



**CHIENGWE DISTRICT INTEGRATED DEVELOPMENT PLAN  
2024-2034**

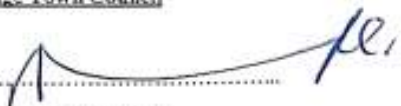
*“To be a poverty free and developed district by the year 2034”*




**CHIENGE INTEGRATED DEVELOPMENT PLAN**  
**APPROVAL OF THE CHIENGE INTEGRATED DEVELOPMENT PLAN**

The CHIENGE Integrated Development Plan is submitted to the Minister responsible for Local Government and Rural Development by:

Chienge Town Council

Sign:   
Mr Mpande Hamwende  
Council Secretary



Sign:   
Mr Francis Mwanto  
Council Chairperson




Provincial Administration, Luapula Province



Sign:   
Mr Alfred Banda  
Executive Secretary, Luapula Province Planning Authority

Date: 05/04/2024



Sign:   
Mr Mighty Mumba  
Permanent Secretary, Luapula Province

Ministry of Local Government and Rural Development

Approved by:   
Sign:   
Hon. Garry Nkombo-MP  
Minister of Local Government and Rural Development



## I. Foreword



This Integrated Development Plan is the district's primary strategic planning tool. It provides an overall framework for development within the local authority area and serves as a tool to guide and inform planning, budgeting, management, and decision-making across all local authority sectors for the years 2021–2030. This plan was created to serve as a roadmap for the District's overall development, to coordinate the efforts of all government

stakeholders, and to make sure that everyone is on the same level and in a constant dialogue over the next ten (10) years.

The IDP defines our desired development directions and corresponding goals. The various sectors will create their implementation projects and programs for the following 10 years, detailing how they will carry out the district-wide objectives. The IDP's goals are to develop an industrialized area that offers sufficient and high-quality socioeconomic opportunities, some of which are driven by agriculture and have a transformative impact. Furthermore, this strategy answers to Vision 2030 by incorporating the economic recovery required to achieve a successful middle-income nation by 2030. It is with gratitude that this document exists thanks to the persistent efforts of the IDP Team and other stakeholders throughout the planning program's many stages.

A handwritten signature in blue ink, appearing to be 'Francis Mwanto', written over a dotted line.

Francis Mwanto (Mr)

**Chiengde Town Council Chairperson**

## II. Remarks



I am honored to serve as your Area Member of Parliament for Chienge Constituency and I would like to take this opportunity to express my commitment to improving the lives of our constituents and the development of our district.

As we embark on the formulation and implementation of the Integrated Development Plan (IDP), it is crucial to remember that the IDP is a bottom-up approach that reflects the needs and aspirations of our community. It has been developed with the active participation and input of various district stakeholders, including Chiefs, Civic Leaders, Leaders from Faith-Based Organizations, and Ward Development Committees.

Chienge District, situated in the northern part of Zambia in Luapula Province, is blessed with abundant natural resources, including Lake Mweru, Kalungwishi River, Luau River, Lunchinda River, streams, and the Lushiba Swamp. These resources provide opportunities for economic activities such as fishing and farming, which have the potential to improve the social and economic wellbeing of our people.

However, it is disheartening to note that despite these potential factors, the majority of our residents continue to live in poverty, especially in the remote parts of our district. This underscores the importance of the IDP in addressing the development needs and priorities of our communities. By focusing on sustainable development, we can create opportunities for employment, improve infrastructure, enhance access to basic services, and uplift the living standards of our people.

The formulation of the IDP has followed the guidelines set out in the Urban and Regional Planning Act of 2015, as well as the IDP guidelines developed by the Ministry of Local Government and Rural Development. Through these established processes, we have ensured that the IDP is holistic, inclusive, and aligned with national development plans, policies, and strategies, such as the Eighth National Development Plan and the Vision 2030.

I want to assure you that I am fully committed to advocating for the effective implementation of the IDP, ensuring that the identified needs and priorities of our communities are addressed. I will work closely with relevant stakeholders, government agencies, and development partners to mobilize resources and support for the successful execution of the plan.

I encourage all residents of Chienge District to actively participate in the implementation of the IDP. Your input and engagement are crucial in shaping the future of our district. Together, we can overcome the challenges and seize the opportunities that lie ahead, creating a brighter and more prosperous Chienge for generations to come.

Thank you for your continued support, and I look forward to a fruitful collaboration as we work towards the realization of the Chienge District Integrated Development Plan.



Hon. Given Katuta (MP)  
**Chienge Constituency Member of Parliament**

### III. Acknowledgements



I am writing to express my gratitude and heartfelt appreciation for the teamwork that went into creating the Chiengde District Integrated Development Plan (IDP). This thorough and forward-looking paper is a result of the effort, hard work, and dedication of all parties participating in this crucial initiative.

Our collaborative efforts to promote sustainable growth and development in this area have reached a great milestone with the adoption of the Chiengde District Integrated Development Plan. It acts as a future road map that will direct our choices, investments, and actions and reflects the vision, aspirations, and needs of the community.

We sincerely appreciate all the people and groups who gave of their time, knowledge, and resources to make our plan a reality. The Chiengde District Administration, many governmental organizations, local leaders, and the committed Chiengde residents who actively engaged in the planning process deserve special thanks.

The Chiengde District Integrated Development Plan is a symbol of our shared commitment to building a better future for all. We look forward to working collaboratively, harnessing the talents and resources within our community, and making the IDP a reality.

Once again, our deepest gratitude to all those involved in this significant endeavor. We are excited about the journey ahead and remain confident in the positive impact this plan will have on the lives of the people in Chiengde District.

A handwritten signature in black ink, appearing to read 'M. Hamwende', written on a light-colored background.

Mpande Hamwende (Mr)  
**Council Secretary Chiengde Town Council**

#### IV. Executive Summary



The development plan for Chienge District Council has a goal of eliminating poverty and promoting growth in the region by 2034. The plan includes various strategies to boost the economy, improve infrastructure, enhance social welfare, ensure environmental sustainability, and promote good governance. These initiatives aim to leverage the district's strengths and address the wide range of challenges that residents face.

In order to promote economic empowerment, the strategy highlights the importance of boosting economic growth, creating jobs, and encouraging entrepreneurship. This includes providing assistance to vital industries like agriculture and small businesses, as well as attracting investments to promote long-term economic progress. Furthermore, the development of infrastructure is essential for improving access and connectivity, with a specific emphasis on upgrading roads, schools, healthcare facilities, and utilities. These initiatives are designed to improve the overall well-being of the community and promote equitable economic expansion.

Moreover, the strategy highlights the significance of social welfare schemes in catering to the requirements of marginalized communities and fostering unity. Projects aimed at enhancing education, healthcare, social security, and fundamental services take precedence in order to guarantee fair progress and welfare for everyone. Environmental stability is also given priority, with an emphasis on preserving and managing resources sustainably to reduce the effects of climate change. In general, the strategy stresses the value of proper governance, openness, responsibility, and community involvement in ensuring the successful execution of development projects and achieving the common goal of a thriving future for the Chienge District.

A handwritten signature in blue ink, appearing to read 'Favourite Musangu'.

Favourite Musangu  
**Chienge District Commissioner**

#### iv. Message from the IDP Team



The IDP team and our district stakeholders worked together to create an integrated development plan for the Chienge District.

Collaboration, information exchange, and verification have been critical components of the process in ensuring that real issues on the ground are identified and addressed. The implementation of the IDP extends beyond the Local Authority, and the team hopes that the

identified programmes can be adopted and implemented in a multi-sectoral manner to achieve the desired results for the IDP Area. A message of gratitude is extended to the IDP team, as well as all stakeholders and Cooperating Partners, for their contributions to the success of the planning processes.

During the midpoint of the Planning period, there will be a mid-term evaluation of the IDP to gauge the advancement of the planned Programmes and strategies. The IDP team hopes that the same level of commitment and dedication shown during the development phase will persist throughout the review process.

A handwritten signature in black ink, appearing to read 'Joshua Kakompe'.

Joshua Kakompe  
IDP Manager

## Contents

1	Introduction and Background.....	1
1.1	Overview of the Integrated Development Plan .....	1
1.2	Location of the District.....	1
1.3	Climate .....	2
1.4	Rainfall pattern .....	2
1.5	Topography .....	2
1.6	District Major Water Bodies .....	2
1.6.1	Kalungwishi River .....	2
1.6.2	Luau River.....	2
1.6.3	Lunchinda River.....	3
1.6.4	Streams.....	3
1.6.5	Lushiba Swamp.....	3
2	Planning Survey and Issues Report.....	5
2.1	Demographic Analysis .....	5
2.1.1	Historic Population Levels and Historic Population Growth Rates at District and ward Levels	5
2.2	Population Density at Ward Level .....	7
2.3	District Population and Population growth rate .....	8
2.4	Estimated Population at Base year .....	9
2.4.1	Estimates Of The Future Population of The IDP Area In 5, 10 And 20 Years.....	12
2.4.2	Estimate Of The Future Rural Population of The IDP Area In 5, 10 And 20 Years ...	14
2.5	Age and Sex Characteristics of Population at Year 5 and Year 10. ....	15
3	Assessment of the Existing Land Use and Settlement Pattern in the District.....	17
3.1	Overall Settlement Pattern.....	17
4	Assessment of the Impact of the Continuation of Population Growth on Land Use and Spatial Development Patterns. ....	19
5	Transport and Communication.....	20
5.1	Key Government Priorities to Be Implemented at Local Level.....	20
5.1.1	Key Priorities of the 8th National Development Plan and implementation at a Local Level	20
5.1.2	Key Priorities of Sector Specific Strategies and implementation at a Local Level. ....	22

5.1.3	Status of Implementation of Existing Plans and Strategies in the District. ....	23
5.2	Assessment of the Existing State of Development.....	23
5.2.1	Assessment of the Overall Performance of the District.....	23
5.2.2	Assessment of the Overall Performance of the district’s feeder, township and district roads including aviation and transportation. ....	23
5.2.3	Assessment of the Overall Performance of the district.....	27
5.2.4	Trend analysis and cross cutting issues.....	27
5.3	Assessment of the availability of Services Relevant to the transportation sector and identification of communities who do not have access to basic services and facilities.....	31
5.4	Assessment of the Quality of Services Relevant to the transport sector compared to Key Indicators of Performance and Historic Performance and identification of shortfalls. ....	32
5.5	Assessment of the Impact of Changes Anticipated Over the Next Ten Years.....	34
5.5.1	Roads.....	34
5.5.2	Water Transportation .....	35
5.5.3	Assessment of the Likely Impact of Ongoing and Committed Investment and Development Programmes on Land Use and Population Distribution Patterns for water transportation. ....	36
5.5.4	Aviation Transportation.....	37
5.5.5	Mobile Network Coverage.....	37
5.6	Issues arising from the Public Participation Process.....	38
5.7	Impact of Changes Anticipated over the next ten Years .....	39
5.8	Future demand for services and facilities influenced by population change .....	39
5.9	District Development Programmes .....	39
5.10	Environmental and Climate Change Analysis.....	39
5.11	Summary.....	40
5.11.1	Summary of issues .....	40
6	Energy Development and Environmental Management Sector.....	40
6.1	Key Government Priorities To Be Implemented At A Local Level.....	40
6.1.1	Key Priorities of the 8th National Development Plan and implementation at a Local Level	40
6.1.2	Key Priorities of Sector Specific Strategies and implementation at Local Level.....	41
6.2	Assessment of the Existing State of Development.....	41
6.2.1	Assessment of the Overall Performance of the District.....	41
6.3	Assessment of the Availability of Services Relevant to this Sector and identification of communities who do not have access to basic services and facilities .....	43

6.4	Assessment of the quality of services relevant to this sector compared to key indicators of performance and historic performance and identification of shortfalls. ....	44
6.5	Issues from Public Participation Process.....	44
6.5.1	Issues from Public Participation Process Relating to the Availability of Services in the Sector and identification of communities who do not have access to basic services and facilities	45
6.5.2	Issues from Public Participation Process Relating to the Quality of Services.....	45
6.6	Assessment of the Impact of Changes Anticipated over ten years.....	45
6.6.1	Quantify future demand for services and facilities based on the estimate of population change. ....	45
6.7	Existing Investment and Development Programme.....	46
6.8	Identification of communities where growth will occur and where future services and facilities are likely to be needed.....	46
6.9	Assessment of the likely Impact of the ongoing and committed investment and development program on Land Use and Population Distribution.....	46
6.10	Analysis of the Impact of Environment and Climate Change .....	47
6.10.1	The Impact of development Trends in the sector on the Environment and Climate Change .....	47
6.10.2	The Impact of Environmental and Climate Change Issues on the Sector.....	47
6.10.3	Summary of Issues .....	47
7	Agriculture, Fisheries and Livestock Sector .....	48
7.1	Key Government Priorities to be implemented at a Local Level .....	48
7.2	Description of the Existing State of Development and key performance indicators Availability and Quality of Service and Key Performance Indicators.....	49
7.3	Assessment of the Overall Performance of the District .....	52
7.4	Assessment of the Availability of Services Relevant to this Sector and identification of communities who do not have access to basic services and facilities .....	54
7.5	Issues arising from public participation process are as follows .....	56
7.6	Impact of Changes Anticipated Over the Next Ten Years.....	57
7.6.1	Summary of issues .....	57
8	Health Sector.....	58
8.1	Review of Policies and Plans .....	58
8.2	Description of the Existing state of development .....	58
8.2.1	Availability of the Services.....	58
8.3	Quality of the Service Including Key Indicators of Performance .....	61

8.4	Issues arising from the Public Participation Process.....	63
8.5	Impact of Changes Anticipated Over the Next Ten Years .....	64
8.5.1	Population Change – Future Demand for Services and Facilities .....	64
8.5.2	Existing and Proposed Investment and Development Programs .....	65
8.6	The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Patterns .....	66
8.7	Environment and Climate Change Analysis .....	66
8.7.1	The Impact of Existing Trends on the Environment and Climate Change .....	66
8.7.2	The Impact of Environmental and Climate Change Issues on the Sector.....	66
8.8	Issues arising relating to gender groups and vulnerable groups.....	66
8.9	Consideration of the underlying factors contributing to issues identified.....	67
8.10	Summary.....	67
8.10.1	Summary of issues .....	68
9	Education Sector .....	68
9.1	Review of policies and plans.....	68
9.1.1	Category of Schools in Chienge.....	69
9.2	Key Government Priorities to Be Implemented at A Local Level.....	72
9.2.1	Key Priorities of the 8th National Development Plan and how they are to be implemented at a Local Level.....	72
9.3	Key Priorities of Sector Specific National Plans/Strategies and how they are to be implemented at a Local Level.....	76
9.4	Assessment of The Existing Performance.....	77
9.4.1	Assessment of the Overall Performance of the District.....	77
9.5	Assessment of the existing state of Development.....	79
9.5.1	Assessment of Services that are relevant to the Sector and identification of Communities that are not able to access the Services.....	79
9.6	Assessment of the Quality of Services Relevant to this Sector Compared to Key Indicators of Performance and Historic Performance and identification of shortfalls .....	80
9.7	Quality of service provision and Key Performance Indicators .....	82
9.8	Issues arising from the public participation (Community participation) .....	82
9.9	Assessment of the impact of changes anticipated over the next ten years. ....	83
9.9.1	Quantify Future Demand for Services and Facilities Based on the Estimates of Population Change .....	83
9.10	Identification of communities where growth will occur and where future services and facilities are likely to be needed.....	83

9.11	Impact on the land and population distributions pattern .....	83
9.12	Impact of Changes Anticipated Over the Next Ten Years Population Change – Future Demand for Services and Facilities .....	84
9.13	Existing and Proposed Investment and Development Programmes .....	84
9.14	Analysis of Impact of Environment and Climate Change. ....	84
9.14.1	The Impact of Development Trends in the Sector on The Environment and Climate Change	84
9.15	The Impact of Environmental and Climate Change Issues on the Sector .....	85
9.15.1	Summary of issues .....	86
10	Water, Sanitation and Waste Management Sector .....	87
10.1	Review of policies and plans .....	87
10.2	Key Priorities of the 8th National Development Plan and implementation at a Local Level	87
10.3	Description of existing state of development .....	88
10.4	Water Supply .....	89
10.5	Sanitation .....	90
10.6	Waste Management .....	90
10.7	Quality of Service Including Key Indicators of Performance .....	91
10.7.1	Water Supply.....	91
10.7.2	Sanitation .....	91
10.8	Issues arising from the public participation process.....	91
10.9	Impact of change anticipated over the next ten years.....	92
10.10	Existing and proposed Investment and Development Programs .....	92
10.11	The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Pattern.....	92
10.12	Environmental and Climate Change.....	93
10.12.1	The Impact of Existing Trends on the Environment and Climate Change .....	93
10.13	Issues Related with Gender Groups and Vulnerable Groups .....	93
10.14	Sector Summary.....	94
10.15	Summary of Issues.....	95
11	Governance, Law and Security Sector .....	95
11.1	Key Government Priorities Being and to Be Implemented at Local Level.....	95
11.2	Availability of Services .....	96
11.2.1	Security.....	96

11.2.2	Law and Order.....	96
11.2.3	Governance.....	96
11.2.4	Traditional Governance.....	97
11.3	Quality of service including Key Indicators of Performance .....	97
11.3.1	Security.....	97
11.3.2	Law and Order.....	98
11.3.3	Impact of Changes Anticipated Over the Next Ten Years.....	98
11.3.4	The Impact of the Continuation of Existing Trends on Land Use .....	98
11.3.5	Issues Arising from the Public Participation Process .....	99
11.3.6	Issues Arising Relating to Gender Groups and Vulnerable Groups .....	99
11.3.7	Summary of Core Issues.....	99
12	Summary of Core Issues .....	99
13	Development Framework.....	100
13.1	Defining Long Term Vision .....	100
13.2	Vision.....	100
13.3	Mission Statement .....	100
13.4	Main objective .....	100
13.5	Development Objectives, Priorities and Development strategies.....	101
13.6	Spatial Development Framework .....	115
	<b>13.6.1 Scenario 1: Boosting Economic Competitiveness and Strengthening Interconnectedness.....</b>	<b>115</b>
	<b>13.6.2 Scenario 2: Enhancing Community Infrastructure and Welfare Services.....</b>	<b>118</b>
	<b>13.6.3 Scenario 3: Environmental Sustainability and Natural Resource Management</b>	<b>120</b>
14	Part Four – Implementation Programme.....	133
14.1	Capital Investment Program .....	133
14.2	Local Authority’s Financial Plan.....	146
14.3	Identification of The Revenue Base For The First Five Years of The Implementation of The Plan	148
	14.3.1 National Support Financing .....	149
14.4	Local Authority’s Resource Mobilization Strategies and Programmes .....	150
14.5	Monitoring and Evaluation, Including Key Performance Indicators.....	151
	14.5.1 Introduction.....	151
15	Conclusion of the IDP.....	168

16	Bibliography .....	169
17	Appendices.....	170

**Table of Tables**

Table 1	Population Size by ward .....	6
Table 2	population density at ward level .....	8
Table 3	age and sex characteristic of population at base .....	10
Table 4	Population Projections .....	12
Table 5	Population of Chienge in 2020 amd 2022 .....	14
Table 6	The Age and Sex characteristics of the population in 5 years .....	15
Table 7:	The Age and Sex characteristics of the population in 10 years (source: Zamstats Population Projection 2020).....	16
Table 8:	Status of Chienge’s feeder roads .....	24
Table 9:	Status of Chienge district roads .....	25
Table 10:	Cross cutting issues in the transportation sector for Chienge.....	28
Table 11:	Quality of services in transport sector .....	33
Table 12:	Existing and Proposed Investment and Development Programmes .....	39
Table 13:	crop production trends for the past 5 years.....	49
Table 14	average yield per hectare.....	49
Table 15	number of livestock.....	50
Table 16:	fisheries production trend from 2018 to 2022 in metric tons. ....	51
Table 17	FISP beneficiary.....	55
Table 18	Health Facilities .....	59
Table 19:	Key Performance indicators.....	61
Table 20:	Demographic Profile.....	63
Table 21:	Key Strategies to be Implemented Under SDA 2 Development Outcome 1 .....	69
Table 22:	Population Distribution In Schools Over The Last 5 Years .....	71
Table 23:	Population Distribution in Schools At Provincial And National Level.....	71
Table 24:	Existing Investments and Proposed Strategies .....	75
Table 25:	performance of grade 7, 9 and 12 .....	76
Table 26:	National Standards in Education.....	78
Table 27:	% Performance In National Examinations: .....	80
Table 28:	% Performance In Literacy And Reading Levels From Grade 1 -4 .....	81
Table 29	Dropout by reason .....	86
Table 30:	revenue base of the first years of the implementation plan .....	148
Table 31:	Locally Generated Revenue.....	148
Table 32:	LGET 20% Capital Projections .....	149

**Table of Figures**

Figure 1	Location Map for Chienge District Source: Chienge District Planning unit.....	4
Figure 2:	population growth by sex Source: ZamStat, 2022 .....	6
Figure 3:	Chienge Settlement Pattern Map Source: Chienge District Council Planning Unit .....	18

Figure 4:map Showing transport and communication situation in Chieng District: <i>Source: Chieng District Council Planning Department</i> .....	26
Figure 5:Kalungwishi Local Forest Map. ....	42
Figure 6 Agriculture and Fish Camp Map: Source: Chieng Town Council Planning Department .....	54
Figure 7 Health Facilities distribution and Catchment Area Map: Source: Chieng Town Council Planning Department.....	59
Figure 8: Distribution of School facilities and their catchment area Source: Chieng Town Council Planning Department.....	80
Figure 9:Water Distribution map for Chieng District Chieng Town Council Planning Department 2023.....	89
Figure 10:Boosting Economic Competitiveness and Strengthening Interconnectedness .....	117
Figure 11:Enhancing Community Infrastructure and Welfare Services .....	119
Figure 12: Environmental Sustainability and Natural Resource Management: Source Chieng Town Council Planning Department.....	121

# PART ONE

## 1 Introduction and Background

### 1.1 Overview of the Integrated Development Plan

The Urban and Regional Planning Act No. 3 of 2015 provides a Legal foundation to the formulation, development and implementation of Integrated Development Plans (IDP). The IDP integrates Sectorial Plans into one development framework to define the District development process. Though influenced by existing Development Plans, Policies and Strategies such as the Eighth (8) National Development Plan, the Revised Decentralization Policy and the Vision 2030 among others, the IDP is largely a bottom up approach to the district Socio-economic development process. As such, the IDP takes into account the participation and submissions of various District Stakeholders at all levels of governance, inclusive of Chiefs, Civic Leaders, and Leaders from Faith Based Organizations and Ward Development Committees.

In light of the foregoing, the IDP reflects the needs and priorities of the communities in all the fifteen (15) wards of Chiengwe District. These identified needs and priorities from the community are further translated as development needs and aspirations of the people.

To ensure this was achieved, the contents, procedures and processes for preparation of an Integrated Development Plan as set out in Sections 19 and 20 of the URP Act (2015) as well as the IDP guidelines developed by the Ministry of Local Government and rural development which outlines in detail the steps, methodology and outputs of developing an IDP were strictly followed.

### 1.2 Location of the District

Chiengwe District is situated on the Northern part of Zambia in Luapula Province. The District is about 350 km away from the Provincial Capital, Mansa and approximately 1200km from the Nation's Capital, Lusaka. Chiengwe District is approximately 596 square kilometres and lies between Longitudes 28°45 and Latitude 29°20 of the world Map. It shares an International Boundary with the Democratic Republic of Congo on the North; and an Intra-District Boundaries with Kaputa and Nchelenge Districts on the North-Eastern and Southern side respectively. It also shares Lake Mweru with the Democratic Republic of Congo on the Western side, and with Nchelenge District on the Southern side.

### 1.3 Climate

Chienge District Experiences Tropical type of Climate with higher Temperatures of 30 degrees Celsius in the Months of September, October; November and partly in December. Temperatures are lower in the months of May, June, July and August while moderate Temperatures are experienced in January, February, March and April, which is also the Rainy Season.

### 1.4 Rainfall pattern

The District is located in the High Rainfall Belt of the Central African Plateau. Generally, Chienge District has an average Annual Rainfall of around 1600mm. Heavy Rainfall pattern is experienced in the period from November to late April. Chienge is divided into two areas; the Valley and the Plateau, which experience different rainfall patterns.

### 1.5 Topography

The Topography of Chienge is generally comprised of many valleys along the Coastal and Lower areas of the Land and a hilly and partly rocky area on the eastern side. Chienge also consists of Dambo and Marshy areas in most of its wards. One such area is the Lushiba Marshland located in Chienge ward measuring up to 1844 Hectares.

### 1.6 District Major Water Bodies

Chienge District has a number of water bodies, namely: Lake Mweru, Kalungwishi river, Luau river, Lunchhinda river, streams and Lushiba swamp:

#### 1.6.1 Lake Mweru

The Lake has a total area of 4550 km squared and approximately 52% of it is in Zambia. The lake has an altitude of 900 Meters above sea level, with an average depth of 3 meters.

#### 1.6.1 Kalungwishi River

The River Starts from the Northern Province and flows into Lake Mweru. It supports and supplies people of Mununga with Fish. Additionally, the River acts as a source of Water for domestic consumption for the entire populace of Mununga, Kabole, Nyamfwa and a few surrounding Villages. The River Banks also has some Salt deposit which can be exploited.

#### 1.6.2 Luau River

The River is situated in Mwabu about 15 Kilometre North of Chienge Boma. It starts from the Eastern part of the Plateau and flow into Lake Mweru. Luau River is host to the growing of the rare Rattan

Plant which is used to make exotic Furniture which is sold across the Country and is sometimes exported to the Neighboring Democratic Republic of Congo (DRC). The soils along the Banks of the Luau Stream also supports the growing of Paddy Rice.

### 1.6.3 Lunchinda River

Lunchinda River is another important Water Body in that, apart from supporting the locals with Fish and water for Domestic consumption, it also forms the International Boundary between Zambia and the Democratic Republic of Congo (DRC).

### 1.6.4 Streams

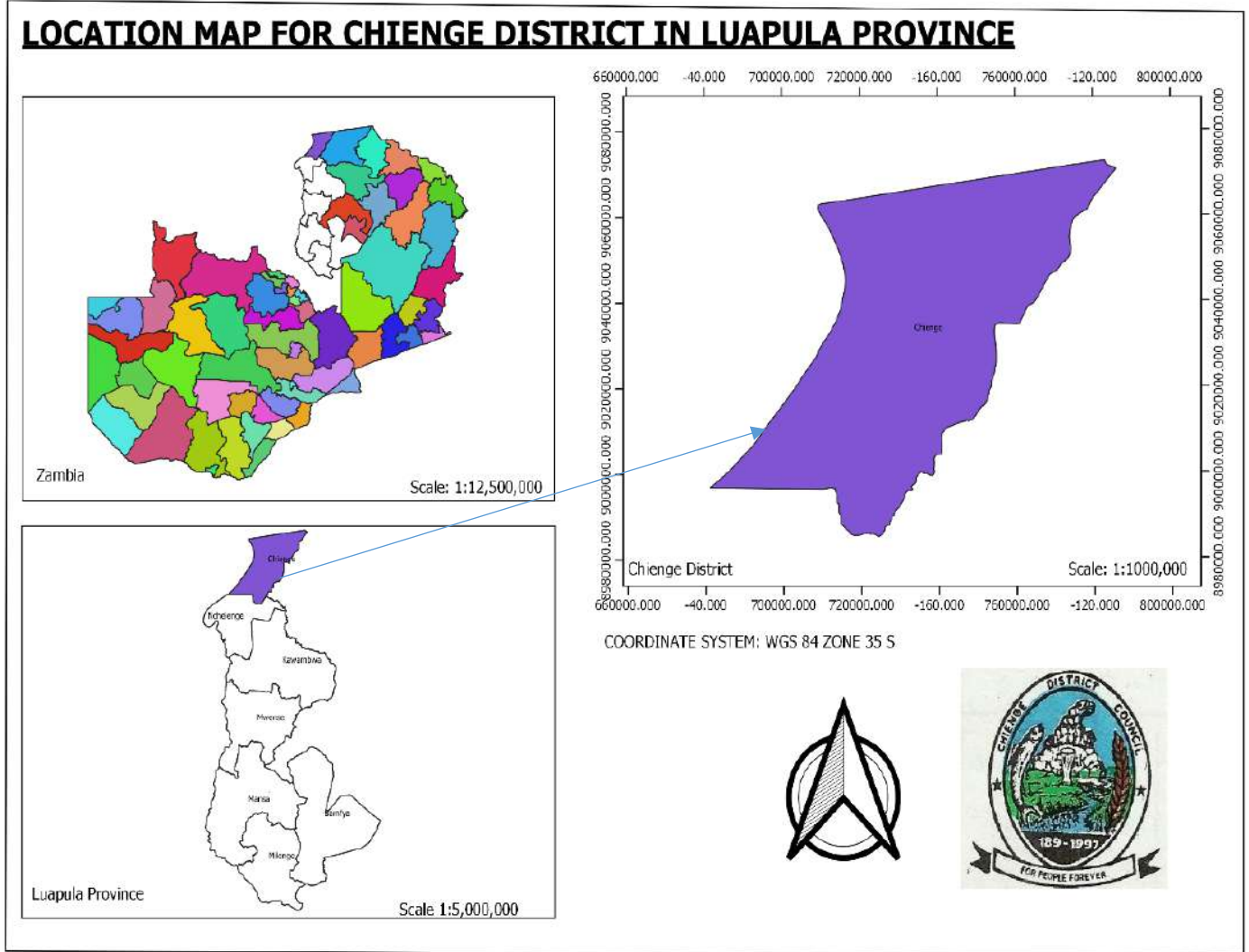
Chienge District is endowed with a lot of Streams. Most of them are located in the low lying Valley of the District while a few are found on the Highlands.

### 1.6.5 Lushiba Swamp

This is the largest Dambo in the District and is located in the North, about 2 kilometers from the Chienge District Administration Offices. It is 15 Kilometers long and ranges between 5 Kilometers and 8 Kilometers in Width. The area is Swampy, Water tight and is rich in humus soils. The composition of the Lushiba Swamp supports a range of economic activities such as Rice, Maize, Groundnuts and Cassava Production. The area is also ideal for Fishing.

The above highlighted natural resources and characteristics have positioned Chienge District to be one of the Districts in Luapula Province with a lot of potential for social and economic development through economic activities like fishing and farming which are the main economic activities in the district. In spite of all these potential factors, the majority of the people of Chienge District are poor, with the majority of them living in the remotest parts of the district.

Figure 1 Location Map for Chiengwe District Source: Chiengwe District Planning unit



## PART TWO

### 2 Planning Survey and Issues Report

#### 2.1 Demographic Analysis

##### 2.1.1 Historic Population Levels and Historic Population Growth Rates at District and ward Levels

Over the last three Decades, the Population in Chienge has increased considerably from the time it was declared a District and separated from Nchelenge District in 1997.

The Population of Chienge increased from 49,290 in 1990 to 83,824 in 2000 which represented a seventy per cent (70%) increase in population during the intercensal period which represents a Growth Rate of 5.7 per cent Per Annum. This was the highest Growth Rate Luapula Province recorded at the time.

However, there was a decrease in the Population growth between 2000 and 2010 intercensal period. According to 2010 census, the Population of Chienge District was at 114,225 indicating an increase in the Population growth of 26.6%. However, during the intercensal period of 2000 and 2010, Chienge District's population Growth Rate reduced from 5.7 per cent to 3.1 per cent due to the factors such as increased awareness on the importance of using family planning methods, increased progression for girl child, reduction of early marriages and early pregnancies on account of the awareness campaigns by Civil Society Organisations (CSOs); and Keeping Girls in School project by the World Bank under the Girls Education and Women Empowerment and Livelihood (GEWEL) programme.

According to the Preliminary Report of the 2022 Census of Population and Housing, the Population in Chienge District increased from 114, 225 in 2010 to 189,893 in 2022 which represents a 66.2% increase in Population growth during the 2010 to 2022 intercensal period. This population growth represents a normal Annual Growth Rate of 3.3% due to increased birth rate and human migration to the district for various social economic activities such as fishing and employment, among others.

## POPULATION GROWTH BY SEX

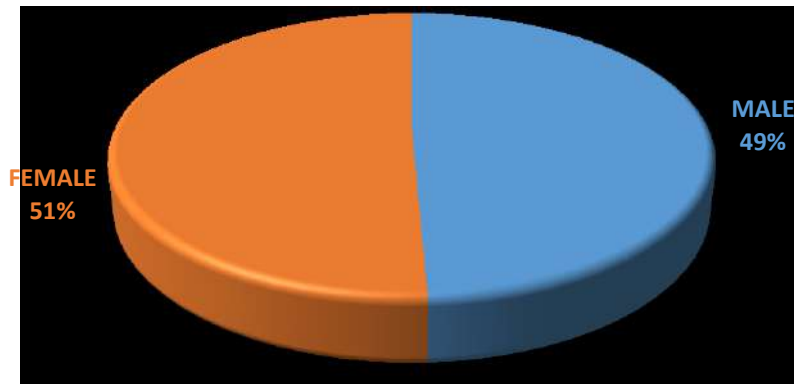


Figure 2: population growth by sex Source: ZamStat, 2022

The Pie Chart above shows the Population percentage distribution of Males and Females in the District. According to the Preliminary Report of 2022 Census of Population and Housing, Chiengde District has a total of 96,284 Females representing 51% of the total Population and a total of 93,609 Males representing 49% of the total Population.

