

**SENANGA DISTRICT INTEGRATED DEVELOPMENT PLAN
2024 – 2034**

VISION STATEMENT

An inclusive, socio economically Diversified and Environmentally Sustainable District by 2034

**SENANGA DISTRICT INTEGRATED DEVELOPMENT PLAN
2024 – 2034**

VISION STATEMENT

An inclusive, socio economically Diversified and Environmentally Sustainable District by 2034

FOREWORD



The formulation of this integrated development plan (IDP) could not come at a better time than now when decentralization emphasizing participation of communities in governance systems peak. The document provided an opportunity for the communities to set development priorities and responsive interventions towards the district development agendas.

An IDP is a key strategic development framework that guides development and expenditure. It is a critical document which guides planning, budgeting processes, and management decision-making by all actors in the IDP implementation area. This IDP would be implemented for a period of 10 years from 2024 to 2034.

The document will contribute to enhanced co-ordination between the government and the partners working in the district. It will also ensure alignment of district developmental programs to the national, sector, regional plans and objectives in the ten (10) year implementation period. Additionally, this plan will contribute to the attainment of the district vision dubbed **an inclusive, socio – economically diversified and environmentally sustainable district by 2034**. The plan embeds the public – private partnerships, promotion of market linkage, innovations, rule of law, value chain mechanisms all aimed at attainment of sustainable socio – economic development.

I am convinced that through our culture of hard work and team spirit, we will be able to achieve the objectives of our development agenda as stipulated in the IDP during the next ten years of the IDP implementation.

Sakwiba Sakwiba
COUNCIL CHAIRPERSON

ACKNOWLEDGEMENTS



The formulation of this IDP was based on a consultative process involving stakeholders across all sectors. The consultations with the community and various stakeholders were undertaken at all levels to build consensus around key issues affecting the district and devise responsive interventions towards the district's challenges.

My special gratitude goes to the IDP facilitation team, government line ministries, Civic Leaders, the Barotse Royal Establishment (BRE), the private sector, the business community, the Faith Based Organisations (FBOs), the Non-Governmental Organisations (NGOs), the Ward Development Committees (WDCs) and the community as whole for their valuable contributions toward the formulation of this IDP document. I am aware that it is challenging to avail time to collect and collate data for such an undertaking and attend to own official duties.

I also take cognisant of our honourable Member of Parliament Hon. Walusa Mulaliki for availing time and share valuable insights regarding our Integrated Development Plan. The district overview inputs by the Hon. Member of parliament contributed to shaping the interventions on emerging issues thereby contributing to comprehensiveness of our Integrated Development Plan.

Special recognition also goes to World Vision Zambia for facilitating community consultations and Ward visioning processes. This eased our task of community engagement and leveraged resources required in the formulation of the IDP. May I also sincerely thank the provincial planning unit and the Ministry of Local government for providing the technical oversights in the development of the IDP. Their efforts and technical expertise are worth commending.

The commitment shown by all actors during the plan formulation was exemplary. I implore all stakeholders to continue with the same zeal exhibited here in the implementation phase of this very important plan.

A handwritten signature in blue ink that reads "Zita Sipalo".

Zita Sipalo

DISTRICT COMMISSIONER

EXECUTIVE SUMMARY



Senanga district has a population of 112,040 with a total land area of 10,565.8 Km² (ZAMSTAT, 2022). The district economy is mainly anchored on agriculture, small scale trade and commerce. The district is endowed with natural resources necessary for competitive advantage and Local economic development. Despite endowments of natural resources, the district has high poverty levels standing at 80 percent and continues to suffer from limited industrialisation, low value chain, poor natural resources utilisation and low per capita production.

The development of the integrated development plan (IDP) for a period 2024 to 2034, in the district prioritizes resource allocations to production, social, technological and entrepreneurial sectors for purposes of unlocking available potential in order to redress the eminent development challenges and poverty states in the district. The IDP plan prioritises social services such as healthcare, education, access to safe water and sanitation initiatives while promoting investments in natural resources utilisation, entrepreneurial skills development, production and productivity as well as economic infrastructure which would be critical to ensuring a productive and health community and reduction of inequalities, vulnerability and poverty in the district.

To attain these objectives, it would be imperative to ensure inclusivity, diversity, ingenuity alongside tenets of good governance at all levels and team effort, among all stakeholders, such as the traditional leadership, none governmental organisations, community and faith based organisations, Civic leaders and political leaders who are all critical to facilitation of the developmental processes.

I am positive that riding on the tenets of good governance, the national values of integrity, transparency, unity, among others, we will attain our district vision dubbed '**An inclusive, socio economically Diversified and Environmentally Sustainable District by 2034**' and the national vision of a Prosperous Middle-Income Nation by 2030. Together we can achieve that much.


Joseph J. Kanyemba
COUNCIL SECRETARY

CONTENTS

FOREWORD.....	i
ACKNOWLEDGEMENTS	ii
EXECUTIVE SUMMARY	iii
LIST OF ACRONYMS	8
PART ONE:.....	11
1.0. INTRODUCTION AND BACKGROUND	11
1.1. Background.....	11
1.2. Methodology – Formulation of IDP.	11
1.2.1. Policy Reviews.....	11
1.3. Location of Senanga District.	13
1.4. Land Landscape Analysis	13
1.4.1. Relief.	13
1.4.2. Hydrology	14
1.4.3. Soils.....	14
1.4.4. Vegetation.....	14
1.5. Climate.....	15
1.5.1. Temperature and rainfall	15
PART TWO: PLANNING SURVEY AND ISSUES REPORT	16
DEMOGRAPHIC ANALYSIS.....	16
2.1 Historic Population Levels and Growth Rates at District and Ward levels.	16
2.1.1 Historic District Population and Growth Rates.....	16
2.1.2 Historic Population at Ward Levels for the Year 2010 and 2022.	16
2.1.2.1. Urban Wards.....	16
2.1.2.2 Rural Wards.....	16
2.2 Population Density at District Level.	17
2.3. Population Density at Ward Level.....	17
2.4. Population Growth Rates of Urban and Rural Areas.....	18
2.5. Estimated Population at Base Year.	18
3.0. DISTRICT POPULATION PROJECTIONS.....	19
3.1 Estimate of the future population of the IDP area in 5, 10 and 20 years.....	19
3.2 Estimate of the future urban population of the IDP area for the year 5, 10 and 20 years from 2024 base year.	20
3.3 Estimate of the future rural population of the IDP area in 5, 10 and 20 years.	20
3.4 Likely age and sex characteristics of the population at years 5 and year 10	20

4.0. ASSESSMENT OF THE EXISTING LAND USE AND SETTLEMENT PATTERN IN THE DISTRICT	21
4.1. Overall settlement plan.....	21
4.2. Urbanising villages and growth nodes	22
4.3. Urban expansion areas	22
4.4. Informal settlements	25
4.5. Other land uses	25
5.0. ASSESSMENT OF THE IMPACT OF THE CONTINUATION OF POPULATION GROWTH ON LAND USE AND SPATIAL DEVELOPMENT PATTERNS	26
5.1. Impact of the continuation of population growth on overall settlement pattern	26
5.2. Impact of the continuation of population growth on urbanising villages and growth nodes	26
26	
5.2. Availability of land for planned urban expansion	26
5.3. Impact of the continuation of population growth on informal settlements – new, expanding and identification.....	26
5.4. Impact of the continuation of population growth on other land uses.....	27
SECTORAL AND THEMATIC ANALYSIS	28
6.0. HUMAN AND SOCIAL DEVELOPMENT	28
6.1. Introduction.....	28
6.2. HEALTH SECTOR	28
6.2.1. Overview	28
6.2.2. Implementation of key government priorities from national development plan at local level	28
28	
6.2.3. Status of implementation of existing plans and strategies in the district.....	29
6.2.3.1. Strengthening public health.	29
6.2.3.2. Access to quality health care.....	29
6.2.3.3. Bed spaces	30
6.2.3.4. Water supply and sanitation in health facilities	30
6.2.3.5. Power supply in health facilities.	31
6.2.3.6. Disease incidences	31
6.2.3.7. Quality of service including key performance indicators.....	32
6.2.3.8. Top 10 causes of mortality in all populations	34
6.2.3.9. Fertility trends	34
6.2.3.10. Life expectancy	35
6.2.4. Issues arising from public participation	37
6.2.5. Impact of changes anticipated over the next 10 years	37
6.2.6. Impact of continuation of existing trends.....	38
6.2.7. Environment and climate change analysis.....	38

6.2.8. Gender analysis	38
6.3. WATER SUPPLY AND SANITATION HYGIENE	38
6.3.1. Overview	38
6.3.2. Implementation of key government priorities from national development plan at local level	38
6.3.3. Status of implementation of existing plans and strategies in the district.....	39
6.3.3.1. Improving access to clean and safe water.....	39
6.3.3.2. Water supply	39
6.3.3.3. Sanitation and Waste Management.....	40
6.3.3.3.1. Sanitation and hygiene practices.....	40
6.3.3.3.2. Solid Waste Management	41
6.3.4. Quality of service and service indicators.....	41
6.3.5. Key issues arising from public participation.....	41
6.3.6. Impact of changes anticipated over the next 10 years	42
6.3.7. Opportunities in the water sector.....	42
6.3.8. The impact of continuation of the existing trend	42
6.3.9. Environment and climate change analysis	42
6.3.10. Gender and climate change analysis.....	42
6.4. EDUCATION SECTOR	43
6.4.1. Overview	43
6.4.2. Key priorities of sector-specific national plans/strategies and local implementation	43
6.4.3. Status of implementation of existing plans and strategies in the district.....	43
6.4.3.2. Education school infrastructure	43
6.4.3.3. Water supply and sanitation facilities in schools.....	45
6.4.3.4. School furniture.....	45
6.4.3.5. Service indicators.....	46
6.4.3.5.1. Examination performance progression.....	46
6.4.3.5.1. School drop outs	46
.....	47
6.4.3.5.4. Quality of service and service indicators.....	47
6.4.4. Key issues arising from public participation	48
6.4.5. Impact of changes anticipated for the next 10 years	48
6.4.6. Impact of continuation of existing trends.....	48
6.4.7. Environment and climate change and gender analysis	49
6.4.8. Conclusion	49
6.5. COMMUNITY DEVELOPMENT AND SOCIAL PROTECTION	50
6.5.1. Overview.....	50

6.5.2.	Key priority programmes.....	50
6.5.3.	Description of existing state of development.....	51
6.5.3.1.	Poverty levels.....	51
6.5.3.2.	Social Protection.....	51
6.5.3.3.	Constituency development empowerment fund support	51
6.5.3.4.	Moral and values development	53
6.5.3.5.	Community amenities	53
6.5.3.6.	Disasters management	54
6.5.3.7.	Quality of services and indicators.....	55
6.5.4.	Issues arising from public participation	55
6.5.5.	Impact of changes anticipated over the next ten (10) years.....	55
6.5.6.	Impact of continuation of existing trends.....	56
6.5.7.	Environment and climate change effects.....	56
6.5.8.	Climate change and gender analysis.....	56
6.6.	ECONOMIC TRANSFORMATION AND JOB CREATION.....	57
6.6.1.	AGRICULTURE SECTOR.....	57
6.6.1.0.	Introduction.....	57
6.6.1.1.	Key priorities programmes implemented under agriculture at a local level.....	57
6.6.1.2.	Status of implementation of existing plans and strategies in the district.....	58
6.6.1.2.1.	Crop sub- sector	58
6.6.1.2.1.	Extension Service Support	62
6.6.1.2.2.	Key performance indicators and quality of service	62
6.6.1.2.3.	Issues arising from public participation	63
6.6.1.2.4.	Impact of changes anticipated in the next ten (10) years	63
6.6.1.2.5.	Impact of continuation of existing trends.....	64
6.6.1.2.6.	Climate change and gender analysis.....	64
6.6.2.	THE LIVESTOCK SUB - SECTOR.....	65
6.6.2.1.	Status of implementation of existing plans and strategies in the district.....	65
6.6.2.2.	Livestock production and productivity	66
6.6.2.3.	Quality of service and service indicators.....	72
6.6.2.4.	Issues arising from public participation	72
6.6.2.5.	Impact of changes anticipated over the next ten (10) years.....	72
6.6.2.6.	Impact of continuation of existing trends.....	73
6.6.2.7.	Environment and climate change effects.....	73
6.6.3.	FISHERIES SUB-SECTOR.....	74
6.6.3.1.	Fisheries production and productivity.....	74
6.6.3.2.	Actors impacting the fisheries sector.....	75

6.6.3.3.	Quality of service and services indicators	75
6.6.3.4.	Issues arising from public participation	76
6.6.3.5.	Impact of changes anticipated over the next ten (10) years.....	76
6.6.3.6.	Impact of continuation of existing trends.....	76
6.6.3.7.	Environment and climate change effects.....	77
6.6.3.8.	Climate change and gender analysis.....	77
6.6.4.	MANUFACTURING, TRADE AND COMMERCE	78
6.6.4.1.	Key priority programmes implemented at a local level.....	78
6.6.4.2.	Status of implementation of existing plans and strategies in the district.....	78
6.6.4.3.	Low processing and value addition capacity.....	78
6.6.4.4.	Issues arising from public participation	79
6.6.4.6.	Impact of changes anticipated over the next ten (10) years.....	79
6.6.4.7.	Impact of continuation of existing trends.....	79
6.6.4.8	Climate change effects and gender analysis.....	79
6.6.5.	MINING SUB - SECTOR	80
6.6.5.1.	Key priority strategies implemented at local level.....	80
6.6.5.2.	Status of implementation of existing plans and strategies in the district.....	80
6.6.5.3.	Quality of service including key performance indicators.....	81
6.6.5.4	Issues arising from the public participation process	81
6.6.5.5.	Impact of the changes anticipated over the next ten (10) years	81
6.6.5.6.	The impact of continuation of existing trends on mining	81
6.6.5.7.	Environment, climate change effects and gender analysis	81
6.6.6.	TOURISM SECTOR	82
6.6.6.1.	Key priority strategies to be implemented at local level	82
6.6.6.2	Status of implementation of existing plans and strategies in the district.....	82
6.6.6.3.	Quality of service including service indicators	82
6.6.6.4	Issues arising from public submissions.....	82
6.6.6.5.	Impact of the changes anticipated over the next ten (10) years	82
6.6.6.6	The impact of continuation of existing trends	83
6.6.6.7	Climate change effects and gender analysis.....	83
6.6.7.	ECONOMIC INFRASTRUCTURE – SECTOR.....	84
6.6.7.1.	Overview	84
6.6.7.2.	Key priority strategies to be implemented at local level.	84
6.6.7.3.	Status of implementation of existing plans and strategies in the district.....	84
6.6.7.4.	Transport sub-sector	85
6.6.7.5.	Township and intra feeder roads.....	85
6.6.7.6.	Inter district roads.....	86

6.6.7.7.	Air transport	86
6.6.8.	COMMUNICATION SUB SECTOR.....	87
6.6.9.	ENERGY SUB- SECTOR.....	87
6.6.9.1.	Quality of service including key performance indicators.....	88
6.6.9.2.	Issues arising from the public participation process	89
6.6.9.3.	Impact of the changes anticipated over the next ten (10) years	89
6.6.9.4.	The impact of continuation of existing trends	89
6.6.9.5.	Climate change effects and gender analysis.....	89
6.6.10.	GREEN ECONOMY AND ENVIRONMENTAL SUSTAINABILITY.....	90
6.6.10.1	Overview.....	90
6.6.10.2.	Key priority strategies to be implemented at a local level.	90
6.6.10.3.	Status of implementation of existing plans and strategies in the district.....	91
6.6.10.4.	Forestry	91
6.6.9.4.	Quality of service including key performance indicators.....	92
6.6.9.5	Issues arising from public submissions.	93
6.6.9.6.	Impact of the changes anticipated over the next ten (10) years.	93
6.6.9.7.	The impact of continuation of existing trends.	93
6.6.9.8.	Climate change impacts and gender analysis.	93
6.6.10.	GOOD GOVERNANCE	94
6.6.10.1.	Key priority strategies are to be implemented at local level.....	94
6.6.10.2	Status of implementation of existing plans and strategies in the district.....	94
6.6.10.3.	Quality of service including key indicators.....	95
6.6.10.4.	Issues arising from public submissions.....	95
6.6.10.5	Impact of the changes anticipated over the next ten (10) years	95
6.6.10.6.	The impact of continuation of existing trends	95
6.6.10.7.	Climate change impacts and gender analysis.....	95
PART THREE:	DEVELOPMENT FRAMEWORK.....	97
7.1.	Introduction.....	97
7.2.	Vision statement.....	97
7.3.	Goals, objectives and strategies.....	97
8.0.	DEVELOPMENT SCENARIOS.....	101
8.1.	The Corridor Development Concept	101
8.2.	Growth Pole (decentralised) development Approach	101
8.3.	Strategic Urban Development Concept	102
8.4.	Choice of development Approach	103
9.0.	THE DISTRICT SPATIAL DEVELOPMENT FRAMEWORK (SDF).....	104
9.1.	SOCIAL SERVICES SPATIAL DEVELOPMENT FRAME WORK.....	104

9.1.1.	Health spatial development frame work.....	104
9.1.2.	Wash spatial development framework.....	105
9.1.3.	Education Spatial Development Framework.....	106
9.1.4.	Community development spatial development framework.....	106
9.1.5.	Agricultural spatial development framework.....	107
9.1.6.	Economic infrastructure spatial development framework.....	108
9.1.7.	Economic Sector.....	108
9.1.8.	Good governance.....	109
PART FOUR: IMPLEMENTATION PROGRAMME.....		110
IMPLEMENTATION PLAN: HUMAN AND SOCIAL DEVELOPMENT - HEALTH SERVICES		110
CAPITAL INVESTMENT PLAN: HUMAN AND SOCIAL DEVELOPMENT - HEALTH SERVICES ..		113
8.0.	FINANCIAL PLAN.....	131
REFERENCES.....		153

LIST OF ACRONYMS

Acronyms

APM	Area Pump Minders
BRE	Barotse Royal Establishment
CBOs	Community Based Organisations
CBPP	Contagious Bovine Plural Pneumonia
CDF	Constituency Development Funds
CDFC	Constituency Development Funds Committee
CLTS	Community Led Total Sanitation
CoAG	Cooperation Agreements
CSA	Climate Smart Agriculture
CSO	Central Statistics Office
DEBS	District Education Boards Secretary
DHO	District Health Office
ECE	Early child Education
FAO	Food and Agriculture Organisation
FBOs	Faith based Organisation
HH	Household
ICT	Information Communication Technology
IDP	Integrated Development Plan
MLGHRD	Ministry of Local Government and Rural Development
MoFNP	Ministry of Finance and National Planning
MT	Metric Tonnes
NDP	National Development Plan
NGOs	Non-Governmental Organisation
NSP	National Social Protection
SAG	Sanitation Action Group
SLTS	School Led total Sanitation
SMEs	Small and medium Enterprises
SOMAP	Sustainable operations and Maintenance practices
UNDP	United nations development Programme
UNICEF	United Nations international Child Emergence Fund
URP	Urban and Regional Planning
WASH	Water and Sanitation Hygiene
WDCs	Ward Development Committees
ZAMSTAT	Zambia Statistics Office
ZDHS	Zambia Demographic Health Survey

LIST OF TABLES

Table 1: Comparison of 2010 and 2022 population and growth rates.....	16
Table 2: COMPARISON OF URBAN POPULATION INCREASE BETWEEN 2010 AND 2022	16
Table 3: Comparison of 2010 and 2022 rural wards population	17
Table 4 comparison of 2010 and 2022 urban and rural population	18
Table 5: estimated base population	19
Table 6: population projections for the years 2029, 2034 and 2044.....	19
Table 7: Shows projected urban ward populations for the years 2029, 2034 and 2044.....	20
Table 8: Rural population projections by ward for the years 2029, 2034 and 2044.....	20
Table 9: Population growth at 5 years	21
Table 10: SERVICES FUTURE DEMAND FOR KEY PERFORMANCE INDICATORS.....	33
Table 11:SERVICES FUTURE DEMAND FOR KEY PERFORMANCE INDICATORS IN TEN 10) YEARS TIME	33
Table 12: Table showing top 10 causes of mortality in all populations.....	34
Table 13: Table showing water supply serviced and None Serviced population per ward	40
TABLE 14: EDUCATION KEY PERFORMANCE INDICATORS	47
Table 15: Education estimate future demands.....	48
Table 16 Child Abuse and gender based violence statistics.....	53
Table 17: Community development and social protection key performance indicators.....	55
Table 18: Services future demand	55
Table 19: Agriculture key performance indicators	62
Table 20: Projected crop production demands	64
Table 21: STATISTICS OF MARKETED LIVESTOCK, LIVESTOCK PRODUCTS AND POULTRY IN 2023	72
Table 22: LIVESTOCK SERVICE INDICATORS.....	72
Table 23: Projected livestock future demands and supply	73
Table 24: Fish future demands and supply service demands	76
Table 25: Summary of core issues.....	95
Table 26: GOAL 1: To improve access to quality social services	98
Table 27: GOAL NO. 2. To enhance economic production and productivity in the district.....	99
Table 28: GOAL 3: To promote development and management of natural resources	100
Table 29: GOAL 4: To enhance rule of law and good governance.....	100

LIST OF FIGURES

Figure 1: Map showing location of planning area	13
Figure 2: MAP SHOWING RELIEF FEATURES	14
Figure 3: Graphs showing annual average temperature and rainfall	15
Figure 4: Map showing population density	18
Figure 5: map showing Population distribution and health facilities	29
Figure 6: showing staffing levels in the health sector	30
Figure 7: Graph Showing Bed Space availability	30
FIGURE 8: GRAPH SHOWING HEALTH SERVICES INDICATORS	32
Figure 9: Graph showing fertility rates.....	35
Figure 10: Graph showing Life expectancy	35
Figure 11: Graph showing under-five Mortality rates.....	36
Figure 12: Graph showing maternal Deaths	36
Figure 13: Graph showing adult death rates.....	37
Figure 14: map showing water coverage in the district	39
<i>Figure 15: Picture showing status of pole and mad classrooms</i>	<i>44</i>
Figure 16: Distribution	45
Figure 17 : learner performance.....	46
Figure 18: graph showing dropout rates.....	47
Figure 19: Graph showing CDF supported applicants.....	52
Figure 20: Image showing community play ground.....	54
Figure 21: Showing District soil types	59
Figure 22: Map showing rainfall variability	59
Figure 23: Graph showing crop production trends in the district	60
Figure 24: AREA UNDER CROP CULTIVATION IN HECTORS	60
Figure 25: Map showing suitable crop Zones	61
Figure 26: Graph showing rice processing in tonnes.....	62
Figure 27: Map of veterinary camps and locations of livestock service infrastructure	65
Figure 28: Livestock population distribution by camps	66
Figure 29: Trends in beef market share for value chain actors	70
Figure 30: Plate showing Encroached Air strip Imagery	86
Figure 31: Map showing Corridor DEVELOPMENT CONCEPT	101
Figure 32: Map showing growth pole development scenario.....	102
Figure 33: Map showing Strategic Urban Development Concept.....	103
Figure 34: map showing settlements with access to safe water	105
Figure 35 : Map showing spatial distribution of education facilities.....	106
Figure 36: Map showing distribution of existing and proposed agricultural interventions	107
Figure 37: map showing existing and proposed ECONOMIC INFRASTRUCTURE	108

PART ONE:

1.0. INTRODUCTION AND BACKGROUND

1.1. Background

This section gives a situational analysis of the existing states of the environmental, social, cultural, political, economic and spatial interlinks in the IDP area. An Integrated Development Plan (IDP) is a strategic planning instrument which gives an overall framework for development to the entire IDP area. It helps inform actors in planning, budgeting, management and enhances decision-making on key issues impacting the planning area (MLGH, 2019) in order to enhance competitiveness and comparative advantage critical for local economic development (LED). This IDP plan is formulated at district wide scale. The IDP will be reviewed periodically after every five (5) years within the ten (10) implementation period.

