



# MPULUNGU DISTRICT

## Integrated Development Plan 2024 – 2034



**“A wealthy and socially inclusive District by 2034”**



## APPROVAL

Mpulungu District Integrated Development Plan (IDP) was submitted for Approval of the Minister responsible for Local Government and Rural Development by the following office bearers:

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COUNCIL SECRETARY  
MPULUNGU TOWN COUNCIL

Signature



Mr. Deo Sichilengwe  
COUNCIL CHAIRPERSON  
MPULUNGU TOWN COUNCIL

Signature



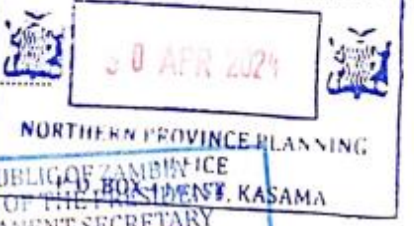
Mr. Gehard Sikazwe  
DISTRICT COMMISSIONER  
DISTRICT ADMINISTRATION  
MPULUNGU

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EXECUTIVE SECRETARY  
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NORTHERN PROVINCE ADMINISTRATION

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Approved by:

Hon. Gary Nkombo (MP),  
MINISTER OF LOCAL GOVERNMENT AND  
RURAL DEVELOPMENT



## FOREWORD



Notwithstanding the progress made in various sector services within the district, Mpulungu district remains vast and faces challenges in providing services such as education, telecommunication, health, water and sanitation, solid waste management, road networks, market centers, and energy, among others. These challenges are not limited to social and infrastructure delivery but also encompass climate change and unplanned development within the district. The peri-urban areas such as Muzabwela and Mupata have seen an increase in informal housing units, making service provision difficult for the residents.

It is for this reason that Mpulungu district is among the districts that have prepared the Integrated Development Plan with financial and technical support from the Ministry of Local Government, European Union, DFID and Lake Tanganyika Development Project.

The integrated Development Plan is intended to provide strategic guidance and coordinate the many various sectoral plans and processes. The document stipulates how well the district is to be developed in a holistic manner using Social and Spatial data collected. The implementation cost of the Mpulungu Integrated Development Plan is approximately **K3.6 billion** and envisions a wealthy and socially inclusive district by 2034, it is a ten-year plan document from 2024 to 2034 and is in line with the national vision 2030, which expresses the aspirations of the citizens “To become a prosperous middle-income nation by 2030”.

The Plan identifies the areas of development and growth which will ensure that people of Mpulungu benefit from the anticipated development and growth.

I believe that a management planning tool such as the IDP will enhance the service delivery and planned growth within the district with appropriate concerted levels of commitment and support from the Government and cooperating partners.

This Integrated Development Plan will significantly bring about the much-needed socio economic development by riding over the two identified drivers of agriculture and Tourism which are peculiar to Mpulungu district which is in line with National aspirations as enshrined in the 8<sup>th</sup> National Development Plan. The Ministry of Local Government and Rural Development is committed to ensuring the successful implementation of this Plan and see to it that growth and development are brought to the local people.

A handwritten signature in black ink, appearing to be 'Deo Sichilengwe', written in a cursive style.

Deo Sichilengwe

**Council Chairperson**

## ACKNOWLEDGEMENT



Mpulungu District Administration acknowledges and appreciates the support rendered to the District by the Government of Republic of Zambia and other Cooperating partners before and during preparation of the Integrated Development Plan, without their invaluable efforts this document would not have been prepared.

Mpulungu district is one of the selected eleven (11) districts in Zambia which benefited from the financial support from the European Union (EU) and the UK Department for International Development (DFID) in collaboration with the Local Government Association of Zambia (LGAZ), Commonwealth Local Government Forum (CLGF) and the Ministry of Local Government and Rural Development. The districts that benefited from the support in Northern Province included Kasama, Luwingu, Lupososhi, Mpulungu and Mporokoso. Lusaka Province beneficiaries included Chongwe, Kafue and Rufunsa, while Copperbelt beneficiaries included Ndola, Luanshya and Masaiti.

Great appreciation also goes to Lake Tanganyika Development Project and Action Aid Zambia for supporting the preparation of the document. The new dawn Government has placed much importance in actualizing the Community aspirations enshrined in Integrated Development Plans Country wide, hence the Constituency Development Funds has been increased from the initial K 1.6 million to K 25.7 million, to K 28 million and further to K 30.6 million in 2024.

Allow me to appreciate the President of the Republic of Zambia, His Excellency – Mr. Hakainde Hichilema and his government for promoting participatory processes in planning and for ensuring that all developments at local level reflect the needs of the local citizens. I am delighted to state that the preparation of the IDP involved consultations with all stakeholders at district level, ward and zone levels.

District Administration also wishes to express gratitude to all the stakeholders that contributed to the IDP preparation. We appreciate the role of the traditional leadership (HRH. Snr Chief Tafuna, HRH. Chief Chinakila, HRH. Chief Chitimbwa) civic leaders (His Worship the Council Chairperson and the Councilor's) and the IDP Team for ensuring that the IDP preparation stages were followed as prescribed in the Guidelines and the Law. I am grateful to all the Chiefs and village headmen in the district for participating in the community consultation meetings and I further express gratitude to the Ward Development Committees (WDCs) who played a key role in mobilizing community members in the various wards of the district to attend the community consultation meetings. Unreserved appreciation goes to the Department of Physical Planning (both Ministry Headquarters and Provincial Planning) for providing technical support and guidance throughout IDP preparation process, and to Mpulungu Town Council Management (Council Secretary and the Directors) for coordinating the process I call on all stakeholders to also participate in the implementation process of the IDP.

A handwritten signature in blue ink, appearing to read 'Gehard Sikazwe', with a stylized flourish at the end.

Gehard Sikazwe

**District Commissioner**

## EXECUTIVE SUMMARY



The successful completion of the Mpulungu Integrated Development Plan (IDP) pursuant to the Urban and Regional Planning Act number 3 of 2015 of the Laws of Zambia signifies the linkage, integration and coordination among the local, cooperating partners and potential investors.

The document is meant to guide development planning and management for a period of ten years and its ultimate goal is to achieve the inclusive desired economic, social, cultural, environmental and infrastructural development which is supportive and enabling to all the people of Mpulungu District. The IDP process had consultations with stakeholder organizations and community consultation in all the 17 wards.

The consultative meetings with stakeholder organizations were held and submissions for inclusion in the IDP were received. Community participation in identifying their own problems and challenges as well as identifying opportunities and solutions was a critical component of integrated planning. The Local Authority and the communities of Mpulungu district identified the main challenges and future needs through the IDP process. The challenges among others include lack of access to clean and safe water, poor feeder road network, limited economic opportunities, lack of skills training facilities, high rate of unemployment levels as well as effects of climate change.

This 10-year plan focuses on promoting socio-economic development in an integrated and coordinated manner which will result in achieving the district vision of being “**a wealthy and socially inclusive district by 2034**”. The vision will be realized through implementation of key strategic goals which include; to diversify the economy from capture fishing to aquaculture and agriculture, to develop the tourism industry, to enhance natural resource management for sustainability, to promote lifelong education through a conducive teaching and learning environment and to improve primary and first level health care services for the community. The budget to implement this plan will cost **K3.6 billion** of which **K246, 298,330.25** will be generated by the local authority.

The document is structured into Five (5) main parts. **Part One** covers the Introduction and Background of the Plan, which provides the background processes carried out to prepare the IDP, total budget required to implement the plan and the scope. **Part Two** covers the Planning Survey and Issues Report which provides reviewed existing policies and plans, a detailed demographic and sector thematic analysis. **Part Three** provides the Development Framework which highlights the Long-Term Development Vision of Mpulungu, policies to direct development, the identified development objectives, priorities and development strategies as well as the spatial development framework. **Part Four** covers the Implementation Program which includes the Capital Investment Plan, the Local Authority’s Financial Plan for the next Five (5) years, the detailed program for the preparation of Local Area Plans (LAPs) as well as the Monitoring and Evaluation Plan which includes the key performance indicators. **Part Five** provides the conclusion of the document.

A handwritten signature in blue ink, appearing to read 'M. Sakala', written over a white background.

Milton S. Sakala  
**Council Secretary**  
**Mpulungu Town Council**

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## LIST OF ACRONYMS

7NDP	Seventh National Development Plan
8NDP	Eighth National Development Plan
AIDS	Acquired Immune-Deficiency Syndrome
ANC	Antenatal Care
CBD	Central Business District
CDF	Constituency Development Fund
CEEC	Citizen Economic Empowerment Commission
CFMA	Community Forestry Management Areas
CLGF	Commonwealth Local Government Forum
CSEN	Children with Special Education Needs
CSO	Central Statistics Office
CWSC	Chambeshi Water and Sewerage Company
DFID	Department for International Development
ECE	Early Childhood Education
ELGCD	Enhancing Local Government Capacity for Development
FDI	Foreign Direct Investment
FISP	Farmer Input Support Programme
GMA	Game Management Area
HIV	Human Immune-Deficiency Virus
HRH	His Royal Highness
ICT	Information and Communication Technology
IDP	Integrated Development Plan
Km <sup>2</sup>	Kilometer Squared
LTDP	Lake Tanganyika Development Project
MLG	Ministry of Local Government
MoGE	Ministry of General Education
MOH	Ministry of Health
MIDP	Mpulungu Integrated Development Plan
MoYCD	Ministry of Youth and Child Development
MSMEs	Micro, Small and Medium Enterprises

MTEF	Medium-Term Expenditure Framework
MP	Member of Parliament
NGO	Non-Governmental Organization
NPF	National Performance Framework
NUA	New Urban Agenda
PPP	Public-Private Partnership
PSIR	Planning Survey and Issues Report
R&D	Research and Development
SDF	Spatial Development Framework
SDGs	Sustainable Development Goals
SRH	Safe Motherhood Reproductive Health
TAZARA	Tanzania-Zambia Railways
WDC	Ward Development Committee
YDC	Youth Development Centre
ZAMTEL	Zambia Telecommunications Company Limited
ZESCO	Zambia Electricity Supply Cooperation
ZILMIS	Zambia Integrated Land Management Information System

## **PART ONE: INTRODUCTION**

### **1.1. Introduction**

Mpulungu Town council prepared the Integrated Development Plan (IDP) pursuant to the Urban and Regional Planning Act No. 3 of 2015 of the Laws of Zambia. It provides that Integrated Development Plans are a requirement for all districts in Zambia to be used as a principal planning instrument as provided for under section 19(3) of the aforementioned Act where it is stated that:

*“An integrated development plan shall be the principal planning instrument to guide and inform all planning and development in the area of the local authority and all planning decisions of a planning authority”.*

This document will be reviewed every Five (05) years and is meant to guide development planning and management for a period of ten (10) years. Ultimately, this strategic development plan will guide decision making, budgeting and development in the district.

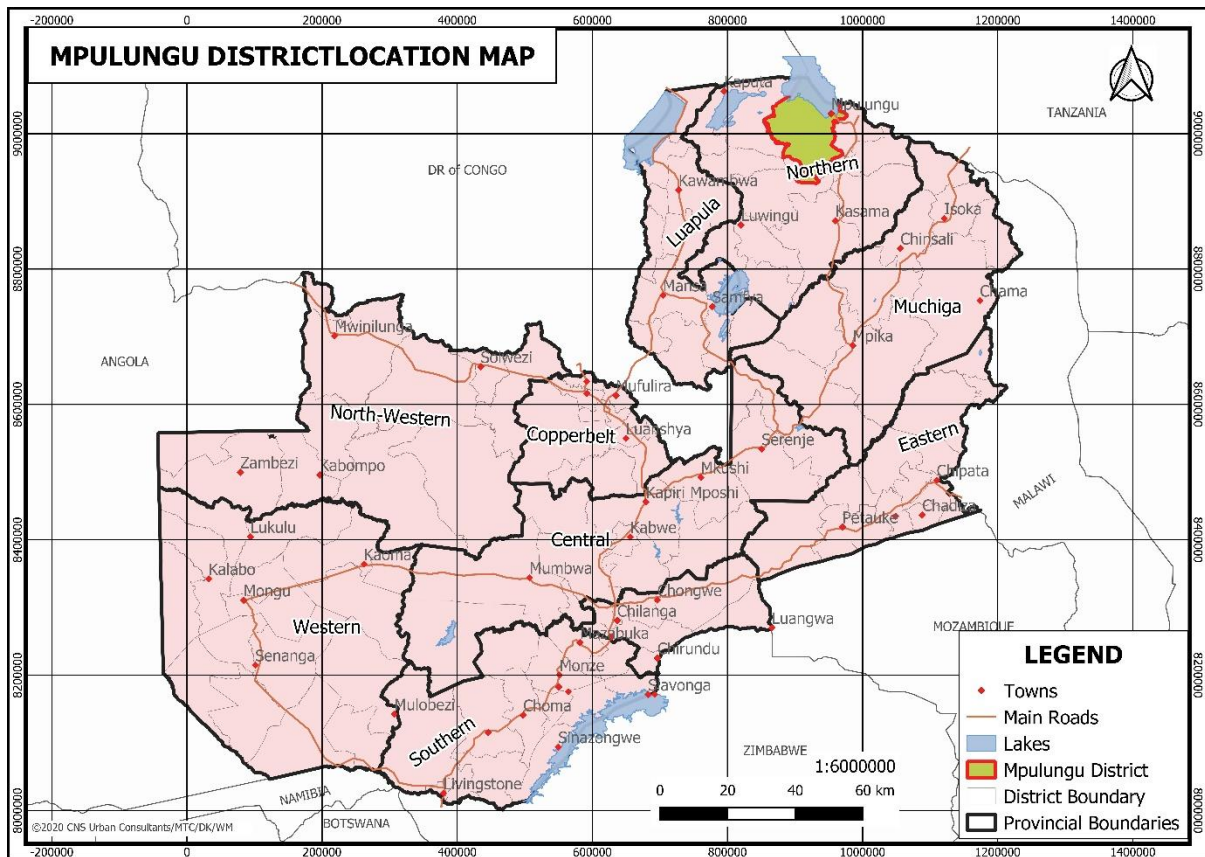
The IDP total budget is estimated at **K3.6 billion** on capital investment programmes for the period of (10) years funded from both internal and external sources. Out of the ~~td~~budget, the local authority has projected to raise **K246,298,330.25** from 2022 to 2027 of which 60 percent will be channeled towards financing the IDP implementation. The IDP will be implemented under the vision of being “**a wealthy and socially inclusive district by 2034.**”

### **1.2. Background**

Mpulungu Town Council approved the preparation of the Mpulungu IDP 2024-2034 through the Council Resolution vide minute number **MDC/40/08/19**. A public advertisement on the IDP preparation process was made through Social Media platforms, local radio stations and public notice boards, which were more effective in the local context. Further, the Ordinary Meeting held on **4<sup>th</sup> May, 2021** resolved to adopt the draft District Integrated Development Plan (IDP) under minute number **MDC/70/05/21**. This was done pursuant to **Section 35** of the **Urban and Regional Planning N0.3 of 2015**.

Mpulungu District is located in the Northern Province of Zambia. It is 210 Km from Kasama, the provincial capital of Northern Province and 1,057.9 Km from Lusaka the capital city of Zambia. It lies between latitude 9° south of the equator and longitude 31° east of the prime meridian. The district covers a total land extent of about 10,170 Square Km<sup>2</sup> with 7, 788.3 Km<sup>2</sup> being plateau while 2,372.53Km<sup>2</sup> is the valley/lake shore part of the district, with the current population standing at 153,564 with 75,467 males and 78,097 females as of 2022 (CSO, 2022). The district has only one constituency and 17 wards.

Figure 1-Location Map



Source: Field Data,2022

### 1.3. Topography

Generally, the district is rocky and interspersed with attractive bays along the lakeshore and sandy beaches. The upper land is a plateau dominated by rugged rocky hills, deep valleys and rocky outcrops. The main physiographical features of Mpulungu District are the highland/hilly flat land (plateau) and lowland/flat land areas (valley). The highest and lowest points in the district are 1,814 Vyamba and Lwambazi wards on the Plateau and 767 Kapembwa, Katwe, Mpulungu and Nonde wards of the Valley above sea level respectively.

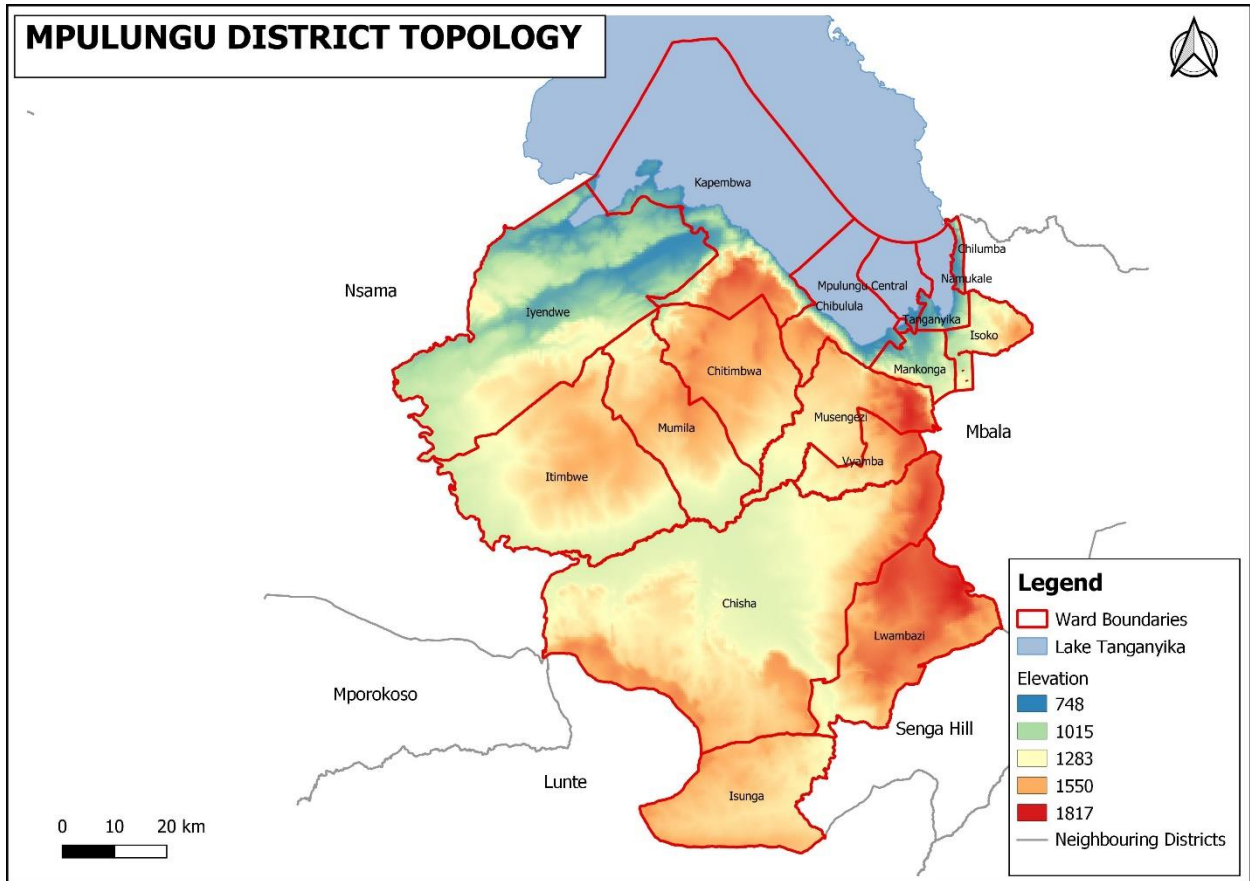


Figure 2 Topography Map (Source: Field Data, 2022)

#### 1.4. Geology

The district is under Katanga/Kundelungu geological formations comprising of dolomites, limestone, quartile and slates. The soils are typical of soil of the Northern plateau. They are medium textured soils overlaying heavier subsoil. The surface soils are red to yellow and often laterite is present in them. The soils are highly reached and are characterized by good fertility, low soil PHI and high phosphorus fixation in wood bound areas, mainly the district’s soil types are finely loam to clay soils.

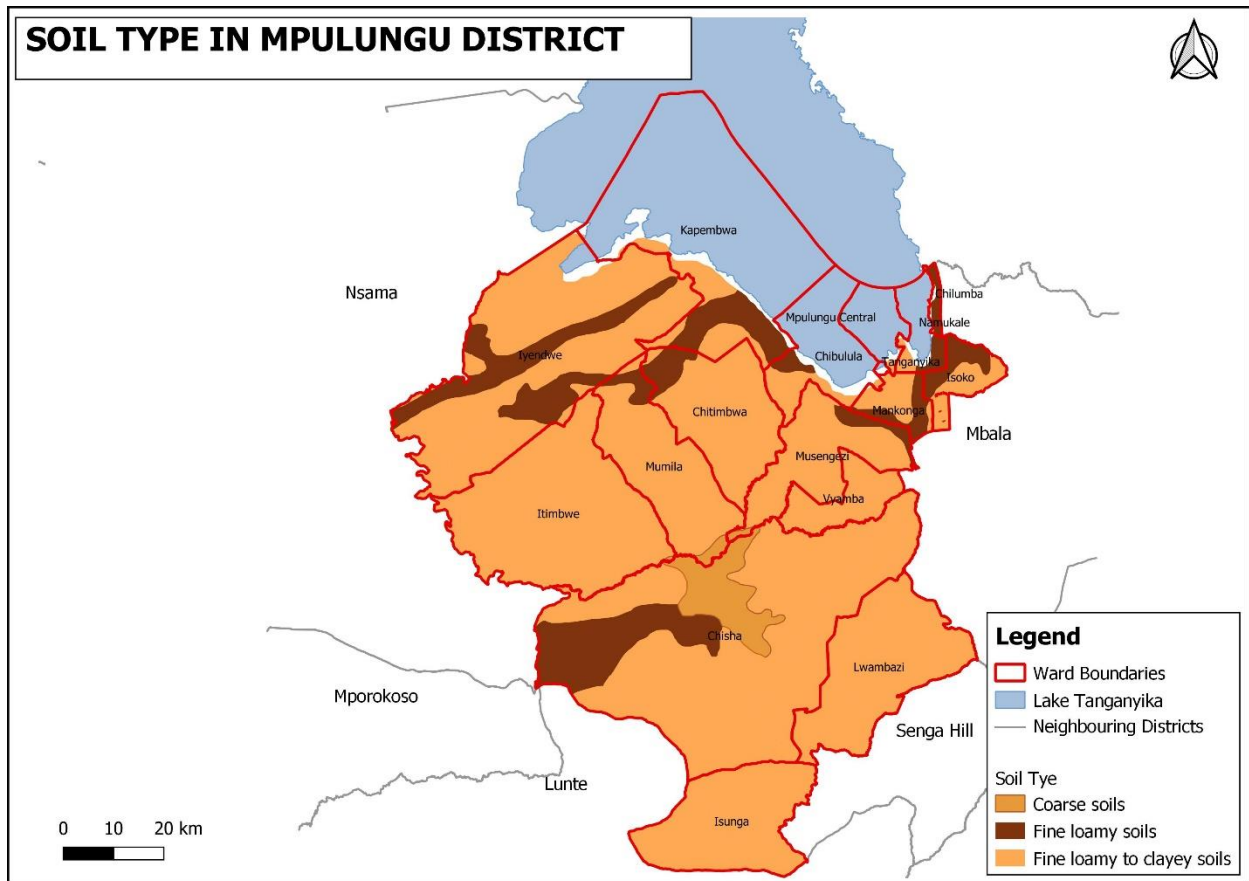


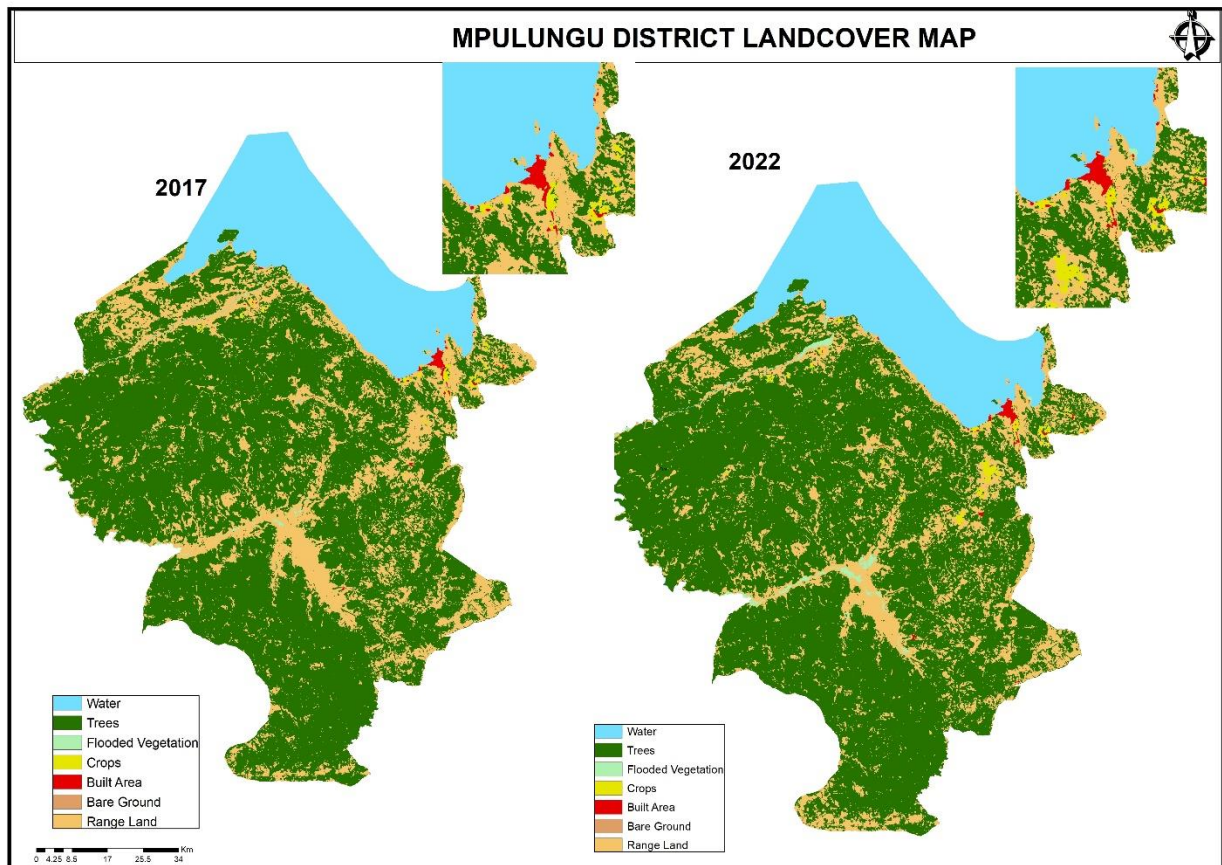
Figure 3-Soil Map (Source: Field Data,2022)

### 1.5. Vegetation

The district’s vegetation is generally savannah woodlands (wooded grasslands) both in the valley and the plateau. Some parts of the district are covered by open grassland and woodlands. Many streams have dambos and some flood plain on the Lufubu basin around Chinakila area. Due to intensive Chitemene system of farming, some areas have changed into shrub woodlands. The main threat to vegetation in the area is the increase in human population resulting in high demand for timber, charcoal, and diversification into agriculture.

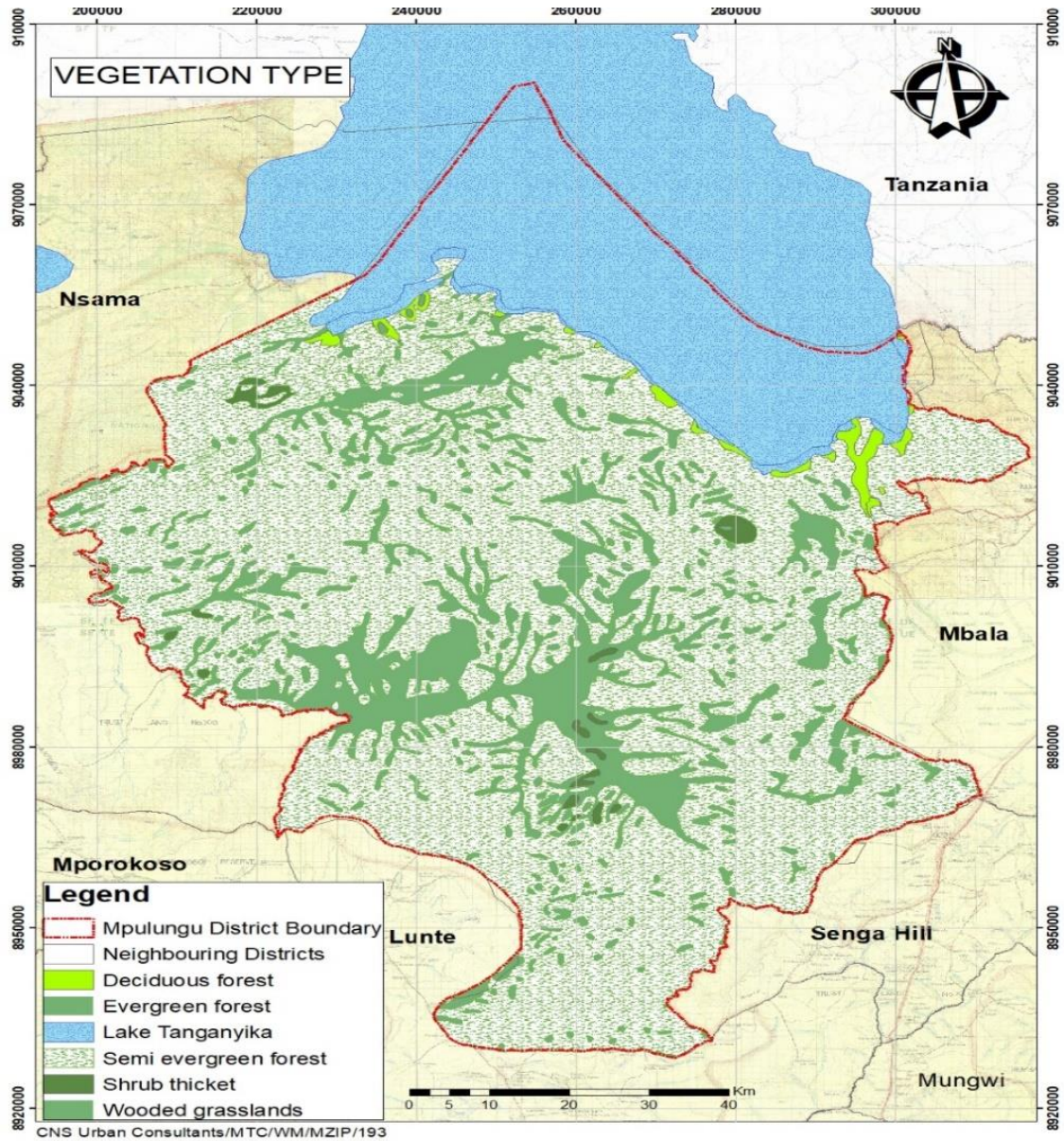
The dominant tree species found in the district vegetation are *Mutondo (Julbernardia paniculata)*, *Musuku (Uapaca kirkiana)*, *Mubanga (Pericopsis angolensis)* and *Mukwa (Pterocarpus angolensis)*. Other common tree species present include *Mwenge (Diplorynchus condylocarpon)*, *Muchenja (Minmusops zeyheri)*, *Utusongole (Strychnos spp)*, *Mutobo (Isoberlinia angolensis)*, *Kayimbi (Erythrophileum africanum)*, *Mufungo (Amisophyllea boehmii)*, *Mupundu (Parinari curatellifolia)*, *Musangati (Pseudolychnostylis maprouneifolia)*, and *Mupapi (Securidacalongepedunculata)*.

Figure 4-Land Cover Map



Source: Field Data,2022.

Figure 5-Vegetation Map



Source: Field Data, 2022.

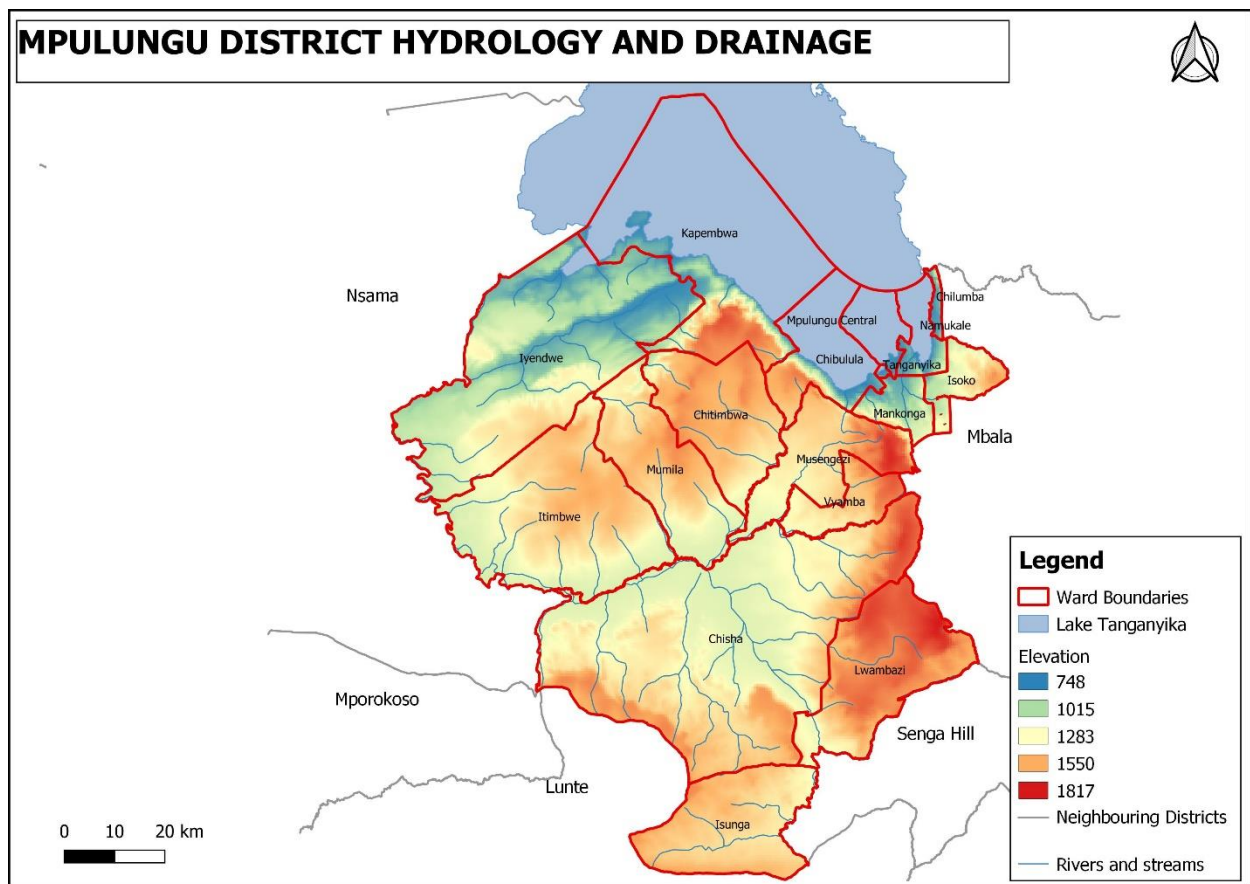
### 1.6. Hydrology and Drainage

The hydrology system of Mpulungu comprises mainly of Lake Tanganyika, Lufubu, Lunzua, Mululwe Rivers, Izi and Chambeshi streams. Most of the rivers and streams have sources from hills and flow throughout the year making water available to the inhabitants for both irrigation and domestic use. All the rivers and streams flow into Lake Tanganyika. Lake Tanganyika is one of the Great Rift Valley lakes. Its origin is thought to date as far back as 9 to 12 million years ago. It is the deepest freshwater body in Africa and second deepest in the world after Lake Baikal in Russia. It is the second largest lake in Africa after Lake Victoria.

The surface water runoff follows the very moderate topographic gradients towards the southern direction.

Figure 6 below shows details of the hydrology and drainage.

Figure 6-Hydrology and drainage Map



Source: Field Data, 2022

## 1.7. General Climate

### 1.7.1 Rainfall

The climatic conditions of Mpulungu are typical of Northern Zambia and the Lake Tanganyika basin. The inter-tropical convergence zone (ITCZ) influences rainfall over the Zambezi basin. The rainy season starts in November and ends in April or sometimes May, although it is not uncommon to have the first rains in late October. The average annual precipitation is 1,309mm predominantly between November and April. In the north, the rainy season is a few weeks longer than the rest of the region due to proximity to the equator. Two thirds of the rains fall between December and March. This period is followed by a dry season between May and October. In recent years, there has been a shortening of the rain season, although the overall quantities have remained almost the same.

### 1.7.2 Temperature

Temperatures vary considerably during the dry season. Mpulungu is one of the hottest places in Zambia with temperatures reaching as high as 38°C in December, which is expected due to the low altitude at the lake and high relative humidity. Temperatures are fairly constant from December to April and then start decreasing in May reaching a minimum of 14.4 0 C in July and rising steadily again to a maximum of 36.4°C in November.

### 1.7.3 Wind

The prevalent winds throughout the year are the easterlies. High wind speeds are experienced between May and September with an average wind speed of 25 – 30 knots. Wind directions are more variable in the rainy season. Generally, there are Lake Winds during the day and land winds during the night. These winds play a major role in the biological production of the lake. Windiest month is October at 11mph. (Source: Weather by custom weather, 2019).