Table 1 Population Size by ward

S/N	WARD	Total Population
1	KALUNGWISHI	18157
2	MUNUNGA	13938
3	KALOBWA	11812
4	LUNCHINDA	12413
5	CHIBAMBA	23897
6	KATETE	19734
7	CHIENGE	15131
8	CHIPUNGU	18546
9	MUNWA	5337
10	IFUNA	10984

11	CHITUNDA	3773
12	LAMBWE CHOMBA	2954
13	CHIPAMBA	10237
14	LUAU	7325
15	CHITUTU	15655

*Source:* ZamStat, 2022

The Table above shows the distribution of Population according to Wards. The Ward with the highest population is Chibamba with a total population of 23,897, followed by Katete Ward with 19,734 and Chipungu Ward with 18546 due to fish and cross-border trading and urbanization. On the other hand, the wards with the least population include Lambwe Chomba with a population of 2954, followed by Chitunda with 3773 and Munwa with 5337 due to delimitation exercise and limited social economic activities. Chibamba Ward has the highest population because it is located at the border and this is where a lot of economic activities are taking place.

Chienge District has two new wards which were delimited during the 2021 General Elections namely Chibamba ward and Chitunda. Chibamba wards was delimited from Lunchinda and Chipungu Wards, while Chitunda ward was delimited from Lambwe Chomba and Luau Wards.

## 2.2 Population Density at Ward Level

Population Density is the number of people living per unit area or per square kilometer. According to 2022 census, the population density at National was 26 people per square kilometer whereas for Luapula Province it was 30 persons per square kilometer and for Chienge district was 47 persons per square kilometer, which means that for every square kilometer in the district, there are at least 47 people living in the area

The Population Density for Chienge District increased from 30 persons per square kilometer in 2010 to 47 persons per square kilometre in 2022 thereby representing an increase of 17 persons per square kilometer.

The following table shows the population density for all the wards in Chienge District.

Table 2 population density at ward level

S/N	WARD	Total Population	Population Density	Land Area
1	KALUNGWISHI	18157	10	61.740
2	MUNUNGA	13938	7	20.614
3	KALOBWA	11812	6	22.865
4	LUNCHINDA	12413	7	161.60
5	CHIBAMBA	23897	13	
6	KATETE	19734	10	36.800
7	CHIENGE	15131	8	14.607
8	CHIPUNGU	18546	10	
9	MUNWA	5337	3	506.614
10	IFUNA	10984	6	20.728
11	CHITUNDA	3773	2	
12	LAMBWE CHOMBA	2954	2	37.173
13	CHIPAMBA	10237	5	69.37
14	LUAU	7325	4	137.44
15	CHITUTU	15655	8	15.742
	<b>TOTAL</b>	<b>189,893</b>	<b>100</b>	

Source: 2022 Preliminary Report of the Census of Population and Housing

The table shows that Katete, Chipungu and Kalungwishi wards have high population densities. This is attributed to economic activities such fishing and cross border trading as well smaller land area for settlement. Chitunda, Lambwe Chomba and Munwa wards have lower densities and this is attributed to low economic activities and large land area for settlement.

### 2.3 District Population and Population growth rate

Over 98.43% of the population in Chienge District live in a rural setup. Chienge district is approximately 3,751 square kilometers in size, of this size, only 9.4149 square kilometers is planned thereby representing only 0.24% out of the entire district which is planned. The rest of the district remains unplanned and in traditional boundaries.

This means that out of the total population of 189,893, approximately only 2981 live in the planned area (urban) of Chienge. The remaining 186, 912 live in unplanned areas (rural). It is important to note that at the time the census was being undertaken, Chienge never had an approved township boundary. Chienge district has a population growth rate of 4.3 percent per annum. This means that the population is expected to grow at 4.3% per year.

Chienge district is the 2<sup>nd</sup> fastest growing district in the province after Chembe which is the highest with a growth rate of 6.8 percent per annum with Mwanabombwe and Chiengehaving 2.2 percent per annum as the lowest. This shows that the population of Chienge is growing at a very fast rate as compared to the remaining districts in the province which is at 3.6 and the national rate of 3.4 percent.

#### 2.4 [Estimated Population at Base year](#)

The Integrated Development Plan for Chienge District will run for 10 years from 2024 to 2034 with 2023 being the base year with the population standing at 189,893. The growth rate for Chienge district stands at 4.3 per cent per annum, the population is projected to reach 289,302 by 2033.

Table 3 age and sex characteristic of population at base

DISTRICT DEMOGRAPHIC DATA									
WARD	Total Population	Under Ones (4%)	1 - 5 Yrs (16%)	Under Fives (20%)	Between 5 & 14 Yrs (29%)	Adults 15 Yrs (50%)	15 - 49 Yrs (43%)	Males 49%	Females 51%
KALUNGWISHI	18157	726	2905	3631	5266	9079	7808	8897	9260
MUNUNGA	13938	558	2230	2788	4042	6969	5993	6830	7108
KALOBWA	11812	472	1890	2362	3425	5906	5079	5788	6024
LUNCHINDA	12413	497	1986	2483	3600	6207	5338	6082	6331
CHIBAMBA	23897	956	3824	4779	6930	11949	10276	11710	12187
KATETE	19734	789	3157	3947	5723	9867	8486	9670	10064
CHIENGE	15131	605	2421	3026	4388	7566	6506	7414	7717
CHIPUNGU	18546	742	2967	3709	5378	9273	7975	9088	9458
MUNWA	5337	213	854	1067	1548	2669	2295	2615	2722

IFUNA	10984	439	1757	2197	3185	5492	4723	5382	5602
CHITUNDA	3773	151	604	755	1094	1887	1622	1849	1924
LAMBWE CHOMBA	2954	118	473	591	857	1477	1270	1147	1507
CHIPAMBA	10237	409	1638	2047	2969	5119	4402	5016	5221
LUAU	7325	293	1172	1465	2124	3663	3150	3589	3736
CHITUTU	15655	626	2505	3131	4540	7828	6732	7671	7984
<b>TOTAL</b>	<b>189893</b>	<b>7596</b>	<b>30383</b>	<b>37979</b>	<b>55069</b>	<b>94947</b>	<b>81654</b>	<b>93048</b>	<b>96845</b>

*Source: ZamStat census preliminary report, 2022*

With the current state of population in Chienge District, we can infer from table 1 that we have more dependent population of 114,312 comprising of youths (aged from 0 to 19) and the aged (60 years and above) against 75,581 of the active and employable population. This is because most of the population in these categories are in the unemployable age group.

This further implies that if most of the active and employable population is not productive, the District is likely to remain underdeveloped. Hence, there is need for progressive creation of various empowerment programs especially related to youths and active adult population ranging from 20 to 59 years of age.


Additionally, Chienge District population by gender is as follows.

<b>Population at Base</b>	<b>Male</b>	<b>Percentage</b>	<b>Female</b>	<b>Percentage</b>
196,150	96,113	49%	100,037	51%

#### 2.4.1 Estimates Of The Future Population of The IDP Area In 5, 10 And 20 Years

The Integrated Development Plan area under consideration, Chienge District, had the estimated population of 189,893 people in 2022 (Zamstat, 2022) that is a total of 93,609 males and 76,284 females. This represents an annual growth rate of 3.3 percent from 2010 census of population and housing. Thus in 2023, the population for Chienge District is estimated to be 196,159 as base year population. Therefore, the population for Chienge district is estimated to growth in five, ten and twenty years as indicated in the table below.

Table 4 Population Projections

	<b>PROJECTION</b>	<b>POPULATION</b>	<b>JUSTIFICATION</b>
<b>3.3</b>	POP IN 5 YEARS	223,363	The population is expected to increase due to an increase in the social economic activities.

	POP IN 10 YEARS	262,732	The population is expected to increase due to an increase in the social economic activities.
	POP IN 20 YEARS	363,509	The population is expected to increase due to an increase in the social economic activities.
<b>3.3</b>	YOUTHS IN 5 YEARS	84,675	The population is expected to increase due to an increase in the social economic activities.
	ADULTS IN 5 YEARS	111,681	The population is expected to increase due to an increase in the social economic activities.
	MALES IN 5 YEARS	113,054	The population is expected to increase due to an increase in the social economic activities.
	FEMALES IN 5 YEARS	117,668	The population is expected to increase due to an increase in the social economic activities.
	YOUTHS IN 10 YEARS	99,510	The population is expected to increase due to an increase in the social economic activities.
	ADULTS IN 10 YEARS	131,366	The population is expected to increase due to an increase in the social economic activities.
	MALES IN 10 YEARS	132,980	The population is expected to increase due to an increase in the social economic activities.
	FEMALES IN 10 YEARS	138,408	The population is expected to increase due to an increase in the social economic activities.

	YOUTHS IN 20 YEARS	137,805	The population is expected to increase due to an increase in the social economic activities.
	ADULTS IN 20 YEARS	181,755	The population is expected to increase due to an increase in the social economic activities.
	MALES IN 20 YEARS	183,989	The population is expected to increase due to an increase in the social economic activities.
	FEMALES IN 20 YEARS	191,498	The population is expected to increase due to an increase in the social economic activities.

**CHIENGE DISTRICT**

*Table 5 Population of Chienge in 2020 amd 2022*

S/N	YEAR	TOTAL	MALE	FEMALE	GROWTH RATE
01	2020	155, 498	77, 029	78, 469	4, 157.2
02	2022	163, 753	81, 127	82, 627	

**2.4.2 Estimate Of The Future Rural Population of The IDP Area In 5, 10 And 20 Years**

The percentage of urban and rural population in 2010 was 3.2% and 96.8% respectively. Going for by the 2022 census preliminary report, it shows that the percentage of rural population has no significant changes. Therefore, inferring from this data, it can be deduced that the percentage of urban and rural population have to a larger extent remained constant.

Therefore, utilizing the same percentage of 96.8 to determine the rural population in 5 years, the rural population is expected to be 216. 115 persons. In the future 10 years based on the same

growth rates, population demographics and base year the rural population can be estimated to be 254, 324 persons while in the future 20 years the population can be estimated to be 351. 876 persons based on the foregoing population demographics.

### 2.5 Age and Sex Characteristics of Population at Year 5 and Year 10.

The age and sex characteristics of the population of Chienge District in the future 5 and 10 years, based on the foregoing population demographics, and the 2010 census report on the Age and Sex characteristics (ZamStat, 2020) can be calculated as follows.

*Table 6 The Age and Sex characteristics of the population in 5 years*

<b>AGE AND SEX IN CHIENGE</b>			
<b>AGE</b>	<b>TOTAL</b>	<b>MALE</b>	<b>FEMALE</b>
0 – 4	44,200	21,658	22,542
5 – 9	34,819	17,061	17,758
10 – 14	28,118	13,778	14,340
15 – 19	19,967	9,784	10,183
20 – 24	20,167	9,882	10,285
25 – 29	18,046	8,843	9,204
30 – 34	12,216	5,986	6,230
35 – 39	10,810	5,297	5,513
40 – 44	9,357	4,585	4,772
45 – 49	7,750	3,798	3,953
50 – 54	6,008	2,944	3,064
55 – 59	4,467	2,189	2,278
60 – 64	3,037	1,488	1,549
65 – 69	1,653	810	843
70 – 74	1,228	602	626
75 – 79	781	383	398
80 +	737	361	376

<b>TOTAL</b>	<b>223,363</b>	<b>109,448</b>	<b>113,915</b>
--------------	----------------	----------------	----------------

Table 7: The Age and Sex characteristics of the population in 10 years (source: Zamstats Population Projection 2020)

<b>AGE AND SEX IN CHIENGE</b>	<b>TOTAL</b>	<b>MALE</b>	<b>FEMALE</b>
<b>TOTAL</b>	<b>262,732</b>	<b>128,739</b>	<b>133,993</b>
0 – 4	51,990	25,475	26,515
5 – 9	40,956	20,068	20,888
10 – 14	33,074	16,206	16,868
15 – 19	23,486	11,508	11,978
20 – 24	23,722	11,624	12,098
25 – 29	21,227	10,401	10,826
30 – 34	14,369	7,041	7,328
35 – 39	12,715	6,230	6,485
40 – 44	11,007	5,393	5,613
45 – 49	9,117	4,467	4,649
50 – 54	7,068	3,463	3,604
55 – 59	5,254	2,575	2,680
60 – 64	3,572	1,750	1,822
65 – 69	1,944	953	992
70 – 74	1,445	708	737
75 – 79	919	450	469
80 +	866	425	442

From the tables age and sex characteristics of the populations in 5 and 10 years above it observed that the age band of 0-4 years has a higher population due to reduced mortality rate which subsequently increasing birthrate. The age band with the lowest population is 84 years and above and this is attributed to limited access to health care services, malnourishment, and hard labour.

### 3 Assessment of the Existing Land Use and Settlement Pattern in the District

#### 3.1 Overall Settlement Pattern

Chienge district mainly has two types of settlement patterns. Linear settlement pattern and clustered settlement pattern.

Linear settlement pattern is mainly characterised by scores of people settled along the road or line of rail. Clustered settlements are mainly characterised by crowds of people in particular area. The most common setup in clustered settlement is village groupings.

Chienge district has most of the people settled along the Kashikishi-Lunchinda Road and Chienge-Kaputa Road. This is mainly because of the economic value that these two roads hold for the district. Kashikishi – Lunchinda road connects Chienge to urban centres in the province and also across international boundaries in the Democratic Republic of Congo. This means that there is a lot of trading that takes place along this road hence settlements tend to grow along these roads. Another factor that has led to this type of settlement in the district is the terrain of Chienge.

The terrain comprises hills and swamps in most parts of the district. This has led to the situation where people are only settling along the roads which provide dry lands and easy access to socio-economic services. This has resulted in the formation of four main settlements which can be considered growth nodes, namely: Mununga, Puta, Lupiya and Lambwe Chomba. These growth centers comprises informal settlements as most of them are in rural parts of the District under traditional land.

The map below shows the settlement pattern in the district.

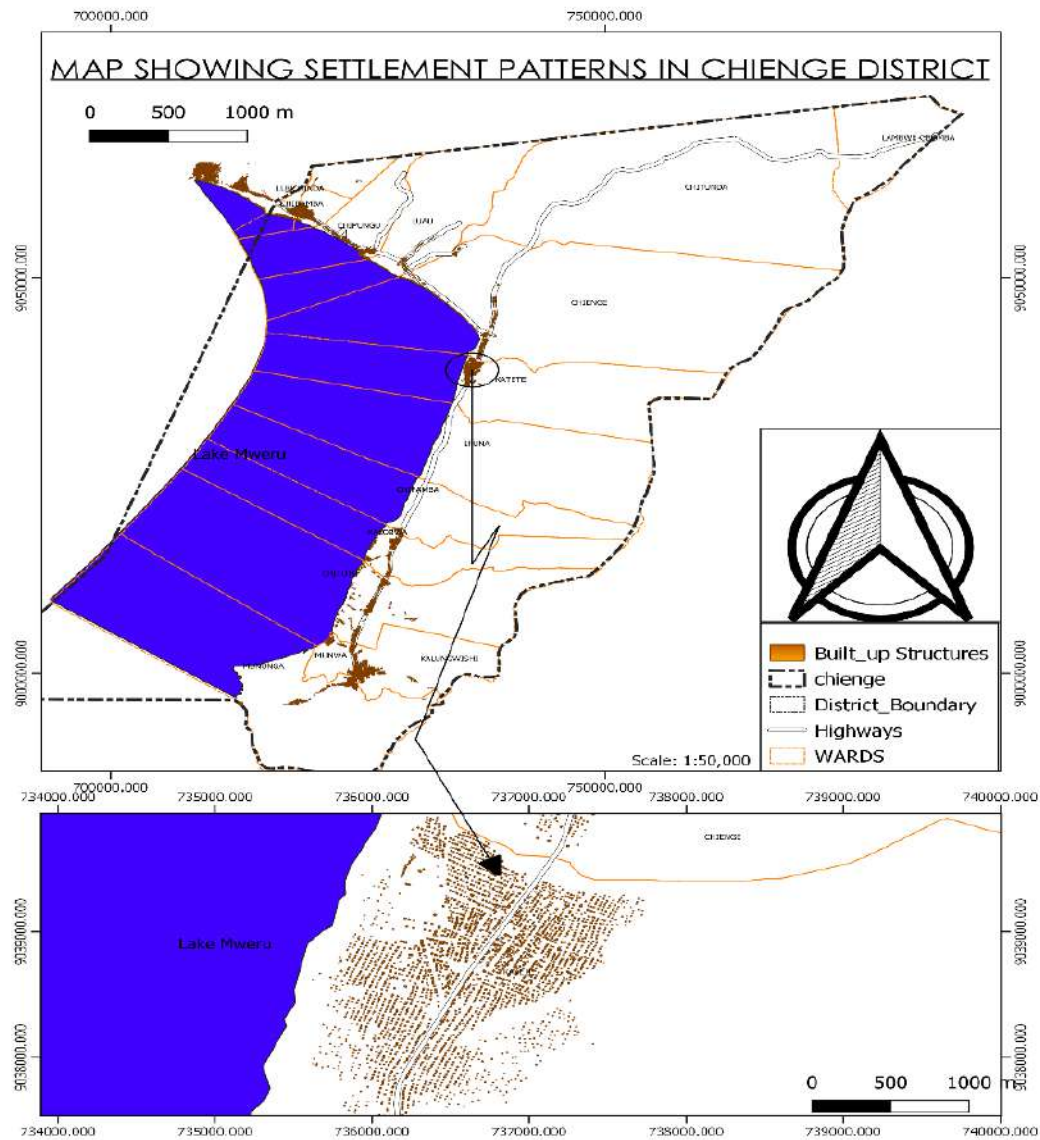


Figure 3: Chiengde Settlement Pattern Map Source: Chiengde District Council Planning Unit

## 4 Assessment of the Impact of the Continuation of Population Growth on Land Use and Spatial Development Patterns.

The continuation of population growth in Chienge District will have a considerable impact on land use and settlement patterns.

As can be seen from the demographic analysis, the population of Chienge has been growing considerably in the last 30 years since it was declared a district. The population grew from 49,290 in 1990 to 189,893 in 2022. As the population grows, the settlement pattern is also likely to change.

Chienge District has both clustered and linear settlement pattern mainly because of the terrain. However, as the population grows, the settlement pattern is expected to change as more people are likely to move into other areas in search of available land. People will move to areas with more resources such as jobs, housing and other services.

Areas such as Lupiya in Chienge will experience rapid population growth as people will move from different parts of the district in search of jobs and trading spaces. This will more likely increase pressure for trading spaces in Lupiya. There will be more demand for commercial spaces because Lupiya provides a ready market for products from the neighbouring country, the Democratic Republic of Congo.

Other areas expected to experience population growth are Puta, Lambwe Chomba and Mununga. Currently Puta has one of the highest population density in the district and this trend is expected to continue owing to the proximity of Puta to the District Administrative Center and civic center.

Puta and the neighbouring areas will likely experience an increased demand for housing and accommodation as people will want to stay near the Central Business District.

Mununga on the other hand is also expected to experience population growth owing to its position in the district. Mununga is strategically located as it is almost equidistant from Chienge Civic Center and the neighbouring Nchelenge District. Population is expected to grow in Mununga

because of these factors and that it has potential of becoming a transit as it links to Nsama and Kaputa Districts. The area is likely to have a high demand for commercial spaces so as to cater for people in transit moving from one district to the other. Finally, population growth in Chienge will also lead to increased demand for infrastructure, such as roads, schools and hospitals.

## SECTORAL AND THEMATIC ANALYSIS

### 5 Transport and Communication

The transport and communication sector are key to unlocking the development process in Chienge District. Notwithstanding this, one of the major challenges in the district has been the bad state of the Kashikishi-Lunchinda road as well as feeder roads cross the district. The major impact has been accessibility for motorists, bicycles and motor cycles who cannot access most parts of the districts such as farming blocks, health, and education services. Additionally, some sections of the district do not have access to communications towers. The bad state of roads and limited communication towers have impacted negatively on the development process of the district.

#### 5.1 Key Government Priorities to Be Implemented at Local Level

5.1.1 Key Priorities of the 8th National Development Plan and implementation at a Local Level  
The 8<sup>th</sup> National Development Plan focuses on the implementation of the regional transport and logistical hubs by ensuring that Zambia is positioned for infrastructural and trade development (p.37).

Chienge District which borders with the Democratic Republic of Congo (DRC) seeks to adopt the Policy direction by facilitating maintenance, development, modernization in the transport sector by integrating the Chienge-Kashikishi road (D79) with Lambwe Chomba-Kaputa Road and Mununga-Kaputa District Roads that will connect the Northern Province to Luapula Province and the border with Democratic Republic of Congo. The D79 Road has been in a deplorable state for many years, which has robbed the residents in the districts of essential services such as banking, and filling stations, which are 90 kilometres away in Nchelenge.

The Districts will tap into the potential of water transport by creating water infrastructure such as harbours and storage facilities in Mununga, Puta and Lupiya so that the Fishing Sector, and Cross

Border Trading is enhanced including transportation of bulk cargo such as copper from the Congo DRC, Agricultural Produce and Transport for the locals to Nchelenge. With improved Transports and Logistics in Chienge we expect an improved local agriculture sector, trade and business between countries, regions and districts.

The 8<sup>th</sup> National Development Plan further highlights that government intends to integrate Digital Technologies by introducing digital communication infrastructure such as satellites, mobile phone services and electronic devices with the aim of advancing economic transformation (p.39). This will be achieved by government commitment in the investment of digital skills for youths which act as backbone for innovation, sciences, technology and will improve internet penetration from 52.9 percent to 80 percent by 2026 (8<sup>th</sup> National Development Plan, p.39). Zambia's internet penetration currently stands at 28.5 percent as of 2022, with Luapula province at 0.67 percent and Chienge district at less than 0.05% extrapolated respectively (Kemp, S. (2022, 16 February). Digital 2022: Zambia. Datareportal; ZICTA. (2021). ZICTA Annual report 2021, p.12).

According to the Bwile Chiefdom Strategic Plan 2013-2017, Puta Chiefdom lacks public broadcasting services with the nearest accessible radio station in neighbouring town of Mpweto situated in the Democratic Republic of Congo (DRC) (p.21). Although the situation has improved by an introduction of a Private Radio Station in Mununga its coverage is limited and scanty to cater for the entire town of Chienge.

In spite of the huge challenge of communication in the District, the Information and Technologies Act No. 15 of 2009 is mandated to promote and facilitate the provision of information and electronic communication services such as emergency, directory information and maritime services as well as approve satellite transmitting stations for aircraft stations, mobile stations or ships stations and radio stations apparatus used in the connection with the transmitting station (p.29).

At the local level Chienge intends to engage the Ministry of Information and technology in requesting for satellite, mobile services in places where these are lacking by ensuring that Radio, TV, Mobile Service coverage is covered in the entire District by 2034

### 5.1.2 Key Priorities of Sector Specific Strategies and implementation at a Local Level.

The main national strategies and plans for Transport and Communication Sector are: The 8<sup>th</sup> National Development plan, The Bwile Chiefdom: Development strategic plan 2013-2017, Chienge District Plan 2017-2021, The Information and Communications Technologies Act of 2009, 2019 National Transport Policy, Chapter 464 the Roads and Traffic Act, National Road Fund Act of 2002, and Public Roads Act of 2002.

The above highlighted plans will require implementation at local level by:

- i. Constructing and modernising the 140km Kashikishi- Lunchinda road (D79), 91 km Chienge-Kaputa Road and 130km Mununga-Kaputa Road that provides access to the Democratic Republic of Congo and Kaputa town connecting to Northern region of Zambia respectively (Chienge District Strategic Plan 2017-2021). This is to enhance cross border and regional trading for local economic activities (8<sup>th</sup> National Development Plan, p.37)
- ii. Identifying, constructing, and maintenance of the 162.4 major feeder roads in the district as provided for under the Public Roads Act No. 12 of 2012 and indicated in the Chienge District Strategic Plan 2017-2021.
- iii. Establishment of Water Transportation Authority on Lake Mweru to regulate the amount of bulk cargo such copper concentrates crossing from the D.R.C as well as promoting water transportation for goods and passengers (8<sup>th</sup> National Development Plan, p.37).
- iv. Establishment of one (1) air transport infrastructure such as Airstrips according to the 2019 National Transport Policy, which seeks to build capacity in the aviation sector and promote local airlines (p.18).

Communication, strategies, plans and policies implementation plans is as follows:

- i. Installation of communication towers for telecommunication services to improve mobile network coverage and services.
- ii. Installation of TV and radio mast in low covered areas.

### 5.1.3 Status of Implementation of Existing Plans and Strategies in the District.

Chienge district has two (2) identifiable local plans namely the Chienge district strategic plan 2017-2021 and The Bwile Chiefdom strategic plan 2013-2017 which have both expired. However, the relevance of issues relating to Transport and Communications still affects Chienge district.

In the last five years, construction works on the Lunchinda-Kashikishi road (D79) commenced. However, but due to funding challenges, these roads have never been completed and the deplorable status of the road still remains. The Mununga-Kaputa Road has been worked on before as a feeder road but has never been upgraded to bituminous standard and still requires much work. Chienge-Kaputa Road was partially upgraded to an all-weather feeder road, but the road has been eroding away due to lack of poor drainage system.

The Water transport potential remains untapped for ferrying of goods and passengers as well as promoting tourism. There is need to promote the water transport sector through the establishment of harbours, docking bays and supporting infrastructure.

Communication infrastructure in terms of mast towers, TV and radio mast stills remains inadequate to cover the entire district. There is still need to improve satellite access and eservice provisions by improving ICT infrastructure.

## 5.2 Assessment of the Existing State of Development.

### 5.2.1 Assessment of the Overall Performance of the District.

The assessment of the overall performance of the district will involve highlighting the key issues regarding the existing state of development in each subtheme of the sector such as transportation and communication. In this regard transportation assessment is categorized as follows:

#### 5.2.2 Assessment of the Overall Performance of the district's feeder, township and district roads including aviation and transportation.

According to Chienge district Strategic Plan 2017-2021 the district has 162.4 Km of feeder roads covering all fifteen (15) wards. The state of these roads is characterised by lack of maintenance schedules and programs, no crossing points, and lack of drainages. This is shown in table 1. Status of Chienge's feeder roads. The status of 6km township roads are open gravel-sand roads which

have no formation and adequate drainage system with limited accessibility for residents. Overall, 39km of these township roads remain unopened for planned settlements along the beachfront, low-cost and high-cost housing areas thereby greatly impacting land development. The main district road (D79) is a gravel-sandy characterized by lack of drainages such as mitre drains, side drains, culverts, gullies and rocky formation along the Mununga-Kefulwa chainage. The Mununga Kaputa road is a gravelly sand recently worked on and opened though its accessibility is being negatively impacted by soil erosion resulting from poor drainage system. Table 6 below shows the status of feeder roads.

*Table 8: Status of Chienge's feeder roads*

S/N	Name	Distance	Ward	Status of the Road
1.	Futu – Lubambe	6.5 Km	Luchinda +	Ungraded gravel road, no drainage, swampy & marshy ground around certain areas
2.	Mukonta via Mukunku- Kasembe	20 Km	Chipungu	Ungraded gravel road, no drainage, swampy & marshy ground around certain areas
3.	Mwabu via Kasase – Swali	13 Km	Luau	Ungraded gravel road, no drainage, swampy & marshy ground around certain areas
4.	Lambwe Chomba – Musangu	15 Km	Lambwe Chomba	Ungraded gravel road, no drainage, stony rocks, stream cuttings through the road (no culverts/bridge)
5.	Lambwe Chomba – Chipundu	11 Km	Lambwe Chomba	Ungraded gravel road, no drainage, stony rocks, stream cuttings through the road (no culverts/bridge)
6.	Kalobwa to Botoman	6.5 Km	Kalobwa	Ungraded gravel road, no drainage outlets, Natural underground springs along the road.
7.	Chisipula Via Mipa East via Chikubi- Kalande	27 Km	Chitutu/Ka lungwishi	Ungraded gravel road, no drainage outlets, Natural underground springs along the road.
8.	Kasote- Kasote Fishing Camps	2.3 Km	Ifuna	Ungraded gravel road, no drainage points along the road.

9.	Musolo- Kafulwe Fishing Camp	3.7 Km	Munwa	Ungraded gravel road, no drainage points along the road.
10.	Senior Chief Mununga Palace-Kapako Resettlement Scheme	15.8 Km	Mununga	Ungraded gravel road, marshy sand soils, no drainage outlets & natural underground springs along the road.
11.	Chipamba- Chipamba Fishing Camp	7.1 Km	Chipamba	Ungraded gravel road, no drainage outlets, Natural underground springs along the road.
12.	Lushiba via Maoma	12 Km	Luau	Ungraded gravel-sand mix road, no drainage outlets, marshy swampy area along the road.
13.	Sambula- Lamba	5 Km	Chitutu	Ungraded gravel-sand mix road(washboard), no drainage- outlets, marshy swampy area along the road.
14.	Makondo- Kapondo	7 Km	Chipamba	Ungraded gravel road, no drainage points along the road.
15.	Roasario- Ngansa	10.5 Km	Chienge	Ungraded gravel road, loose sand soils, no drainage points along the road.
	TOTAL=	162.4 Km		

Source: Chienge Town Council. (2021). Chienge District Strategic Plan 2017-2021, p.14

Table 9: Status of Chienge district roads

No. Priority	Name of the Roads	Aprox. Km	Status of the road
1	Lunchinda-Kashikishi road	140	Gravelly sand, insufficient drainages, no road formation
2.	Chienge-Kaputa Road	91	Eroding Gravel formation, insufficient drainage, gravel sand road in Lambwe chainage

3.	Mununga- Kaputa Road	130	Gravelly stone formation, insufficient drainage.

Source: Chienge Town Council. (2021) Chienge District Strategic Plan 2017-2021, p.13

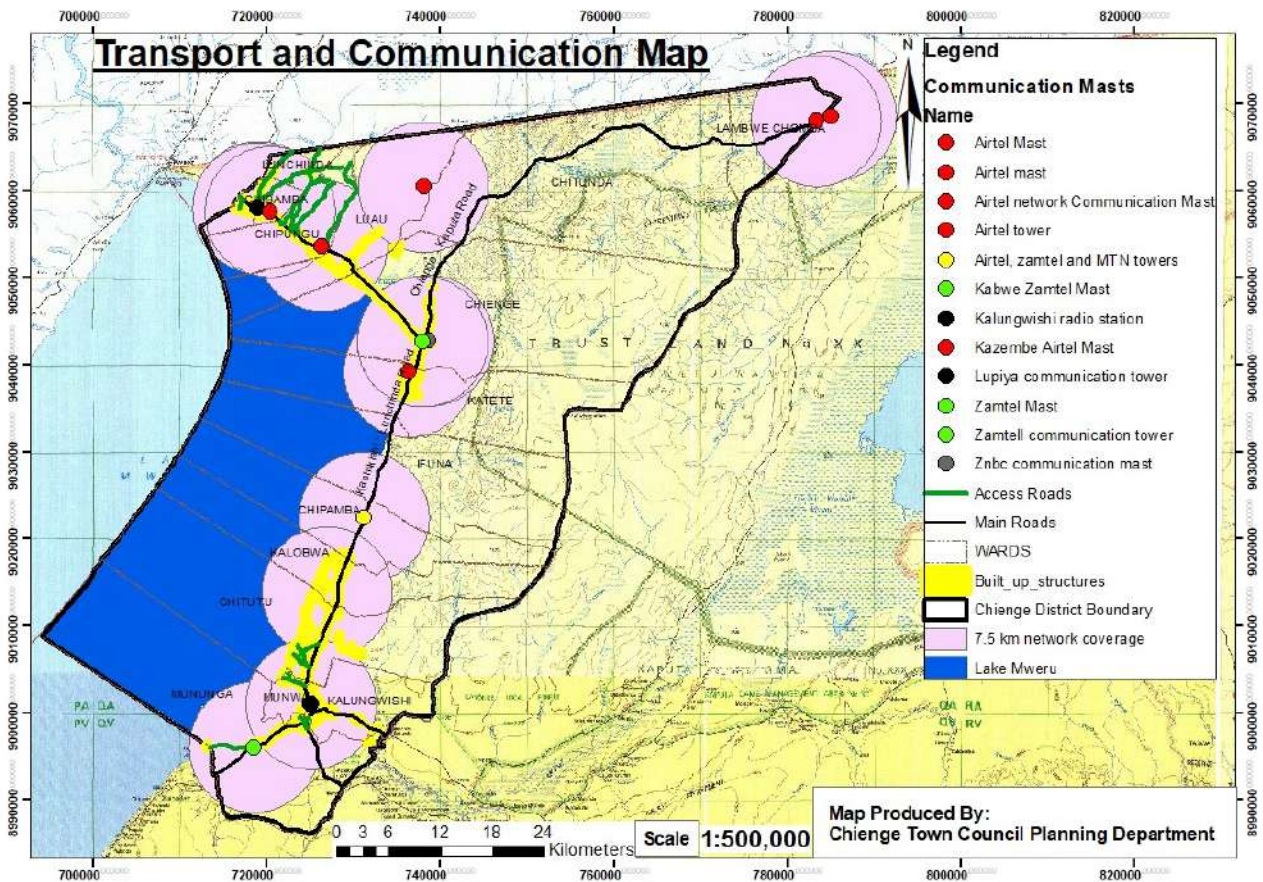


Figure 4: map Showing transport and communication situation in Chienge District: Source: Chienge District Council Planning Department

### 5.2.3 Assessment of the Overall Performance of the district

#### 5.2.3.1 *Road transportation system*

Chienge has no formalised road public transportation system with the informal sector servicing the community by providing motor bikes and taxi which aid movement of people and goods. The lack of presence of regulatory bodies such as Road and Transportation Service Agency has led to unregulated transporters using unregistered and motorbikes and taxis.

#### 5.2.3.2 *Water transportation system.*

Water transportation is accessed through Lake Mweru which is mainly used for fishing by local fishermen. However, the potential for ferrying goods and passengers and tourism development remains untapped as there are no established harbours in the district. The potential to attract large vessels is still there and could offer alternative and a cheaper option to road transportation.

#### 5.2.3.3 *Aviation transportation*

Aviation transportation is not available in Chienge district. The old airstrip which in Katete ward of Chienge district was located on traditional land and has since been developed with residential plots in the last few years. Aircraft landings of helicopters are normally undertaken at school fields for any incomings.