1.2. Methodology – Formulation of IDP.

The methodology employed in the development of this IDP included reviews of secondary data sources under which planning policy documents such as the sector plans, 8th National Development Plan, Vision 2030, ministerial sector reports and, national policy guides among others. The information gathered from such documents, were important in structuring the plan within policy frameworks and alignment of the plan to national priorities and goals. Primary data collection approaches encompassing field visits, focussed group discussions through forums such as the District Development Coordinating Committee (DDCC), District Water and Sanitation Education (DWASHE) and WDCs. Stakeholder consultations were also undertaken with Civil Societies Organisations (CSO), civic leaders, traditional leaders, religious groups among others to ensure adequate representation, balanced views and consensus on development needs and priorities in the district.

1.2.1. Policy Reviews.

This section provides list of reviewed existing plans, policies and strategies which have a bearing on the development of Senanga District. The reviews highlight the salient existing policy measures relevant to the planning process and implementation of the IDP. The key policy measure reviewed to ensure successful development and implementation of the IDP among others included the following:

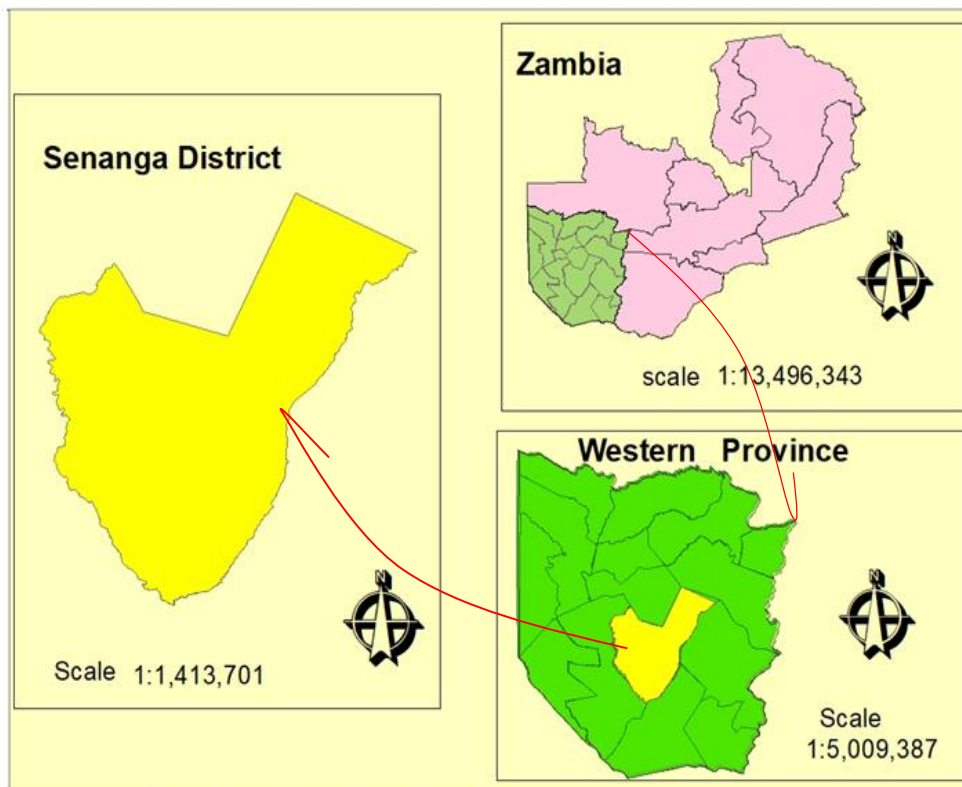
- Urban and Regional Planning (URP) Act, Number 3 of 2015- the Act makes provision with respect to planning management, administration, systems and procedures for planning.
- Local Government Act, Number 2 of 2019- the Act provides for an integrated local government system, decentralizes functions, responsibilities and services at all levels of local government. Ensures democratic participation and control of decision making by the people at local level, regulates the review of tariffs, charges and fees within the area of a Local Authority.
- Environmental Management Act No 12 of 2011- this Act provides for integrated environmental management and the protection and conservation of the environment and sustainable management and use of natural resource and related issues.

- Wildlife Management Act Number 14 of 2015.
- Fisheries Act Number 22 of 2011.
- Forestry Management Act Number 4 of 2015 – the act provides for the establishment and declaration of national forests, local forests, joint forest management areas, botanical reserves, private forests and community forests.
- National Water Policy and the Water Supply and Sanitation Act No. 28 of 1997.
- Public Health Cap 273.
- Education Act No. 23 of 2011- this act regulates the provision of accessible, equitable and qualitative education.
- Vision 2030 – Articulates the strategies to make Zambia a prosperous middle-income nation.
- Eighth National Development Plan (8NDP)- A five-year national plan that aims at accelerated, sustained inclusive and private sector-led growth.
- National Adaptation Plan.
- National Health Strategic Plan.
- Fisheries and Livestock Strategic Plan.
- National Decentralization Policy – devolved decision-making power to two different sub-national layers of government.
- The National Social Protection Policy (NSPP)- reducing poverty, inequality and vulnerability among the Zambian population for the poor and vulnerable segments of society in particular.
- National Water Policy.
- National Livestock Development Policy.
- National Fisheries and Aquaculture Policy.

1.3. Location of Senanga District.

Senanga district lies between latitudes 15° 15' and 17° 30' S, and between longitudes 22° 00' and 24° 30' E (Fanshawe, 2010). The district is centrally located in western province and covers a total surface area of 10565.8 square kilometres. The district administration is about 106 kilometers south of Mongu the provincial capital and about 687 kilometers from Lusaka the capital of Zambia. The district shares its boundary with Mongu, Nalolo, Sioma, Sesheke, Mulobezi, and Luampa giving it a comparative advantage in terms of trade and access to markets.

FIGURE 1: MAP SHOWING LOCATION OF PLANNING AREA



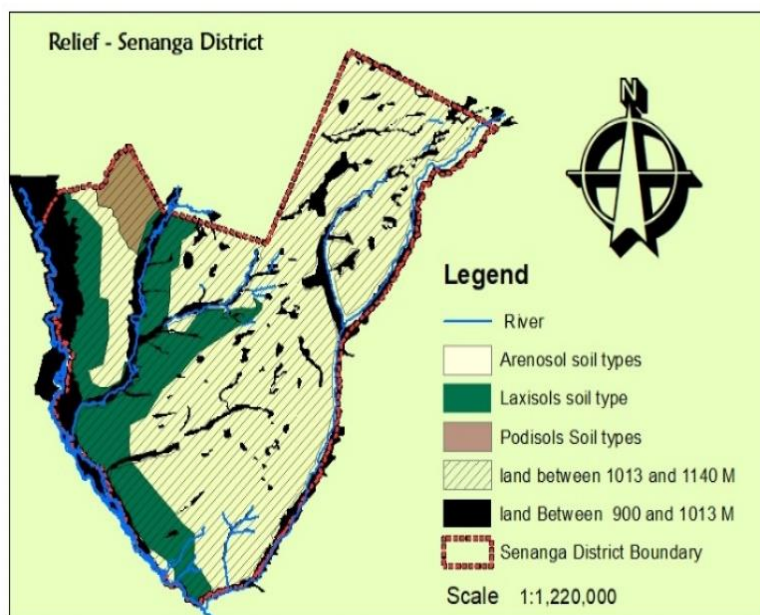
Source: Adapted from CSO 2020

1.4. Land Scape Analysis

1.4.1. Relief.

The landscape of Senanga district is generally flat land. The land can be classified into lower land (below 900 - 1013) and upper land (1013 – 1140M) (Sichinga, 2015).

FIGURE 2: MAP SHOWING RELIEF FEATURES



The lower lands are mainly characterised by grass lands, flood plains and swampy areas while upper lands are mainly undulating plateaus dissected by numerous rivers and streams (Fanshawe, 2010). The landscape of lower and upper lands in the district allows for alternate crop production all year round.

Source: Adapted from Sichinga, 2015

1.4.2. Hydrology

Senanga district is drained by the Zambezi, Lui, and Lumbe rivers. These river systems are supported by perennial streams and dambos. The numerous river systems and wetlands gives the district potential for crop and livestock production throughout the year.

1.4.3. Soils

The district generally comprises of sand to sandy-loam soils in upper lands and sandy-loam to clay soils in the lower lands. About two-thirds (67 percent) of the soils (Arenosols) in the district are poor soils for crop production. Only one-third (33percent) of the soils (Laxisols and Podisols) are good for crop production. See figure 2

1.4.4. Vegetation

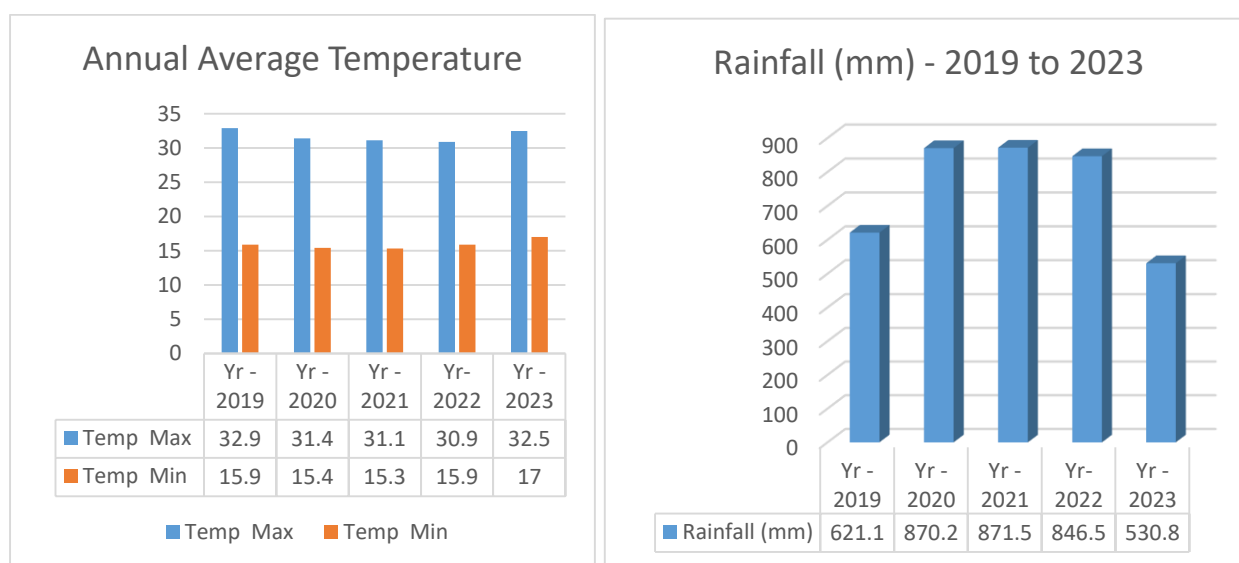
The vegetation types in the IDP area (Senanga district) comprise mainly of Mopane, Miombo, Mutemwa woodlands and the grasslands. The common tree species include the *Brachistegia sp*, *Jubelnardia sp*, *Accacia sp*, *Combretum sp*, *Temenalia sp*, *Petrocarpus angolensis* (Mukwa), *Guibourtia coleosperma*, *Arafzelia quensinsis* and *Baikiea plurijuga* (Mukusi) (Fanshawe, 2010). Some tree species such as *petrocurpus angolensis*, *Baikiea plurijuga* among others support economic activities such as timber while grasslands serve as range lands for livestock rearing. Other vegetation types are used to support a range of both human and environmental ecological activities.

1.5. Climate.

1.5.1. Temperature and rainfall

The climate of Senanga district can be categorized into three distinct seasons namely the cool dry, dry wet and dry hot seasons. During the cool dry reason, (May to August) the minimum temperatures range from 06 to 12 degrees Celsius. In the dry wet season (Mid November – April) the temperatures range from 22 – 27 degrees Celsius while in the dry hot season (August to Mid-November), the temperature ranges from about 20 – 33 degrees Celsius (Konnie, 2022). The average annual minimum temperatures range from 15 to 17 °C while maximum temperatures range from 30 – 33° C See figure3. In last five (5) years the district received an average annual rainfall of 748 mm (Dept. of Meteorology, 2024). However, the distribution of rainfall varies from place to place within the district

FIGURE 3: GRAPHS SHOWING ANNUAL AVERAGE TEMPERATURE AND RAINFALL



Source: Dept. of Meteorology, 2024

On average the district receives an average of 9 Sunshine hours monthly (Konnie, 2022). The district experiences rain variability with the eastern part of the district receiving more rainfall in average of 90 rain days and reduces to an average of 60 rain days in western parts of the district.

PART TWO: PLANNING SURVEY AND ISSUES REPORT

DEMOGRAPHIC ANALYSIS

2.1 Historic Population Levels and Growth Rates at District and Ward levels.

2.1.1 Historic District Population and Growth Rates.

Senanga District's population grew from 70,772 in 2010 to 113,124 in 2022 out of which 53,462 were male while 58,578 were female.

In comparison to other districts in the province, Senanga district ranks third in terms of population growth after Mongu and Kaoma districts.

TABLE 1: COMPARISON OF 2010 AND 2022 POPULATION AND GROWTH RATES

SENANGA	YEAR 2010				YEAR 2022			
	MALE	FEMALE	TOTAL	GROWTH RATE (%)	MALE	FEMALE	TOTAL	GROWTH RATE (%)
Population	33,870	37,06	70,772	1.5	53,986	59,138	113,124	3.9
Percentage	47.7	52.3			47.7	52.3		

Source: ZAMSTATS, 2022

The average population growth rate for the district between the years 2000 and 2010 was 1.5 percent while between 2010 and 2022 the population growth rate increased to 3.9 percent (ZAMSTATS, 2022). This growth rate is higher than the provincial and national growth rates standing at 3.5 percent and 3.4 percent respectively. This implies a higher demand for goods and services further constraining the district's capacity for service delivery.

2.1.2 Historic Population at Ward Levels for the Year 2010 and 2022.

2.1.2.1. Urban Wards.

Population in the urban wards of Imatanda and Imatongo increased by 53.6 percent. Imatongo had a higher population increase of 107.5 percent compared to Imatanda at 30.3 percent. The high population increase in Imatongo was largely attributed to availability of land for housing, proximity to social services and rural urban migration.

TABLE 2: COMPARISON OF URBAN POPULATION INCREASE BETWEEN 2010 AND 2022

WARD NAME	YEAR 2010			YEAR 2022		Totals
	MALE	FEMALE	TOTAL	MALE	FEMALE	
Imatanda	8,302	9,023	17,325	10,547	12,029	22,576
Imatongo	3,585	3,913	7,498	7,277	8,284	15,561

Source: ZAMSTATS, 2022

2.1.2.2 Rural Wards

Generally, the population in the rural wards increased by 63.2 percent from 45,949 in 2010 to 74,987 in 2022. In the rural wards Wanyau ward showed high population increase by 49.6 percent. The other rural wards showed population increase of between 17 percent to 23 percent while others indicated no increase and reduction of population eminent in some wards due to delimitation changes. For detailed analysis on the comparison of population growth refer to table 3.

TABLE 3: COMPARISON OF 2010 AND 2022 RURAL WARDS POPULATION

WARD NAME	YEAR 2010		TOTAL	YEAR 2022		TOTALS	AVERAGE POPULATION INCREASE (%)
	MALE	FEMALE		MALE	FEMALE		
Mwanambuyu	5,445	6,136	11,581	3,418	3,590	7,008	63.2
Liangati	Non-existent		0	5,023	5,710	10,733	
Lipuwe	4,286	4,841	9,127	3,568	3,896	7,464	
Namukokoba	Non-existent		0	3,977	4,356	8,333	
Naluywa	3,073	3,088	6,161	3,606	3,642	7,248	
Silwizi	Non-existent		0	2,564	2,686	5,250	
Lumbe	1,992	2,149	4,141	2,402	2,529	4,931	
Wanyau	2,267	2,544	4,811	3,457	3,739	7,196	
Mata	2,550	2,604	5,154	3,032	3,344	6,376	
Lumbe Nanyezu	Non-existent		0	907	997	1,904	
Sibukali	2,370	2,604	4,974	2,206	2,325	4,531	
Muweswa	Non Existent		0	2,002	2,011	4,013	
Totals	21,983	23,966	45,949	36,162	38,825	74,987	

Source: CSO, 2010; ZAMSTATS, 2022

The factors contributing to the observed population changes include population migration, delimitations of wards which resulted in some ward populations relocated to new wards such as Lumbe Nanyezu, Silwizi, Namukokoba and Liangati which were not there in 2010. Additionally, some wards such as Imatanda lack adequate land for housing amenities resulting in most migrant populations mostly settling in unplanned urban areas of Imatongo ward.

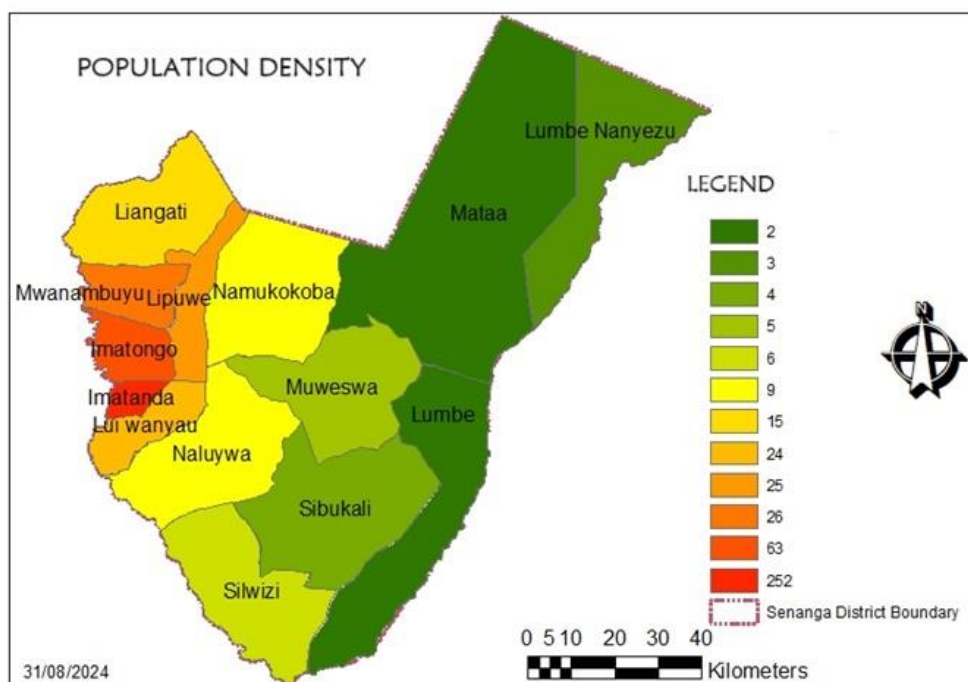
2.2 Population Density at District Level.

The population density for Senanga district increased from 7.1 persons per square kilometre in 2010 to 10.6, while that of the province and the nation stand at 10.8 and 26.1 persons per square kilometres respectively (ZAMSTATS; 2022). The district ranks seventh (7) with regards to population density in the province after Mongu (33.2), Nkeyema (29.8), Kaoma (17.5), Limulunga (15.7), Nalolo (15.5) and kalabo (12.8) persons per square kilometres.

2.3. Population Density at Ward Level.

At the ward level the most densely populated areas in the district include the urban wards of Imatongo and Imatanda wards with densities of 252 persons per square kilometre. The other rural and remote wards have population density ranging from 2 to 63 persons per square kilometres. The sparsely population distribution eminent in most rural wards has affected provision of social services. The populations in some village areas fail to meet ascribed population service standards to qualify for social service provision. In the urban settings where population density is relatively high, service provision are challenged by high population ratios per unit service standard. See figure 3

FIGURE 4: MAP SHOWING POPULATION DENSITY



Source : ZAMSTATS:2022

2.4. Population Growth Rates of Urban and Rural Areas.

The district had an urban population of 13,420 and rural population of 57,517 in 2010. In 2022 urban population increased to 28,332 signifying 111% urban population while rural population increased from 57517 to 84,784 signifying 47% rural population increase (ZAMSTAT, 2022). The key drivers to the observed urban population growth include natural population increase, rural – urban migration, employment, availability of economic opportunities and social amenities eminent in the urban area.

TABLE 4 COMPARISON OF 2010 AND 2022 URBAN AND RURAL POPULATION

Senanga District	2010			2022		
	Male	Female	Total	Male	Female	Total
Urban population	6,390	7,030	13,420	28322	28322	28322
Rural population	27,480	30,037	57517	84784	84784	84784
Total	33870	37067	70,937	53986	59138	113,124

Source: CSO, 2010; ZAMSTATS, 2022

The rapid population increase in both urban and rural areas is likely to outstrip pace and capacity of the district in providing quality social services if supportive interventions are not put in place. Current trends indicate that classrooms are overcrowded, with high teacher pupil; high patient –nurse patient ratios and high farmer to extension worker ratios signifying stressed social services systems.

2.5. Estimated Population at Base Year.

The estimated population for the base year which is 2024 for the integrated development plan for the district is 122,120. Imatanda, Imatongo and Liangati are among the wards with

relatively high populations in the district compared to others while Lumbe Nanyezu is among the most sparsely populated wards in the district.