## 1.8. Administrative Structure:

Administratively, Mpulungu districts is run by the Central and local Government systems.

### 1.8.1 Central Government System

The Central Government System is composed of all government departmental heads, under the headship of the District Commissioner (DC) who co-ordinates all district developmental activities. To discharge these functions, the District Commissioner and the Council Secretary co-chairs the District Development Coordinating Committee (DDCC), whose composition encompasses district government departments, the Council, major companies in the district, Community Based Organizations (CBOs), Non-governmental Organizations (NGOs) and many other stakeholders.

### 1.8.2 Local Government System

The local government system is composed of officers and the elected Councilors headed by the Council Chairperson. These collectively constitute the council; the council is the highest policy making body in the district. The Council discharges its functions through standing committees such as Finance and General Purposes, Plans, Works and Development, Housing and Social Services, Public Health and Establishment. The Chief Officers are under the headship of the Council Secretary, the Chief Executive of the Council, with the labor force under them support the Council with regard to the implementation of policies, by laws and resolutions. The Ward Development Committee is the lowest representation of the Local Authority at Ward Level and is the entry point of developmental projects.

### 1.8.3 Political Governance System

Mpulungu district has its political and governance systems operating under a democratic multi-party-political system. This entails that the people in wards, through elections, elect political leaders by voting. The electorates elect the Council Chairperson, Member of Parliament, and Councilors.

## PART TWO: PLANNING SURVEY AND ISSUES REPORT

### 2. SECTORAL AND THEMATIC ANALYSIS

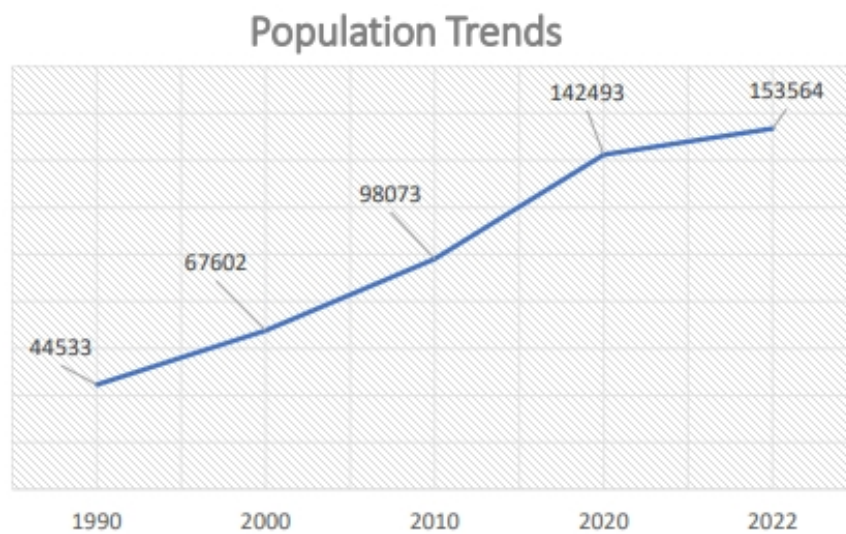
#### 2.1. DEMOGRAPHIC ANALYSIS

The analysis focuses on the details of population dynamics within the district and includes total population and growth rate, the gender breakdown of this population, age distribution, rural and urban population, dependency ratios, population density and poverty as well as the population trends.

##### 2.1.1. Population And Population Growth

The Population of Mpulungu increased from 44,533 in 1990 to 67,602 in 2000 at annual growth rate of 4.2. From the year 2000 to 2010, the population reached 98,073 growing at the annual growth rate of 3.4. From the year 2010 to 2022 the population stood at 153,564 growing at an annual growth rate of 3.8 (ZAMSTATS, 2022).

*Figure 7-The population trends from 1990 to 2022*



Source: ZAMSTATS, 2022

Table 1: Average Annual Population Growth Rate by District and Sex, Northern Province 2010-2022

Province	2010 Population			2022 Population			Average Annual Population Growth Rate 2010-2022		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Chitubi	39,792	41,456	81,248	55,617	58,394	114,011	2.8	2.9	2.9
Kaputa	35,210	35,671	70,881	51,000	51,854	102,854	3.1	3.2	3.2
Kasama	114,208	117,616	231,824	170,168	178,384	348,552	3.4	3.5	3.5
Lunte	28,849	28,990	57,839	42,298	42,275	84,573	3.2	3.2	3.2
Lupososhi	34,199	35,158	69,357	39,248	40,366	79,614	1.2	1.2	1.2
Luwingu	26,095	26,684	52,779	50,055	51,087	101,142	5.6	5.6	5.6
Mbala	54,625	56,113	110,738	79,286	82,309	161,595	3.2	3.2	3.2
Mporokoso	20,312	20,691	41,003	31,186	32,266	63,452	3.6	3.8	3.7
Mpulungu	48,651	49,422	98,073	75,467	78,097	153,564	3.7	3.9	3.8
Mungwi	74,730	76,328	151,058	101,928	103,168	205,096	2.6	2.5	2.6
Nsama	24,102	24,531	48,633	38,567	39,084	77,651	4.0	4.0	4.0
Senga Hill	46,078	46,313	92,391	62,403	63,905	126,308	2.6	2.7	2.6
<b>Total</b>	<b>546,851</b>	<b>558,973</b>	<b>1,105,824</b>	<b>797,223</b>	<b>821,189</b>	<b>1,618,412</b>	<b>3.2</b>	<b>3.3</b>	<b>3.2</b>

### 2.1.2. Population Characteristics and Distribution by Ward

The district has a young population comprising 48.2% of those aged between 0 -14, while 33% of youths aged between 15 – 34, and 18.8% are aged 35 and above (CSO 2011-2035 Projection Report, 2011).

The Population of Mpulungu is concentrated much in urban wards of Mpulungu Central and Tanganyika. The major pull factors in these wards are availability of social amenities and trading opportunities such as fish trading, Electricity, Education facilities, Health services and agro- products. This mainly has been as a result of historical trends, access to better social services and trade.

Table 2-Population Distribution By ward in Mpulungu District

S/N	Ward Name	Kilometer squared	Economic Activity	Population
1	Chibulula	379	Fishing	8,365
2	Chilumba	27	Fishing and Tourism	7,782
3	Chisha	2265	Farming	7,719
4	Chitimbwa	543	Farming	5,974
5	Isoko	151	Farming	8,290
6	Isunga	566	Farming	5,006
7	Itimbwe	1050	Farming	2,855
8	Iyendwe	1499	Farming and Tourism	5,625
9	Kapembwa	1415	Fishing, Trade and Tourism	6,378
10	Lwambazi	669	Farming	6,692
11	Mankonga	135	Farming	8,395
12	Mpulungu Central	146	Trade, Tourism and Fishing	31,514
13	Mumila	555	Farming	2,731
14	Musengezi	440	Farming	7,706
15	Namukale	135	Fishing and Tourism	7,037
16	Tanganyika	6	Fishing, Trade and Tourism	23,772
17	Vyamba	200	Farming	7,723
	<b>Total</b>			<b>153,564</b>

Source: ZAMSTATS, 2022.

The 2020 population stood at 142,493, of which 72,142 were females and 70,351 were males. The rural population increased from 68,970 in 2010 to 96,899 in 2020 while urban population increased from 29,103 to 45,594 in 2020. The total rural population in 2010 stood at 68,970 comprising 34,362 males and

34,608 females while urban population was at 29,103 comprising 14,289 males and 14,814 females (CSO, 2011).

**2010 Population Distribution by Residence and Sex (Urban vs Rural)**

*Table 3-Population Distribution by Residence and Sex*

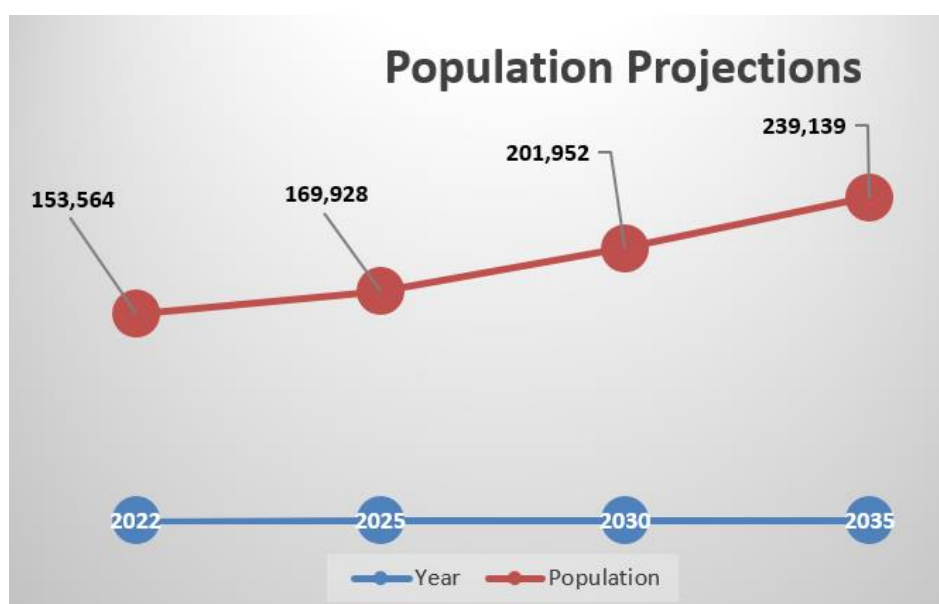
Rural			Urban		
2010					
Total	Male	Female	Total	Male	Female
68,970	34,362	34,608	29,103	14,289	14,814
2020					
Total			Total		
96,899	-	-	45,594	-	-

Source: CSO, 2011

**2.1.3. Projected Population and Likely Characteristics**

The population of Mpulungu is projected to reach 239,139 in 2035. The graph indicated below shows population projections from 2022 up to 2035.

*Figure 8-Population Trends*



Source: ZAMSTATS, 2022.

The projected population will affect some population characteristics that include; dependency ratio, life expectancy as well as fertility rate.

*Table 4-Dependency Ratios*

Rural/Urban	1990	2000	2010	2020	2030	2035
Child Dependency Ratio	78.6	81.3	84.2	96.4	85.5	81.4
Aged Dependency Ratio	0.7	1.2.	1.9	4.5	4.7	4.8

Overall Dependency Ratio	73.1	76.3	79.2	100.9	90.3	86.2
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Source: Field Data, 2022.

Table 5-Life Expectancy

Trends of Life Expectancy at Birth									
2011		2015		2020		2025		2035	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
55.3	59.8	55.2	59.3	56.7	60.9	58.2	62.7	61.4	66.3

Source: CSO, 2012.

The increase of life expectancy at birth can be attributed to improved health services provision, increased access to information on better living standard practices such as cleanliness, improved nutrition and early disease detection.

Table 6-Fertility Rates

Year	2011	2015	2019	2025	2035
TFR	7.0	6.7	6.4	6.0	5.2

Source: CSO, 2012.

The reduction in total fertility rates can be attributed to birth control (access to family planning methods), economic challenges, career progression, improved access to education (keeping more girls away from marriages) and enforcement of Early Marriage Policy- this has made many girls not to bear early, hence reduced childbearing period.

In comparison to the other districts in Northern Province, the population of Mpulungu is the fourth (4<sup>th</sup>) highest after Kasama, Mungwi and Mbala. However, in terms of population density, Mpulungu is on 8<sup>th</sup> position with population density of 15.2 per square Kilometer. Table 2 below shows a comparison of population figures for Northern Province.

Table 7- Population Density by District, Northern Province 2022

District Name	Population	Land Area	Population Density (Pop/ Land Area)
Chilubi	114,011	5,169.6	22.1
Kaputa	102,854	5,035.6	20.4
Kasama	348,552	10,584.1	32.9
Lunte	84,573	7,782.1	10.9
Lupososhi	79,614	4,127.4	19.3
Luwingu	101,142	4,899.5	20.6
Mbala	161,595	3,346.3	48.3
Mporokoso	63,452	4,196.0	15.1
Mpulungu	153,564	10,074.1	15.2
Mungwi	205,096	9,758.7	21.0
Nsama	77,651	7,492.9	10.4
Senga Hill	126,308	5,183.7	24.4
<b>Total</b>	<b>1,618,412</b>	<b>77,650.0</b>	<b>20.8</b>

Source: ZAMSTATS, 2022.

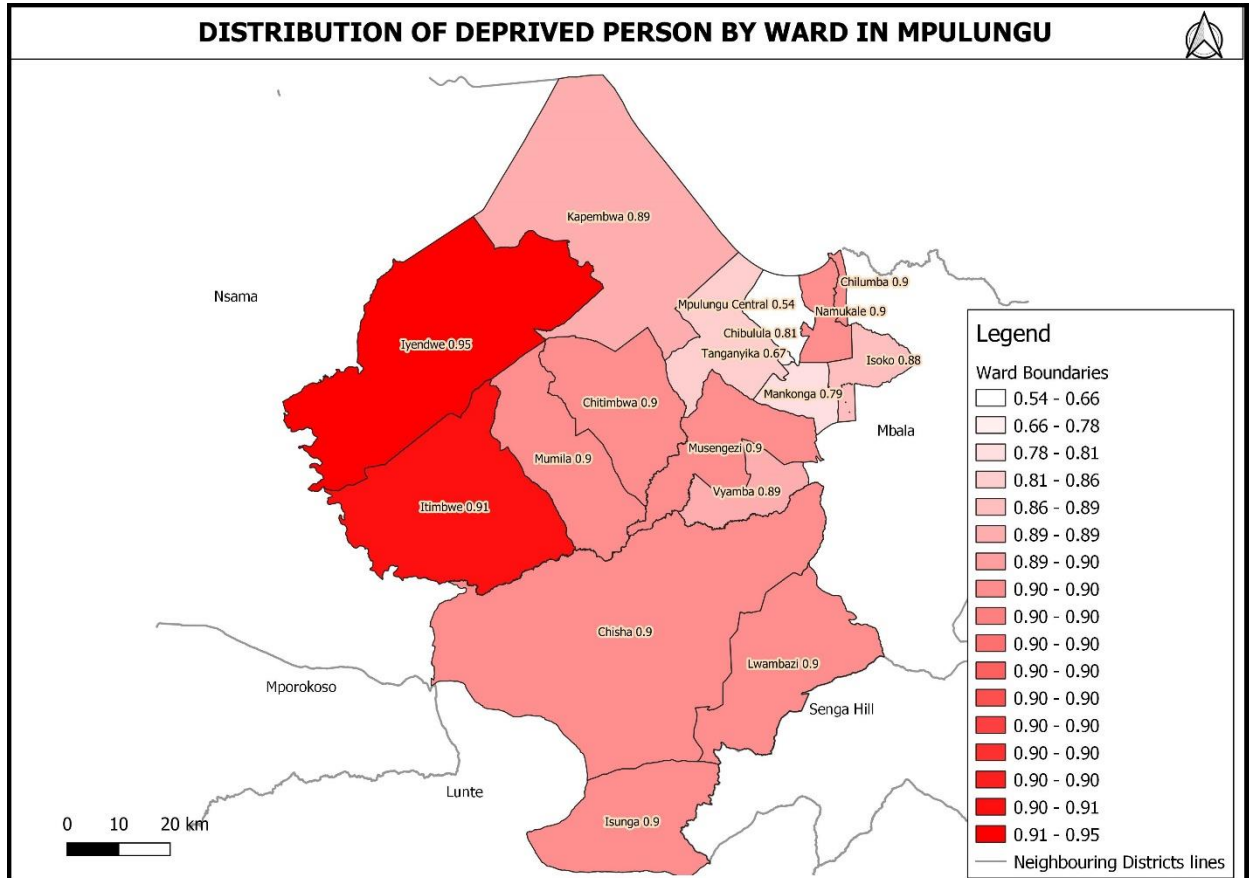
### 2.1.4. The Impact of the Continuation of Existing Population Trends on Land Use and Spatial Development Patterns.

The continuous existing population growth trends causes problems on land use and spatial development patterns. The problems create obstacles in national development. It is estimated that growth in population is putting pressure on natural resources available that include water, land as well as the ecosystem services. This implies that the ratio of population to available sustainable resources will be imbalanced.

Considering the existing population growth trends for Mpulungu district from 2010 population was at 98,073 with the annual growth rate of 3.4, in 2015 the population was 118,886 with growth rate of 3.3. The projection population increase of 2020 and 2035 is 142,493 and 239,139 with annual growth rate of 3.2 and 2.7 respectively.

The population growth trends call for adequate planning and provision of social economic services such as schools, health facilities, recreation facilities, economic empowerment, construction of more housing units, provision of adequate sanitation and creation of employment to reduce the dependence ratio.

Figure below shows Poverty deprivation of persons measured by Multi Poverty Index (IMP) by ward. Iyendwe is the most deprived ward with the head count ratio of 0.91, followed by Itimbwe with 0.90, Mumila with 0.90, and Mpulungu Central with the least number of deprived persons standing at head count of 0.54.



*Figure 9-Distribution of deprived persons in Mpulungu District*

source: Field Data,2022

Table 8-Population Projection by Age Group

2019				2020			2025			2030			2035		
Age group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	<b>27,112</b>	13,561	13,551	<b>27,865</b>	13,925	13,940	<b>31,915</b>	15,878	16,037	<b>36,725</b>	18,186	18,540	<b>42,082</b>	20,743	21,339
5-9	<b>21,520</b>	10,629	10,891	<b>22,066</b>	10,894	11,172	<b>25,245</b>	12,411	12,833	<b>29,087</b>	14,226	14,861	<b>33,670</b>	16,386	17,284
10-14	<b>17,599</b>	8,774	8,825	<b>18,464</b>	9,198	9,266	<b>21,790</b>	10,817	10,973	<b>24,957</b>	12,324	12,633	<b>28,795</b>	14,138	14,656
15-19	<b>14,527</b>	7,009	7,518	<b>15,043</b>	7,235	7,808	<b>19,066</b>	9,112	9,954	<b>22,565</b>	10,732	11,833	<b>25,907</b>	12,249	13,659
20-24	<b>12,979</b>	6,514	6,465	<b>13,467</b>	6,780	6,687	<b>15,619</b>	7,791	7,828	<b>19,903</b>	9,868	10,035	<b>23,648</b>	11,674	11,974
25-29	<b>10,132</b>	4,734	5,397	<b>10,698</b>	5,071	5,627	<b>13,532</b>	6,667	6,864	<b>15,789</b>	7,709	8,080	<b>20,272</b>	9,848	10,424
30-34	<b>7,770</b>	3,584	4,186	<b>7,964</b>	3,671	4,293	<b>10,379</b>	5,117	5,263	<b>13,249</b>	6,768	6,481	<b>15,561</b>	7,871	7,691
35-39	<b>6,720</b>	3,216	3,503	<b>6,961</b>	3,279	3,682	<b>7,471</b>	3,355	4,117	<b>9,771</b>	4,693	5,078	<b>12,522</b>	6,235	6,287
40-44	<b>5,093</b>	2,693	2,400	<b>5,268</b>	2,763	2,505	<b>6,783</b>	3,277	3,506	<b>7,303</b>	3,373	3,931	<b>9,599</b>	4,741	4,858
45-49	<b>4,260</b>	2,235	2,024	<b>4,474</b>	2,333	2,140	<b>5,053</b>	2,599	2,453	<b>6,529</b>	3,097	3,432	<b>7,062</b>	3,206	3,856
50-54	<b>2,930</b>	1,528	1,402	<b>3,061</b>	1,593	1,468	<b>4,212</b>	2,094	2,118	<b>4,770</b>	2,340	2,430	<b>6,189</b>	2,794	3,395
55-59	<b>2,326</b>	1,220	1,106	<b>2,426</b>	1,274	1,152	<b>2,809</b>	1,501	1,308	<b>3,856</b>	1,973	1,882	<b>4,373</b>	2,213	2,160
60-64	<b>1,449</b>	716	734	<b>1,560</b>	767	793	<b>2,084</b>	1,008	1,076	<b>2,412</b>	1,188	1,224	<b>3,326</b>	1,563	1,763
65-69	<b>1,002</b>	463	540	<b>1,038</b>	485	553	<b>1,469</b>	680	789	<b>1,954</b>	888	1,066	<b>2,251</b>	1,041	1,210
70-74	<b>829</b>	399	430	<b>847</b>	409	438	<b>908</b>	468	440	<b>1,273</b>	647	626	<b>1,674</b>	834	840
75-79	<b>592</b>	284	308	<b>618</b>	293	325	<b>738</b>	337	401	<b>779</b>	379	400	<b>1,076</b>	512	564

80+	<b>641</b>	367	274	<b>675</b>	382	293	<b>854</b>	452	403	<b>1,031</b>	514	517	<b>1,131</b>	560	571
<b>Total</b>	<b>137,480</b>	<b>67,927</b>	<b>69,553</b>	<b>142,493</b>	<b>70,351</b>	<b>72,142</b>	<b>169,928</b>	<b>83,566</b>	<b>86,362</b>	<b>201,952</b>	<b>98,904</b>	<b>103,048</b>	<b>239,139</b>	<b>116,609</b>	<b>122,530</b>

Source: ZAMSTATS, 2022.

## 2.2 OVERVIEW OF EXISTING PLANS AND POLICIES

This section of the document provides information on reviewed existing policies and plans during the preparation. Further, other statutes and polices were reviewed under thematic areas as will be noticed in the document.

*Table 9-Reviewed Policies and Plans*

Document	Description	IDP Implications
Sustainable Development Goals (SDGs)	The SDGs are a call for action by all countries, poor, rich and middle-income to promote prosperity while protecting the planet. They recognize that ending poverty must go hand- in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.	The IDP core issues will be addressed to ensure that theSDGs are implemented at local level
African Union Agenda 2063.	AGENDA 2063 is Africa’s blueprint and master plan for transforming Africa into the global powerhouse of the future. It is the continent’s strategic framework that aims to deliver on its goal for inclusive and sustainable development. This agenda intends to prioritize inclusive social and economic development, continental and regional integration, democratic governance and peace and security amongst other issues aimed at repositioning Africa to becoming a dominant player in the global arena	This plan will directly contribute to archiving the goal of the African Union Agenda 2063 as can be seen from the vision statement  <b>“A wealthy and socially inclusive District by 2032”</b>

<p>Vision 2030</p>	<p>The Vision 2030 is a long-term plan that expresses the aspirations of the Zambian people to live in a strong and dynamic, middle income industrial nation that provides opportunities for improving the wellbeing of all. The Vision 2030 outlines long-term national and sector goals for attaining desirable socio-economic indicators, to fulfil the Zambian people’s aspirations.</p>	<p>The IDP will address the following development issues to achieve the vision 2030;</p> <ul style="list-style-type: none"> <li>-Establishing new infrastructure and refurbishing and maintaining existing ones</li> <li>-Investing in people through education and training to ensure job creation and socioeconomic transformation;</li> <li>-Ensuring a healthy population in which the incidence of major disease</li> <li>-Maintaining a safe, sustainable and secure environment for sustainable economic growth and development.</li> </ul>
<p>8th National Development Plan 2022 - 2026</p>	<p>The main theme of the 8NDP is to promote “<i>Socio-Economic Transformation for Improved Livelihoods</i>”. The overall aim is to improve the efficiency and competitiveness of the economy to sustainably lift the living standards of the people. This will be achieved through four (4) main strategic development focus areas namely: (i) Economic Transformation and Job Creation; (ii) Human and Social Development; (iii) Environmental Sustainability; and (iv) Good Governance Environment.</p>	<p>Mpulungu IDP will directly contribute to archiving the targets of the 8NDP as can be seen from the vision statement and the set Local Development Policies.</p> <p>The key thrust of the IDP is to promote economic development; promote delivery of social services to all citizens in an inclusive manner; promote local participation; and promote green growth.</p>
<p>Decentralization Policy</p>	<p>Aims at achieving a fully decentralized and democratically elected system of governance characterized by open, predictable and transparent policy making and implementation processes at all levels of the public service</p>	<p>IDP will implement this policy through the proposed development programmes, strategies and projects</p>

Source: CSO, 2012.

## 2.2. ECONOMIC TRANSFORMATION AND JOB CREATION

This pillar aims to diversify our economy away from over-reliance on the mining sector and create more job opportunities for our people.

### 2.2.1. Agriculture

#### 2.2.1.1. Review of key Agricultural Policies and Plans

The agricultural sector is guided by the Second National Agricultural Policy of 2016 and the Eighth National Development Plan (8thNDP). The policy provides great scope for attaining sustainable food and nutrition security particularly at national level and contributing immensely to profitability of agricultural enterprises, creation of jobs, increased income generation, poverty reduction as well as increased contribution of agricultural sector to Gross Domestic Product. Mpulungu district under agriculture sector provides services as guided by the policy.

#### 2.2.1.2. The Existing State of Development

##### 2.2.1.2.1. Availability of Service

The district is demarcated into four (4) agricultural blocks and further sub-divided into twenty (20) agricultural camps. The available services include; Agriculture extension Advisory Services, Agribusiness Promotion, Technical Services, and dissemination of Agricultural information through the National Agriculture Information Services (NAIS).

##### 2.2.1.2.2. Quality of Service Including Key Indicators of Performance

The district has a total number of 5 officers in management positions and 14 extension officers against the total number of 43,157 farmers, resulting in inadequate service delivery. The 14 extension officers consist of 12 Agricultural Assistants (AA) and 2 Agricultural Supervisors (AS). The ideal situation is that, the district is supposed to have 20 AA to man agricultural camps and 4 AS officers to supervise the agricultural blocks. A crops specialist, farm management specialist, land husbandry officer and irrigation engineer. The ideal officer farmer ratio is one officer to 400 farmers. The current officer to farmer ratio stands at one officer to 2, 289 farmers. This implies that the quality of the services provided by extension officers is compromised due to low numbers of officers against the farmers.

A larger population of farmers is living on the plateau and engaged in farming that is largely dependent on rain fed conditions. This means crop production is limited only to a few months of the year. The agriculture sector in Mpulungu District has also been supported by the Lake Tanganyika Development Project through promotion of conservation farming in the 23 pilot villages aimed at improving productivity and increase resilience of crops to some climate changes such as dry spells and floods.

In terms of key performance indicators, the district produced the under listed crops between 2016 and 2019 as shown the table below.

*Table 10-Crop Production*

S/N	Type of Crop	Production Quantities (50KG bags)		
		2016/17	2017/18	2018/19
1	Maize	297,202.5	555,156	795,000

2	Cassava	1385.1	2,488	3575.3
3	Beans	35560	36,488	39,650
4	Rice	1856	9216	12,101
5	Finger millet	15,210	7,264	8,022
6	Groundnuts	34,974	9,648	11,011

Source: CSO,1012

### 2.2.1.2.3. Issues Arising from the Public Participation Process

#### 2.2.1.2.3.1. Availability of Service

A number of issues in the agriculture sector were identified and these include;

- Inadequate extension services due to limited number of extension Officers in the District.
- Inadequate Extension Officers accommodation.
- Lack of transport for Extension Officers.
- Poor road network affecting transportation and marketing of farm produce, and extension service delivery.
- Inadequate irrigation facilities in the district.
- Lack of access to mechanised farming equipment in the district.
- Inadequate bulking centres.
- Low crop yields.
- Inadequate value addition processing plants.

#### 2.2.1.2.3.2. Quality of Service Including Key Indicators of Performance

- Limited storage facilities in agricultural production areas.
- Post-harvest losses due to bad state of the feed roads.
- Lack of mechanised farming equipment thereby causing low agricultural yields.
- Inadequate extension delivery due to few numbers of extension officers.

### 2.2.1.3. Impact of Changes Anticipated Over the Next Ten Years

#### 2.2.1.3.1.1.1. Population Change – Future Demand for Services and Facilities

It is expected that the population will increase which will in turn lead to increased demand for agriculture land. This implies that more land will be needed to meet the demand, leading to increased forestry clearance causing deforestation, invasion into the protected areas and destruction to the biodiversity. The demand for more land would result in social conflicts leading to migration in search for arable land which in turn lead to increased demand for social services.

2.2.1.3.1.1.2. *Existing Investment and Development Programmes*

1. Promotion of use of improved and certified seed.
2. Promotion of affordable and cost-effective irrigation infrastructure.
3. Promoting effective use of available water resources for irrigation and promoting high value irrigable crops.
4. Farmer Input Support Programme.
5. Climate Smart Agriculture – Trainings in conservation farming; promotion of climate smart technologies.
6. Agribusiness Development – Entrepreneurship farmer trainings; promotion of commodity value addition and marketing.

2.2.1.3.1.2. *The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns*

- Prolonged use of fertilizer will lead to soil degradation and pollution of water bodies.
- Prolonged use of chemicals in crop production will destroy the eco-system and pollute water bodies.
- Increased deforestation due to forest clearance of land for agriculture use.
- Population distribution is concentrated along water bodies posing a threat to disease outbreaks due to water pollution.

2.2.1.3.2. *Environment and Climate Change Analysis*

2.2.1.3.2.1. *The Impact of Existing Trends on The Environment and Climate Change*

- Prolonged use of fertilisers and chemicals will result in soil degradation, water and air pollution.
- Increased deforestation resulting in episodes of dry spells and flush floods.
- Out breaks of pests and diseases due to prolonged use of chemicals and effects of climate change.

2.2.1.4. *The Impact of Environmental and Climate Change Issues on the Sector*

- Crop damage and reduced yield due to dry spells, flush floods and emergence of new pests and diseases.
- Threat on household food security and income due to impact of climate change.

2.2.1.5. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

- Most farms are owned by men while women are labourers in the same farms
- Vulnerable groups such as the differently abled, aged, women and youths are excluded in farming activities i.e. Farmers Input Support Program and other agricultural empowerments.
- High prices of agricultural inputs such as seed, fertilisers, labour tools
- High illiteracy levels among women makes it difficult for them to vie for leadership positions in various Community Organizations.
- Empowerment programs mostly are meant for women and disadvantage males.

*2.2.1.6. Summary for the Sector/Thematic Area*

The district provides various agricultural services to 43,157 farmers. A larger population of farmers is based on the plateau practicing farming under rain fed conditions.

The production figures show an annual increase in production in maize, cassava and beans while finger millet, rice and groundnuts had decreased in the 2017/18 season and increased in the 2018/2019 season.

The sector operates with challenges that include;

- Inadequate bulking centers for yields produced
- Lack of mechanized farming equipment
- Limited number of extension officers against 43,157 farmers.
- Low yields per unit area not optimal due to poor soils, poor rainfall and poor management practices.
- Inadequate value addition processing plants.
- Lack of transport for the extension officers.
- Poor road networks.
- Inadequate officers' accommodation.

It is proposed that under this thematic area the following listed should be prioritized

- Construction of bulking centers in each camp.
- Procurement of mechanized farming equipment to improve yield production.
- Recruitment of more officers in management positions and extension officers.
- Procurement of motor bikes.
- Construction of camp houses.
- Improvement of feeder roads.
- Construction of value addition processing plants.

*2.2.1.7. Consideration of the Underlying Factors Contributing to the Issues Identified*

The identified issues under this thematic area are necessitated by various factors that include;

- Topography of the district
- Climate
- High poverty levels

## 2.2.2. Fisheries

### 2.2.2.1. Review of key Fisheries Policies and Plans

The fisheries sector is guided by the National Fisheries and Aquaculture Policy (NFAP) and regulated by the Fisheries Act No. 22 of 2011. The policy provides guidance to fisheries and aquaculture programmes in Zambia and aims at transforming the fisheries and aquaculture sub-sectors which is key to boosting productivity and increasing fish production, thereby contributing to accelerated economic growth, ending hunger and under nutrition. The policy therefore serves as a blue print to guide all stakeholders in the sub sector and contribute to the realization of the vision 2030. Mpulungu District under fisheries sector provides services as guided by the NFAP and the 8NDP.

### 2.2.2.2. Description of the Existing State of Development

#### 2.2.2.2.1. Availability of Service

The Department offers various services through 3 different sections namely; Research, Extension and Training unit. The available services include; Capture Extension Services, Capture Fisheries Research Services, Aquaculture Extension Services, Fisher folk and Farmer Training and Marketing Services. Other services include registration of fishers and boats, issuance of fish permits and licenses.

#### 2.2.2.2.2. Quality of Service Including Key Indicators of Performance

The Department has a total number of 9 officers; 2 in management positions, 4 laboratory personnel and 3 extension officers against the total number of 190 fish farmers and 5,661 fishermen as of 2017 resulting in inadequate service delivery.

The district has a total number of 462 active fish ponds; 60 situated within the valley, 6 along the Lakeshore and 396 are on the plateau and 6 fish cages on Lake Tanganyika. The district has 1 operational fish hatchery (Great Lakes Products) and 1 still under construction sponsored by ZAEDP/CEEC (Mwaletu Hatchery). However, the district has inadequate value addition, aquaculture facilities and the Department of Fisheries lacks fish farming demo equipment. Service delivery under capture fisheries research, fisheries law enforcement, trainings and promotion of aquaculture activities is hampered by lack of transport, low staffing levels and inadequate funding.

*Table 11-Fish Production*

S/N	Type of Crop	Production Quantities (Tones)						
		2016	2017	2018	2019	2020	2021	2022
1	Fish ponds	-	-	-	-	-	0.916	2.923
2	Capture	24.903	14.288	18.118	20.22	20.284	19.730	-

Source: Feld Data,2022.

N.B The collection of fisheries and aquaculture data has been scanty due to the limitation of resources.

### 2.2.2.2.3. Issues Arising from the Public Participation Process

#### 2.2.2.2.3.1. Availability of Service

A number of issues under Fisheries Sector were identified and these included;

- Low staffing levels.
- Lack of field staff accommodation.
- Lack of transport.
- Poor road network affecting extension service delivery and marketing of fish and fish products.
- Inadequate aquaculture facilities in the district.
- Inadequate cold storage facilities in rural areas.
- Inadequate availability of quality fingerlings and fish feed.
- Inadequate value addition of fish products.
- Inadequate fish market facilities.
- Fish depletion due to increased illegal fishing methods.
- Lack of updated and reliable fisheries and aquaculture data.

#### 2.2.2.2.3.2. Quality of Service Including Key Indicators of Performance

- Currently the district has got only 1 hatchery resulting in not meeting the demands of fish farmers at an intended time when stocking.
- Post-harvest fish losses due to distance to the market and bad state of feeder roads.
- Poor service delivery due to inadequate staff
- Lack of local availability of commercial fish feeds.

#### 2.2.2.2.4. Impact of Changes Anticipated Over the Next Ten Years

##### 2.2.2.2.4.1. Population Change – Future Demand for Services and Facilities

In the next 10 years, the population is expected to increase from 142,493 to 201,952, hence causing increase in fishing efforts on the Lake. This trend will result in depletion of fish in the Lake. It is anticipated that many will resort to fish farming due to high demand for fish and high unemployment levels. The population growth will result in the future demand for services and facilities, which will include; fish farming facilities, cold storage facilities, extension services, technical services, and nutritional advisory services.

2.2.2.2.4.2. Existing Investment and Development Programs

1. Rehabilitation of research facilities.
2. Procurement of laboratory equipment.
3. Employment of staff
4. Demarcation of fish bleeding areas
5. Monitoring control and surveillance
6. Promotion of aquaculture (land and water based).
7. Strengthening of co-management structures
8. Fisheries law enforcement
9. Construction of fish market
10. Collection of Fisheries and Aquaculture Data – 3 Frame surveys; Catch assessment surveys; Gillnet surveys and Aquaculture surveys.

2.2.2.2.4.3. The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns

- Depletion of fish in water bodies may lead to population decrease along lake shore due to migration.
- Expansion of aquaculture facilities may lead to displacement of human population and fishing grounds.

2.2.2.2.5. Environment and Climate Change Analysis

2.2.2.2.5.1. The of Existing Trends on the Environment and Climate Change Impact

- Illegal fishing gear and methods cause decrease of fauna and flora thereby disturbing the ecosystem.
- Continuous use of inorganic fertilizer to fertilize the pond will damage eco-system and polluting underground water.
- Use of charcoal and firewood in smoking of fish/preservation leads to deforestation which ultimately result in climate change effects.

2.2.2.2.5.2. The Impact of Environmental and Climate Change Issues on the Sector

- Damage to aquaculture facilities as a result of flush floods.
- Emergence of fish diseases as result of flush floods and high temperatures.
- Disruption of service delivery due to damaged roads and bridges along the Lake shore.
- Displacement of fishing grounds and human settlements due to rising water levels.

2.2.2.3. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

- Existence of cultural barriers where mostly men are fishermen and women are fish traders.
- Fisheries and aquaculture empowerment are biased towards youths and women.
- High prevalence of Gender Based Violence cases in fishing camps, i.e, wife battering and defilements.

- High prevalence of women exchanging sex for fish which in turn leads to an increase in sexually transmitted diseases

#### *Summary for the Sector/Thematic area*

The department has a total number of 9 officers; 2 in management positions, 4 laboratory personnel and 3 extension officers against the total number 190 fish farmers and 5,661 fishermen as in 2017 resulting in inadequate service delivery. The district has a total number of 462 active fish ponds; 60 situated within the valley, 6 along the Lakeshore and 396 are on the plateau.

- There are difficulties in getting harvested fish to reach the market on time due to bad feeder roads. This can cause losses as fish needs refrigeration as soon as it is harvested.
- The district has no fish farming demo equipment thereby making training difficult.
- The need for aquaculture training equipment and land for demo ponds.
- Up scaling of aquaculture empowerment.
- The road network is poor making it difficult for fish farmers and officers to transport harvested fish and fingerlings respectively.