### 5.2.4 Trend analysis and cross cutting issues

Trend analysis in all sector indicate that transportation is the life blood of the district and its current state impacts agriculture, health, education, forestry, communication, and fisheries. The transportation of agriculture produces around the farming zones such as Kapako, Mukunku and Kazembe where rice, maize and cassava produce come from is hindered by the poor state of feeder roads which affects delivery to the desired market.

The health sector uses the districts roads for maternity case referrals to the district hospital and Nchelenge. However, due to the poor state of the road, the District Health Office face challenges in transporting patients in some cases leading to an increase in infant and maternal mortality rate. Similarly, education sector is also affected by the poor state of feeder roads network lacking crossing points in certain instances and sometimes cuts off children from accessing their schools.

Forestry products such as timber, rattan and charcoal are equally affected by the poor state of the road network and as a result, forestry products take long to reach the markets. Fishermen whose

livelihood depends on the Lake use the main district roads to reach the markets but spend many hours in moving their produce resulting in delays in the delivery of their goods and in some instances, goods being damaged and ultimately losing out on income.

Local transportation for residents is characteristics by usage of motor bikes, taxis and occasionally goods trucks that access the district. Other form of transportation such as buses cannot access the district due to the poor state of the district roads, which cause damage to vehicles, this leads to low economic activity, which is an opportunity cost to those in business and connecting to the rest of the country. Aviation and water transportation have no significant impact on any other sector as they are non-existent but their potential could enhance them with provision of alternative transportation. This has resulted in mushrooming informal settlement patterns around the beachfront where infrastructure such as harbours should have been established.

Table 10: Cross cutting issues in the transportation sector for Chienge.

Name of Ward/ Population	Name of road/lake/air strip.	Category	No. of Health facilities accessing the road	No. of agriculture produce transported	Tonnage of fish transported	No. of forest products/by products	No. of schools accessing the road	Climatic Impact.
Chienge/ 15,131	Ngansa-Rosario Road	Feeder road	0	Maize, Cassava, groundnuts	0	Charcoal, Timber, Wood	0	Erosion, Deforestation
Chipamba / 10,237	Mukondo-Kapondo	Feeder road	0	Maize, Cassava, Groundnuts	0	Charcoal, Timber, Wood	0	Erosion, Deforestation
	Chipamba-Chipamba Fishing Camp	Feeder Road	0	Maize & Groundnuts	2 tonnes	0	0	
Chitutu/ 15,655	Sambula-Lamba	Feeder road	0	Tumeric, maize, Cassava	2 tonnes	0	2 school	Erosion
Luau/ 7,325	Lushiba via Maoma	Feeder Road	0	Rice, maize, Groundnuts, cassava	0	Charcoal	1 school	Erosion
	Mwabu via Kasase Swali	Feeder road	0	Maize, Groundnuts, Cassava	0	Rattan, timber, charcoal	3 schools	Erosion, deforestation

Mununga/ 13,938	Senior Chief Mununga Palace- Kapako Resettleme nt Scheme	Feeder road	2 facilities	Maize, rice, Groundnuts, cassava	1 tonne	Timber & charcoal	2 schools	Erosion,
Munwa/ 5,337	Musolo- Kafulwe Fishing Camp	Feeder Road	1 facility	Tomatoes, maize	10 tonnes	NIL	1 school	Erosion
Ifuna/ 10,984	Kasote- Kasote Fishing Camps	Feeder road	0	0	20 tonnes	NIL	0	Erosion
Kalungwis hi/ Chitutu 18,157/15, 655	Chishipula Via Mipa East via	Feeder Road	0	Maize, groundnuts, Cassava	NIL	Timber, Charcoal	2 schools	Erosion, Deforestati on
Kalobwa/ 11,812	Kalobwa to Botoman	Feeder Road	0	Maize	8 tonnes	Charcoal	1 school	Erosion
Lambwe Chomba 2954/	Lambwe Chomba – Chipundu	Feeder road	1 facility	Maize & Cassava	NIL	Charcoal	1 school	Erosion. Deforestati on
	Lambwe Chomba – Musangu	Feeder Road	0	Cassava & maize	NIL	Charcoal	1 school	Erosion. deforestati on
Chipungu/ 18,546	Mukonta via Mukunku-	Feeder road	0	Cassava & maize	NIL	Charcoal & Timber	3 schools	Erosion, deforestati on
Lunchinda / 12,413	Futu – Lubambe	Feeder road	1 facility	Maize,Grou dnuts,Cassa va	NIL	Charcoal & Timber	2 schools	Erosion, deforestati on
Chienge/ 15,131	Unnamed	Townshi p Roads	1 main Hospital	Maize,Cassa va	0	0	1 school	Erosion
13 wards except Lambwe Chomba & Chitunda/ 183,166	Kashikishi Lunchinda	District road (D79)	17 facilities	Cassava, maize, Groundnuts, rice	>1440 tonnes	Timber,ratta n, Charcoal, Wood,	68 schools	Erosion, land degradatio n

Chienge, Chitunda Lambwe Chomba/ 196,620	Chienge-Kaputa	District road	1 main hospital, 4 facilities	Cassava, maize, Groundnuts,	>72 tonnes	Timber, Charcoal, Wood	18 schools	Erosion, land degradation, deforestation
Kalungwishi/ 18,157	Mununga-Kaputa	District road	1 facility	Cassava, maize, Groundnuts,	>144 tonnes	NIL	4 schools	Erosion
All wards except Lambwe Chomba & Chitunda/ 183,166	Lake Mweru	Water transport	0	0	>5 tonnes	NIL	0	NIL
NIL	Airstrips	Aviation	0	NIL	0	NIL	0	NIL

Source: Chienge Town Council (2022).

### 5.3 Assessment of the availability of Services Relevant to the transportation sector and identification of communities who do not have access to basic services and facilities

The Public Roads Acts No.12 of 2002 chapter 13 & 14 provides that “the service and provision of roads such as urban and rural roads shall be administered by the local authority subject to direction of the Agency to maintain and construct aforementioned roads” (p.273-274).

Water transportation is regulated by Maritime and Inland water department and the Marine unit of the Zambia Police under Cap 466 of the Laws of Zambia lack of vessel inspectors make navigation risky and its implementation (2019 National Transportation Policy, 2019(p.5).

Further, aviation sector is governed by Aviation Act No. 5 of 2016, which provides for the establishment of the National Civil Aviation Security Committee, Aircraft Accident Investigation Board and Transport Health Board. As of 2019, the government had not yet established an institutional framework for administration and management of provincial and district aerodromes (p.3).

The service provision at National level for district roads has not been consistent for Chiengwe District with works having commenced on the three (3) main district roads in the last ten (10) years but due to lack of funding led to the abandonment of the projects; leaving incomplete works that are characterised by lack of road formation works and drainages leaving the roads in worse state than before.

Urban (Township) roads and feeder roads still lack maintenance and construction despite the mandate given to the local authority due to lack of funding.

Water transportation has serious challenges in the district with the only vessel of the Zambia Police unit still broken and docked at the station. There is no proper regulation of the maritime to the level and standards as prescribed in the law. The only established airstrip in Katete ward has since been encroached, with residents building and occupying the land. In addition, the district faces a challenge in institutional framework to re-establish the airstrip in the district.

#### 5.4 Assessment of the Quality of Services Relevant to the transport sector compared to Key Indicators of Performance and Historic Performance and identification of shortfalls.

The quality of services is analysed over the last five years with each category in the transport sector measured by indicator baseline against historical target indicator.

Table 4 shows the quality of services in the transport sector against key performance indicators, historic performance, and identification of shortfalls (2017-2023) in Chienge district. It is observed that approximately 210 kilometres were worked on owing to challenges such as funding, under budgeting, incomplete works and poor project management. The works on districts roads remain in deplorable state.

Similarly, out of the 45 kilometres, only 6 kilometres was attended to with shortfalls in quality owing to lack of funds and earth moving equipment, low-capacity building. The same can be said for 162.4 kilometres.

The quality of Water transport services is negatively affected by a lack of an established maritime strategy, lack of presence by Mweru Lake authority and Maritime infrastructure. Similarly, the aviation sector is negatively affected by encroachment, lack of identifiable land for the aerodrome space to establish the airstrip within the district.

Table 11: Quality of services in transport sector

S/N	Categories of road in Chieng district	Indicator (kilometres of maintenance, care, & construction)	Baseline of Indicator	Historic target	Shortfalls in the quality of service
1.	District roads	361 km		Aprox. 210 Km	Lack of funding, under budgeting of projects, incomplete works, poor communication, lack of stakeholder engagement, lack of audit, poor contract management.
2.	Township roads	45 km		6 Km	Lack of funds, Lack of earth moving equipment, Low-capacity building,
3.	Feeder roads	162.4km		31 Km	Lack of funds, Lack of earth moving equipment, Low-capacity building, U
4.	Water transport	NIL		NIL	No maritime strategy, Lack of Lake authority, No maritime infrastructure such harbours, dock and cold storage warehouses.
5.	Aviation	NIL		NIL	Unsecured land, Encroachment, No identifiable future aerodromes for airlines,

Source: Chieng Town Council *DDCC Reports (2022)*.

## 5.5 Assessment of the Impact of Changes Anticipated Over the Next Ten Years

### 5.5.1 Roads

#### 5.5.1.1 *Future Demand for roads Based on the Estimates of Population Change.*

With a projected population growth, there will be an increased demand for roads in the district. Roads (feeder, township, or district) connect towns and villages to other cities/towns or highways. As the population grows, the need for roads will be greater for access to markets, services, and other opportunities.

The demand for roads is influenced by changes in land use patterns such as the expansion of socio-economic activities in the district. In addition, projected changes in population growth will also affect the demand for roads.

To effectively plan for the future demands for roads over the next ten years, a thorough analysis of population projections, land use patterns, and demographic trends, and engagement with local communities and stakeholders to identify their specific transportation needs and priorities. This information should then be used to develop a comprehensive plan for the construction, maintenance, and upgrading of feeder roads, considering the anticipated changes.

#### 5.5.1.2 *Identification of communities where growth will occur and where future roads are likely to be needed.*

Predicting where growth will occur and where future roads will be needed involves analysing demographic trends, economic indicators, and land use patterns. Here are some steps used to identify communities where growth will occur and where future roads are likely to be needed in the district:

Population growth trends: the Public Health Department at the District Health office carried out an in-depth analysis of the historical and current population growth rates in the district. Areas with a high rate of population growth and likely to experience continued growth in the future were identified as follows;

- a) Chibamba
- b) Katete
- c) Chipungu

#### d) Kalungwishi

**Economic indicators:** employment data was analysed to gain insights into the contribution of employment to future road needs. Further, an analysis was done to consider the relationship between population growth rate and industrial expansion that are expanding in the identified area. Areas with a strong economy and a diverse range of industries are likely to experience growth in the future, and road infrastructure will be needed to support this growth.

**Land use patterns:** To identify areas in the district of Chienge where new roads may be needed, an analysis of the land use patterns, including the location of residential, commercial, and industrial developments was carried out.

Areas with a high concentration of development or where development is expected to occur in the future such as the four main population hubs should be prioritized for road infrastructure investment. Additionally, any significant land-use changes, such as new commercial or residential developments, should be carefully monitored as they may require new roads to support increased traffic in the district.

**Consultation with locals:** Local officials such as headmen, Chiefs, and village elders offered valuable insight into current and future development plans. They also provided information about planned infrastructure projects that were proposed but not implemented and roads that are needed to support economic growth.

#### 5.5.2 Water Transportation

##### 5.5.2.1 *Quantify Future Demand for water transportation Based on the Estimates of Population Change.*

With a projected population growth of 3.3% in a district where currently there is no water transport available, it is likely that there will be a higher demand for water transportation in the future. This requires an assessment of the feasibility and economic viability of introducing water transportation infrastructure to meet the future demand.

It is crucial to identify communities where the largest growth is expected to occur in Chienge to determine the areas where future water transportation will be needed. Water transport infrastructure

is needed if we are to meet the growing transportation demand and if we want to improve accessibility and connectivity within Chienge.

#### *5.5.2.2 Identification of communities where growth will occur and where future water transportation are likely to be needed.*

Developing water transportation infrastructure will provide a reliable and sustainable means of transportation, ensuring that the needs of the population are met and the district can continue to thrive. Two sites have been identified for the pilot development namely Puta and Lupiya. The selection of Puta and Lupiya as sites to be connected to Nchelenge through water transportation is based on a thorough analysis of the population distribution patterns and transportation needs in the district.

Both Puta and Lupiya are communities that are expected to experience significant population growth in the coming years. By connecting these areas to Nchelenge through water transportation, we can improve accessibility and connectivity within the district, which can help to support economic growth and development.

#### *5.5.3 Assessment of the Likely Impact of Ongoing and Committed Investment and Development Programmes on Land Use and Population Distribution Patterns for water transportation.*

The likely impact of ongoing and committed investment and development programs on land use and population distribution patterns for water transportation is important to consider to understand the potential benefits and challenges associated with these programs.

On one hand, investment and development can provide new opportunities for economic growth and development. For example, the development of new industries or infrastructure may attract new residents to an area, which can increase the demand for water transportation services.

While, on the other hand, there are potential negative impacts associated with investment and development, such as displacement of communities or environmental degradation at developed sites. For example, if a new industry or infrastructure project requires the acquisition of land, it may

lead to the displacement of local communities or harm the environment, which can have a ripple effect on the demand for water transportation services.

#### 5.5.4 Aviation Transportation

Based on the estimates of population change, growth patterns, and travel behaviour in Chienge District, it is likely that there will be a low significant demand for aviation transportation services in the near future. The district has a relatively small population, which is dispersed across a large area, and travel behaviour is characterized by short distances and low levels of mobility. As such, it is unlikely that there will be a significant demand for air travel for commercial or personal use.

However, it is important to note that there may be some demand for aviation transportation services for governmental use, particularly for security wings. These services may be required to transport personnel or equipment to remote locations or to respond quickly to emergencies or other security-related situations.

#### 5.5.5 Mobile Network Coverage

The inadequate mobile network coverage in parts of Chienge District such as Lambwe Chikwama, Mununga, Lambwe Chomba, and Futu etc, is a significant challenge that needs to be addressed to ensure that residents of these areas access basic communication services.

While some parts of the district already enjoy access to mobile networks, the lack of coverage in these areas can have negative impacts on socio-economic development, as well as on the ability of residents to access emergency services.

To address this issue, there is need to increase network coverage in these areas through the installation of more mobile network masts. Investing in the installation of more mobile network towers will not only improve communication services in Chienge District but also have positive impacts on socio-economic development.

It will enable residents of these areas to access a wider range of services, including mobile banking, and e-commerce among others, which can in turn improve their quality of life and contribute to socio-economic growth. Therefore, there is a need to prioritize the expansion of mobile network coverage in the district to ensure that all residents access basic communication services.

#### *5.5.5.1 Access to Information*

Access to information is essential for the social, economic, and political development of any community. However, in Chienge District, the availability and accessibility of information are limited due to lack of radio stations and poor signal coverage of the one radio station (Kalungwishi Radio) that is available. In addition, access to television stations is through satellite connections via providers such as DSTV, Muvi TV, Zuku TV and Topstar, which can be costly and inaccessible to many residents.

To address this issue, there is need for the District to facilitate the establishment of more radio stations or the installation of repeater stations to improve signal coverage. This can be achieved through collaboration with private sector players, civil society organizations, and other stakeholders to identify suitable locations for the establishment of new radio stations or repeater stations.

### **5.6 Issues arising from the Public Participation Process**

The following were the main issues arising from community consultative meetings held in Chienge District:

- The poor state of the roads is a major hindrance to accessing social and economic services such as schools, health centres, police posts, markets, and agricultural farming areas.
- The hilly terrain of the district makes road construction and maintenance a challenge
- Some areas in the outskirts of the district lack access to public transportation systems due to poor road networks.
- The lack of local broadcasting networks, which limits access to information.
- There is need to improve water transport infrastructure to ensure safe and efficient transportation across water bodies in the district.
- The absence of an airport in the district also poses a challenge for those who need to travel long distances.
- Construction of foot bridges to improve accessibility and connectivity within the district, and
- Construction of a modern market and bus terminal to provide a centralized location for trade and transportation.

### 5.7 Impact of Changes Anticipated over the next ten Years

In anticipation of the expected population growth, there is need to improve the transport and communication services in Chienge. This would require interventions and measures to meet the increasing demand in the sector.

### 5.8 Future demand for services and facilities influenced by population change

The population is expected to grow by 58.3% from 2020 to 2030, which will increase the need for accessible and well-maintained roads, requiring more resources for their construction and maintenance. In addition, the demand for telecommunication services, including mobile, radio, and television networks, will also increase, necessitating their expansion.

### 5.9 District Development Programmes

Table 12: Existing and Proposed Investment and Development Programmes

Source: Chienge Town Council (2022).

S/N	DEVELOPMENT PROGRAM	STATUS
1	Rehabilitation for 25km Feeder Road Kazembe via Mukonko	Cancelled
2	Installation of 5 new Mobile Network towers	Completed
3	Connection of ZNBC Radio 1 & 2	On-going

The status of development program in Chienge show that some projects were cancelled to due inadequate funding and insufficient progress undertaking, other were completed and some are currently ongoing.

### 5.10 Environmental and Climate Change Analysis

The transport and telecommunications sector has significant environmental impacts, particularly in terms of land use. The construction and maintenance of roads require the clearing of vegetation, which can have negative effects on local ecosystems and this contributes to climate change. Similarly, the installation of telecommunication towers often involves the clearing of land to ensure a ground is stable before erection of said tower is undertaken, which can also have ecological consequences. It is crucial to consider and minimize the environmental impact of the sector as we strive for development and progress. This can be achieved using sustainable practices, such as incorporating green infrastructure.

## 5.11 Summary

To summarize, the condition of transportation and communication in the district is unsatisfactory, and there is a need for more funding to improve the quality of service and improve the lives of the local community. The necessary investments include the construction of a bituminous road, upkeep and enhancement of current feeder road systems, and investments in telecommunication infrastructure and water transportation.

### 5.11.1 Summary of issues

- Inadequate machinery.
- Inadequate funding from government.
- Lack of skilled work force.
- Low population size in affected areas.
- Lack of alternative forms of transport such as air, water and rail.
- Lack of communication facilities
- Inadequate private sector participation in the transport sector.
- Lack of properly planned neighbourhoods

## 6 Energy Development and Environmental Management Sector

### 6.1 Key Government Priorities To Be Implemented At A Local Level

#### 6.1.1 Key Priorities of the 8th National Development Plan and implementation at a Local Level

According to the 8<sup>th</sup> NDP under strengthen climate change mitigation strategy, the strategic focus of the government is on the forestry enhancement, sustainable charcoal production, improved cooking devices and forestry fire management. This can be achieved through the following programs;

- a) Sustainable forestry management
- b) Green and renewable energy
- c) Sustainable land management

The other aspect “under enhanced natural resources management” is to reverse the growing threat to natural resources caused by habitat transformation, encroachment, uncontrolled wildfire and invasive species. As such, the major policy shift during the 8NDP will be to ban the unsustainable production and consumption of charcoal by 2025. To achieve this, there is need to put in place measures that will protect the livelihood of those in charcoal value chain and promote alternative energy sources for charcoal users.

In the energy sector, the 8<sup>th</sup> NDP under the enhanced Generation, Transmission and Distribution of Electricity in the electricity strategic area, the government has prioritized the implementation of reforms to make the sector more efficient and effective by increasing electricity generation capacity and promotion of alternative green and renewable energy sources as well as scaling up rural electrification.

Furthermore, government intends to make investments to upgrade electricity transmission infrastructure in an effort to reduce transmission losses and promote trade in electricity. To achieve this strategic areas, the following key programs are to be implemented as priority interventions in the 8NDP:

- 1) Electricity generation
- 2) Electricity transmission and distribution
- 3) Energy efficiency promotion
- 4) Off-grid energy solutions
- 5) Green and renewable energy

#### 6.1.2 Key Priorities of Sector Specific Strategies and implementation at Local Level

According to the National Investment Plan to Reduce Deforestation and Forest Degradation (2018-2022) under conservation and management of high value forest areas, the aim is to achieve a sustainable management of timber and Non-Timber Forest Products (NTFP). To achieve this, the strategy is to Identify, develop, establish and promote NTFP industry/enterprises.

The other strategy is to promote participatory approaches to local forest management in protected and open forest areas through Community forest management (CFM), Joint Forest Management (JFM) and Private Forest Management (PFM). On the other hand, the key priorities for the energy sector will be to increase electricity transmission and distribution to identified areas to simulate socio-economic development.

### 6.2 Assessment of the Existing State of Development

#### 6.2.1 Assessment of the Overall Performance of the District

The district depends much on hydropower and charcoal for lighting and heating and this has resulted into high charcoal production, which is leading to deforestation as more trees are cut down for the production.

Chienge district has one forest reserve, which is located in Mununga area six (6) kilometres from Kapako – munkombwe road. The Kalungwishi Local Forest has 102ha of land and was established by statutory instrument No. 50 of 1970 and No. 66 of 1975. Now, the forest is completely encroached due to non-boundary maintenance. The map below shows the location of the Forest that has been encroached

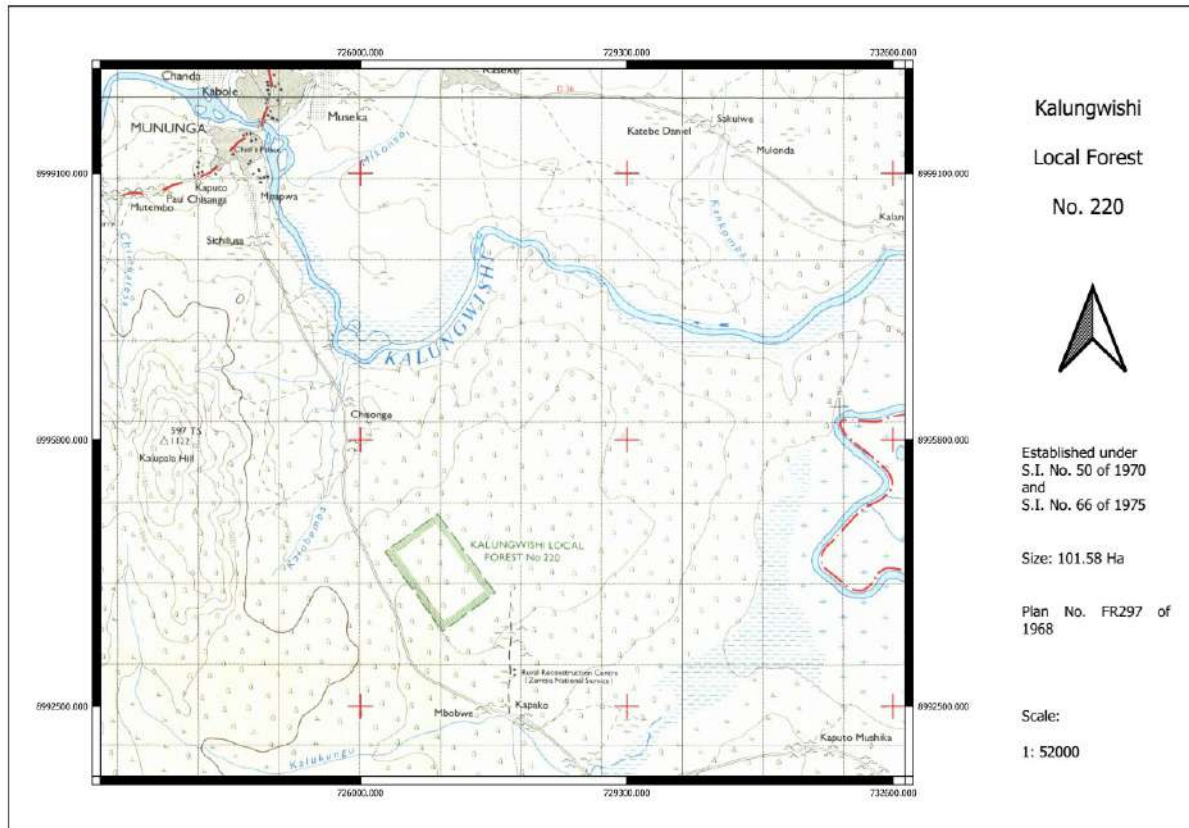


Figure 5: KALUNGWISHI LOCAL FOREST MAP.

Source: published by government of the United Kingdom (directorate of overseas Surveys) for the government of the republic of Zambia. Citation: Zambia Government 1982 Sheet no. 0929 A1

Additionally, the District has a total of 2,150 households connected to power supply by ZESCO against approximately 49, 895 households, representing 4% of the total households. Apart from the 2,150 households connected to electricity power supply grid, a considerable number of households use solar energy, domestics lighting (Candle) as well as charcoal for cooking and lighting.

Furthermore, Chiengi District has a rural electrification project by the Rural Electrification Authority (REA) covering areas like Kapampale in Kalungwishi Ward, Mukunta in Kalobwe Ward, Pondwa area in Chipamba ward, Chilindi, Kaulungombe and kangalo villages in Katete ward, lunchinda and lupiya in Chibamba ward. Once this project is completed, more households are expected to be connected to electricity power supply.

### 6.3 Assessment of the Availability of Services Relevant to this Sector and identification of communities who do not have access to basic services and facilities

Under Environmental management, the Forestry Department provides services such as issuance of permits, Compliance Check, Issuance of penalties and community Sensitization. However, the District Forestry office does not receive funds for extension services to facilitate the formation of Community Forest Management both in open and protected areas or for the formation of NTFP Enterprises. As for protection services, the Department conducts enforcement activities such as forest patrols.

The communities requiring the services of the department include areas that are very far from the Administrative Offices like Lambwe Chomba, Lambwe Chikwama, Mununga, Lupiya, Kasase and Swali. The major Challenges for failing to reach these identified areas include lack of transport for operations, inadequate funding and under-staffing as the result the department is losing revenues in these areas were even banned species like *pterocarpus chrysothrix* (Mukula) are illegally produced.

Under the energy sector, only 4% (2, 150) out of the 49, 895 households have access to electricity supply from ZESCO compared to the National percentage of 46.69% (Source: Word Bank). This means that many households currently use other sources of energy for their energy needs. In this regard, there is need for areas that are not currently connected to electricity supply to be considered for electrification. These areas include parts of lambwe Chomba, Lambwe Chikwama, chakaba, outskirts of mununga as well as kasase and Swali areas.

Additionally, several public infrastructures not connected to electricity grid; i.e. 20 out of 75 school are connected, health facilities 10 out of 16 are connected and 2 out of three markets are connected.

#### 6.4 Assessment of the quality of services relevant to this sector compared to key indicators of performance and historic performance and identification of shortfalls.

The immediate and major drivers of deforestation in areas designated for conservation and protection include unsustainable charcoal and wood production practices, uncontrolled wildfire, human settlements, and clearing of land for agricultural practices.

In this regard, sensitizing the communities and the general public through, the District multi-sectoral team, on the importance of community involvement in the management of forest resources and, sustainable use of natural resources through identification of specific target areas and formation of community forest management (CFM) groups to manage the resources in Chienge district is important.

Bringing the members of communities on Board in Forest Management instil a sense of ownership for the natural resources which in turn helps them to realise the need to protect the resources, and to use them in a sustainable manner without expecting to be paid or out of fear of being prosecuted. This will make the work of Forest Extension Officers easier as they will work in partnership with the communities, instead of seeing each other as rivals.

#### 6.5 Issues from Public Participation Process

The following issues were brought out during community and stakeholder consultations;

- a) Inadequate afforestation and reforestation practices in the District is contributing to the high levels of deforestation
- b) The uncontrollable cutting of trees over large areas for uses such as agriculture, charcoal, timber production, and fire wood is contributing to the deforestation
- c) There is a practice of uncontrollable burning of tree which destroys the bio-diversity and leads to the loss of flora and fauna.
- d) Most government facilities like schools and hospitals do not have access to electricity which limits the provision of educational and healthcare services.
- e) Several identified areas such as Lambwe Chikwama, swali, Kasase and outskirts of Mununga are not connected to the main grid.
- f) High revised electricity connection fees

### 6.5.1 Issues from Public Participation Process Relating to the Availability of Services in the Sector and identification of communities who do not have access to basic services and facilities

Issues identified from the public participation include the following:

- 1) Traditional leaders are not involved in forestry management activities such as forest reserve protection areas hence having the challenges in achieving sustainable forestry management.
- 2) Alternatives for Charcoal and fire wood meant to conserve the Natural Resources such as trees and Non-timber Forest Products are too expensive for the local people to acquire.
- 3) There is lack of street lights for security purposes, and
- 4) Inadequate electrification of essential installations such as Health facilities and Schools

### 6.5.2 Issues from Public Participation Process Relating to the Quality of Services

There is big gap between forestry polices and the communities/traditional practices. For example, according to the forestry Act, burning should be done in May and June. However, traditionally burning is done in September and October, thereby having a conflict on what is to be followed. Ignorance of the Laws surrounding the Conservation of Natural Resources by the Local People hinder their implementation.

In addition, adherence to recommended forest practices have been impacted by lack of sensitization, delays in processing of permits and arresting offenders without proper collaboration between the community and forest officers.

## 6.6 Assessment of the Impact of Changes Anticipated over ten years

### 6.6.1 Quantify future demand for services and facilities based on the estimate of population change.

It has been anticipated that due to population growth rate which stands at 4.3% annual growth rate for the 10years implementation period of the IDP, there will be too much pressure on the forest resources and products both wood and non-wood forest products for purposes of construction, lighting and warming, food gathering and medicinal herbs.

For the harvesting of wood products, this will have a serious effect on the environment if not properly managed resulting in environmental degradation and loss of forest land cover and destruction to wild life habitats.

Similarly, there will be an increase demand for connection to the main electricity grid as there is an increase in the number of households, public infrastructure, and expansion in commercial activities. Hence, the need for investment in alternative energy sources like wind, gas, solar and thermal.

#### 6.7 Existing Investment and Development Programme

- 1 gazetted forest reserve
- 2 NTFP Enterprises
- 150 customers are connected per year to Hydro power
- Rural electrification project by REA

#### 6.8 Identification of communities where growth will occur and where future services and facilities are likely to be needed.

Chiengde District has four (4) places with high population density and growth namely, Lupiya, Puta, Lambwe Chomba and Mununga. It is highly anticipated that in the next ten years the population may increase by 50% in these areas causing high pressure on Energy and Environment.

This entails that there will be an increase in demand for energy. Even people whose houses are connected to hydroelectric power still depend on charcoal for cooking causing more pressure on existing forests for charcoal production. There will be need to connect 2000 customers to hydropower and Alternative cooking (energy source) methods must be introduced to curb the pressure.

#### 6.9 Assessment of the likely Impact of the ongoing and committed investment and development program on Land Use and Population Distribution

The desire to establish community forests will have a positive impact on the land use patterns as it will promote afforestation, regenerate the environment, and provide forest cover in areas that have no cover thereby changing the current use of land to forest use.

On the part of population distribution patterns, the majority of residents have been anticipated to establish settlements around these forests in order to provide security for the forest products as they will be a source of income for the nearby community that will take ownership and management of the establishments.

## 6.10 Analysis of the Impact of Environment and Climate Change

### 6.10.1 The Impact of development Trends in the sector on the Environment and Climate Change

The establishment of Community Forests is a more than welcome aspiration as it is anticipated to contribute positively towards combating environmental degradation and climate change in that the new forest land cover will provide carbon sequestration services and forest products both wood and non-wood. There is prolonged dry spells, floods and high temperatures as the result of losing forest cover.

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

There has been evidence of deforestation and forest degradation, which are coupled with dry spells and strong winds. Late fire is currently being exerted on the forestry resources due to climate change leading to occurrences of: reduction/loss of forest cover resulting from opening up of more land or forest areas for agricultural set of rain season, high temperatures and extreme low temperatures, damage to public and private property/infrastructure which include falling of pole lines causing interruption of power to customers, soil erosion, sedimentation /siltation of water sources or bodies, dwindling water recharge and loss of bio-diversity.

There has been significant dwindling and loss of revenue by the government and by those people who mostly rely on wood and NWFPs for their livelihoods e.g., wild honey hunters, mushroom, indigenous timber traders/dealers.

### 6.10.3 Summary of Issues

- Low staffing levels
- Lack of funding
- high poverty levels
- Mining activities
- Inadequate knowledge and sensitizations on the environment
- Cost of operation by service providers is high.
- Centralization of decision making in the sector has affected connectivity.
- Deforestation
- Seasonal flooding
- Erratic supply of electricity
- Lack of electricity in selected areas
- Climate change.
- Poor infrastructure due to lack of development control

## 7 Agriculture, Fisheries and Livestock Sector

Chiengde District has been growing in terms of Domestic Direct Investment (DDI). This has been witnessed through increased citizen participation in various economic activities such as small-scale farming, trading and commerce, small scale mining and real estate development among others. This sector has highlighted various components that constitute the economic status of Chiengde District.

### 7.1 Key Government Priorities to be implemented at a Local Level

The 8<sup>th</sup> National Development Plan envisioned the agriculture sector in terms of being a diversified and export-oriented sector through increased agricultural production and productivity according to the vision 2030. The Key Priorities in line with the 8th National Development Plan for Chiengde District include the following:

- ✓ Increasing number of beneficiary farmers under the Farmer Input Support Programme (FISP) from 4,000 to 10,000 by 2033.
- ✓ 1 Farmer Training Centre constructed and fully operationalized by 2033.
- ✓ 1 Farm Block fully established and operationalized by 2033.
- ✓ 4 Irrigation schemes established by 2033.
- ✓ Staff levels increased from 66% to 100% by 2033.
- ✓ Transport situation be improved by 75% by 2033.

Under the fisheries and livestock sector, the Government has planned to increase livestock population to 6,000,000 by 2030 and increase fish population to 300,000mt by 2030. In this regard, Chiengde district has been training farmers in livestock, fisheries and aquaculture production and productivity, animal food management, good nutrition for livestock as well as trainings in early disease detection and prevention, vaccinations of chickens against New Castle diseases, vaccinations of dogs against Rabies in a bid to prevent spread of the disease to human beings. Some of these activities have been done in collaboration the National Food and Nutrition Commission under the Scaling Up Nutrition programme (MCDP II/SUN II Programme).