TABLE 5: ESTIMATED BASE POPULATION

WARD NAME	YEAR 2024
Imatanda	24,371
Imatongo	16,798
Liangati	11,586
Namukokoba	8,996
Naluywa	7,824
Lipuwe	8,058
Mwanambuyu	7,565
Wanyau	7,768
Mata	6,883
Silwizi	5,667
Lumbe	5,323
Sibukali	4,891
Muweswa	4,332
Lumbe Nanyezu	2,055
District Total	122,120

Source: Adapted from ZAMSTATS, 2024

3.0. DISTRICT POPULATION PROJECTIONS.

3.1 Estimate of the future population of the IDP area in 5, 10 and 20 years.

The population projections for the district shows a continued population growth trend in the plan implementation period from 2024 – 2034 and beyond. The population projections show that the population for Senanga is expected to grow from 122,120 in 2022 to 179,036 by 2034. See table 6.

TABLE 6: POPULATION PROJECTIONS FOR THE YEARS 2029, 2034 AND 2044

WARD NAME	YEAR 2024	YEAR 2029	YEAR 2034	YEAR 2044
Imatanda	24,371	27,335	35,730	52,383
Imatongo	16,798	18,841	24,628	36,106
Liangati	11,586	12,996	16,987	24,904
Namukokoba	8,996	10,090	13,188	19,335
Naluywa	7,824	8,776	11,471	16,817
Mwanambuyu	7,565	8,485	11,091	16,261
Wanyau	7,768	8,713	11,389	16,697
Mata	6,883	7,720	10,091	14,794
Silwizi	5,667	6,357	8,309	12,182
Lumbe	5,323	5,971	7,804	11,441
Sibukali	4,891	5,486	7,171	10,513
Muweswa	4,332	4,859	6,351	9,311
Lumbe Nanyezu	2,055	2,305	3,013	4,418
TOTAL	122,120	136,972	179,036	262,480

Source: Adapted from ZAMSTATS, 2022

The rapid population growth rates has implications of constrained access to social services for the district. Currently, the district faces challenges of low access to quality social services such as education, health and water supply services among others due to population and low financing factors. The observed status quo could worsen.

3.2 Estimate of the future urban population of the IDP area for the year 5, 10 and 20 years from 2024 base year.

The urban population is estimated to grow from 30,476 to 34,183 by 2029 and from 30,476 to 44,680 by 2034 and up to 65,504 in the next 20 years as shown in table 7.

TABLE 7: SHOWS PROJECTED URBAN WARD POPULATIONS FOR THE YEARS 2029, 2034 AND 2044

Ward Name	Year 2024	Year 2029	Year 2034	Year 2044
Imatanda	22,440	25,169	32,899	48,232
Imatongo	8,036	9,013	11,781	17,272
Totals	30,476	34,183	44,680	65,504

Source: Adapted from ZAMSTATS, 2022

The urban areas are likely to be constrained in terms of quality social services provision, infrastructure, land availability for development and social amenities due to population increase. Additionally, waste generation, indiscriminate waste disposal, and charcoal burning would also increase in proportionate to population growth without adequate corresponding interventions.

3.3 Estimate of the future rural population of the IDP area in 5, 10 and 20 years.

In the rural areas, a similar population growth trend was observable. The population in the rural areas population growth would worsen the existing encroachments of protected and reserve forests, unsustainable utilisation of natural resources, ecosystems due to population increase and push demand for settlement, food production and productivity.

TABLE 8: RURAL POPULATION PROJECTIONS BY WARD FOR THE YEARS 2029, 2034 AND 2044

Ward Name	Year 2024	Year 2029	Year 2034	Year 2044
Imatanda	1,833	2,056	2,687	3,940
Imatongo	8,762	9,828	12,846	18,834
Liangati	11,586	12,996	16,987	24,904
Namukokoba	8,996	10,090	13,188	19,335
Naluywa	7,824	8,776	11,471	16,817
Lipuwe	8,058	9,038	11,813	17,319
Mwanambuyu	7,565	8,485	11,091	16,261
Wanyau	7,768	8,713	11,389	16,697
Mata	6,883	7,720	10,091	14,794
Silwizi	5,667	6,357	8,309	12,182
Lumbe	5,323	5,971	7,804	11,441
Sibukali	4,891	5,486	7,171	10,513
Muweswa	4,332	4,859	6,351	9,311
Lumbe Nanyezu	2,055	2,305	3,013	4,418
Totals	91,546	102,680	134,212	196,765

Source: Adapted from ZAMSTATS, 2022

3.4 Likely age and sex characteristics of the population at years 5 and year 10

The obtaining district population structure is a youthful population structure with children (under five, school going children) and the youths being the majority accounting for up to 75 percent of the populations. This results in challenges of high dependence population ratio with characteristics of low investments and high poverty levels. The estimate of the productive population age group contributing to the district economic growth accounted for only up to 21 percent of the population while the aged category accounted for only 4 percent of the total population respectively.

TABLE 9: POPULATION GROWTH AT 5 YEARS

2029			2034		
Male	Age Group	Female	Male	Age group	Female
9,805	0-4	10,741	12,816	0-4	14,039
10,459	05-Sep	11,457	13,671	05-Sep	14,975
10,459	Oct-14	11,457	13,671	Oct-14	14,975
8,498	15-19	9,309	11,107	15-19	12,167
5,229	20-24	5,728	6,835	20-24	7,488
4,576	25-29	5,012	5,981	25-29	6,552
3,268	30-34	3,580	4,272	30-34	4,680
3,268	35-39	3,580	4,272	35-39	4,680
2,615	40-44	2,864	3,418	40-44	3,744
1,961	45-49	2,148	2,563	45-49	2,808
1,307	50-54	1,432	1,709	50-54	1,872
1,307	55-59	1,432	1,709	55-59	1,872
654	60-64	716	854	60-64	936
654	64-70	716	854	65-69	936
654	70-74	716	854	70-74	936
654	75+	716	854	75+	936
65,367	Totals	71,605	8,5441	Totals	93,595

Source: Adapted from ZAMSTATS, 2022

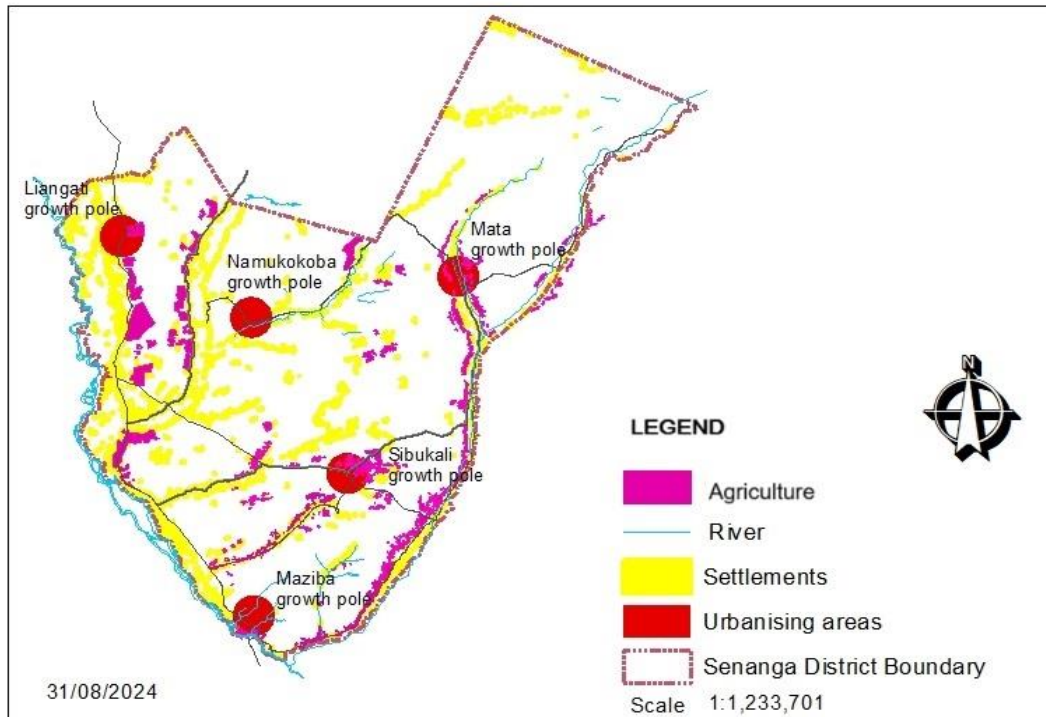
Generally, the district population structure is more of a youthful population structure with children (under five, school going children) and the youths being the majority accounting for up to 75 percent of the populations. This results in challenges of high dependence population ratio which results low investments and high poverty levels. The estimate of the productive population age group contributing to the district economic growth accounted for only up to 21 percent of the population while the aged category accounted for only 4 percent and 4 percent of the total population respectively. The factors contributing to youthful population structures included migration, high fertility rates of 5.7 children per woman, improved child survival rates owing to improving health states ZDHS (2018).

4.0. ASSESSMENT OF THE EXISTING LAND USE AND SETTLEMENT PATTERN IN THE DISTRICT

4.1. Overall settlement plan

The Settlement Patterns in the district mostly follow a linear pattern. They are mostly located along the river lines, plains and stretches of good soils for crop production. The land uses in the district can be segmented into urban and rural land uses.

Figure 4 map showing settlement patterns and land use



Source: Adapted from Google Earth satellite Image, 2024

The rural land uses comprise mainly of agricultural, settlements, limited dotted trading spaces, burial, and historical sites. The settlements and agricultural activities are the major land uses in the rural areas. Agriculture activities are confined mostly along the wetlands in low land areas and within a radius of 200 metres to about 6 kilometres from villages in the upper lands. The shifting of agricultural activities due to infertile soils and expansion of settlements as a result of population growth contribute to increase in opening of land and loss of forest cover.

4.2. Urbanising villages and growth nodes

The district has five (5) urbanising areas arising from concentrations of population namely Nande, Namukokoba, Mata, Sibukali and Maziba. These emerging growth nodes are characterised by the presence of trading places, social and economic infrastructure such as communication, health, education and judiciary.

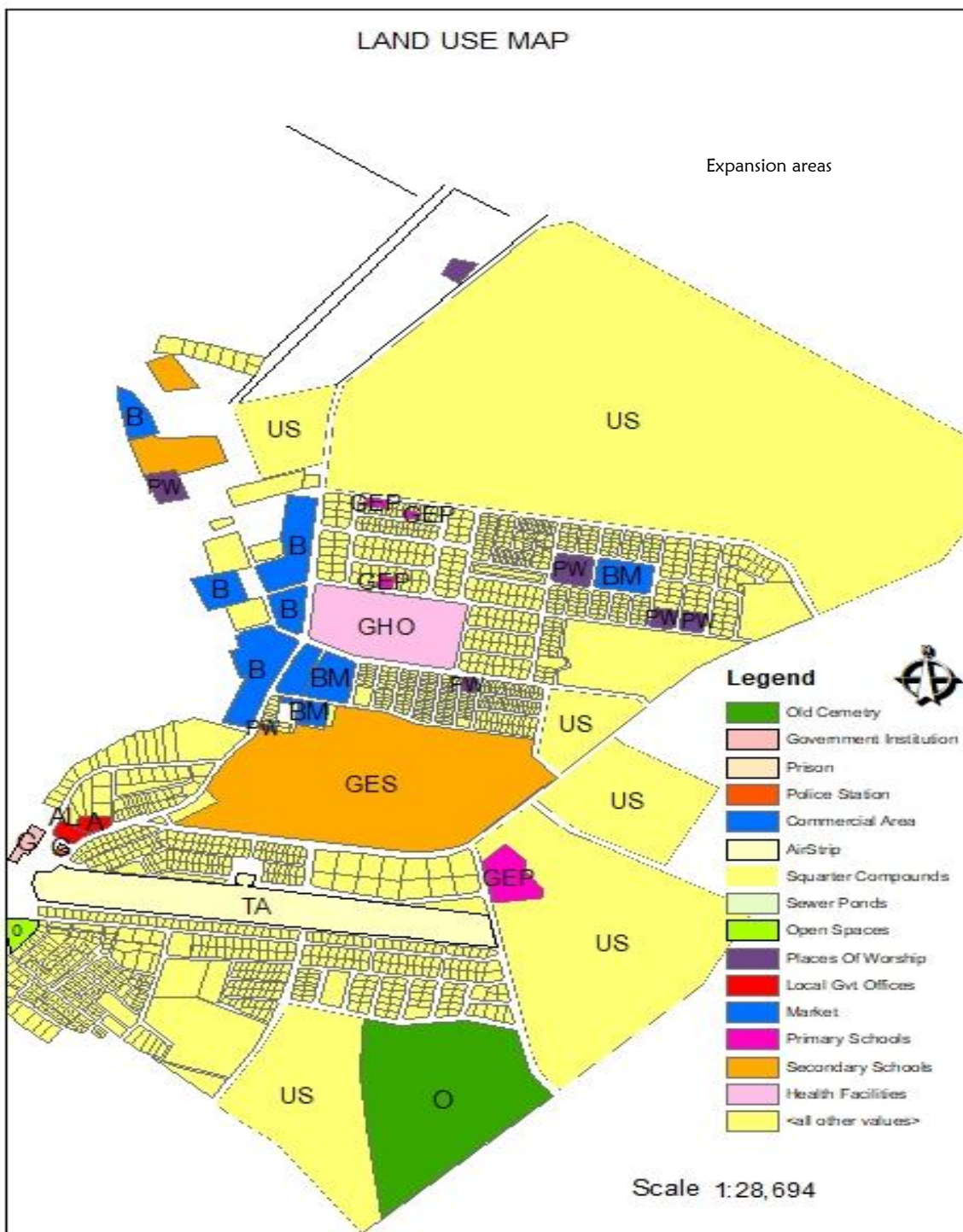
The areas still lack other supportive infrastructure such as better roads linking them to markets, crop aggregation centres, appropriate trading infrastructure, security infrastructure such as police posts and strategic mini hospital to reduce on distances to access specialised health care services by communities.

4.3. Urban expansion areas

The urban settlements comprise of the planned and informal settlements. The planned areas are dictated by planning standards while the informal settlements are as a result of inadequate development control and engagement between the local and traditional authorities. The land uses in the planning area encompass commercial, residential, religious, administrative, public

amenities, and social services such as education, health services among other functions see figure 5.

FIGURE 5 LAND USE MAP



Source: Senanga Town Council, 2007

4.4. Informal settlements

The district has a total of five (5) informal settlements in the planned area. These include Limoneno, part of Mungule, Nasitondo and Ma-round residential and Katuya areas. On the outer extents the planned area, is also surrounded by unplanned settlement that are partly under customary area. These include Mungule and Liwilo residential areas.

The unplanned settlement results in high costs of access to social services such as water and power supplies owing to lack of planned servitude service lines. The service providers, for power and water supply services face challenges to service their networks.

4.5. Other land uses

The other functional uses such as play parks for children, stadium or sports complex for community sports, library, and housing development, bus station, commercial and light industrial areas critical for enhanced local economic development are lacking while some are inadequate in the district. This has resulted in provision of some services such as bus stations loading in unsuitable places, vendors trading along road reserve.

5.0. ASSESSMENT OF THE IMPACT OF THE CONTINUATION OF POPULATION GROWTH ON LAND USE AND SPATIAL DEVELOPMENT PATTERNS

5.1. Impact of the continuation of population growth on overall settlement pattern

The continuation of population growth in the district would increase demand for land for public amenities, settlements, food production, wood and charcoal usage. It would also result in increased unsustainable usage of natural resources and ecosystems with likely increased impacts of climate change, vulnerability and poverty.

5.2. Impact of the continuation of population growth on urbanising villages and growth nodes

In the urbanising villages and growth nodes, population growth would accelerate emergency and expansion of unplanned spatial developments. It would also result in poorly integrated social services infrastructure which would result in high costs of provision of other social amenities such as water and power to service infrastructure. Similarly, such growth would increase waste generation and indiscriminate waste disposal and unsustainable utilisation of natural resources and ecosystems due to increasing food demands.

5.2. Availability of land for planned urban expansion

The availability of land for urban services expansion would also be impacted by population growth. The anticipated population increase of 14,204 in the urban area by 2034 has implications on land availability and land use. The population increase of 14,204 in urban population implies an increase by 2,367 households. This implies land requirement in equivalent of 142 hectares for development of housing amenities at a minimum land unity of 20x30 square meters, land for light industries (3 hectares) and improvement of public amenities. The population would also require 1,159 hectares of land for sustainable urban food production at a minimum land unit of 1 hectare per household. Consideration of land engagements and forward plans on sustainable land utilization would thus be imperative in the plan period.

In the current state, the planned area has limited land with a total surface area of only 4.4 square kilometres (Km²). Land for development of public amenities, social housing, expansion of trading space and light industries to feed into prevalent economic potential remain inadequate in the planning area. This has resulted in constrained development, inadequate social services, increasing encroachments on public amenities such as road reserves and rampant land conflicts. Further, the limitation of land in the planned area has resulted in increased expansions of informal settlements, infill and densification development and some high-rise developments.

5.3. Impact of the continuation of population growth on informal settlements – new, expanding and identification

The continuation of population growth would have multiple impacts on land use, access to social services and the environment. Population growth would result in increased demand for land resulting in high costs of accessing land for development. This would worsen the

eminent trends of densification and infill currently at resurgence in the planned area due to inadequate land in the planned area. Population growth would also increase land use changes, waste generation and indiscriminate waste disposal.

5.4. Impact of the continuation of population growth on other land uses

The continuation of population growth would also impact other land uses such as local and protected zoned forests. The population increase of 56,916 in the rural areas, between 2024 and 2034 entails an approximate of 9,486 new households with a minimum requirement of 4,900 square meters for each new household for food production and extra land for settlements. This would contribute to increased loss of forest cover, and increased encroachments of local and protected forests. The district local and protected forests are already encroached for settlements and agricultural activities by between 40 to 73 percent. Sensitive ecological Zones and ecosystems would also be negatively impacted.

It is therefore imperative to not only understand the impacts of population growth effects and dynamics but to adequately consider necessary remedial measures and plans implementation to ensure sustainable growth and local economic development in the plan period.

SECTORAL AND THEMATIC ANALYSIS

6.0. HUMAN AND SOCIAL DEVELOPMENT

6.1. Introduction

Human and social development is facilitated by enhanced access to social services, reduced inequalities and poverty reduction in communities (MoFNP, 2022). To actualize Human and social development redressing impeding factors to access to quality social services delivery in the health, Education, water and sanitation, and community development at the local level in the plan period would be necessary.

6.2. HEALTH SECTOR

6.2.1. Overview

The health sector has a Vision of providing equitable access to cost effective quality health care services as close to the family as possible and ensure a health nation and productive people. This would be attained by providing key and priority interventions in the health sector with the help of other actors such as UNICEF, CoAg, ICAP, DAPP, Global Funds, Transbantu, SSHA LIFE SAVERS and ECR to ensure enhanced health services currently supporting similar interventions.

6.2.2. Implementation of key government priorities from national development plan at local level

The government priority interventions in the health sector includes public health strengthening, increasing access to quality health care and to enhance food security and nutrition. The implementation of the priority health interventions at the local level included the following strategies:

1. Strengthening public health

Implementation of disease prevention and control, health care education, maternal healthcare, Child survival development, Family planning, Epidemic preparedness and control.

2. Increasing access to quality health care

Implementation of infrastructure development programmes, procurement of medical products, equipment, transport maintenance, and medical supply management, mobile health services and human resource development.

3. Enhance food security and nutrition

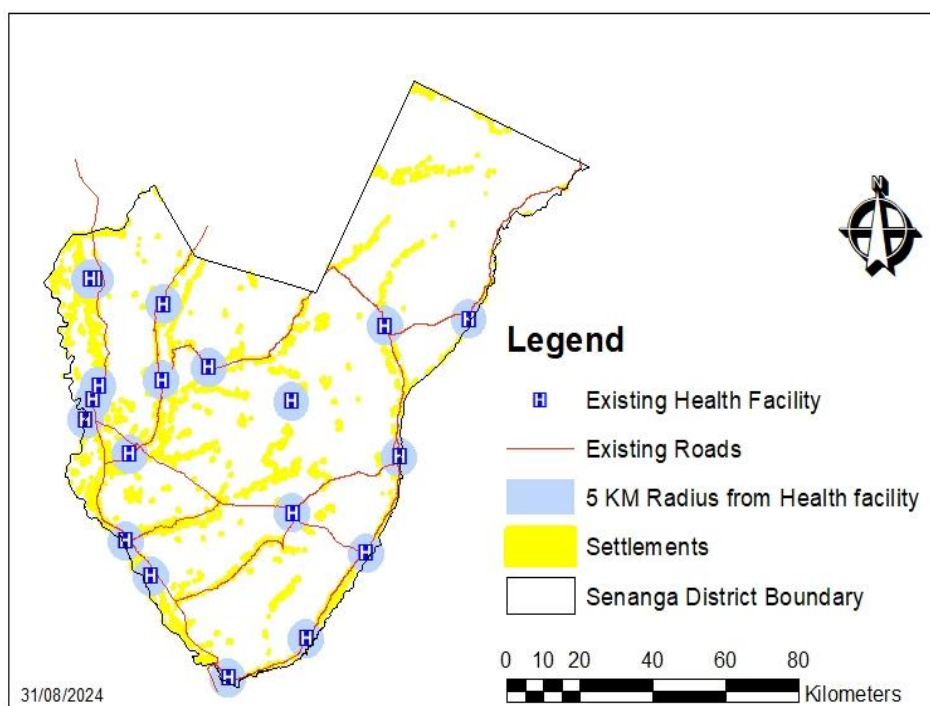
Up-scaling supplementary feeding.

6.2.3. Status of implementation of existing plans and strategies in the district.

6.2.3.1. Strengthening public health.

The district has a total of 21 health facilities comprising of 12 health posts, 7 rural health centres, one (1) urban clinic and one (1) referral hospital. The facilities are strategically and fairly distributed across the 14 wards of the district in order to enhance access to health services and public health. However, the health infrastructure remain inadequate as 80 percent of the 19 health facilities lack functional maternity annexes, adequate mothers' shelters. The district still lack a district and mini hospitals and appropriate medical equipment necessary for specialised case management services. The health facilities are distributed across vast wards resulting in communities walking longer distances of between 6 to well above 50 kilometres to access health care services against a recommended distance of 5 Kilometres. See figure 6.

FIGURE 5: MAP SHOWING POPULATION DISTRIBUTION AND HEALTH FACILITIES



Source: DHO, 2024

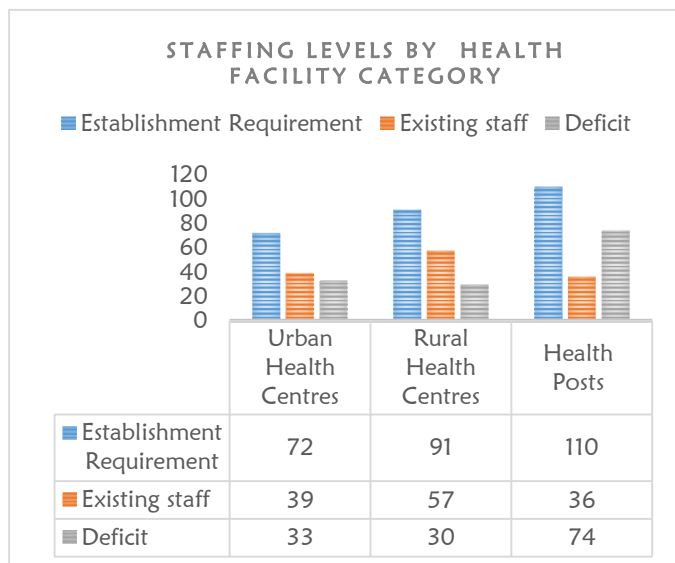
The longer distances to health facilities impact access to quality health care in terms of costs of care due to distances involved. Community members have to camp around health facilities increasing opportunistic costs and loss of production man hours. The vastness of wards and inadequate distribution of health facilities also impact negatively on disease surveillance due to inadequate transport at facility level.