#### *2.2.2.4. Consideration of the Underlying Factors Contributing to the Issues Identified*

The identified issues under this thematic area are necessitated by various factors that include;

- Lack of connectivity to the national electricity grid affecting establishment of freezing facilities along the lake shore.
- Climate change effects.
- Population growth which has led to increased number of fishermen.
- High poverty levels and low literacy levels.
- Inadequate funding.
- Lack of transport.
- Poor road network.

### 2.2.3. Livestock

#### *2.2.3.1.1. Review of existing Livestock Policies and Plans*

The Livestock sector is guided by the National Livestock Development Policy (NLDP). The policy recognizes the need to improve the productivity of the livestock industry in line with the vision 2030. The Livestock Development Sector is regulated by the Animal Health Act No. 27 of 2010. The Act focuses on promotion of animal health and productive efficiency of livestock in order to contribute towards the alleviation of poverty, food security and income generation. It promotes animal health through the development and implementation of environmentally sustainable diseases and vector control strategy. This involves carrying out applied research in animal health and control animal disease as well as ensuring wholesome food of animal origin.

### 2.2.3.1.2. The Existing State of Development

#### 2.2.3.1.2.1. Availability of Service

The district is demarcated into Seven (7) Veterinary camps and these are Central, Isoko, Vyamba, Chinakila, Kavumbu, Iyendwe and Chitimbwa camps. However, the District has only one dip tank located in Chinakila which is not in operation as a result of lack of water reticulation system.

The livestock service available includes; Public Health, Clinical services for livestock, Disease control, Disease surveillance, Farmers trainings and consultation.

#### 2.2.3.1.2.2. Quality of Service Including Key Indicators of Performance

The district has a total number of 1 officer in management position and 9 extension officers against the huge population of animals as indicated in the tables below which results in inadequate service delivery. Further, the District has no motorized transport to provide service efficiently.

*Table 12-Livestock Production*

S/N	Type of Livestock	Quantities					
		2015	2016	2017	2018	2019	2020
1	Cattle	2800	2500	2014	1418	1138	1380
2	Chicken	30000	29999	29,985	29945	29253	30165
3	Goats	14,000	13,888	12,000	11282	11317	11296
4	Pigs	13,000	12,800	12,600	12397	12635	12435
5	Ducks	760	500	700	851	954	851
6	Sheep	180	110	100	252	282	263

Source: Field data,2022.

*Table 13-Domesticated animals Population*

S/N	Name of Pet	Quantities					
		2015	2016	2017	2018	2019	2020
1	Dogs	1050	1000	800	966	944	961
2	Cats	970	920	905	800	900	920
3.	Hamsters	20	40	80	87	100	109

Source: Field Data,2022.

### 2.2.3.2. Issues Arising from the Public Participation Process

#### 2.2.3.2.1. Availability of Service

A number of issues in the livestock sector were identified and these include;

- Limited extension services due to lack of staff accommodation in camps.

- Lack of accommodation for Livestock and Veterinary Assistants.
- Lack of motorised transport for Livestock and Veterinary Assistants.
- Poor road network.
- Lack of livestock facilities such as dip tanks, veterinary clinics, livestock service centres, livestock multiplication centre, slaughter slabs and abattoirs.
- Low livestock population in the district.
- High illegal movements of cattle from Tanzania via Mbala into Mpulungu for slaughter purposes.

*2.2.3.2.2. Quality of Service Including Key Indicators of Performance*

- The district has got only one (1) non-functional dip tank in Chinakila.
- Low presence of veterinary and livestock extension staff.
- Lack of livestock facilities hinders livestock production and population.

*2.2.3.2.3. Impact of Changes Anticipated Over the Next Ten Years*

*2.2.3.2.3.1. Population Change – Future Demand for Services and Facilities*

Over the next ten years it is expected that population of livestock will increase thereby reducing land for habitation and grazing of animals. It is further anticipated that social conflicts will emerge as a result of land shortage and migration.

The above would lead into demand for livestock services and facilities, which will include; camp sites dip tanks, abattoirs and slaughter slabs as well as dams or water ponds.

*2.2.3.2.3.2. Existing Investment and Development Programmes- Livestock structures*

1. Promoting livestock production and disease control programmes
2. Promoting livestock stocking and restocking programmes.
3. Livestock Development – livestock stocking and restocking programmes; establishment of pasture; livestock disease control programmes; livestock sensitisation and trainings.

*2.2.3.2.3.3. The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns*

- Pollution of ground water sources due use of acaricides used in spraying and dipping of livestock.
- Land and soil degradation due to livestock movements and overgrazing.
- Deforestation caused by cutting down of trees for kraal and paddocks construction.

#### 2.2.3.3. *Environment and Climate Change Analysis*

##### 2.2.3.3.1. The Impact of Existing Trends on the Environment and Climate Change

- Increased cattle population results in high production of methane gas that contributes to greenhouse gases.

##### 2.2.3.3.2. The Impact of Environmental and Climate Change Issues on the Sector

- Flush floods, dry spells and extreme temperatures affect livestock production.
- High prevalence of livestock diseases due to shortage of pasture and water for livestock.
- Reduced livestock production and population.

##### 2.2.3.4. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

- Big livestock such as cattle are owned by men while small livestock like goats and chickens are owned by women and the youth.
- Livestock empowerment programmes are biased towards men and youths.

#### 2.2.3.5. *Summary for the Sector/Thematic Area*

The district is demarcated into Seven (7) livestock camps and these are Central camp, Isoko , Vyamba, Chinakila Kavumbu, Iyendwe and Chitimbwa camps. However, the District has only one non-functional dip tank located in Chinakila. The district has a total number of 3 officers in management positions and 6 extension officers against the huge population of livestock.

The sector has challenges that include;

- The district has got only one (1) non-functional dip tank.
- Lack of accommodation, transport and field equipment for livestock and veterinary officers hinders adequate service delivery.
- Lacks of livestock facilities hinder livestock production and population.

##### 2.2.3.6. *Consideration of the Underlying Factors Contributing to the Issues Identified*

The identified issues under this thematic area are necessitated by various factors that include;

- Inadequate funding.
- Climate change effects.
- Poor road network.
- Lack of transport for livestock and veterinary staff.

## 2.2.4. Energy

### 2.2.4.1. *Review of key Energy Policies and Plans*

The energy sector is guided by National Energy Policy which is key in facilitating increased access to energy services. The policy provides guidance for the continued development of the energy sector essentially on the security, affordability, supply and utilization of energy.

### 2.2.4.2. *The Existing State of Development*

#### 2.2.4.2.1. Availability of Service

Mpulungu District like most Districts in Zambia use various energy sources. The main sources of energy in Mpulungu are hydro-electric power, solar power, wood fuel and charcoal. The wood fuel caters for 84.7% of the total number of households while hydropower accounts for 15.3%.

#### 2.2.4.2.2. Quality of Service Including Key Indicators of Performance

According to the Draft District Strategic Plan (2018-2021) as of 2017, the demand for electricity in the district reached 3.8MVA. The total number of customers were 3,300. Out of that number 3,108 were domestic customers and 192 were commercial customers. The number of customers in 2022 reached 5,011. The district has Lunzua sub hydro power station with a capacity of 14.9 Megawatts. Based on 2010 Census on housing and commercial infrastructure, it was projected that only 15.3% of the total housing and commercial infrastructure in the district mainly residing in urban areas have access to hydroelectricity while the remaining 84.7% of households continue using charcoal or firewood for cooking and, candles for lighting. There has been an increase in the use of solar energy in the rural parts of the district. The Rural Electrification Authority (REA) commenced the electrification of chiefdoms and government facilities in rural parts of Mpulungu. Another project of developing Lufubu hydro Power Station in Iyendwe Ward has been approved awaiting commencement of construction works.

### 2.2.4.3. *Issues Arising from the Public Participation Process*

#### 2.2.4.3.1. Availability of Service

A number of issues under energy sector were identified and these include;

- The need for Rural Electrification Authority to expedite connection of rural part of the district to the national grid.
- There is need to expedite construction of Lufubu Hydro Power Station.
- The need to reduce load management by ZESCO which has negatively affected the business community of Mpulungu.
- There is need for establishment of a solar power plant in the lake shore areas of Lake Tanganyika where there is open space for capturing sunshine.

#### 2.2.4.3.2. Quality of Service Including Key Indicators of Performance

The quality of energy service in the district is quite fair as there are minimal power disruptions or load shedding. However, there is need for further expansion of electricity connection to the rural areas. In addition, there is need to emphasize on the need to utilize solar energy.

2.2.4.4. *Impact of Changes Anticipated Over the Next Ten Years*

2.2.4.4.1. Population Change – Future Demand for Services and Facilities

In the next ten years, there will be an increase in demand for energy services in the district due to population increase.

2.2.4.4.2. Existing Investment and Development Programmes

1. Maintenance of Lunzua Hydro Power Station.
2. Connection of electricity to Chinakila and Chitimbwa chiefdoms.
3. Connections of new housing units in the urban and peri-urban areas of Mpulungu District to the national grid.
4. Maintenance of the grid.
5. Energy Efficient Promotion-Distribution of 48,000 energy saver bulbs.

There has been a record of encroachment by the locals under electrical pylons. This trend is common amongst shop owners who build their shops under the electricity poles.

2.2.4.5. *Environment and Climate Change Analysis*

2.2.4.5.1. The Impact of Existing Trends on The Environment and Climate Change

- During construction of electrical substations or pylons, there is clearing of land and this in turn causes deforestation and soil erosion.
- The use of firewood and charcoal causes air pollution

2.2.4.5.2. The Impact of Environmental and Climate Change Issues on The Sector

The district experiences high rainfall and strong winds which plummets the electrical poles thereby causing disruption of power supply.

Due to high rainfall patterns, the plateau area experiences low temperatures which causes erratic solar energy supply in few government facilities using solar energy.

2.2.4.6. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

- Mpulungu District ZESCO branch has only male employees.
- Only male casual workers are engaged to construct electrical lines or sub stations.

2.2.4.7. *Summary for Sector/Thematic Area*

Mpulungu District like most Districts in Zambia uses various energy sources. The main sources of energy in Mpulungu are hydro-electric power, solar power, wood fuel and Charcoal. The wood fuel caters for 84.7% of the total number of households while hydropower accounts for 15.3%.

Of late there has been an increase in the use of solar energy amongst residents especially on the plateau. In addition, The Rural Electrification Authority has started the program of putting power lines towards the Plateau area or rural part of the district.

2.2.4.8. *Consideration of the Underlying Factors Contributing to the Issues Identified*

The identified issues under this thematic area are necessitated by various factors that include;

- Inadequate funding to expand energy supply coverage.
- Lack of investors to invest in solar energy.

## 2.2.5. Tourism

### 2.2.5.1. *Review of key Tourism Policies and Plans*

The tourism sector has been identified as one of Zambia's key economic sectors as the nation strives to diversify its economy. This recognition has been supported by various key institutional and policy reforms by the Government in its endeavor to develop the untapped potential of the sector and increase its contribution to the nation's revenue. Tourism creates socio-economic benefits in the form of foreign exchange earnings, income generation, employment opportunities, rural development and entrepreneurship stimulation, through multiplier effects. The vision in the National Tourism Policy for the tourism sector is to "Make Zambia an exciting and growing destination that realizes its full potential and rewards tourists with unique, authentic and treasured experiences. In realizing this vision, the 8NDP provides guidance how tourism sector can be diversified through infrastructure development; product development; tourism promotion and marketing; and wildlife management.

### 2.2.5.2. *The Existing State of Development*

#### 2.2.5.2.1. Availability of Service

Mpulungu District hosts a number of tourist attraction sites. These include the Lake Tanganyika, rivers, water falls, monuments, Nsumbu national park, other wildlife sites, mountains, plateau among others. These are potential sites for tourist activities such as walking safaris, fishing competitions, boat cruises, traditional ceremonies, game viewing, etc. Notwithstanding, the district has not exploited these natural resource endowments for the benefit of its growth and development. This is however compounded by lack of data on tourist arrivals.

Tourism sector in Mpulungu is characterized with poor hospitality services. There are only 7 lodges offering at least quality accommodation services, these include Mishembe Lodge, Isanga Bay, Nawela Lodge, Great Lakes Products Lodge, Parkway Lodge, Lake Tanganyika Resorts and Caferonia lodge. However, these facilities have limited rooms for tourists.

Mpulungu lacks existence of the Tourism Department to spearhead promotion of tourism sector in the district.

#### 2.2.5.2.2. *Quality of Service Including Key Indicators of Performance*

Service delivery of the tourism sector is not fully developed. The hospitality facilities are inadequate; some tourism sites are inaccessible; the services of game rangers are not available in Mpulungu and the district lacks a tourism information Centre.

### 2.2.5.3. *Issues Arising from the Public Participation Process*

#### 2.2.5.3.1. Availability of Service

A number of issues in the Tourism sector were identified and these include;

- Nonexistence of tourism marketing strategies
- Inaccessible tourism infrastructure
- Low private sector participation leading to low investment in the sector
- Lack of human resource to conduct tourist activities at local level.

- Low quality of hospitality services
- Underdeveloped tourism-related infrastructure
- Limited investment in the tourism sector by both local and foreign investors

#### 2.2.5.3.2. Quality of Service Including Key Indicators of Performance

There is no proper service delivery in the tourism sector due to non-availability of the coordinating institution in the district.

#### 2.2.5.4. Impact of Changes Anticipated Over the Next Ten Years

##### 2.2.5.4.1. Population Change – Future Demand for Services and Facilities

It is expected that the population will increase which will in turn lead to increased demand for hospitality services and facilities. This will lead to improvement in the hospitality industry. Investments in water transport, boat cruising and spot fishing competitions will emerge. The formation of the Tanganyika Abercorn Tourism Association (TATA) will help market the tourism potential of the Northern Tourism Circuit (NTC), in Mbala, Mpulungu, Nsumbu and around the vicinity of Lake Tanganyika. TATA will collaborate with Government institutions to link and provide guidance to business and tourism associates to develop and grow their endeavours to outside operators, institutions, and individuals. It is also expected to give impetus to the preparation and implementation of international and domestic marketing strategies, local institutional reforms, human capacity development, tourism research, quality assurance and foreign assisted projects and programs.

##### 2.2.5.4.2. Existing and Investment and Development Programmes

1. Lodges.
2. Niamukolo heritage site.
3. Availability of Lake Tanganyika.
4. Formation of Tanganyika Abercorn Tourism Association
5. Spot Fishing on Lake Tanganyika.
6. Construction of hospitality infrastructure such as Hotels and Lodges along the lake shore and Islands of Lake Tanganyika.

##### 2.2.5.4.3. The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns

- Increased demand for hospitality facilities will create an increase in the demand for land which will in turn lead to displacements of communities.
- There will be increased demand for land on the plateau as people will migrate to give room for development of the tourism facilities along the Lake shore.

#### 2.2.5.5. Environment and Climate Change Analysis

##### 2.2.5.5.1. The Impact of Existing Trends on The Environment and Climate Change

- Deforestation will be on the increase to pave way for new developments and constructions.

- Water pollution associated with development of tourism facilities along the Lake shore resulting in negative impact on the biodiversity.
- Loss of fish species and introduction of new fish species.

#### 2.2.5.5.2. *The Impact of Environmental and Climate Change Issues on the Sector*

- Flush floods will cause damage to tourism facilities and associated infrastructures.
- Loss of tourism sites due to flush floods.
- Loss of business and sector contribution to GDP.
- Outbreaks of water borne diseases due to flush floods leading to loss of business.

#### 2.2.5.6. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

- Tourism related activities contribute to the increase of ill-vices such as prostitution among the women and youths coming from vulnerable communities.
- Erosion of cultural values promoted as a result of promotion of western culture among the indigenous communities such as LGBTQ (Lesbian, Gay, Bisexual, Transgender and Queer).

#### 2.2.5.7. *Summary for the Sector/Thematic Area*

The tourism sector is under developed but has great potential. This will in-turn improve the economic status of the district. This is to be achieved through

- Construction of the hotels.
- Construction of access roads and airports to the tourist sites.
- Construction of a cultural village.

#### *Consideration of the Underlying Factors Contributing to the Issues Identified*

The identified issues under this thematic area are necessitated by various factors that include;

- Lack of investment in the sector.
- Lack of marketing.
- Cultural barriers where locals hold on to land.

## 2.2.6. Transport and Communications

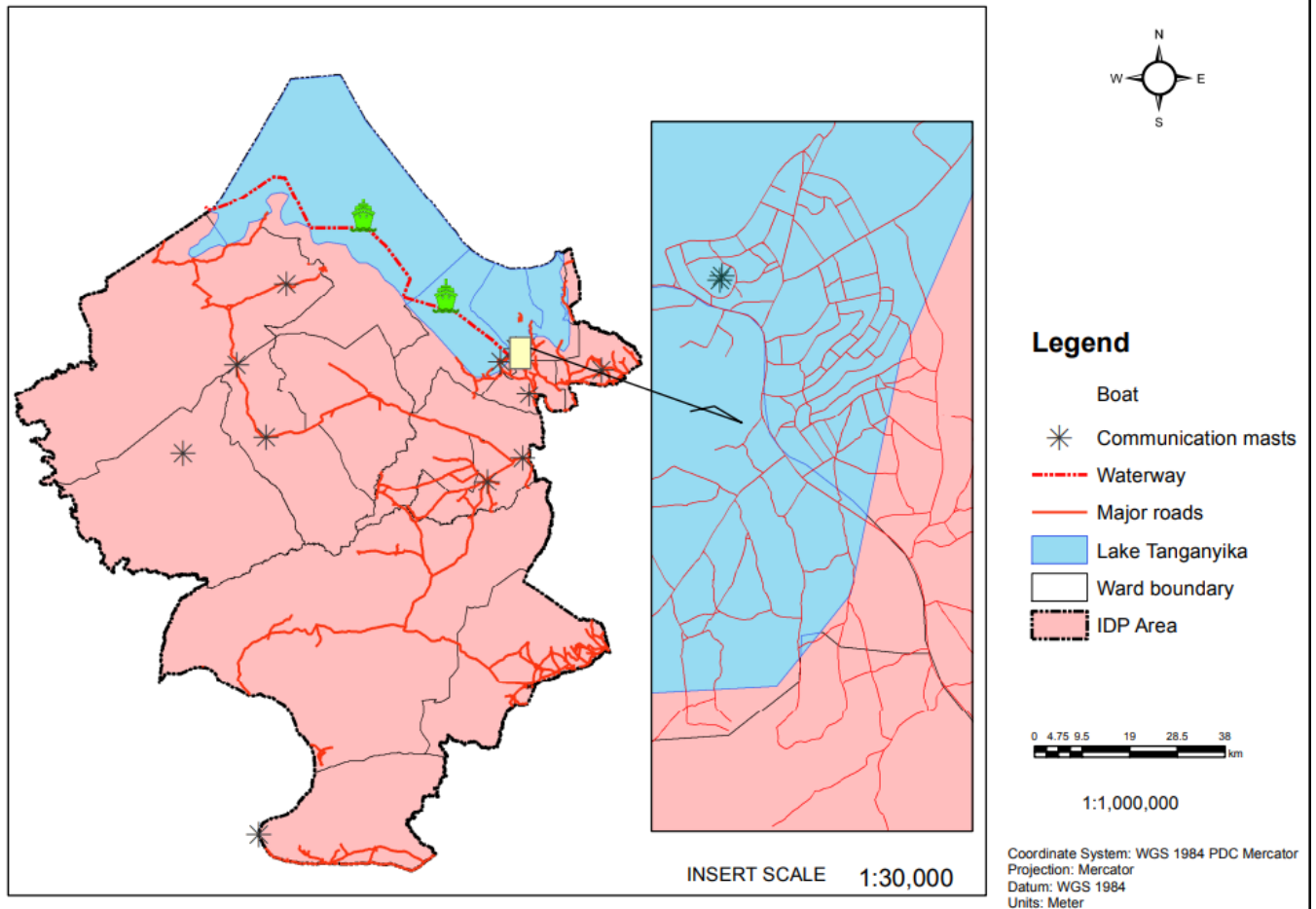
### 2.2.6.1. *Review of key Transport Policy and Plans*

The transport sector is guided by the National Transport Policy of 2019 whose focus is on creating an intermodal transport system which provides for inter-linkages among the four modes (Rail, Road, Air and Water) of transport and ultimately transforms Zambia into a regional transport hub by 2028. The policy introduces institutional reforms in the sector to improve implementation capacity and a greater coordination at all levels. This is further supported by the Eighth National Development Plan (8NDP) which provides for improving the transport and logistics sector with the focus on positioning the country into a regional transport and logistics hub. This is to be done through maintenance, development, modernization, and integration of the rail, road, air and water transport infrastructure. This will contribute

to opening up of the rural areas for development and enhancing participation of the communities in the economy.

Figure 10-Distribution of communication masts, water ways and roads.

**TRANSPORT AND COMMUNICATION IN MPULUNGU DISTRICT**



Source: Field Data,2022

2.2.6.2. *The Existing State of Development*

2.2.6.2.1. *Availability of Service*

Mpulungu district has both road and water transport networks. In terms of road network, it has a fairly good and well-developed road network in the urban set up of the district. A total of **19.9km** are of bituminous standard with a high proportion of the road network falling within central, Tanganyika and Chibulula wards. Access to rural wards is through gravel and most of the roads are not well maintained and have challenges with several crossing points. However, the rate of investments in transport infrastructure is lower than the demand largely due to lack of clearly defined infrastructure targets, financial resources and approved spatial plans to ensure that the investments in roads is implemented accordingly. Only a small percentage of transport infrastructure in the whole district is maintained which is in the urban sector. The roads leading to the rural wards are hazardous especially in the rainy season hence this causes a negative impact economically in the sense that people from the rural setup find it

difficult to transport farm production to the urban setup to make sales and earn a living. It is for this reason that transport cost is expensive in Mpulungu.

On the other hand, Mpulungu has no designated local bus stations for local public transport despite a high number of people that travel within and around the district for trade. It only has station for buses traveling outside the district and entering in the district. The main source of public transport is local taxis and small light tracks for carriage of goods from one point to another within the district.

Water transport is a suitable and convenient mode of transportation and has proved to be an important alternative to other forms of transportation such as road, air and rail. It is a convenient form of transport particularly in rural communities along Lake Tanganyika such as Kapembwa, Chibulula, Namukale and Chilumba Wards as well as Mutondwe Island and Nsumbu area. Currently only Pendulum Corporation and Standard fisheries have 3 medium vessels carry people to and from Nsumbu via Kapembwa ward. Water transport has an advantage in that it is able to move goods in bulk. Statistics show that a total cargo of approximately 296 tones and 8,669 passengers use the water transport through Mpulungu Port. However, the Zambian Government does not own any vessel on Lake Tanganyika to promote trade across great Lake's region.

#### 2.2.6.2.2. Quality of Service Including Key Indicators of Performance

The transport and logistics sector are not fully developed to provide the required services. Mpulungu is the only district in the country with an inland port. However, the district only has one major road linking Kasama via Mbala to Mpulungu which is also in a bad state and with a collapsed bridge. The district has no rail connection from the major towns for transportation of heavy cargo to the port. Mpulungu relies on Mbala and Kasama for aviation services. Mpulungu is the only district with an inland port, it has limited imports and exports warehousing facilities for the goods. The district lacks a trade centre to facilitate adequate international trade. The aviation industry is non-existence and the district is characterised with underdeveloped water transport system.

#### 2.2.6.3. Issues Arising from the Public Participation Process

##### 2.2.6.3.1. Availability of Service

A number of issues in the Transport and Logistics sector were identified and these include;

- Poor road network and bridges.
- Lack of truck parking bay.

##### 2.2.6.3.2. Quality of Service Including Key Indicators of Performance

The poor road network causes damages to the vehicles which posse a cost to the owners as they require to constantly repair the vehicles.

#### 2.2.6.4. Impact of Changes Anticipated Over the Next Ten Years

##### 2.2.6.4.1. Population Change – Future Demand for Services and Facilities

It is expected that the population will increase which will in turn lead to increased demand for improved transport and logistics facilities and services. There will be more cargo being export to neighbouring countries which will lead to further damage of the roads. Demand for safe water transport will increase due to the increase in population on the lake shore villages.

#### 2.2.6.4.2. Existing Investment and Development Programmes

1. Construction/ Rehabilitation of access road from Mpulungu to Nsumbu via Nsumbu National Park.
2. Opening up of new roads; Chitinta –Chipwa Rd, Mbetete – Mwela Rd, Iyendwe – Kabyolwe Rd.
3. Construction of access road from Mpulungu to Mporokoso via Musakanya.
4. Construction of landing jetties along the Lakeshore.

#### 2.2.6.5. *The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns*

The current road network is damaged. Prolonged usage of these roads will result in erosion of land bordering the roads as drivers of vehicles continue looking for better pieces of land avoiding the pot holes and excessively damaged parts of the roads. Prolonged usage of the road by heavy trucks will lead to the collapsing of the temporary bridge at Lunzua. Road accidents will increase due to the poor state of roads.

#### 2.2.6.6. *Environment and Climate Change Analysis*

##### 2.2.6.6.1. *The Impact of Existing Trends on The Environment and Climate Change*

- Pot holes on the roads cause damages and break downs of motor vehicles. It is a common trend that at the point of breakdowns, trees are cut down as a way of cautioning and notifying other motorists. This will result in deforestation and soil erosion in the affected areas.
- Water pollution due to leakage of oil and gases from water vessels. This has a negative effect on the flora and fauna.

##### 2.2.6.6.2. *The Impact of Environmental and Climate Change Issues on the Sector*

- Flash floods cause damage to the roads and bridges which may lead to accidents on the roads and bridges.
- Disruptions of services due to damaged roads and washed away bridges.
- Disruptions of services due to flooding of landing sites.

##### 2.2.6.7. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

- Employment opportunities are biased towards men.
- Increased prostitution due to influx of truck drivers at the port.

##### 2.2.6.8. *Summary for the Sector/Thematic Area*

- Poor and under developed road network.
- Lack of rail connectivity.
- Availability of inland port.
- Lack of warehouse facility.
- Under developed water transport system.

*2.2.6.9. Consideration of the Underlying Factors Contributing to the Issues Identified*

The identified issues under this thematic area are necessitated by various factors that include;

- Topography of the district
- Lack of adequate funding to the sector.

## 2.3. HUMAN AND SOCIAL DEVELOPMENT

This pillar focuses on improving the quality of life of our people through access to quality education, healthcare, and social protection.

### 2.3.1. EDUCATION

#### *2.3.1.1. Review of key Education Policies and Plans*

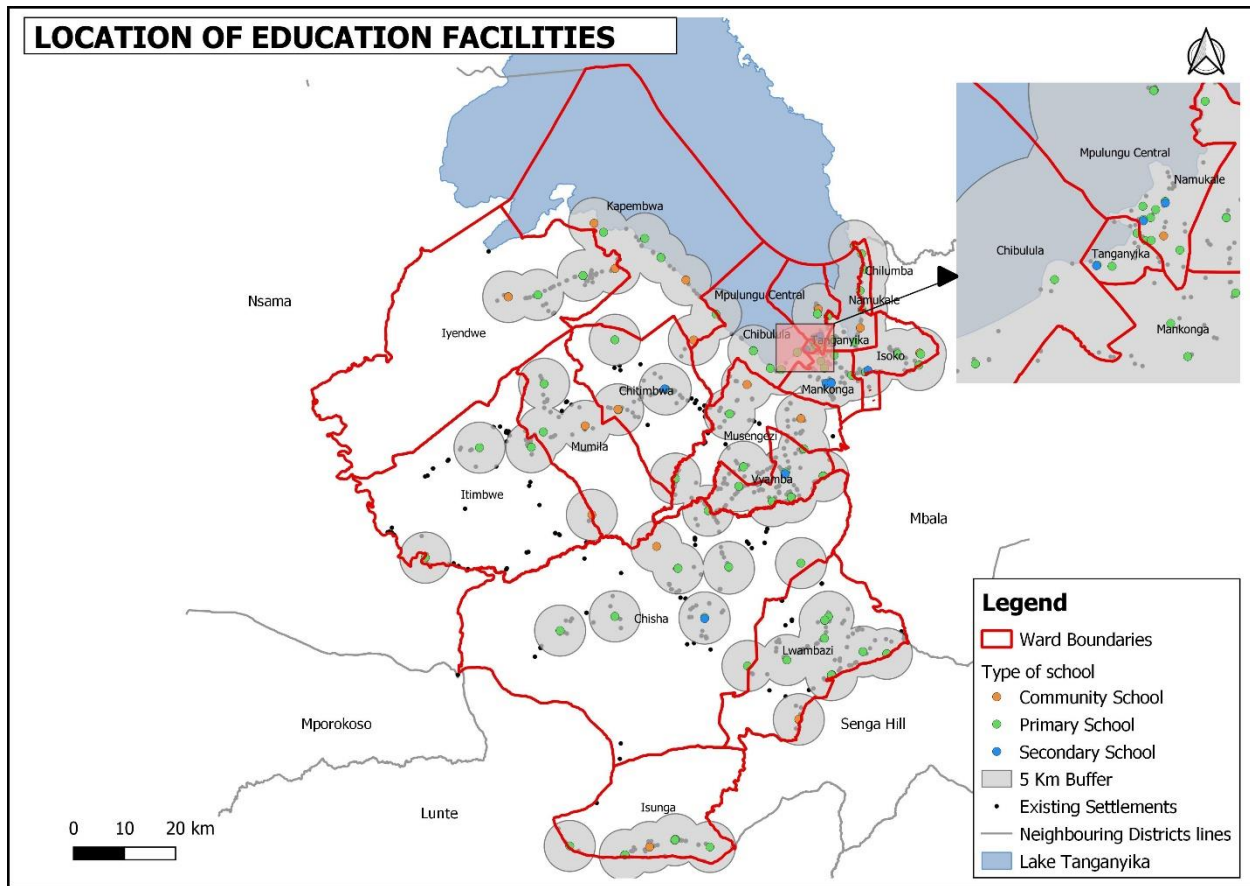
The 8<sup>th</sup> National Development Plan stipulates that achieving universal access to education as espoused by the Vision 2030 and the SDGs remains government policy on education. Education is a key driver to higher productivity which is a prerequisite for national development therefore, the need to increase investment in educational infrastructure with the view to improve the quality of education, especially in rural areas cannot be over emphasized. The education sector is guided by the Education Policy of 1996, 'Educating the Future'. The policy focuses on the democratic principles of efficiency, equity, accountability and cost effectiveness. This implies that education system will be liberalized and decentralized in accordance with the democratic principles of local governance. Emanating from the policy direction, Mpulungu district Education Board recognizes all stakeholders in provision of quality education in academic clean and green environment.

#### *2.3.1.2. The Existing State of Development*

##### *2.3.1.2.1. Availability of Service*

The district provides early childhood, primary, and secondary education. However, there is no tertiary education and education for children with special needs provided. In total there are 103 schools segregated as 12 secondary schools, 58 government primary schools, 31 community schools and 6 registered private schools. The map below shows the distribution of educational facilities.

Figure 11-Education Facilities



Source: Field Data,2022

2.3.1.2 Quality of Service Including Key Indicators of Performance

The total number of learners is 43,500 of which 20,549 are boys and 19,873 are girls against 933 teachers resulting into a deficit of 500 teachers. The staffing in primary schools stands at 531 primary school teachers of which 297 are male teachers and 234 female teachers. The secondary school staffing stands at 385 teachers broken down into 152 females and 233 males.

- The average teacher-pupil ratio stands at 1:65 in primary schools and 1:70 in secondary schools resulting in ineffective teaching and learning as teachers are over whelmed with work, this negatively affects pupil performance.
- The district average pass rates have been at 65% and 58% at grades 9 and 12 respectively.
- There are 312 classrooms against 43,500 learners having a deficit of 775 classrooms.
- Lack of adequate transport on both land and water which has negatively affected Monitoring and Inspection of service delivery in schools.
- The road network and distance to schools has increased the number of drop outs.

- Poor physical environment e.g. lack of laboratories, co-curricular fields and dilapidated classrooms.
- The district has 34 standard houses against 933 teaching staff. This affects service delivery as 899 staff are left to look for their own accommodation.

*2.3.1.3. Issues Arising from the Public Participation Process*

*2.3.1.3.1. Availability of Service*

Issues from the public participation process included; Lack of tertiary and special needs school, lack of electricity in rural schools, inadequate class room blocks, inadequate libraries, inadequate ICT equipment, inadequate laboratories, inadequate teachers, inadequate secondary high schools, inadequate staff houses, non-functional water boreholes, inadequate furniture, poor sanitation, as well as had to reach schools due to poor road network.

*2.3.1.3.2. Quality of Service Including Key Indicators of Performance*

- The district has 12 secondary schools, only 3 are gazetted and 2 have science laboratories.
- High dropout rate of girls due to pregnancies and early marriages.
- Average pass rate of 65% and 58% at grade nine and twelve respectively.
- Poor performance due to inadequate number of teachers, long distances covered from home to school, inadequate boarding facilities, lack of libraries, and the district has only 1 library with inadequate material to support the current curriculum.

*2.3.1.4. Impact of Changes Anticipated over the Next Ten Years*

*2.3.1.4.1. Population Change – Future Demand for Services and Facilities*

The current population of the school going age group is at 55,573, and the projected population in the next 10 years will be 90,769 this is according to 2010 Census projection (CSO, 2010). This implies that future demands for services and facilities will be high, thereby the need to construct more education facilities in both rural and urban areas of the district.

*2.3.1.4.2. Existing Investment and Development Programmes*

1. Youth skills centre
2. University
3. 10 secondary schools
4. Gazetting of 31 community schools

*2.3.1.5. The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns*

Approximately 98% of the land is under customary tenure, implying that most schools are constructed on unplanned settlement and do not have title deeds. This trend has contributed to the high levels of encroachment by settlers as there are no marked boundaries for easy identification.

Furthermore, encroachment will hinder schools from expansion taking into account increase in enrolment.

### 2.3.1.6. *Environment and Climate Change Analysis*

#### 2.3.1.6.1. *The Impact of Existing Trends on the Environment and Climate Change*

There is a lot of land clearing during construction of education facilities thereby resulting into land degradation. Due to high demand of education facilities, a lot of people settle near schools thereby creating pressure on the environment through activities such as charcoal burning and inorganic farming as a means of survival. The Impact of Environmental and Climate Change Issues on the Sector

The education sector has faced a number of environmental and climate change issues such as blown off infrastructure, flooding, collapsing of infrastructure and reduced school attendants due to inaccessible road networks leading to schools.

#### 2.3.1.7. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

The staffing in primary schools stands at 531 primary school teachers of which 97 are male teachers and 234 female teachers. The secondary school staffing stands at 385 teachers broken down into 152 females and 233 males. The district has 450 females and 333 males in management positions. The district has three differently abled staff in management positions.

Climate change has negatively affected education delivery, this can be seen from the increased number of blown off roofs, collapsed schools and bridges. This affects the attendance in schools. Furthermore, during floods and droughts low yields are experienced resulting in low retention of pupils in schools.

#### 2.3.1.8. *Summary for the Sector/Thematic Area*

The district has 17 zones with a total number of 103 schools as of 2022. The number of secondary schools is 12 of which 3 are gazetted while the number of primary schools is 58 of which 20 annex Early Childhood services and the number of registered private schools is 6. The district's average pass rates have been at 60% and 65% at grades 9 and 12 respectively.

The district faces many challenges in education sector that include; lack of tertiary services, laboratories, libraries, shortage of teachers, teacher's accommodation, electricity, accessibility to some schools, classroom space and schools, internet connectivity, ICT equipment and furniture, high school drop-out rate among girls as well as high poverty levels.

It is proposed that the following challenges be prioritised in this sector;

- Construction of a Skills Centre
- Upgrading and construction of new secondary schools in Chitinta, Chibote, Iyendwe, Kalongola, Chaulu, Chisanza and Kapembwa .
- Recruitment of more teachers
- Construction of a University.
- Procurement of furniture and ICT equipment
- Improvement of sanitation and water supply
- Construction and equipping of laboratories and libraries
- Procurement of a boat and 3 vehicles.

- Construction of a special needs boarding school
- Equipping of the district teachers resource centre.

#### *2.3.1.9. Consideration of the Underlying Factors Contributing to the Issues Identified*

Factors contributing to the identified issues include; inadequate funding, low community participation in local resource mobilization towards some developmental projects, Inadequate communication facilities, high poverty levels, unwanted pregnancies and early marriages.