## 7.2 Description of the Existing State of Development and key performance indicators Availability and Quality of Service and Key Performance Indicators

In the past 10 to 20 years, Chiengde District was known to have most of the people involved traditionally in fishing unlike farming due to the availability of fish in Lake Mweru, Kalungwishi and Chipamba Rivers, which led to the depletion of fish stocks in the natural water bodies with an increase in the population. Because of this cultural background, there has been an unprecedented increase in the number of citizens participating in the farming of assorted crops and vegetables, which has further added pressure on the need for enhanced agricultural extension services as well as increased agricultural input supply to the district. The table below illustrates the crop production trends for the past 5 years.

Table 13: crop production trends for the past 5 years.  
Source: MOA (2023): Chiengde

CROP	2018		2019		2020		2021		2022	
	Ha	Yield (MT)	Ha	Yield (MT)	Ha	Yield (MT)	Ha	Yield (MT)	Ha	Yield (MT)
Maize	3,540	9,267	2,820	13,152	5,250	18,448	5,760	19,178	5,975	19,544
Rice	916	2,289	1,153	2,881	1,475	3,688	1,965	3,986	3,650	4,676
Groundnuts	1,600	4,801	2,153	6,459	2,525	7,575	2,624	7,964	2,876	8,202
Cassava	5,300	101,230	5,395	103,044	5,500	105,059	5,240	102,625	4,875	101,750
Soya Beans	90	134	65	112	60	105	63	106	66	110
Beans	300	452	287	435	283	424	285	430	287	452

Taking a particular assessment on Maize as a critical crop for the district and the country at large, it is inferred from the given crop production table that despite an increase in both numbers of production hectare and farmer participation, the overall yield is still very low per hectare as shown in the table below.

YEAR	AREA (HA)	YIELD (MT)	YIELD/HA
2018	3540	9,267	2.6
2019	4820	13,152	2.7
2020	5250	18,448	3.5

2021	5760	19,179	3.3
2022	5975	19,544	3.3
<b>AVERAGE YIELD/HA</b>		<b>3.1</b>	

Source: MOA (2023): Chiengde

According to SeedCo (2022), the yield per hectare for maize under good management is about 14 metric tons, meaning that production of maize crop is below expected standard. As government aims to increase

production and productivity in the agricultural sector through creation of an enabling environment for private sector growth by providing a stable policy with emphasis on easing of restrictions on exports of agricultural commodities and facilitating access to finance, there is need for the district to enhance its agricultural service delivery to increase yields from the current 3.1 metric tons (62 x 50kg bags) to about 5 metric tons (100 x 50kg bags) per hectare by 2033

In addition to the above-named crops, the district farmers are also involved in the growing of a variety of horticultural crops such as Chinese, Rape, Cabbage, Onion, Tomato and Eggplants among others. The district is further endowed with favourable weather conditions for fruit production with most common grown ones being Bananas, Mangoes and Oranges.

On the other hand, Livestock production is the main activity for management of various animal production as the main source of animal proteins for human population. Among the available animals in the district include Donkeys, Goats, Sheep, rabbits, Chickens and Pigs.

Table 15 number of livestock

Species	Number Of Livestock
Donkeys	04
Goats	14,822
Sheep	753

Chickens	39, 996
Pigs	1, 184

Source: MFL (2023): Chienge

With the statistics tabulated on this table, Chienge district has a lot of potential for livestock and poultry production, especially goats and chickens being dominant and as alternative source of income generation and for consumption purposes. This situation is due to cultural background as most of the in the district is native fishermen.

There are inadequate livestock production trainings in the district due to limited human resources, transport for extension officers and funding in order to enhance adoption levels in the livestock production.

On fisheries, the district has favorable potential for aquaculture due to availability of natural water bodies such as Lake Mweru, Kalungwishi and Chipamba Rivers and Luau streams.

In terms of capture fisheries and aquaculture, the table below shows the production trend from 2018 to 2022 in metric tons.

*Table 16: fisheries production trend from 2018 to 2022 in metric tons.*

<b>Year</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Production Measure</b>	<b>tons</b>	<b>Tons</b>	<b>tons</b>	<b>tons</b>	<b>tons</b>
Capture Fisheries	9,768	8,679	7,996	5,433	3,000
Aquaculture	3.5	5.1	4.7	6.3	6.2

Source: MFL (2023): Chienge

To increase aquaculture production, the district has constructed two (2) fishponds with support from UNICEF under the SUN II Programme (MFL: 2023).

This brings the total number of fishponds to 49 with total surface area of 7883m<sup>2</sup>. The district also has 45 fish cages with the 562,000 fingerlings procured in readiness for stocking.

### 7.3 Assessment of the Overall Performance of the District

The performance of the district under agriculture sector has improved due to increased number of extension officers in the district, which has led to the increase in the number of players in the agriculture sector. The district has a lot of potential to become one of the biggest contributors to the country's economic development through increased production and productivity.

The main issues currently affecting the growth of the sector the district are as follows:

- ❖ Limited access to agricultural inputs: This is due to inadequate farming input packs allocated to the district, inability by majority small-scale farmers to buy inputs at expensive price as well as the limited number of Agro-dealers in the district. This is likely going to enable increased prices of agriculture products in the end.
- ❖ Inadequate number of staff at District and field levels leading to increased farmer-staff ratio: Chienge district farmer population is growing higher alongside the general population of the district, which has been putting a lot of demand for agricultural extension services and especially in the absence of the Farmer Training Centre (FTC). Overtime, the productivity rate is likely to dwindle, as it will be very difficult for Extension officers to reach the population effectively and efficiently.
- ❖ Lack of transport at both district and field levels: This is due to non-provision/procurement of vehicles and motorbikes for both district and field officers. This has enabled officers under the sector to monitor delivery and performance of agriculture extension services as well as challenge to visit farmers for various trainings in smart agricultural practices.
- ❖ Inadequate/sub-standard staff housing units: This is due to lack of improvements in the existing housing infrastructure and non-construction of new houses for a long period, thereby resulting in demotivated staffing across the sector.
- ❖ Inadequate allocation of resources to Block and Camp support services: This results in failure to service motorbikes and access to necessary logistics for extension service delivery.

- ❖ Lack of mechanized and irrigation farming practices: This is due to cultural background and lack of investments by both public and private sectors. This has enabled limitation in land utilization and limited crop production thereby resulting in increased prices in agricultural commodities.
- ❖ Lack Agricultural, Fisheries and Livestock Infrastructure: The district has no Farmer Training Centre, no Slaughter Slabs for animals, lack/inadequate of fish ponds, incomplete Livestock Service Centre, Water Schemes, among others. This is due to lack of investments in the sector by both private and public players of which it is difficult to influence social economic change in the target citizens.
- ❖ Low levels of fish stocks and livestock: This is due to the use of inappropriate fishing gears, increased population as well as cultural background on the part of livestock. This has further led to increased demand for agricultural, fisheries and livestock extension services.
- ❖ Poor Road Infrastructure: This has negatively affected efficient and effective agricultural, fisheries and livestock extension services. It has resulted in an increased cost of most outsourced agricultural, fisheries and livestock inputs/raw materials and supplies.

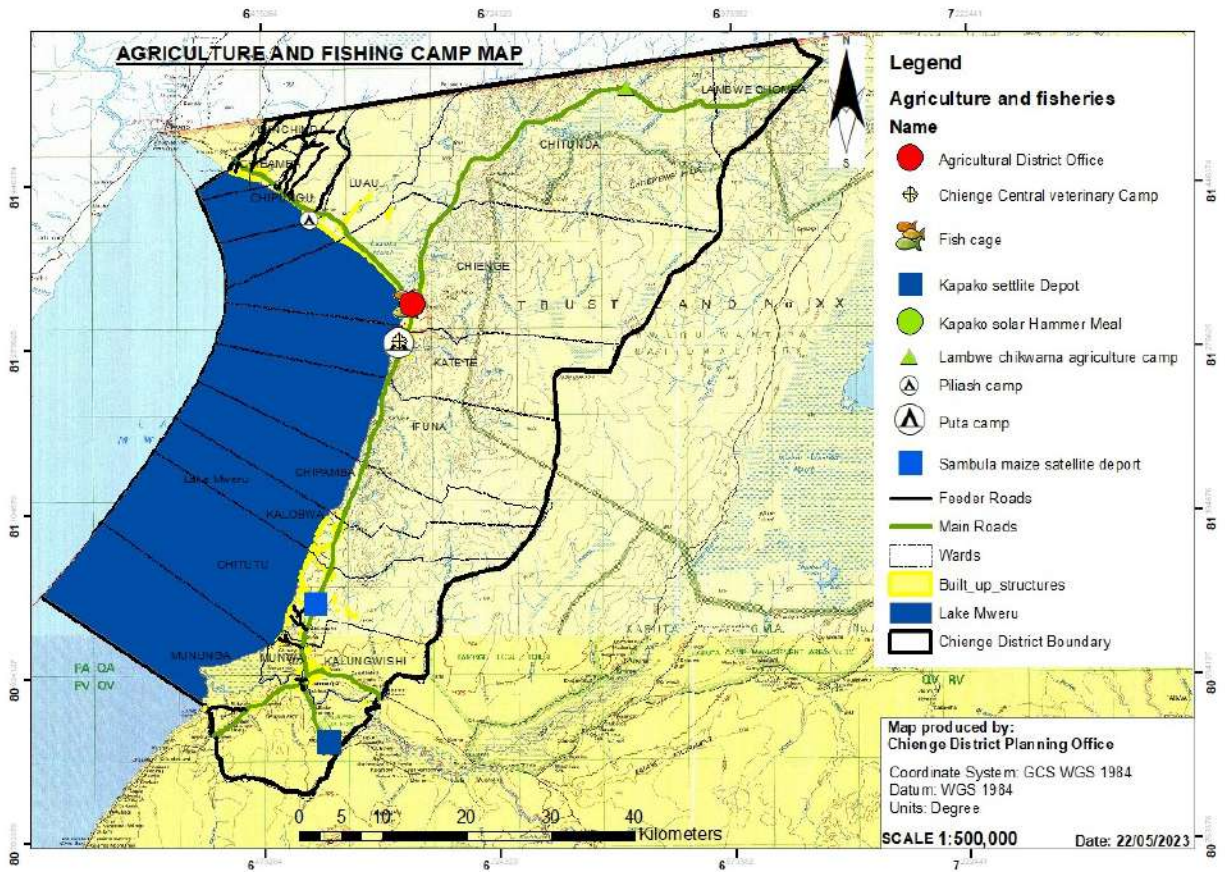


Figure 6 Agriculture and Fish Camp Map: Source: Chiengde Town Council Planning Department

In terms of actual agricultural production performance, most activities were influenced by changes in the climate patterns such as droughts in the mid of rain season and increased/unstable average temperatures. These changes have subsequently led to emergence of common crop pests such as fall and African Army Worms in Maize and tuta absoluta in Tomato. Other factors affecting full utilization of the district potential in agriculture include but not limited to over-dependency on rain fed water by small scale farmers, low access to agricultural inputs, poor extension officer to farmer ratio, lack of agricultural commodity markets and lack of access to credit and banking services.

#### 7.4 Assessment of the Availability of Services Relevant to this Sector and identification of communities who do not have access to basic services and facilities

With an increase in the population of farmers in the district over the years, it has been very difficult for the officers under Agriculture to manage farmers effectively due to limited resources and increased coverage. The district has only about 12.19% of farmers who benefit from farming

inputs under FISP the majority of which still have a challenge to access inputs as they are basically small-scale farmers. Refer to the table below for details.

Table 17 FISP beneficiary

S/N	BLOCK NAME	CAMP NAME	NO. OF ZONES	NO. OF FARMERS		TOTAL FARMERS	NO. OF FISP BENEFICIARIES	BENEFICIARY PERCENTAGE
				MAL ES	FEMAL ES			
1	MUKUNTA BLOCK	KALEMBWE CAMP	5	944	771	1715	308	17.96%
2		KALOBWA CAMP	4	990	625	1615	165	10.22%
3		MUKUNTA CAMP	4	975	760	1735	217	12.51%
4		KANYANGALA CAMP	4	655	366	1021	132	12.93%
5	KALUNGWISHI BLOCK	KASEKE CAMP	7	3562	2357	5919	583	9.85%
6		MUNUNGA CAMP	5	1038	850	1888	383	20.29%
7		KALUNGWISHI CAMP	4	987	659	1646	295	17.92%
8		SAMBULA CAMP	4	1020	742	1762	321	18.22%
9	CHIENGE BLOCK	MWABU CAMP	5	1624	1366	2990	141	4.72%
10		PUTA CAMP	4	630	445	1075	284	26.42%
11		CHIPUNGU CAMP	5	540	360	900	327	36.33%
12		CHIENGE CAMP	4	3452	2370	5822	459	7.88%
13	LAMBWE CHOMBA BLOCK	LAMBWE CHOMBA 1 CAMP	8	1686	1114	2800	185	6.61%
14		LAMBWE CHOMBA 2 CAMP	3	763	320	1083	86	7.94%
15		LAMBWE CHIKWAMA CAMP	5	490	360	850	114	13.41%
			<b>71</b>	<b>19,356</b>	<b>13,465</b>	<b>32,821</b>	<b>4,000</b>	<b>12.19%</b>

Source: Ministry of Fisheries and Livestock Field Data

Chiengde district is endowed with enough fertile land and climatic conditions for production of a variety of crops. The district has an estimated population of 32,821 small-scale farmers who are involved in the growing of various agricultural crops and vegetables (MOA, 2022).

### 7.5 Issues arising from public participation process are as follows

The issues coming from the Public Participation Process in Chiengde District include the following;

- ❖ Inadequate number of beneficiaries on Farmer Input Support Programme (FISP).
- ❖ Inadequate agricultural extension services.
- ❖ Inadequate trainings in cooperative management and entrepreneurship skills.
- ❖ Late distribution of farming inputs to farmers under FISP.
- ❖ Some agricultural camps are too big to be handled by one Camp Officer.
- ❖ Lack of adequate staff houses.
- ❖ Inadequate farmer trainings in various agricultural technologies and practices.
- ❖ Inadequate storage facilities for agricultural products.
- ❖ Lack of transport for officers.
- ❖ Inadequate Fish Farming trainings
- ❖ Inadequate fish farming inputs in the district
- ❖ Inadequate livestock extension officers
- ❖ Lack of complete Livestock Service Centre
- ❖ Lack of veterinary drug outlets.

- ❖ Lack of slaughter slabs
- ❖ Lack of staff accommodation and transport

## 7.6 Impact of Changes Anticipated Over the Next Ten Years

With the current annual population growth rate of 4.3% as recorded in the Census 2022, it is anticipated that the human population will greatly increase over the next ten years. This will subsequently add a lot of pressure on the demand for agricultural services. It is, therefore, important for the district under agricultural sector to consider increasing the number of FISP packs, creating more agricultural camps and employing more camp officers, increasing the number of marketing sheds and storage facilities, increasing budgetary allocations to support increased agricultural extension services, constructing farmer training Centre, establishing farming blocks, constructing modern staff accommodation for field officers, constructing dams and weirs, as well as provision of adequate and reliable transportation monitoring and backstopping activities.

In the bid to increase maize production yields from the current three-point one (3.1) metric tons per hectare experienced over the past five years to over five (5) metric tons per hectare anticipated over the next ten (10) years, there is need for enhancement of service delivery to farmers in various programs such as Climate smart agriculture and conservation agricultural practices.

With regards to the fisheries and livestock sector, it is anticipated that the demand for livestock and fisheries products will increase due to massive upward shift in the population levels over the next ten years. This translates into an increase in livestock and fisheries production services which calls for increased trainings in livestock and fisheries production management; increased number of fisheries and livestock extension officers, provision of adequate transport for both field and district staff, construction of necessary infrastructure such as livestock Service Centre, slaughter slabs, fish ponds, staff accommodation and increasing fish cages and fingerling production center.

### 7.6.1 Summary of issues

- Inadequate funding
- High farmer-camp officer ratio
- Inadequate farming inputs

- Centralization in decision making
- Substandard staffing houses
- Low levels of investment in storage facilities.
- Lack of agro-dealers
- Low demand of livestock farmers
- No mechanized agriculture farming methods
- Low crop and fish production

## 8 Health Sector

### 8.1 Review of Policies and Plans

In order to mitigate the challenges and improve health care services, Government has put in place several Health policies and strategies.

The National Health Policy, which is anchored on the vision 2030, underscores Government’s commitment to provide equitable access to cost effective and quality health services as close to people as possible in a caring, competent, and clean environment.

The policy has also taken into consideration other relevant national, regional and global health related policies, protocols and strategic frameworks such as the Sustainable Development Goal (SDGs) number 3 - Good health and well-being which “ensure healthy lives and promote wellbeing for all, at all ages”. Much emphasis has also been placed on promotion of good health through the development of the National Health strategic plan 2017-2021. At the district level the development of MTEF Action plans target to actualize the fulfilment of all outlined government health policies.

### 8.2 Description of the Existing state of development

#### 8.2.1 Availability of the Services

The District is serviced by 19 health facilities comprising of 16 health centres, two mini hospitals and a district hospital situated along the Kashikishi-Lunchinda road except Lambwe Chomba Mini Hospital in Lambwe Chomba ward and Kalande Rural Health in Kalungwishi Ward. In order to bring health services as closer to the people as possible, the national standard calls for provision of a health facility in a radius of 5km families in order to achieve universal health coverage. However, in various places of Chienge people still travel long distances to access health services. Further the 1: 50 national standards on Doctor patient ratio is still not realized, there is still need for more staff in the existing health facilities.

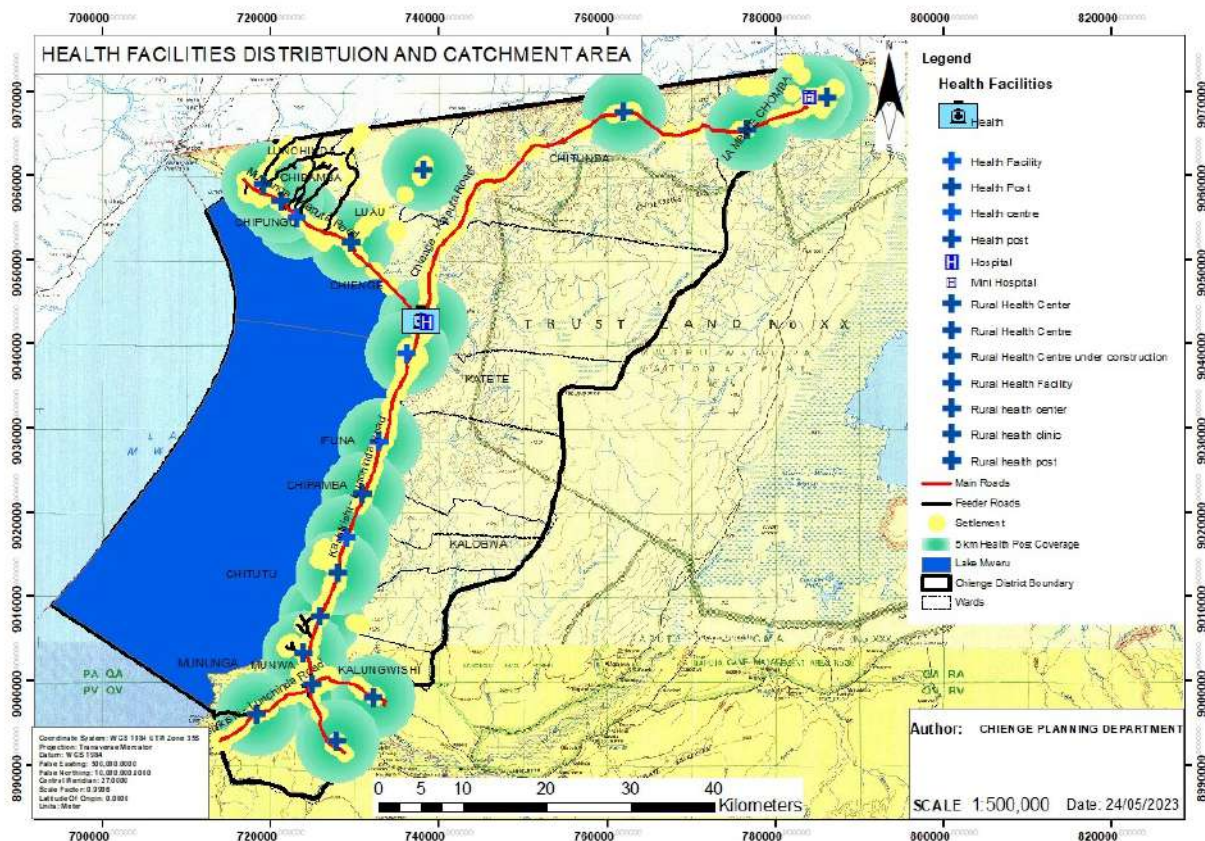


Figure 7 Health Facilities distribution and Catchment Area Map: Source: Chiengde Town Council Planning Department

**Source: ZAMMSTAT Preliminary Report 2022.**

Table 18 Health Facilities

S/N	FACILITY TYPE AND NAME	WARD
1	CHIENGE DISTRICT HOSPITAL	CHIENGE
2	PUTA RHC	KATETE
3	MWABU RHC	LWAO
4	CHIPUNGU RHC	CHIPUNGU
5	LUNCHINDA HP	CHIBAMBA
6	LAMBWECHIKWAMA HP	CHITUNDA
7	LAMBWECHOMBA RHC	LAMBWECHOMBA
8	LAMBWECHOMBA MINI HOSPITAL	LAMBWECHOMBA
9	KALEMBWE RHC	IFUNA

10	KANYANGALA HP	CHIPAMBA
11	MUKUNTA RHC	CHIPAMBA
12	KALOBWA HP	KALOBWA
13	LUKATA HP	MUNWA
14	KABOLE RHC	KALUNGWISHI
15	KALANDE HP	KALUNGWISHI
16	KABWE RHC	MUNUNGA
17	KAPAKO HP	MUNUNGA
18	TWAILETA MINI HOSPITAL	CHIPUNGU
19	SAMBULA RHC	CHITUTU

**Source: Census preliminary Report 2022**

The district is providing a range of health services such as laboratory services, PMTCT, and ART services. In addition, the district is also working with partners to improve clinical care.

It is also important to appreciate that the district is addressing socio-economic empowerment and social welfare, which can help to reduce poverty and improve the overall well-being of individuals and communities through the provision of quality health care services.

The district has one mortuary facility at the District Hospital. However, the facility needs to be properly equipped, staffed and functional to handle the needs of the community. In addition, there is need to increase the capacity of the mortuary to accommodate additional corpses. This implies more mortuary fridges to be procured to avert any challenge regarding mortuary services

The IDP will continue to address the major health concerns for our populations mainly Maternal health, Malaria which is scheduled for elimination by 2030 and HIV/AIDS covering retroviral diseases, against the backdrop of emerging non-communicable diseases such as hypertension, obesity and diabetes which have begun to show an increase in the number of cases.

In addition, the DHO commits to undertaking environmental health and surveillance activities for preventing the occurrence of any outbreak. It is the expectation of the government that the issues

aligned to environmental health and sanitation continue being addressed in the district in order to have societies that are free from water borne diseases such as cholera and typhoid. It is further envisioned that global threats of Ebola, which have in the recent past terrorized the communities of West Africa and Poliomyelitis diagnosed in neighbouring Congo DR, continue receiving adequate attention to prevent any outbreaks in the district as evidenced by the confirmation of one case of polio.

### 8.3 Quality of the Service Including Key Indicators of Performance

The quality of health service delivery in the district is generally good, despite the challenges faced. It is important that qualified health professionals staff each facility, but it's also crucial to address the challenges of low staffing levels, inadequate medical equipment, and infrastructure to ensure that high-quality care can be provided consistently across the district.

The district is divided into three ambulance service zones namely Lambwe Chomba, Kabole and the District Hospital to ensure proper supervision, and coordination of ambulance services effectively, which can ultimately lead to improved service delivery. It is important to regularly monitor key health indicators and performance indicators to track progress and identify areas for improvement.

Overall, the district is taking a comprehensive approach to healthcare, addressing both clinical care services and socio-economic factors that affect health outcomes. The tables below show the key performance indicators.

Table 19: Key Performance indicators

	INDICATOR	2020		2021		2022	
		Target	Achieved	Target			Target
1	% under one fully immunised (0-11	100	139	100	11	100	98

	months)				0		
2	% BCG coverage	100	115	100	138	100	98
3	% new family planning	60	12	80		50	39
4	% pregnant women who received ANC 1+	100	67	100	73	100	74
5	First Antenatal Coverage before 14 weeks	80	79	85	80	75	73
6	% of pregnant women who received FANC	100	100	100	100	100	100
7	Deliveries conducted by skilled providers	100	98.7	100	92.7	100	99.3
8	% of functional B-EmONC facilities	100	100	100	100	100	100
9	% of women attending postnatal cares visit within 6 days.	90	89	96	90	80	78
10	% infant born to HIV+ mothers receiving cotrimoxazole prophylaxis at six weeks	100	100	100	100	100	100

**Data source: HMIS reports/DHIS2- 2020, 2021 and 2022**

Note that, while other indicators are performing well, follow up on ANC coverage remains a challenge due to myths and misconception. However, the district is sensitizing the communities to curb the situation. Consistent provision of some medical supplies has been a challenge in achieving the goal of quality health services.

Table 20: Demographic Profile

Category	2023		2024		2025	
	Number	%	Number	%		%
Children 0 – 11 Months	6642	4	6908	4	6,945	4
<5 Years	38318	20	45981	20	34,723	20
5 – 14 Years	73576	29	94913	29	50,349	29
Women 15 – 49 Years	50268	22	61327	22	38,196	22
All Adults 15 Years+	176851	50	265276	50	86,809	50
Total Male (All ages)	163597	49	243760	49	85,072	49
Total Female (All ages)	274850	51	415023	51	88,545	51
Total Population <sup>VI</sup>	163333	100	168396	100	173,617	100
Population Growth Rate	3.1	3.1	3.1	3.1	3.1	3.1
Expected Pregnancies	8820	5.4	9093	5.4	9,375	5.4
Expected Deliveries	8003	5.2	8757	5.2	9,028	5.2
Expected Live Births	6533	4.95	8251	4.95	8,507	4.95

Source: ZAMSTAT Census preliminary Report 2022

#### 8.4 Issues arising from the Public Participation Process

The stakeholder’s consultation process brought to light the following issues:

- ❖ The need for Health Facilities, which would match the current and projected population.
- ❖ The existing 19 Health facilities are inadequate to service the district. More health facilities are required to meet high demand for health services.
- ❖ There are several challenges, which include low staffing levels, inadequate medical equipment, transport, and infrastructure among other leading to poor health delivery.

- ❖ The quality of health service delivery in health facilities is generally good as a qualified health staff operates each health facility.
- ❖ Some communities walk long distances of 20KM to reach the nearest health facilities and yet the national standards state that every area with required population should have a health facility in the radius of 5km from the other health facility.
- ❖ The need for maternity wards and mothers' shelters to be constructed at health facilities to reduce home deliveries and infant mortality.
- ❖ Most of the health facilities have inadequate wards and maternity wings for admission of critical patients and pregnant mothers,
- ❖ Some facilities that have wards and maternity wings still have a challenge with beds, linen, and mattresses for patients.
- ❖ Health Facilities usually stock out of essential medicines compelling patients to look for pharmaceutical shops where to buy medications and yet these shops are few.
- ❖ The facilities also have no adequate Health Care Workers as per establishment for proper patient flow management.
- ❖ There is need to construct more wards and maternity annexes in 16 Health Facilities.
- ❖ Some facilities in the district have no electricity and still dependent on solar power.
- ❖ The community members also showed concern on staff altitude towards work, most Health Care Workers report late for work, which is causing delay to attend to patients.

## 8.5 Impact of Changes Anticipated Over the Next Ten Years

### 8.5.1 Population Change – Future Demand for Services and Facilities

The district population, according to ZAMSTATS 2022 Census, is at 189, 893 for 2023. In order to cope with the increasing district population projected at 289,451 people by the year 2030, the district will require 40 health facilities to meet the demand as seen by the steady annual growth rate. Additional health facilities will be required in the hard-to-reach areas. Densely populated areas will need expansion of the existing health facilities and provision of more health personnel.

The district largely depends on onsite excreta disposal and as a result, this will have an effect on the underground water, which may become contaminated with faecal matter and lead to outbreaks of diarrheal diseases.

The district has four (4) major zones with high population growth; Puta with 32,282, Lunchinda with 22,787, Mununga with 17,090 and 17, 090 ZAMSTATS population for 2023. These are the areas with high priority for provision of future services and facilities; this entails provision of health centres for every 5000 population

The district's epidemiological profile has been characterized by high prevalence and impact of preventable and treatable communicable diseases. Among the major factors leading to the high disease burden is the persistence of infectious diseases such as malaria, HIV and AIDS, pneumonia, and tuberculosis (TB), bloody and non-bloody diarrhoea with Hypertension being the major prevalent non-communicable disease. Statistically malaria incidence rate is currently standing at 672.4/1000 and TB Cure Rate from 60% in 2022 respectively

In terms of major diseases of public health concern, the incidence of malaria decreased to 387.7 per 1,000 population in 2022 from 440.1 per 1,000 population in 2021, and that of TB declined to 30 per 1,000 population from 82 per 1,000 population during the same period. Further, the HIV prevalence among women and men aged 15-49 years decreased to 0.52 percent in 2022 from 0.62 percent in 2022. The malaria incidence rate has been seen to decline due to continued provision of ITNs and application of Indoor Residual Spraying.

The district recorded 376 COVID 19 cases in 2021 and 290 in 2022. COVID 19 remains one of public health concerns that has affected the delivery of health services.

#### 8.5.2 Existing and Proposed Investment and Development Programs

During this period there is need for high impact interventions and investment in the health system in order to cope with the current health strategies and interventions such as:

- ❖ There will be need for expansion of infrastructure and equipment, transport inclusive.
- ❖ There will be need to procure more patient linen, beds and other medical equipment for health facilities
- ❖ There will also be need to construct more admission rooms and wards for patients for all 19 health facilities

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

Some of the trends alluded to such as inadequate health equipment and manpower, health facilities, poor road network to access health services will have an impact on land use and population distributions in future. Settlement patterns will be concentrated around health facilities leading to encroachment of the health facilities. Furthermore, the Local Authority will provide land for health facilities in areas with high population density.

## 8.7 Environment and Climate Change Analysis

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

Existing trends in the health sector are characterized by lack of incinerators in all 17 health centers which negatively affect the surrounding population and the environment. Onsite waste disposal of both domestic and hazardous medical waste causes pollution to the atmosphere and underground water.

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

Climate change's impact on the health sector has been seen through changes in weather patterns that have led to the emergence of new and complicated climatic effects which include extreme heat, wildfires, drought, and extreme weather events such as flooding.

Climate change contributes to high malnutrition due to a decrease in the agro production as a result of floods and droughts. Further climate change contributes to the increased cases of malaria and diarrhoea diseases due to favourable environmental conditions for breeding of vectors. There are three most affected wards in the district namely; Lunchinda, Luau, and Chipamba.

## 8.8 Issues arising relating to gender groups and vulnerable groups

The major problem among female children are early marriages and teenage pregnancies. Adult women are prone to gender-based violence and divorce. The district has no social amenities for the physically impaired members of the community. This is also observed in the construction of most public buildings where there is no provision that enables the physically challenged to have easy access.

The District health management information system also revealed that the prevalence of HIV/AIDS is higher for women than men because of women's limited decision-making power on their sexuality and health. The top priority interventions for women were the construction of maternity and mothers' shelters, which are not adequately provided throughout the district. Concerns on unsuitable health infrastructure towards differently disabled persons were raised and proposals to provide ramps, wider entrances and suitable toilets were made. ***Statistics on HIV levels between men and women***

#### 8.9 Consideration of the underlying factors contributing to issues identified

Inadequate funding and deployment of resources are contributing to the challenges in the district's health sector. Adequate funding is essential to ensure that health facilities have the necessary infrastructure, equipment, and staff to provide quality services to the population.

The sparsely settled pattern of the district is also a challenge, as it makes it difficult for health facilities to cater to the 5-kilometer radius prescribed by law. This may require innovative solutions, such as mobile clinics to ensure that people in remote areas have access to healthcare services.

The health sector needs increased funding and resources to address these challenges. Additionally, it may be necessary to explore alternative models of service delivery, such as public-private partnerships, to address the resource gaps

#### 8.10 Summary

Despite the 19 Health facilities, with population projection of 289,451 people by the year 2030 and the IDP in place, the district is taking steps to ensure effective service delivery for its growing population through the monitoring of catchment areas and the provision of health services at regular intervals.

The district is working to meet the requirements of the law regarding the availability of health services. Providing access to quality healthcare is essential to achieving SDG number 3, which aims to promote healthy lives and wellbeing for all.

By improving access to health services, the district is taking an important step towards achieving this goal. Continued monitoring and evaluation of the district's health services will be important to ensure that they are meeting the needs of the population and addressing any gaps in service delivery. It is also important to involve community members and stakeholders in the planning and implementation of health programs to ensure that they are culturally appropriate and effective.

#### 8.10.1 Summary of issues

- Low participation by private sectors in healthcare service delivery
- Inadequate funding
- Low staffing levels
- Centralization of decision-making.
- High Doctor Patient ratio
- Inadequate medicines and medical supplies in the health facilities
- Lack of maternity wards.
- lack of access to electricity
- inadequate health facilities
- inadequate in ambulances
- inadequate mortuary facilities
- poor road network affecting delivery of healthcare services

## 9 Education Sector

### 9.1 Review of policies and plans

The revised curriculum framework of 2013 provides for both quality and access to education. The framework provides for the strengthening of guidance and counselling, adult education, early childhood education, morals and values and practical subjects for life long skills.