6.2.3.2. Access to quality health care.

The quality of health care services is also impacted by inadequate qualified human resources. The health sector has inadequate qualified human resource. Only 48 percent of professional health workers are available to provide health care services to the community. This has resulted in high population per professional unit standard, poor disease surveillance;

increased disease incidence rates, work overloads and overall poor quality of health care services. See figure 7 below.

FIGURE 6: SHOWING STAFFING LEVELS IN THE HEALTH SECTOR

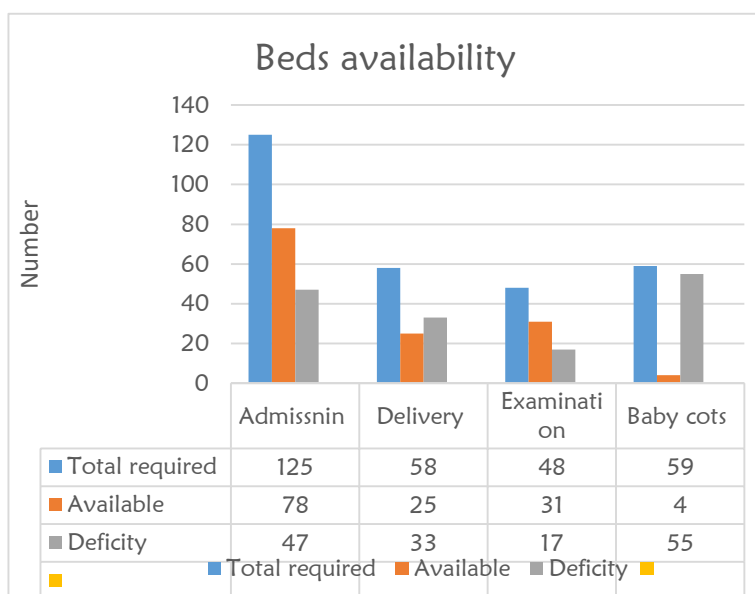


Source: DHO, 2024

6.2.3.3. Bed spaces

The facilities also lack adequate beds for inpatients and other diagnostic services. Only 49 percent of the total required beds spaces are available for health care provision. Out of the total 280 required bed stock, only 138 beds for all categories encompassing Admission, deliveries, examination and baby care are available see figure 8.

FIGURE 7: GRAPH SHOWING BED SPACE AVAILABILITY



Source: Senanga DHO, 2024

This affects quality of health care with regards to appropriate attending to patients and ensuring appropriate accommodation of patients.

The other factors compounding the sector include inadequate staff housing, 90 percent of the health facilities do not have adequate housing infrastructure to cutter for all required personnel. This also contribute to lack of professional staff at health

Facilities, work overloads on available staff and poor quality of health care services.

6.2.3.4. Water supply and sanitation in health facilities

Portable water to ease health care delivery services and hygiene practices at facility levels is still a challenge. 89.5 percent of available water supply infrastructure are mainly hand pumps stationed at varying distances from service facilities. This contributes to poor hygiene

practices, especially for in patients and maternity services that require easy access to water at all times for critically ill in patients.

All the health facilities (100 percent) have ventilated improved latrines (VIP) toilets positioned at varying distances from facilities to avert smells and transmission of diseases. However, distances to VIP sanitation facilities pose a challenge of access by critically ill in patients while some of the VIP facilities (Litambya, Itufa, and Mwanamwalye) are in dilapidated states.

6.2.3.5. Power supply in health facilities.

Current state of power supply in health facilities remain inadequate. A total of 31.5 percent (6) of 19 health facilities have dysfunctional solar batteries. All solar powered health facilities and houses have inadequate power supply to run all utility equipment and lighting. This contributes to low motivation and resistance of some staff to work in rural settings thereby undermining quality of care services, disease surveillance and consequently increase in disease incidences.

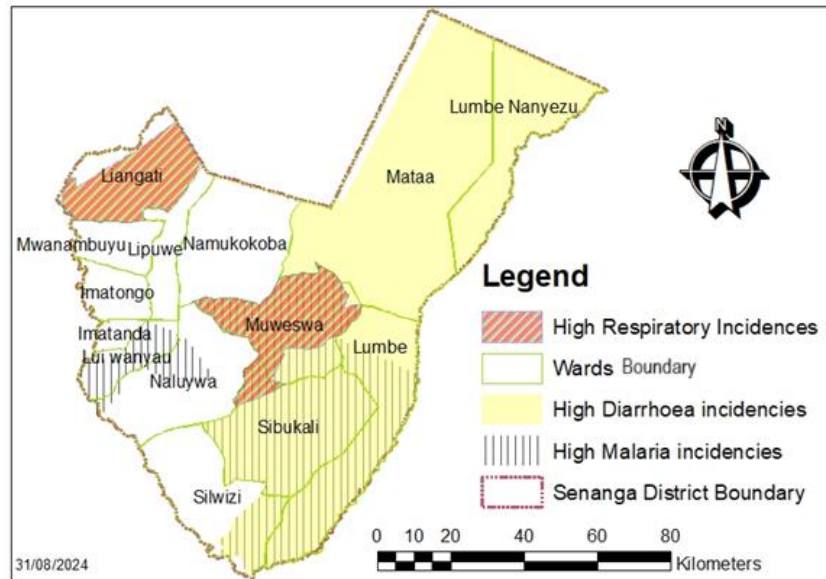
6.2.3.6. Disease incidences

In Zambia malaria remains a major Public Health concern and its elimination has been prioritized in the national universal health coverage agenda through deployment of cost-effective preventive and curative interventions. (NMEC 2017) Senanga District is still recording high incidence of malaria as it stands at 639, while the provincial and National stand at 785 and 587 respectively.

This cause for investment in malaria prevention and control to reduce the rates of malaria in the district.

The most common diseases with high incidence rates in the district include malaria with an incidence rate of 557/1000, respiration non pneumonia with an incidence rate of 384/1000 and diarrhoea non blood with an incidence of 71/1000. The areas most affected by high malaria incidence cases include Muweswa, Sibukali, Lumbe and Wanyau wards mainly due to prevalent wetland areas that serve as breeding sites for mosquitoes. Some wards such as Muweswa, Mata, Lumbe Nanyenzu, Namukokoba and Lumbe have low numbers of safe and clean drinking water infrastructure at community level. The other diseases among the top 10 most prevalent in the district included, muscular skeletal-corrective tissue (79/1000), digestive system non-infectious (48/1000), Dental cavities (33/1000), Throat Diseases (23/1000) Trauma and other injuries (17/1000) skin disease non infection 16/1000) respiratory non-infectious pneumonia (10/1000) and Hypertension (5/1000).

FIGURE 10: MAP SHOWING DISEASE INCIDENCES

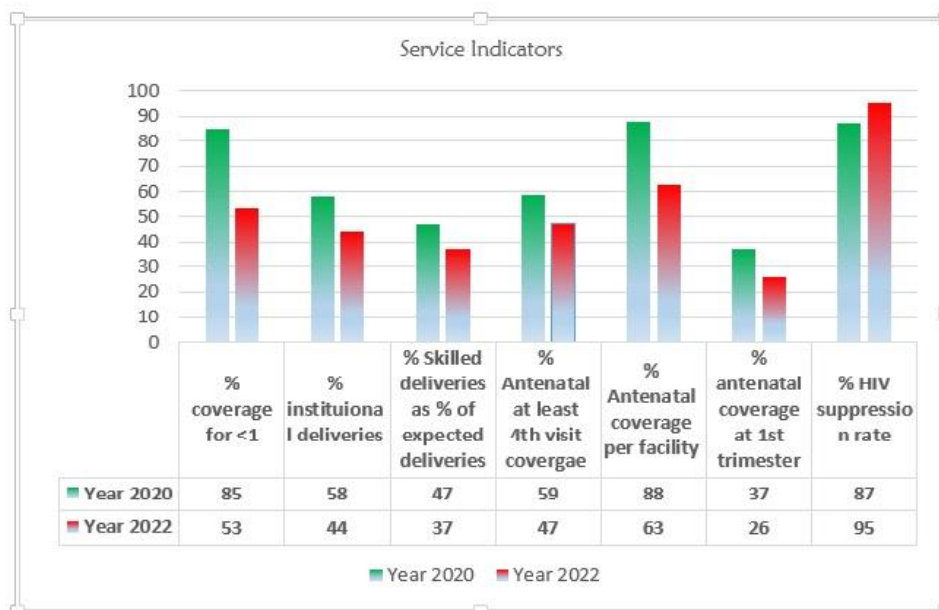


Source: Senanga DHO, 2023

6.2.3.7. Quality of service including key performance indicators

The quality of health care is impacted by a number of factors as highlighted above. The effects of inadequate health facility infrastructure, medical equipment, maternity and mother’s shelters Inadequate qualified staff alongside community attitude to health information impact quality of health care in a number of ways.

FIGURE 8: GRAPH SHOWING HEALTH SERVICES INDICATORS



Source: Senanga DHO, 2024

Comparison of some key health indicators between 2020 and 2022 show a reduction on most health performance indicators. Figure 9, shows that percent coverage for immunization under 1 reduced by 37.6 percent, antenatal coverage per facility reduced by 30 percent with other indicators dropping by 20-28 percent.

Institutional deliveries increase the chances of skilled birth attendance as well as increasing the mothers' access to essential equipment and supplies. The expected national target for institutional deliveries stands at 50 percent and 60 percent for rural and urban settings. For 2023 statistics (ZDS 2018) the national and provincial statistics for institutional deliveries stood at 84 percent and 73.7 percent while the district stood at 43 percent.

96 percent of institutional deliveries were attended by skilled personnel. The national and provincial data stood at 80 percent and 94 percent respectively. The target is to attain 100 percent of institutional deliveries by employing more skilled personnel.

Table 10: SERVICES FUTURE DEMAND FOR KEY PERFORMANCE INDICATORS

INDICATOR	CURRENT INDICATOR (2022)	NATIONAL TARGET	DEFECIET
Percentage of Children under 1 fully immunised	62.20%	95%	33%
Percentage of Institutional deliveries	43%	50%	17%
percentage of skilled deliveries	57.60%	80%	42%
Maternal Mortality Ratio	39/100, 000	272/100,000	Nil
Percentage of Ante Natal Care 4th Visit	18.70%	58%	40.3%
Percentage of Ante Natal Care at first Trimester Visit	28.40%	60.0%	31.4%
Percentage of Ante Natal Care	63.60%	95%	31.4%
Percentage of HIV Suppression rate	98%	95%	NIL

Source: DHS2

Universal immunisation of children against common vaccine-preventable diseases is crucial to reducing infant and child morbidity and mortality in the country. The expected target for fully immunized children is 95 percent. The coverage for fully immunized at 23 months at provincial and national level were at 72 percent and 68 percent respectively. Senanga district recorded a 9 percent increase in children fully immunized from 53 percent to 62 percent. Despite the increase, the district is still below the expected target. As a district we need to invest more in child protection by improving access to quality health services.

TABLE 11: SERVICES FUTURE DEMAND FOR KEY PERFORMANCE INDICATORS IN TEN 10) YEARS TIME

INDICATOR	CURRENT INDDICATOR (2022)	NATIONAL TARGET	DEFECIET	EXPECTED DEMAND IN THE NEXT 10 YEARS' TIME	EXPECTED DEFICITS IN THE NEXT 10 YEARS
Percentage of Children under 1 fully immunised	62.20%	95%	33%	95%	31%
Percentage of Institutional deliveries	43%	50%	17%	60%	22%
percentage of skilled deliveries	57.60%	80%	42%	80%	5%
Maternal Mortality Ratio	39/100, 000	172/100,000	Nil	0/100, 000	0.6/100, 000
Percentage of Ante Natal Care 4th Visit	18.70%	58%	40.3%	60%	48%

Percentage of Ante Natal Care at first Trimester Visit	28.40%	60.0%	31.4%	60%	27%
Percentage of Ante Natal Care	63.60%	95%	31.4%	95%	11%
Percentage of HIV Suppression rate	98%	95%	NIL	95%	2%

6.2.3.8. Top 10 causes of mortality in all populations

The challenges of inadequate public health states largely contribute to the surge of disease incidences. Among the many diseases impacting the district the most common top 10 disease causing mortality in all populations for the years 2020, 2021 and 2022 are as highlighted in the table 11.

TABLE 12: TABLE SHOWING TOP 10 CAUSES OF MORTALITY IN ALL POPULATIONS

No.	2020		2021		2022	
	Disease	Deaths/1000 Adm	Deaths/1000 Adm	Deaths/1000 Adm	Disease	Deaths/1000 Adm
1	Meningitis	1000	Pneumocystis Carini Pneumonia (PCP)	300.2	Rabies	1000
2	Cryptococcal meningitis	600	Cryptococcal meningitis	230.0	Cryptococcal Meningitis	1000
3	Acute flaccid paralysis	500	Poisoning	124.1	Acute Upper Gastro-intestinal bleeding	1000
4	Cardio-vascular diseases	278.4	Hypertension	75.0	Congestive Heart failure	500
5	Diabetes	225.8	Severe Diarrhoea with dehydration	70.0	Acute renal failure	333
6	Hypertension	202	Tuberculosis	43.4	Epilepsy, unspecified	500
7	Severe Diarrhoea with dehydration	176.5	Malaria	23.5	Alcohol intoxication	357
8	Tuberculosis	97.6	Anaemia	20.0	Tuberculosis pleural effusion	333
9	Pulmonary Diseases Non-Infectious	90.9	Cardio-vascular diseases	16.2	Viral pneumonia	333
10	Substance Abuse	69	-	-	Chronic liver disease	333

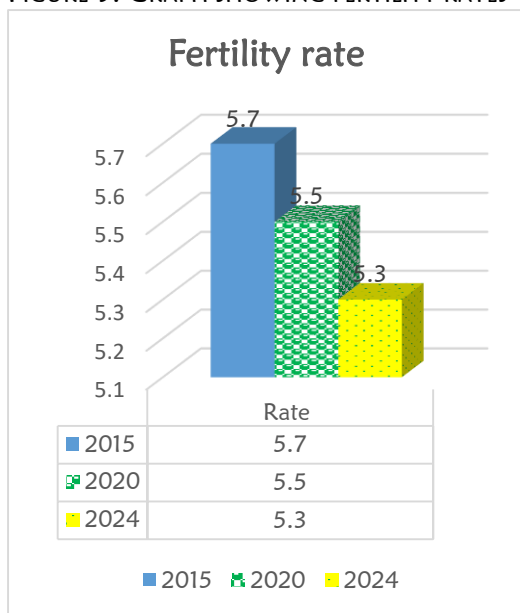
Source: Senanga DHO, 2024

Despite the noticeable challenges in public health and access to quality care services however, there was still noticeable improvement in in fertility trends, life expectancy, maternal deaths, death crude rates which all contribute to the eminent district population growth.

6.2.3.9. Fertility trends

The fertility rates in the district show a reduction trend although it is slightly higher than the provincial and national where are 5.4 and 4.7 respectively. This has been due to health promotion interventions which include family planning interventions and risk behaviour awareness information available at community levels.

FIGURE 9: GRAPH SHOWING FERTILITY RATES



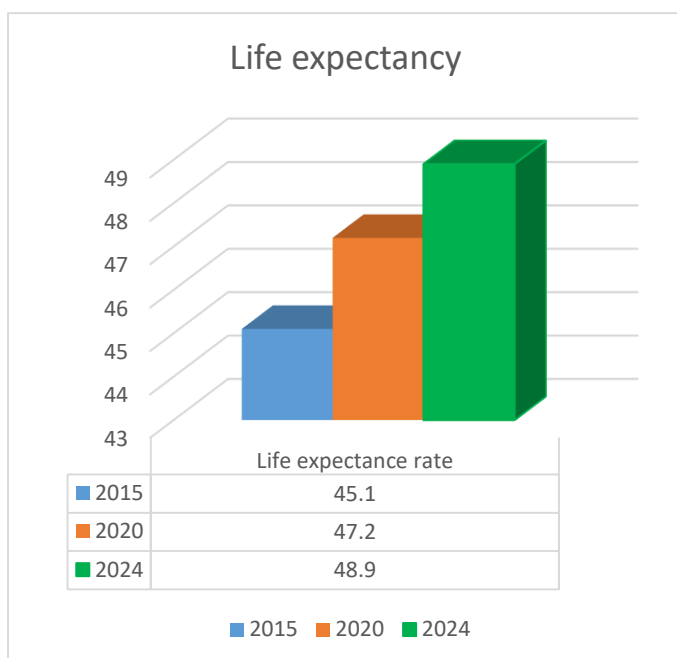
Statistical data show that number of births per woman reduced from 5.7 in 2015 to 5.3 birth per woman in 2024. This shows a minimal reduction of only 0.4 Birth per woman. This explains why the district population is still on the increase despite the observed reduction stressing the provision of service delivery. This calls for construction of more health facilities to cater for the ever-increasing population and to intensify education, information and communication to increase in the uptake of family planning to control the population growth.

CSO, 2011; DHIS, 2022

6.2.3.10. Life expectancy

The district life expectancy trends also show that the life expectancy in the district has been improving. The life expectancy which is the number of years a person is expected to live based on statistical average improved from 45.1 to 48.9 years.

FIGURE 10: GRAPH SHOWING LIFE EXPECTANCY

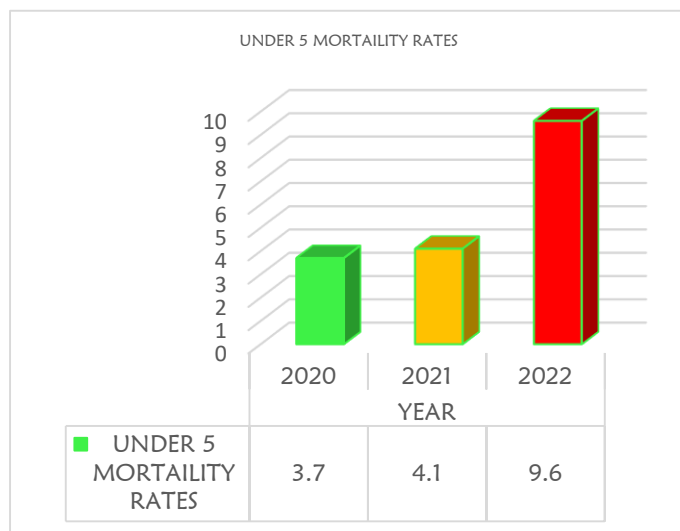


Although there is a noticeable improvement in the life expectancy, the district life expectancy of 48.9 remains below the provincial life expectancy of 53 and that of the nation at 61 years (CSO, 2011; ZDHS, 2022). This implies that while there is noticeable improvement in the life expectancy, generally factors that contribute to life expectancy such as quality health care services at the district level, remain low and more needs to be done towards health care parameters.

Source: CSO 2011, DHIS, 2022

Low life expectancy in the district could be explained by a compound of factors such as high poverty levels, food insecurities, low incomes and low access to quality care services due to inadequate health infrastructure in the district.

FIGURE 11: GRAPH SHOWING UNDER-FIVE MORTALITY RATES

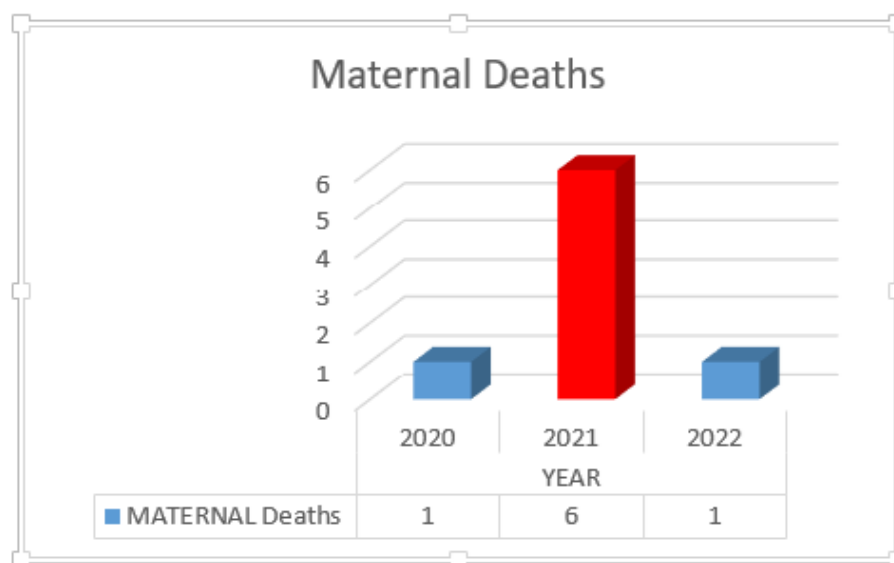


The under-five mortality rates indicated an incremental trend from 2020 to 2022. The factors contributing to the observed trends include inadequate qualified staff and health facility infrastructure, and longer distances to referral facilities amid poor roads infrastructure.

Source: DHO, 2024

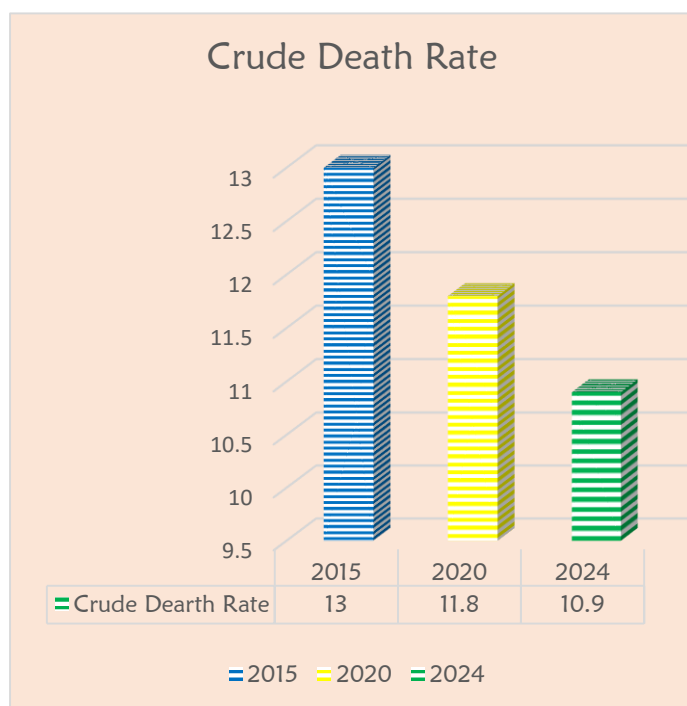
The district recorded one maternal death in 2020, 6 in 2021 and 1 in 2022. The district recorded (195/100, 000) slightly higher ration than the provincial which is at 166/100, 000 while the national ration was at 278/100, 1000. This is against a set standard of no woman should die giving births. Major contributing factors to the observed trend include – longer distances to health facilities, specialised care services and inadequate referral systems due lack of Supportive infrastructure (ambulance services and good road network).