### 2.3.2. HEALTH

#### *2.3.2.1. Review of key Health Policies and Plans*

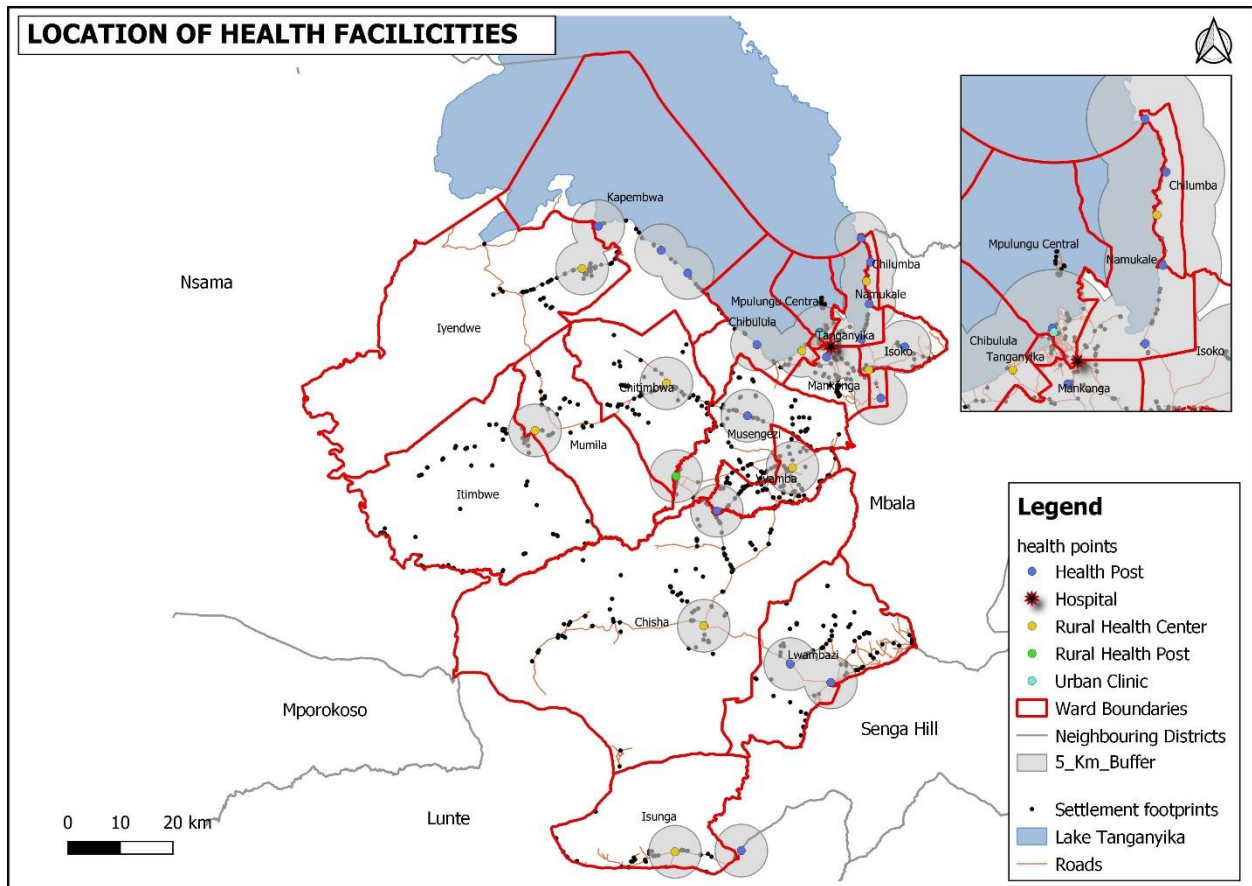
The Ministry of Health is guided by various health policies and the 8<sup>th</sup> National Development Plan. The 8<sup>th</sup> NDP emphasizes much on need to have improved health and health related services. The Government is determined to transform Zambia into a nation of healthy and productive people. The National Health Policy of 2012 focuses on the provision of equitable access to cost effective and quality health services as close to the family as possible in a caring, competent and clean environment. Mpulungu district health office has been striving to provide equitable access to health services as enshrined in the policies.

#### *2.3.2.2. The Existing State of Development*

##### *2.3.2.2.1. Availability of Service*

The district provides health care services through the district hospital, 1 urban health clinic, 7 health Centers and 19 health Posts providing services to the 153,564 people of Mpulungu district. The locations of health facilities are indicated in the map below.

Figure 12-Location of Health Facilities



Source: Field Data, 2022

2.3.2.2.2. Quality of Service Including Key Indicators of Performance

The quality of services in health is regulated by health professional bodies and Zambia Medicines Regulatory Authority that ensures that quality is not compromised. However, the demand for health services in the district is extremely high to be provided by only 2 medical doctors, 36 clinical officers and 108 nurses. Further, the health sector is facing challenges with inadequate health facilities causing people to move long distances to nearest facilities, for example the district hospital according to standards is supposed to cater for 80 000 people only but in this case the district population of 152,975 is way above the standard. There is also inadequate transport (vehicles and boats) and lack of specialized equipment for patients cause limitations in service delivery. The key health indicators are shown in the tables below.

*Table 14-key health indicators*

<b>Mortality Rates</b>	<b>Year -2020</b>	<b>Year – 2021</b>	<b>Year – 2022</b>
Maternal Mortality Rate	40.6	53.3	68.6
Malaria incidence rate	319.9	419.6	383.8
Malaria under-five fatality rate	55.8	34.7	19.9
HIV Prevalence Rate	7.20%	8.36%	8.36%
Infant Mortality Rate	9.3	7.6	7.6

Source: Mpulungu DHO, 2022

Table 15-Disease prevalence

	<b>2021 Diseases</b>	<b>Abs.#</b>	<b>Inci/1000</b>		<b>2022 Diseases</b>	<b>AbAbs.#</b>	<b>Inci/1000</b>
1.	Conf. Malaria	57579	419.6	1.	Conf. Malaria	58707	383.8
2.	Respiratory Tract Infection (non.pneu)	41682	303.7	2.	RTI (non.pneu.)	33586	219.6
3.	Diarrhoea (non)	14367	104.7	3.	Diarrhea (non)	12616	82.5
4.	Masc.Skeletal	2733	19.9	4.	Masc.Skeletal	2582	16.9
5.	Digestive sys.Dis	1798	13.1	5.	Digestive sys.Dis	1820	11.9
6.	Trauma; other injuries	1370	10.0	6.	Trauma; other injuries	1653	10.8
7.	Pneumonia	861	6.3	7.	Dental caries	2260	14.8
8.	Skin Dis. (not infectious)	867	6.3	8.	Skin Dis.(not infe)	1258	8.2
9.	Dental caries	1853	13.5	9.	Anemia	995	6.5
10	General Urine Disease	1315	9.6	10.	Pyrexia of Unk.	906	5.9

Source: Mpulungu DHO, 2022

### 2.3.2.3. *Issues Arising from the Public Participation Process*

#### 2.3.2.3.1. *Availability of Service*

Issues from the public participation process included; inadequate health facilities, inadequate transport both marine and land, lack of modern equipment in health facilities, lack of electricity in rural health posts, inadequate essential medical supply (limited medical drugs), inadequate health staff, inadequate accommodation of health workers, poor water and sanitation supply, poor road network to transport emergence cases among others.

#### 2.3.2.3.2. *Quality of Service Including Key Indicators of Performance*

- The existing 27 health facilities in the district are inadequate to be accessed by the entire district population.
- People cover longer distances to reach health facilities, more than the standard of 5km radius.
- Inadequate health staff and essential supplies.

### 2.3.2.4. *Impact of Changes Anticipated Over the Next Ten Years*

#### 2.3.2.4.1. *Population Change – Future Demand for Services and Facilities*

In the next 10 years the population is expected to reach approximately 201,952. This will call for increased demands for health services. There will be need to construct more health facilities and deploy more health personnel to cater for the demand. Some of the current health facilities will need to be upgraded, including the district hospital to a general hospital level.

#### 2.3.2.4.2. *Existing Investment and Development Programmes*

Currently there are 2 health posts which are under construction under Constituency Development Funds at Sondwa and Chipote villages which will bring health facilities to 29 in total. Other proposed investment during the planned period include;

1. Construction of Sondwa & chipote health posts
2. Construction of 20 mother's shelter
3. Construction of 20 maternity annex
4. Procurement of 6 land cruiser specialised ambulances and 4 specialised ambulance boats for referrals
5. Construction of a wall fence at urban clinic
6. Processing of title deeds for all 27-health infrastructure
7. Construction of Chaulu Health Post

### 2.3.2.5. *The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns*

The trends on land use have shown that there is too much encroachment on the land for health facilities, reason being that there is no proper documentation on the allocated land extents as most of them are constructed on customary land. This will have a negative impact on provision of health services as there will be limited space for expansion. For instance, Mpulungu Urban Clinic is surrounded by residential houses.

### 2.3.2.6. *Environment and Climate Change Analysis*

#### 2.3.2.6.1. *The Impact of Existing Trends on the Environment and Climate Change*

Construction of health facilities involves cutting of trees for burning mould bricks and clearing of land which results into land degradation. Some health facilities do not have proper incinerators for disposal

of waste, instead use open pits which contributes to pollution of the environment, especially during rainy season.

#### 2.3.2.6.2. *The Impact of Environmental and Climate Change Issues on the Sector*

Climate change has impacted negatively on the health sector in the district. The climate change hazards such as high rainfall and strong winds have contributed to blown offs and collapse of health infrastructure. Recently during 2020/2021 rainy season about 3 health facilities including Kaizya health post were damaged. All the documents, drugs and furniture were destroyed. The change in climate has also resulted in dry spells increasing food insecurity which has led to stunting and malnutrition. It has also resulted in washed away bridges which reduced accessibility to health facility.

#### 2.3.2.7. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

- The records show that health facilities in Mpulungu are mostly accessed by females as compared to males, however, this does not mean more females fall sick than males, it implies that females are left with a responsibility to take children to health facilities alone.
- Some health facilities and toilets are not inclusively designed, cannot be accessed by differently abled persons.

#### 2.3.2.8. *Summary for Sector/Thematic Area*

The National Health Policy of 2012 focuses on the provision of equitable access to cost effective and quality health services as close to the family as possible in a caring, competent and clean environment. The Ministry of Health provides health services through the Mpulungu District Health Office. Currently the district has 27 health facilities against the population of 152,975.

Some of the issues emanated from the public participation process included; inadequate health facilities, lack of modern equipment in health facilities, lack of electricity in rural health posts, inadequate essential medical supply (limited medical drugs), inadequate health staff, inadequate accommodation of health workers, poor water and sanitation supply, poor road network to transport emergence cases among others.

In terms of infrastructure and other investment proposed, currently there are 3 health posts which are under construction with support from the Constituency Development Funds at Sondwa and Chipote villages. Other proposed investment during the planned period includes but not limited to;

- Construction of 3 min – hospitals on the plateau (Vyamba, Chitimbwa and Kopeka)
- Construction of 20 health Posts
- Upgrading of 10 health posts to health centres
- Construction of staff accommodation and mothers’ shelters in all health facilities
- Procurement of 6 ambulances and 4 engine boats
- Processing of title deeds for all health infrastructure
- Establishing of nursing for Mpulungu district
- Procurement of medical equipment

- Disease prevention and control
- Health education and promotion

*2.3.2.9. Consideration of The Underlying Factors Contributing to the Issues Identified*

Factors contributing to the identified issues include;

- Inadequate funding,
- Low community participation in local resource mobilisation towards some developmental projects,
- Inadequate communication facilities,
- High poverty levels
- Poor road networks
- Inadequate transport (land and marine)

2.3.3. COMMUNITY DEVELOPMENT AND SOCIAL SERVICES

*2.3.3.1. Review of key Community Development and Social Services Policies and Plans*

Community development and social services sectors are guided by the National Social Protection Policy of 2014, the policy of emphasises on the provision of equitable and basic social protection services for inclusive sustainable human development. In Mpulungu district the social protection services are aimed at uplifting the livelihoods of the communities that are vulnerable.

*2.3.3.2. The Existing State of Development*

*2.3.3.2.1. Availability of Service*

The sector in the district provides services that include, social cash transfer, juvenile protection, village banking, food security pack, women empowerment, adult literacy, school feeding program, education support, infant feeding program. The services are offered in all the 17 wards of the district

*2.3.3.2.2. Quality of Service Including Key Indicators of Performance*

There are 11 members of staff of which 2 are extension officers against the population in 17 wards. The district has 17 wards and only two wards are manned by community development assistants from the department of community development, this has resulted in poor service delivery in some wards. Lack of transport has also negatively impacted on service delivery. Village banking has 56 beneficiaries only against the high number of women in the district who require empowerment of village banking and it is only in two wards, 18 literacy classes are also inadequate, 300 secondary school children are on CDF education support (bursaries). The district has 7,836 social cash transfer beneficiaries, 1896 beneficiaries on food security pack, this has resulted in more demand for the service as very few people have access to support under the food security pack programme.

Social service delivery has been affected by lack of transport for staff at sub-centre level as they do not have motor bikes. Funding to the sector especially community development has been a challenge. The

district has only two sub-centres (Isoko and Mankonga) in two wards and other wards [15] are un manned, this has negatively affected service delivery.

*2.3.3.3. Issues Arising from The Public Participation Process*

*2.3.3.3.1. Availability of Service*

Some of the issues raised during the public participation process include;

- Most of the empowerment programmes do not reach out to all the communities in need of support
- People living with disabilities often feel left out from programmes
- Lack of safe house for survivors of GBV and SGBV
- Most empowerment programmes are often for women leaving out the male folk
- Inadequate youth empowerment activities.
- Most social services are concentrated around Urban areas

*2.3.3.3.2. Quality of Service Including Key Indicators of Performance*

- Poor road networks making it impossible for services to reach the intended beneficiaries
- High illiteracy levels making it difficult for the beneficiaries to conceptualize the services being rendered
- Cultural practices retrogress development in many parts of the district
- Few sub-centres in the district

*2.3.3.4. Impact of Changes Anticipated Over the Next Ten Years*

*2.3.3.4.1. Population Change – Future Demand for Services and Facilities*

Population increase over the next ten years will result in high demand for services and facilities that include;

- Need for social services infrastructure
- Demand for more educational support
- Demand for more social cash transfer support and food security pack.
- Demand for more youth empowerment programmes.
- Demand for more empowerment programmes towards people living with disabilities

*2.3.3.4.2. Existing Investment and Development Programmes*

The district's existing development programmes in place include; Girls Education and Women Empowerment Livelihood (GEWEL), Food Security Pack, literacy programme, Village banking and social cash transfer.

The proposed investment development programmes include; capacity training in financial management/entrepreneurship for beneficiaries, construction of input storage shades and procurement of more utility vehicles to aid in service delivery.

#### *2.3.3.5. The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns*

- Continuous application of fertiliser which brings about land degradation.
- High levels of poverty putting pressure on natural resources causing damage on the forest and other natural resources.

#### *2.3.3.6. Environment and Climate Change Analysis*

##### *2.3.3.6.1. The Impact of Existing Trends on The Environment and Climate Change*

Unpredictable weather patterns such as high rainfall, droughts and flash floods have negatively affected household food security. The production by poor communities has been affected by dry spells reducing food availability causing hunger and deprivation in communities. Heavy rains have washed away houses in some cases as well as livestock increasing the vulnerability of poor people.

##### *2.3.3.6.2. The Impact of Environmental and Climate Change Issues on the Sector*

The impact of environmental and climate change includes; soil erosion, drying of water bodies that has resulted in women and children covering long distances to access water for home use. infrastructure destruction, low yield resulting in food source losses making poor households to have food shortages. Diseases and pests are now rampant further causing further vulnerability.

Due to climate change poor households are losing resources invested in agriculture when droughts, dry spells and floods occur.

#### *2.3.3.7. Issues Arising Relating to Gender Groups and Vulnerable Groups*

- There are more female beneficiaries as compared to males due to high levels of single, divorced and widowed women.
- Inadequate information by women on their rights.
- Women travelling long distances to access social services e.g. health care, fetching water
- Continuous sending away of GBV and SGBV victims seeking safe house services suspects the victim to more abuse as the district does not have a safe house.

#### *2.3.3.8. Summary for the Sector/Thematic area*

In Mpulungu district the social protection services are aimed at uplifting the livelihoods of the –poor in in communities that are vulnerable.

The services offered by the sector range from social cash transfer, juvenile protection, village banking, food security pack, women empowerment, adult literacy, school feeding program, education support, infant feeding program. The services are offered in all the 17 wards of the district

#### *2.3.3.9. Consideration of the Underlying Factors Contributing to the Issues Identified*

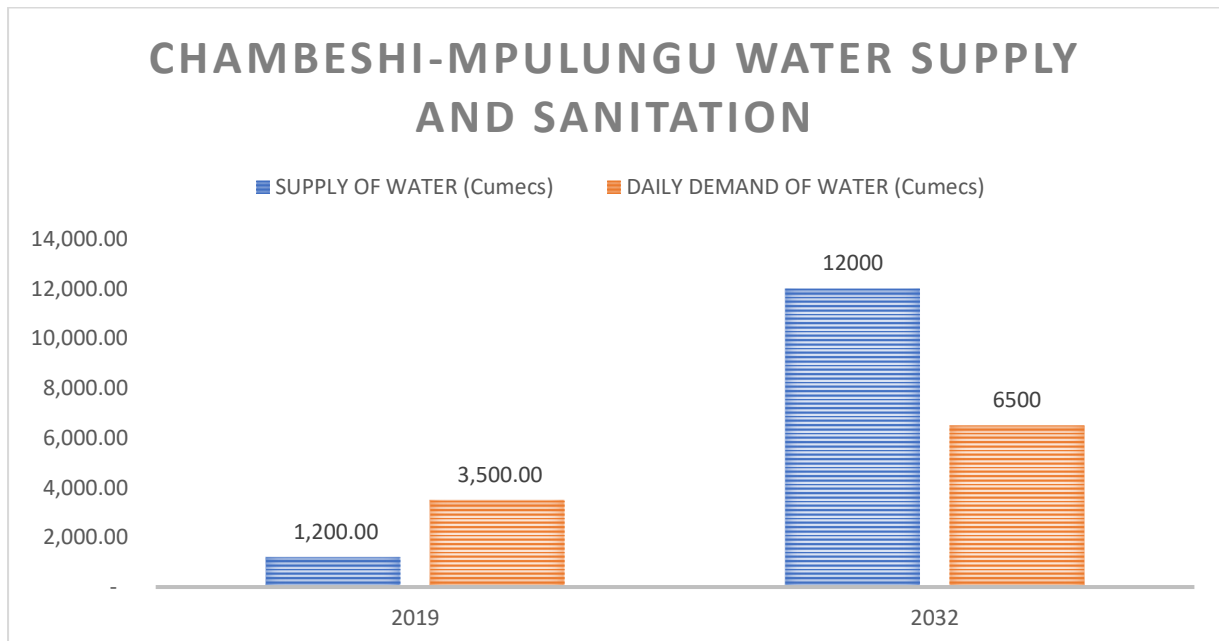
- Poor road network coupled with bad geographical terrain
- Inadequate funding to the social sector.

- Inadequate human resource to provide quality social services
- Inadequate staff in the ministry of community development and social services.
- Lack of transport both on land and water for service delivery.
- Lack of office space both at sub centre and district level.
- High illiteracy levels in communities making service delivery and reception to be difficulty.

2.3.3.10. Access to Safe Water

The main source of water for the habitants of Mpulungu are boreholes, hand dug wells, the lake and streams with an exception of a small percentage of the total population in the Urban Area who are connected to a water network system supplied by Chambeshi Water and Sewerage Company. The water utility company has a total of 1,052 water connections in two urban wards Mpulungu Central and Tanganyika wards. The actual full water supply capacity from the plant is at 3,000 cumecs against the daily demand of 3,500 cumecs. However, the plant only manages to supply 1,200 cumecs per day leaving the deficit of 1,800 cumecs. The rest of the wards in the rural areas have inadequate boreholes and hand dug wells. It is assumed that by 2032 the daily demand will reach 6,500 cumecs against the daily supply of 12,000 cumecs. The supply will be high because at that time the on-going water reticulation project will be fully functional. The figure below shows the current and projected water demand and supply by 2032.

Figure 13-Mpulungu Water Supply and Demand



Source: Field Data,2022

Table 16-Water Supply – Demand Schedules recorded as of December,2019

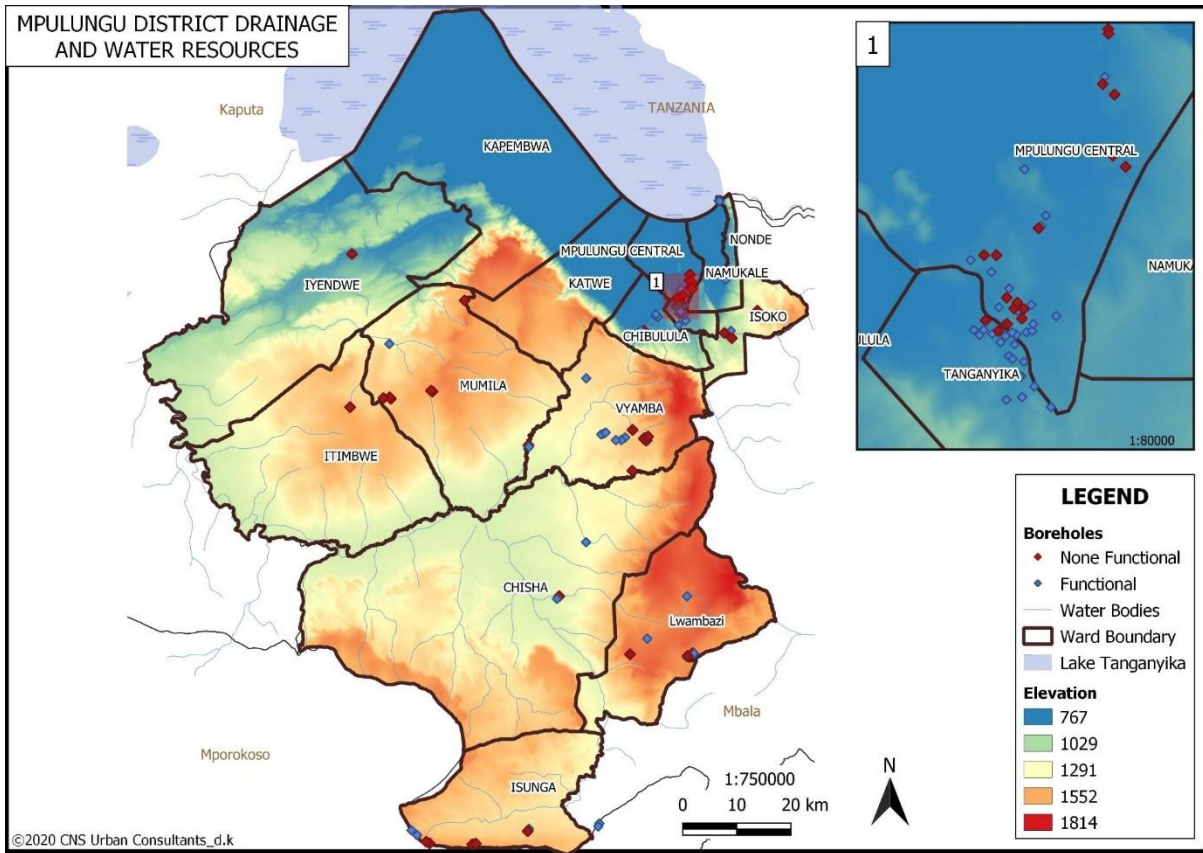
*Distribution of Households on piped water*

S/N	Ward	Zone	No. Of Households	Total	Daily Supply CUMEC S	Percentage NRW(Cumecs)	Of Daily Demand
1	Central	Lake Side	285	1052	3,000	60%	60% *Daily Supply
2	Central	Old Location	128				1,200 Cumecs
3	Central	Posa	132				
3	Central	New Location	395				
4	Tangan yika	Muzabwela	96				
5	Tangan yika	Mupata	16				

*Source: Field Data,2022.*

There are 305 borehole points in the district of which 135 are defective boreholes (need for flushing and reconstruction of civil works), 95 are functional but there is need for rehabilitation, 75 are fully functional and mostly located in the Peri-Urban area of the district. The major contributing factor to damaging of boreholes is the presence of high iron content in underground water, which reacts with pipes causing them to rusty and worn out within 2 years.

*Figure 14-Distribution of Water Boreholes*



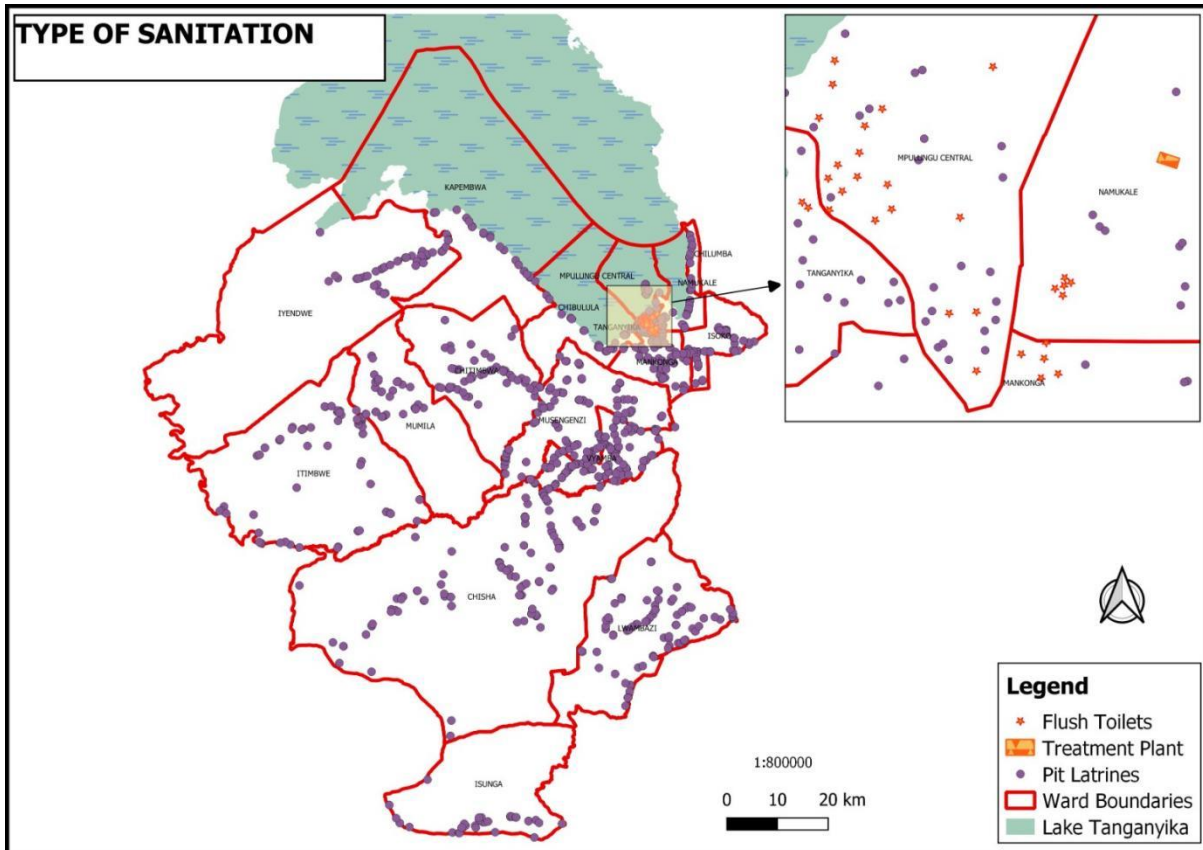
Source: Field Data,2022

### 2.3.3.11. Access to Sanitation

Mpulungu district does not have access to improved sewerage system, of which only few households have septic tanks in the urban areas while in the rural areas there are pit latrines which are not of good standards. This implies that Mpulungu Community uses unimproved on-site sanitation services which can easily contaminate water supplies and has no offsite sanitation. The Local Authority has partnered with institutions like Chambeshi Water and Sanitation, Ministry of Health, SNV and World Vision to raise total water and sewage sanitation awareness.

The Final Report of 2019 SNV Behaviour Change Communication Formative Research among the households in the urban wards states that open defecation in Mpulungu urban stands at 17% whilst unimproved latrines were at 16.2%, basic latrines at 25.6%, fly management at 17.7% and environmental safe toilets were at 22.5%. Sanitation coverage in Mpulungu town stands at 83%, if unimproved toilets are included and if these are removed it falls to 66.8%. 38.99% of households had access to functional, clean and private toilets while 26% had functional toilets.

Figure 15-Type of Sanitation in District



Source: Field Data, 2022.

## 2.4. ENVIRONMENTAL SUSTAINABILITY CLUSTER

This pillar focuses on promoting environmental sustainability and addressing climate change.

### 2.4.1. FORESTRY AND WILDLIFE

#### 2.4.1.1. *Review of key Forestry Policies and Plans*

The Forestry sector is guided by the National Forestry Policy of 2014 and the Forestry Act No 4 of 2015. This National Forestry Policy encourages participatory forest management which is anchored on the active participation of local communities, traditional institutions, private sector and other stakeholders in the management and utilization of forest resources at all levels of decision making, implementation, monitoring and evaluation. The policy also encourages the definition of stakeholder roles, resource tenure, costs and benefit sharing mechanism related to forest resources management, investments and forest industries development. The policy therefore, is aligned within the framework of the decentralization policy of 2004, Zambia's Vision 2030. Further, the Policy recognizes regional and international opportunities and obligations or frameworks such as the SADC protocols on forestry and other natural resources, CITES, MDGs, and forest related international conventions.

Mpulungu district under forestry sector provides service as guided by the policy.

#### 2.4.1.2. *The Existing State of Development*

##### 2.4.1.2.1. Availability of Services

The district is demarcated into two (2) regions namely the valley and the plateau areas. Most of the forestry services are on the plateau areas where the vast forests for both customary and protected areas are found. On the other hand, the valley constitutes of communities along the lake shores of the Lake Tanganyika which equally has minimal forest covers.

Mpulungu District has 4 protected forest reserves with a total of **101,986** hectares (**1,019.86 km<sup>2</sup>**) covering about 10.3 % of the total land area of the district. These forests are categorized into local forests and national forests. These are Mpulungu Local Forest covering an area of 21,730 hectares, Kambashi Local Forest covering 22,825 hectares, Mwenze National Forest covering 30,400 hectares and Chinakila National Forest covering 27,031 hectares.

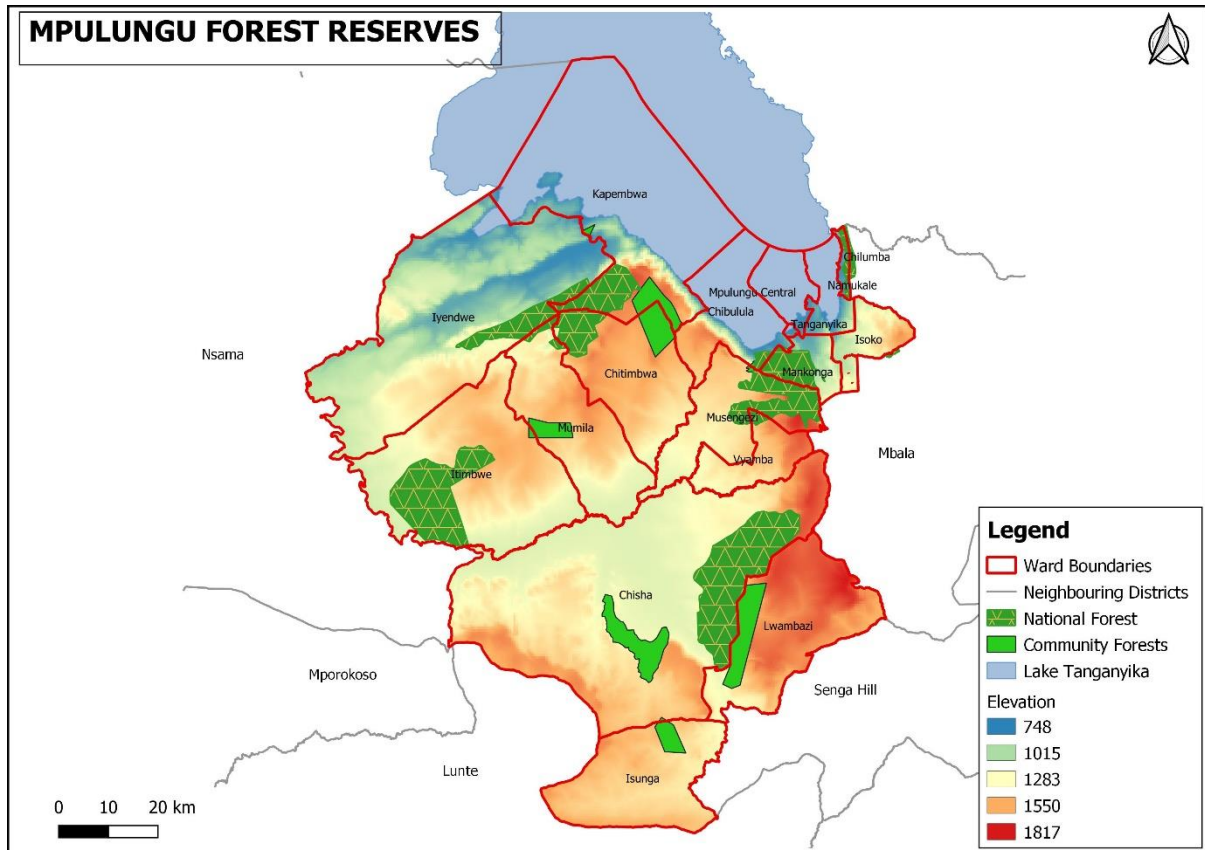
The Forestry Act No 4 of 2015, Section 29 provides for the establishment of Community Forestry Management Areas (CFMA). This is a concept of devolving rights and responsibilities to the local resource users who then become key decision makers and beneficiaries in sustainable natural resource management. The Forestry Department has guided (7) seven communities in the process of gazetting community forest management areas in seven wards of the district. All the seven CFMGs have received financial support from the Cooperating partners who are the Lake Tanganyika Development Project and Tralard Project.

Agreements between the Government and communities have seen been signed and communities are now implementing their management plans. The forests are being managed by the communities for communal control, Utilization and protection.

The seven areas are Chitimbwa CFMG in Chitimbwa ward, Kalongola in Mumila ward, Chinakila in Chisha ward, Kabyolwe in Kapembwa ward, Mbete in Chibulula ward, Mukungusa in Isunga ward and Lwambazi CFMG in Lwambazi ward.

The available services include; forest extension services, technical service, and research services.

Figure 16-Forest Reserves



Source: Field Data, 2022

The district has a total number of four (4) trained technical officers. These are the District Forestry Officer, One Senior Technologist, one Technologist and one Technician. The department also has one Forest Range Guard and one General Worker. The existing staffing level at the district is not complete because there is need for the Office orderly, a watchman and a nursery attendant.

The district forestry office provides services which are predominantly on the plateau such as extension in beekeeping, nursery establishment and management, tree planting and logging operations for various Concessional holders.

2.4.1.3. Issues Arising from the Public Participation Process

2.4.1.3.1. Availability of Service

A consultative process was undertaken both at Ward and Zonal level to obtain views from the local communities concerning the Forestry sector and issues identified include;

- The inadequate extension officers.

- The road network leading to the plateau area is poor.
- Lack of knowledge in modern beekeeping, tools and protecting gear.
- High mortality rate of some exotic tree species especially pines.
- Lack of the bulking centre and the honey processing facilities.

#### 2.4.1.4. *Quality of Service Including Key Indicators of Performance*

- Inadequate extension officers have resulted into inadequate service delivery.
- The bad state of the road network makes it difficult for officers to implement forestry programs and monitoring of other activities in good time because most of the time is spent on travelling.
- Farmers are unable to adopt modern beekeeping methods due to lack of training and modern equipment.
- High mortality rate of some exotic tree species due to lack of research on most forestry tree crops, soil types and climatic conditions.

#### 2.4.1.5. *Impact of Changes anticipated over the next ten years*

##### 2.4.1.5.1. *Population Change – Future Demand for Services and Facilities*

Due to population increase, land carrying capacity will diminish resulting in social conflicts and migration.

The growth in population will result in the future demand for services and facilities which will include; expansion of agriculture fields thereby affecting natural forests, extension services and technical services.

##### 2.4.1.5.2. *Existing Investment and Development Programs*

1. Nursery establishment and management
2. Tree planting
3. Boundary maintenance in four forest reserves
4. Conduct community sensitisation programs in areas where deforestation is rampant.
5. Restoration of degraded areas targeting farmlands, open areas and forest reserves using natural Forest Regeneration targeting 20,000 ha.
6. Establishment and management of community forests.
7. Conduct detailed forest Inventories in four forest reserves (Chinakila National Forest, Mpulungu Local Forest, Kambashi Local Forest and Mwenze National Forest).
8. Blitz patrols

#### 2.4.1.6. *The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns*

- The continuous clearance of huge portions of forests for expansion of agriculture fields will lead to loss of biodiversity and permanent change of land use.
- It will lead to global warming and climate change
- Following the population increase, the farms are expanding thereby causing deforestation and soil erosion.

2.4.1.7. *Environment and Climate Change Analysis*

2.4.1.7.1. *The Impact of Existing Trends on The Environment and Climate Change*

Mpulungu district has been experiencing high demand for forest products ranging from wood fuel, timber, charcoal production and poles. Clearance of huge areas of forests has contributed to land degradation. High temperatures provide suitable environment for insects to multiply and hence cause damage to forestry crops.

Below is the table showing impact of existing trends on the Environment.

*Table 17-The Impact of Existing Trends on The Environment and Climate Change*

S/N	Existing trends	Impact
•	Clearing of forests for agriculture expansions	Exposure of the land leading to serious storms which damage crops, properties, infrastructure, human and animal life.
•	Charcoal production	Gases from charcoal kilns contributes to ozone layer depletion thereby resulting into global warming and climate change.
•	Illegal timber production	Loss of valuable tree species.
•	Uncontrolled wild fires	Loss of Biodiversity

Source: Field Data,2022.

2.4.1.7.2. *The Impact of Environmental and Climate Change Issues on The Sector*

- The forestry sector will be impacted negatively because changes in rainfall variation due to climate change will lead to poor hydropower generations and subsequently erratic supply of power. This will mean more people will resort to use of wood fuel.
- Climate change will bring variations in rainfall patterns which can affect the performance of trees especially for newly planted ones.

2.4.1.7.3. *Issues Arising Relating to Gender Groups and Vulnerable Groups*

- Most forestry activities such as beekeeping, timber harvesting are male dominated and women feel left out.
- Empowerment programs mostly are meant for women and disadvantage males.
- High illiteracy levels among women makes it difficult for them to aspire for leadership positions.