All the provisions of the framework are being implemented at the district and are in line with SDG No. 4 which seeks to ensure inclusive and equitable quality education and promote lifelong learning opportunities. This is also enshrined in the country's 8th National Development Plan objectives which emphasizes developing quality human capital, including investing in quality education and skills development.

Nevertheless, a few challenges exist that hamper the full execution of the framework and most of them hinge on behavioural change.

### 9.1.1 Category of Schools in Chienge

The district has 75 schools, which are classified as follows: -

- 1) 35 primary schools running from grade 1 to 7
- 2) 19 primary schools running from grade 1 to 9
- 3) Six Combined schools (with primary and secondary sections).
- 4) 4 secondary schools running from grade 8 to 12
- 5) 30 Community schools
- 6) The district has also 36 ECE Centres, which are annexed to existing primary and Secondary school (Meaning they are not independent structures), but the existing classrooms have been turned into ECE classes).

The above numbers are below the set targets at provincial and National level.

In order to achieve Development Outcome 1 of the SDA 2 of the 8NDP two (2) key strategies highlighted in the table below will be implemented to address the major challenges under the education sector.

*Table 21: Key Strategies to be Implemented Under SDA 2 Development Outcome 1*

<b>Strategy</b>	<b>Program</b>
Enhance access to quality, equitable and inclusive education	a) Early childhood education b) Primary education c) Inclusive education (LSEN) d) Adult literacy e) Secondary education f) Curriculum development g) Human resource development h) Infrastructure development i) ICT promotion j) Science, technology, engineering and mathematics k) Menstrual hygiene promotion
Improve technical, vocational and entrepreneurship skills	a) Technical Education Vocational and Entrepreneurship Training

	<ul style="list-style-type: none"> <li>b) Curriculum review</li> <li>c) Research and development</li> <li>d) Internship and apprenticeship</li> <li>e) Digital skills development</li> <li>f) Human resource development</li> <li>g) Infrastructure development</li> </ul>
Increase access to higher education	<ul style="list-style-type: none"> <li>a) Infrastructure development</li> <li>b) Human resource development</li> <li>c) Loans and scholarship scheme</li> <li>d) Curriculum development</li> <li>e) Private sector participation promotion.</li> </ul>
Enhance science, technology and innovation	<ul style="list-style-type: none"> <li>a) STEM</li> <li>b) Curriculum development</li> <li>c) Industry linkages promotion</li> <li>d) Science and technology infrastructure development</li> <li>e) Digital skills development</li> <li>f) Partnership promotion</li> </ul>

**Source: GRZ, 2022**

Under Strategy 1 the Government will ensure that all learners have access to equitable and inclusive quality education that prepares them to pursue higher education. This will be done through the recruitment and placement of more teachers in needy areas, provision of free education from early childhood to secondary school and provision of bursaries, using a decentralized approach. Additionally, establishment and construction of more ECE centers, secondary schools and other school infrastructure, including completion of incomplete classroom structures, and accommodation for teachers, especially in rural areas, will be undertaken. The delivery of education using ICT platforms will also be promoted.

Under Strategy 2 the main focus will be on strengthening the regulatory and quality assurance frameworks that will also cover vocational skills training establishments in the private sector. Further, there will be regular upgrading of training equipment and expansion of training facilities. In addition, the qualifications for TEVET skills will be upgraded to allow for progression.

Under Strategy 3 the main focus will be on reforms to the bursary and student loan system so that students who cannot afford to pay fees are supported. Further, in order to enhance the development of an innovative society, the bursaries and student loans will be steered towards science, technology, engineering and mathematics.

Under Strategy 4 the main focus will be on investment in research and development especially in institutions of higher learning. This will be done through utilization of various funds such as the Strategic Research Fund and the Science, Technology and Innovation Youth Fund. With the above strategies in place, the net enrolment rate is expected to increase to 100 percent by 2026 from 81.8 percent in 2020 for primary schools, while the rate for secondary schools will increase to 60 percent from 37.6 percent. The quality of TEVET services will also improve. The development of an innovative society will be enhanced.

*Table 22: Population Distribution In Schools Over The Last 5 Years*

Year	ECE			Primary			Secondary		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2018	654	788	1442	15758	14124	29909	2654	1656	3,410
2019	698	804	1452	16254	15525	31,779	2841	1865	4706
2020	745	967	1702	17324	16101	33425	2985	1987	4987
2021	996	1045	2041	18231	17824	36,145	3102	2145	5247
2022	1263	1443	2706	19632	18131	37632	3232	2228	5460
2023	1372	1764	3067	21675	19276	40951	3436	2628	6064

**Source: Ministry of Education, Chiengde District**

The source of the above information is from the statistical bulletin 2020 produced. The provincial projection against national for the above information is shown below against the respective years.

*Table 23: Population Distribution in Schools At Provincial And National Level*

Year	ECE	Province	National
2018	1442	1746	1965
2019	1452	1553	1667

2020	1702	1834	1905
2021	2041	<b>2103</b>	2204
2022	2706	2843	3019
2023	3067	3189	3213

<b>Year</b>	<b>Primary</b>	<b>Province</b>	<b>National</b>
2018	29909	3104	33997
2019	31,779	32778	34,102
2020	33425	35765	37887
2021	36,145	<b>38675</b>	40,134
2022	37632	38897	41,112
2023	40951	42987	44887

<b>Year</b>	<b>Secondary</b>	<b>Province</b>	<b>National</b>
2018	3,410	3612	3765
2019	4706	4803	4987
2020	4987	5002	5203
2021	5247	<b>5376</b>	54678
2022	5460	5578	5687
2023	6064	6189	7307

These statistics depicts that the district has been making steady improvements in terms of trying to match the targets at both provincial and national level at all the three grade levels (ECE, Primary and Secondary).

## 9.2 Key Government Priorities to Be Implemented at A Local Level

### 9.2.1 Key Priorities of the 8th National Development Plan and how they are to be implemented at a Local Level

The following government policies were reviewed: Government Vision 2030, Eighth (8) National Development Plan (8NDP) 2022–2030), Sustainable Development Goals and Education for all policy- 1992. The following priorities were identified from the reviewed documents;

- Increase the literacy rates and work towards eliminating illiteracy by 2030
- Improve pupil/teacher ratio to **40:1** at basic school compared to the current status of 80:1 at the district basic schools to **70:1** at provincial and **60 :1** at national level by 2030
- And Improve pupil/teacher ratio to **35:1** at basic school compared to the current status of **60:1** at the district basic schools to **55:1** at provincial and **50 :1** at national level by 2030
- Reduce the average distance to schools to 5 km compared to the current radius situations` which is over 5km in some zones to potential learners by 2030
- Construct, rehabilitate and maintain appropriate infrastructure in secondary and primary schools, including community schools.
- Ensure inclusive and equitable quality education and promote life-long learning opportunities for all.

Government is fully committed to ensuring the availability of education facilities and various schools have been constructed to realize these policies through the Constituency Development Fund. All the schools to provide remedial actions to ensure that learners at various levels understand the concepts taught in all the learning areas. Teachers to be encouraged to pay particular attention to slow learners.

#### 9.2.1.1 Development needs of the education sector

The plans and strategies for the education sector includes:

- 1) Construction of Primary schools in the highly populated areas like, Lupiya area, Puta area, Mukunta area, Lambwe area and Mununga areas to decongest schools such as Lambwe Chomba primary, Lupiya primary, Mukunta primary, puta primary and Mununga Primary Schools.
- 2) Construction of more classrooms at the following schools: Lunchinda Secondary, Lambwe Chomba Secondary, Mwase Secondary, Pondwa secondary, Muya secondary, Museka secondary, kantipa primary, kapampale community, Lambe Community, Sansamukeni community, Chakaba primary, Lambwe Chomba primary, Chitofwe community, Bwafwano community, Mucese community, Kanke Community, Kalwanga community, Njelesani community, Mutumpa community, Mulolwa community, Namwale community.

- 3) Rehabilitation of dilapidated Classrooms at the following schools: Kantipa Primary, Lupiya Primary, Mwabu Primary, Ponde Primary, Kalembwe Primary, Kasote primary, Chikubi primary, Lambwe Chomba primary, Chienge primary, Puta primary, Mununga primary, Kabwe primary, Kaseke primary, Kanyangala primary, Kalobwa primary, Nyamfwa primary, kafulwe primary and Kawama Primary School.
- 4) Drilling of boreholes at the following schools: Mwase secondary, Bwafwano community, Kanke community, Kabendwe community, Njelesani community, Sansamukeni community, Njikalilwa community, kalangwa community, Mulolwa community and Chikubi Primary
- 5) Construction of staff houses at the following schools: Lunchinda secondary, Katele primary, Maoma Primary, Lubambe Primary, Chitofwe community, Kasase Primary, Mwabu primary, Lambwe Chomba ii secondary, Mwase secondary, Lambe community, Kawama Primary, Chakaba Primary, Kalembwe primary, Muya secondary, Pondwa secondary, Museka secondary, Mununga secondary, Lambwe Chomba primary, Kabwe primary, Chilimba primary, Kapako primary, Nyamfwa primary, Chikubi primary, Mipa East primary, Kantipa, Kalobwa primary, Chibabila primary, Njikalilwa community, Njelesani community, Mulolwa community, Mulonda primary, Kawama primary, Bwafwano community, Sansamukeni community, Kanke community, Kafulwe primary and Kanyangala primary.
- 6) Rehabilitation of staff houses at the following schools: Kasase Primary, Mwabu primary, Kalembwe primary, Muya secondary, Chienge primary, Puta primary, Lambwe Chomba primary, Kabwe primary, Nyamfwa primary, Chikubi primary, Mipa East primary, Mununga primary, Kaseke primary, Mutampuka primary, Muya secondary, Kalobwa primary, Mununga primary, Lambwe Chomba I primary, Chienge primary, Chipungu primary, Lupiya primary, Futu primary, and Kanyangala primary.
- 7) Completion of houses at the following schools: M8ase secondary, Lunchinda secondary and Kawama primary. (The above projects will be implemented with support from CDF, and Funding from Ministry of Education.)

### **Status of Existing Plans and Strategies in the District**

Table 24: Existing Investments and Proposed Strategies

Existing Investments	Proposed Development Programmes
<ul style="list-style-type: none"> <li>● 183 Permanent Classrooms most of which have outlived their life spans</li> <li>● 285 Temporal classrooms built either with mud and unburned brick or with burnt bricks</li> </ul>	<ul style="list-style-type: none"> <li>● Construction and Rehabilitation of Classroom infrastructure</li> <li>● Rehabilitations: 40 schools</li> <li>● Constructions: 1x3CRM Blocks x2 -30 schools</li> </ul>
<ul style="list-style-type: none"> <li>● 8297 desks some of which are have missing tops and bottoms and other none</li> </ul>	<ul style="list-style-type: none"> <li>● Procurement of desks and other educational furniture/equipment-12,700</li> </ul>
<ul style="list-style-type: none"> <li>● Most schools are drawing water from either nearby stream or unprotected well and a few with boreholes and some are already defunct</li> </ul>	<ul style="list-style-type: none"> <li>● Construction and rehabilitation of water and sanitation facilities-75 schools</li> </ul>
<ul style="list-style-type: none"> <li>● Most schools have either houses that have outlived the lifespan or there is none</li> </ul>	<ul style="list-style-type: none"> <li>● Construction of staff houses-75 schools</li> </ul>
<ul style="list-style-type: none"> <li>● No school has ICT laboratory</li> </ul>	<ul style="list-style-type: none"> <li>● Construct ICT Labs in 10 secondary schools</li> </ul>
<ul style="list-style-type: none"> <li>● No STEM school in the district</li> </ul>	<ul style="list-style-type: none"> <li>● Transform one school into a STEM school</li> </ul>
<ul style="list-style-type: none"> <li>● 70 schools are implementing Home Grown School Meals (HGSM)</li> </ul>	<ul style="list-style-type: none"> <li>● Scale up the school feeding program in 70 schools</li> </ul>
<ul style="list-style-type: none"> <li>● 1 school has a boarding facility although not completed but still under construction</li> </ul>	<ul style="list-style-type: none"> <li>● Complete the construction of a boarding school and construct.</li> </ul>
<ul style="list-style-type: none"> <li>● 75 schools are implementing Free Education for All policy</li> </ul>	<ul style="list-style-type: none"> <li>● Operationalize the Free Education for All policy tool-75 schools</li> </ul>

Source: Chieng DEBS, 2023

### 9.3 Key Priorities of Sector Specific National Plans/Strategies and how they are to be implemented at a Local Level

The following are the key priorities of the sector:

- Improve performance at all levels from 72 % to 80% at grade 7, 68% to 89% at grade 9, and from 78 to 89 at grade 12.

Table 25: performance of grade 7, 9 and 12

Year/Grade	2023		
	District	province	National
Grade 7	72%	80%	85%
Grade 9	68%	85%	90%
Grade 12	65%	70%	78%

This performance will be achieved by building a strong foundation at primary school level through catch up methods by ensuring that all learners who proceed to grade five are able to read and write.

- **Improve pupil teacher ratio.**

This will help motivate teachers to work hard and will be done by recruiting more teachers in the district. The current pupil- teacher ratio still stands at 80:1 at primary school and 60:1 at Secondary school level. The ideal teacher-pupil ratio 40:1 at primary school and 35:1 at Secondary school level

- Gender Parity of Youth and Adult Learners

Gender Parity of Youth and Adult Learners out of a target of 4 centres is at 1:3. The district has a target of opening these centers in all the 8 Zones in the district to address the issues of Adult literacy.

- Improvement in the provision curriculum materials in schools (Availability of materials across all levels as regard to pupil-book ratio.)

Due to curriculum change, the pupil book ratio still stands at **1: 5** at primary school level while at secondary is at **1: 3**. It is anticipated that the situation will be normalized by 2033 where the ratio will be at **1 :1** at all levels as the standard ratios at both provincial and National levels.

- Improve skills among students.

This will be done by ensuring that schools effectively teach the vocational pathways to impart skills into the learners. The skills that need to be enhance include Home economics, Agricultural Science, Design and Technology, Music, Art and Design and Physical Education and Sport.

#### 9.4 Assessment of The Existing Performance

##### 9.4.1 Assessment of the Overall Performance of the District

Chienge district has for a long time experienced poor results in National Examinations. This has been at all grade levels where results have been consistently low over number of years and poor reading levels across all grades. The district has been looking for means and ways of improving learner performance.

Although access had improved in schools because of increased infrastructure development, there was little corresponding improvement in the quality of performance of learners that were leaving the education system.

The following are found to be some of the major causes of poor learner performance in the district.

- Poor educational management and supervisory skills at all levels (district, schools). This is causing the district performance not meeting the set targets at all levels of quality performance hence performing at lower standards and producing learners who are failing to upgrade themselves further.
- Inadequate and dilapidated office and school infrastructure. This situation is causing uncondusive learning environment, which is not favourable to both teachers and learners hence compromising the normal standards of operations.
- Inadequate desks in most schools: 2:1 desk compared to the status of 3:1 at the district, **3:1** at provincial and **2:1 and** at national level by 2030. The resultant is Low quality education service delivery, as most pupils cannot concentrate on their education due to uncondusive learning environment.
- Inadequate transport for administration leading to ineffective monitoring delivery services causing a low performance at all levels.

The national standards in education have been set as follows:

Table 26: National Standards in Education

S/N	CRITERIA	STANDARDS
1	<b>Distance</b>	Average minimum of 5km to education facilities.
2	<b>Pupil/Qualified Teacher Ratio:</b>	The PQTR is 45:1 for Basic and 35:1 for High school.
3	<b>Pupil/Classroom Ratio:</b>	National PCR is 45:1 for Basic and 35:1 for High school.
4	<b>Desk – Pupil ratio</b>	1 desk: 2 pupils (two-seater desks – Primary Section)
5	<b>Book – Pupil ratio</b>	1 book: 1 pupil

Source: Chinge DEBS (2022)

- 
- Massive transfers from the district to other Provinces
- Poor work culture among teachers, administrators, and pupils.
- Negative attitude among parents and the community towards education
- Inadequate funds to enable the office insure the operational vehicles

Despite the many challenges, the district has scored a number of successes. These include but not limited to;

- Revamped Subject Associations in the district.
- Learners who can read and write are being enrolled in examinations classes
- Identified learners with learning difficulties early and continue helping them
- Continue assessing the learners in order to determine / ascertain appropriate interventions
- Promoted class competitions in academic through
  - a. Reading competition
  - b. Essay competition
  - c. Spelling completion
  - d. Quiz and
  - e. Debate
- School administrators regulated the permission of their teachers

- Introduced Subject checklists by individual teachers for easy checking of pupils who are attending classes
- Improved Early Child Education (ECE) provision in terms of participation through establishing new ECE centres, classrooms and the general teaching and learning
- Improved Primary Education provision in terms of participation through implementation of many programs to enhance teaching and learning
- Improved Secondary Education provision in terms of participation through implementation of many programs, ranging from infrastructure development and equity programs to enhance teaching and learning
- Improved provision of Youth and Adult Education across the district through establishment of centres

## 9.5 Assessment of the existing state of Development

### 9.5.1 Assessment of Services that are relevant to the Sector and identification of Communities that are not able to access the Services.

The district has generally covered all the areas. All the communities have access to education services. However, there is need to upgrade more community schools to primary schools in some zones in order to decongest some schools like Lupiya, Puta and Mununga and Lambwe Chomba Primary school.

There is need to construct more classrooms at combined secondary and newly gazetted primary schools. However, the district still has places where schools are in distant places from the learners such as Mwabu to Kasase, Kawama to Kabendwe, Kalobwa to Kantipa, Kabwe to Kefulwa among others. These are far more than 5 km apart.

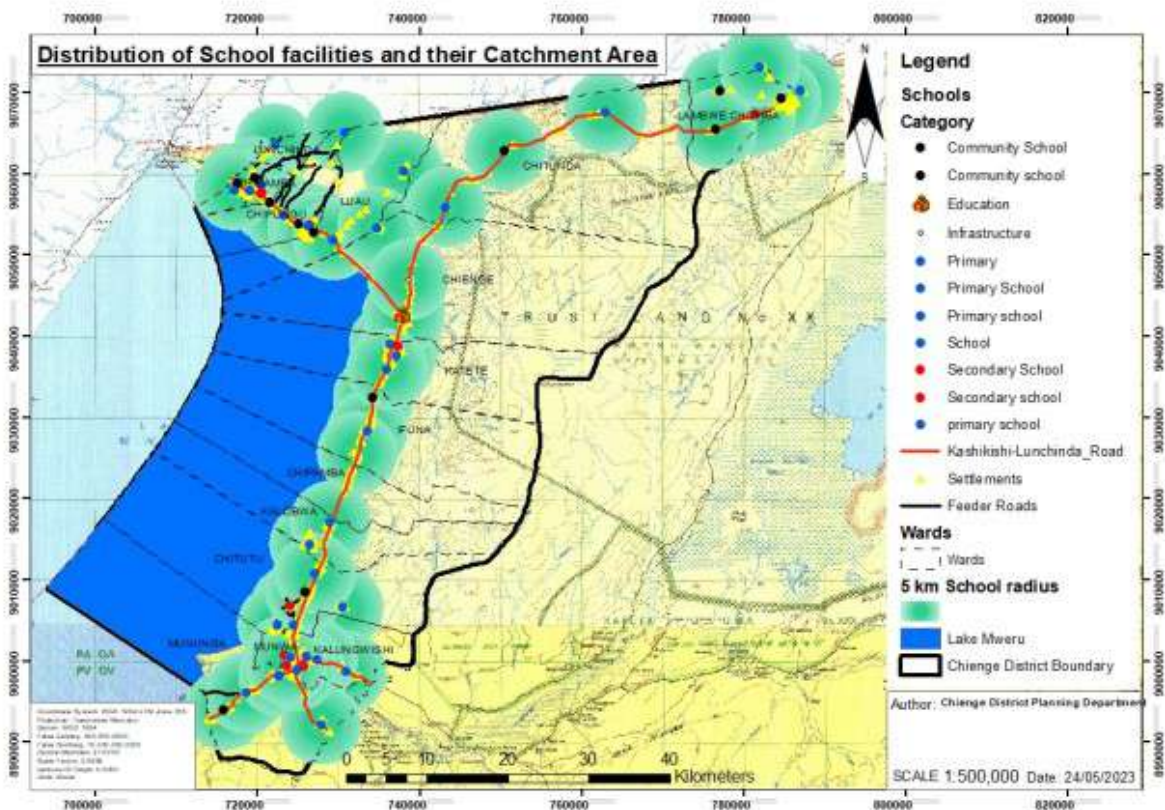


Figure 8: Distribution of School facilities and their catchment area Source: Chiengde Town Council Planning Department.

## 9.6 Assessment of the Quality of Services Relevant to this Sector Compared to Key Indicators of Performance and Historic Performance and identification of shortfalls

Table 27: % Performance In National Examinations:

Year	Grade 7			Grade 9			Grade 12		
	District	Province	National	District	Province	National	District	Province	National
2018	64.0	65	68	56.0	55	60	62.0	60	65
2019	73.0	70	69	63.3	60	65	60.7	65	70
2020	70.0	75	70	57.0	65	70	62.0	70	75
2021	72.0	76	75	68.4	70	75	64.4	75	80
2022	51.4	78	80	38.9	75	80	59.0	80	85

Source: from National statistical analysis bulletin, 2018, 2019, 2010.2021 and 2022

Table 28:% Performance In Literacy And Reading Levels From Grade 1 -4

YE AR	Grade 1			Grade2			Grade3			Grade4		
	Distr ict	Provin ce	Natio nal	Distri ct	Provin ce	Natio nal	Distri ct	Provin ce	Natio nal	Distri ct	Provin ce	Natio nal
201 7	31%	35%	40%	34%	45%	50%	41%	55%	60%	41%	45%	55%
201 8	28%	40%	45%	35%	50%	55%	36%	60%	65%	42%	50%	60%
201 9	29%	45%	50%	35%	55%	60%	40%	70%	75%	44%	55%	70%
202 0	33%	50%	55%	39%	60%	65%	45%	75%	80%	43%	60%	75%
202 1	35%	55%	60%	45%	65%	70%	45%	80%	85%	51%	65%	80%
202 2	50%	60%	65%	31%	70	75	52%	85	90	48%	70%	85%

YEA R	Grade 5			Grade6			Grade7		
	District	Province	National	District	Province	National	District	Province	National
2017	31%	40%	45%	35%	45%	50%	40%	55%	60^
2018	28%	45%	50%	39%	50%	55%	43%	60%	65%
2019	29%	50%	55%	37%	55%	60%	43%	65%	70%
2020	33%	55%	60%	38%	60%	65%	41%	70%	75%
2021	43%	60%	65%	40%	65%	70%	43%	75%	80%
2022	44%	65%	70%	42%	70%	75%	44%	80%	85%

Source: from National statistical analysis bulletin, 2018, 2019, 2010.2021 and 2022

### 9.7 Quality of service provision and Key Performance Indicators

Chiengwe District has literacy rate of 45.5% compared to the standard rate at provincial which is at 55% and 67.8% at national level respectively. This means that as a district we still very far from reaching the set targets at the two levels. The low literacy levels especially among female adults can be attributed to the following factors;

- Early marriages which make girls drop out of school during their formal school time.
- Early pregnancies leading to girl children dropping out from school.
- Culture and tradition gave preference to a boy child to go to school than the girl child
- Traditional practices such as initiation ceremonies in which girls receive marriage instructions beyond basic hygiene practices.

Youth literacy is one of the indicators used to assess the achievement of the universal primary education that is the population between the ages 15 to 24.

### 9.8 Issues arising from the public participation (Community participation)

- There is high demand on the number of keeping girls in school (KGS), Campaign for Female Education (CAMFED), Churches Health Association of Zambia (CHAZ) beneficiaries to be put on the program
- Poor road network infrastructure leading to some schools in the district
- Inadequate infrastructure for classrooms, staff houses and sanitations, laboratories especially for the upgraded Secondary schools, including that of physically challenged pupils
- Shortage of desks, chairs and tables including office furniture in most schools in the district
- Poor staffing in most of the schools leading to Low teacher -pupil ratio
- Lack of enough materials in most of the schools leading low pupil -book ratio
- Long distance to schools away from the standard 5km apart
- Inadequate funding to schools and lack of sponsorship for the vulnerable and physically challenged pupils
- Lack of early childhood stand-alone infrastructure development centres
- Lack of adult literacy programs in most zones in the district

- High dropout rates for the pupils especially the girl child
- High rate of absenteeism for the pupils
- Lack of ICT equipment in the teaching and learning of computer studies in
- No trade training schools.
- Low literacy levels
- Lack of boarding facilities

## 9.9 Assessment of the impact of changes anticipated over the next ten years.

### 9.9.1 Quantify Future Demand for Services and Facilities Based on the Estimates of Population Change

The population increase in growth centres in the next ten years will have impact on the number of services. There will be shortage of land because more industries are likely to be set up, more farming activities will be conducted due to readily available Congo DR market. Specifically, there will be more demand for the construction of more schools as the population increases.

### 9.10 Identification of communities where growth will occur and where future services and facilities are likely to be needed.

Areas, which have been identified as growth centres, include Lambwe Chomba, Lupiya, Mununga, Puta and Kalobwa area.

### 9.11 Impact on the land and population distributions pattern

The impact on the land and population distributions pattern of Chienge district is immense and the population is lightly distributed. Some places like Lambwe Chomba, Chikubi, Lubambe, Mukunku and Kapako are too remote and far from the main road hence making it difficult for the provision of Education in some cases.

To ensure that the pace of population growth is matched by adequate provision of schools, there is need to encourage village collections as ways of settlement to ease the provision of schools and ensure pupils have access to facilities

### 9.12 Impact of Changes Anticipated Over the Next Ten Years Population Change – Future Demand for Services and Facilities

From the population analysis, it is anticipated that the population of Chienge will greatly increase and this will in turn increase the demand for education facilities.

The anticipated changes will exert pressure on quality of education and services and education infrastructure as well as infrastructure development. Therefore, it is important with anticipated changes that there is need to plan for;

- More infrastructure development
- More staff recruitment to reduce on teacher –pupil ratio and hence improve quality of education
- Increase on more accommodation of staff
- Increase provision of infrastructure in schools

### 9.13 Existing and Proposed Investment and Development Programmes

- Increase access to basic and secondary education by constructing new schools per constituency
- Rehabilitating existing schools and staff houses.
- Upgrading of basic schools to secondary schools to ease the long distances
- Provision of lighting systems and learning materials for the various schools.
- Water and sanitation facilities will be provided to schools.
- Orphans and Vulnerable Children (OVC) being assisted with bursaries to attain secondary school education. The idea is to reduce the high illiteracy rates in the district.
- Recruitment of more staff to gap teacher-pupils ratio
- Construction of skills centres in the district

### 9.14 Analysis of Impact of Environment and Climate Change.

#### 9.14.1 The Impact of Development Trends in the Sector on The Environment and Climate Change

The impact of climate change has not spared any sector. In the education sector, classroom blocks and staff houses have been blown off repeatedly.

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

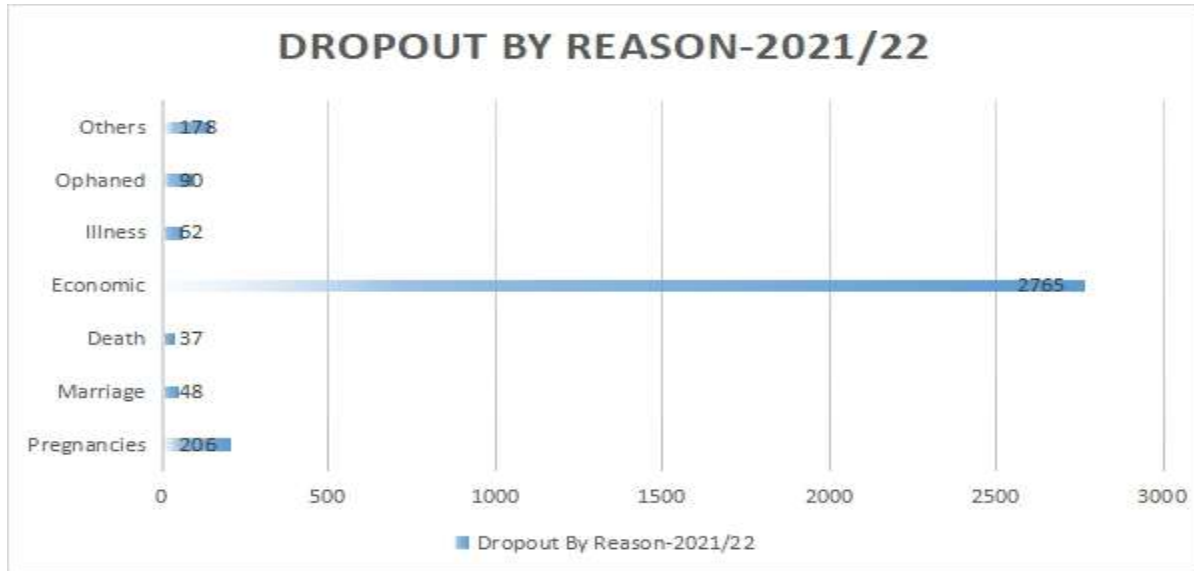
This has resulted in disturbing the learning process and is worsened by the fact that the district is a high rainfall area. This has also costed the government huge sums of money in rehabilitating Classrooms and staff houses, which could go to other needy areas. This can be shown from certain schools being rehabilitated with constituency development funds (CDF) in the district. In addition, the upgrading of structures in some community schools in the district.

Issues arising relating to gender and vulnerable groups

- Most of girls in schools are vulnerable because they are coming from vulnerable homes. However, the coming up of Keeping Girls in School (KGS) Programme to support them has brought hope. So far, 3173 girls have been captured yet to be sponsored.
- Camfed has also been sponsoring girls from grade 8 to grade 12. This year, the district has 1,234 girls on sponsorship and are yet to be recruited.
- CHAZ has also been sponsoring girls and boys inclusive from grade 10 to grade 12 in 5 secondary schools and more are being recruited. However, the district aims to have all the 10 secondary schools included.
- High Drop Out Rates
- The table below shows the number of pupils who dropped out of school due to different reasons, which among them include illness, early marriages, expulsion, economic, pregnancies, being orphaned, deaths and rural urban migration.

## Dropout Rate by reason

Table 29 Dropout by reason



*Source: Chienge DEBS, 2023*

- It is clearly deductible as shown in table, majority of learner's dropout due to economic reasons.

### 9.15.1 Summary of issues

- Over population in the school
- Inadequate funding
- Attrition
- No deliberate schools for children with educational needs
- Child early pregnancies and marriage.
- High dropout rate
- Poor attitude towards attaining education by pupils.
- Inadequate staffing
- Inadequate school infrastructure
- Inadequate skills in the district
- Low literacy levels
- Inadequate teaching and learning materials
- Lack of proper sanitation facilities in schools
- Poor road network affecting education delivery
- Lack boarding school facilities.

## 10 Water, Sanitation and Waste Management Sector

### 10.1 Review of policies and plans

The National Water Policy of 2010 is an important policy document on matters of water and sanitation. The policy aims at promoting sustainable water resources development with a view to facilitating adequate, equitable, and good quality water for all users at acceptable costs and ensuring security of supply under varying conditions. This is because it has been envisioned that Water, sanitation and hygiene (WASH) is at the centre of other important aspects of the Zambian economy such as nutrition, health, education, poverty and economic growth, urban services, gender equality, resilience and climate change.

The National Water policy also paved way for the enactment of the Water Supply and Sanitation Act No 28 of 1997, which led to the creation of the National Water Supply and Sanitation Council (NWASCO). NWASCO has been given the mandate to regulate the provision of Water Supply and Sanitation services by Water Utility Companies in urban and peri-urban areas. For rural areas, the local authorities has retained the responsibility of providing Water Supply and Sanitation Services to communities, public places and institutions.

In line with the National Water Policy and the water supply and Sanitation act, the government has been implementing water and sanitation programs in Chiengwe District aimed at ensuring universal, sustainable, and equitable access to safe drinking water, sanitation and hygiene, as well as the elimination of open defecation by 2030.

### 10.2 Key Priorities of the 8th National Development Plan and implementation at a Local Level

The Government has prioritized the promotion of investment in the water and sanitation sectors under the improved water supply and sanitation development outcome of the 8<sup>th</sup> National Development Plan (8NDP). To achieve this, the government has prioritised the provision of clean and safe water across the country, especially in districts, constituencies and wards where there have been water deficiencies like Chiengwe District. In this regard, the key measures to be implemented includes the development and maintenance of water supply infrastructure, water quality monitoring and protection of aquifers and other water sources.

Additionally, the Government has prioritised the strengthening of sewerage and solid waste management by enhancing financing to address the constraint of inadequate infrastructure and promoting sustainable sanitation practices, including personal hygiene promotion and solid waste management, among others (8NDP).

Furthermore, the Solid Waste Regulation and Management Act no. 20 of 2018 guides on the management of solid waste, especially on providing sustainable regulation and management of solid waste, general and self-service solid waste services, licensing of solid waste service providers and operators and setting approvals and tariffs for management of solid waste among others.

In this regard, the District has been drilling boreholes, constructing waste dumpsites and promotion of Community Led Total Sanitation activities, with support from Government and Cooperating partners, which saw the district attaining the open defecation status in 2014. However, more still needs to be done in the area of water supply, sanitation and waste management due to increased population and declining sanitation levels.

### 10.3 Description of existing state of development

Access to Water Supply and Sanitation (WSS) services remains low in the district. This poor record is disastrous for the economy of the district that is negatively affecting human capital development, which, in turn, creates a strain on the economy. Chiengde District has many water and sanitation needs due to a high population of 189,893 compared to 401 boreholes, which are currently servicing the people of Chiengde District. As such, insufficient boreholes, non-functional boreholes, poor management of boreholes, no piped water, no sewerage system, inadequate water schemes, high prevalence of pit latrines, and lack of hand washing facilities in selected households characterize the water and sanitation sector.