FIGURE 12: GRAPH SHOWING MATERNAL DEATHS



Source: Senanga DHO, 2023

FIGURE 13: GRAPH SHOWING ADULT DEATH RATES



The projected crude adult mortality rates show that there has been a reduction trend in adult death rates. Similarly, ZDHS, 2018 highlighted reduction trends of adult population death rates as having reduced from 353 to 164 per thousand among female and from 407 to 234 per thousand among males.

Source: CSO, 2011

Generally, most of the population parameters indicate probabilities of increased population in upcoming years and thus likely populations' impacts that require planning interventions to ensure minimised negative social and community impacts.

6.2.4. Issues arising from public participation

The key issues submitted by public participation highlighted as negatively impacting the quality, health outputs and outcomes of health care services included low access to quality health care services due to inadequate health infrastructure and qualified staff, low utilization of health information by the community as well as inadequate medical equipment, poor communication and inadequate power supply as impacting negatively on health care service provision.

6.2.5. Impact of changes anticipated over the next 10 years

Over the next 10 years, the population is anticipated to grow from 122,120 in 2024 to about 179,036 by 2034. This would further result in increased demand for health care services and the associated infrastructure such as rural health centres, health posts, equipment, staff housing staffing levels, service road network, communication as well as water and power supply to enhance services delivery. It is also anticipated that health care financing, human resources, distances to health facilities, better portable water infrastructure, power connectivity to health facilities would improve considering that interventions towards the eminent challenges are planned for in the long term IDP plan. The anticipated changes and expected project implementation to mitigate the many health challenges are highlighted in the development framework.

6.2.6. Impact of continuation of existing trends

The continuation of the current trends encompassing low access to quality health care due to inadequate health care infrastructure, equipment, housing, staff among others, will continue to negate access to quality health care if interventions are not put in place. Low access to quality health care results in poor community wellness, low productivity, household vulnerability and increased poverty at household levels (Disabil, 2012).

6.2.7. Environment and climate change analysis

Climate change effects would likely impact on health care services by inducing ailments associated with climate change such as headaches, eye infections diarrhoea, Pneumonia among other diseases due to excessive high and colds temperatures. Such ailments would impact the community in terms of productivity, high costs of health care, loss of livelihoods and induced vulnerability and poverty.

6.2.8. Gender analysis

Climate change would impact female gender the most who are culturally laden with the responsibility of care for the sick and household food production at household and community level. It would further impact on children who are most susceptible to extreme weather conditions, the chronically ill and the aged.

6.3. WATER SUPPLY AND SANITATION HYGIENE

6.3.1. Overview

Water supply and sanitation contribute to good nutrition and health, productivity and welfare of the communities. The sector has a vision of ensuring universal coverage of safe water and sanitation services. The goal of universal coverage is implemented with support of other actors encompassing government partner organisations such as the African Development Bank (ADB), Christian Brothers, Local Authority and Echo Zambia among others supporting Water, Sanitation and Hygiene (WASH) intervention services working through the District Water, Sanitation and Hygiene Education (WASHE) structures.

6.3.2. Implementation of key government priorities from national development plan at local level

The government priorities implemented at the local level included programmes aimed at improving access to clean, safe water and sanitation services. The district through the sector implemented the following strategies focussed on (i) Improving access to clean and safe water through Implementation of water infrastructure development and water quality monitoring and (ii) Improving sanitation services through implementation of sanitation infrastructure development, solid waste management, and sanitation and hygiene promotion.

6.3.3. Status of implementation of existing plans and strategies in the district

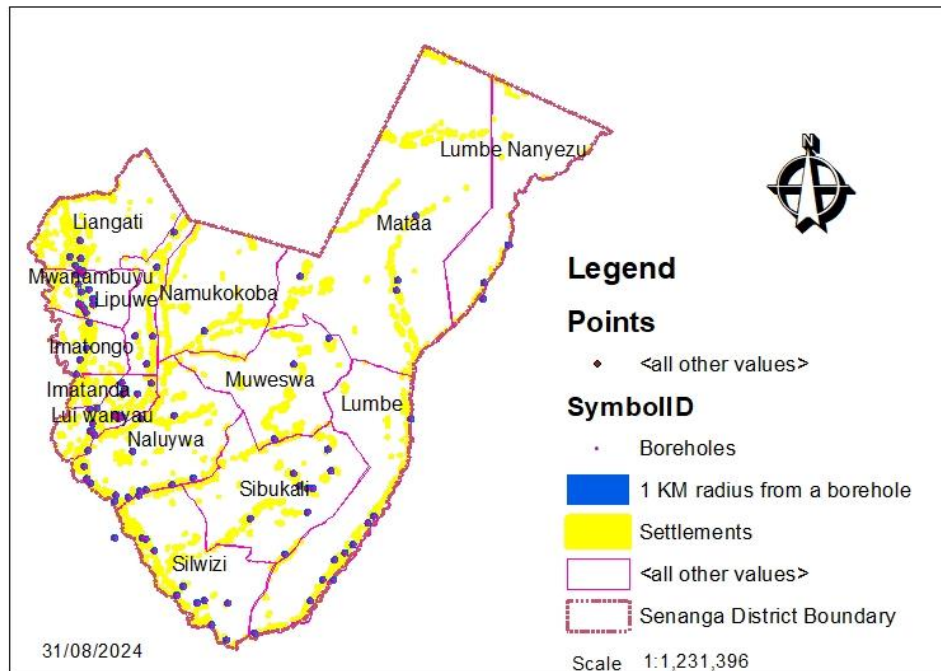
6.3.3.1. Improving access to clean and safe water

The sector has been implementing water interventions which included drilling of boreholes mainly of India mark II hand pumps and promoting Sanitation and hygiene practices. In urban area, the sector has been expanding water supply network infrastructure to ensure access to safe water supply. Urban areas are serviced by the Western Water Supply and Sanitation Company (WWSC) while the rural areas are serviced by the MLGH&RD through the Local Authority and other partners supporting WASH interventions in the district such as World Vision Zambia, Christian Brothers, YWCA, DANNIDA, African Development Bank, Village water among others. Despite the support however, access to safe water supply and sanitation facilities coverage remain low. See figure 15.

6.3.3.2. Water supply

In the urban area, only 2,016 (31 percent) of the total 6,497 urban households had access to safe drinking water. The urban population is serviced by water networks and 25 hand pump boreholes dotted around the urban area. In the rural areas, only 5,283 households (31 percent) out of the total 17,016 households had access to safe drinking water. The rural areas are serviced by a total of 317 boreholes mostly of India mark II hand pumps. Out of a total of 317 boreholes, 111 boreholes are located in public institutions implying that only 231 boreholes are servicing villages at community level.

FIGURE 14: MAP SHOWING WATER COVERAGE IN THE DISTRICT



Source Field Data, 2024

This has resulted in most members of the community walking longer distances to access safe clean water against a standard distance 1 kilometre. This implies that a majority population of 4,481 urban households and 11,733 rural households are still using unsafe sources of water and likely to be impacted by water related diseases. See table 11.

TABLE 13: TABLE SHOWING WATER SUPPLY SERVICED AND NONE SERVICED POPULATION PER WARD

WARD NAME	2022 CENSUS YEAR	NO. OF WATER POINTS	SERVICE STANDARDS	SERVICED POPULATION	UN-SERVICED POPULATION	NO. WATER POINTS REQUESTED
Imatanda	2,250	25	100	2,500	0	0
Imatongo	15,561	53	100	5,300	10,261	103
Liangati	10,733	46	100	4,600	6,133	61
Namukokoba	8,333	8	100	800	7,533	75
Naluywa	7,248	15	100	1,500	5,748	57
Lipuwe	7,464	48	100	4,800	2,664	27
Mwanambuyu	7,008	45	100	4,500	2,508	25
Wanyau	7,196	42	100	4,200	2,996	30
Mata	6,376	7	100	700	5,676	57
Silwizi	5,250	7	100	700	4,550	46
Lumbe	4,931	11	100	1,100	3,831	38
Sibukali	4,531	25	100	2,500	2,031	20
Muweswa	4,013	7	100	700	3,313	33
Lumbe Nanyezu	1,904	3	100	300	1,604	16
Totals	92,798	342	100	34,200	58,848	588

Source: Filed data, 2024

The factors contributing to poor access to safe and clean water include sparsely distributed population of settlements and poor states of access roads requiring four-wheel drive water drilling rigs which result in community sections not meeting population requirement per service standard of unit water infrastructure. The poor state of roads also challenges mobility of drilling vehicles with regards to access of certain rural areas.

Access to safe water was also challenged by low sustainable maintenance and operational practices (SOMAP). Only 36 (10 percent) of wash committees out of the total required 342 water points were trained in basic SOMAP practices. This contributes to longer down time of dis-functional water infrastructure. Community is also resistant to proactive contributions of funds towards sustainable functionality of water points until they breakdown. This further exposes communities to unsafe sources of water and increased water related disease incidences. In the urban areas, key challenges included capacity related factors by the water utility company and failure by some households and firms to service their own water lines with regards to service charges.

Access to safe and clean water is further impacted by the salt pans in wards such as Naluywa and Silwizi and the presence of iron in most parts of the district. Owing to such impacts there will be need to undertake hydro-geological surveys to ascertain the extent of the problem.

6.3.3.3. Sanitation and Waste Management

6.3.3.3.1. Sanitation and hygiene practices

In terms of access to sanitation services, the sector implemented promotion of sanitation hygiene practices, construction of sanitation facilities and monitoring of sanitation hygiene practices through the community led total sanitation approach. However, only 16 percent of the population had sanitation facilities while sanitation hygiene practices remained poorly adhered to (DHIS, 2021).

The key challenges affecting scale up of sanitation hygiene and practices especially in rural areas include cultural beliefs and norms, loose sandy soils which contribute to frequent collapsing of pit latrines and low involvement and engagement of the traditional leaders in monitoring and championing community led sanitation programs. Poor sanitation facilities at community levels poses challenges of open defecation (OD), and open-source water pollution which a majority population utilise resulting in increased diarrhoea diseases.

6.3.3.3.2. Solid Waste Management

The district faces challenges of increasing indiscriminate waste disposal. The primary generators to the obtaining solid waste include the markets, trading places, restaurants, public institution, bars and liquor stores, residential households, rice and timber millers. The types of waste mostly generated by these actors comprise of plastic, paper, glass, food leftovers and rice husks, saw dust, wood shavings from millers and rumen digester from abattoirs.

The refuse waste receptacles in designated waste disposal areas are also in short supply. Only two (2) out of five (5) designated markets namely old and new markets have waste bays. Other markets such as Limoneno and Caprivi markets have 1 and 2 drum skip bins respectively. Katuya market has neither a refuse bay nor drum skip bins. The majority of public institutions and trading places do not have skip or wheel bins. Additionally, most of the actors have not subscribed for solid waste interventions such as waste collection with the Local Authority. Only 18 out of 1224 household have subscribed for waste collection. The majority of households dig pits, burn or dispose their waste in undesignated places such as road sides and open spaces. Further, the district has no designated dumpsite while the public cemetery in use is nearly full and in urgent need to find land for a new burial site.

6.3.4. Quality of service and service indicators

Water supply coverage in the district is very low at 31.04 percent for both the rural and the urban population compared to the provincial and national levels which stand at 44 percent and 72 percent respectively. There are still poor unsustainable and maintenance practices resulting in longer down times of water points. In terms of sanitation coverage, the district stands at 16 percent compared to the province which is at 6 percent and national at 54 percent (ZDHS, 2018). Only 13.65 percent of the villages have trained sanitation action groups to champion sanitation hygiene practices at the community levels.

6.3.5. Key issues arising from public participation

Submissions from public participation highlighted low access to safe water as key issue impacting the community negatively. Low access to safe water supply is attributed to low investment and participation of the private sector in the water supply sector in the district. Some communities also fail to raise community contribution funds required as upfront payments for considerations for boreholes.

Another key issue submitted from public participation includes low access to sanitation facilities and poor adherence to sanitation hygiene practices due to cultural beliefs and values on usage of sanitation facilities (toilets). Additionally, there has been Low involvement of traditional leaders in enforcing construction of sanitation facilities at the community levels as well as low awareness on the ill effects of poor sanitation impacting negatively on the

health states of the community and educational states of many learners at the community levels.

6.3.6. Impact of changes anticipated over the next 10 years

The population projections show population increase of up to 56,916 by 2034. This implies that besides the current deficit of 588 required water points an additional 569 water points (hand pumps) at a current population of 100 per water point would be required to service the emergent population. This highlight shows that without mitigation measures, a larger district population would be serviced by unsafe water sources, while practicing OD. The unsafe water sources, and poor sanitation practices would impact a majority of the district population. The implications of that would be high water related disease incidences, increased cost of care, low productivity, vulnerability and poverty for a larger population in the district.

6.3.7. Opportunities in the water sector

The deficits of water supply services of about 61 percent for both the urban and rural communities present investment opportunities for the business enterprises dealing in water supply works, equipment and spare parts of water infrastructure in both urban and in the rural settings. The district township area is drained by the Zambezi and Wayama rivers which also provides an opportunity for water abstraction firms with ability to set up water supply infrastructure in the urban area. The need for improved sanitation services and scale up also provide opportunities in the construction industry, water works as well as behavioural change awareness interventions aimed at improving community lives.

6.3.8. The impact of continuation of the existing trend

The continuation of the existing trend of low access to safe water and sanitation hygiene practices amid increasing population growth rates would perpetuate vulnerability and poverty for a majority of households in the district.

6.3.9. Environment and climate change analysis

The Climate change effects likely to impact on the water sector include mostly excessive high temperatures with likely impacts of drying water sources for both safe drinking water, crop and livestock production. This would further induce poor nutrition, vulnerability and poverty at household levels.

6.3.10. Gender and climate change analysis

Similarly, the female gender charged with cultural gender roles of fetching water for household chores and children are likely to be impacted the most. The effects among the female gender encompasses loss of productive time owing to longer durations of searching for water, care for the sick due to ailments induced by unsafe sources of water compared to the male gender.

6.4. EDUCATION SECTOR

6.4.1. Overview

The education sector is a cornerstone of societal development, crucial for equipping individuals with the knowledge and skills necessary for personal and collective progress. In our district, education plays a pivotal role in shaping the future of both the local community and the nation at large. This sector is guided by the overarching goal of providing equitable access to quality education that ensures improved learning outcomes, participation, and the development of relevant skills by 2034, as outlined in national policies.

This document provides a comprehensive overview of the current state of the education sector, detailing the key priorities outlined in the National Development Plan, and how these priorities are being implemented at the local level. It assesses the status of existing plans and strategies, highlights significant challenges such as infrastructure deficits, water and sanitation issues, and staffing shortages, and discusses the impact of climate change and other external factors. By examining these elements, the report aims to identify critical areas for improvement and outline strategic recommendations to enhance the quality and accessibility of education in the district.

6.4.2. Key priorities of sector-specific national plans/strategies and local implementation

The government through the Ministry of Education prioritizes the following programs: Early Childhood Education, Primary and Secondary Education, Information and Communication Technology (ICT) and Science Learning Promotion, provision of school requisites (learning materials and desks), school infrastructure and skills development.

6.4.3. Status of implementation of existing plans and strategies in the district

The district comprises a total of 111 schools, 4 are private schools, 99 primary schools, 76 of which have Early Childhood Education annexes and 8 are secondary schools. At the tertiary level, there is only one nursing school and no skills training centre, resulting in high training costs and low skill development. The education sector faces challenges such as inadequate infrastructure (classrooms, housing), furniture, water and sanitation facilities and a shortage of teaching staff.

6.4.3.2. Education school infrastructure

The Constituency Development Fund (CDF) has supported the construction of 27 classrooms between 2022 and 2024. Despite this, there remains a significant infrastructure challenge, with a requirement of 705 classrooms. Currently, only 319 suitable classrooms are available, with 171 being substandard pole and mud structures. At the secondary level, only 50 out of the required 115 classrooms are available. The shortage leads to long distances to schools, overcrowded classrooms, and compromised education quality.

FIGURE 15: PICTURE SHOWING STATUS OF POLE AND MAD CLASSROOMS

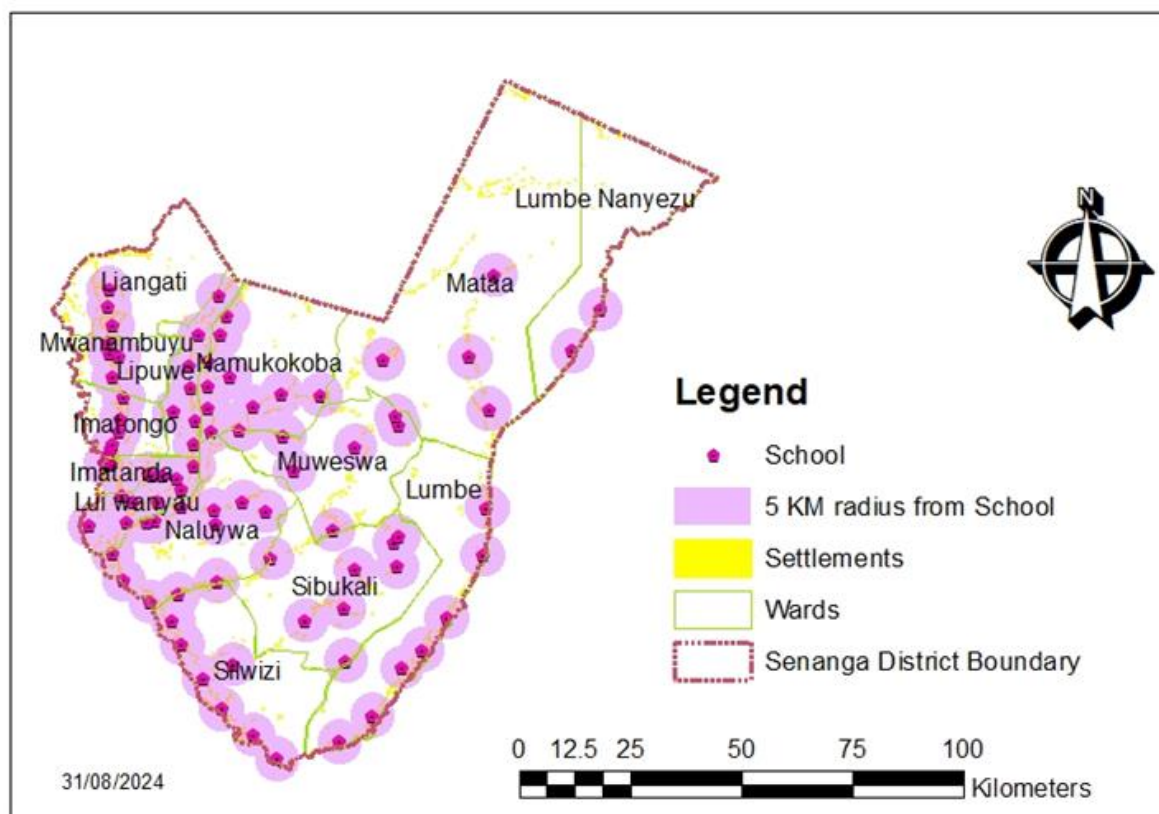


Source: Field Photo, 2024

Figure 17. Is a pictorial representation of the structures under the 171 semi-permanent structures in the district?

The wards mostly impacted by inadequate school infrastructure included mostly the remote rural wards of Lumbe Nanyezu, Mata, Muweswa and Namukokoba wards. The key challenges associated with inadequate school infrastructure include sparsely population distributions and isolated settlement patterns resulting in low population requirement per unit standard of school infrastructure. In the urban areas, school infrastructure is fairly distributed. However, pupil to classroom ratios are high resulting in overcrowded classrooms.

FIGURE 16: DISTRIBUTION



Senanga DEBS Office, 2024

School distribution follows the settlement patterns and population density. The wards with highest population density have better coverage compared to the ones low population density.

6.4.3.3. Water supply and sanitation facilities in schools

The sector continues to face water supply challenges, with 85.8 percent of schools having hand pump boreholes and 14.2 percent relying on unsafe water sources. There is a total requirement of 1,150 sanitation facilities, but only 771 (67 percent) are available, with 64 percent of these being substandard pit latrines. The lack of suitable facilities for early childhood learners and menstrual hygiene contributes to increased absenteeism and poor performance among female students respectively.