*2.4.1.8. Consideration of the Underlying Factors Contributing to the Issues Identified*

- Inadequate funding to empower and advantage both women and men in forestry management.
- High illiteracy levels among women.
- High poverty levels among the people who live near forests.

*2.4.1.9. Summary for Sector/Thematic Area*

It is proposed that under this thematic area the following listed should be prioritized

- Improvement of road network
- Training of community members in modern beekeeping
- Revamp the research section

## 2.5. GOOD GOVERNANCE ENVIRONMENT

This pillar aims to promote good governance and respect for human rights.

### 2.5.1. LOCAL AUTHORITY

*2.5.1.1. Review of key Local Authority Policies and Plans*

The Local Authority is guided by the principal Act which is Local Government Act No. 2 of 2019 and it provides for an integrated local government system and gives effect to the decentralization functions, responsibilities and services at all levels of local government. It also ensures democratic participation and control of decision making by the people at the local level. The Act provides the functions of local authorities and also provide for the review of tariffs, charges and fees within the area of a local authority. Further the Act provides for the proceedings of the council and committees and provide for the role of traditional leadership in democratic governance.

Further, there are other statutes that empowers the Local Authority to carry out other functions apart from those that are provided for by the Local Government Act No. 2 of 2019 such as: -

- The Urban and Region Planning Act No. 3 of 2015
- The Markets and Bus Stations Act No 7 of 2007
- The Liquor Licensing Act No. 20 of 2011
- The Rating Act
- The Public Health Act

*2.5.1.2. Description of the Existing State of Development*

*2.5.1.2.1. Availability of Service*

The Local Authority has the following existing infrastructure:

- |                                 |                                  |
|---------------------------------|----------------------------------|
| • Office Accommodation          | • 2 Refuse Bays                  |
| • Water points e.g., Bore holes | • 2 Markets with market shelters |

- 5 Ablution Blocks
- Fire Station
- Bus Station

#### 2.5.1.2.2. Quality of Service Including Key Indicators of Performance

Mpulungu district does not have access to improved sewerage system, of which only few households have septic tanks in the urban areas while in the rural areas there are pit latrines which are not of good standards. This implies that Mpulungu Community uses unimproved on-site sanitation services which can easily contaminate water supplies and has no offsite sanitation. The Local Authority has partnered with institutions like Chambeshi Water and Sanitation, Ministry of Health, SNV, Action Aid and World Vision to raise total water and sewage sanitation awareness.

The Final Report of 2019 SNV Behaviour Change Communication Formative Research among the households in the urban wards' states that open defecation in Mpulungu urban stands at 17% whilst unimproved latrines were at 16.2%, basic latrines at 25.6%, fly management at 17.7% and environmentally safe toilets were at 22.5%. Sanitation coverage in Mpulungu town stands at 83%, if unimproved toilets are included and if these are removed it falls to 66.8%. 38.99% of households had access to functional, clean and private toilets while 26% had functional toilets.

Mpulungu district lacks gazette burial sites in all the wards. Cemetery is another critical area that requires proper planning for both urban and rural areas. The current situation indicates that each village has its own burial site. There is emergency need to plan for cemeteries in both urban and rural areas to provide sanity in the district.

Further, the local Authority has limited Office space, while one Ablution Block and a Market Shelter are under construction. Further, 4 ablution blocks and the Rest House are in a dilapidated state. The Local Authority has one (1) tipper truck, one tractor, one (1) Single Cab Pickup and One (1) Fire Engine for service provision. However, the Local Authority grapples with transport for services provision to community.

#### 2.5.1.3. Issues Arising from the Public Participation Process

Public consultations were done at the Ward Development Committee and zonal levels. Zonal meetings were held where municipal issues affecting the communities were discussed with the IDP team and recorded.

##### 2.5.1.3.1. Availability of Service

Communities raised the following issues in terms of the available services being provided in the district;

- Inadequate drainages, mostly constructed in the urban residential areas.
- Inadequate Solid waste Management system
- Housing unit's plans are poorly done.
- The district has no designated areas for refuse disposal
- Lack of markets in places like Kalongola, Fundiamali, Chaulu, Kakusu and Kopeka

- Inadequate number of boreholes and lack of modernized water schemes
- Inadequate land for construction of modern infrastructure like hotels/lodges
- Lack of flushable toilets in most public infrastructure in areas like Vyamba, Musengezi, Chilumba, Chibulula, Kapembwa, Lwambazi, Chitimbwa, Isunga, Iyendwe, Chisha, Itimbwe Isoko and Mumila.
- Ineffective operations by Ward Development Committees (WDCs) to support decentralizations

#### *2.5.1.4. Quality of Service Including Key Indicators of Performance*

Communities described the quality of services being provided as follows;

- **In terms of drainages** – drainages are only constructed in urban residential areas (Location) leaving peri urban areas such as Muzabwela, Mupata, Niamukolo and Posa, which has resulted into flooding of some residential areas causing damage to houses. Even in Urban area some drainages were poorly constructed pausing a serious challenge on management of storm water.
- **In terms of Garbage Collection/ Solid waste Management** – The local authority provides a good service of garbage collection in Town, Markets and some Peri urban areas. However, there is indiscriminate disposal of solid waste by some residents who throw solid waste around which could cause disease outbreak such as Cholera.
- **In terms of operations of Ward Development Committees (WDCs)**- Most of the committees in the district are not effective due to lack of incentives.

#### *2.5.1.5. Impact of Changes Anticipated Over the Next Ten Years*

##### *2.5.1.5.1. Population Change – Future Demand for Services and Facilities*

Over the Next Ten years there would be shortage of Council land as a result of population increase. This will have an effect on the following:

- The disposal of solid waste
- Burial site
- Infrastructure development

##### *2.5.1.5.2. Existing Investment and Development Programmes*

- Rehabilitation of Mbita Rest House
- Extension of Township Boundary
- Gravelling of the Feeder Roads
- Establishment of Public Cemetery
- Construction and Rehabilitation of Public Toilets
- Solid waste management

*2.5.1.6. The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns*

- Continuance of solid waste disposal at the same place would lead to serious land and environmental pollution.
- Population increase will lead to high demand of housing units in Urban and peri-urban areas of the district which may result in development of unplanned settlements.
- The need for water points will also increase as a result of population increase.

*2.5.1.7. Environment and Climate Change Analysis*

*2.5.1.7.1. The Impact of Existing Trends on The Environment and Climate Change*

The Impact of existing trends on the environment is that some solid waste may take years to decompose. In addition, toxic substances are released into the soil when solid waste perishes under sunlight and if they are burned, the release toxic substance in the air thereby causing ambient air pollution.

Solid wastes such as vegetable waste are useful sources of plant nutrients. However, in gaseous form these pollute the air causing offensive smell in some residential and working premises. Decaying solid waste also harbour flies, cockroaches, attracts rats and infectious agents such as salmonella species, vibrio cholerae species and shigella species. The waste also becomes unsightly particularly when it remains uncollected for some time at waste storage sites, in parks, in streets of trading and residential zones.

Organic waste such as plastics and non-organic waste such as bottles, tins, soils etc. Degrade soil structure and increase turbidity in the run off rain water. They also block storm water roadside drains leading to stagnation of water in some sections or floors of water channels, creating favourable sites for mosquitoes breeding.

The Climate implications for some solid wastes do not only cause pollution but also exacerbates climate change such that they jeopardize the ability to maintain the global temperature

*2.5.1.7.2. The Impact of Environmental and Climate Change Issues on the Sector*

- Dry spells and droughts will cause water sources (boreholes and springs) to run dry.
- Flooding and Heavy rainfall will damage water sources and sanitation facilities, carry runoff and waste into streams and lakes, and contaminate the water supply.

*2.5.1.8. Issues Arising Relating to Gender Groups and Vulnerable Groups*

- Most cultural practices in the district hinder women to have access to development due to beliefs and traditional norms.
- Most leadership and managerial Positions in the District are dominated by Men.
- Most land is owned by Men and hence the Youths, women and other vulnerable groups such as People with disabilities have no land for development thereby causing inequality in wealth distribution.

- Most private and public infrastructure are not user friendly to the people living with Disability due construction design.

#### *2.5.1.9. Summary for the Sector/Thematic Area*

Mpulungu district does not have access to improved sewerage system, of which only few households have septic tanks in the urban areas while in the rural areas there are pit latrines which are not of good standards. This implies that Mpulungu Community uses unimproved on-site sanitation services which can easily contaminate water supplies and has no offsite sanitation. Further, Mpulungu district lacks gazetted burial sites in all the wards. Cemetery is another critical area that requires proper planning for both urban and rural areas. The current situation indicates that each village has its own burial site. There is emergency need to plan for cemeteries in both urban and rural areas to provide sanity in the district. The continuance solid waste disposal at the same place would lead serious land and environmental pollution because Mpulungu District has no gazetted dump site.

#### *2.5.1.10. Consideration of the Underlying Factors Contributing to the Issues Identified*

The identified issues under this thematic area are necessitated by various factors that include;

Most land is in the traditional hands thereby making it difficult for the Local Authority to plan for Cemetery, Dumpsite and other infrastructure development etc.

### 2.5.2. NATIONAL REGISTRATION

Like any other department in the district, the Department of National Registration, Passport and Citizenship play a vital role in executing government functions as stipulated in the National Registration Act Cap 126 of the laws of Zambia. These include birth and death Registration, issuance of national registration cards, and registration and development of villages. Most of the citizens are not aware of the birth and death certification process. During the period under review the department recorded an increase in the number of registered births from 26 in 2013 to 64 in 2017. However, there is need for more sensitization on the importance of the birth certification. The department also recorded only 5 deaths as of October 2017. This is as a result of low compliance by citizens from the district to register deaths. This could be caused by inadequate sensitization on the importance of deaths certification and lack of designated Council grave yard hence most residents burry their loved ones without records.

#### *2.5.2.1. The Existing State of Development*

##### *2.5.2.1.1. Availability of Service*

The National Registration has no existing infrastructure in the district.

##### *2.5.2.1.2. Quality of Service Including Key Indicators of Performance*

- The Department of National Registration does not have a Vehicle and office space for their operations.

#### *2.5.2.2. Impact of Changes Anticipated Over the Next Ten Years*

##### *2.5.2.2.1. Population Change – Future Demand for Services and Facilities*

Over the next ten years there is expected rise in demand for the department's services to arise from the sensitization programs and increase in the population.

### 2.5.3. JUDICIARY

The Judiciary Sector plays a vital role in promoting good governance environment in the district. The functions of the judiciary include the administration of justice through resolving disputes among individuals or between individual and the state interpreting the constitution and the laws of Zambia as well as promoting the rule of law. However, Mpulungu district only has 3 local courts (without a subordinate court) and 19 staffs. The shortage of courts and under staffing hampers the delivery of justice in the district especially in rural wards.

#### *2.5.3.1. Issues Arising from the Public Participation Process*

Public consultations were done at the District, Ward and zonal levels to discuss issues affecting service delivery under this sector. The following issues were raised:

- Inadequate Local Courts in the district.
- Lack of infrastructure for the Subordinate Court
- Delayment in the disposal of cases.

### 2.5.4. SAFETY AND CRIME

The district has one police station located in the Urban area for public law enforcement against a District population of 153,564 (ZAMSTATS, 2022). According to the Zambia Police Service's standards, there should be one police post in every ward. Therefore, the District has a deficit of 17 Police Posts. Maintenance of law and order is inadequate despite the rise in criminal activities caused due to high poverty levels. The most common crimes are theft, assault occasioning bodily harm, defilement, gender-based violence, common assault, poaching and trafficking in prohibited substances.

The district hosts the Zambia Security Intelligence Services (ZSIS), Zambia Special forces Commandos, Immigration, Drug Enforcement Commission. However, the District lacks Correctional Services and depends on Mbala District's Correctional Services.

#### *2.5.4.1. Impact of Anticipated Changes Over the Next Ten Years*

Security infrastructure in growth centres need to be constructed and well-staffed. The population growth for Mpulungu is around 3.4% per annum and as such requires proper security and safety. Places in growth centres include Chitimbwa, Vyamba, Chinakila, Isoko, Chibote and Kalongola.

2.5.5. ECONOMIC ANALYSIS

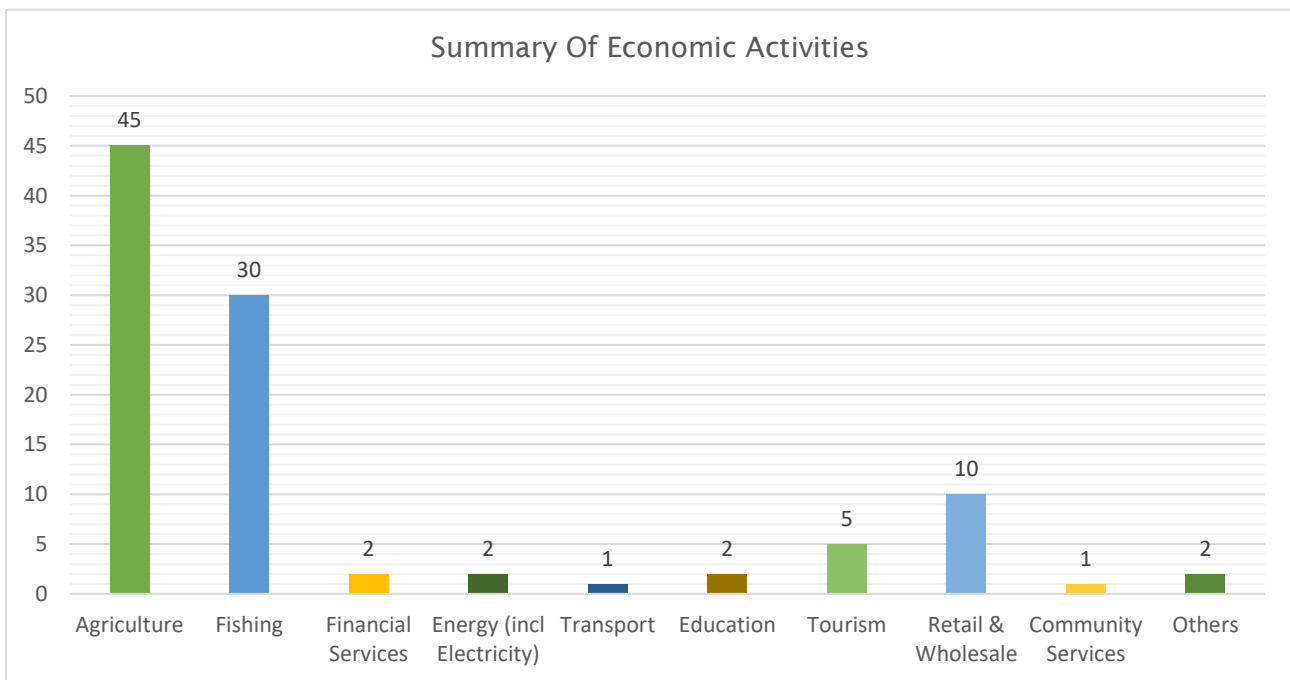
This section gives the economic analysis of the district.

2.5.5.1. Local Economy

Mpulungu District’s Local economy is predominant driven by small-scale farming and fishing activities. The main crops grown in the area are maize, soya beans cassava, finger millet sweet potatoes and groundnuts including vegetable growing. Some fishing activities are also carried out in streams and rivers on the plateau part of the district. In the recent past, there has been an increase in aquaculture activities namely, fish caging and ponds. There has been an increase in agriculture due to a number of factors such as favorable weather conditions and Government support through the Farmer input support programme and Food Security pack under community development.

The table below shows the contributions of economic activities towards the district local economy.

Figure 17-Summary of district economic activities.



Source: Field Data, 2022

2.5.5.2. Business Enabling

Mpulungu district like any other district in Zambia has challenges in accessing financial services to support the business community. The district has one bank making it difficult for the people to access financial services. Micro credit is also inaccessible to the people.

2.5.5.3. Main business entities

The district’s main business entities other than general trading include: fish freezing Companies, One Milling Company, Water and land transport companies and Cargo Handlers

2.5.5.4. Barriers to business in the district

The district faces a lot of barriers in the business environment like many other predominantly rural areas. Notable challenges include; access to capital, loans and adequate energy. The high

unemployment rate and low incomes for a few in employment also affects the bossiness sector. Poor road infrastructure is also a major barrier as well as a small district's population.

#### 2.5.6 SUMMARY OF THE IDP CORE ISSUES

The table below highlights a summary of findings from Community consultative meetings held in all the 17 Wards.

*Table 18-Summary of the IDP Core Issues*

S/N	CORE ISSUE	DESCRIPTION OF CORE ISSUE
1	Inadequate judicial and Zambia Police Infrastructure	The district has only three (3) Local Courts, no magistrate Court infrastructure as well as no standard Zambia Police Station-building
2	Poor status of roads in the urban and rural areas	Most feeder roads on the plateau area of the district are in a dilapidated state while in urban area approximately 60 percent of households have access to tarred roads
3	Inadequate access to clean and safe drinking water in the urban area	Most households in the urban area have no access to piped water and depend on boreholes. The utility company provides water only twice to those who are connected to piped water.
4	Inadequate empowerment programs for women and youth	Majority of the women and youth have no access to empowerment programs or access to bank credit to support their businesses
5	Inadequate community recreation facilities	Recreation facilities are important for a healthy and vibrant community. The district has few recreation facilities which are also in a poor state.
6	Shortage and dilapidated bridges and crossing points	Most areas have no bridges or crossing points and a few places with bridges, they are in bad state, which makes the movement of people, goods, farm produce and services especially in rural areas difficult
7	Inadequate extension services	Most farmers in the district have limited knowledge, skills and technologies to improve their farming livelihood due to limited number of extension officers.
8	Inadequate health facilities	Peri-urban and rural areas in the district have inadequate access to health care facilities with most households having to cover long distances to access the facilities

9	Poor solid waste management	Most households, are not serviced by the local authority for in the area of garbage collection Due to poor solid waste management system arising from obsolete machinery and equipment, the CBD also suffers from uncollected waste
10	School drop-outs and Early marriages	School going children mainly girls are dropping out of school due to teenage pregnancies, driven by low access to safe planning methods, cultural practices and poverty
11	Inadequate staff houses for government workers especially teachers and health workers in rural areas	Most teachers and health workers working in the rural areas lack decent accommodation
12	Inadequate power supply	Most households and businesses need electricity to carry out their work. The current capacity of power generation in the district does not meet the demand for all households
13	Lack of main bridge on the M2 Mbala-Mpulungu road	The bridge on Lunzua river has been cut and apparently the public is using a temporal belly-bridge

14	Lack of access to sewerage services	Sewer systems are important components of urban infrastructure that helps keep the urban environment safe from flooding and prevents the spread of water borne diseases. Most households in the urban area are not connected to the sewer system for disposal of faecal matter. Households resort to using septic tanks and soakaways.
15	Inadequate provision of public markets	Public markets and bus stations help grow and connect urban and rural economies. Most households in the district cover long distances to access markets and bus stations
16	Inadequate street lights	Only 5% of households in the urban area have access to street lights in their communities which makes it unsafe for people move at night and may contribute increase in crime
17	Restricted Township Boundary Expansion	Township boundary extension can provide improved service coordination to a large area, more comprehensive land use planning, or more services and better representation to previously rural communities. The urban area is surrounded by 6unplanned settlements/villages
18	Inadequate tourism infrastructure	Poor and lack of road network leading to tourism sites as well as shortage of hospitality infrastructure
19	Deforestation	Besides providing habitats for animals and livelihoods for humans, forests also offer watershed protection, prevent soil erosion and mitigate climate change. 79% of households do not practice forest conservation in their communities which contribute to climate change

20	High disease burden	Most households suffer from malaria and Diarrhea
21	Inadequate telecommunication services	Some communities in the rural areas of the district have no access to telecommunication services
22	Inadequate education facilities	Some communities in rural areas cover long distance to access education services
23	Street vending	Street vending promotes the spread of garbage and diseases. Street vendors in the township is not controlled which poses a threat on public health
24	Lack of abattoir services	The district has no abattoir where people can have their animals slaughtered, inspected and certified for human consumption
25	Poor sanitation services in peri-urban and rural areas	Most households use pit latrines to dispose fecal matter which contribute to ground water contamination and the spread of water borne diseases such as cholera
26	Difficulty in accessing proper documentation as regards to land ownership (traditional tenure systems)	Most land is owned under traditional tenure system which mostly favors men. This traditional system limits expansion on production as farmers cannot access commercial facilities (credits) as they lack collateral. Further lack of this security measure makes landowners easily displaced in case of any development.

*Source: Field Data, 2022*

## **PART THREE: DEVELOPMENT FRAMEWORK**

### **3. INTRODUCTION**

The previous chapter has discussed core issues identified in the district during the planning survey. This chapter provides the development framework which will guide and coordinate all the developmental projects in the district for the next ten (10) years. It outlines the vision for the district, strategic goals, development objectives, priorities and alternative spatial development scenarios.

#### **3.1. DEFINITION OF LONG-TERM VISION**

The vision of Mpulungu District is to be ***“a wealthy and socially inclusive district by 2034”***.

##### *3.1.1.Explanation of the Vision*

The availability of arable land, competitive and comparative advantage of the district’s geographical location for tourism, access to the Great Lakes Region through Lake Tanganyika, presence of Mpulungu Harbor Corporation as well as availability of fisheries gives the town potential to develop into wealthy and socially inclusive district by 2034.

The vision entails harnessing the potential in agriculture, tourism and transportation which should be supported by development of necessary social-economic infrastructure and technologies such as irrigation schemes, value addition centers, mechanization in farming, improved road network, health and education facilities.

##### *3.1.2.Mission Statement*

To promote social economic development through diversification, hard work, transparency, accountability and inclusiveness.

##### *3.1.3.Strategic Goals*

The IDP’s ultimate goal is to achieve the inclusive desired economic, social, cultural, environmental and infrastructural development which is supportive and enabling to all people of Mpulungu District for them to have good quality of life. The vision will be realized through implementation of the following strategic goals;

- To diversify the economy from capture fishing to aquaculture and agriculture.
- To develop the tourism industry
- To increase access to renewable energy sources.
- To improve the Transport and Logistics Infrastructure
- To promote lifelong education through a conducive teaching and learning environment
- To improve primary and first level health care services for the community
- To reduce poverty and vulnerability through inclusiveness
- To enhance natural resource management for sustainability.
- To enhance value addition to our local resources
- To enhance public participation in governance and developmental issues
- To provide and improve on sports and recreation related infrastructure
- To enhance peace, justice and the livability of all citizenry in the district.
- To enhance land management and administration

### 3.2. POLICIES TO DIRECT DEVELOPMENT

The vision will be attained pursuit to implementation of various government policies aimed at supporting socio-economic development. These policies were arrived at after thorough analysis of core problems identified in the planning and issues survey. The main development policies formulated in fostering development of Mpulungu district include the following;

#### *3.2.1.Promotion of Sustainable Agriculture*

Sustainable agriculture and aquaculture development is considered as major economic activities in the district, following drastic depletion of fish stock on the Lake. The policy will address food security at household level and promote market-oriented agricultural and aquaculture activities. Sustainable agriculture and aquaculture development will be promoted by;

- i. Improving road network systems for easy transportation of farming inputs and produce within the district.
- ii. Enhancing technology, investment in value addition technology and construction of bulking centers.
- iii. Constructing of Irrigation weirs and canals as well as dams.
- iv. Investing in fish caging, hatcheries and feed processing plant.
- v. Identifying and establishing of fish breeding areas

#### *3.2.2.Improve Transport network, Communication and Tourism infrastructure*

The district has both land and water transport systems which connects the district to other districts as well as to the Great Lakes Region through Lake Tanganyika. Improved transport network, communication and tourism infrastructure play a vital role in promoting socioeconomic development. This policy will address the challenges of the poor state of public transport and communication and tourism infrastructure to promote socio-economic development. This will be achieved by;

- i. Lobby for funds to procure earth moving equipment which would ensure that all major and feeder roads within the district are rehabilitated.
- ii. Development of tourism related infrastructure
- iii. Opening up roads leading to tourism potential sites
- iv. To connect potential investment and rural areas to national grid
- v. Procurement of two vessels

#### *3.2.3.Improve the quality and access to Social Services in the District*

Improving access to social services contributes to human development. The district faces numerous social challenges across social sectors. This policy will address the existing challenges of inadequate access to health and education services, access to safe drinking water, urban and rural sanitation, and access to community markets, solid waste management as well as access to community recreation facilities.

*3.2.4. Promote Sustainable Environmental Resource Management in the District*

Environmental resources management aims to ensure that ecosystem services are protected and maintained for future human generations, and also maintain ecosystem integrity through considering ethical, economic, and ecological variables. This policy will address the challenges of deforestation in the district by promoting the planting of trees to mitigate climate change and creation of community forests.

**3.3. DEVELOPMENT OBJECTIVES, PRIORITIES AND DEVELOPMENT STRATEGIES**

Problem Tree Analysis was conducted during community consultations in 17 wards and 85 zones of the district to identify the key issues faced by urban and rural communities. The approach adopted in the Problem Tree Analysis was to identify the problems and turn them into solution trees. This formed the basis for identification of the IDP development policies, objectives, strategies and programmes.

*3.3.1. Objectives And Strategies*

The following development goals, objectives, strategies and programs will be used to achieve the IDP vision. The details are summarized in the table below

The table below shows the vision, goals, objectives, summary of problems and expected results.

Table 19-Summary of development framework issues.

Vision	<i>A wealthy and socially inclusive district by 2034</i>				
Strategic goals	Objectives	Summary of Problems	Expected Results		
1. To diversify the economy from capture fishing to aquaculture and agriculture.	<ul style="list-style-type: none"> <li>• To increase agriculture production and productivity by 50% by the year 2027.</li> <li>• To increase fish production by 50% by 2027.</li> <li>• To increase the livestock production and productivity by 50% by 2027.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of mechanized farming equipment.</li> <li>• Inefficient extension service delivery.</li> <li>• Poor and lack of road network</li> <li>• Bad fishing methods.</li> <li>• Increased extreme variation in climatic conditions.</li> <li>• Increased demand for fish.</li> <li>• Over dependency on the lake.</li> <li>• Poor law enforcement.</li> <li>• Lack of livestock facilities.</li> <li>• Inadequate tourism infrastructure and facilities.</li> <li>• Poor tourism marketing.</li> <li>• Cultural barriers to tourism.</li> <li>• Low investment in the energy sector.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved incomes</li> <li>• Improved diets</li> <li>• Increased crop production</li> <li>• Increased fish production</li> <li>• Reduced youth dependency ratios</li> <li>• Improved tourism infrastructure</li> <li>• Increased adaption and mitigation to climate change</li> <li>• Reduced poverty levels</li> <li>• Increased production of renewable energy</li> <li>• Solar plant constructed</li> <li>• Clean green and health District</li> <li>• Improved road network</li> </ul>		
2. To develop the tourism industry.	<ol style="list-style-type: none"> <li>3. To increase tourism infrastructure and facilities through construction of hotels, roads, lodges and tourism sites by 2034.</li> <li>4. To increase tourist inflows by 80% by 2030.</li> </ol>				
3. To increase access to renewable energy sources.	<ul style="list-style-type: none"> <li>• To increase electricity generation capacity by 50% by 2034.</li> <li>• To expand the electricity grid by 50% by 2034.</li> <li>• To increase utilization of alternative renewable energy sources by 50% by 2034.</li> </ul>				

<p>4. To improve the Transport and Logistics Infrastructure.</p>	<ul style="list-style-type: none"> <li>To improve service delivery in the transport sector by 80% by 2032.</li> <li>To reduce road and water accidents by 80% by 2030</li> <li>To reduce the cost of transportation by 80% by 2030.</li> </ul>	<ul style="list-style-type: none"> <li>Poor marketing of alternative renewable energy sources.</li> <li>Lack of rail connectivity.</li> <li>Under developed water transport system.</li> <li>Under developed inland port facility.</li> <li>Poor access to health services</li> <li>Poor access to education services</li> <li>Poor and lack of road network</li> <li>Poor sanitation</li> <li>Poor access to judicial services</li> <li>Lack of police services in most of the Wards</li> <li>Household poverty</li> <li>Lack of correctional services</li> <li>Poor communication network coverage</li> <li>Reduced fish stock in the lake</li> <li>High Unemployment among youths</li> <li>High rate of deforestation</li> </ul>	<ul style="list-style-type: none"> <li>Improved communication and transport systems</li> <li>Improvement of learning outcomes among learners</li> <li>Improved public infrastructure constructed</li> <li>Increased number of learning and training institutions constructed</li> <li>Youth Skills Training Institute Constructed</li> <li>Improved Health Care</li> <li>Increased life expectancy from 55 and 60 to 70 and 75 for men and women respectively</li> <li>Improved levels of employment</li> <li>Increased Household incomes</li> <li>Reduced maternal mortality rate.</li> <li>Increased number of community forests</li> </ul>
<p>5. To promote lifelong education through a conducive teaching and learning environment</p>	<ul style="list-style-type: none"> <li>To support youth mentorship programmes.</li> <li>To provide learning institutions and skills Centres.</li> </ul>		
<p>6. To improve primary and first level health care services for the community</p>	<ul style="list-style-type: none"> <li>To increase access to primary health care services.</li> </ul>		
<p>7. To reduce poverty and vulnerability through inclusiveness.</p>	<ul style="list-style-type: none"> <li>To promote food security in poor households.</li> <li>To increase access to disposable incomes</li> <li>To promote child nutrition</li> </ul>		
<p>8. To enhance natural resource management for sustainability.</p>	<ul style="list-style-type: none"> <li>To increase areas under Community forests by 50% by 2034.</li> </ul>		

	<ul style="list-style-type: none"> <li>To increase the forest cover by more than 50 % by 2028.</li> <li>To determine the stocking volumes of the forests by 2027</li> <li>To raise awareness among community members in order to improve on forest management</li> </ul>	<ul style="list-style-type: none"> <li>Increased extreme variation in climatic conditions</li> <li>High cases of charcoal burning</li> <li>Inadequate knowledge on co-management</li> <li>Poor farming methods</li> </ul>	<ul style="list-style-type: none"> <li>Improved land cover and vegetation</li> <li>Reduced cases of charcoal burning</li> <li>Increased knowledge levels on natural resource management</li> </ul>
9. To enhance value addition to our local resources	<ul style="list-style-type: none"> <li>To set up facilities for value addition</li> </ul>	<ul style="list-style-type: none"> <li>Lack of value additional Centers</li> </ul>	<ul style="list-style-type: none"> <li>Value additional Centres constructed</li> </ul>
10. <i>To enhance public participation in governance and developmental issues</i>	<ul style="list-style-type: none"> <li>To establish a platform for interaction between Member of Parliament, Ward Development Communities and communities by 2027</li> <li>To build capacity in all the 17 Ward Development Committees by 2024.</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate interface meetings with communities from elected offices</li> <li>Inadequate knowledge levels on some government programs by WDCs</li> </ul>	<ul style="list-style-type: none"> <li>Increased community engagement meetings</li> <li>All 17 WDCs capacity built</li> </ul>
11. To provide and improve on sports and recreation related infrastructure.	<ul style="list-style-type: none"> <li>To establish more recreational and social amenities facilities by the</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate sports and recreational infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Modern sports and recreational infrastructure</li> </ul>

<p>12. To enhance peace, justice and the livability of all citizenry in the district</p>	<ul style="list-style-type: none"> <li>• To enhance and improve law and order in the district.</li> <li>• To enhance citizen registration by department of National Registration</li> <li>• To enhance the expedition in the administration of justice</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate Police Utility Vehicles for patrols</li> <li>• Lack of Police station and Judicial Courts</li> <li>• Poor access to National Registration services</li> </ul>	<ul style="list-style-type: none"> <li>• Procurement of Police Utility Vehicles</li> <li>• Modern Police Station, Posts and Courts of law constructed</li> <li>• Increased access to National Registration service</li> </ul>
<p>13. To enhance land management and administration</p>	<ul style="list-style-type: none"> <li>• To improve land alienation and zoning in the district</li> <li>• To enhance stakeholders' participation in land management in the district</li> </ul>	<ul style="list-style-type: none"> <li>• Limited land under the jurisdiction of the Local Authority</li> <li>• Limited knowledge on land acquisition procedures.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased planned area through Planning Agreements with the traditional leadership</li> <li>• Increased awareness programs on land acquisition procedures.</li> </ul>

Source: Field Data.2022.

### 3.3.2. Consideration of Potential Resources

The table below provides the consideration of potential resources of the IDP area with regard to description, total capacity, current utilization, spare capacity and limiting factors. Issues considered include poor telecommunications and postal services, inadequate education and health facilities, inadequate access to safe drinking water among others.

Table 20-Consideration of potential resources

ISSUE	DESCRIPTION OF POTENTIAL RESOURCE	TOTAL CAPACITY	CURRENT UTILIZATION	SPARE CAPACITY	POTENTIAL LIMITING FACTORS
<b>Poor Telecommunication and postal services</b>	- Availability of Land to construct telecommunication and postal services	-15 masts	- 5 Masts	Nil	<ul style="list-style-type: none"> <li>Poor access roads</li> <li>Funding to complete project</li> </ul>
<b>Inadequate education facilities</b>	<p>- Presence of community schools (Infrastructure potential)</p> <p>- Local community unskilled labour (Human Potential)</p> <p>- Community upfront materials (Natural Potential)</p> <p>- Ministry of Education and CDF (Financial Potential)</p>	<p>- 135 Schools</p> <p>- 5 tertiary institutions</p>	<p>- 103 school</p> <p>- Nil</p>	32 Schools 5 tertiary schools	Inadequate funding
<b>Inadequate Health facilities</b>	- Local community unskilled Labour (Human Potential)	50 health facilities	- 26 Health facilities	24 Health facilities	Inadequate funding

	<ul style="list-style-type: none"> <li>- Community upfront materials (Natural Potential)</li> <li>- Ministry of Health, partners and CDF (Financial Potential)</li> </ul>				
<b>Inadequate water supply</b>	<ul style="list-style-type: none"> <li>- Skilled human Labour (Human Potential)</li> <li>- CDF, Equalization fund and partners (Financial Potential)</li> <li>- Availability t rivers and streams (Natural resource)</li> <li>- Underground water</li> </ul>	<ul style="list-style-type: none"> <li>- 100 skilled APMs</li> <li>- 3 Cooperating partners and CDF</li> </ul>	<ul style="list-style-type: none"> <li>- 18 APMs –all based in few wards</li> <li>- 3 partners</li> <li>- Perennial streams</li> </ul>	<p>82 APMs</p> <p>At least 6 Cooperating partners</p>	<ul style="list-style-type: none"> <li>- Lack of drilling rig</li> <li>- Limited financial resources</li> <li>- Limited investors in the water sector</li> <li>- Unfavorable terrain</li> <li>- Poor state of roads</li> <li>- drought</li> </ul>
<b>Inadequate market shelters</b>	<ul style="list-style-type: none"> <li>- Community upfront materials (Natural Potential)</li> <li>- Skilled labour persons</li> <li>- Local community unskilled Labour (Human Potential)</li> </ul>	18 trading places	7 market shelters	18 market shelters	Lack of quarry Inadequate financial support
<b>Inadequate Police posts</b>	<ul style="list-style-type: none"> <li>-Availability of land for construction</li> <li>-Human resource</li> </ul>	17 Police Post	1 Police station	17 Police Posts	-Funding

<b>Deforestation (Charcoal burning)</b>	-Alternative source of livelihood such as livestock rearing and farming - Connection of district to the national grid - Availability of good sunlight energy (high temperature) for solar energy	-		Nil	- Inadequate access to seed finance to engage in alternative sources of living - Lack of access to Rural Electrification Authority in rural areas
<b>Low livestock, fisheries and agriculture production</b>	-Available arable land -Availability of water bodies -Livestock disease-free zone	Lake Tanganyika and streams/rivers for aquaculture (1000 fish cages) Total hectares .....	-38 fish cages Utilized arable land 311,417 Ha	962 fish cages 86,610 hectares of land	- Fish cages have just been introduced - Lack of mechanization
<b>Poor road infrastructure</b>	- Most roads already exist and only need maintenance				- Limited funding

Source: Field Data,2022

### *3.3.3. The Alternative Spatial Development Scenarios*

In quest to achieve the district's vision, three development scenarios were formulated considered based on three (3) main parameters, that is, relevance, contribution to local and national economy/ job creation and the feasibility and viability in implementation. All the three developmental scenarios can be applied in development of the district; however, the preferred scenario would accentuate development and attainment of the district vision of wealthy and productive district by 2034.

### *3.3.4. Agriculture and Industry Framework*

The first scenario in developing Mpulungu district is to prioritize agriculture and industry Framework. This means that there is need to focus on agricultural activities such as aquaculture, crop and livestock farming with supporting industries to drive the economy of the district. The district is abundantly endowed with vast arable land and water bodies to support agricultural activities such as aquaculture, irrigation of crops among others. Rationale behind the concept was to focus on current economic activities in the identified growth areas and corridors.

### *3.3.5. Relevance*

- It would help the district meet the vision through increased production of various agricultural produce.
- It would contribute effectively to achieving bumper harvest and improved national food basket.
- It would create value addition to various agro – produce through introduction of industries in the district.

### *3.3.6. Contribution to Local/ National Economy and Job Creation*

The approach would contribute to poverty alleviation through increased production of crops, livestock and fish, which will eventually create employment across food chain for the community members. The food basket for the district would be improved and more exports to the Great East Lakes Region would be promoted.

### *3.3.7. Feasibility and Viability*

The approach is feasible and easier to implement as currently, farming tops the economic activities in the district.

The map below shows growth nodes for agriculture and potential areas for industries. The areas where most farming activities are taking place is located in the map below.