The above issues have resulted into the outbreak of water borne diseases such as cholera, low access to water supply, and long distances to water sources and poor healthcare services due to lack of water in some health facilities among others.

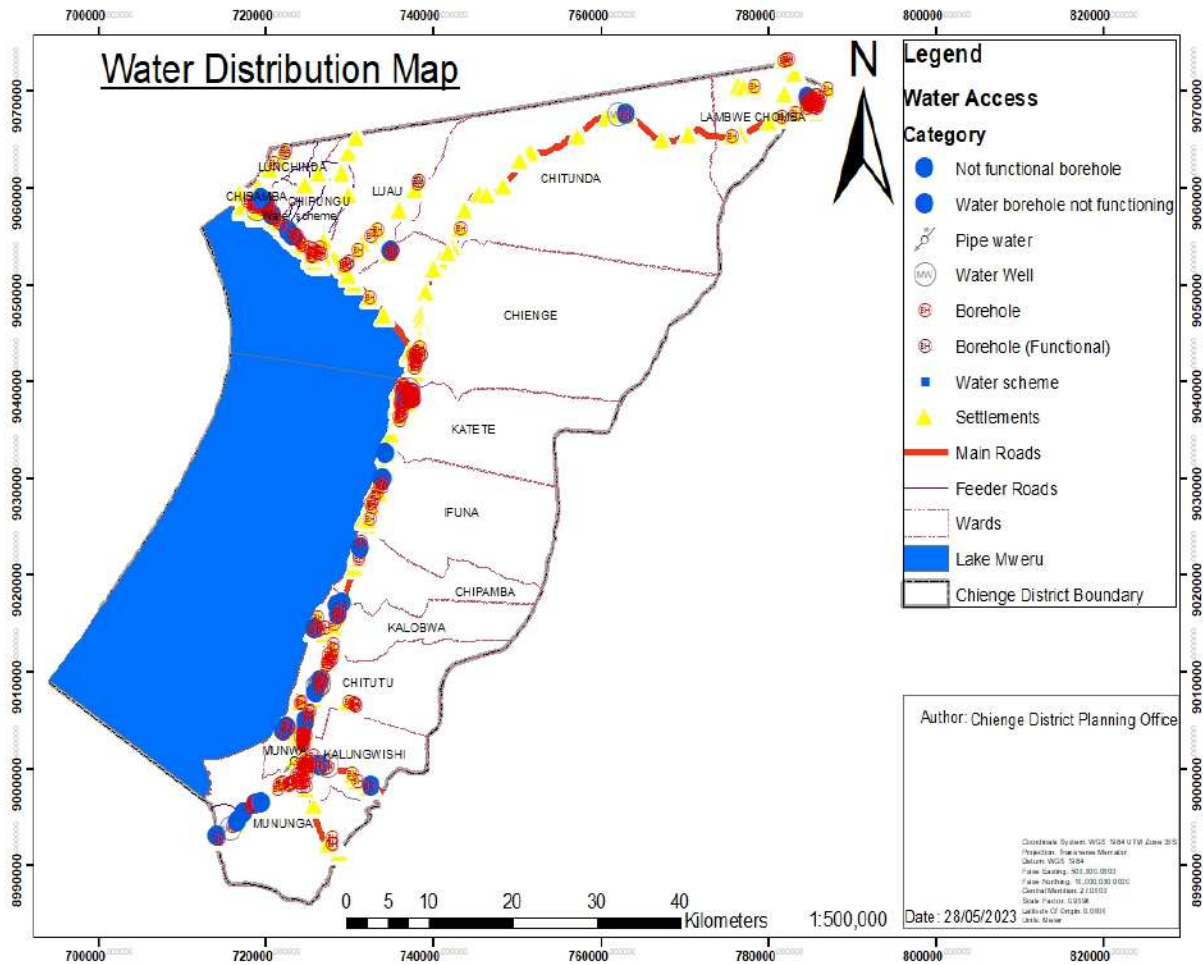


Figure 9: Water Distribution map for Chiengge District Chiengge Town Council Planning Department 2023

### 10.4 Water Supply

According to RWSS, (2023), Chiengge district has 401 boreholes. The water situation in the district has, however, not reached the desired standards as only 33% of the people have access to water supply systems while 67% of the people are either, still walking more than ten (10) kilometres to access safe drinking water or using unclean Water from sources like shallow wells, streams among others. This situation has been causing diseases such as diarrhoea, typhoid and cholera especially in unplanned settlement like fishing camps.

## 10.5 Sanitation

Traditionally, Chienge district is subdivided into three (3) chiefdoms namely Shila Chiefdom under Senior Chief Mununga, Bwile Chiefdom under Senior Chief Puta and sub Bwile chiefdom under Chieftainess Lambwe Chomba.

In terms of sanitation, the District is characterized by pit latrines and septic tanks, which is referred to as onsite sanitation. The District had no Water Utility and Sewerage Company, which made sewer services very difficult. However, recently the Luapula water and sewerage company made intentions to establish a water and sewerage office in the district. Luapula water will also provide water to the Chinese residents starting with the BOMA area and Puta area. The lack of water and sewerage in other parts of the district means that there is a high risk of underground water contamination. As such, capacity building, sensitization and awareness of Community Led Total Sanitation (CLTS) is very important so that all the actors can fully be aware of their roles and responsibilities.

## 10.6 Waste Management

Solid waste management is the responsibility of the local authority. The district collects an average of 120 tons of waste per month. Solid waste management services are provided free. However, others have resorted to alternative waste disposal methods such as digging garbage pits and burning of the waste.

Chienge district has only two private companies that collect wastes from Lambwe Chomba and Mununga. For Lupiya, Puta, and Kasembe the service is entirely provided by the local authority. The local authority collects waste mainly from public places such as markets. The district has three dumping sites namely Lunchinda Ward, Kalungwishi and Chienge Ward. Chienge Town Council is managing all the dumpsites.

In addition, there are five refuse bays dotted around the District in strategic locations such as Mununga, Puta, Lupiya, Kasembe and Lambwe Chomba for dumping of waste by the public.

In order to improve water supply and sanitation services in the district, Chiengi Town Council has been on hand to provide water and sanitation services such as the following:

- Borehole drilling equipped with hand pumps such as Indian mark 2 and Afridevs

- Construction of three Water Schemes generated by solar energy at Lambwe Chomba Refugee Entry Point, Lupiya Refugee Entry Point and BOMA Reception Centre.
- Training and sensitization of communities on Water Sanitation and Hygiene Education (WASHE) programs and activities through formation of committees.
- Training of Area Pump Menders (APMs)
- Water quality monitoring
- Training of Community Action Groups
- Training of Community Champions
- Training of EHTs

## 10.7 Quality of Service Including Key Indicators of Performance

### 10.7.1 Water Supply

To promote community health and easily accessible Water Supply, boreholes are drilled in Communal Lands so that the communities can benefit from them and a Village Water committee is formed and trained to take full responsibilities on the management of water points. Furthermore, the Area Pump Menders are trained within the district to ensure the continuous functionality of Water facilities.

### 10.7.2 Sanitation

The district is working in partnership with UNICEF and the Ministry of Water Development and Sanitation in promoting adequate Sanitation and Hygiene. Sanitation Action Groups (SAGs) and Community Champions (CCs) are being trained to campaign and sensitize the communities on the importance of having and using a latrine for excreta disposal in order to end Open Defecation (OD) in the district by 2030.

## 10.8 Issues arising from the public participation process

The following issues were highlighted during community consultations on the formulation of the IDP

1. Inadequate/lack of boreholes in some communities
2. Inadequate/lack of people to repair broken down water facilities in some Wards
3. No sustainability of water facilities
4. Need for more waste disposal bays and Willie bins especially in Puta and Lupiya wards.

5. There is need to drill more boreholes and rehabilitate the existing ones which are non-functional
6. There is need to train more Area pump menders
7. There is need to train and sensitize V-WASH Committees

#### 10.9 Impact of change anticipated over the next ten years

The population growth particularly will limit the amount of water available per person because of an increase in per capita Water consumption driven by development. Population growth will translate into an increased water demand for domestic, industrial and waste treatment, straining the local Water supply. This will also put a strain on the facilities used to supply water such as hand pumps and submersible pumps. In terms of sanitation and hygiene there will be an increased demand for sanitation facilities such as toilets and sewer systems.

#### 10.10 Existing and proposed Investment and Development Programs

The district does rehabilitate and reconstruct water and sanitation facilities through repairing of broken down Water facility mechanism, identification of Water sources, and improvement of shallow wells to protected wells and probably install a mechanism such as hand pumps. In addition, the district does construct new Water facilities. There is need to drill more boreholes in communities and construct water schemes in public places/ Government institutions.

Additionally, there is need to invest in human resource and equipment by training Area Pump Menders (APMs) and equipping the SOMAP shop respectively. Considering that on-site sanitation has negative effect on the environment especially underground water resources, there is need to invest in sewer systems. There is also need to invest in activities such as CLTS, SLTS and MLTS.

#### 10.11 The Impact of the Continuation of Existing Trends on Land Use and Population Distribution Pattern

Population growth in relation to land use in the district has resulted in increased activities such as buildings, farming and other developmental projects taking place near water sources, which affects the recharge and Water tables underground. Further, unplanned settlement mushroom near water

sources such as fishing camps. Furthermore, the direct use of water affects water quality and leads to water contamination.

## 10.12 Environmental and Climate Change

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

The effects of climate change are evident in all sectors of the district including water and sanitation sector. Because of climate change, the district experiences droughts in certain parts of the District, which in turn cause water sources such as boreholes and streams to run dry.

Conversely, heavy rainfall is being experienced in some parts of the District resulting in Floods, which is devastating some households. The Heavy Rainfall has resulted in the damage of water sources and sanitation facilities, the carry run-off water and the waste flows into streams and rivers hence contaminating the water supply.

Water scarcity, which is because of climate change, can result in an increase in the costs of accessing water and this could lead to inequitable access. This may deprive households of opportunities to collect the amount of safe water needed for proper hand washing and hygiene. Considering the fact that the households and business houses in the district have resorted to digging of rubbish bins and the burning of waste, this is an environmental concern as it contributes to air pollution. Furthermore, the indiscriminate disposal of waste contributes to land pollution.

### 10.13 Issues Related with Gender Groups and Vulnerable Groups

Limited access to water, sanitation and hygiene services affects women and children in a variety of ways. Women and girls are more vulnerable to abuse, attacks and ill health, affecting their ability to study, work and live in dignity. This is because Women and girls who have the responsibility of fetching water in most typical rural areas. This can be dangerous, time consuming and physically demanding task. Long journeys by foot often once a day leaves women and girls vulnerable and not able to participate in developmental issues. As such, Sanitation is a matter of life and death for women and girls since they have to go to a toilet outside or sharing facilities with men and boys especially in public institutions, which puts them at risk of abuse and assaults

A clean, functional, lockable, gender segregated space is needed with access to sanitary products and disposal systems for women and girls to manage menstrual hygiene and pregnancy. Lack of safely managed water and sanitation is an equality issue: Women and girls are disproportionately affected by poor water, sanitation and hygiene services and facilities. However, their voices and needs are often absent in the design and implementation of improvements, thereby ensuring their continued marginalization.

Access to water and sanitation is a human right. Where women are unable to enjoy such rights their health is profoundly affected, curtailing their educational and economic opportunities and denying them their roles in the society. Waste recycling can be an income generating activity for women. Where they can cycle waste especially the plastic and be able to make curios and other items. This can improve their income and over household income. This can also enhance the local economic development for the district.

#### 10.14 Sector Summary

The provision of Water Supply, Sanitation and Hygiene (WASH) services generates substantial benefits for public health, the economy and the environment. Wastewater treatment interventions can generate significant benefits for public health, the environment and economic sectors such as fisheries, tourism and property markets.

The main core issues in the water and sanitation sector includes insufficient boreholes, increased number non-functional boreholes, poor management of boreholes, no piped water, no sewerage system, inadequate water schemes, high prevalence of pit latrines, and few households have hand washing facilities. These core issues have resulted into the outbreak of water borne diseases, low access to water supply, and long distances to water sources and poor healthcare services due to lack of water in some health facilities among others.

Therefore, protecting water resources from pollution and managing water supply and demand in a sustainable manner can deliver clear benefits for both would-be investors in the service and the end water users.

#### 10.15 Summary of Issues

- Lack of accessibility due to poor road network.
- Presence of fish camps, which does not allow the sinking of boreholes.
- Constant reliance on donor funding for boreholes.
- Failure to meet borehole-drilling requirements.
- Adamant attitudes towards meeting borehole-drilling requirements.
- Relocation of trained Area Pump Menders (APM) for green pastures.
- Lack of funding to train APM.
- Poor attitude towards the maintenance of drilled boreholes.
- Failure to replenish the SOMAP.
- Insufficient boreholes
- No piped water supply
- No sewerage systems
- Water born disease
- High number of unplanned settlements

## 11 Governance, Law and Security Sector

The administrative structure of the district operates on a dual level, with both Central Government and Local Government playing crucial roles. At the apex of district governance sits the District Commissioner, who oversees administrative affairs. Complementing this central authority, the Local Government is comprised of elected officials and officers responsible for the day-to-day management of the district's affairs.

Currently, Chiengwe district is subdivided into (15) distinct Wards, each represented by an elected councilor. These councilors, in turn, operate under the leadership of the Council Chairperson, who coordinates the collective efforts of the council.

Furthermore, the legislative landscape was altered significantly by the Constitution Amendment Act No. 2 of 2016, which introduced the concept of Ward Development Committees (WDCs). These committees serve as the grassroots level of governance, empowering local communities to initiate and oversee development projects tailored to their specific needs and priorities.

A key aspect of the WDCs' mandate is their role as project initiators. They identify pressing issues within their respective wards and propose projects aimed at addressing them. These projects are typically funded through the Constituency Development Fund (CDF), providing communities with the resources needed to enact positive change at the local level.

### 11.1 Key Government Priorities Being and to Be Implemented at Local Level

- Zambia Decentralization Policy: This policy's main goals are to encourage responsible and open governance and enable the effective provision of services.

- The Zambia Devolution Support Programme
- Maintaining the district's law and order and preserving tranquillity (Public Order).
- Deliver justice and legal services on time.
- To assist in maintaining internal security by facilitating and controlling the movements of individuals entering and exiting the nation as well as limiting the duration of immigration.

## 11.2 Availability of Services

### 11.2.1 Security

The security services in the district are offered by the Zambia Police Services. The district has two Main police posts, one located at Katete and Mununga ward and the other at Lambwe Chomba in Lambwe Chomba ward. This development is against the population of 189,893 people and a population density of 47 Persons per square Kilometers. Moreover, these two police posts are operating in old dilapidated structure which do not even meet the minimum standard of been police posts. Additionally, there is no Correctional Facility (Prisons) in the district.

Chiengwe district is located on the northern part of Luapula province, it is bordering with the Democratic Republic of Congo (DRC) with an estimated border line of 104.2 kilometers. With this status quo, the district also has the Immigration Department. However, there are very few officers at the department execute the high demand of cross border crossings between Congolese and Zambians.

### 11.2.2 Law and Order

The district runs two Local Courts, one in Puta and one in Lunchinda, for the purpose of managing disputes and resolving conflicts. These courts hear cases that fall under their specific purviews. Cases that fall outside of the Local Courts' purview are sent to the Nchelenge District Subordinate Courts.

Given the difficulties caused by great distances, it is important to create a magistrate court that is dedicated to the trial of criminal cases. By creating a new court, the district's citizens would receive more effective and easily accessible justice while also lessening the strain on the court system.

### 11.2.3 Governance

The District Commissioner is in charge of the district's government and is in charge of its administrative activities. In parallel, the Council Chairperson leads the Local Government and is in charge of overseeing local affairs and advocating for the interests of the community. Since the

district currently has just one constituency, representation at the federal level is provided by the Constituency Members of Parliament.

The government's top priority during the Integrated Development Plan (IDP) era would be the transfer of sector functions to local authorities. The purpose of this calculated action is to improve public service delivery by locating decision-making near the impacted community. These decentralization initiatives are in line with the National Decentralization Policy, which aims to strengthen local governments' authority and expand their ability to meet the various demands of their constituency.

#### 11.2.4 Traditional Governance

Chienge district is governed traditionally by 3 Chiefs who include Senior Chief Mununga, Senior Chief Puta and Chieftainess Lambwe Chomba. The three traditional leaders are part of the district council according to the provision of the Republican Constitution. However, there is need for Chiefdoms to establish and strengthen chiefdom governance structures to promote good governance practices and improve the administration and management of customary land. In this regard, it is important to strengthen the capacity of chiefdom development trusts to promote, facilitate, manage and coordinate all developmental activities being undertaken by investors. Furthermore, the link between traditional and public governance system has also been weak. Traditional authorities in the districts have been left to the side-lines and play limited roles in the local governance system.

### 11.3 Quality of service including Key Indicators of Performance

The sector in the district is currently operating under challenging circumstances and it has not performed as per required standard due to the following reasons.

#### 11.3.1 Security

- Inadequate infrastructure for the sector. There is not police station in the district. All the 4 growth centres only have small police posts to service the growing population in the district. The police post in the Central Business district is operating from an old council building. However, the local Authority has reserved some land for the construction of a police station and a police camp. In Mununga Ward, there was a project to construct a police station however that project was abandoned
- Inadequate human resource; the district has very few police officer to service the district due to lack of infrastructure.

- Another challenge that the sector is facing is the lack of transport to conduct routine security checks. However, one police vehicle was procured under 2023 CDF which is not enough to service all the wards in the district.

#### 11.3.2 Law and Order

Court infrastructure is imperative in the dispensation of justice for creating a conducive governance environment for any developmental activities. It must be noted that Chienge district has four local courts situated in various parts of the districts that are in a deplorable state except for a local court in Lambwe Chomba which is almost recent. The other local courts are situated in Mununga, Puta, and Chipungu. However, there is serious shortage of human resources to handle a number of cases. In addition, Chienge District lacks a magistrate court to handle cases of the criminal nature but relies on a magistrate court in Nchelenge District. The lack of this important infrastructure has proven to be very costly, especially on the part of the Law enforcement agencies and complainants to follow up cases in another district.

#### 11.3.3 Impact of Changes Anticipated Over the Next Ten Years

As earlier mentioned, Chienge district is divided into four parts these include, Mununga, Lambwe Chomba, Puta and Lupiya. Due to this unique situation, the Local Authority plans to formulate local area plans in all the four centres to help manage the growth of the areas and to make service provision much easier.

With the increasing population, it will certainly result in the increased number of cases such as gender-based violence, theft among others. The two Local Courts and two police posts will not be adequate hence, need to upgrade these two institutions in the district. There is need also to establish a police post at Munkunta in order to maintain law and order near the Central part of the district.

#### 11.3.4 The Impact of the Continuation of Existing Trends on Land Use

Building immigration and security facilities is one of the first things that must be done when the Lunchinda border station is put into operation. The aforementioned growth highlights the expected rise in the need for land to accommodate these essential infrastructures.

In order to promote seamless operations and guarantee border integrity, the border post's installation will result in increased requirements for a complete immigration and security infrastructure. This covers establishments like law enforcement stations, immigration offices, and customs checkpoints. As a result, more land needs to be set aside in order to accommodate these crucial installations' spatial needs. Furthermore, the expansion of land allocation is essential not

only to meet the immediate needs of the border post but also to account for potential future developments and expansions. It is imperative to plan for adequate space to accommodate potential growth in infrastructure and operational demands as the border post becomes increasingly pivotal in facilitating cross-border activities and trade.

#### 11.3.5 Issues Arising from the Public Participation Process

I. Lack of police posts at Mukunta and Chipungu Border

III. poor and lack of local court infrastructure in Puta, Chipungu, Mununga and Lambwe Chomba

IV. Limited public participation in decision making due to lack of community halls and WDC offices.

#### 11.3.6 Issues Arising Relating to Gender Groups and Vulnerable Groups

I. Problems with gender and marginalized groups are on the rise; poverty and culture are the main causes of this. Over time, the district's current state necessitates an update in judicial and police services.

II. Because the communities in the district are traditional, many incidences of gender and sexual violence go unreported.

#### 11.3.7 Summary of Core Issues

I. Public safety compromised and restricted access to justice.

II. low level of public involvement in matters of governance

## 12 Summary of Core Issues

- Poor and inadequate road infrastructure, public transport and communication facility.
- Environmental degradation and inadequate energy sources
- Inadequate agriculture and fisheries infrastructure
- Inadequate health infrastructure and poor health services
- Poor infrastructure and poor quality of education service
- Inadequate water provision services and poor sanitation.

## PART THREE: DEVELOPMENT FRAMEWORK

### 13 Development Framework

The Development Framework for the IDP area is established in the second stage of the integrated development planning process. The aims, priorities, and strategies for the IDP area's development will be outlined in the development framework. It will outline goals and tactics for implementing the spatial development framework. The SDF's function and mission is to promote and foster an atmosphere that will enable the achievement of these goals while also ensuring that any plans are compliant with applicable laws and rules. In actuality, the SDF will serve as the basis for all decisions made by the local government on the present or foreseeable use and development of land, including infrastructure development.

#### 13.1 Defining Long Term Vision

##### 13.2 Vision

*“To be a poverty free and developed district by the year 2034”*

By 2034, the district aims to be developed and free of poverty, signifying a dedication to significant economic growth. This vision takes a multifaceted approach, seeking to promote overall development in addition to the eradication of poverty. The focus goes beyond just economic indicators and takes into account improvements in social welfare, infrastructure, healthcare, and education.

Important parts of this vision could include putting in place-focused initiatives to reduce poverty, developing long-term job opportunities, improving educational infrastructure, and guaranteeing that people have access to high-quality healthcare. Furthermore, the establishment of resilient infrastructure, such as communication and transportation networks, can promote economic expansion and raise living standards generally.

In order to fulfil the vision and encourage residents' ownership and responsibility, community engagement and participation are essential. Holistic development is enhanced by partnerships between the public and private sectors as well as non-profit organizations.

#### 13.3 Mission Statement

*Dedicated to creating an enabling environment for socio-economic development.*

#### 13.4 Main objective

*To provide an enabling environment for all sustainable developmental programs in the district through active stakeholder participation.*

## Policies to Influence development

Name of Policy	Effect on Chienge's Development
Urban and regional Planning Act (2015)	The urban and regional planning act is the principal planning instrument that guides planning in Zambia. The URP act stipulates all the necessary steps that are needed when conducting any sort of development. The URP acts provides guidance on planning agreements, which will be needed when proposing land under customary tenure for development infrastructure.
Vision 2030	The IDP will be in line with Vision 2030 and look into ways to directly support the Vision's realization. All objectives should be interconnected to promote inclusivity for all.
National Land Policy 2021	Equitable and efficient management and administration of secure land ownership for all Zambians in order to promote the district's sustainable development
8 <sup>th</sup> National Development Plan.	The IDP is required to consider the primary goals of the 8NDP when formulating its proposals in order to guarantee a spatial alignment with the national development initiatives carried out by relevant parties.
Eduaction Policy	It is necessary to rely on standards and principles that have already been established when submitting suggestions for the sector's improvement. The location of schools and access, including land for school expansion and development at all levels from early childhood education through tertiary education, are critical issues that the IDP must address. These facilities ought to be positioned appropriately to improve accessibility.
National Health Policy 2017	Every health-related proposal in the IDP needs to be properly matched with the major strategies and policies at the local level and support the country's health-related objectives.
Climate Change Policy	For the purpose of mitigation and adaptation strategies, IDP must acknowledge climate change issues. As part of the adaptation and mitigation of climate change, gender issues must be taken seriously.

### 13.5 Development Objectives, Priorities and Development strategies.

The development framework aims to outline objectives, strategies, and actions to assist in achieving the targets and emerged from the examination of the sectors included in the planning survey and problems report.

CORE PROBLEM: POOR AND INADEQUATE ROAD INFRASTRUCTURE,PUBLIC TRANSPORT AND COMMUNICATION FACILITIES									
Goal: Enhancement Of Road Development And Communication									
Objective: To Improve Road Infrastructure, Public Transport And Communication Facilities By 2034									
Strategy	Program	Activities	Location by Priority	2024	2025	2026	2027	2028	Responsible Agency
To improve transport and logistics in the district.	Road development and maintenance	Technical support training meetings in road construction and maintenance.	Chienge constituency	4	4	4	4	4	RDA,NRFA and Local Authority.
		Procurement of 18 pieces of earthmoving equipment.	Chienge constituency	1	1	2	2	2	Local Authority

		Upgrading and maintenance of 165 kilometers of feeder road	All wards	33	33	33	33	33	Local Authority	
		Construction of 370 kilometers of district roads	All wards	74	74	74	74	74	Local Authority & RDA	
		Construction of 45 kilometers of township roads.	Chienge ward	9	9	9	9	9	Local Authority & RDA	
	Public transport Infrastructure	Construction of three (3) bus stops	Kalungwishi, Katete and Lupiya Wards	0	1	1	1	0	Local authority	
		Construction of three (3) bus stations	Kalungwishi, Katete and Lupiya Wards	0	0	1	0	1	Local authority	
	Aviation development	Establishment of one (1) airstrip	Katete ward	0	0	0	0	1	Local authority	
To develop water transport on Lake Mweru and beach shores.	Water transport development	Assessment of navigation route on lake Mweru to Nchelenge and Mpweto	All wards except for Lambwe Chomba and Chitunda ward	33	33	34	0	0	Luapula river authority and Local Authority	
		Procurement of water vessels (1)	Chienge ward	0	0	0	1	0	Local Authority & Ministry of Transport & communication.	
		Establishment of water transportation authority on Lake Mweru.	Chienge ward	0	0	1	0	0	Local Authority & Ministry of Transport & communication.	
	Inland dry ports development	Construction of three (3) harbour	Chienge ward, Mununga and Chipungu ward	1	0	1	0	1	Local Authority & Ministry of Transport & communication.	
To improve communication across the wards	Communication enhancement	Installation of broadcasting & communication tower masts.	Chitunda, Lambwe Chomba, Luchinda, Chibamba, Mununga wards	1	1	1	1	1	Local Authority & Ministry of Transport & communication.	
		Construction of one radio station.	Chienge ward	0	0	0	1	0	Local Authority & Ministry of Transport & communication.	

<b>CORE PROBLEM: Inadequate access to health services</b>									
<b>GOAL: Improved access to health care services.</b>									
<b>OBJECTIVE: Construction and uprading health infrastructure and enhancing health care services</b>									
	Health education	Sensitization of the community on the importance of health seeking behaviour	All wards	4	4	4	4	4	Local Authority and Ministry of health
	Disease prevention and control	conducting immunisations, malaria prevention through use of ITNs and IRS	All health facility catchment ares	monthly	monthly	monthly	monthly	monthly	Ministry of Health
	Health education promotion and maternal Health	Drug prevention awareness	All wards	monthly	monthly	monthly	monthly	monthly	Ministry of Health
Strengthen public health		Promotion of early ANC booking							
		Procurement of 5 ambulances	Chienge District hospital, Lambwe Chomba and Twaileta mini-Hospitals, Kabole RHC and DHO, Lambwe Chikwama	2	2	0	0	4	Local Authority and Ministry of health
		Promotion of Institution deliveries							
	Mental health and substance abuse management	Holding community engagement meeting on mental health	All wards	monthly	monthly	monthly	monthly	monthly	Ministry of Health
		Early referral of complicated mental case		monthly	monthly	monthly	monthly	monthly	Ministry of Health
	Health security and surveillance	Conducting Event Based surveillance	All wards	monthly	monthly	monthly	monthly	monthly	Ministry of Health
		communiengagemnt meetinon mentalhealth							
	Family Planning promotion	Community sensitisation on the use of family planning methods	All Health facilities	monthly	monthly	monthly	monthly	monthly	Ministry of Health
		Ordering of family planning commodities	All Health facilities	monthly	monthly	monthly	monthly	monthly	Ministry of Health
	Epidermic preparedness and Control	Health Facility weekly submission of IDSR to DHO	All health facilities	weekly	weekly	weekly	Weekly	Weekly	Ministry of Health

	Health infrastructure development	Construction of 5 health centres	Lubambe, Kasembe, Kasase kamasansa and Kantipa	1	1	1	1	1	Local Authority and Ministry of health
		upgrading 4 Rural Health centres to mini-hospitals	Kabole, Puta and Lunchinda RHCs,	0	1	1	1	0	Local Authority and Ministry of health
	Human resource development	recruitment of health care workers	n all 19 health facilities	60	60	60	60	60	Local Authority and Ministry of health
To increase access to quality health care									
	Medicine and medical supply chain management	Routine ordering of medical supplies		monthly	monthly	monthly	monthly	monthly	Ministry of Health
		Procurement of supplementary drugs using 4% from the monthly grant	All wards						
	Equipment and Transport procurement and maintenance	procurement of mortorbikes	All health facilities	38	0	0	0	35	Ministry of Health
		procurement of utility vehicles	District Health office	2	2	0	0	4	Local Authority and Ministry of health
	Health Insurance Scheme	Rolling out Health insurance scheme to all health facilities		19	additional facility	additional facility	additional facility	additional facility	Ministry of Health
	Mobile Health services	conducting outreach services in all health facilities	In all health Facility catchment areas	19	additional facility	additional facility	additional facility		Ministry of Health

GOAL: ACCESS TO QUALITY EDUCATION AND LITERACY LEVELS INCREASED IN THE DISTRICT									
Objective To reduce the distance covered by pupils to access schools to 5 km by 2033									
Strategy	Program	Activities	Location by Priority	2024	2025	2026	2027	2028	Responsible Agency
Increase the number of schools to reduce distance covered by pupils	Education infrastructure development	Construction of classroom blocks	All wards	8	8	8	3	3	Ministry of Education & Local authority

Rehabilitate dilapidated classroom blocks	Education infrastructure development	Rehabilitation of existing classroom blocks	All wards	20	10	5	5	4	Ministry of Education & Local authority
Objective: To improve the living standards of Teaching staff by 2033									
Improve Infrastructure Development for Teachers	Education infrastructure development	Construction of Staff houses	All wards	4 staff houses	4 staff houses	4 staff houses	4 staff houses	4 staff houses	Ministry of Education & Local authority
Introduce boarding facilities in 4 Zones (Lunchinda, Lambwe Chomba, and mununga)	Education infrastructure development	Construction of boarding facilities	4 Zones (Lunchinda, Lambwe Chomba, Puta and mununga)	2 dormitories	2 dormitories	2 dormitories	2 dormitories	2 dormitories	Ministry of Education & Local authority
Rehabilitate dilapidated staff houses	Education infrastructure development	Rehabilitation of existing staff houses	All wards	38 houses	20 houses	20 houses	20 houses	20 houses	Ministry of Education & Local authority
Objective : To reduce the pupil teacher ratio from 80:1 to 45:1 by 2033									
Increase access to primary and secondary education	Human resource development	Recruitment of teachers	All Schools	140	140	140	140	140	HRMC( DEBS)
Objective : To reduce the pupil desk ratio from 4:1 to 1: 2 (the district has short of 8164 under primary level) by 2033									
Increase access to primary and secondary education	Infrastructure development	Procurement of desks	All schools	4054 desks	2028 desks	2028 desks			Ministry of Education & Local authority
Objective: Improve ICT in all the schools from 5% to 60% by 2033									
Enhance access to ICT education in ECE, primary	ICT promotion	Procurement of ICT facilities	All schools	500	560	560	300	200	Ministry of Education & Local authority

and Secondary schools									
Objective: Improve Youth and adult literacy levels in all the schools from 35% to 80% by 2033									
Enhance access to quality, equitable and inclusive education	Youth & adult Literacy	Establishment of literacy centers	8 zones	2	2	2	1	1	Ministry of Education & Local authority
Objective: Increase teaching and learning materials at all grade levels in all the schools from the current 4:1 to 2:1 by 2033									
Increase access to ECE, Primary and Secondary education	Curriculum Review development	Procurement of Curriculum and materials development delivery system to reduce to the normal 1:2 pupil book ratio	All Schools	all subjects	all subjects	all subjects	all subjects	all subjects	Ministry of Education & Local authority
Objective: To Improve education access to quality education in 45 schools by 2033									
Enhance science, technology and innovation	Infrastructure development	Construction of Labs in primary and secondary schools	All zones	15	15	5	5	5	Ministry of Education & Local authority
	Infrastructure development	Procurement of laboratory tools and equipment	All schools	All lab kits (10) school	All lab kits (20) school	All lab kits (15) school			MoE (DEBS)
Objective: To increase enrollment of early childhood and primary schools from 44,887 to 10,000 by 2033 and 46,870 to 65,240 respectively.									