6.4.3.4. School furniture

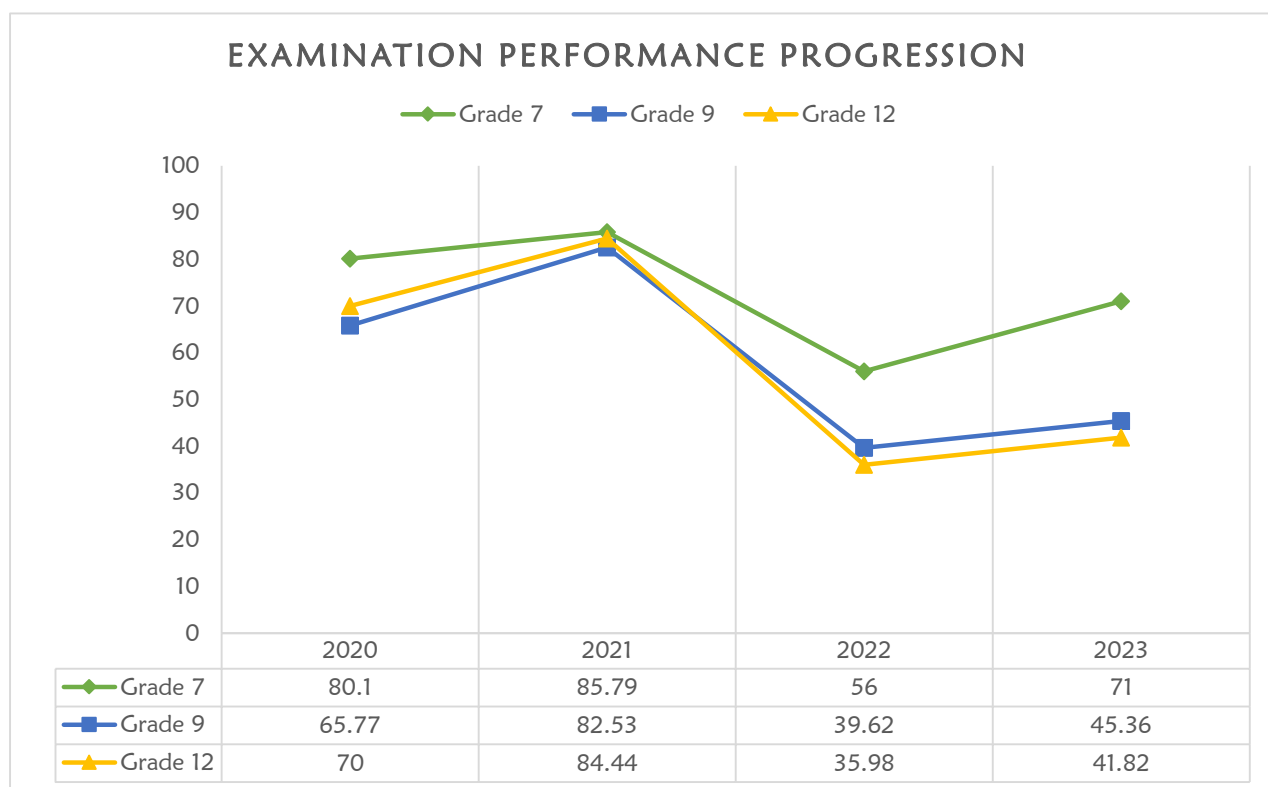
The sector received 1,175 from the proposed 2,225 desks through the Constituency Development Fund between 2022 and 2024. Despite this, there remains a shortfall of 5,775 desks in schools, affecting 11,550 learners. Inadequate furniture negatively impacts learning outcomes.

6.4.3.5. Service indicators

6.4.3.5.1. Examination performance progression

The sector observed a concerning decline in educational performance across Grades 7, 9, and 12 post-2021, with all grades experiencing a significant drop in 2022. Grade 12 faced the steepest decline, falling from 84.44 in 2021 to 35.98 in 2022 and although there was a slight improvement in 2023, scores remain far below their previous levels. Similarly, Grade 9 showed a drastic reduction in performance, while Grade 7, despite a decline, demonstrated a more substantial recovery in 2023.

FIGURE 17 : LEARNER PERFORMANCE



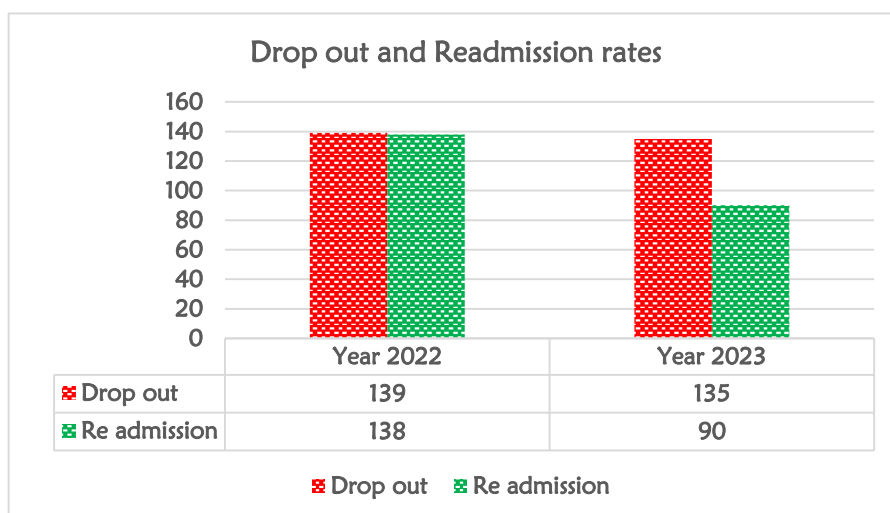
Source: DEB, 2023

This suggests varying factors impacting different educational levels and highlights a need for targeted interventions, particularly for Grades 9 and 12, to address the lingering gaps and promote sustained academic recovery.

6.4.3.5.1. School drop outs

A significant number of pupils drop out of school each year. Although mechanisms exist to re-admit dropouts, some pupils are permanently lost. In 2022, nearly all dropouts were re-admitted, but 45 pupils did not return in 2023. Contributing factors include teenage pregnancies, early marriages, and transfers. Interventions are needed to address these challenges.

FIGURE 18: GRAPH SHOWING DROPOUT RATES



Source: DEB, 2024

6.4.3.5.4. Quality of service and service indicators

Despite efforts to expand access and improve quality, the education sector faces challenges in educational quality. Teacher-pupil ratios are inadequate: 1:82 for Early Childhood Education (ECE) versus a standard of 1:25, 1:64 for primary schools versus 1:40, and 1:47 for secondary schools versus 1:35. Classroom to pupil ratios are poor standing at ECE 1:99, Primary 1:57 and Secondary 1:69, leading to overcrowded classrooms which affects learning outcomes. The district's literacy level stands at 51 percent, indicating that 49 percent of learners lack basic reading and writing skills, which impacts community productivity and health. Progression rates for grades 7 and 9 stands at 71 percent and 45.36 percent respectively. The completion rate at grade 12 however is at 41.82 percent following the 2023 statistics.

TABLE 14: EDUCATION KEY PERFORMANCE INDICATORS

INDICATOR/ MEASURE	BASELINE	YEAR OF BASELINE	STARNDARD	
Teacher pupil Ratio	<i>ECE</i>	1: 82	2023	1: 25
	<i>Primary</i>	1: 64	2023	1:40
	<i>Secondary</i>	1:47	2023	1:35
Pupil classroom ratio	<i>ECE</i>	1:99	2023	1:58
	<i>Primary</i>	1:57	2023	1:40
	<i>Secondary</i>	1: 69	2023	1:40
Literacy Levels	51%	2023	100%	
% of Staff Housing Provision	47%	2023	100%	
% of Clean Water Supply Provision	85.8%	2023	100%	
% Sanitation	67%	2023	100%	
Desk Pupil Ratio	TBA	2023	1:2	

Source: DEB, 2024

6.4.4. Key issues arising from public participation

Public feedback highlights high illiteracy rates (49 percent), inadequate school infrastructure, long distances to schools, and insufficient teaching staff as major issues. These factors contribute to delays in school attendance and low student retention rates. Poverty exacerbates illiteracy as students from poor households often drop out to contribute to family income.

6.4.5. Impact of changes anticipated for the next 10 years

In the next decade, population growth will increase the demand for education, necessitating more school infrastructure, staff housing, teaching resources, and improved power and water connectivity. There is a risk that private schools may expand without meeting education standards. However, decentralized development and financing could improve standardized infrastructure and educational quality.

TABLE 15: EDUCATION ESTIMATE FUTURE DEMANDS

INDICATOR / MEASURE		CURRENT STATUS			ESTIMATED DEMAND IN 10 YRS	ESTIMATED DEFICITS IN 10 YEARS
		AVAILABLE	ONGOING	DEFICITS		
Teacher pupil Ratio (Number of Teachers of Recruited)	<i>ECE</i>	102	TBA	453	TBA	TBA
	<i>Primary</i>	415	TBA			
	<i>Secondary</i>	477	TBA			
Number of Classrooms constructed		319	27	705	1,565	1,219
Number of Staff Housing Constructed		164	2	599	1,141	975
Number of water reticulation systems constructed		0	0	15	22	22
Number of water infrastructure upgraded to water reticulation systems		0	0	91	136	136
Number of flushable units of ablution blocks constructed		375	1	1,307	2,511	2,135
Number of desks procured		-	2,225	5,775	11,920	9,695
Number of staff housing and classes Connected to power		8	1	591	894	885

Source: DEB, 2024

6.4.6. Impact of continuation of existing trends

Persisting trends, such as increased population and inadequate classrooms, will limit access to quality education. Poor sanitation and water facilities will affect health, while low staffing levels will exacerbate illiteracy and impact learning outcomes. Continued efforts from CDF, CBOs, NGOs, and FBOs are vital to address these challenges. The sector presents investment opportunities, particularly in construction, which can enhance employment, incomes, and livelihoods.

6.4.7. Environment and climate change and gender analysis

In Senanga District, climate change disrupts education through infrastructure damage particularly from strong winds and flush-floods, food and water shortages, and limited school access due to impassable routes. Hunger forces many children to miss school to support their families, while mothers face increased caregiving burdens for climate-affected children, limiting their livelihoods. Addressing these challenges requires resilient infrastructure and gender-sensitive strategies to ensure uninterrupted learning and community stability.

6.4.8. Conclusion

The education sector within the district faces significant challenges and opportunities as it strives to meet the needs of a growing population. While progress has been made in expanding access to education through various programs and infrastructural improvements, critical issues remain. Inadequate school infrastructure, insufficient teaching staff, and challenges with water supply and sanitation facilities hinder the sector's ability to deliver quality education effectively.

The high illiteracy rates and the continued dropout of students underscore the urgent need for targeted interventions. Addressing these issues requires a comprehensive approach involving increased investment in infrastructure, improved teaching and learning materials, and enhanced support systems to mitigate the impact of external factors such as climate change and economic constraints.

Looking ahead, the anticipated rise in educational demand due to population growth presents both a challenge and an opportunity. Effective planning, decentralization of resources, and strategic partnerships with various stakeholders will be crucial in improving educational outcomes. By focusing on these areas, the district can work towards creating a more equitable, inclusive, and high-quality education system that meets the needs of all learners and contributes to the broader development goals of the region and the country.

6.5. COMMUNITY DEVELOPMENT AND SOCIAL PROTECTION

6.5.1 Overview.

The district poverty levels stand at a staggering 80 percent, the province at 78.6 percent while the national levels are at 64.3 percent (LCMS 2022). This contributes to increased vulnerability and inequalities at community level.

In order to reduce poverty, vulnerability and inequalities, the district endeavours to improve coordination of social protection programmes by enhancing welfare and livelihood for the poor and vulnerable people, mitigating violence against women and children, enhancing multi-sectorial disaster management, promotion of secondary school bursaries and skills development, youth and women empowerment and reducing developmental inequalities through Constituency Development Fund (CDF) projects. The actors implementing the above programmes include, Ministry of Community Development and Social Services, the Local Authority, Zambia Police (Victim Support Unit), World Vision, SETHA Life Savers, Young Women's Christian Association (YWCA), Non-Governmental Organisations Coordinating Committee (NGOCC) and Development Aid from People to People (DAPP).

6.5.2. Key priority programmes.

These priority programmes align well with the strategic objectives No. 2 (enhance welfare and livelihood for the poor and vulnerable people) and No. 3 (reduce developmental inequalities) and the development outcome No. 4 (reduced poverty vulnerability and inequalities) under human development pillar of the 8th national development plan, and the vision 2030 which also emphasises attainment of reduced poverty, vulnerability and inequality.

Programmes:

- 1) Social Cash Transfer (SCT)
- 2) Public Welfare Assistance Scheme (PWAS).
- 3) Disability services
- 4) Sports, culture and arts development
- 5) Food security support
- 6) Statutory Services (Child protection, Gender Based Violence and Migration Services)
- 7) Food Security Pack
- 8) Supporting Women's Livelihoods
- 9) Non-Formal Education (adult literacy and skills training).
- 10) Self Help Initiatives (SHI).
- 11) Integrated Development Planning
- 12) Gender equality
- 13) Rural roads connectivity
- 14) Rural industrialization
- 15) Rural electrification

6.5.3. Description of existing state of development

6.5.3.1. Poverty levels

Senanga district is among the districts with high poverty levels. The poverty rate in the district was 80 percent of the total population (LCMS, 2022). This implies that a total of 64,538 households out of the total 80,673 households are in the poverty bracket with only 16,134 households outside the poverty brackets. The high poverty levels in the district contribute to households' inability to cope with economic and health shocks over time, early marriages, increasing number of female headed households, poor social support for family members, vice and chronic illness as evidenced by drought effects over 2023/2024 farming season.

The key drivers to the recorded poverty levels in the rural parts of the district include low productivity and production for majority households due to impacts of droughts, over reliance on rain fed agriculture, poorly developed value chains and value addition, poor road connectivity to markets, high costs of moving produce to urban markets.

In the urban areas, key drivers to poverty are associated with low levels or inadequate skill sets to take advantage of locally available raw materials through value addition, while other factors such as low and inadequate power connectivity and low access to capital are eminent to both urban and rural communities.

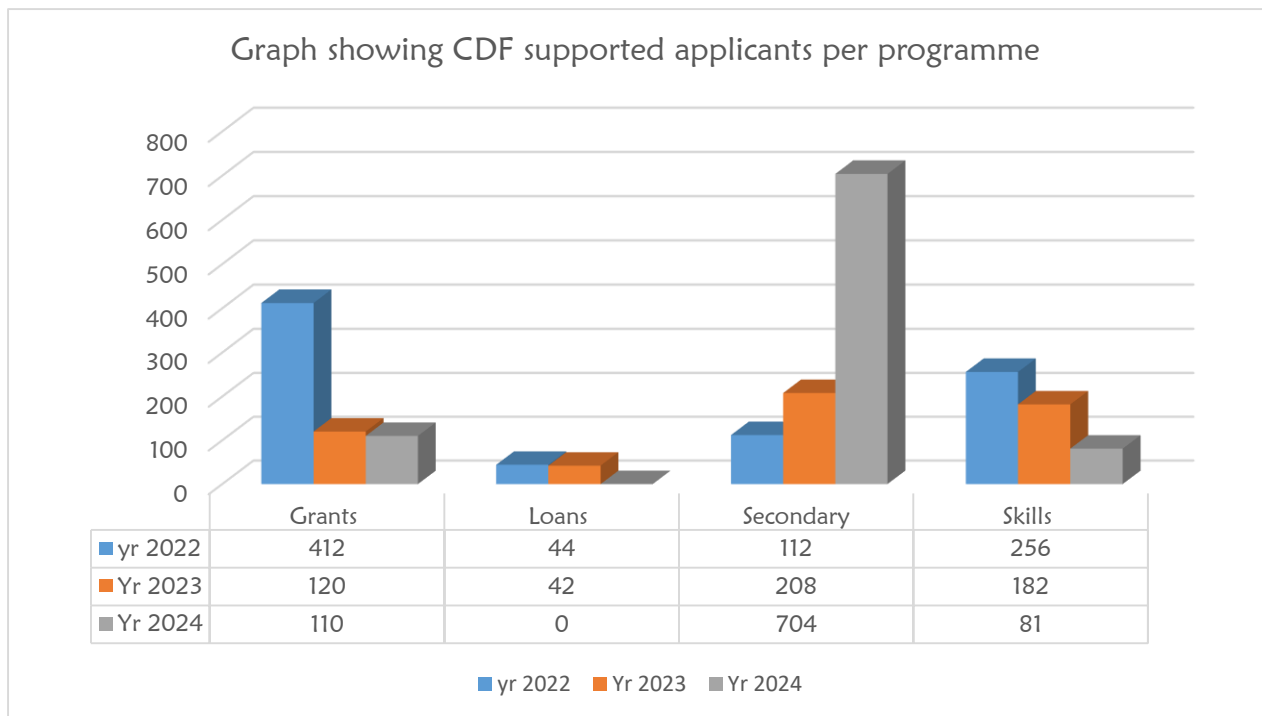
6.5.3.2. Social Protection

To ameliorate such existing poverty levels and associated challenges in the district, the sector has been implementing social protection programmes. Out of the total 64,538 poor households 12,900 poor and vulnerable households were enlisted on Social Cash Transfer, 5,064 households of vulnerable but viable famers on food security pack, 30 on Village Banking and 1,333 on Supporting Women's Livelihoods (SWL) programmes (Community Development quarterly reports, 2023). Although the interventions contribute to mitigation of poverty and vulnerability among the target households, generally a total of 41,019 poor households remain impacted by the poverty clutch.

6.5.3.3. Constituency development empowerment fund support

To ensure wide spread benefits for the community, the sector through the decentralised approach and government financing of community groups through grants, loans, school and skills bursary programmes under CDF was launched in 2022 to mitigate the social impacts of poverty at household levels. Through this programme, a number of community groupings, individuals and learners alike have been supported.

FIGURE 19: GRAPH SHOWING CDF SUPPORTED APPLICANTS



Source: Senanga Town Council, 2024

The CDF supported government programmes are key to addressing many of the poverty challenges the communities are facing in the district. From inception in 2022 – 2024 the programmes, supported a total of 642 youth and women groups with grants, 86 enterprises, groups and cooperatives with loans, 1024 secondary school pupils and 519 skills development beneficiaries.

Despite this magnitude of support however, the impact of the programme among the supported beneficiaries has remained low. Under the loan category, a majority of the loan beneficiaries are defaulting with others taking time to repay their loan obligations. This has resulted in locked up funds and exerted pressure on government financing to sustain the programme at the local level. Similarly, low outputs are enlisted among the grants and skills beneficiaries. The grants beneficiaries lack a culture of working together, financial literacy and commitment to financed activities. There also exists a disconnect in terms of linkages and monitoring of funded activities at the sub district levels.

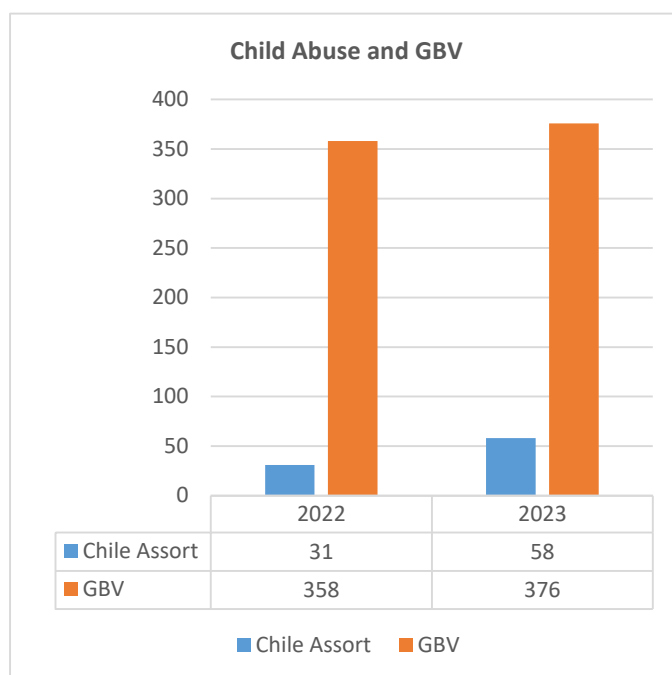
The skills offered in the colleges (Trade schools) while important with regards to particular industries such as agriculture among others, still present a mismatch on the choice of courses by the applicants and prevalent core economic activities in district localities. It would be imperative to tailor skills that respond to eminent local economies such as tannery, fish farming, fruit (mango) preservation and processing, value addition among others critical for turnaround of local economies in the plan period. This however could be easily attainable with a localised skills training centre in the district. additionally, a crop of skills trained beneficiaries still require some mentorship and support in terms of organisation, financial literacy and equipment to launch them into productivity in the plan implementation period. The facilitating structures encompassing the ward development (WDCs) and constituency funds committees CDFCs lack operating spaces (offices) to ensure easy access to development information by the communities at sub district and district levels in the case of CDFCs. This

has a negative effect in terms of development information flows, access and participation at the community levels. Some community members still do not have access information on CDF, where to access it, knowledge of the WDCs and where to find them. Considering office spaces for the WDCs and CDFCs would thus be necessary in the plan period.

6.5.3.4. Moral and values development

There is noticeable increase in erosion of moral and cultural values among adult, children and youth populations in the district. The cases of child abuse, by adult populations, gender-based violence cases, abuse of alcohol and patronisation of bars and drinking places by children and the youths are on the increase. This contributes to low productivity especially among the youths, poor performance among school going populations and generally break down of families.

TABLE 16 CHILD ABUSE AND GENDER BASED VIOLENCE STATISTICS



The drivers to the derogation of morals and values among the key populations highlighted are numerous. These encompass high poverty levels, parents` rare availability to inculcate morality and value teachings to their own children. The Churches (religious bodies) have also poorly developed moral scripts and value development programme of reach outs to nurseries through structures such as scripture unions among others, child development institutions and a culture of working with various schools, youth development institutions and organisations where the character of moral and value systems could be impacted the most.

Source VSU, 2024

6.5.3.5. Community amenities

The district generally lacks public amenities and community welfare infrastructure to enhance trade, social services, social capital, networks and relevant social support in communities. Infrastructure such as community welfare halls, sports complexes or stadiums, libraries play parks and resort areas are lacking in the district.

FIGURE 20: IMAGE SHOWING COMMUNITY PLAY GROUND



The district has only one community playground and one commercial play park available for community recreation alongside a few school play grounds. Lack of adequate recreation activities encompassing netball, volley ball, basketball, and indoor activities (board games among others, contribute to increase in vice among the youths such as theft, violence and attacks on innocent members of the community.

Source: Google Satellite image, 2024

The sector also lack other amenities such as skills training centres, safe homes for victims of gender based violence and juvenile holding cells. Lack of such amenities result in increased costs of training and low number of students participating in skills while lack of juveniles holding cells result in the juvenile undergoing trial being held together with adults which is inappropriate. Further lack of safe homes results in perpetuation of gender violence owing to lack of alternative home for affected individuals.

6.5.3.6. Disasters management

The district experiences periodic disasters key among them, droughts, floods, disease out breaks, infernal among others. Although the district experiences disease outbreaks such as Draughts, COVID 19, among others, its capacity to handle contagious diseases is still inadequate. The most prevalent disease outbreaks in the district include periodic recurrence of diseases such as anthrax in human and livestock, Contagious Bovine Pleura-Pneumonia (CBPP) among others. Occurrence of such diseases impacts negatively on livelihoods such as trade in livestock products, movement of products to markets and generally trade of livestock trade.

The district also experiences droughts and floods which destroys field crops contributing to induced hunger and poverty. The areas affected by floods are mainly wetland areas while droughts impact upper land the most. Although efforts on information flow on early warning systems are undertaken by the district through department of Meteorology, information flow to the peripheral has been a challenge. Some communities such as Lumbe Nanyezu, parts of Lumbe, Muweswa and Silwizi wards lack adequate radio and phone network reception resulting in poor response to early warning. In cases of fires, generally, the district lacks fire fighting equipment implying that in cases of inferno the district has limited capacity to fight fires.

In the southern parts of the district lay the wildlife corridor connecting Sioma Ngwezi to Kafue National Parks resulting into human-wildlife conflicts in the settlements along the corridor. Consequently, the animals destroy crops along their way and have the last two years the animals have settled around the Lui belt.