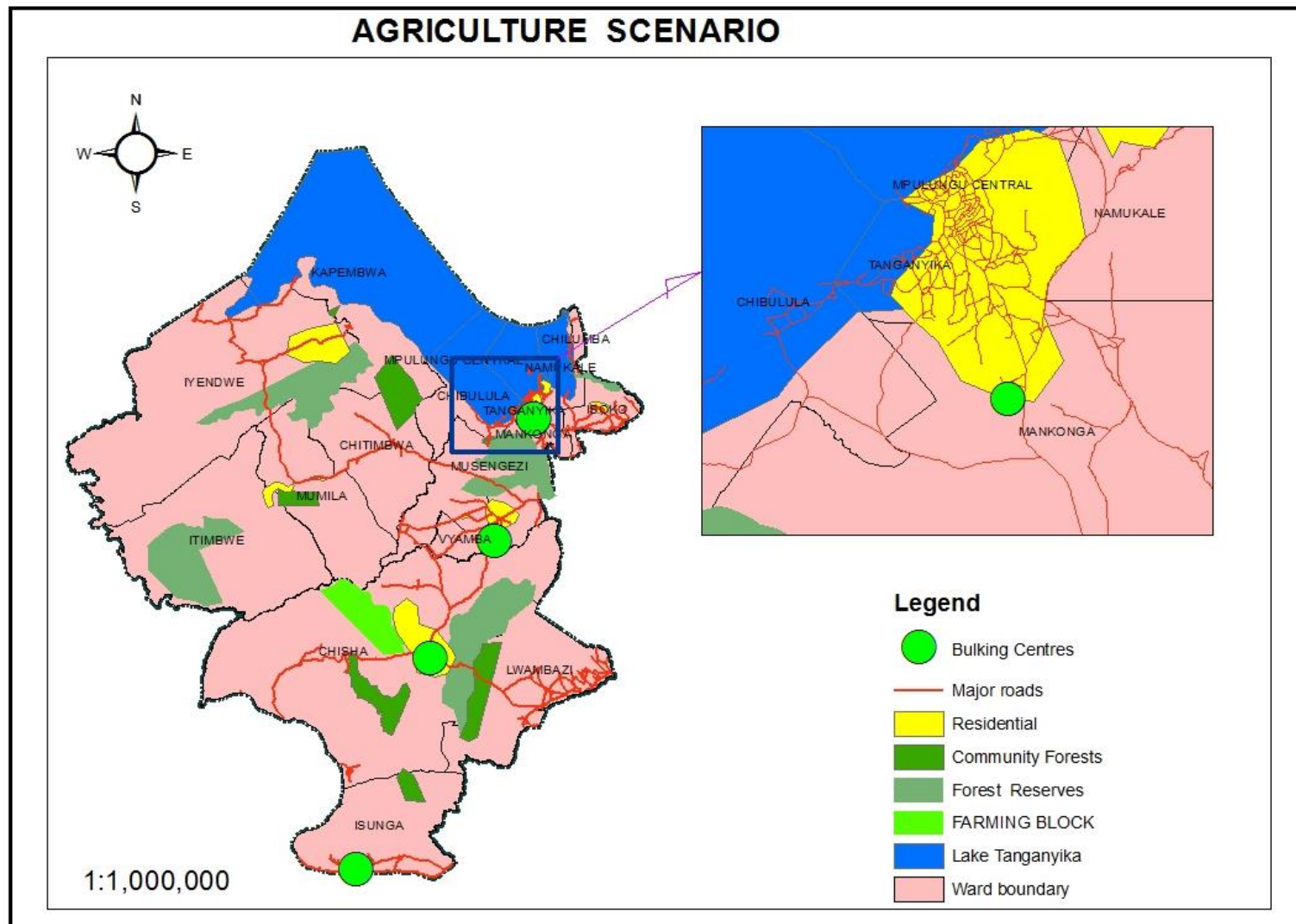


Figure 18- Growth nodes for agriculture and potential areas for industries (Source: Field Data, 2022)

### 3.3.8. Tourism and Connectivity

The second scenario in developing Mpulungu district is to promote tourism and improve connectivity. This concept focuses on promoting tourism, culture and heritage by improving accessibility to the tourist attraction sites as a way of enhancing the economy of the district. This can be achieved by improving transport network both on land and water coupled with development of tourism modern infrastructure connected to the national grid.

#### 3.3.8.1. Relevance

The concept is relevant to achieving the vision of the district as it will awaken and stimulate the sleeping tourism related economic activities. The district has its beautiful scenery, national park, Lake, sand dunes at Kasaba Bay, Niamukolo monument and lodges along the Lakeshore.

#### 3.3.8.2. Contribution to Local/ National Economy and Job Creation

The approach would increase tourism related businesses as it will ease accessibility of tourist attraction sites. Companies under hospitality industry and transport would improve due to increased influx and movement of people inside and outside the district.

#### 3.3.8.3. Feasibility and Viability

The approach is feasible and viable to be implemented as people have started investing in the sector. Although at the moment only a few have invested in accommodation, recreation facilities such as bars.

The map below shows the touristic sites, growth areas with directions and potential areas proposed for recreation facilities.

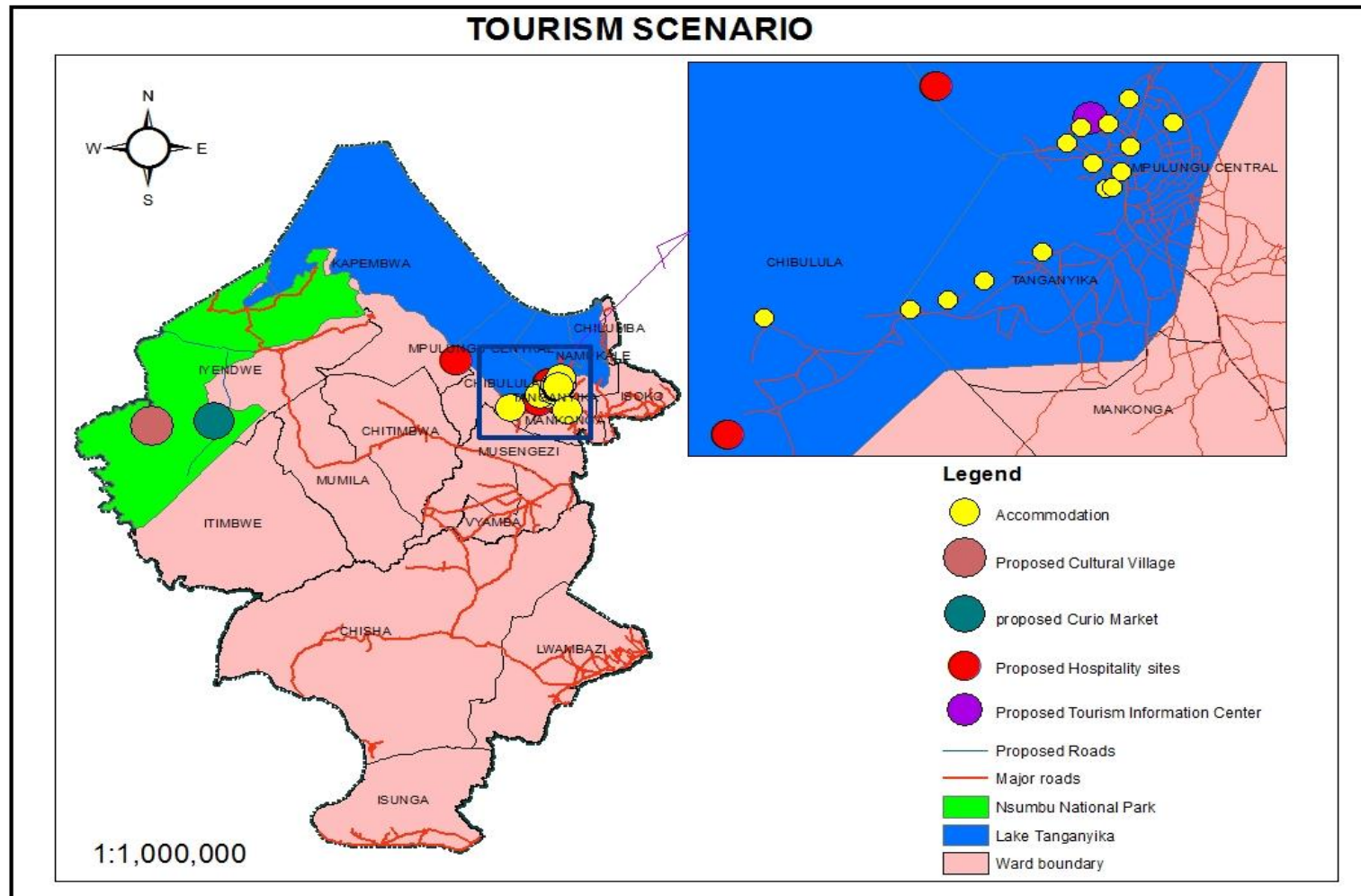


Figure 19-Touristic sites and Growth areas. (Source: Field Data, 2022)

### 3.3.9. Social Development Framework

The third scenario in developing Mpulungu district is to prioritize social development framework. This concept focuses on providing necessary services and social amenities to the community in order to realize the vision of the district.

#### 3.3.9.1. Relevance

The approach is relevant in achieving the vision of the district through improved health and education facilities that can spur development through acquisition of knowledge.

#### 3.3.9.2. Contribution to Local/ National Economy and Job Creation

The approach would support construction of health and education facilities to improve human development. A district with healthy and educated people would develop faster as compared to the other one with poor health and education facilities.

#### 3.3.9.3. Feasibility and Viability

The approach is feasible and viable; however, it may need a lot of time to yield results that would contribute directly to the economy of Mpulungu.

The map below shows the locations for existing and proposed health and education facilities including other supporting social amenities.

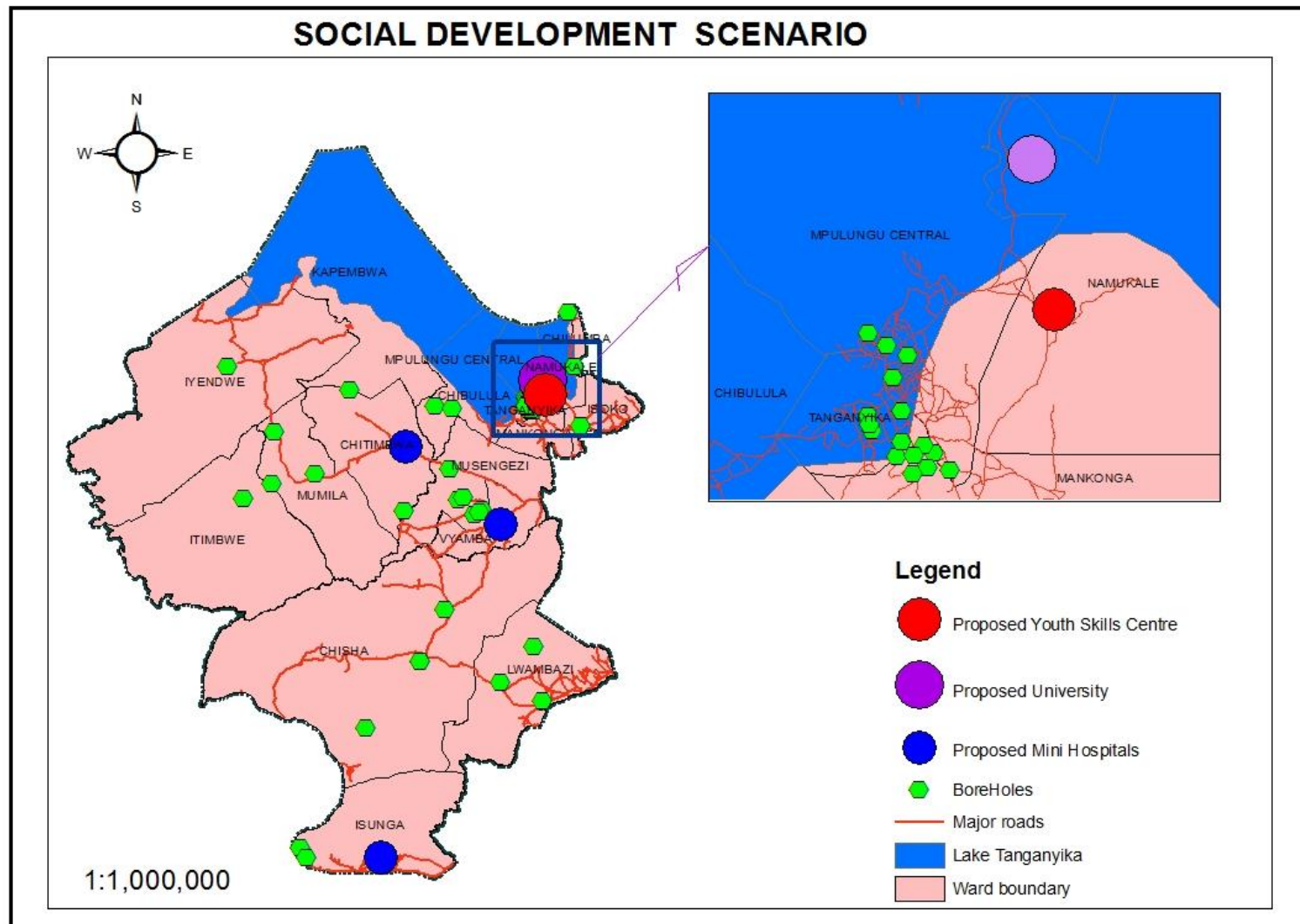


Figure 20-locations for existing and proposed health and education facilities (Source: Field Data, 2022)

*3.3.9.4. Preferred Scenario*

After analysis and critical consideration on alternative development scenarios based on relevance, contribution to both district and national economy and job creation as well as feasibility. **Scenario 1 "agriculture and industry framework" was selected as the best alternative for Mpulungu district.** The reason been that prioritizing agricultural related and industrial related projects would accelerate development in the district as compared to the other two scenarios. It is imperative to note that the other two scenarios are equally important in development of the district.

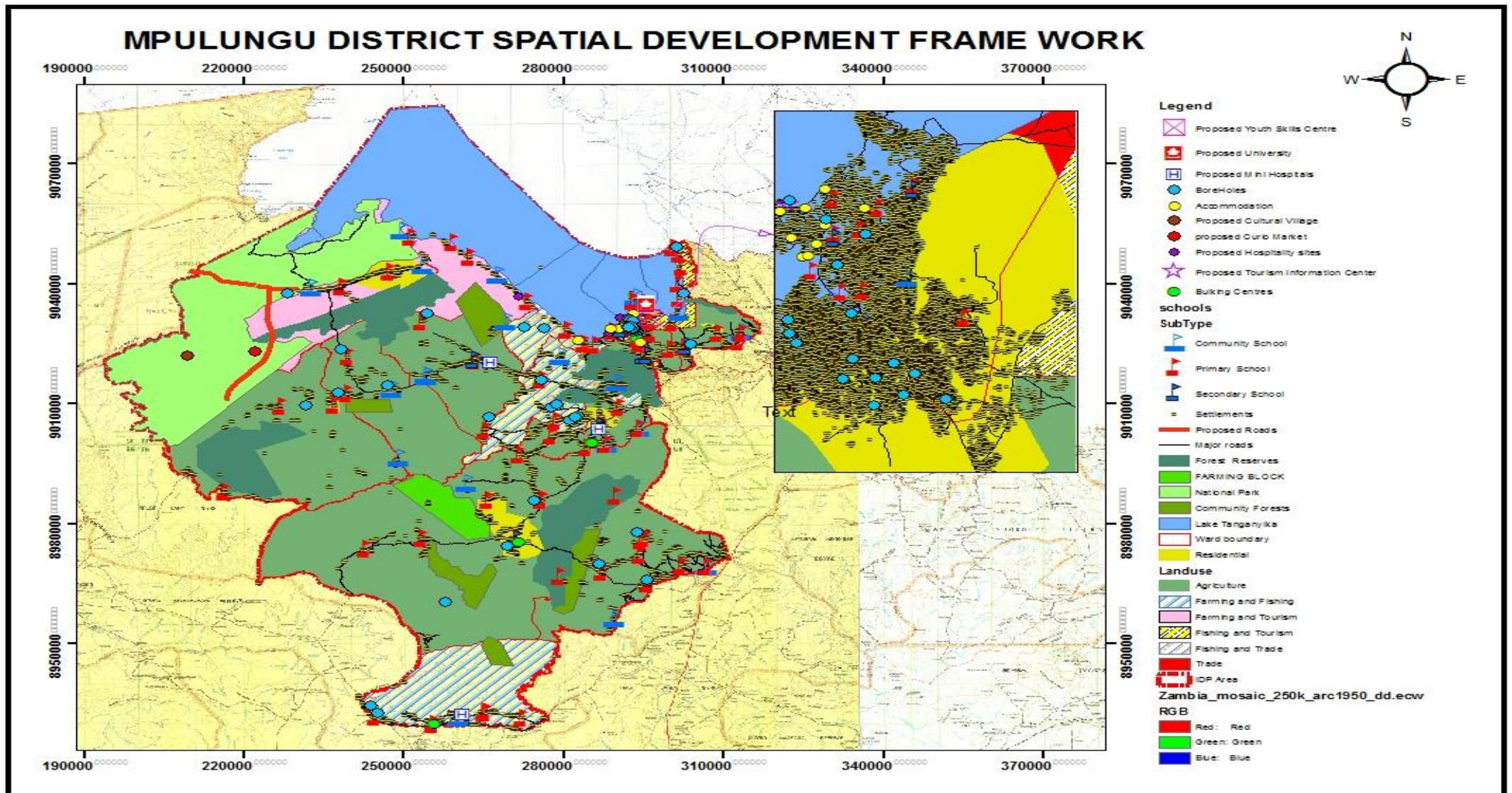


Figure 21 Spartial Development Framework.

(Source: Field Data, 2022)

### 3.3 SPATIAL PLANNING NEEDS OF MPULUNGU

The section contains the assessed and estimated planning needs for major sectors in Mpulungu based on likely population projections and current planning standards in units and hectareage wherever applicable. The examined needs include the existing and projected ones. The base year used in this regard is 2010 which constitutes the year for determining the existing needs.

#### 3.3.1 Housing Needs

The table below illustrates the number of housing units existing in Mpulungu in 2010 and projected to 2025 and 2035. The housing units needs include government and private sector housing units. The 2022 census report states that the average household size at national level was 4.8 persons per household. Rural areas had a higher average household size of 5.0 persons compared to the urban areas with 4.6 persons per household. Northern Province has the average Household size of 4.8 persons. Approximately 85% of Mpulungu's urban Population lives in informal settlements such as Muzabwela, Mupata, Musende, Posa and Kasasa lack basic amenities and services. The local authority in partnership with the traditional leadership through planning agreements will provide a conducive environment that will attract public and private investment in infrastructure development for low-cost houses to meet the existing housing deficits.

*Table 21-Housing Needs Based on Population Projections*

	2010	2020	2025	2035
Population	98,073	142,493	169,928	239,139
Estimated required number of households	24,520	28,499	35,402	49,821
Existing number of households	22,943	25,253	31,034	43,469
Estimated shortage of housing needs	1,577	3,246	4,368	6,352

Source: Field Data, 2022

#### 3.3.1.1 Housing Needs in Hectarage

Table below shows the expected Mpulungu population growth together with the estimated number of households, existing housing hectareage and estimated hectareage required.

	2020	2035
Population	142,493	239,139
Estimated required number of households	28,499	49,821
Existing number of housing units	25,253	43,469
Existing housing hectareage	1,771	1,771
Estimated required housing hectareage	3,017	5063
Estimated housing hectareage shortfall	1,246	3,292

*Table 22-Housing Needs in Hectarage*

The hectarage in the above table is based on the assumption that new residential zoning/development of Mpulungu is distributed at 50% low-cost housing, 30% medium cost and 20% high cost and on the Development/Planning Standards shown in Table below

*Table 23-Number of Units Per Hectare in Residential Zones*

<b>Residential Zoning</b>	<b>Plot Sizes</b>	<b>Dwelling Units/Ha</b>	<b>Possible Appropriate Locations</b>
<b>Low Cost</b>	200m-285m <sup>2</sup>	35-50	Town Centre or immediately adjacent to public transport hubs
<b>Medium Cost</b>	286m <sup>2</sup> -666m <sup>2</sup>	15-35	Neighborhood Centre's (typically within 400m Walking distance of Centre point), inner urban suburbs.
<b>High Cost</b>	667m <sup>2</sup> -2000m <sup>2</sup>	5-15	Urban periphery, outlying lands, areas with capacity/environmental constraints

Source: Field Data,2022.

### 3.3.2 Commercial Building Needs

#### a. Commercial Building Unit (Shop) Needs

Table below shows the number of shops needed in Mpulungu from 2010 to 2035. The estimates of the number of shops in Mpulungu are based on the current planning standards of one shop per 30 households.

*Table 24-Commercial Building Needs Based on Population Projections and Planning Standards*

	2010	2020	2025	2035
Population	98,073	142,493	169,928	239,139
Number of households	24,520	28,499	35,402	49,821
Number of shops needed for above population	372	778	1,154	1,584
Number of existing shops	220	542	786	1082
Estimated shortage of shops	152	236	368	502

Source: Field Data, 2022.

In addition to the estimated shopping units, Mpulungu will need a modern stadium and an intercity bus station.

#### b. Central Business Hectare Needs

The land use planning standards for the Central Business area are provided in table below.

*Table 25- Standards for Central Business Hectare Needs*

Land Use	Standards and Catchments	Comments
Shopping (BS)	Rural area settlement: total =160 360m <sup>2</sup> /1,000pop  (260m <sup>2</sup> average) dispersed as:  Central area 80-180m <sup>2</sup> /1,000pop(i.e., one shop)  Dispersed 80-180m <sup>2</sup> /1,000pop	Standard relates to retail space not plot size
Parking (shops)	3/1,000m <sup>2</sup> floor space	
Retail Market (BM)	14 stalls/1,000pop i.e., 25m <sup>2</sup> /1,000	1k m catchment
Parking (Markets)	1/300m <sup>2</sup> floor space	
Offices (BC)	400m <sup>2</sup> /10,000 pop	

Parking (Offices)	1/100m2 floor space	
Licensed Premises	2000m2/3,000pop (plots to be 1,000-2,000m2)	
Petrol Filling Station(TS)	1,000 -1,500m2 site/20,000 pop	
Post office (AP)	Sub office 300m2/10,000 pop	
Parking (Licensed Premises)	1/40m2 public floor space 3/4 bedrooms 1/5 staff	
Small Workshops	10 x 25 mL/4,000pop	Adjacent market area
Industry/ warehousing & wholesale Premises	1car/10 employee 1 lorry/ 1,000m2(min 3)	Lorry spaces = 46 m2  Additional provision for

Source: Field Data,2022.

With the above planning standards and unit needs projected in Table 33, Table 34 provides the commercial hectareage needed for the Central Business District.

*Table 26-Commercial Building Needs Based on Population*

	2020	2035
Population	142,493	239,139
Number of Households	28,499	49,821
Number of Shops needed for above population	778	1,584
Number of Existing Shops	542	1082
Number of Estimated Shop shortfall	236	502
Estimated shopping Hectarage shortfall	0.7	1.1

Source: Field Data, 2022.

### 3.3.3 Administration Building Needs

#### a. Administration Building Unit Needs

Based on the current standards provided in **table 35**, it is estimated that with the projected population of 142,493 for 2020 the required number of administrative building units in Mpulungu is 132 which is anticipated to increase to 160 units by 2025 and 214 units by 2035 to serve the projected population of 239,139.

*Table 27-Administrative Facilities*

Council Offices	400m <sup>2</sup> /10,000 pop
Police Post	400m <sup>2</sup> /10,000 pop
Police Station	1ha/30,000 pop, Plus 2ha residential in residential district
Party Offices	400m <sup>2</sup> /4,000 pop
Central Government Offices	4000m <sup>2</sup> /10,000 pop

Source: Field Data, 2022.

### b. Administration Building Hectarage Needs

The land area required for administrative units in Mpulungu to service the estimated population of 142,493 for 2020 is 49.85 hectares. It is anticipated that by the year 2035 with the projected population of 239,139 the total land area for administrative units required to serve the population will increase to 86.66 hectares.

#### 3.3.4 Educational Needs

##### (a) Educational Unit Needs

Using the standards provided in table 36, in 2020 the school going population is estimated at 43,500 pupils against 312 classrooms, leaving a deficit of 775 classrooms. By 2035 when the school going population is projected to be at 95,769, the anticipated number of Classrooms required to service the population will be 2,393.

Table 28- Educational Standards.

Land Use	Standard and Catchments	Ha/ Population	Comments
Nursery School (GEN)	0.5ha; with GEP 200 pupils/4,000 population average 25pupils/school	0.125/1,000	Land use to be allocated in advance of requirements.
Primary School (GEP)	Stream: 280 pupils (1,500 pop): 1.2ha  Stream: 560 pupils (3,000 pop): 1.8ha  Stream: 840 pupils (5400 pop): 2.4ha  Stream: 1120 pupil (6,000 pop): 3.0ha	At 4 Stream (ideal target)0.5/1,000	Excluded teachers housing in all cases

Parking for Schools	1/classroom (plus ``set down`` area, 3/1000m <sup>2</sup> floor space)		``set down `` areato be within site
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Source: Field Data,2022.

### (b) Educational Hectarage Needs

Educational hectarage requirements are drawn from the planning standards provided in table37.

	2020	2035
Population	43,500	90,769
Hectarage	27.15	45.38

#### 3.3.5 Health Building Needs

##### a. Health Building Unit Needs

Using the standards provided in table 21, in 2020 the population is estimated at 142,493 people, Mpulungu District requires a total number of 56 health facilities to service the population. However, the district currently only has 28 facilities leaving a shortfall of 28. By 2035 the population is expected to increase to 239,139 and the estimated required number of health units is 94 facilities.

##### b. Health Building Hectarage needs

Land area for the general hospital and clinics is derived from the planning standards below.

Table 29-Health Facilities Standards

Land Use	Standards and Catchments	Ha/Population	Comments
Health Sub Centre or Clinic (GHC)	600-800m <sup>2</sup> /1,000 pop	0.06-0.08/1000	Housing outside site: 5km radius catchment
Hospital (GHO)	MK.I (District) 1/50,000 pop ; MK.II (Prov. H.Q.) 1/100,000 POP ; MK.III 1/20,000 pop; General 1/300,000 pop	15ha/50,000pop	
Parking (Health)	1 space/5beds + space/1 staff		

*Table 30-Health Facilities Hectarage Needs*

	<b>2020</b>	<b>2035</b>
<b>Population</b>	142,493	239,139
<b>Hectarage</b>	54.15	90.87

source: Field Data,2022.

### 3.3.6 Industrial Needs

Using the standards provided in table 23, in 2020 the population is estimated at 142,493 people, Mpulungu District requires a total number of 62 industrial units to service the population comprising of small and large workshops. However, the district currently only has 1 units leaving a deficit of 52 units. By 2035 the population is expected to increase to 239,139 and the estimated required number of industrial units is 104 units.

#### a. Industrial Hectarage Needs

Industrial land needs for the year 2020 to 2035 have been estimated based on Planning standards as shown below:

*Table 31-Industrial Needs Standards*

<b>Land Use</b>	<b>Standards and Catchments</b>	<b>Comments</b>
Service Industry	10 X 25m <sup>2</sup> /4,000pop	Adjacent market area
Small workshops large workshops (FL)	5 X 400m <sup>2</sup> /1,000pop	
Other Industry (General or Special) Specific works as Requested	+50% expansion nearby +50% land reservation elsewhere for "spin-off"	
Parking (Industry)	1 car/10 employees 1 lorry/1000m <sup>2</sup> (min3)	Lorry spaces 46m <sup>2</sup> Additional provision for offices were Appropriate

Source: Field Data,2022.

*Table 32-Industry Hectarage Needs*

	2020	2035
Population	142,493	239,139
Hectarage	23.68	39.75

Source: Field Data,2022.

Thus, a total hectarage of 39.75 will be required for this sector by the year 2035.

### 3.3.7 Local Street Unit Needs

#### 3.3.7.1 Local Street Unit Needs 2020-2030

The district has about total 45 kilometers of township roads of which only 19.9 kilometers (44.2%) are tarred and remaining kilometers are of gravel standards. Based on the prevailing economic status about 25 kilometers of township roads will be required for rehabilitation by 2027 and all 45 kilometers will be tarred by 2032.

*Table 33-Priority Urban Roads in Mpulungu*

Road	Type	Length (Km)
1	Tarred	19.9
2	Gravel	45

(Source: Mpulungu Town Council)

#### 3.3.6.2 Local Street Hectarage Needs in Mpulungu 2020-2030

Based on the road size standards provided in **table 41**, about 79.2 hectares of road space will be required by 2030 to ensure that 44 kilometers of priority urban roads are tarred.

### 3.3.8 Utilities Needs

#### 3.3.8.1 Water & Sewer Supply unit needs in Mpulungu Town

In 2020 Mpulungu's water demand was 2,000,000 cubic meters per year. Water production is 500,000 cubic meters per year and deficit is 1,500,000 cubic meters per year.

The needs in the water supply and sanitation in Mpulungu were spelt out by the stakeholders as follows:

- Increase capacity for water storage and supply in the urban area.
- Rehabilitate and expand urban sanitation infrastructure.
- Water & Sewer Supply Hectarage needs in Mpulungu

Land Use	Standards and Catchments	Comments
Water Supply	200litres/day/person	
Sewerage	200litres/day/person	
Lateral or house sewer Terminal Lengths	1:40	Minimum
Normal Lengths	1:80	Minimum
	1:100	

Chambeshi Water and Sanitation Company is working on a project to increase capacity of water storage and supply in the urban area. The company is also improving the sewer system to connect more households. 10 hectares will be required for construction of an oxidation ponds sewer treatment plant and new waterworks.

### 3.3.9 Social Facilities Needs

Social Facilities unit needs for Mpulungu include construction of 1 modern stadium, Improvement on Muzabwela stadium, rehabilitation and construction of community halls as well as rehabilitation and establishment of new play parks. Table 42 provides the social facilities' service standards.

*Table 34-Social Facilities Service Standards*

Land Use	Standards Catchments	And	Ha/Population	Comments
Community Hall (PS)	1,500- 2,500m <sup>2</sup> /10,000 pop;		0.06 - 0.08/1,000	Housing outside site: 15km radius catchment
Place of Worship (PW)	(3,000m <sup>2</sup> if sports facilities)			
Public Convenience (PT)	1,000- 1,500m <sup>2</sup> /3,000pop			At each shopping Centre and bus station
Entertainment (theatre, cinema, social clubs) (PE)	0.04ha/1,000pop			Suitably located landreservation
Open air cinema (PE)	0.5ha/300,000pop			

Source: Field Data, 2022.

Based on the social facilities service standards provided in table 42, the hectareage needs for public and social facilities for the 2020 projected population of 142,493 is 19.7 hectares across the district. The total hectareage required by 2030 for the projected population of 239,139 is 32.1 hectares. Table below provides details of the required land for social facilities in 5- year intervals.

### 3.3.10 Electricity Needs

The power supply demand for Mpulungu district as at 2020 was 3.8 MVA Megawatts with over 15,250 customers both domestic and commercial. The supply from Lunzua Hydro Power Station is 14.0 Megawatts.

### 3.3.11 Open Spaces and Recreational Facilities Needs

#### a. Open spaces and recreational facilities unit needs

This comprises play parks, open spaces, sports fields and golf course. Based on the standards provided in table 28, the 2020 projected population of 142,493 require a total number of 15 units of open spaces and recreation facilities.

#### b. Open spaces and recreational facilities land needs

Planning standards for open space facilities are provided in **table 43** below:

*Table 35-Planning standards for open space facilities*

Land Use	Standards and Catchments	Ha/Population	Comments
"Tot Lots"	0.1 ha/1,000pop. Serving 100m radius	0.1ha/1,000	Ideally to serve 25 Houses
Children's Playground (OPP)	Radius Sites totaling 0.5 ha/1,000 pop	0.5ha/1,000	
Playfields, Tennis Courts etc. (OPF)	To serve 200m radius 2.0 ha/10,000pop; 1kmradius	2.0ha/10,000	Including informal football pitch areas 1 football pitch/5,000pop
Parks (OP)	0.1ha/1,000pop.	Swimming Pools (OPS)	0.75ha site/30 - 50,000pop
Golf Course (OPG)	60ha site (18hole) 30ha site (9hole)		
Private Park or Play Area (OVP)	0.05ha/1,000pop. 5ha site		Less specific requests - This acts as land reservewithin town
Race Track/ Stadium/ Show Ground (OPR)	5ha site		Demand likely once community exceeds 10,000 pop

Source: Field Data,2022.

### 3.3.11 Transport Unit Needs

#### a. Transport Unit Needs

By the year 2035 the following transportation facilities need to be provided in Mpulungu to cope with demand as per existing planning standards:

*Table 36-Transport Facilities Standards*

<b>Land Use</b>	<b>Standards and Catchments</b>	<b>Comments</b>
Primary distributor	Dual 2 or 3 lane 30 - 36m overall reserve	65kph no plot access
District distributor	Single 2 or 4 lane 24m for 2 lanes; 36m for 4 lanes	60kph no access permitted
Local distributor	Single 2 lane 18m reserve	50kph plot access permitted
Access Roads	Single 2 lane 12m reserve	30kph plot access permitted
Segregated Pedestrian ways	3m minimum width, gravel based	
Turning Space in culde sac	12.50 x 18mm hammerhead	

Source: Field Data,2022.

### 3.4 LAND USE PLANNING POLICIES AND PROPOSALS

#### *3.4.1 Improve, maintain or protect the environmental, social and economic aspect of development*

The following land use policies will be applied:

1. Promote in fill development on vacant land to increase population density in ~~communities~~ and along development corridors;
2. Promote corridor development along the major public transport routes to promote economic activities.
3. Reduce uncontrolled developments through setting of development standards for building footprints and heights per square kilometers;
4. Promote the construction of low-income housing through designing of low-cost plots and local area plans.
5. Prevent encroachment and development on open spaces meant for greenery.
6. Improve the existing major transport routes by rehabilitating and expanding the roads along development corridors development.
7. Integrate greenfield development into existing road transport systems; and
8. Protect zones of environmental sensitivity, cultural and historical importance areas and importance areas for disaster management purposes

The district is endowed with vast natural resources such as Lake Tanganyika, rivers, underground water, forests, and good soils. The district has a number of sites of historical and cultural importance which are gazetted under the National Heritage Conservation Act of the Laws of Zambia. These areas are also tourist attractions and are significant to the growth and development of the district. The sites include Niamukolo Monument (world heritage site), good news site, Izi Falls among others. The existing protected national forests have various species of trees including Mukula used for timber production.

To ensure that these areas are protected against encroachments, the following land use planning policies will be applied:

1. Strengthen environmental education and awareness programs on natural resource management and disaster risk reduction;
2. Increase environmental protection by controlling development along environmentally sensitive

areas such as fish breeding sites on the lake, rivers and streams

3. Prevent land encroachments on protected national forests, tourism and historical ~~as~~ through community sensitization, boundary clearance and installation of warning signs.
4. Develop a disaster risk reduction and mitigation plan to respond to all forms of disasters, including climate change;
5. Strengthen forest management practices in the district through the use of modern information technology and communication to enhance forest safety; and
6. Promote the use of alternative sources of energy that are not dependent on deforestation of forest resources.

#### *3.4.2 Protection of national and regional interests, policies and guidelines*

The district shares boundaries with Mbala District in the east, Senga Hill District in the South east, Lunte District in the South, Mporokoso District in the south west and Nsama District in the west but also shares international boundaries with the Republic of Tanzania. It also provides passage for goods and services access to and from the great lakes' region (Democratic Republic of Congo, Burundi) respectively through Lake Tanganyika.

The major land use policies to be implemented are as follows: -

1. Develop modern infrastructure at Mpulungu Harbour to enhance trade along the Great Lakes Region.
2. Promote the development and accessibility of storage facilities such as bulking Centers.

#### *3.4.3 Informal settlements with a description of improvement inputs or other management responses required and the appropriate building and land use controls to be applied in those areas*

The urban area is surrounded by 6 unplanned settlements (2 peri-urban and 4 villages) that ~~will~~ the expansion of the township boundary for improved service provision and revenue collection. The following land use policies are proposed for managing informal settlements:

1. Reduce and prevent the expansion of informal settlements into agricultural land and environmentally sensitive areas through settlement upgrading,
2. Promote the development of low-cost housing infrastructure or housing improvements, rather than reconstructing the whole houses.
3. Promote housing resettlement schemes that are integrated and within the development corridors

along the major transport routes;

4. Strengthen development control and the use of urban informatics to eliminate non compatible developments in planned areas; and

5. Prepare Land Use Planning Policies and Proposals for Areas Under the Jurisdiction of Traditional Authorities through planning agreements.

**Section 25** of the **Urban and Regional Planning Act, Number 3 of 2015** of the Laws of Zambia provides for preparation of planning agreements with chiefs responsible for a particular customary area to facilitate development in customary areas. The following plans and proposals will be taken into consideration:

1. Prepare Local Area Plans for unplanned settlements and settlements around growth centers to promote socio-economic development;

2. Secure land for major investment and the provision of social services such as health and education facilities, markets and bus stations.

#### **PART FOUR: IMPLEMENTATION PROGRAM**

This section of the IDP is one that provides guidance on how the IDP will be implemented and clearly shows the institutional arrangements to be put in place to ensure successful implementation of the IDP. It sets out the programs, expected results and outcomes, targets, resources required, lead agencies and support agencies for each strategic objective outlined in the Development Framework. One of the major functions of the implementation plan is to mobilize and direct resources to areas where they are needed the most within the IDP to ensure effectiveness in order to avoid compromising the results.