Promote School Health and Nutrition program	Early childhood and primary education	Sensitization of the community and traditional leaders on ensuring school going children are enrolled in school	All wards	4 Meetings	4 Meetings	4 Meetings	4 Meetings	4 Meetings	LA,ComDev, MoE,FBOs
Objective: Promote school Health and Nutrition in schools									
Enhance School Health and Nutrition( SHN)	Home Grown School Meals Program	Cultivation of crop production	All wards	75 schools	75 schools	75 schools	75 schools	75 schools	Ministry of Education &Local authority
Objective: increase enrolment of girls in schools from 26,966...to...37,145 by 2033									
Engage community on enrolment of girl children and gender quality	Girl child Education	Sensitization of the community and traditional leaders	All wards	4 Sensitizations	4 Sensitizations	4 Sensitizations	4 Sensitizations	4 Sensitizations	LA,MoE,Com Dev,
	Keeping Girls in school program	sensitization of the girl child education	All wards	1000 Girls Supported	1200 Girls Supported	1500 Girls Supported	1000 Girls Supported	1000 Girls Supported	LA, MoE, ComDev,Sw
	Menstrual hygiene promotion	Promotion of good health practices	All wards	1000 girls	1000 girls	2000 girls	2000 girls	2000 girls	Ministry of Education &Local authority
Objective: Increase access to quality and equitable education for Learners with special education needs (LSEN)									
Establishment of special unit centers in the district	Inclusive education (LSEN)	Construct special unit centers	All zones	4	2	1	1		Ministry of Education &Local authority

		in the district							
		Procurement of tools and equipments for special unit centers in the district	All zones	assorted tools and materials	assorted tools and materials	assorted tools and materials	assorted tools and materials	assorted tools and materials	
Objective: To Improve education access to quality education by 2033									
Enhance science, technology and innovation	Science and technology infrastructure development	Construction of one skills centre	Katete zone		1				Ministry of Education & Local authority
Objective: Reduced dilapidated school infrastructure due to unfriendly weather by 2033									
Enhance trees are tree planting in all schools to reduce shock from strong winds	Environmental protection	Tree planting in schools	All wards	200 Trees	250 Trees	250 Trees	150 Trees	150 Trees	MoE/ FORESTRY
Objective: increase access to electricity for 35 schools by 2033									
Provision of hydro energy to schools that are far from the national grid	power and energy development	School electrification	All wards	15 School electrified	5 School electrified	5 School electrified	5 School electrified		LA, MoE,ZESCO, REA
Provision of solar energy to schools that are far from the national grid	power and energy development	School electrification	All wards	15 School electrified	5 School electrified	5 School electrified	5 School electrified		LA, MoE,ZESCO, REA
Objectives: improve water and sanitation in all schools by 2033									
Enhance good piped water	water and sanitation development	Construction of Water supply	All wards	4 piped water system	4 piped water system	3 piped water system	3 piped water system	3 piped water system	Ministry of Education & Local authority

reticulation system		system in schools							
Ensure construction of ablution blocks in all schools	water and sanitation development	Construction of sanitation facilities in schools	All schools	20 ablution blocks	20 ablution blocks	20 ablution blocks	15 ablution blocks		Ministry of Education & Local authority.

**Core Problem: Environmental Degradation And Inadequate Energy Sources**

**Goal: To Promote Efficient Use Of Natural Resources, Ensure Environmental Sustainability And Improve Connectivity To National Grid**

**Objective: Enhancing Sustainable Natural Resource Management By 2028**

Land acquisition	Community Forest establishment.	Engagement of traditional leaders.	Mununga and Chitunda	4	4	0	0	0	Forestry & Local authority
		Land identification	Mununga and Chitunda	100	100	0	0	0	Forestry & Local authority
		Gazetting of acquired land	Mununga and Chitunda	0	0	200	0	0	Forestry & Local authority
Promotion of afforestation and reforestation.		Sensitization of community in affected wards	Mununga and Chitunda	4	4	4	4	4	Forestry.

Objective	To improve energy infrastructure by 2035								
Strategies	Programme	Activity	Location (by priority)	2025	2026	2027	2028	2029	Responsible Agency/Department
The Local Authority to engage REA and Zesco to connect all public facilities to the national grid		Rural electrification	Mukunta RHC - Kabole RHC - Lambwe Chikwama Health Post - Kalembe RHC - Puta RHC - Mwabu RHC	1	2	2	2		Local Authority

			- Sambula RHC - Lunchinda RHC - Kabwe RHC - Mununga and Puta Police Stations						
--	--	--	---	--	--	--	--	--	--

CORE PROBLEM: LOW AGRICULTURE (CROPS, FISH AND LIVESTOCK) PRODUCTION AND PRODUCTIVITY									
Objective: To Promote Crop, Fish and Livestock Production And Productivity									
Objective: To Increase Crops, Fish and Livestock Production and Productivity By 40% by 2034									
Strategy	Program	Activities	Location by Priority	2024	2025	2026	2027	2028	Responsible Agency
Improve Crop Production and Productivity	Agriculture Development and Production	Farmer trainings in smart agriculture practices	All Camps	750	750	750	750	750	MOA
		Conducting field days	All Camps	30	30	30	30	30	MOA
		Establish demonstration plots	All Camps	60	60	60	60	60	MOA
		Procurement of motorbikes	Chikwama, L/Chomba 1, L/Chomba 2, Mununga, Kaseke, Kalungwishi, Mukunta, Kalembwe, Kalobwa, Chipungu,	2	2	2	2	2	MOA
		Rehabilitation of Camp Houses	Chikwama, Mukunta, Mununga, Kaseke, Chienge	2	2	2	2	2	MOA
		Construction of Agriculture camp houses	L/Chomba 1, L/Chomba 2, Kalembwe and Sambula Camps	-	1	1	1	1	MOA
		Construction of Agriculture Bulking Centres/Main Storage Shed	Chienge Camp	-	1	-	1	-	MOA

		Promotion of agriculture mechanization	All Camps	400	400	400	400	400	MOA
		Production and dissemination of News Articles and Items	Chienge District	10	10	10	10	10	MOA
		Agriculture shows	All Camps	6	6	6	6	6	MOA
	Agri-Business and Marketing	Market Information collections, analyses and disseminations	Chienge District	48	48	48	48	48	MOA
		Production and dissemination of monthly market bulletins produced	Chienge District	12	12	12	12	12	MOA
		Inspections of marketing infrastructure	Chienge District	2	2	2	2	2	MOA
		Farmer trainings in Entrepreneurship skills	All Camps	200	200	200	200	200	MOA
	Farmer Input support	Diversification and improvement of agriculture input supply chains	All Camps	TBA	TBA	TBA	TBA	TBA	MOA
	Irrigation Development	Construction of Weirs	kaseke, Chikwama, L/Chomba Camps	-	1	1	1	1	MOA
		Construction of a Dam	Kalungwishi Camp	-	-	-	-	1	MOA
		Establishment of gravity irrigation practices	All camps	10	10	10	10	10	MOA
Improve Livestock Production and Productivity	Livestock Production, Extension and Advisory Services	Supervision and backstopping	All Camps	4	4	4	4	4	MFL
		Livestock Farm visitations	All Camps	100	100	100	100	100	MFL
		Conducting Livestock Field Days	All camps	3	3	3	3	3	MFL
		Training of Livestock farmers in appropriate livestock farming technologies	All Camps	150	150	150	150	150	MFL
		Construction of Livestock Service Centre	Chienge Camp	-	-	-	-	1	MFL
		Chicken restocking and stocking	All Camps	1,500	3,000	4,500	6,000	7,500	MFL
		Goats restocking and stocking	All Camps	100	200	300	400	500	MFL
		Treatment of Livestock Diseases	All Camps	1000	1000	1000	1000	1000	MFL
		Disease control measures (Vaccinations,, Deworming, Spraying/Dipping)	All Camps	4000	4000	4000	4000	4000	MFL

		Construction of livestock Slaughter facilities	Chienge and Mununga camps	1	-	-	1	-	MFL
Improve Fisheries production and Productivity	Aquaculture Extension and Advisory Services	Supervision and backstopping	All Camps	4	4	4	4	4	MFL
		Trainings of fish farmers in appropriate aquaculture technologies	All Camps	150	150	150	150	150	MFL
		Fisheries Farm visitations	All Camps	100	100	100	100	100	MFL
		Conducting Fisheries Field Days	All Camps	3	3	3	3	3	MFL
		Construction of Fish hatcheries	Chienge camp	1	-	-	-	-	MFL
		Fabrication of fish cages	Chipungu, Kalembwe, Chienge and Kalungwishi camps	4	4	4	4	4	MFL
		Fish production under aquaculture	All aquaculture fishing camps	68	68	68	68	68	MFL
	Capture Fisheries Extension and Advisory Services	Fish Surveillance and Enforcement	All fishing camps	60	60	60	60	60	MFL
		Fishers Community Sensitisation meetings	All fishing camps	6	6	6	6	6	MFL
		Establish and operationalize aqua parks	Lupiya, Kasembe and Kalembwe Camps	1	-	-	-	-	MFL
		Excavation of fish ponds	L/Chomba, Kaseke and Chikwama	3	3	3	3	3	MFL
		Construction of fisheries camp houses	Chienge District	TBA	TBA	TBA	TBA	TBA	MFL
	Fisheries and Livestock Marketing	Collection, Analysis and Dissemination of Fisheries and Livestock marketing Information	Chienge District	12	12	12	12	12	MFL
Training of farmers in agribusiness		All Camps	100	100	100	100	100	MFL	
Fisheries and Livestock Information Services	Agricultural shows	All Camps	6	6	6	6	6	MFL	
Aid In appropriation (AIA)	Issuance of permits, certificates and licences	Chienge District	K150,000	K150,000	K150,000	K150,000	K150,000	MFL	
GOAL:IMPROVED ACCESS TO WATER AND SANITATION SERVICES									
Objective To improve access to clean water services by 2034									

Strategy	Program	Activities	Location by Priority	2024	2025	2026	2027	2028	Responsible Agency
Develop a piped water system.	Squatter settlement upgrading programme	Picking of coordinate Preplanning the settlements	Putu Lupiya Mununga Lambwe Chomba	1	1	1	1	0	Local Authority and Ministry of Water Development
Enhance Private sector participation in development of water reticulation facilities	Public Private Partnerships	Development of PPP policy in water provision	All wards	1	1	1	1	1	Ministry of Water development
Construction of boreholes	Water resource infrastructure development	Drilling of boreholes	All wards	20	20	20	20	20	Ministry of Water development
Train Area Pump Minders (APM) in Operation and Maintenance of water points	Maintenance of water points	Undertake trainings of APMs in all the wards.	All wards	1	1	1	1	1	Local Authority
Objective: improved sanitation services									
Enhance sanitation awareness and hygiene promotion	Sensitization	Conduct awareness meetings with Civic Leaders, communities and schools	All wards	2	2	2	2	2	Local Authority
	Hygiene Promotion	Re- engagement of trained subdistrict service providers (EHTs, Extension workers) to support sanitation interventions at ward level	All wards	2	2	2	2	2	Local Authority
Enhance CLTS training	Training & Capacity Building	Train traditional leaders to support sanitation intervention at community and school levels	All wards	1	1	1	1	1	Local Authority
Objective: Enhance Solid Waste Management System in the District									

Provision of infrastructure and equipment	Procurement of refuse management equipment	Procurement of 3 refuse truck		1	1	1	0	0	Local Authority
		Procurement of refuse bins	Lupiya Mununga Lambwe Chomba Putu	20	20	0	0	0	Local Authority
Infrastructure development		Construction of refuse bays	Lambwe Chomba	0	1	0	0	0	Local Authority

Core Problem	Compromised public safety, restricted access to justice, and a low level of public involvement in matters of governance.								
Goal	Enhance Public Safety, Access to Justice, and Public Participation in Governance by 2034								
Objective 1	Strengthen Community Policing and access to Justice from 25% to 75 % by 2034								
Strategies	Programme	Activity	Location (by priority)	2024	2025	2026	2027	2028	Responsible Agency/Department
Strengthen criminal and justice system	Crime prevention, detection and prosecution	Constructi on of police Station	Chienge BOMA, Lambwe Chomba, Mununga	-	1	1	1	1	Zambia Police and Local Authority
		Coonstruc tion of Border Police Post	Chipungu Boarder post	-	-	-	-	-	Immigration Department
		Constructi on of Police Post	Mukunta	0	1	0	0	0	
		Constructi on of subordinat e courts	Chienge BOMA, Lambwe Chomba, Chipungu, Mununga	1	1	1	1	-	Judiciary of the Republic of Zambia
		Purchase of Police Vehicles and Motorbike	Mununga, Lambwe Chomba, Lunchinda, Mukunta	1	1	1	1	-	

## 13.6 Spatial Development Framework

### 13.6.1 Scenario 1: Boosting Economic Competitiveness and Strengthening Interconnectedness.

The "Boosting Economic Competitiveness and Strengthening Interconnectedness" approach focuses on reviving the district's economic environment while encouraging greater regional cooperation. This multidimensional plan seeks to strengthen the district's ability to compete effectively in both local and global markets.

This approach, at its foundation, prioritises investments in key infrastructure such as transportation networks and digital connections. It aims to improve the efficiency of goods and people movement through improving highways, water systems, and broadband connectivity. As a result, local products can access bigger markets, increasing economic competitiveness.

The scenario utilises two concepts of spatial planning that is the nodes and corridors. Chienge has been considerably growing in 4 main areas namely Mununga, Lambwe Chomba, Lupiya and Puta Areas. These four areas act as centers for economic growth for the district.

Due to the nature of the terrain, there is some development that is also taking place along the main trunk roads such as the Kashikishi - Lunchinda road, Mununga Kaputa road and Chienge kaputa road through lambwe Chomba. The key drivers to achieve this development scenario are as follows:

Infrastructure and Connectivity through road and water infrastructure to facilitate the movement of goods and people, making it easier for local products to access national and international markets such as the Democratic Republic of Congo and also to Invest in digital infrastructure and broadband connectivity to enable businesses to leverage technology for efficiency and access to wider markets.

The agricultural industry will need to evolve in order to counteract the consequences of climate change, and technological developments will be essential to achieving this. Agriculture will be dependent not only on climatic knowledge but also on the ability to develop crops that are highly resistant to pest assault and drought. The prevention of cattle diseases will also depend on this.

Market Access and Diversification: Strengthen ties with regional and global markets, encouraging the export of local products and attracting new markets for district goods and services. Economic

Diversification: Support the expansion of various economic sectors, including agriculture, manufacturing, services, and tourism, to reduce dependency on a single industry.

Collaboration and Networking: Establish partnerships with neighbouring districts, businesses, and other government agencies to create a network for collaboration, resource sharing, and knowledge exchange. Encourage the formation of trade associations and business networks to collectively address challenges and explore new opportunities.

The goal of this scenario is to develop an economically dynamic district that can compete effectively in both local and global markets. The area can attract investment, create jobs, and eventually improve the well-being of its citizens by strengthening its economic competitiveness and interconnectivity. To fulfill the full potential of this growth scenario, active participation of the commercial sector, government agencies, and community organizations is required.

**Scenario 1: Boosting Economic Competitiveness and Strengthening Interconnectedness**

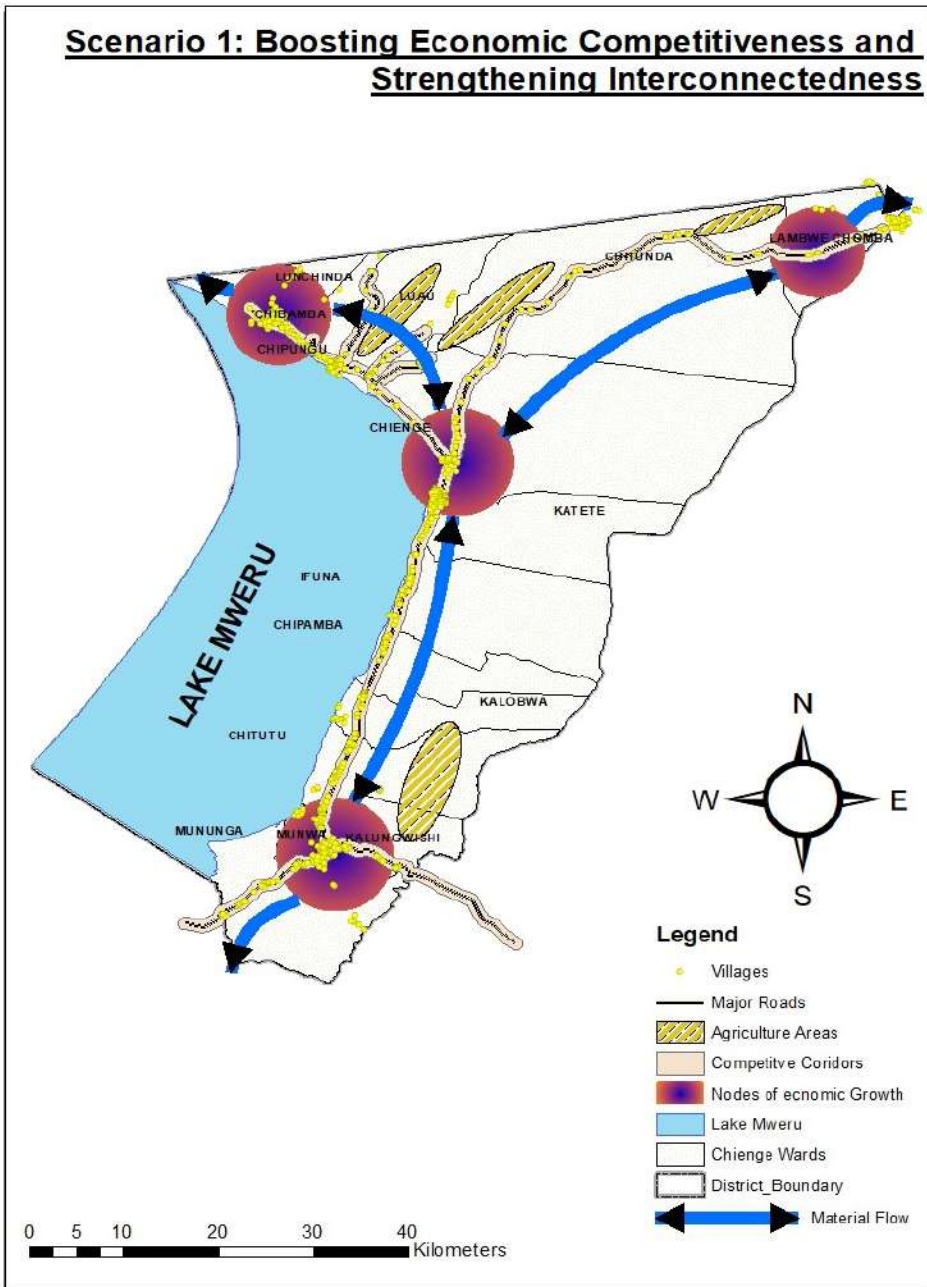


Figure 10: Boosting Economic Competitiveness and Strengthening Interconnectedness

### **13.6.2 Scenario 2: Enhancing Community Infrastructure and Welfare Services**

The goal of the "Enhancing Community Infrastructure and Welfare Services" strategy is on enhancing the district's core pillars in order to raise the standard of living for its citizens. By addressing multiple facets of well-being, it aims to strengthen basic services and community infrastructure.

This strategy emphasizes the need for better healthcare facilities and services primarily. It includes projects to construct or upgrade medical facilities so that the population can obtain healthcare more easily. To further enhance public health, preventive healthcare initiatives including vaccination campaigns and health education are implemented.

The foundation of this plan is education and training. By strengthening school infrastructure and providing appropriate teaching materials, it seeks to increase educational quality. Adult education and vocational training programs are available to provide people with useful skills for lifetime learning.

This scenario is aimed at creating a more conducive and supportive environment for residents by investing in critical social infrastructure and services. By doing so, it can improve overall living conditions, promote social cohesion, and enhance the quality of life in the district. Community involvement and collaboration with local organizations and authorities are crucial in realizing the success of this development scenario.



### **13.6.3 Scenario 3: Environmental Sustainability and Natural Resource Management**

The focus of the "Environmental Sustainability and Natural Resource Management" strategy is the sustainable and responsible management of the district's natural resources for environmental protection and long-term wellbeing.

This strategy's main focus is the preservation and protection of the environment. By promoting environmentally beneficial behaviours, it lessens adverse effects on the natural environment. In order to use resources like water, forests, and minerals without depleting them and protecting them for future generations, sustainable resource management is essential.

The preservation of biodiversity is a crucial component of this strategy. It aims to preserve the distinctive flora and fauna of the area and stop the extinction of species and habitats. The establishment of protected areas and wildlife reserves is one possible initiative.

Education and community involvement are essential. The strategy attempts to encourage sustainable practices at the individual and community levels, increase knowledge of the value of environmental sustainability, and include locals in conservation activities.

## Scenario 3: Enhancing Community Infrastructure and Welfare Services

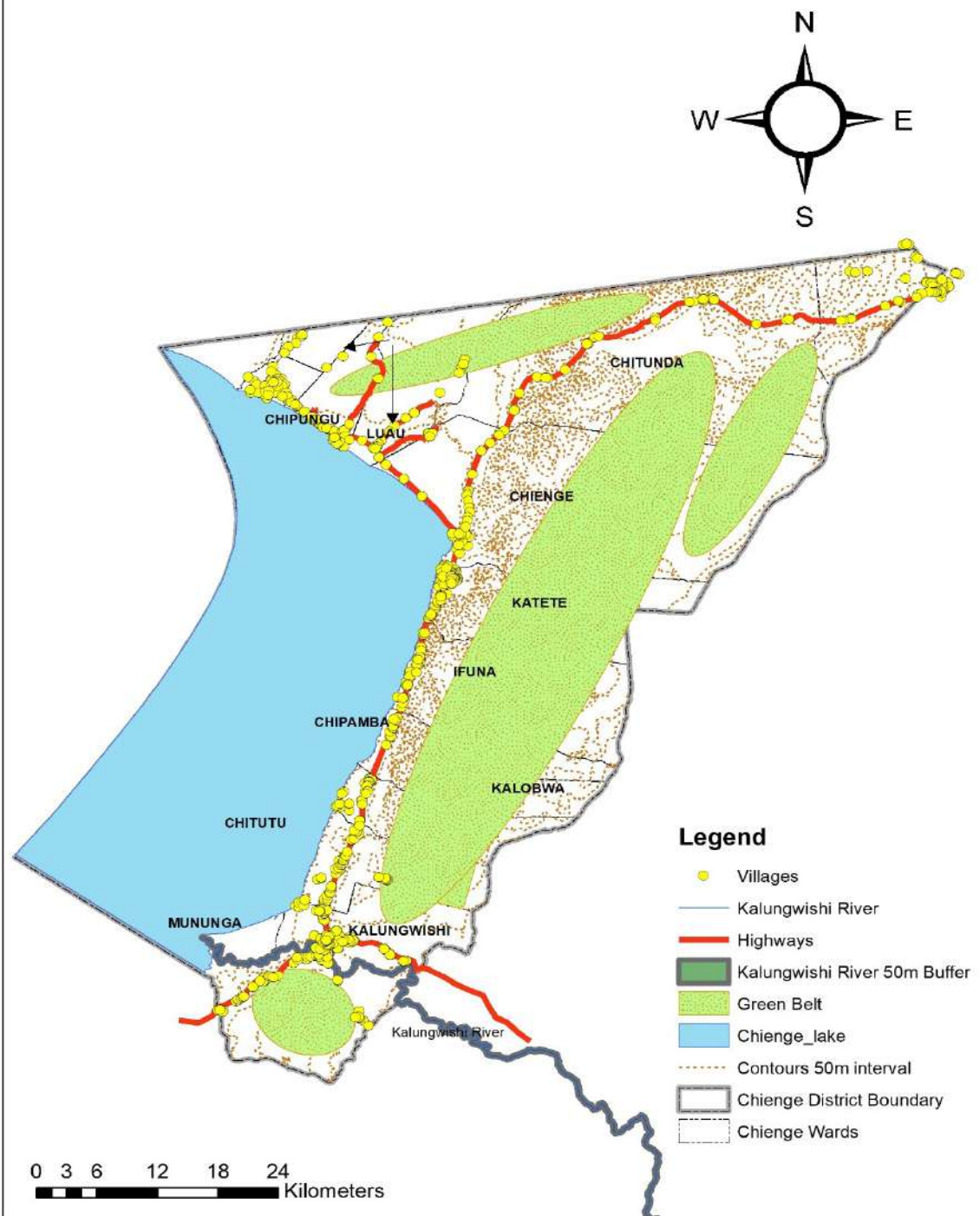


Figure 12: Environmental Sustainability and Natural Resource Management: Source Chiengde Town Council Planning Department

### **Selection of Scenarios**

The potential to create jobs, contribution to local and national economic development, encouragement of technological innovation, demographic trends, social economic factors, and infrastructure development are the criteria used to choose the best scenario. Scenario 1 was chosen as the best alternative.

## 14 Part Four – Implementation Programme

### 14.1 Capital Investment Program

The total cost of the investment plan over the five (5) years is **ZMW 2,610,854,835.76** for all the strategies distributed as follows:

Strategy	Program	Activities	Location by Priority	2024	2025	2026	2027	2028	Responsible Agency
To improve transport and logistics in the district.	Road development and maintenance	Procurement of 18 pieces of earthmoving equipment.	Chiengwe	K4,800,000.00	K5,200,000.00	K5,720,000.00	K6,292,000.00	K6,921,200.00	Local Authority
		Upgrading and maintenance of 165 kilometers of feeder road	All wards	K65,673,593.37	K72,240,952.71	K79,465,047.98	K87,411,552.78	K96,152,708.05	Local Authority
		Construction of 370 kilometers of district roads	All wards	K2,518,154,732.00	K2,769,970,205.20	K3,046,967,225.72	K3,351,663,948.29	K3,686,830,343.12	Local Authority & RDA
		Construction of 45 kilometers of township roads.	Chiengwe ward	K306,262,062.00	K336,888,268.20	K370,577,095.02	K407,634,804.52	K448,398,284.97	Local Authority & RDA
	Public transport Infrastructure	Construction of three (3) bus stops	Kalungwishi, Katete and Lupiya Wards	K0.00	K1,450,000.00	K1,595,000.00	K1,754,500.00	K0.00	Local authority
		Construction of three (3) bus stations	Kalungwishi, Katete and	K0.00	K0.00	K2,867,567.34	K0.00	K3,441,080.81	Local authority

			Lupiye Wards						
	Aviation development	Establishment of one (1) airstrip	Katete ward	K0.00	K0.00	K0.00	K0.00	K2,126,819.87	Local authority
To develop water transport on Lake Mweru and beach shores.	Water transport development	Procurement of water vessels (1)	All wards except for Lambwe Chomba and Chitunda ward	K0.00	K0.00	K0.00	K3,400,000.00	K0.00	Local Authority & Ministry of Transport & communication.
	Inland dry ports development	Construction of three (3) harbour	Chienge ward, Mununga and Chipungu ward	K1,450,000.00	K0.00	K1,740,000.00	K0.00	K2,088,000.00	Local Authority & Ministry of Transport & communication.
To improve communication across the wards	Communication enhancement	Construction of one radio station.	Chienge Ward	K600,000.00	K660,000.00	K726,000.00	K2,647,864.00	K2,912,650.40	Local Authority & Ministry of Transport & communication.

<b>CORE PROBLEM: Inadequate Access to Health Services</b>									
<b>GOAL: Improved Access to Health Care Services.</b>									
<b>OBJECTIVE: Construction and Upgrading Health Infrastructure And Enhancing Health Care Services</b>									
To increase access to quality health care	Health infrastructure development	Construction of 5 health centres	Lubambe, Kasembe, Kasase, kamasansa and Kantipa	K2,660,000.00	K2,926,000.00	K3,218,600.00	K3,540,460.00	K3,894,506.00	Local Authority and Ministry of health
		Upgrading 3 Rural Health centres to mini-hospitals	Kabole, Puta and Lunchinda RHCs	K0.00	K1,024,100.00	K1,126,510.00	K1,239,161.00	K0.00	Local Authority and Ministry of health

<b>GOAL: ACCESS TO QUALITY EDUCATION AND LITERACY LEVELS INCREASED IN THE DISTRICT</b>									
<b>Objective To reduce the distance covered by pupils to access schools to 5 km by 2034</b>									
<b>Strategy</b>	<b>Program</b>	<b>Activities</b>	<b>Location by Priority</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>Responsible Agency</b>

Increase the number of schools to reduce distance covered by pupils	Education infrastructure development	Construction of classroom blocks	All wards	K800,000,000.00	K880,000,000.00	K968,000,000.00	K30,000,000.00	K33,000,000.00	Ministry of Education & Local authority
Rehabilitate dilapidated classroom blocks	Education infrastructure development	Rehabilitation of existing classroom blocks	All wards	K9,000,000.00	K450,000,000.00	K2,250,000.00	K2,250,000.00	K1,800,000.00	Ministry of Education & Local authority
<b>Objective: To improve the living standards of Teaching staff by 2034</b>									
Improve Infrastructure Development for Teachers	Education infrastructure development	construction of Staff houses	All wards	K3,248,000.00	K3,248,000.00	K3,248,000.00	K3,248,000.00	K3,248,000.00	Ministry of Education & Local authority
Introduce boarding facilities in 4 Zones (Lunchinda, Lambwe Chomba, and mununga)	Education infrastructure development	Construction of boarding facilities	4 Zones (Lunchinda, Lambwe Chomba, Puta and mununga)	K3,400,000	K3,740,000.00	K4,114,000.00	K4,525,400.00	K4,977,940.00	Ministry of Education & Local authority
Rehabilitate dilapidated staff houses	Education infrastructure	Rehabilitation of existing	All wards	K1,900,000.00	K1,000,000.00	K1,000,000.00	K1,900,000.00	K1,900,000.00	Ministry of Education & Local authority

	development	staff houses							
<b>Objective : To reduce the pupil desk ratio from 4:1 to 1: 2 (the district has short of 8164 under primary level) by 2033</b>									
<b>Increase access to primary and secondary education</b>	Infrastructure development	Procurement of desks	All schools	K1,221,000.00	K1,343,100.00	K1,477,410.00	K1,625,151.00	K1,787,666.10	Ministry of Education &Local authority
<b>Objective: Improve ICT in all the schools from 5% to 60% by 2034</b>									
<b>Enhance access to ICT education in ECE, primary and Secondary schools</b>	ICT promotion	Procurement of ICT facilities	All schools	K1,200,000.00	K1,320,000.00	K1,452,000.00	K1,597,200.00	K1,756,920.00	Ministry of Education &Local authority
<b>Objective: Improve Youth and adult literacy levels in all the schools from 35% to 80% by 2034</b>									
Enhance access to quality, equitable and inclusive education	Youth & adult Literacy	Establishment of literacy centers	8 zones	K700,000	K770,000.00	K847,000.00	K931,700.00	K1,024,870.00	Ministry of Education &Local authority
<b>Objective: Increase teaching and learning materials at all grade levels in all the schools from the current 4:1 to 2:1 by 2034</b>									

Increase access to ECE, Primary and Secondary education	Curriculum Review development	Procurement of Curriculum and materials development delivery system to reduce to the normal 1:2 pupil book ratio	All Schools	K1,520,000.00	K1,672,000.00	K1,839,200.00	K2,023,120.00	K2,225,432.00	Ministry of Education & Local authority
<b>Objective: To Improve education access to quality education in 45 schools by 2034</b>									
Enhance science, technology and innovation.	Infrastructure development	Construction of Labs in primary and secondary schools	All zones	K1,240,000.00	K1,364,000.00	K1,500,400.00	K1,650,440.00	K1,815,484.00	Ministry of Education & Local authority
	Infrastructure development	Procurement of laboratory tools and equipment	All schools	K1,200,000.00	K1,320,000.00	K1,452,000.00	K1,597,200.00	K1,756,920.00	MoE (DEBS)
<b>Objective: Promote school Health and Nutrition in schools</b>									
Enhance School	Home Grown	Cultivation of	All wards	K1,500,000	K1,650,000.00	K1,815,000.00	K1,996,500.00	K2,196,150.00	Ministry of Education

Health and Nutrition(S HN)	School Meals Program	crop production							
<b>Objective: Increase access to quality and equitable education for Learners with special education needs (LSEN)</b>									
Establishment of special unit centers in the district	Inclusive education(LSEN)	Construct special unit centers in the district	All zones	K980,000.00	K1,078,000.00	K1,185,800.00	K1,304,380.00		Ministry of Education &Local authority
		Procurement of tools and equipments for special unit centers in the district	All zones	K1,340,000.00	K1,474,000.00	K1,621,400.00	K1,783,540.00	K1,961,894.00	
<b>Objective: To Improve education access to quality education by 2034</b>									
Enhance science, technology and innovation	Science and technology infrastructure development	Construction of one skills centre	Katete zone		K2,660,000.00				Ministry of Education &Local authority
<b>Objective: increase access to electricity for 35 schools by 2034</b>									
Provision of hydro energy to	power and energy	School electrification	All wards	K2,800,000.00	K3,080,000.00	K3,388,000.00	K3,726,800.00		LA, MoE,ZESCO,REA

schools that are far from the national grid	development								
Provision of solar energy to schools that are far from the national grid	power and energy development	School electrification	All wards	K2,800,000.00	K3,080,000.00	K3,388,000.00	K3,726,800.00		LA, MoE,ZESCO,REA
<b>Objectives: improve water and sanitation in all 75 schools by 2034</b>									
Enhance good piped water reticulation system	water and sanitation development	Construction of Water supply system in schools	All wards	K3,700,000.00	K4,070,000.00	K4,477,000.00	K4,924,700.00	K5,417,170.00	Ministry of Education &Local authority
Ensure construction of ablution blocks in all schools	water and sanitation development	Construction of sanitation facilities in schools	All schools	K3,400,000.00	K3,740,000.00	K4,114,000.00	K4,525,400.00		Ministry of Education &Local authority

<b>Core Problem</b>	<b>Core Problem: Environmental Degradation And Inadequate Energy Sources</b>								
<b>Goal</b>	<b>To Promote Efficient Use Of Natural Resources,Ensure Environmental Sustainability And Improve Connectivity To National Grid</b>								
<b>Objective</b>	<b>To improve energy infrastructure by 2034</b>								
<b>Strategies</b>	<b>Programme</b>	<b>Activity</b>	<b>Location (by priority)</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>Responsible Agency/Department</b>
The Local Authority to engage REA and Zesco to connect all public facilities to the national grid		Rural electrification	Mukunta RHC - Kabole RHC - Lambwe Chikwama Health Post - Kalembe RHC - Puta RHC - Mwabu RHC - Sambula RHC - Lunchinda RHC - Kabwe RHC - Mununga and Puta Police Stations	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	Local Authority

<b>CORE PROBLEM: LOW AGRICULTURE (CROPS, FISH AND LIVESTOCK) PRODUCTION AND PRODUCTIVITY</b>									
<b>Goal: To Promote Crop, Fish and Livestock Production and Productivity By 40%</b>									
<b>Objective: To Improve Crops, Fish and Livestock Production and Productivity By 40% by 2034</b>									
<b>Strategy</b>	<b>Program</b>	<b>Activities</b>	<b>Location by Priority</b>	<b>2024 (KMW)</b>	<b>2025 (KMW)</b>	<b>2026 (KMW)</b>	<b>2027 (KMW)</b>	<b>2028 (KMW)</b>	<b>Responsible Agency</b>
Improve Agriculture production and Productivity	<b>Agriculture production and Productivity</b>	Procurement of motorbikes	Chikwama, L/Chomba 1, L/Chomba 2, Mununga, Kaseke, Kalungwish i, Mukunta, Kalembe, Kalobwa &	160,000	170000	180000	190000	200000	MOA/LA

			Chipungu camps						
		Rehabilitation of Camp Houses	Chikwama, Mukunta, Mununga, Kaseke & Chienge camps	400,000	400,000	400,000	400,000	400,000	MOA/LA
		Construction of Agriculture camp houses	L/Chomba 1, L/Chomba 2, Kalembwe and Sambula Camps	500,000	500,000	500,000	500,000	500,000	MOA/LA
		Construction of Agriculture Bulking Centres/Main Storage Shed	Chienge camp	200,000	200,000	200,000	200,000	200,000	MOA/LA
		Construction of Weirs	kaseke, Chikwama, L/Chomba Camps	250,000	250,000	250,000	250,000	250,000	MOA/LA
		Construction of a Dam	Kalungwish i camp	400,000	400,000	400,000	400,000	400,000	MOA/LA

Improve Fisheries production and Productivity	<b>Fisheries and Livestock production and Productivity</b>	Construction of Livestock Service Centre	Chienge Camp	400,000	400,000	400,000	400,000	400,000	MFL/LA
		Construction of livestock Slaughter facilities	Mununga and Chienge camps	40,000	40,000	40,000	40,000	40,000	MFL/LA
		Construction of Fish hatcheries	Chienge camp	600,000	600,000	600,000	600,000	600,000	MFL/LA
		Fabrication of fish cages	Chipungu, Kalembwe, Chienge and Kalungwish i camps	500,000	500,000	500,000	500,000	500,000	MFL/LA
		Establish and operationalize aqua parks	Chienge	200,000	200,000	200,000	200,000	200,000	MFL/LA
		Excavation of fish ponds	L/Chomba, Kaseke and Chikwama	400,000	400,000	400,000	400,000	400,000	MFL/LA
		Construction of Fisheries and livestock camp houses	TBA	500,000	500,000	500,000	500,000	500,000	MFL/LA

Goal: Improved Access To Water And Sanitation Services									
Objective To improve access to clean water services by 2034									
Strategy	Program	Activities	Location by Priority	2024	2025	2026	2027	2028	Responsible Agency
Develop a piped water system.	Squatter settlement upgrading programme	Picking of coordinate Preplanning the settlemnts	Putu Lupiya Mununga Lambwe Chomba	0	150,000	150,000	150,000	0	Local Authority and Ministry of Water Development
Construction of boreholes	Water resource infrastructure development	Drilling of borholes	All wards	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	Ministry of Water development
Objective: Enhance Solid Waste Management System in the District									
Provision of infrastructure and equipment	Procurement of refuse management equipment	Procurement of 3 refuse truck		500,000	500,000	500,000	0	0	Local Authority
Infrastructure development		Construction of refuse bays	Lambwe Chomba	0	800,000	0	0	0	Local Authority

Core Problem	Compromised public safety, restricted access to justice, and a low level of public involvement in matters of governance.								
Goal	Enhance Public Safety, Access to Justice, and Public Participation in Governance by 2035								
Objective 1	Strengthen Community Policing and access to Justice from 15% to 70 % by 2035								
Strategies	Programme	Activity	Location (by priority)	2024	2025	2026	2027	2028	Responsible Agency/Department
Strengthen criminal and justice system	Crime prevention, detection and prosecution	Construction of Police Station	Chienge BOMA, Lambwe Chomba, Mununga						Zambia Police and Local Authority
		Coconstruction of Border Police Post	Chipungu Boarder post			2,000,000			Immigration Department
		Construction of Police Post	Mukunta		2,000,000				
		Construction of subordinate courts	Chienge BOMA, Lambwe Chomba, Chipungu, Mununga	1,500,000		1,500,000		1,500,000	Judiciary of the Republic of Zambia
		Purchase of Police Vehicles and Motorbike	Mununga, Lambwe Chomba, Lunchinda, Mukunta	50,000	1,000,000				

## 14.2 Local Authority's Financial Plan

This chapter discusses the summary resources requirements for implementing the IDP and the strategies for mobilizing such resources and areas targeted to ensure efficient utilization. The financial plan takes into account the Medium Term Expenditure Framework (MTEF). The table shows the Revenue the Analysis for the years 2021, 2022 and 2023.