6.5.3.7. Quality of services and indicators

There has been a quantitative improvement in terms of numbers enlisted in terms of support among both the social cash transfers, food security packs programmes and supporting Women’s livelihoods. Despite the numeric increase however, productivity has continued to remain below recommended harvests per cultivated unit area.

TABLE 17: COMMUNITY DEVELOPMENT AND SOCIAL PROTECTION KEY PERFORMANCE INDICATORS

INDICATOR	BASELINE	YEAR OF BASELINE	TARGET
Number of the poor population receiving SCT (Social Cash Transfers)	21,100	2023	25,000
Number of bi monthly Cash Transfer payments provided annually	6	2023	6
Number of women and youths trained in life and business skills and other entrepreneurship training programmes	66	2023	66
Number of women’s clubs accessing Cash Grants.	623	2023	1,000
Number of women accessing micro credit support	30	2023	40
Number of women accessing digital financial services	180	2023	1,980
Number of farmer households supported with rain fed Food Security Packs.	1,744	2023	2,500
Number of farmer’s households supported with wetlands Food Security Packs.	600	2023	600
Number of households supported with Ali (Alternative Livelihoods Intervention).	120	2023	120
Number of places of safety constructed.	1	2023	1
Number of victims of violence against children provided with care and support services.	80	2023	100
Number of children reintegrated/placed into family settings through reintegration, foster care, kinship and adoption	40	2023	50
Number of vulnerable individuals provided with in kind support. (PWAS)	400	2023	600

Source: CDO, 2024

6.5.4. Issues arising from public participation

Submissions from the public participation highlighted low productivity, and increasing vulnerability owing to factors of climate change such as droughts impacting negatively on productivity and livelihoods, reliance on rain fed due to lack of irrigation equipment, lack of social amenities as contributing to vulnerability and social vice.

6.5.5. Impact of changes anticipated over the next ten (10) years

Over the next ten (10) years, population would increase. This would increase demand on food and commodities of products and consequently cost of products. Population growth (ZAMSTATS, 2022) would also increase levels of vulnerability, poverty and vice of thieving and attacks on innocent people by gangs of youth for their property among others especially in urban areas.

TABLE 18: SERVICES FUTURE DEMAND

INDICATOR	CURRENT CASELOADS	EXPECTED DEMAND IN THE NEXT 10 YEARS	EXPECTED DEFICITS IN THE NEXT 10 YEARS
Number of the poor population receiving SCT (Social Cash Transfers)	21,100	46,100	25,000
Number of bi monthly Cash Transfer payments provided annually	6	60	0
Number of women trained in life and business skills and other entrepreneurship training programmes	66	6,000	20,000
Number of women's clubs accessing Cash Grants.	623	6,000	15,000
Number of women accessing micro credit support	30	15,000	25,000
Number of women accessing digital financial services	180	2,000	4,000
Number of farmer households supported with rainfed Food Security Packs.	1,744	5,000	4,000
Number of farmers households supported with wetlands Food Security Packs.	600	6,000	3,000
Number of households supported with Ali (Alternative Livelihoods Intervention).	120	2,500	4,000
Number of places of safety constructed	1	3	0
Number of victims of violence against children provided with care and support services.	80	800	1,500
Number of children reintegrated/placed into family settings through reintegration, foster care, kinship and adoption	40	400	800
Number of vulnerable individuals provided with in kind support. (PWAS)	400	4,000	7,000

Source: CDO, 2024

6.5.6. Impact of continuation of existing trends

The continuation of the current trends without appropriate responsive interventions would impact the most on the already 80 percent poor households. The low productivity states and inadequacy of social amenities would worsen vulnerability at household level and exacerbate poverty and compound vice, economic and health shocks at households in communities.

6.5.7. Environment and climate change effects

Climate change effects such as drought, floods, excessive high and low temperatures would affect productivity, livelihoods, incomes and support towards children. Agriculture fields and direct utilization of natural resources for survival would increase resulting in loss of vegetation cover, unsustainable use of natural resources and, further increased impacts of climate change effects.

6.5.8. Climate change and gender analysis

Climate change effects would affect both genders in a number of ways. However, the effects of climate change would weigh more on the female gender owing to cultural ascriptions of gender roles assigned to the female gender. These include roles of ensuring food availability at household level.

6.6. ECONOMIC TRANSFORMATION AND JOB CREATION

6.6.1. AGRICULTURE SECTOR

6.6.1.0. Introduction

The agricultural sector is the main economic driver in the district especially for the rural communities whose livelihoods depend on farming (crop cultivation), livestock rearing and fishing. Although statistics on employment levels by the sector at the district level is scant, generally the sector employs 90 percent of population in agriculture and its value chain (Zambia – Country Commercial Guide, 2022). The major crops grown include rice, cassava, maize, millet, sorghum vegetables, and ground nuts while the types of livestock reared are cattle, goats, pigs and chickens. Fishing is mainly undertaken in the Zambezi River on the Barotse floodplains and in the upper land rivers such Lui and Lumbe.

To increase agricultural production and productivity programmes such as infrastructure development, extension service support, animal disease control, agroforestry and tree crops development, fisheries and aquaculture development, livestock, marketing and agribusiness development have been implemented in the sector. The key actors supporting agriculture interventions in the district include United Nations Development programme (UNDP), International Fund for Agriculture Development (IFAD), Action against Hunger (AAH), Food and Agriculture Organisation, World Vision Zambia, Mendelu and Christian Brothers.

6.6.1.1. Key priorities programmes implemented under agriculture at a local level

The key programmes implemented includes increasing agricultural production and productivity, promote local participation in the economy, promote enterprise development.

Strategy 1: Increase Agricultural Production and Productivity

Programmes implemented under the strategy includes infrastructure development, Agricultural mechanisation, Enhanced farmer support, Agroforestry and tree crops development, Agribusiness development, Fisheries and aquaculture development, Livestock development, Extension service support and early warning and surveillance systems.

Strategy 2: Promote local and diaspora participation in the economy

Programmes includes preferential procurement, Women, youth and persons with disability empowerment and informal sector formalisation.

Strategy 3: Promote enterprise development

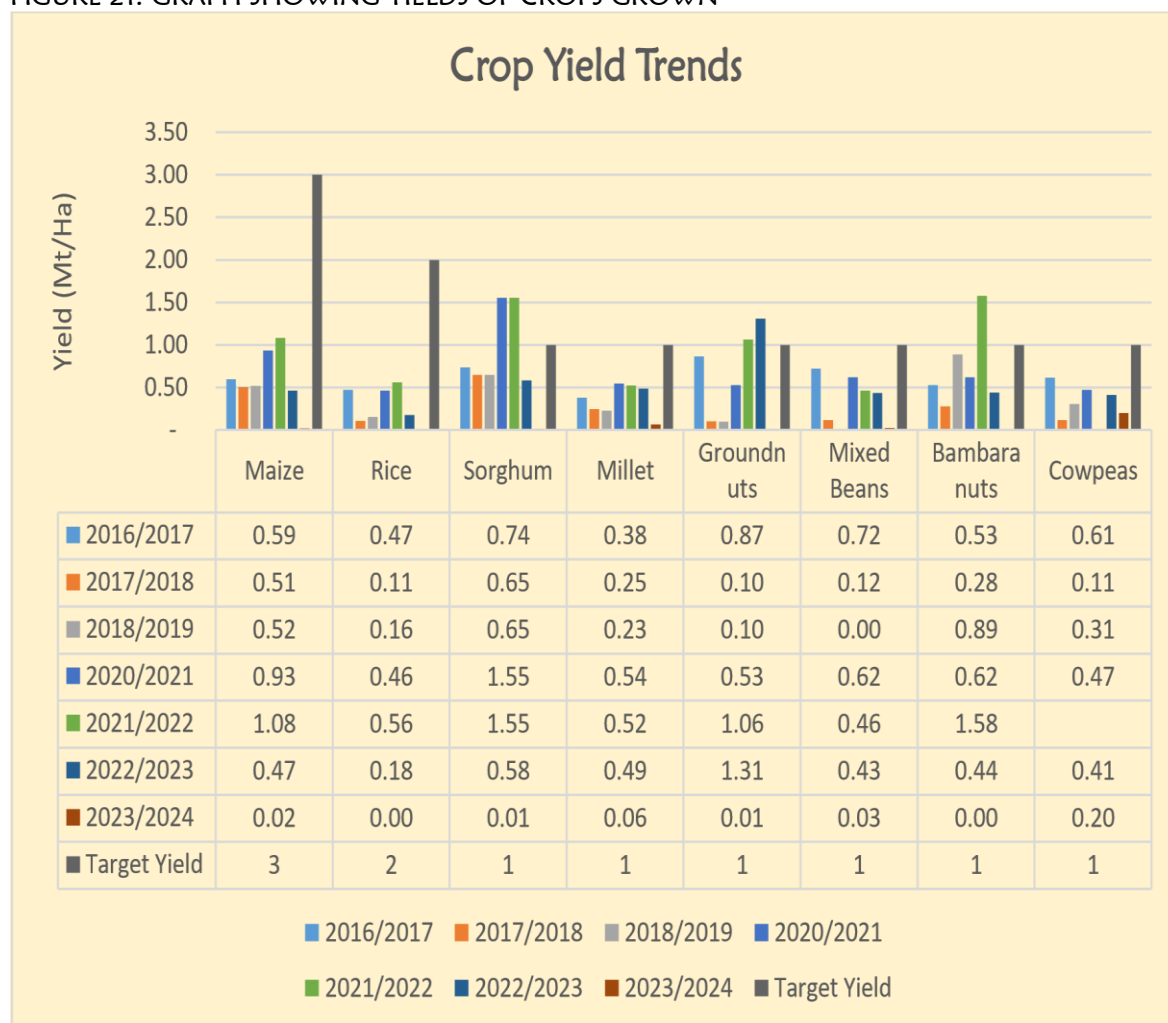
Programmes implemented include Small and medium-scale enterprises development and cooperatives development.

6.6.1.2. Status of implementation of existing plans and strategies in the district

6.6.1.2.1. Crop sub- sector

The district is divided into 4 farm blocks consisting of 19 agricultural camps. All the camps have both upper land and wetlands with potential to produce crops such as rice, maize, cassava, Millet, sorghum throughout the year. However, the crop productivity per capita remains low. The production of most common crops in the district is below the expected output per hectare. See figure 21.

FIGURE 21: GRAPH SHOWING YIELDS OF CROPS GROWN

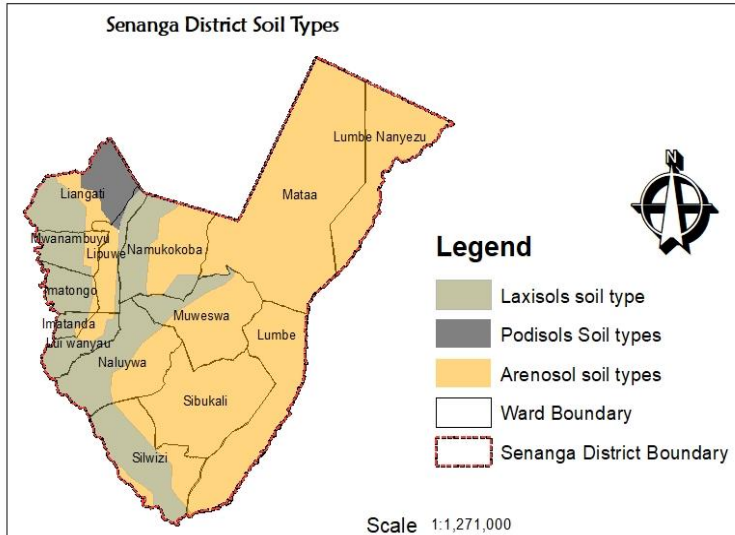


Source: Crop Forecast Surveys 2016 to 2024

Figure 21 above indicates that, the yields per hectare for nearly all crops have been varying and were generally below the targeted yields. The highest Maize yield recorded was 1MT/Ha compared to the targeted 3MT/Ha. All the other crops indicated a similar trend of low productivity.

The factors contributing to low productivity include poor soils, climatic factors, poor mechanisation and low access to extension services, capital as well as poor farmer attitudes.

Figure 21: Showing District soil types



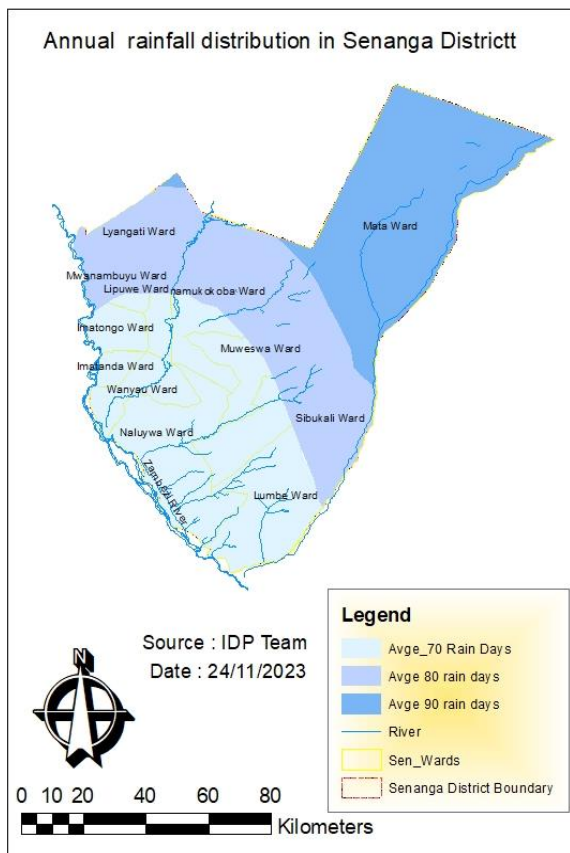
Source: adapted from Mudenda

About two thirds (67%) of the soils are arenosol (sand) soil types which are poor soils for crop production requiring good soil management.

The arenosol soil types mostly favour crop types such as cassava, millet, and sorghum. Only a third (33%) of soils are podisol and laxisol (clayish to sandy loamy) soil types are good for crop production.

The laxisol soil are however prone to flooding resulting in limited usage due to seasonal usage. These soil mostly favour rice production. Maize is also grown during recessions of floods in selected parts under irrigation at small scale.

FIGURE 22: MAP SHOWING RAINFALL VARIABILITY



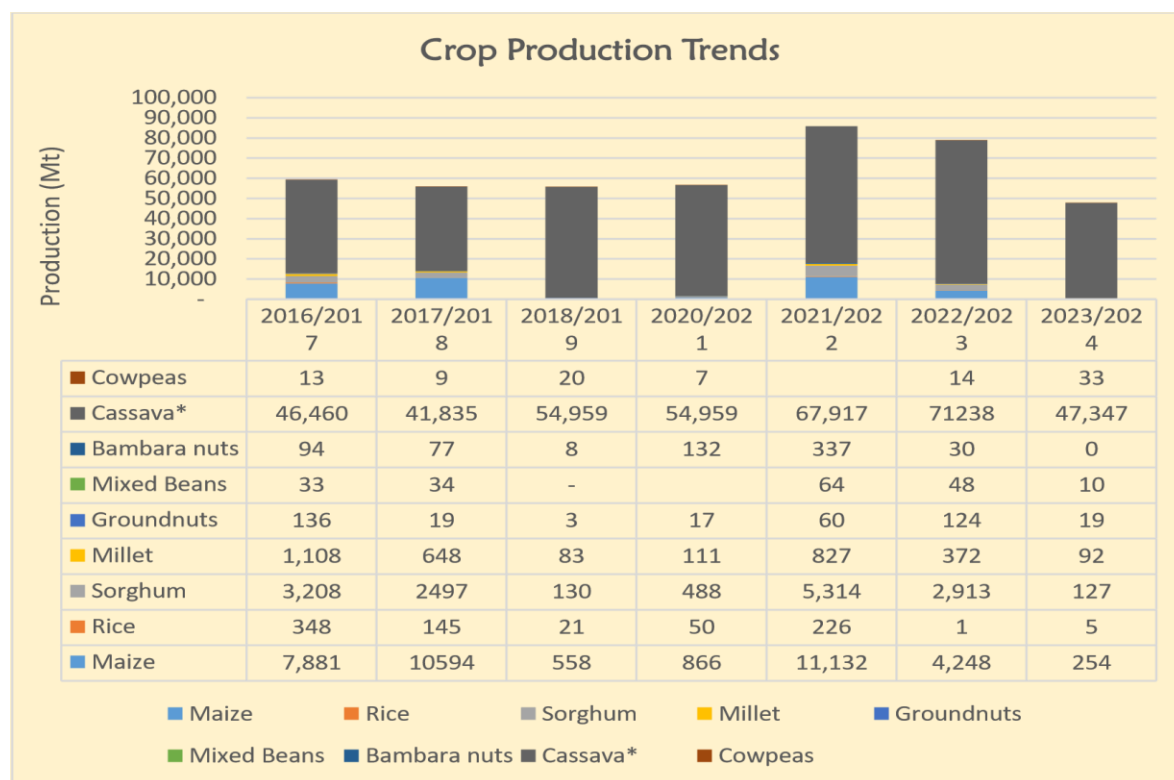
Source: Adapted from FAO, 1973.

Rainfall variability also contribute to low production and productivity eminent in the district. A majority of farmers rely on rain fed agriculture despite availability of water sources due to poor mechanisation.

Areas of Mata and Lumbe Nanyezu experience an average of 90 rain days while a number of areas which include Imatongo, Lui Wanyau, Silwizi parts of Naluywa and Lumbe in the western parts of the district, receive an average of 70 rain days which is below maturing duration of some crops varieties.

This is worsened by farmers` challenges of limited access to recommended early maturing seed varieties resulting in farmers recycling seed, prevalence of pests and crop diseases.

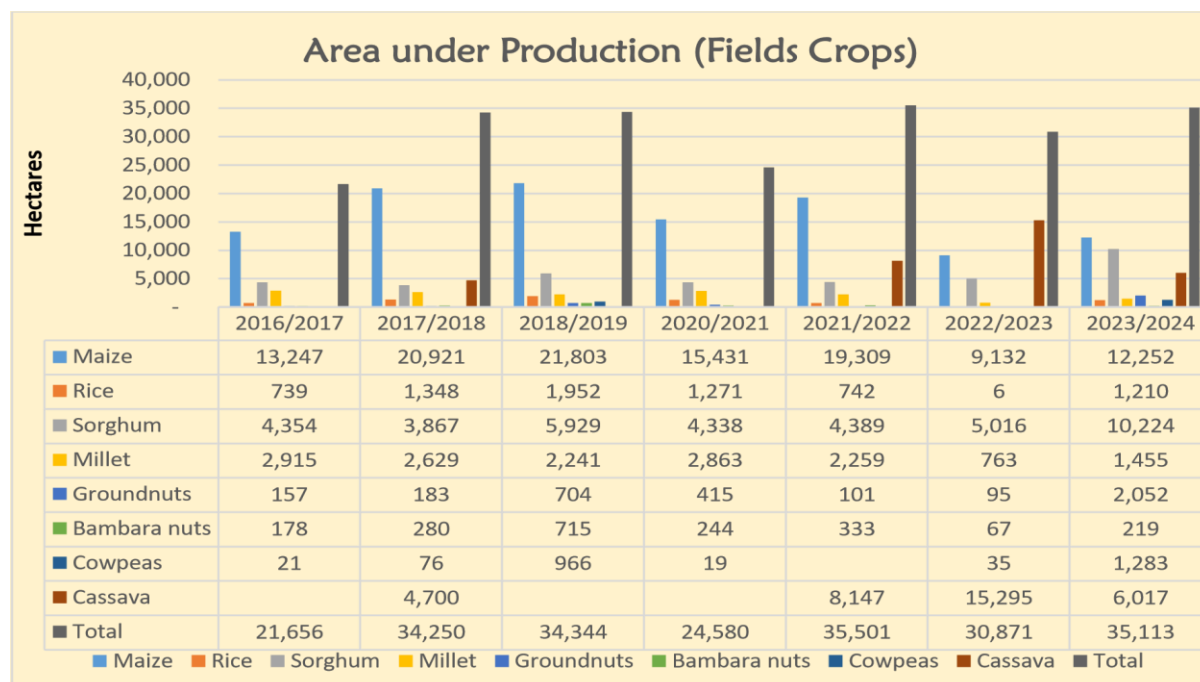
FIGURE 23: GRAPH SHOWING CROP PRODUCTION TRENDS IN THE DISTRICT



Source: Crop Forecast Surveys 2016 to 2024

The crop production trends show that cassava contributes the highest to production followed by maize and then sorghum. When maize production is compared to its area of production which accounts for largest portion, its productivity is very low as shown on the figure 22

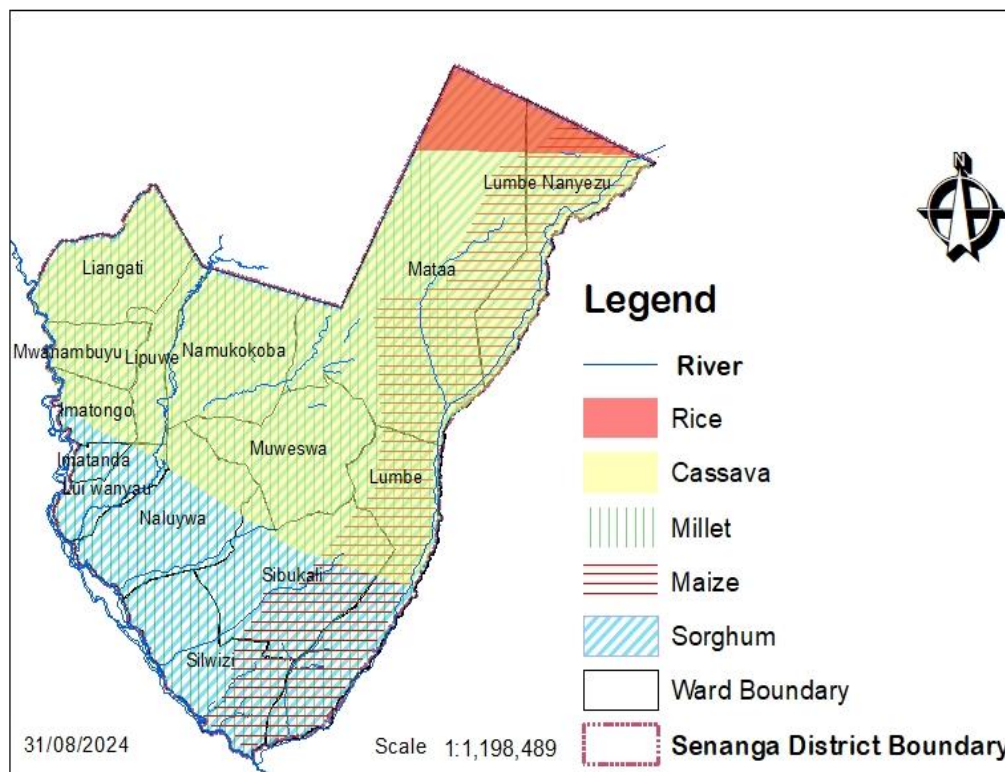
FIGURE 24: AREA UNDER CROP CULTIVATION IN HECTARS



Source: Crop Forecast Surveys 2016 to 2024

Figure 23 indicated that the area under cultivation has been increasing over time especially for maize, despite having limited soil types that support maize production. The crops with wide suitable soil types and drought tolerant such as sorghum, cassava and millet (figure 24) are under cultivated due to challenges of market and demand for the crops thereby contributing to low productivity.