## 4. CAPITAL INVESTMENT PROGRAMME

1	<b>AGRICULTURE SECTOR</b>								
Goal	<b>To Diversify the Economy from Capture Fishing to Aquaculture and Agriculture</b>								
Objective	<b>To Increase Agriculture Production and Productivity by 50% by the year 2027</b>								
Strategy	<b>Increased Agriculture Production and Productivity</b>								
Programme	Activity	Location (By Priority)	Target (Years)				Cost Estimates (ZMK)		Responsible
			1	2	3	4	5		
<b>Infrastructure Development</b>	Construction of 12 Camp Houses	Kabamba; Kalonda; Kavumbu; Kalongola; Iyendwe; Katulo; Kaizya; Kasimango; Shimwalota, Kapembwa, Chilumba; Kazembe	1	3	3	3	2	8,580,000	MOA
	Construction of bulking Centre's and slabs	Kabamba; Kalonda; Kavumbu; Kalongola; Iyendwe; Katulo; Kaizya; Kasimango; Shimwalota, Kapembwa, Chilumba; Kazembe; Kopeka; Chinakila; Chitimbwa; Chibote; Vyamba; Isoko; Itimbwe; Chaulu	NIL	5	5	5	5	20,000,000	MOA
<b>Agriculture Mechanisation</b>	Empowerment of 400 farmers with Rippers	Kabamba; Kalonda; Kavumbu; Kalongola; Iyendwe; Katulo; Kaizya;Kasimango;Shimwalota , Kapembwa, Chilumba; Kazembe; Kopeka; Chinakila; Chitimbwa; Chibote; Vyamba; Isoko; Itimbwe; Chaulu	80	80	80	80	80	23,440,000	MOA

<b>Climate Smart Agriculture</b>	Training 1000 farmers in climate smart technologies	Mpulungu district	200	200	200	200	200	1,000,000	MOA
<b>Agribusiness Development</b>	Training 100 farmer cooperative in agriculture commodity Processing	Mpulungu District	20	20	20	20	20	500,000	Central govt/ cooperating partners
	Establishment of the Processing Plant.	Mpulungu District	NIL	NIL	1	NIL	NIL	80,000,000	Local Authority/Central govt/ cooperating partners
<b>Irrigation Development</b>	Establishment of 4 Irrigation Schemes Weir and Canals	Kabamba, Vyamba, Lwambazi Chitimbwa, Chinakila, Musengezi	NIL	1	1	1	1	20,100,000	Central government/ cooperating partners
	Dam Construction	Kabamba, Kopeka, Vyamba, Chitimbwa, Chinakila	NIL	1	1	1	1	1,800,000	Central government/ cooperating partners
<b>Extension Services Support</b>	Procurement of 20 Motor bikes	Mpulungu District	4	4	4	4	4	800,000	Central government/ cooperating partners
	Procurement of 1 boat	Mpulungu District	NIL	NIL	1	NIL	NIL	300,000	Central government/ cooperating partners
	Procurement of GPS kits	Mpulungu District	NIL	NIL	1	NIL	NIL	350,000	Central government/ cooperating partners
	Farmer Visitation by the Extension Officer (40 Visits)	Mpulungu District	8 VISITS	8 VISITS	8 VISITS	8 VISITS	8 VISITS	584,000	Local Authority/Central govt/ cooperating partners
	Farmer sensitizations and Trainings	Mpulungu District	8	8	8	8	8	584,000	Central government/ cooperating partners

	Employment of extension staff – 8 agriculture assistants, 2 agriculture supervisor, 1 assistant technical officer	Mpulungu District	NIL	8	2	1	NIL	0	Central Government/MoA
<b>Early Warning System</b>	Establishment of 2 weather stations	Kavumbu, Kalongola	NIL	NIL	1	NIL	NIL	100,000	Central government/cooperating partners
<b>Resettlement scheme Development</b>	Construction of access roads and connection to national grid	NORAD resettlement scheme	NIL	NIL	1	NIL	NIL	5,000,000	Local Government/Central government/cooperating partners
		<b>Sub Total</b>						<b>181,438,000</b>	
<b>2</b>	<b>FISHERIES SECTOR</b>								
<b>Goal</b>	<i>To diversify the economy from capture fishing to aquaculture and agriculture</i>								
<b>Objective</b>	<b>To increase aquaculture production and productivity by 50% by the year 2027.</b>								
<b>Strategy</b>	<b>Increased fisheries production and productivity</b>								
<b>Programme</b>	<b>Activity</b>	<b>Location (by priority)</b>	<b>Target(years)</b>						<b>Responsible</b>
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>		
<b>Infrastructure Development</b>	Construction of 1 fish hatchery	Mpulungu District	NIL	NIL	1	NIL	NIL	4,500,000	Central government/cooperating partners, DoF
	Construction of 1 feed processing plant	Mpulungu Boma	NIL	NIL	1	NIL	NIL	5,000,000	Central government/cooperating partners, DoF
	Construction of Camp Houses	Kabyolwe, Kapembwa, Chipwa	NIL	1	1	1	NIL	2,145,000	Local government /Central government/cooperating partners, DoF

	Construction of 3 fish freezing centers	Kabyolwe, Kapembwa, Chipwa	NIL	1	1	1	NIL	4,500,000	Local government/Central government/cooperating partners, DoF
<b>Procurement of Laboratory Equipment</b>	Procurements of transport (1 motor vehicle, 2 boats, 4 motor bikes)		NIL	4 motor bikes	1 Motor vehicle	1 boat	1 boat	3,400,000	Local government/Central government/cooperating partners, DoF
	Renovation of aquarium	Lake Tanganyika Research Unit	NIL	NIL	1	NIL	NIL	250,000	Local government/Central government/cooperating partners, DoF
	Training & Monitoring of Fish Farmers	Mpulungu District	4	4	4	4	4	200,000	Local government/Central government/cooperating partners, DoF
<b>Extension Support Services</b>	Employment of extension staff – 6 fisheries assistants	Mpulungu District	NIL	6	NIL	NIL	NIL		Central Government/MFL
<b>Aquaculture Development</b>	Installation and stocking of 100 fish cage on Lake	Lake Tanganyika	20	20	20	20	20	25,000,000	DoF/ Local government/cooperating partners
	Construction of 1,050 fish ponds	Chinakila, Vyamba, Iyendwe, Chitimbwa, Kalongola, Kabamba (Shimwalota)	210	210	210	210	210	5,000,000	DoF/Cooperating partners

	Sensitization and training 2000 fish farmers in fish farming	Chinakila, Vyamba, Iyendwe, Chitimbwa, Kalongola, Kabamba (Shimwalota), Chipwa, Kabyolwe, Kapembwa, Chituta, Mbete, Kapoko	400	400	400	400	400	100,000	DoF/ Cooperating partners/local authority
<b>Capture Fisheries Development</b>	Identification and establishment of 20 fish breeding areas	Lake Tanganyika	4	4	4	4	4	500,000	DoF/ Cooperating partners/local authority
	Establishment and strengthening of 49 co-management structures	Lake Shore	9	10	10	10	10	1,000,000	DoF/ Cooperating partners/local authority
	384 Monitoring, control and surveillance patrols	Lake Tanganyika	75	75	75	75	84	3,000,000	DoF/ Cooperating partners/local authority
	144 fish conservation awareness meetings	Lake Shore Villages	28	28	28	28	32	1,500,000	DoF/ Cooperating partners/local authority
<b>Collection of Fisheries and Aquaculture Data</b>	Collection of fisheries and aquaculture data – 3 Frame surveys	Fishing villages, landing sites, fish markets, bus stations	1	1	1	1	1	10,000,000	DoF/ Cooperating partners/local authority
	Collection of fisheries and aquaculture data – 20 Catch Assessment Surveys	Lake Tanganyika	4	4	4	4	4	2,500,000	DoF/ Cooperating partners/local authority
	Collection of fisheries and aquaculture data – 40 Gill net Surveys	Lake Tanganyika	8	8	8	8	8	500,000	DoF/ Cooperating partners/local authority
		<b>Sub Total</b>						<b>68,925,000</b>	

<b>3</b>	<b>LIVESTOCK SECTOR</b>								
<b>Goal</b>	<i>To diversify the economy from capture fishing to aquaculture and agriculture.</i>								
<b>Objective</b>	<b>To increase the livestock production and productivity by 50% by 2025.</b>								
<b>Strategy</b>	<b>Increased livestock production and productivity</b>								
<b>Programme</b>	<b>Activity</b>	<b>Location (by priority)</b>	<b>Target (Years)</b>				<b>Cost</b>		<b>Responsible</b>
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>		
<b>Infrastructure Development</b>	Construction of 7 veterinary camp houses	Central, Isoko, Vyamba, Chinakila, Kavumbu, Iyendwe, Chitimbwa	1	1	1	2	2	4,200,000	Central/Local government/ cooperating partners
	Construction of 2 dip tanks	Isoko, Vyamba	NIL	NIL	2	NIL	NIL	3,000,000	Central/Local government/ cooperating partners
	Construction of 1 livestock service centre	Vyamba	NIL	1	NIL	NIL	NIL	4,500,000	Central/Local government/ cooperating partners
	Construction of 1 livestock multiplication centre	Isoko	NIL	1	NIL	NIL	NIL	2,500,000	Central/Local government/ cooperating partners
	Construction of standard slaughter facility	Central	NIL	1	NIL	NIL	NIL	750,000	Central/Local government/ cooperating partners
	Construction of veterinary clinic	Mpulungu	NIL	1	NIL	NIL	NIL	1,500,000	Central/Local government/ cooperating partners
<b>Extension Support Services</b>	Procurement of 7 Motor bikes	Central, Isoko, Vyamba, Chinakila, Kavumbu, Iyendwe, Chitimbwa	1	1	1	2	2	700,000	Central/Local government/ cooperating partners

	Procurement of 1 vehicle	Mpulungu	NIL	NIL	1	NIL	NIL	850,000	Central/Local government/ cooperating partners
	Procurement of livestock service kits	Mpulungu	NIL	NIL	1	NIL	NIL	150,000	Central/Local government/ cooperating partners
<b>Livestock Development</b>	Livestock stocking and restocking (500 cattle, 5500 goats, 15000 chickens, 6000 pigs)	All livestock camps	250, cattle, 2750 goats, 3000 pigs	NIL	250, cattle, 2750 goats, 3000 pigs	NIL	NIL	1,000,000	Central/Local government/ cooperating partners
	Establishment 50ha of pasture fields	Chinakila, Vyamba, Isoko	10	10	10	10	10	100,000	Central/Local government/ cooperating partners
	Livestock Disease control – 3000 Rabies vaccinations	All camps	600	600	600	600	600	250,000	Central/Local government/ cooperating partners
	Livestock Disease control – 200,000 Newcastle vaccinations.	All camps	40,000 vaccinations	40,000 vaccinations	40,000 vaccinations	40,000 vaccinations	40,000 vaccinations	150,000	Central/Local government/ cooperating partners
	1000 farmers sensitized and trained in livestock production.	All camps	200	200	200	200	200	250,000	Central/Local government/ cooperating partners
		<b>Sub Total</b>						<b>19,900,000</b>	
<b>4</b>	<b>ENERGY SECTOR</b>								

Goal	To increase access to renewable energy sources.								
Objective	To increase electricity generation capacity, expand the electricity grid and increase utilization of alternative renewable energy sources by 50% by 2034								
Strategy	Increased electricity generation capacity, expanded the electricity grid and increased utilization of alternative renewable energy sources								
Programme	Activity	Location (by priority)	Target (Years)				Cost		Responsible
			1	2	3	4	5		
<b>Electricity Generation</b>	Construction of Lufubu Hydro Plant	Lufubu river	NIL	NIL	1	NIL	NIL	5,000,000	ZESCO
<b>Electricity Transmission and Distribution</b>	Expansion of Electricity grid	Lake shore and plateau	NIL	NIL	1	NIL	NIL	1,000,000	ZESCO/REA
	Connecting 6000 housing units to national grid	Mpulungu	1200	1200	1200	1200	1200	2,000,000	ZESCO
<b>Energy Efficient Promotion</b>	Distribution of 48,000 energy saver bulbs	Mpulungu	9,600	9,600	9,600	9,600	9,600	2,400,000	ZESCO
	Construction of substation by Zesco and REA to cover the plateau		NIL	NIL	1	NIL	NIL	2,000,000	ZESCO/REA
	Construction of Zesco Office Blocks and Staff Houses	Mpulungu	1	1	1	1	1	4,000,000	ZESCO
	Establishment of 100 stations of bio-gas digesters	Vyamba, chinakila, isoko	20	20	20	20	20	500,000	ZESCO
<b>Off-grid energy solutions</b>	Construction of 1 solar power plant	Mpulungu	NIL	NIL	1	NIL	NIL	30,000,000	Ministry of Energy
		<b>Sub Total</b>						<b>46,900,000</b>	

<b>5</b>	<b>TOURISM SECTOR</b>									
<b>Goal</b>	<i>To Develop the Tourism Industry</i>									
<b>Objective</b>	<b>To increase tourism infrastructure, facilities and tourists' inflows by 2034.</b>									
<b>Strategy</b>	<b>Increased tourism infrastructure, facilities and tourists' inflows</b>									
<b>Programme</b>	<b>Activity</b>	<b>Location (by priority)</b>	<b>Target (Years)</b>				<b>Cost</b>		<b>Responsible</b>	
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>			
<b>Infrastructure Develop</b>	Construction of 1 Hotel and 10 Lodges along the lake shore and Islands of Lake Tanganyika	Lake shores, Islands	2 lodges	2 lodges	2 lodges	2 lodges	1 hotel	5,000,000	Investors	
	Maintenance and securing of Niamukolo heritage site	Mpulungu	NIL	1	NIL	NIL	NIL	50,000	National Heritage and Conservation Commission/Tanganyika Abercorn Tourist Association	
	Develop access roads to Izi and Mwepu Falls		NIL	NIL	1	NIL	NIL	500,000	Ministry of Tourism/National Heritage	
	Construction of access road to Nsumbu via Nsumbu National Park	Mpulungu	NIL	NIL	1	NIL	NIL	2,000,000	Central Government/development	
	Upgrading of Nsumbu National Park airstrip into an International Airport	Nsumbu National Park	NIL	NIL	1	NIL	NIL	2,000,000,000	Central Government/development partners	

<b>Tourism Product Development</b>	Establishment of a cultural village	Chomba wa kasaba village, Mpulungu	NIL	NIL	1	NIL	NIL	500,000	Ministry of Tourism, National Heritage, Ministry of Education
	Establishment of youth skills training centre for curio curving	Mpulungu	NIL	NIL	NIL	NIL	1	4,000,000	Ministry of Tourism, National Heritage, Ministry of Education
	Establishment 2 of cultural village	Chomba wa kasaba, Mpulungu	NIL	NIL	1	NIL	1	500,000	Ministry of Tourism, National Heritage
<b>Tourism Promotion and Marketing</b>	Establishment of 1 Tourism Information Centre	Mpulungu Boma	NIL	NIL	1	NIL	NIL	1,000,000	Ministry of Tourism
		<b>Sub Total</b>						<b>2,011,550,000</b>	
<b>6</b>	<b>TRANSPORT AND COMMUNICATION SECTOR</b>								
<b>Goal</b>	<i>To improve transport and logistics infrastructure</i>								
<b>Objective</b>	<ul style="list-style-type: none"> <li>• To improve service delivery in the transport sector by 80% by 2030.</li> <li>• To reduce road and water accidents by 80% by 2030</li> <li>• To reduce the cost of transportation by 80% by 2030.</li> </ul>								
<b>Strategy</b>	<b>Improved Transport and Logistics</b>								
<b>Programme</b>	<b>Activity</b>	<b>Location (by priority)</b>	<b>Target (Years)</b>				<b>Cost</b>		<b>Responsible</b>
<b>Road Development and Maintenance</b>	Maintenance of Mbala - Mpulungu Road	Kasama, senga Hill, Mbala, Mpulungu		1	NIL	NIL	NIL	50,000,000	RDA
	Upgrading of 10 wooden bridges to concrete bridges in Mpulungu	Chibote, Kalongola, Kalonda, Chitimbwa, chinakila, Katulo, Kapondwe, Chipako, Kanzombo, Munsekele	2	2	2	2	2	2,500,000	RDA/local government

	Construction of Chibote Chitimbwa Road	Chibote, Chitimbwa	NIL	1	NIL	NIL	NIL	600,000	Local government
	Maintenance and upgrading of all feeder roads	Muzabwela, Posa, Onzye, Kaizya, Isoko, Muswilo, Chituta	2	2	3	2	1	8,700,000	Local government
	Maintenance and upgrading of Power – lyendwe road, Kalongola –Musakanya, Katulo road, Vyamba Chibote	Iyendwe, Chitimbwa, Mumila, Itimbwe	2	2	2	2	1	10,000,000	RDA / Local government
	Opening up of new roads;	Chitinta - Chipwa Road, Mbete Mwela Road, and Iyendwe Kabyolwe	1	NIL	NIL	NIL	1	80,000,000	Local government
	Rehabilitation of the Lunzua Bridge	Mpulungu	NIL	1				30,000,000	RDA
	Construction of Access Roads	Construction of access road from Mpulungu to Mporokoso and from Mpulungu to Nsumbu	NIL	1	1	NIL	NIL	3,000,000	Local government
	Water Transport	Procurement of Two Water Vessels; Cargo and Passenger vessel	1	NIL	1	NIL	NIL	20,000,000	Central Government
<b>Rail Development and maintenance</b>	Construction of rail line from Nseluka to Mpulungu Harbour	Nseluka to Mpulungu	NIL	NIL	NIL	NIL	1	850,000,000	Ministry of Transport and Communication
<b>Inland Water Transport Development and maintenance</b>	Introduction of 2 improved public water transport vessels	Mpulungu	NIL	1	NIL	1	NIL	5,000,000	Ministry of Transport and Communication

<b>Inland dry port Development</b>	Expansion of the Mpulungu Harbour Port		NIL	NIL	1	NIL	NIL	5,000,000	Mpulungu Harbour and Central Government
	Construction of Truck Parking Bay		NIL	1	NIL	NIL	NIL	1,000,000	Central/local authority
		Construction of landing jetties						1,000,000	
<b>Warehousing Development</b>	Construction of 5 ware houses		1	1	1	1	1	5,000,000	Central/local authority/private investors
		<b>Sub Total</b>						<b>1,055,800,000</b>	
<b>7</b>	<b>EDUCATION</b>								
<b>Goal</b>	<i>To promote lifelong education through a conducive teaching and learning environment</i>								
<b>Objective</b>	1. To support youth mentorship programmes. 2. To provide learning institutions and skills Centres.								
<b>Strategy</b>	Supported youth mentorship programmes and provide learning institutions and skills Centres.								
<b>Programme</b>	<b>Activity</b>	<b>Location (by priority)</b>	<b>Target (Years)</b>				<b>Cost</b>		<b>Responsible</b>
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>		Central government/ cooperating partners
	Youth skills Centre	MPULUNGU	NIL	NIL	1	NIL	NIL	5,000,000	Central government/ cooperating partners
	University	MPULUNGU	NIL	NIL	NIL	1	NIL	15,000,000	
		<b>Sub Total</b>						<b>20,000,000</b>	
<b>8</b>	<b>HEALTH SECTOR</b>								
<b>Goal</b>	To improve primary and first level health care services for the community								
<b>Objective</b>	To increase access to primary health care services.								

Strategy	Increased access to primary health care services.								
Programme	Activity	Location (by priority)	Target (Years)				Cost		Responsible
	Construction of 3 mini-Hospitals	(Vyamba, Chitimbwa & Kopeka)	1	NIL	1	NIL	1	15,000,000	Central/local authority/private investors
	Construction of a wall fence at urban clinic	Mpulungu	NIL	NIL	1	NIL	NIL	200,000	Central/local authority/private investors
	Construction of 15 health posts	Mpulungu	3	3	3	3	3	10,725,000	Central/local authority/private investors
	Upgrading of 10 health posts to health centres	Mpulungu	2	2	2	2	2	7,150,000	Central/local authority/private investors
	Construction of 20 staff houses	Mpulungu	4	4	4	4	4	14,300,000	Central/local authority/private investors
	Construction of 20 maternity annex	Mpulungu	4	4	4	4	4	14,300,000	Central/local authority/private investors
	Construction of 20 mother's shelter	Mpulungu	4	4	4	4	4	14,300,000	Central/local authority/private investors
	Procurement of 6 land cruiser specialized ambulances and 4 specialized ambulance boats for referrals	Mpulungu	1	1	1	1	2	5,000,000	Central/local authority/private investors

	Processing of title deeds for all 27-health infrastructure	Mpulungu	5	5	5	6	6	250,000	Central/local authority/private investors
		<b>Sub Total</b>						<b>81,225,000</b>	
<b>9</b>	<b>FOREST SECTOR</b>								
<b>Goal</b>	<b>To enhance Natural resource Management for sustainability</b>								
<b>Objectives</b>	<b>1. To increase the forest cover by more than 50 % by 2034</b>								
	<b>2. To determine the stocking volumes of the forests by 2028</b>								
	<b>3. To raise awareness among community members in order to improve forest management</b>								
<b>Strategy</b>	<b>Strengthen climate change adaptation</b>								
<b>Programme</b>	<b>Activity</b>	<b>Location (By Priority)</b>	<b>Target (Years)</b>					<b>Apox cost</b>	<b>Responsible</b>
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>		
	Restoration of degraded areas targeting farmlands, open areas and forest reserves using natural Forest Regeneration targeting 20,000 ha	Mpulungu	4,000ha	4,000ha	4,000 ha	4,000 ha	4,000ha	150,000	Central government/ cooperating partners
	Plant 600,000 trees of assorted species plantations within the district	Mpulungu	120,000 Trees	120,000 Trees	120,000 Trees	120,000 Trees	120,000 Trees	200,000	Central government/ cooperating partners
	Boundary maintenance in four forest reserves	Mpulungu	1	1	1	1	1	50,000	Central government/ cooperating partners

	Conduct community sensitization programs in areas where deforestation is rampant.	Mpulungu	1	1	1	1	1	100,000	Central government/ cooperating partners
	Procurement of a vehicle preferably a Landcruiser ideal for plateau terrains.	Mpulungu	1	nil	nil	nil	nil	1,200,000	Central government/ cooperating partners
	There is need to conduct more trainings to the beneficiaries especially those that were not trained.	Mpulungu	1	1	1	1	1	100,000	Central government/ cooperating partners
	Construction of one bulking center and honey processing facility on the plateau areas of the district	Mpulungu	Nil	nil	1	nil	nil	20,000,000	Central government/ cooperating partners
	Procurement of more beekeeping protective gear and tools.	Mpulungu	1	nil	1	nil	nil	30,000	Central government/ cooperating partners
	Setting up of additional Community forests areas.	Mpulungu	1	1	1	1	1	15,000	Central government/ cooperating partners
	Provide alternative livelihood activities such as mushroom growing, piggery, chicken rearing etc to Communities managing forests.	Mpulungu	1	1	1	1	1	150,000	Central government/ cooperating partners
	To conduct boundary opening for seven	Mpulungu	1	1	1	1	1	100,000	Central government/ cooperating partners

	Community Forest Management areas.								
	To link CFMGs to markets for carbon trade	Mpulungu	1	1	1	1	1	30,000	Central government/ cooperating partners
	To begin conducting research at district level.	Mpulungu	1	1	1	1	1	100,000	Central government/ cooperating partners
	Conduct detailed forest Inventories in four forest reserves (Chinakila National Forest, Mpulungu Local Forest, Kambashi Local Forest and Mwenze National Forest)	Mpulungu	1	1	1	1	1	80,000	Central government/ cooperating partners
	Training farmers on processing of non-wood forest products.	Mpulungu	2	2	2	2	2	100,000	Central government/ cooperating partners
	Enhance fire management programs	Mpulungu	2	2	2	2	2	100,000	Central government/ cooperating partners
	Formulation of 4 Management Plans for the 4 forest reserves (Chinakila National Forest, Mpulungu Local Forest, Kambashi Local Forest and Mwenze National Forest)	Mpulungu	1	1	1	1	1	40,000	Central government/ cooperating partners

	Promotion of Agroforestry techniques aimed at restoring soil fertility.	Mpulungu	1	1	1	1	1	20,000	Central government/ cooperating partners
		<b>Sub Total</b>						<b>22,215,000</b>	
<b>10</b>	<b>LOCAL AUTHORITY</b>								
<b>Goal</b>	<b>To strengthen climate change adaptation</b>								
<b>Objective 1</b>	<b>To set up facilities for value addition</b>								
<b>Strategy</b>	<b>Strengthened climate change adaptation</b>								
<b>Programme</b>	<b>Activity</b>	<b>Location (By Priority)</b>	<b>Target (Years)</b>				<b>Cost (ZMW)</b>		<b>Responsible</b>
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>		
	Development of Landfill	Mpulungu	NIL	NIL	NIL	1	NIL	800,000	LOCAL AUTHORITY
	Establishment of Public Cemetery	Mpulungu	NIL	1	NIL	NIL	NIL	200,000	LOCAL AUTHORITY
	Rehabilitation of Mbita Rest House	Mpulungu	NIL	NIL	1	NIL	NIL	700,000	LOCAL AUTHORITY
	Development of Truck Parking Bay	Mpulungu	NIL	1	NIL	NIL	NIL	500,000	LOCAL AUTHORITY
	Extension of Township Boundary	Mpulungu	NIL	NIL	1	NIL	NIL	2,000,000	LOCAL AUTHORITY
	Construction of Landing Jetties	Mpulungu	NIL	NIL	NIL	NIL	1	200,000	LOCAL AUTHORITY
	Construction of Bus Stations	Mpulungu	NIL	NIL	NIL	1	NIL	1,500,000	LOCAL AUTHORITY

	Construction of Community Markets	Mpulungu	2	4	4	5	2	1,700,000	LOCAL AUTHORITY
	Gravelling of the Feeder Roads	Mpulungu	1	1	1	1	1	5,000,000	LOCAL AUTHORITY
	Paving of the Civic Centre	Mpulungu	NIL	1	NIL	NIL	NIL	1,000,000	LOCAL AUTHORITY
	Construction of the Wall Fence at the Civic Centre	Mpulungu	NIL	NIL	1	NIL	NIL	500,000	LOCAL AUTHORITY
	Rehabilitation of the Civic Centre	Mpulungu	1	NIL	NIL	NIL	NIL	500,000	LOCAL AUTHORITY
	Solid Waste Management Research	Mpulungu	365	365	365	365	365	3,000,000	LOCAL AUTHORITY
	Provision of Council farm Blocks.	Mpulungu	1	1	1	1	1	250,000	LOCAL AUTHORITY
	Procurement of Refuse truck and Vacuum Tanker	Mpulungu	NIL	NIL	1	NIL	2	2,000,000	LOCAL AUTHORITY
	Slaughter Facility	Mpulungu	NIL	NIL	NIL	1	NIL	500,000	LOCAL AUTHORITY
	Street Lights	Mpulungu	30	30	30	30	30	5,000,000	LOCAL AUTHORITY
		<b>Sub Total</b>						<b>24,550,000</b>	
<b>11</b>	<b>NATIONAL REGISTRATION</b>								
<b>Goal</b>	<b>To enhance peace, justice and the livability of all citizenry in the district</b>								
<b>Objective</b>	<b>To enhance citizen registration by department of National Registration</b>								
<b>Strategy</b>	<b>Enhanced citizen registration by department of National Registration</b>								
<b>Programme</b>	<b>Activity</b>	<b>Location (by priority)</b>	<b>Target (Years)</b>				<b>Cost</b>	<b>Responsible</b>	

			1	2	3	4	5		
	Construction of additional Government office space	MPULUNGU	NIL	NIL	1	NIL	NIL	2,500,000	Central government/ cooperating partners
	Procurement of the utility vehicle	MPULUNGU	NIL	1	NIL	NIL	NIL	1,200,000	Central government/ cooperating partners
		<b>Sub Total</b>						<b>3,700,000</b>	
<b>12</b>		<b>JUDICIARY</b>							
<b>Goal</b>	<b>To enhance public participation in governance and developmental issues</b>								
<b>Objective</b>	<b>1. To enhance and improve law and order in the district. 2. To enhance the expedition in the administration of justice</b>								
<b>Strategy</b>	<b>Enhanced and improved law and order and enhanced expedition in the administration of justice in the district</b>								
<b>Programme</b>	<b>Activity</b>	<b>Location (by priority)</b>	<b>Target (Years)</b>				<b>Cost</b>		<b>Responsible</b>
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>		
	Construction of a Subordinate Court		NIL	NIL	1	NIL	NIL	800,000	Central government/ cooperating partners
	Construction of Local Courts		NIL	NIL	NIL	1	NIL	800,000	Central government/ cooperating partners
		<b>SUB TOTAL</b>						<b>1,600,000</b>	
		<b>GRAND TOTAL</b>						<b>3,637,218,000</b>	

Table 37-Implementation Plan Tables

(Source: Field Data, 2022)

#### 4.1. LOCAL AUTHORITY FINANCIAL PLAN

Financial plans are important in that they direct the fiscal and monetary policy of any Local Authority like Mpulungu Town Council. The budget clearly outlines how the objectives will be achieved within the periods set. The local Authority's budget outlines the methodology and perimeters of its implementation. Hence this section outlines the findings from the revenue assessments and revenue projections conducted as part of the IDP preparation as well as the revenue projections for the next five (5) years (2022–2027).

##### 4.1.1 Key Findings

Revenue generated by Mpulungu clearly remains the central anchorage for the Council's financial sustainability. In Mpulungu local taxes, Fees and Charges, levies, permits, and licenses form the principal revenue sources of the Locally generated revenue. Generally, Mpulungu like many other Councils in Zambia, revenue generation and mobilization are among the momentous problems the local authorities have been facing. Table 63 provides details of the budget estimates for the past three (3) years, which presents a fair and justifiable measure, yet the collection efficiency remains slightly above 50%. The results of the assessment indicate that the mainstay of revenue sources for the district was Levies under a specific vote Fish levy. However, the historical trend shows that the collection efficiency on locally generated revenue has slowly declined by comparing the catches of fish from the said lake. According to the survey that was conducted in 2018 –2019, for example, the number and size of fish called Pamba in the local language which is found on the market today is in small quantities and very small in size.

The data below also shows that the local Authority was mainly financed through Intergovernmental Fiscal Transfers of funds in the form of the Local Government Equalization Fund (LGEF). Constituency Development Fund (CDF) also contributes a great deal to the Council revenue base and is mainly channelled to capital projects inform of infrastructure development. The LGEF refers to the above as the primary source of Mpulungu Town Council Funding from the Central Government as provides 80% of the Council budget. The LGEF is divided into two (2) parts that are 80% of the funds are allocated for payment of salaries and provision of another operational cost while 20% is allocated for implementation of capital projects. On average locally, generated revenue contributes 45.6% of the overall budget performance for the past three years.

*Table 38-Revenue Estimates and Collection Trends of Revenue Sources.*

Sn.	Revenue Type	Budgeted 2019	Actual Collected 2019	%	Budgeted 2020	Actual Collected 2020	%	Budgeted 2021	Actual Collected 2021	%
1	Local Taxes	1,834,284	762,211	42	1,087,445	587,072	54	1,087,445	774,501	71
2	Fees & Charges	430,880	600,154	139	1,761,750	1,053,654	60	948,030	603,254	64
3	Levies	357,328	334,530	94	4,817,260	2,933,474	61	6,702,730	4,453,064	66
4	Permits	60,900	12,050	20	408,640	189,618	46	970,140	387,155	40
5	Licenses	194,750	87,583	45	1,671,920	1,038,228	62	1,007,670	118,756	12
6	Other Income	20,081	455,900	2270	969,000	455,900	47	-	-	##
	<b>Total Locally GF</b>	<b>2,898,223</b>	<b>2,252,428</b>	<b>78</b>	<b>10,716,015</b>	<b>6,257,946</b>	<b>58</b>	<b>10,716,015</b>	<b>6,336,730</b>	<b>59</b>
	National Support									
1	Lgef	9,361,924	6,017,872		9,361,924	6,017,872	64	9,361,924	9,361,924	
		<b>9,361,924</b>	<b>6,017,872</b>	<b>0</b>	<b>9,361,924</b>	<b>6,017,872</b>	<b>64</b>	<b>9,361,924</b>	<b>9,361,924</b>	<b>0</b>
1	CDF	1,600,000	1,600,000		1,600,000	1,600,000		1,600,000	1,600,000	
	<b>Total</b>	<b>13,860,147.00</b>	<b>9,870,300.00</b>		<b>21,677,939.00</b>	<b>13,875,818.00</b>	<b>64</b>	<b>21,677,939</b>	<b>17,298,654</b>	<b>80</b>

Source: MTC 2019,2020 and 2021 Budget Performance Report.

From the analysis, it is important to note that the forecasted revenues for the next five years under the IDP will be based on the current trends of actual performance against budget. Therefore, it is prudent that the 2022 budget is used as baseline data to update the financial outlook in the development of revenue projections from 2023–2027. In preparation for revenue projections, the local authority uses computation of actual and budget figures from the past, current, and future trend analysis using a baseline year together with a set of guidelines from the Ministry of Local Government and Rural Development. The Local Authority recognizes Revenue Collection and Monitoring Systems that include low collection efficiency and effectiveness, most commonly as a result of a combination of factors and challenges relating to the following: -

- Collection efficiency (cost of Collection)
- Collection effectiveness (how much is billed is collected)
- Base Tax (What to be Taxed)
- Tax coverage (who is paying and how much)
- Tax assessment (basis of tax determination)
- Capacity Gaps (Human, Finance, and Transport)

The collection efficiency is a measure of how much Locally Generated Revenue a Council raises relative to its Budgeted Revenue Estimates. The collection efficiency of the Local Authority has shown a fluctuating trend. However, Mpulungu Town Council has the potential of raising additional revenue. Additional sources of locally generated revenue include the following: -

- Parking fee by law
- Completion of rehabilitation of Mbita Lodge
- Centralization of levying and collection of Loading Fees at Ngwenya Market from both fresh and dry fish centres.
- Strategic planning on the Collection of Residential rates
- Introduction and enactment of the by-law to collect fees and levies from the goods passing through the harbour to the neighbouring countries.
- Construction of a Truck Yard

Some of the challenges that were found to undermine revenue mobilization include the following:

- Inadequate data for the revenue potential for various tax bases
- Inadequate enforcement of revenue mobilization
- Data on revenue potential and actual collection
- Administrative capacity
- Transport
- Inadequate Knowledge.

The assessment further found that there were substantial gaps between reported and projected revenues, leaving room for further analysis of why projected revenues differ from reported actuals and how this affects budget implementation.

#### *4.1.2 Assessment of Overall Collection Efficiency*

The major contributor to revenue mobilization consists of Locally Generated Revenue and the LGEF from Government. Generally, Rates, Fees, Charges, and Levies contribute 40% of the total budget, this interprets that rates, Levies, Fees, and Charges are the main source of locally generated revenues.

However, there has been a decrease in collection efficiency over the past three years. In practice the amount of revenue that a Council can raise from its communities depends on what the community wants the Council to do for them and how the community feels about the activities the Council implements. More often the communities do not feel to have a fair share of the services the Council renders to the public. The decline of locally generated revenue over the years is a result of weaknesses in assessing revenue bases, finding new ones, and, exploiting the exhaustively. There is a need to examine the causes that determines revenue collection efficiency and their impact on revenue generation.

#### 4.1.3 Assessment of Uncollected Revenue

An examination of the 2020 revenue and actual collection records shows that the Council did not perform well in this area. From the locally generated revenue shown in the 2020 budget performance, it is clear that most revenue sources recorded uncollected margins against the set budget. Table 64 shows the share of uncollected revenue against the budget.

*Table 39-Distribution of Uncollected Revenue – 2020 Budget.*

Sn.	Revenue Type	Budgeted	Actual Collection	Uncollected	% of Uncollected Against Budgeted
1	Local Taxes	1,087,445	774,501	312,944	29
2	Fees & Charges	948,030	603,254	344,776	36
3	Levies	6,702,730	4,453,064	2,249,666	34
4	Permits	970,140	387,155	582,985	60
5	Licenses	1,007,670	118,756	888,914	88
6	Other Income	-	-	0	0

Source: 2020 Budget Performance Report.

To this end, an assessment of the uncollected revenue shows three basic shortcomings associated with the current local revenue assignment. Firstly, there are a number of significant shortcomings in the overall structure of the Local Government revenue structure. Secondly, there are problems specific to each revenue instrument assigned to the Local Government level. Thirdly, there are a number of administrative problems with the manner in which local taxes are administered in the Council, such as the distribution of bills, Awareness sensitization programs, Stakeholder consultation programs just to mention a few. This realization is an important impetus to fully engage key stakeholders in a comprehensive review of the policy framework underpinning the structure of financing the Local Government in Zambia including the local revenue structure. At a broader policy level, there is an urgent need to develop and implement a Local Authority Financial Management strengthening program to provide technical advisory and capacity support in the local revenue management process and local revenue administration cycle within the framework of Resource Generation and Mobilization Strategy during the IDP.