YEARS	2021				2022			2023		
S/N	DETAILS	APPROVED BUDGET	ACTUAL	%	APPROVED BUDGET	ACTUAL	%	APPROVED BUDGET	ACTUAL	%
01	Local taxes	9,900	8,888	90	10,200	14,951	147	10,200		
02	Fees and charges	756,027	397,830	29	1,187,688	248,857	21	313,250		
03	Licenses	6,100	11,724	192	51,350	0	0	1,350		
04	Levies	437,096	465,483	106	542,720	351,292	65	610,000		
05	Permits	50,000	23,424	47	66,268	1,297	2	24,000		
06	Charges	120,000	180,336	150	600,000	8,110	1	1,131,933		
07	National Support	9,810,212	8,399,530	86	9,532,086	10,585,027	111	11,035,624		
08	CDF	1,600,000	1,600,000	100	25,700,000	23,739,911	92	28,313,902		
09	Other Income	799,154	1,251,500	157	1,654,489	1,203,907	93	1,183,588		
Grand Total		13,588,489	12,158,379	89	38,744,801	36,153,312	93	42,623,847		

## Revenue collection efficiency

### a) Local Taxes (Personal levy)

The collection efficiency of local taxes in the recent years has been slightly below the approved budget. Mainly this is due to non-compliance of the potential taxpayers.

### b) Fees and Charges

The collection efficiency was at 29 % for 2021. Out of the total budget of 756,027 only K397,830 was collected in 2021 the Council could not collect a 100% due to the non-advertising of plots that the council intended to sale hence could not be collected which affected collection of local revenue.

### c) Licenses

The collection efficiency was at 192 % for 2021, which was more than what was approved. Out of the total budget of K6, 100 about K11, 724 was collected in 2021.

### d) Levies

The collection efficiency was at 106 % for 2021. Out of the total budget of K437, 096 about K 465,483 was collected in 2021. The performance was above par

### e) Permits

The collection efficiency was at 47 % for 2021. Out of the total budget of K50, 000 only K 23,424 was collected in 2021

### f) Charges

The collection efficiency was at 150 % for 2021. Out of the total budget of K120, 000 about K180, 336 was collected in 2021.

## Revenue Collection Methods

Manual collection through Revenue Collectors

## Revenue Collection Challenges

Poor road network in the district

Lack of vehicle for revenue mobilization

Nonexistence of rateable properties in the district. No Valuation Roll.

### 14.3 Identification of The Revenue Base For The First Five Years of The Implementation of The Plan

Table 30: revenue base of the first years of the implementation plan

YEARS	2024	2025	2026	2027	2028
LOCALLY GENERATED REVENUE	3,274,321	3,765,469	4,330,290	4,979,833	5,726,808
CONSTITUENCY DEVELOPMENT FUND	31,145,292	34,259,821	37,685,804	41,454,384	45,599,822
CAPITAL (20% OF LGEF)	2,427,837	2,670,621	2,937,683	3,231,451	3,554,597
<b>TOTAL</b>	<b>36,847,450</b>	<b>40,970,064</b>	<b>45,269,053</b>	<b>50,028,235</b>	<b>55,298,179</b>

#### Table 3: Revenue Base for 2024 to 2028

The breakdowns of the projected sources of revenue are tabulated as follows:

Table 31: Locally Generated Revenue

YEARS	2024	2025	2026	2027	2028
Local Taxes	10,200	11,730	13,490	15,513	17,840
Fees and Charges	313,250	360,238	414,273	476,414	547,876
Licenses	1,350	1,553	1,785	2,053	2,361
Levies	610,000	701,500	806,725	927,734	1,066,894
Permits	24,000	27,600	31,740	36,501	41,976

Charges	1,131,933	1,301,723	1,496,981	1,721,529	1,979,758
OTHER INCOMES	1,183,588	1,361,126	1,565,295	1,800,089	2,070,103
<b>TOTAL</b>	<b>3,274,321</b>	<b>3,765,469</b>	<b>4,330,290</b>	<b>4,979,833</b>	<b>5,726,808</b>

### 14.3.1 National Support Financing

#### 14.3.1.1 Constituency Development Fund (CDF)

The Constituency Development Fund at 30.8 million Kwacha.

#### 14.3.1.2 Capital @ 20% of LGEF

Table 32: LGET 20% Capital Projections

YEARS		2024	2025	2026	2027	2028
Capital-Months	20%*12	2,427,837	2,670,621	2,937,683	3,231,451	3,554,597
<b>TOTAL</b>		<b>2,427,837</b>	<b>2,670,621</b>	<b>2,937,683</b>	<b>3,321,451</b>	<b>3,554,597</b>

## 14.4 Local Authority's Resource Mobilization Strategies and Programmes

<b>RESOURCE MOBILIZATION STRATEGIES FOR THE NEXT TEN YEARS</b>		
<b>Goal</b>	<b>Enhanced Resource mobilisation</b>	
<b>OBJECTIVE</b>	<b>STRATEGY</b>	<b>ACTIVITIES</b>
Increase the Council Revenue Base	To adopt ICT to enhance Revenue Collection	<ul style="list-style-type: none"> <li>• Formulate a physical cadaster for all taxpayers and traders in the districts in Markets and all other trading spaces using Geographic information Systems.</li> <li>• Use of technology platforms for paying of levies, fees and Charges (Mobile money platforms)</li> <li>• To increase public awareness on revenue collection</li> <li>• Equip revenue collectors with adequate tools such as smart phones</li> </ul>
Enhance Asset Management	To update Asset Register quarterly	<ul style="list-style-type: none"> <li>• Implement a policy on Asset management</li> <li>• Implement a policy management on the profitability of assets</li> <li>• Venture into capital growth by embracing capital financing</li> </ul>
Enhance Financial Management	To effectively manage finances	<ul style="list-style-type: none"> <li>• Compliance to relevant financial regulations</li> <li>• Provide means for growth through investment</li> <li>• Meet the demands of shareholders and expectations of the stakeholders</li> <li>• Effective management of audit procedures</li> </ul>
Enhance Public Private Partnerships (PPP)	Strengthen Stakeholders engagement	<ul style="list-style-type: none"> <li>• Establish a developmental agenda which will be appealing to development partners</li> <li>• Identification of key areas that will call for the need for development partners</li> <li>• Changes in policies and laws</li> <li>• Socio –cultural changes</li> <li>• Improvement of current mechanisms and process</li> <li>• Financial and capital capacity building</li> </ul>

## 14.5 Monitoring and Evaluation, Including Key Performance Indicators

### 14.5.1 Introduction

This chapter outlines the Monitoring and evaluation plan of the IDP. This is to ensure that the changes anticipated in the Council and resources are used effectively. The cost estimates for each activity are also provided in this chapter.

MONITORING AND EVALUATION PLAN							Indicator	Source of information	Frequency
Objective	Enhancement of road development and communication by 2033								
Strategies	Programme	Target Yr 1	Target Yr 2	Target Yr 3	Target Yr 4	Target Yr 5			
To improve transport and logistics in the district.	Road development and maintenance	4	4	4	4	4	No. of technical support meeting conducted.	Local Authority	Quarterly
		1	1	2	2	2	No. of earth moving equipment procured.	Local Authority	Yearly
		33	33	33	33	33	No. of kilometers of feeder roads upgraded and maintained	Local Authority	Yearly
		74	74	74	74	74	No. of kilometers of district roads constructed	Local Authority	Yearly
		9	9	9	9	9	No. of kilometers of township roads constructed	Local Authority	Yearly

	Public transport Infrastructure	0	1	1	1	0	No. of bus stops constructed.	Local Authority	Yearly
		0	0	1	0	1	No. of bus stations constructed.	Local Authority	Yearly
	Aviation development	0	0	0	0	1	No. of Airstrips constructed	Local Authority	Every 5 years
To develop water transport on Lake Mweru and beach shores.	Water transport development	33	33	34	0	0	No. of kilometers for navigation route assessed on Lake Mweru	Local Authority and MOTC	Yearly
		0	0	0	1	0	No. of water vessels procured	Local Authority and MOTC	Every 5 years
		0	0	1	0	0	No. of water transportation authority setup and operationalised on Lake Mweru	Local Authority and MOTC	Every 5 years
	Inland dry ports development	1	0	1	0	1	No. of harbours constructed	Local Authority and MOTC	Yearly
To improve communication across the wards	Communication enhancement	1	1	1	1	1	No. of broadcasting and communication	Local Authority	Yearly

							towers installed		
		0	0	0	1	0	No. of radio station constructed	Local Authority	Yearly

Objective	Construction and upgrading health infrastructure and enhancing health care services						Indicator	Source of information	Frequency
Strategies	Programme	Target Yr 1	Target Yr 2	Target Yr3	Target Yr 4	Target Yr 5			
Increase access to quality health care	Health infrastructure development	1	1	1	1	1	No. of health centres constructed	Local Authority and Ministry of Health	Yearly
		1	1	1	1	1	No. of health centres upgraded	Local Authority and Ministry of Health	Yearly
	Human Resource development	60	60	60	60	60	No. of healthcare workers recruited	Local Authority and Ministry of Health	yearly
strengthen public health	Health education promotion	4	4	4	4	4	No. of community engagement meetings held	Local Authority and Ministry of Health	yearly

<b>GOAL: ACCESS TO QUALITY EDUCATION AND LITERACY LEVELS INCREASED IN THE DISTRICT</b>										
<b>Objective To reduce the distance covered by pupils to access schools to 5 km by 2033</b>								<b>Indicator</b>	<b>Source of information</b>	<b>Frequency</b>
<b>Strategy</b>	<b>Program</b>	<b>Location by Priority</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>			
Increase the number of schools to reduce distance covered by pupils	Education infrastructure development	All wards	8	8	8	3	3	Number of classroom constructed	Ministry of Education & Local authority	Yearly
Rehabilitate dilapidated classroom blocks	Education infrastructure development	All wards	20	10	5	5	4	Number of classroom rehabilitated	Ministry of Education & Local authority	Yearly
<b>Objective: To improve the living standards of Teaching staff by 2033</b>										
Improve Infrastructure Development for Teachers	Education infrastructure development	All wards	4 staff houses	4 staff houses	4 staff houses	4 staff houses	4 staff houses	Number of staff house constructed	Ministry of Education & Local authority	Yearly
Introduce boarding facilities in 4 Zones (Lunchinda, Lambwe Chomba,	Education infrastructure development	4 Zones (Lunchinda, Lambwe Chomba,	3 dormitories	3 dormitories	3 dormitories	3 dormitories	3 dormitories	Number of boarding facilities	Ministry of Education & Local authority	Yearly

Lambwe Chomba, and mununga)		Put a and mununga)						constructed		
Rehabilitate dilapidated staff houses	Education infrastructure development	All wards	38 houses	20 houses	20 houses	20 houses	20 houses	Number of existing staff houses rehabilitated	Ministry of Education & Local authority	Yearly
<b>Objective : To reduce the pupil teacher ratio from 80:1 to 45:1 by 2033</b>										
Increase access to primary and secondary education	Human resource development	All Schools	140	140	140	140	140	number of teachers recruited	HRMC( DEBS)	Yearly
<b>Objective : To reduce the pupil desk ratio from 4:1 to 1: 2 (the district has short of 8164 under primary level) by 2033</b>										
Increase access to primary and secondary education	Infrastructure development	All schools	3054 desks	3028 desks	2028 desks			number of desks procured	Ministry of Education & Local authority	Quarterly
<b>Objective: Improve ICT in all the schools from 5% to 60% by 2033</b>										
<b>Enhance access to ICT education in ECE, primary</b>	ICT promotion	All schools	500	560	560	300	200	number of ICT facilities procured	Ministry of Education & Local authority	Yearly

<b>and Secondary schools</b>										
<b>Objective: Improve Youth and adult literacy levels in all the schools from 35% to 80% by 2033</b>										
Enhance access to quality, equitable and inclusive education	Youth & adult Literacy	8 zones	2	2	2	1	1	number of literacy centres established	Ministry of Education & Local authority	Yearly
<b>Objective: Increase teaching and learning materials at all grade levels in all the schools from the current 4:1 to 2:1 by 2033</b>										
<b>Increase access to ECE, Primary and Secondary education</b>	Curriculum Review development	All Schools	all subjects	all subjects	all subjects	all subjects	all subjects	Number of books procured	Ministry of Education & Local authority	Yearly
<b>Objective: To Improve education access to quality education in 45 schools by 2033</b>										
Enhance science, technology and innovation.	Infrastructure development	All zones	15	15	5	5	5	Number of labs constructed	Ministry of Education & Local authority	Yearly
	Infrastructure development	All schools	All lab kits (10) school	All lab kits (20) school	All lab kits (15) school			Number of labs constructed	MoE (DEBS)	Yearly
<b>Objective: To increase enrollment of early childhood and primary schools from 44,887 to 10,000 by 2033 and 46,870 to 65,240 respectively.</b>										

Promote School Health and Nutrition program	Early childhood and primary education	All wards	4 Meetings	4 Meetings	4 Meetings	4 Meetings	4 Meetings		<b>LA,ComDev,MoE,FBOs</b>	Yearly
<b>Objective: Promote school Health and Nutrition in schools</b>										
Enhance School Health and Nutrition(SHN)	Home Grown School Meals Program	All wards	75 schools	75 schools	75 schools	75 schools	75 schools		Ministry of Education &Local authority	Yearly
<b>Objective: increase enrolment of girls in schools from 26,966...to...37,145 by 2033</b>										
Engage community on enrolment of girl children and gender quality	Girl child Education	All wards	4 Sensitizations	4 Sensitizations	4 Sensitizations	4 Sensitizations	4 Sensitizations	No. of sensitization meetings held.	LA,MoE,ComDev,	Yearly
	Keeping Girls in school program	All wards	1000 Girls Supported	1200 Girls Supported	1500 Girls Supported	1000 Girls Supported	1000 Girls Supported	Number of girls supported	<b>LA, MoE, ComDev,Sw</b>	Yearly
	Menstrual hygiene promotion	All wards	1000 girls	1000 girls	2000 girls	2000 girls	2000 girls	Number of girls enrolled back	<b>Ministry of Education &amp;Local authority</b>	Yearly
<b>Objective: Increase access to quality and equitable education for Learners with special education needs (LSEN)</b>										
Establishment of special unit centers in the district	Inclusive education(LSEN)	All zones	4	2	1	1		Number of special units constructed	<b>Ministry of Education &amp;Local authority</b>	Yearly

		All zones	assorted tools and materials	assorted tools and materials	assorted tools and materials	assorted tools and materials	assorted tools and materials	Number of tools and equipment procured	Ministry of Education & Local authority	Yearly
<b>Objective: To Improve education access to quality education by 2033</b>										
Enhance science, technology and innovation	Science and technology infrastructure development	Katete zone		1				Skill centre constructed	Ministry of Education & Local authority	Yearly
<b>Objective: Reduced dilapidated school infrastructure due to unfriendly weather by 2033</b>										
Enhance trees are tree planting in all schools to reduce shock from strong winds	Environmental protection	All wards	200 Trees	250 Trees	250 Trees	150 Trees	150 Trees	Number of trees planted	MoE/ FORESTRY	yearly
<b>Objective: increase access to electricity for 35 schools by 2033</b>										
Provision of hydro energy to schools that are far from the national grid	power and energy development	All wards	15 School electrified	5 School electrified	5 School electrified	5 School electrified		Number of schools electrified	LA, MoE, ZESCO, REA	Yearly

Provision of solar energy to schools that are far from the national grid	power and energy development	All wards	15 School electrified	5 School electrified	5 School electrified	5 School electrified		Number of schools electrified with solar energy	LA, MoE,ZESCO,REA	Yearly
<b>Objectives: improve water and sanitation in all 75 schools by 2033</b>										
Enhance good piped water reticulation system	water and sanitation development	All wards	4 piped water system	4 piped water system	3 piped water system	3 piped water system	3 piped water system	Number of water supply system	Ministry of Education &Local authority	Yearly
Ensure construction of ablution blocks in all schools	water and sanitation development	All schools	20 ablution blocks	20 ablution blocks	20 ablution blocks	15 ablution blocks		Number of sanitation blocks constructed	Ministry of Education &Local authority	Yearly

MONITORING AND EVALUATION PLAN							Indicator	Source of information	Frequency
Objective	Enhancement of road development and maintenance by 2033								
Strategies	Programme	Target Yr 1	Target Yr 2	Target Yr 3	Target Yr 4	Target Yr 5			
Improve Crop Production and Productivity	<b>Agriculture Development and Production</b>	750	750	750	750	750	Number of farmers trained in smart agriculture practices.	MOA	QUARTERLY/ANNUALLY
		30	30	30	30	30	Number of field days held.	MOA	QUARTERLY/ANNUALLY
		60	60	60	60	60	Number of demonstration plots established	MOA	QUARTERLY/ANNUALLY
		2	2	2	2	2	Number of motorbikes procured	MOA	QUARTERLY/ANNUALLY
		2	2	2	2	2	Number of camp houses rehabilitated	MOA	QUARTERLY/ANNUALLY
		-	1	2	3	4	Number of camp houses constructed	MOA and MFL	QUARTERLY/ANNUALLY

		-	1	-	1	-	Number of agriculture bulking centres constructed.	MOA	QUARTERLY/ANNUAL LY
		400	400	400	400	400	Number of hectares under mechanized farming	MOA	QUARTERLY/ANNUAL LY
		10	10	10	10	10	Number of news articles and items produced	MOA	QUARTERLY/ANNUAL LY
		6	6	6	6	6	Number of agriculture shows held/attended	MOA	QUARTERLY/ANNUAL LY
	<b>Agri-Business and Marketing</b>	48	48	48	48	48	Number of Market information collected, analysed and disseminated	MOA	QUARTERLY/ANNUAL LY
		12	12	12	12	12	Number of monthly market bulletins produced and disseminated	MOA	QUARTERLY/ANNUAL LY
		2	2	2	2	2	Number of inspections conducted on marketing Infrastructure	MOA	QUARTERLY/ANNUAL LY

		200	200	200	200	200	Number of farmers trained in entrepreneurship skills	MOA	QUARTERLY/ANNUALLY
	<b>Farmer Input support</b>	TBA	TBA	TBA	TBA	TBA	No. of Small-scale farmers accessing inputs under FISP	MOA	QUARTERLY/ANNUALLY
	<b>Irrigation Development</b>	-	1	2	3	4	Number of weirs constructed	MOA	QUARTERLY/ANNUALLY
		-	-	-	-	1	Number of dams constructed	MOA	QUARTERLY/ANNUALLY
		10	10	10	10	10	No. of farmers practicing gravity irrigation.	MOA	QUARTERLY/ANNUALLY
Improve Livestock Production and Productivity	<b>Livestock Production, Extension and Advisory Services</b>	4	4	4	4	4	Number of supervisions and backstopping missions held	MFL	QUARTERLY/ANNUALLY
		100	100	100	100	100	Number of Livestock farm visits conducted	MFL	QUARTERLY/ANNUALLY
		3	3	3	3	3	Number of Livestock field days held.	MFL	QUARTERLY/ANNUALLY

		150	150	150	150	150	Number of farmers trained in appropriate livestock farming technologies	MFL	QUARTERLY/ANNUALLY
		-	-	-	-	1	Number of Livestock Service Centre constructed.	MFL	QUARTERLY/ANNUALLY
		1,500	3,000	4,500	6,000	7,500	Number of chickens restocked and stocked	MFL	QUARTERLY/ANNUALLY
		100	200	300	400	500	Number of goats restocked and stocked.	MFL	QUARTERLY/ANNUALLY
		1000	1000	1000	1000	1000	Number of Livestock Disease Cases treated	MFL	QUARTERLY/ANNUALLY
		4000	4000	4000	4000	4000	Number of Vaccinations, Dewormings and Spraying/Dipping held.	MFL	QUARTERLY/ANNUALLY
		1	-	-	1	-	Number of slaughter facilities constructed.	MFL	QUARTERLY/ANNUALLY

Improve Fisheries production and Productivity	<b>Aquaculture Extension and Advisory Services</b>	4	4	4	4	4	Number of supervisions and backstopping missions held	MFL	QUARTERLY/ANNUALLY
		150	150	150	150	150	Number of fish farmers trained in appropriate technologies	MFL	QUARTERLY/ANNUALLY
		100	100	100	100	100	Number of fish farms visited	MFL	QUARTERLY/ANNUALLY
		3	3	3	3	3	Number of Field Days conducted	MFL	QUARTERLY/ANNUALLY
		1	-	-	-	-	Number of fish hatcheries constructed.	MFL	QUARTERLY/ANNUALLY
		4	8	12	16	20	Number of fish cages fabricated.	MFL	QUARTERLY/ANNUALLY
		68	68	68	68	68	Number of tons produced under aquaculture	MFL	QUARTERLY/ANNUALLY
	<b>Capture Fisheries Extension and Advisory Services</b>	60	60	60	60	60	Number of fisheries patrols conducted	MFL	QUARTERLY/ANNUALLY
		6	6	6	6	6	Number of Fishers Community Sensitisation meetings held	MFL	QUARTERLY/ANNUALLY

		1	-	-	-	-	Number of aqua parks established and operationalized	MFL	QUARTERLY/ANNUALLY
		3	6	9	12	15	Number of fish ponds excavated.	MFL	QUARTERLY/ANNUALLY
		TBA	TBA	TBA	TBA	TBA	Number of fisheries houses constructed.	MFL	QUARTERLY/ANNUALLY
	<b>Fisheries and Livestock Marketing</b>	12	12	12	12	12	Number of monthly market information collected and submitted	MFL	QUARTERLY/ANNUALLY
		100	100	100	100	100	Number of farmers trained in agribusiness skills.	MFL	QUARTERLY/ANNUALLY
	<b>Fisheries and Livestock Information Services</b>	6	6	6	6	6	Number of Block, District and Provincial shows attended.	MFL	QUARTERLY/ANNUALLY
	<b>Aid In appropriation (AIA)</b>	K150,000	K150,000	K150,000	K150,000	K150,000	Amount of revenue collected	MFL	QUARTERLY/ANNUALLY

**GOAL: SUSTAINABLE NATURAL RESOURCES**

Goal	Sustainable Natural Resources									
Objectives	promoting efficient use of natural resources, ensure environmental sustainability and improve connectivity to national grid									
Strategies	Program me	Activities	Target	Targe t year 1	Target year 2	Targe t year 3	Targe t year 4	Target year 5	Indicator	Source of information
FORMULA TION OF COMMUNITY FOREST MANAGEMENT	The departme nt will identify and secure 200 hectares of land for communi ty forest managem ent.	Engagement of traditional leadership to request for land allocation	Meeting with traditional leaders	12	6	4			Number of meetings held	Quarter reports
		Sensitization in the affected wards regarding the importance of reforestation and Formation of community forest management (CFM).	Meetings with the community members				12	6	Number of meetings held	Quarter reports

<b>Goal</b>	Sustainable Natural Resources									
<b>Objectives</b>	promoting efficient use of natural resources, ensure environmental sustainability and improve connectivity to national grid									
<b>Strategies</b>	<b>Program me</b>	<b>Activities</b>	<b>Target</b>	<b>Target year 1</b>	<b>Target year 2</b>	<b>Target year 3</b>	<b>Target year 4</b>	<b>Target year 5</b>	<b>Indicator</b>	<b>Source of information</b>
INFRASTRUCTURE DEVELOPMENT	OFFICE BLOCK CONSTRUCTION	Construction of 1x4 office block	Have it completed by end of 5 year	10%	20%	50%	80%	100%		Project report
	AFFORESTATION AND REAFFORESTATION	Raising of seedlings	10,000 seedlings raised per year	10000	10000	10000	10000	10000	Number of seedlings	Annual report

167

167

## 15 Conclusion of the IDP

Currently, Chienge District has little social and economic development and is primarily rural. With a plan in place, it is envisaged that the district will expand in a way that promotes industrial, socioeconomic, environmental, and sustainable growth.

The Integrated Development Plan (IDP) will guide the district's planned growth, including the provision of social and infrastructure services such as health, education, solid waste management, roads, telecommunications, market centers, and energy. The IDP considers the local economy, social development, and current state of affairs as well as challenges and resources. The IDP establishes guidelines for the use of land, the requirements for infrastructure and services, and the preservation of the environment. The IDP is determined by the priorities and needs of the community.

Ensuring that Chienge develops into an industrial hub for agriculture and other economic activities depends critically on the plan's implementation. The utilization and exploitation of natural resources can help accomplish this. Ensuring economic growth, wealth creation, social investment, human development, and sustainable socio-economic development for Chienge District is contingent upon the complete implementation of the outlined projects and programs.

## 16 Bibliography

Chiengwe Town Council (CTC), 2023, Geographic Information System

Chiengwe Town Council (CTC), Strategic Plan 2015- 2019.

Pilot Program on Climate Resilience, 2016.

Republic of Zambia. National Assembly. *Urban and Regional Planning Act, 2015 (No. 3 of 2015)*.

Republic of Zambia. National Assembly. *Lands Acquisition Act Cap 189 of the Laws of Zambia*

Republic of Zambia. National Assembly. *Lands Act (No. 29 of 1995) (Cap. 184)*

Republic of Zambia. National Assembly. *The Environmental Management Act, 2011. Act No. 12 of 2011*

Republic of Zambia. *National Decentralization Policy, 2002.*

Republic of Zambia. Ministry of Agriculture and Cooperatives, *National Agriculture Policy (2004-2015)*

Republic of Zambia. Ministry of Education. Educating Our Future: *National Policy on Education (1996)*

Republic of Zambia. Ministry of Trade Commerce and Industry. *National Trade Policy (2018)*

Republic of Zambia. Ministry of Health. *National Health Policy (2012)*

Zambia Statistics Agency, 2010. *2022 Census of Population and Housing: National analytical Report*. Lusaka: CSO. Available at <http://www.zamstats.gov.zm/>

Zambia Statistics Agency, 2010. *2010 Census of Population and Housing: Population Summary Report*

<https://unstats.un.org/unsd/statcom/doc14/2014-17-HumanSettlement-E.pdf>

Ministry of Education. Chiengwe District Education Board, 2023. Education Bulletin.

Ministry of Health. Chiengwe District Health office, 2023.

Ministry of National Development Planning, 2019, Zambia 2010-2017 Sub National Analysis, GRZ Zambia



REPUBLIC OF ZAMBIA  
P.O. BOX 740002 CHIENGWE  
CHIENGWE TOWN COUNCIL

## NOTICE TO THE PUBLIC

I WISH TO NOTIFY THE GENERAL PUBLIC THAT CHIENGWE TOWN COUNCIL AT ITS SITTING OF 8<sup>th</sup> JUNE 2018 VIDE MINUTE NUMBER OC/03/06/18 RESOLVED TO PREPARE AN INTEGRATED DEVELOPMENT PLAN (IDP) FOR CHIENGWE DISTRICT IN ACCORDANCE WITH PART V, SECTION 35 OF THE URBAN AND REGIONAL PLANNING ACT NO. 3 OF 2015 OF THE LAWS OF ZAMBIA.

DULANI PHIRI (MR.)  
COUNCIL SECRETARY  
CHIENGWE TOWN COUNCIL

R50279191/18.21 07

# ZAMBIA DAILY MAIL LIMITED



## CERTIFICATE OF PUBLICATION

This is to certify that CHIENGI TOWN COUNCIL Advertised in the  
Zambia Daily Mail on 16<sup>th</sup> JULY 2021 And 21<sup>ST</sup> JULY 2021

Yours faithfully  
For Zambia Daily Mail Limited  
  
Milimo Maambo P.O. BOX 31421  
Advertising Manager LUSAKA

ZAMBIA DAILY MAIL LIMITED  
23 JUL 2021



### CHIENGE TOWN COUNCIL

## NOTICE OF PREPARATION OF THE CHIENGE INTEGRATED DEVELOPMENT PLAN

*Notice is hereby given that:* Pursuant to section 40 of the Urban and Regional planning act, No. 3 of 2015, Chiengge District has prepared an Integrated Development Plan, which will cover a period of 10 years.

The integrated Development Plans sets out objectives and policies to deliver an overall strategy for the proper planning and sustainable development of the area of the Development Plan. The draft plan is available for inspection at the Civic Center, Chiengge Town Council, Chiengge District Commissioner's office and Provincial Planning office during normal business hours from 10<sup>th</sup> January 2024 to 11<sup>th</sup> March 2024.

Chiengge Town Council hereby invites any interested parties to make submissions in respect of the Chiengge Integrated Development Plan to Mr Mpande Hamwende, Chiengge Town Council or Mr. Alfred Banda before 5:00 pm on 11<sup>th</sup> March 2024. Submissions may be made in electronic format by e-mail to [hamwendempande@gmail.com](mailto:hamwendempande@gmail.com) or [alfredkatawa@gmail.com](mailto:alfredkatawa@gmail.com) by the same time and date.

**Mpande Hamwende**  
Council Secretary

RSO34312



*Kashikishi - Lunchinda Road(D79) During Rainy season  
Source: Chiengge Town Council (2023)*



*Kashikishi - Lunchinda after grading*



*Public transportation systems in Chiengde*  
*Source: Chiengde Town Council (2022)*



*The photos above show the alternative source of energy for most residents in Chiengi who are not connected to ZESCO (Field data, 2023).*



Figure 2: Picture showing Water sources in Chiengi District.

Source: CTC (RWSC, 2022)



(CTC field data, 2022)