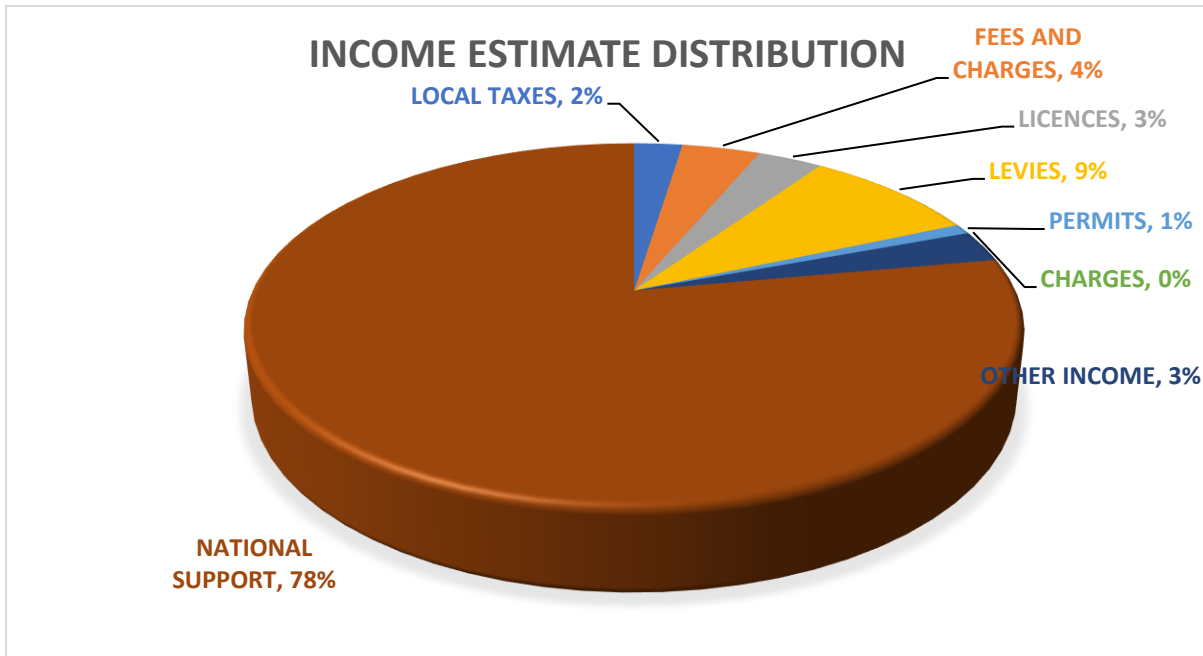
#### 4.1.4 Assessment of Revenue Potential

The Local Authority has a high potential in increasing its revenue base. One such quickest way is to take advantage of the current Rating Act in force which now permits the rating of all properties within its jurisdiction. This will certainly bring on board a significant number of properties which in turn beef up revenues collected in local taxes. In order for the Council to implement this, it will require significant capital injection due to extent of work required. The cost of collection must also be addressed as the indication of low collection levels against the budgeted revenues demonstrates the need to harness the revenue collection administrative operations.

4.1.5 Revenue Projections

The key step in projecting revenues involves sorting revenues according to type and considering the assumptions collection efficiency against budget. Some revenues are very sensitive to changes in the economy while others depend on policy decisions or long-term development trends. Figure below is a chart that indicates the share each revenue contributes to the overall budget.

Figure 22-Income Estimate Distribution.



Source: Field Data,2022.

4.1.6 Financial Plan for The Next Five (5) Years

To estimate the revenues for the next five years (2023–2027) the local authority considered the 2022-2023 Medium Term Expenditure Framework (MTEF) Budget which was approved by the Ordinary Council Meeting and the Ministry of Local Government in 2021. Table 49 provides the 5-year financial plan. The local authority plans to collect an average of K52,157,654.40 for the first 5 years of the IDP which will be used to finance programs and projects identified in the capital investment plan. It should be stressed other main sources of funding for the IDP include Central Government, The Private Sector, NGOs, and Cooperating Partners. Hence funds raised by the local authority will only support selected programs of the IDP.

Table 40-Distribution of Actual Revenue Received

<b>MPULUNGU TOWN COUNCIL</b>							
<b>PROPOSED PROJECTED BUDGET PLAN UP TO 2027</b>							
<b>CODE</b>	<b>DETAILS</b>	<b>2021 CURRENT BUDGET AS BASE</b>	<b>BUDGET FOR THE YEAR 2022</b>	<b>BUDGET FOR THE YEAR 2024</b>	<b>BUDGET FOR THE YEAR 2025</b>	<b>BUDGET FOR THE YEAR 2026</b>	<b>BUDGET FOR THE YEAR 2027</b>
<b>LOCAL TAXES</b>							
151101	Residential	152,500	152,500	157,838	164,151	172,359	185,285
151102	Commercial	910,000	910,000	941,850	979,524	1,028,500	1,105,638
151201	Personal levy	24,945	24,945	25,818	26,851	28,193	30,308
	<b>TOTAL-LOCAL TAXES</b>	<b>1,087,445</b>	<b>1,087,445</b>	<b>1,125,506</b>	<b>1,170,526</b>	<b>1,229,052</b>	<b>1,321,231</b>
<b>FEES AND CHARGES</b>							
152001	Consent Fees	-	-	-	-	-	-
152002	Survey Fees	-	-	-	-	-	-
152003	Inspection/Health Fees	50,000	50,000	51,750	53,820	56,511	60,749
152004	Plan Scrutiny Fee	-	-	-	-	-	-
152005	Parking Fees ( Tax)	150,000	150,000	155,250	161,460	169,533	182,248
152006	Container/Ntemba	9,200	9,200	9,522	9,903	10,398	11,178
152007	Rentals/ Lease of Council Properties	60,000	60,000	62,100	64,584	67,813	72,899

152008	Application Fees	27,000	27,000	27,945	29,063	30,516	32,805
152009	Rental from Houses	36,000	36,000	37,260	38,750	40,688	43,740
152010	Sketch Plan	-	-	-	-	-	-
152011	Search Fees	-	-	-	-	-	-
152012	Toilet Fees	91,000	91,000	94,185	97,952	102,850	110,564
152013	Market Fees	262,800	262,800	271,998	282,878	297,022	319,298
152014	Parking Fees	58,400	58,400	60,444	62,862	66,005	70,955
152016	Bus Station Fees	332,150	332,150	343,775	357,526	375,403	403,558
152017	Affidavities/Certification Authentication	1,200	1,200	1,242	1,292	1,356	1,458
152018	Hire of Halls	2,400	2,400	2,484	2,583	2,713	2,916
152019	Truck	30,000	30,000	31,050	32,292	33,907	36,450
152021	Charcoal levy	5,000	5,000	5,175	5,382	5,651	6,075
152025	Restaurant at Bus Station	505,000	505,000	522,675	543,582	570,761	613,568
152035	Exhibition	-	-	-	-	-	-
152045	Marriage Notices/Cert	1,000	1,000	1,035	1,076	1,130	1,215
152046	Abattoir /Meat Insp	-	-	-	-	-	-
152047	Registration Of Clubs	2,000	2,000	2,070	2,153	2,260	2,430
152050	Farm Produce Levy	20,000	20,000	20,700	21,528	22,604	24,300
152053	Communication Mast	18,000	18,000	18,630	19,375	20,344	21,870

152054	Change of Ownership	15,000	15,000	15,525	16,146	16,953	18,225
152055	Repairs Of Cars /Garages	6,100	6,100	6,314	6,566	6,894	7,411
152057	Land Record Cards	-	-	-	-	-	-
152061	Bill Boards & Banners	75,000	75,000	77,625	80,730	84,767	91,124
152064	Penalties and Fines	4,500	4,500	4,658	4,844	5,086	5,467
152099	Other Fees & Charges	-	-	-	-	-	-
	<b>TOTAL-FEES &amp; CHARGES</b>	<b>1,761,750</b>	<b>1,761,750</b>	<b>1,823,411</b>	<b>1,896,348</b>	<b>1,991,165</b>	<b>2,140,502</b>
<b>LICENCES</b>							
153001	Manufacturing License	-	-	-	-	-	-
153002	Business Permit	1,150,000	1,150,000	1,190,250	1,237,860	1,299,753	1,397,234
153003	Wholesale License	-	-	-	-	-	-
153004	Occupancy License	-	-	-	-	-	-
153005	Commercial Travelers License	-	-	-	-	-	-
153006	Hawkers License	-	-	-	-	-	-
153007	Peddlers License	-	-	-	-	-	-
153008	Stall License	-	-	-	-	-	-
153009	Liquor License	284,500	284,500	294,458	306,236	321,548	345,664
153010	Firearm	1,000	1,000	1,035	1,076	1,130	1,215
153011	Petroleum Licenses	22,000	22,000	22,770	23,681	24,865	26,730

153012	Restaurant License	2,400	2,400	2,484	2,583	2,713	2,916
153013	Dog License	2,500	2,500	2,588	2,691	2,826	3,037
153099	Other Licenses	-	-	-	-	-	-
	<b>TOTAL-LICENCES</b>	<b>1,462,400</b>	<b>1,462,400</b>	<b>1,513,584</b>	<b>1,574,127</b>	<b>1,652,834</b>	<b>1,776,796</b>
<b>LEVIES</b>							
154001	Livestock Levy	8,000	8,000	8,280	8,611	9,042	9,720
154002	Birds Levy	-	-	-	-	-	-
154003	Fish Levy	3,860,699	3,860,699	3,995,824	4,155,657	4,363,440	4,690,697
154004	Pole Levy	38,000	38,000	39,330	40,903	42,948	46,169
154005	Grain Levy	60,500	60,500	62,618	65,122	68,378	73,507
154006	Sand Levy	25,000	25,000	25,875	26,910	28,256	30,375
154099	Other Levies	-	-	-	-	-	-
	<b>TOTAL-LEVIES</b>	<b>3,992,199</b>	<b>3,992,199</b>	<b>4,131,926</b>	<b>4,297,203</b>	<b>4,512,063</b>	<b>4,850,468</b>
<b>PERMITS</b>							
155001	Health Permits	40,050	40,050	41,452	43,110	45,265	48,660
155002	Opaque Beer Permit	2,000	2,000	2,070	2,153	2,260	2,430
155003	Herbalist Permit	-	-	-	-	-	-
155007	Nursery & Pre-School Permits	150,000	150,000	155,250	161,460	169,533	182,248
155008	Marriage Certificates	12,000	12,000	12,420	12,917	13,563	14,580

155009	Fire Certificates	50,000	50,000	51,750	53,820	56,511	60,749
155010	Livestock	-	-	-	-	-	-
155011	Extension of Business Hours	21,000	21,000	21,735	22,604	23,735	25,515
155012	Public Permits (Social Gatherings, Etc)	50,000	50,000	51,750	53,820	56,511	60,749
155099	Other Permits	83,590	83,590	86,516	89,976	94,475	101,561
	<b>TOTAL-PERMITS</b>	<b>408,640</b>	<b>408,640</b>	<b>422,942</b>	<b>439,860</b>	<b>461,853</b>	<b>496,492</b>
<b>CHARGES</b>							
156001	Service Charges - Residential	-	-	-	-	-	-
156002	Service Charges - Industrial	-	-	-	-	-	-
156003	Premium Plot- Residential	-	-	-	-	-	-
156004	Premium Plot - Commercial	-	-	-	-	-	-
156006	Lease Charges	-	-	-	-	-	-
156099	Other Charges	-	-	-	-	-	-
	<b>TOTAL-CHARGES</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>OTHER INCOME</b>							
157001	ZESCO Wayleave	103,880	103,880	107,516	111,816	117,407	126,213

157002	Contribution from Commercial Ventures	1,115,000	1,115,000	1,154,025	1,200,186	1,260,195	1,354,710
157003	Donations	-	-	-	-	-	-
157090	Transfer Inwards	-	-	-	-	-	-
157099	Other income	44,400	44,400	45,954	47,792	50,182	53,945
	<b>TOTAL-OTHER INCOME</b>	<b>1,263,280</b>	<b>1,263,280</b>	<b>1,307,495</b>	<b>1,359,795</b>	<b>1,427,784</b>	<b>1,534,868</b>
<b>NATIONAL SUPPORT</b>							
158001	Grant In Lieu Of Rates	100,000	100,000	103,500	107,640	113,022	121,499
158002	Restructuring Grant	-	-	-	-	-	-
158003	Lgef	9,361,924	9,361,924	9,689,591	10,077,175	10,581,034	11,374,611
158004	Capital Grant	-	-	-	-	-	-
158005	Roads Grant	-	-	-	-	-	-
158006	Health Grant	-	-	-	-	-	-
158007	Special Grant	-	-	-	-	-	-
158008	Service Delivery Grant	-	-	-	-	-	-
159001	Constituency Development Fund	1,600,000	25,700,000	26,599,500	27,663,480	29,046,654	31,225,153
158099	Other Grants	-	-	-	-	-	-
	<b>TOTAL-NATIONAL SUPPORT</b>	<b>11,061,924</b>	<b>35,161,924</b>	<b>36,392,591</b>	<b>37,848,295</b>	<b>39,740,710</b>	<b>42,721,263</b>

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	<b>GRAND TOTAL</b>	<b>21,037,638</b>	<b>45,137,638</b>	<b>46,717,456</b>	<b>48,586,154</b>	<b>51,015,462</b>	<b>54,841,621</b>
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Source: Field Data,2022.

<b>MPULUNGU TOWN COUNCIL</b>						
<b>SUMMARY OF PROPOSED PROJECTED BUDGET PLAN UP TO 2027</b>						
<b>DETAILS</b>	<b>2021 CURRENT BUDGET AS BASE</b>	<b>BUDGET FOR THE YEAR 2022</b>	<b>BUDGET FOR THE YEAR 2024</b>	<b>BUDGET FOR THE YEAR 2025</b>	<b>BUDGET FOR THE YEAR 2026</b>	<b>BUDGET FOR THE YEAR 2027</b>
LOCAL TAXES	1,087,445	1,087,445	1,125,506	1,170,526	1,229,052	1,321,231
FEES AND CHARGES	1,761,750	1,761,750	1,823,411	1,896,348	1,991,165	2,140,502
LICENSES	1,462,400	1,462,400	1,513,584	1,574,127	1,652,834	1,776,796
LEVIES	3,992,199	3,992,199	4,131,926	4,297,203	4,512,063	4,850,468
PERMITS	408,640	408,640	422,942	439,860	461,853	496,492
OTHER INCOME	1,263,280	1,263,280	1,307,495	1,359,795	1,427,784	1,534,868
NATIONAL SUPPORT	11,061,924	35,161,924	36,392,591	37,848,295	39,740,710	42,721,263
<b>GRAND TOTAL</b>	<b>21,037,638</b>	<b>45,137,638</b>	<b>46,717,456</b>	<b>48,586,154</b>	<b>51,015,462</b>	<b>54,841,621</b>

*Table 41-Five-Year Financial Plan*

(source: Field Data,2022)

#### 4.2 PROGRAMME FOR THE PREPARATION OF LOCAL AREA PLANS AND OTHER DETAILED PLANNING ACTIVITIES

The local Authority identified the need to create Local Area Plans in 16 Wards. This is in line with the requirement of the IDP that all the Wards prepare Local Area Plans (LAPs) to prevent the growth of unplanned settlements in the district and to also manage the uncoordinated developments resulting from the frequent changes in land use, subdivisions and conversions from customary land to leasehold. The program for preparation of local area plans is shown in the table below.

*Table 42-program for preparation of local area plans*

Project	Land management and Administration						TARGET YEARS					RESPONSIBLE
	Activities	Cost ZMW	Proposed Sources of funding	Indicator (Activity level)	Base line	Sources of information	1	2	3	4	5	
Creation of 16 Local Area Plans (2 plans per year)	Field Reconnaissance	47,800.00	LA/GRZ	No of Field Recon Conducted	0	Field Report	1					Planning Dpt
	Land Audit	170,000.00	LA/GRZ	No of Land Audits conducted	0	Land Audit Report		1				Planning Dpt
	Layout Development	57,000.00	LA/GRZ	No. of Layouts produced	0	Layout Plan		1				Planning Dpt
	Survey and Beacons	2,420,000.00	LA/GRZ	No. of Stands surveyed and Beacons	0	Survey diagrams and report			1			Planning Dpt
Grand total		<b>2,694,800</b>										

Source: Field Data,2022.

## 4.2.3 Local Area Plans creation schedule

WARD	5 YEARS TIME FRAME				
Chisha	■				
	■				
Chilumba	■				
Chitimbwa	■				
Mumila		■			
Vyamba		■			
Itimbwe		■			
Iyendwe			■		
Lwambazi			■		
Isunga			■		
Isoko				■	
Chibulula				■	
Kapembwa				■	
Musengezi					■
Mpulungu Central					■
Namukale					■

Table 43-Local Area Plans creation schedule

(Source: Field Data,2022).

#### 4.3 MONITORING AND EVALUATION PLAN, INCLUDING KEY PERFORMANCE INDICATORS

The performance of the integrated development Plan will be monitored and evaluated according to the plan presented in the following tables.

*Table 44-Monitoring and Evaluation Plan: Economic Transformations and Job creation*

<b>Goal</b>	<b><i>To diversify the economy from capture fishing to aquaculture and agriculture</i></b>			
<b>Objective</b>	<b>To increase agriculture production and productivity by 50% by the year 2027.</b>			
<b>Strategy</b>	<b>Increased agriculture production and productivity</b>			
<b>Programme</b>	<b>Activity</b>	<b>Key Performance indicator</b>	<b>Sources of information</b>	<b>Frequency</b>
<b>Infrastructure Development</b>	Construction of 12 Camp Houses	Number of agricultural camp houses constructed. Percentage of farmers serviced with agricultural extension services.	Ministry of Agriculture Reports, Community	Annually
<b>Infrastructure Development</b>	Construction of bulking Centre's and slabs	Number of bulking centers and slabs constructed.	MoA, Buildings department, local Authority	Annually
<b>Agriculture Mechanization</b>	Empowerment of 400 farmers with of Rippers	Number of farmers empowered with rippers. Number of hectares of land mechanized.	MoA	Quarterly
<b>Climate Smart Agriculture</b>	Training 1000 farmers in climate smart technologies	Number of farmers trained in climate smart technologies. Number of hectares under climate smart technologies.	MoA	Annually
<b>Agribusiness Development</b>	Training 100 farmer cooperative in agriculture commodity Processing	Number of cooperatives trained in commodity processing.	MoA, Community	Annually
	Establishment of the Processing Plant.	Processing plant established. Percentage of agriculture produce processed.	MoA, Community	Annually
<b>Irrigation Development</b>	Establishment of 4 Irrigation Schemes	Number of irrigation schemes established. Number of hectares under irrigation agriculture. Number of farmers in the irrigation schemes. Percentage of agricultural produce from irrigation schemes.	MoA, Community	Annually
<b>Extension Services Support</b>	Procurement of 20 Motor bikes	Number of motor bikes procured.	Central government/ MoA	Once
	Procurement of 1 boat	Boat Procured.	Central government/ MoA	Once

	Procurement of 2 GPS kits	Number of GPS kits procured.	MoA	Once
	Dumpy Level	Dumpy level procured.	MoA	Once
	Camera	Camera procured.	MoA	Once
	Employment of extension staff – 8 agriculture assistants, 2 agriculture supervisor, 1 assistant technical officer	Number of extension officers deployed.	Central government, MoA	Annually
<b>Early Warning System</b>	Establishment of 2 weather stations	Number of weather stations established.	Central government, Metrological department	Twice
<b>Resettlement scheme Development</b>	Construction of access roads and connection to national grid	Number of roads constructed. Number of kilometers of roads constructed. Number of farms connected to the grid.	Central government, Local Authority, Rural Electrification Authority, ZESCO	Annually
<b>Objective</b>	<b>To increase aquaculture production and productivity by 50% by the year 2025.</b>			
<b>Strategy</b>	<b>Increased fisheries production and productivity</b>			
<b>Infrastructure Development</b>	Construction of 1 fish hatchery	Fishery hatchery constructed. Number of fingerlings produced.	Department of Fisheries, Community	Once/ Quarterly
	Construction of 1 feed processing plant	Fish Feed Processing Plant constructed. Tonnage of fish feed produced.	Department of Fisheries, local authority	Once/ Quarterly
	Construction of Camp Houses	Number of camp houses constructed.	Central government, local Authority, Department of Fisheries	Once
<b>Extension Support Services</b>	Procurements of transport (1 motor vehicle, 2 boats and engines, 4 motor bikes)	Number of bikes procured. Motor vehicle procured. Number of boats and engines procured.	Central government, local Authority, Department of Fisheries	Annually
	Employment of extension staff – 6 fisheries assistants	Number of extension staff deployed.	Central government, Department of Fisheries	Once
<b>Aquaculture Development</b>	Installation and stocking of 100 fish cage on Lake	Number of fish cages installed and stocked. Tonnage of fish produced from fish cages.	Department of Fisheries, community	Annually
	Construction of 1,050 fish ponds	Number of fish ponds constructed. Tonnage of fish produced from fish ponds.	Department of Fisheries, community	Annually

	Sensitization and training 2000 fish farmers in fish farming	Number of sensitizations and trainings conducted. Number of farmers sensitized and trained.	Department of Fisheries, community	Quarterly
	102 Monitoring Visits	Number of monitoring visits conducted. Number of farmers visited.	Department of Fisheries, community	Quarterly
<b>Capture Fisheries Development</b>	Identification and establishment of 20 fish breeding areas	Number of fish breeding areas identified and established.	Department of Fisheries	Annually
	Establishment and strengthening of 49 co-management structures	Number of co-management structures established. Number of co-management structures strengthened.	Department of Fisheries, community	Quarterly
	384 Monitoring, control and surveillance patrols	Number of monitoring, control and surveillance patrols conducted. Number of culprits arrested and prosecuted.	Department of Fisheries	Quarterly
	144 fish conservation awareness meetings	Number of awareness meetings conducted. Number of participants.	Department of Fisheries	Quarterly
<b>Capture Fisheries Development</b>	Collection of fisheries and aquaculture data – 4 Frame surveys	Number of frame surveys conducted.	Department of Fisheries	Annually
	Collection of fisheries and aquaculture data – 20 Catch Assessment Surveys	Number of catchment assessment surveys conducted.	Department of Fisheries	Quarterly
	Collection of fisheries and aquaculture data – 40 Gill net Surveys	Number of gill net surveys conducted.	Department of Fisheries	Quarterly
	Collection of fisheries and aquaculture data – 2 aquaculture Surveys	Number of aquaculture surveys conducted.	CSO, Department of Fisheries	Twice in ten years

<b>Objective</b>	<b>To increase aquaculture production and productivity by 50% by the year 2025.</b>			
<b>Strategy</b>	<b>Increased fisheries production and productivity</b>			
<b>Infrastructure Development</b>	Construction of 7 veterinary camp houses	Number of veterinary camp houses constructed.	Central government, local government, VET	Annually
	Construction of 2 dip tanks	Number of dip tanks constructed.	Central government, local government, VET	Twice
	Construction of 1 livestock service centre.	Livestock service centre constructed.	Central government, local government, VET	Once
	Construction of 1 livestock multiplication centre	Livestock multiplication centre constructed.	Central government, local government, VET	Once
	Construction of standard slaughter facility	Standard slaughter facility constructed.	Central government, local government, VET	Once
	Construction of veterinary clinic	Veterinary clinic constructed.	Central government, local government, VET	Once
<b>Extension Support Services</b>	Procurement of 7 Motor bikes	Number of motor bikes procured.	Central government, local government, VET	Once
	Procurement of 1 vehicle	Motor vehicle procured.	Central government, local government, VET	Once
	Procurement of livestock service kits	Number of livestock service kits procured.	Central government, local government, VET	Once
<b>Livestock Development</b>	Livestock stocking and restocking (500 cattle, 5500 goats, 15000 chickens, 6000 pigs)	Number of cattle, goats, chickens and pigs distributed. Number of beneficiaries. Livestock population percentage change.	Central government, local government, VET	Annually
<b>Livestock Development</b>	Establishment 50ha of pasture fields	Number of hectares of pasture fields established. Tonnage of pasture produced.	Department of livestock development	Annually
	Livestock Disease control – 3000 Rabies vaccinations	Number of canines vaccinated.	Department of livestock development, local authority	Continuously
	Livestock Disease control – 200,000 Newcastle vaccinations.	Number of avian species vaccinated.	Department of livestock development	Twice per year

	1000 farmers in sensitized and trained in livestock production.	Number of farmers sensitized and trained in livestock production.	Department of livestock development	Annually
<b>Goal</b>	<b>To increase access to renewable energy sources.</b>			
<b>Objective</b>	<b>To increase electricity generation capacity, distribution and utilization of alternative renewable energy sources by 2030</b>			
<b>Strategy</b>	<b>Enhance generation, transmission and distribution of electricity by 50%by 2025</b>			
<b>Electricity Generation</b>	Construction of Lufubu Hydro Plant	Lufubu hydro station constructed.	Ministry of Energy	Once
<b>Electricity Transmission and Distribution</b>	Expansion of Electricity grid	Number of houses newly connected to the grid. Kilometers of newly constructed grid line.	Ministry of Energy, ZESCO, REA	Continuous
	Connecting 6000 housing units to national grid	Number of new housing units connected to grid.	Ministry of Energy, ZESCO, REA	Annually
<b>Energy Efficient Promotion</b>	Distribution of 48,000 energy saver bulbs	Number of energy saving bulbs distributed.	ZESCO, REA	Annually
	Establishment of 100 stations of bio-gas digesters	Number of bio-gas digesters stations established.	Ministry of Energy, community, cooperating partners	Annually
<b>Off-grid energy solutions</b>	Construction of 1 solar power plant	Solar power station constructed.	Ministry of Energy, cooperating partners	Once
<b>Goal</b>	<b>To Develop the Tourism Industry</b>			
<b>Objective</b>	<b>To increase tourism infrastructure, facilities and tourists inflows by 2030.</b>			
<b>Strategy</b>	<b>To Promote Tourism Diversification</b>			
<b>Infrastructure Develop</b>	Construction of 1 Hotel and 10 Lodges along the lake shore and Islands	Hotel constructed. Number of Lodges constructed.	Central Government, Cooperating Partners	Annually
	Maintenance and securing od Niamukolo heritage site	Niamukolo heritage site secured and maintained.	National Heritage	Continuous

	Develop access roads to Izi and Mwepu Falls	Number of access roads constructed.	Central Government, Cooperating Partners, Local Authority	Once
	Construction of access road to Nsumbu via Nsumbu National Park	Mpulungu to Nsumbu road constructed.	Central Government, Cooperating Partners, Local Authority	Once
	Upgrading of Nsumbu National Park airstrip into an International Airport	Nsumbu National Park airstrip upgraded.	Central Government, Cooperating Partners, Local Authority	Once
<b>Tourism Product Development</b>	Establishment of a cultural village	Cultural village established.	Central Government, Cooperating Partners, Local Authority, National Heritage	Once
	Establishment of youth skills training centre for curio curving	Youth Skills Training Centre established. Number of students enrolled and trained.	Central Government, Ministry of Education, Cooperating Partners, Local Authority, National Heritage	Once, continuous
	Establishment 2 of curio markets	Number of curio markets established. Number of curio products produced and sold.	National Heritage, Cooperating Partners, Local Authority	Twice, continuous
<b>Tourism Promotion and Marketing</b>	Establishment of 1 Tourism Information Centre	Tourism Information Centre Established. Number of Tourism packages promoted.	National Heritage, Cooperating Partners, Local Authority	Continuous
<b>Goal</b>	<b>To improve transport and logistics infrastructure</b>			
<b>Objective</b>	<b>To improve service delivery in the transport sector by 80% by 2030</b>			
<b>Strategy</b>	<b>Improve Transport and Logistics</b>			
<b>Road Development and Maintenance</b>	Maintenance of Kasama, Mbala and Mpulungu Road	Kasama, Mbala and Mpulungu Road maintained.	RDA	Once
	Upgrading of 10 wooden bridges to concrete bridges in Mpulungu	Number of wooden bridges upgraded to concrete bridges.	RDA, Local Authority	Annually
	Construction of Chibote Chitimbwa Road	Chibote to Chitimbwa road constructed.	RDA, Local Authority	Once

	Rehabilitation of the Lonzua Bridge	Lonzua bridge rehabilitated.	RDA	Once
<b>Rail Development and maintenance</b>	Construction of rail line from Nseluka to Mpulungu Harbour	Nseluka to Mpulungu Harbour railway constructed.	RDA	Once
<b>Inland Water Transport Development and maintenance</b>	Introduction of 2 improved public water transport vessels	Number of public water transport vessels improved.	Ministry of Transport and Logistics, Local Authority, Department of Maritime	Twice
<b>Inland dry port Development</b>	Expansion of the Mpulungu Harbour Port	Mpulungu Harbour Port expanded.	Ministry of Transport and Logistics, Local Authority, Department of Maritime, Cooperating Partners, Mpulungu Harbour	Once
	Construction of Truck Parking Bay	Truck Parking Bay constructed.	Ministry of Transport and Logistics, Local Authority, Department of Maritime, Cooperating Partners, Mpulungu Harbour	Once
<b>Warehousing Development</b>	Construction of 5 ware houses	Number of ware houses constructed.	Ministry of Transport and Logistics, Local Authority, Cooperating Partners, Mpulungu Harbour	Annually

<b>Goal</b>	To promote lifelong education through a conducive teaching and learning environment.			
<b>Objectives</b>	To support youth mentorship programs			
<b>Strategy</b>	Improved Technical, vocational and entrepreneurship skills.			
<b>Programme</b>	<b>Activity</b>	<b>Key Performance indicator</b>	<b>Sources of information</b>	<b>Frequency</b>
Infrastructure Development	Construction of Secondary Schools	Number of secondary schools constructed.	-Ministry of Education -Local Authority	Yearly
	Construction of Skills Centre.	Number of skills canters constructed.		Yearly
	Construction of Staff Houses,	Number of staff Houses constructed.		Yearly
<b>Goal</b>	To improve primary and first level health care services for the community.			
<b>Objectives</b>	To increase access to both primary and first level health care services			
<b>Strategy</b>	Increase access to quality health care			
<b>Programme</b>	<b>Activity</b>	<b>Key Performance Indicator</b>	<b>Source of information</b>	<b>Frequency</b>

Infrastructure Development	Construction of 3 Mini Hospitals	Number of Mini-Hospitals constructed	MoH Local Authority	Yearly
	Construction of 15 health posts	Number of health posts constructed	MoH Local Authority	Yearly
	Construction of 20 staff houses	Number of staff houses constructed	MoH Authority	Yearly
	Construction of 20 mother's shelter	Number of mother's shelter constructed	MoH Authority	Yearly
	Construction of 20 maternity annexes	Number of maternity annexes constructed	MoH Authority	Yearly
Equipment and transport procurement and maintenance	Procurement of 6 land-cruiser specialized ambulances	Number of land-cruiser specialized ambulances procured	MoH Authority	Yearly
	Procurement of 4 specialized ambulance boats	Number of specialized ambulance boats procured	MoH Authority	Yearly
<b>Goal</b>	Reduce poverty and vulnerability through inclusiveness			
<b>Objectives</b>	To reduce poverty and promote disposable incomes for the poor			
<b>Strategy</b>	Enhance welfare and livelihoods of poor and vulnerable people			

<b>Programme</b>	<b>Activity</b>	<b>Key Performance Indicator</b>	<b>Source of information</b>	<b>Frequency</b>
Food security pack	Identification of beneficiaries	Number of beneficiaries identified	Community listings	Annually
	Distribution of inputs	Number of inputs distributed	Delivery notes	Quarter one and two
	Monitoring of beneficiaries	Number of beneficiaries monitored	Registers	
<b>Public welfare Assistance scheme</b>	Repatriations	Number of people repatriated	communities	Monthly
	Infant feeding programme	Number of babies assisted with food		
<b>Social cash transfer</b>	Listing	Number of beneficiaries listed	Community lists	Annually
	Enumeration	Number of beneficiaries enumerated	Listings	
	Payments	Number of beneficiaries payed	Payment schedules	
	Monitoring of beneficiaries	Number of beneficiaries monitored	Number of beneficiaries monitored	
<b>Village banking</b>	Listing of beneficiaries	Number of beneficiaries listed	Community lists	Annually
	Identification of beneficiaries	Number of beneficiaries identified	Payment schedules	By Monthly
	Loan payments	Number of beneficiaries paid		

*Table 45-Monitoring and Evaluation Plan: Human and Social Development  
Field data, 2022)*

*( Source:*

<b>Goal</b>	<b>To enhance Natural resource Management for sustainability</b>			
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. To increase the forest cover by more than 50 % by 2032</li> <li>2. To determine the stocking volumes of the forests by 2027</li> <li>3. To raise awareness among community members in order to improve forest management</li> </ol>			
<b>Strategy</b>	Strengthen climate change adaptation			
<b>Programme</b>	<b>Activity</b>	<b>Key Performance indicator</b>	<b>Sources of information</b>	<b>Frequency</b>
Sustainable land, forest and water management	Carry out natural Forest Regeneration in degraded areas targeting open areas and forest reserves.	Number of hectares of forests rehabilitated	-Forestry department  -Community	Yearly
	Training of farmers in Agroforestry techniques aimed at restoring soil fertility.	Number of farmers trained in Agroforestry techniques	-Forestry department  -Community	Yearly
	Raise and distribute 600,000 tree seedlings of assorted species	Number of tree seedlings raised and distributed	Forestry	Yearly

	Conduct forest Inventories in forest reserves.	Number of forest inventories conducted	Forestry	Yearly
	Formulation of Management Plans for the 4 forest reserves.	Number of Forest Management formulated	Forestry	Yearly
	Conduct community sensitisation meetings on sustainable forest management.	Number of sensitization meetings on sustainable forest management conducted	-Forestry department  -Community	Quarterly
	Conduct trainings of Beekeepers.	Number of trainings conducted	-Forestry department  -Community	Yearly
	Procurement of a vehicle preferably a Landcruiser ideal for plateau terrains	One vehicle procured	Forestry	Yearly
	Construction of bulking centres and honey processing.	One bulking Centre constructed	Forestry	Yearly
<b>Goal</b>	<b>To enhance value addition to our local resources</b>			
<b>Objective</b>	<b>To set up facilities for value addition</b>			

Strategy	Strengthen climate change mitigation			
Programme	Activity	Location (by priority)		
Sustainable forest management	Establishment of portable sawmills in Chinakila and Chitimbwa zones	Portable Sawmills established in Chinakila and Chitimbwa zones	Forestry	Yearly
	Training women on processing of non-wood forest products.	Number of women trained in processing of non-wood forest products	-Forestry department -Community	Quarterly
	Establishment of Community Forests	Number of hectares of Community forests established	-Forestry department -Community -Tradition leadership	Yearly
	Establishment and management of community forests	Number of community forests established	-Forestry department -Community -Tradition leadership	Yearly
	Conduct Blitz Patrols	Number of Blitz patrols conducted	Forestry Department	Monthly
	Inspection of forest concession areas and forest produce selling points	Number of forest concessions inspected	Forestry Department	Monthly

	Maintenance of forest boundaries	Number of forest boundaries maintained	-Forestry department -Community -Tradition leadership	Yearly
	Conduct early burning	Number of early controlled burnings conducted	-Forestry department -Community -Tradition leadership	Yearly
	Formation of beekeeping groups	Number of beekeeping groups formed	-Forestry department -Community -Tradition leadership	

*Table 46-Monitoring and Evaluation Plan: Environmental Sustainability*

<b>Goal</b>	<b>To enhance public participation in governance and developmental issues</b>			
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. To establish a platform for interaction between Member of Parliament, Ward Development Communities and communities by 2025.</li> <li>2. To enhance capacity in all the 17 Ward Development Committees by 2024</li> </ol>			
<b>Strategy</b>	<b>Strengthen transparency and accountability mechanisms</b>			
<b>Programme</b>	<b>Activity</b>	<b>Key Performance indicator</b>	<b>Sources of information</b>	<b>Frequency</b>
Civic education	Conduct awareness programs	Number of awareness meetings held	-Community	Yearly
	Stakeholder meetings with cooperating partners	Number of stakeholders meetings held	-LA Reports	Yearly
Capacity development	Training of WDCs on management of community projects	Number of WDCs Trainings Held	LA Reports	Yearly
	Provision of transport logistics to WDCs	Number of meetings held with provided transport logistics to WDCs	LA Reports	Yearly
<b>Goal</b>	<b>To enhance land management and administration</b>			
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• <b>1. To improve land alienation and zoning in the district</b></li> <li>• <b>To enhance stakeholders' participation in land management in the district</b></li> </ul>			

Strategies	Strengthen land management and administration			
Programme	Activity			
Urban and regional planning	Conduct awareness program	Number of awareness programs conducted	LA Reports	Yearly
	Lobbying for land for township boundary expansion	Hectarage of land converted to leasehold	LA Reports	Yearly
	Procurement of Planning Equipment (Differential GPS, Utility Vehicle, Plotter)	Number of equipment procured	LA Reports	Yearly

*Table 47-Monitoring and Evaluation Plan: Creating Good Governance Environment*

*(Source: Field Data,2022)*

## **CONCLUSION**

This integrated Development Plan is intended to provide strategic guidance and coordinate various sectoral plans within the district. It stipulates how well the district is to be developed in a holistic manner using Social and Spatial data collected. The Plan identifies the areas of development and growth which will ensure that people of Mpulungu benefit from the anticipated development and growth.

The sector in the district has made progress made in-service provision of education, telecommunication, health, solid waste management, market centers as well as energy among others. However, the district has on the other hand faced challenges not only social and/or infrastructure delivery but also climate change and unplanned development within the district. These challenges have seen many residents especially in the plateau area resort to setting up informal housing schemes. This has significant environmental and social impact on the residents.

It is anticipated that within the ten-year period of this IDP document, the district will improve even more in all the sectors in the service delivery to the community of Mpulungu district.