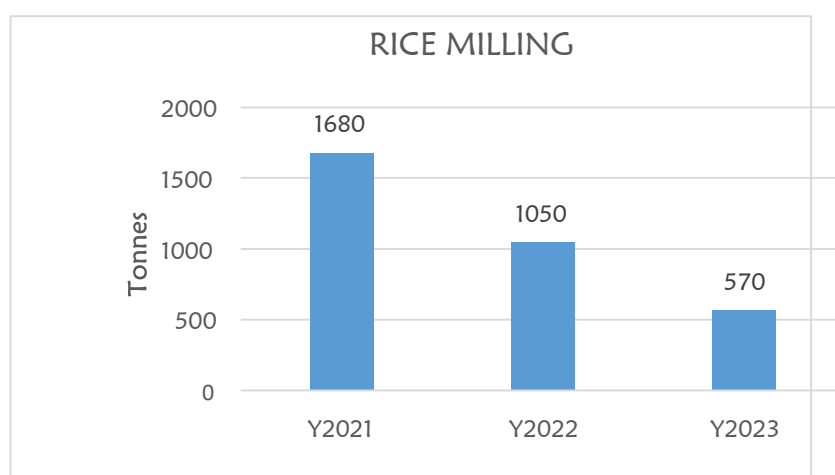
FIGURE 25: MAP SHOWING SUITABLE CROP ZONES



Source: Adapted from FAO, 1997

Rice production has also been declining over time. Figure 23 indicates that there has been a downward trend in the processing of rice and this scenario is equally depicted by the rice production trend in the period covered. Factors contributing to the observed trend include reliance on rain fed agriculture and increasing occurrences of droughts.

FIGURE 26: GRAPH SHOWING RICE PROCESSING IN TONNES



Source: Crop Forecast Surveys 2016 to 2024

6.6.1.2.1. Extension Service Support

The farmers have been receiving inadequate extension services due to extension officers. The farmer input support to farmers was also inadequate. Out of 15,000 registered on the Zambia Integrated Agricultural Management Information System (ZIAMIS) farmers only 884 farmers benefited from Farmer Input Support Programme (FISP). Out of four (4) agricultural blocks only two (2) have crop bulking centres.

6.6.1.2.2. Key performance indicators and quality of service

TABLE 19: AGRICULTURE KEY PERFORMANCE INDICATORS

INDICATOR	BASELINE	YEAR OF BASELINE	STANDARD/PLAN TARGET 2034
Productivity (MT/Ha)			
Maize	0.5	2023	3
Sorghum	0.6	2023	1
Millet	0.5	2023	1
Groundnuts	1	2023	1
Mixed Beans	0.4	2023	2
Rice	0.2	2023	2
Cowpeas	0.4	2023	1
Extension Service			
Extension Officer to Farmer ratio	1:1500	2024	1:500
Number of manned Camps	16	2024	TBA
Number of unmanned Camps	0	2024	TBA
Number of Camp houses	11	2024	TBA
Number motorcycles	19	2024	TBA

Source: Crop Focus Survey, 2023, MOA (Senanga) third quarterly report, 2024

6.6.1.2.3. Issues arising from public participation

Key submission from community participation highlighted low productivity due to low investment in irrigation equipment, low access to technical agricultural extension services, as well as poor market linkages. Farmers receiving inadequate extension services.

6.6.1.2.4. Impact of changes anticipated in the next ten (10) years

The key impacts anticipated in the next ten (10) years in the sector include worsened food production and productivity owing to reduced rainfall pattern, overreliance on rain fed agriculture, low utilisation of cheaper sources of power to support various agricultural support interventions which consequently, trigger hunger, vulnerability and poverty at various community and district as a whole.

Arising from the crop production trends the district is a net importer of maize averaging at over 5,000 MT per annum against a demand of 16,806 MT needed for the population of 113,120. The demand in the next 10 years will grow to 27,160.7 MT with the estimated population of 181,071.

TABLE 20: PROJECTED CROP PRODUCTION DEMANDS

CROP	ESTIMATED DEMAND IN 10 YEARS (MT)	ESTIMATED PRODUCTION (MT)	ESTIMATED DEFICIT (MT)
Maize	27,160.7	13,698	Deficit (13,462.7)
Rice	753	1,500	Surplus (747)
Sorghum	82	3,000	Surplus (2,918)
Millet	82	763	Surplus (681)
Cassava	5,251	15,295	Surplus (10,044)
Cowpea	525	35	Surplus (490)
Groundnut	1,810	95	Deficit (1,715)
Mixed beans	1,810	112	Deficit (1,698)

Source: Crop Focus Survey, 2023, MOA (Senanga) third quarterly report, 2024

6.6.1.2.5. Impact of continuation of existing trends

Continuation of the existing trend would result in shrinking employment in the sector, food scarcity, increased malnourishment, ailments and cost of health care at household and community level.

6.6.1.2.6. Climate change and gender analysis

Climate change negatively impacts crop production and productivity. This further exacerbates vulnerability which results in poverty to a greater extent among the vulnerable categories in communities such as children, mothers, and the chronically ill as well as increasing vice in communities.

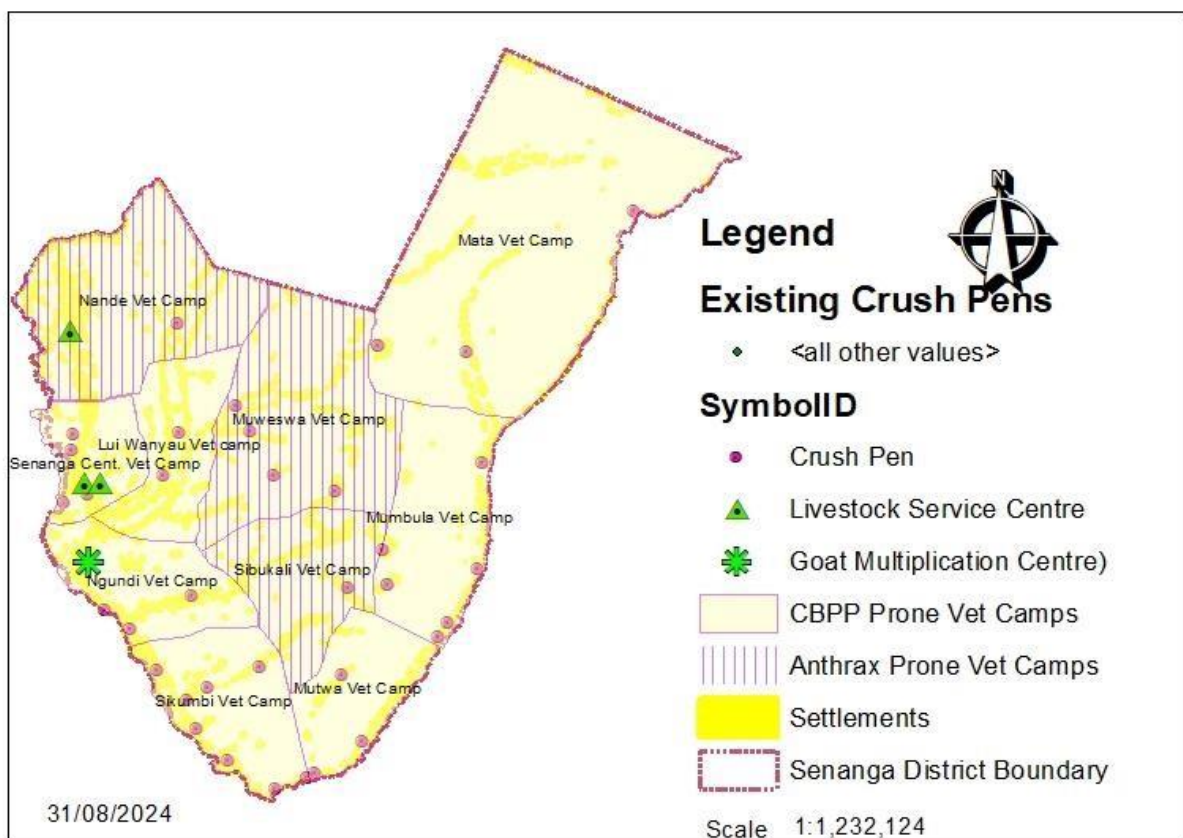
6.6.2. THE LIVESTOCK SUB - SECTOR

The livestock sub-sector is one of the major economic contributors to the agriculture sector in the district with an annual economic value of over K40 million (MFL Senanga 2023). The sector is supported by 10 veterinary camps. See figure 24. Despite potential to grow the sector, it was characterised by low productivity and production due to inadequate livestock service centres and increased disease incidences.

6.6.2.1. Status of implementation of existing plans and strategies in the district

The sub-sector has a total of 10 veterinary camps aimed at supporting livestock farmers with extension services to enhance livestock production and productivity, animal health and management. The sub-sector is impacted by a number of challenges which hamper realisation of the potential, and productivity.

FIGURE 27: MAP OF VETERINARY CAMPS AND LOCATIONS OF LIVESTOCK SERVICE INFRASTRUCTURE



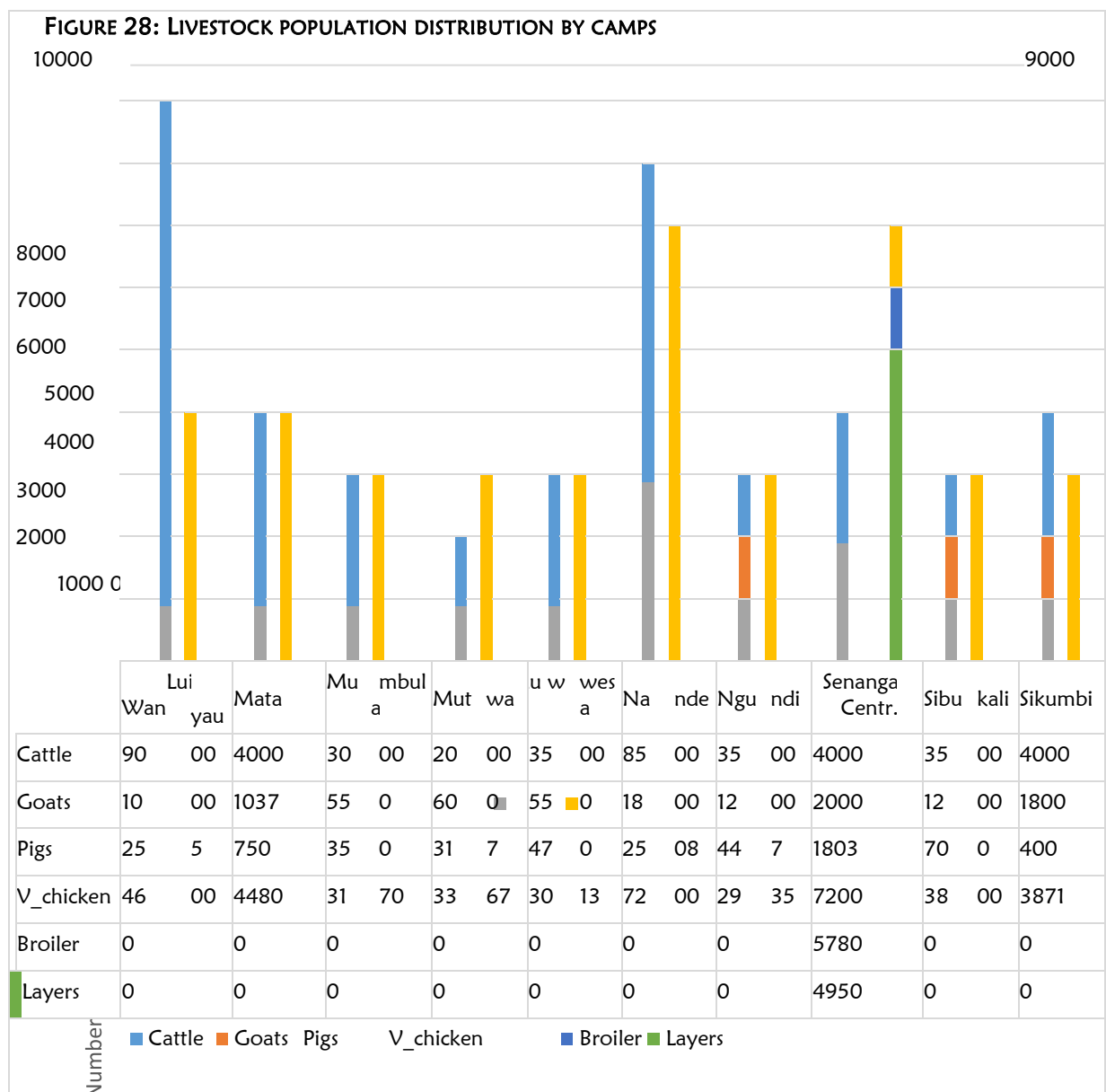
Source: Adapted from Veterinary ATLAS of Zambia, 2017

The district has an estimated cattle population of over 45,000 comprising of 90 percent indigenous Barotse breed and 10 percent consisting of exotic and improved breeds. The other livestock types include Goats, pigs and village chickens with populations of 11,737, 8,000, and 43,636 respectively, relatively distributed according to the potentials of the camps (Livestock Survey Report, 2022). However, broilers and layer chickens are reared exclusively in Senanga Central Veterinary camp which encompasses urban wards of Imatongo and Imatanda.

The subsector over a period of 10 years recorded a growth of 7.1 percent in village chicken production, 10 percent in cattle production, 16.7 percent in goat production, 50 percent growth in piggery production, 55.6 percent in broiler chicken production and 230 percent in layers' chicken production.

6.6.2.2. Livestock production and productivity

The major livestock types reared in the district include cattle, goats, pigs, broilers, layers and village chickens. The figure 25 shows the livestock population distribution in the various camps of the district.



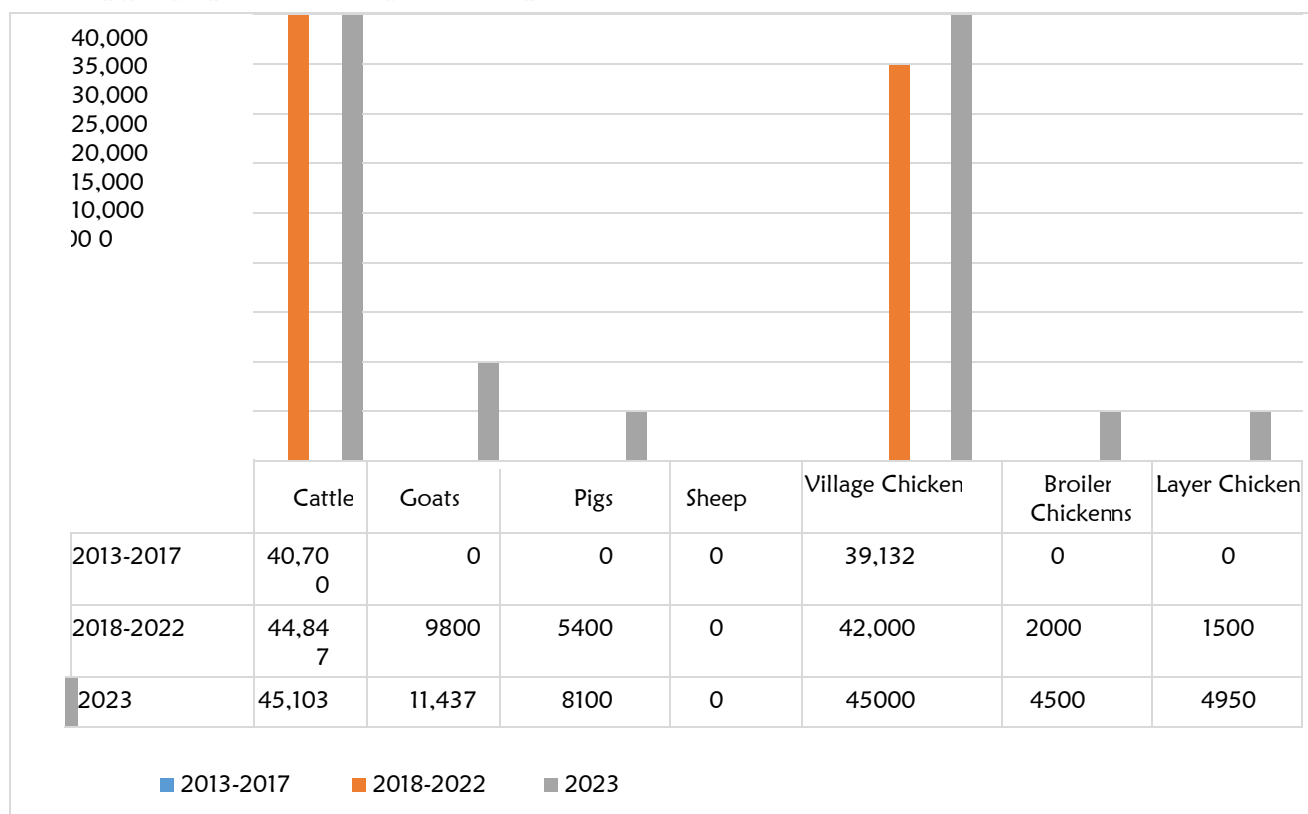
Source: MFL Senanga 2024

The trends in the livestock population indicates that there has been a quantitative improvement. However, the increase of livestock is still minimal i.e. 10 percent for a duration of 10 years signifying an average growth of only 1 percent per annum. Cattle remains the backbone of livestock production and major economic driver in the district. Lui Wanyau and

Nande veterinary camps have the highest cattle population whilst Mumbula and Mutwa camps have the least.

The cattle production has great potential to grow owing to the presence of vast plains and valleys which provide grazing pasture for the livestock during the dry season and the upland rangelands in rainy season. Figure 26 shows the trends in cattle marketing (for slaughter) and the district of origin.

FIGURE 26: LIVESTOCK POPULATION TRENDS

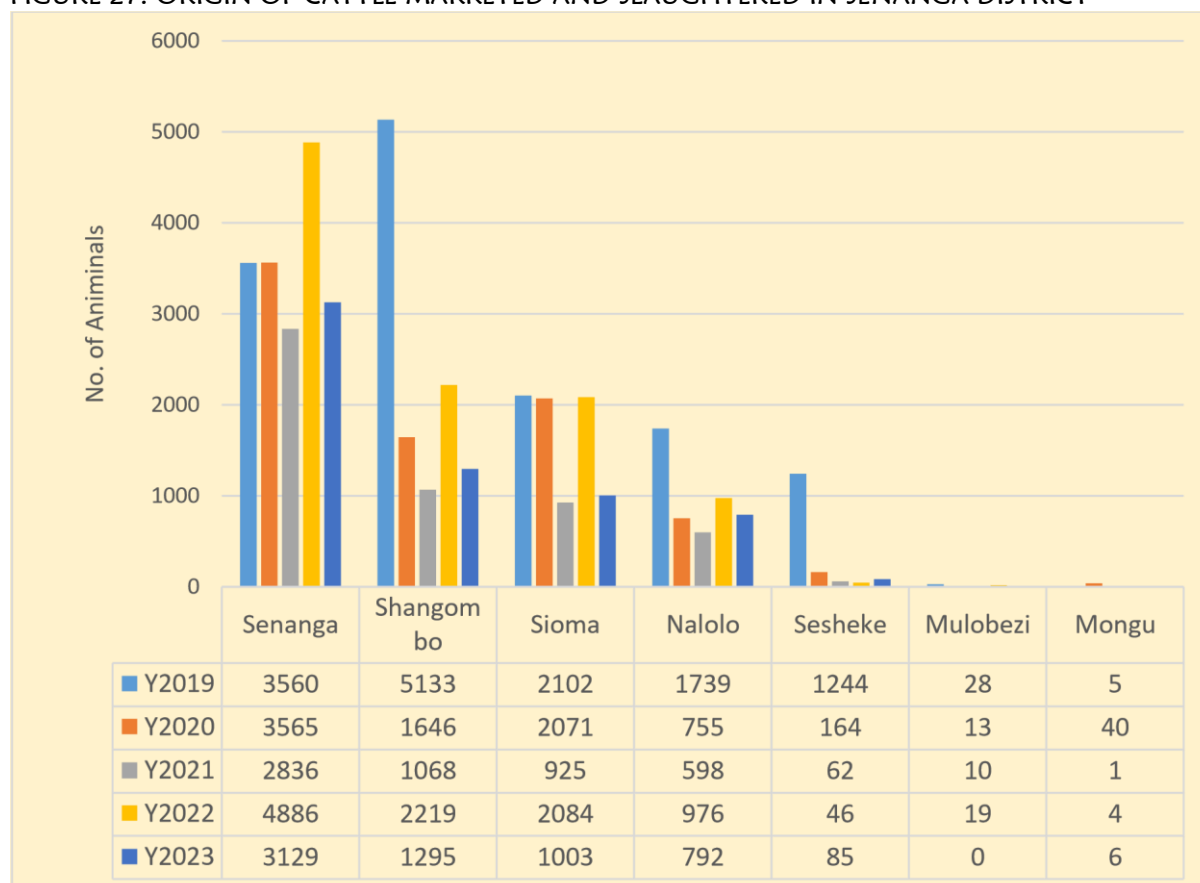


Source: MFL Senanga, 2023.

In 2023, Senanga district contributed 50 percent of the total number of animals (6,310) slaughtered compared to 26 percent in 2019 of 13,811 animals slaughtered that year. The highest number of animals marketed which originated from Senanga was 4,886 cattle in 2022 whilst the lowest was 2,836 cattle in the year 2021. Low cattle numbers observed in 2021 and 2023 were as a result of animal slaughter bans effected due to outbreaks of Foot and Mouth Disease (FMD) and Anthrax respectively. The frequent animal movement and slaughter bans have a negative effect on trade, marketing, nutrition, incomes and overall economy of the district as cattle trade contributes over K40 million per annum (MFL Senanga Annual Reports, 2020, 2021, 2023).

Over the last five years the district has experienced a decline in the total number of animals slaughtered mainly as a result of significant decrease of animal inflows coming from Shangombo district, which now go to Mongu and Limulunga Districts where new abattoirs have been opened. See figure 27.

FIGURE 27: ORIGIN OF CATTLE MARKETED AND SLAUGHTERED IN SENANGA DISTRICT

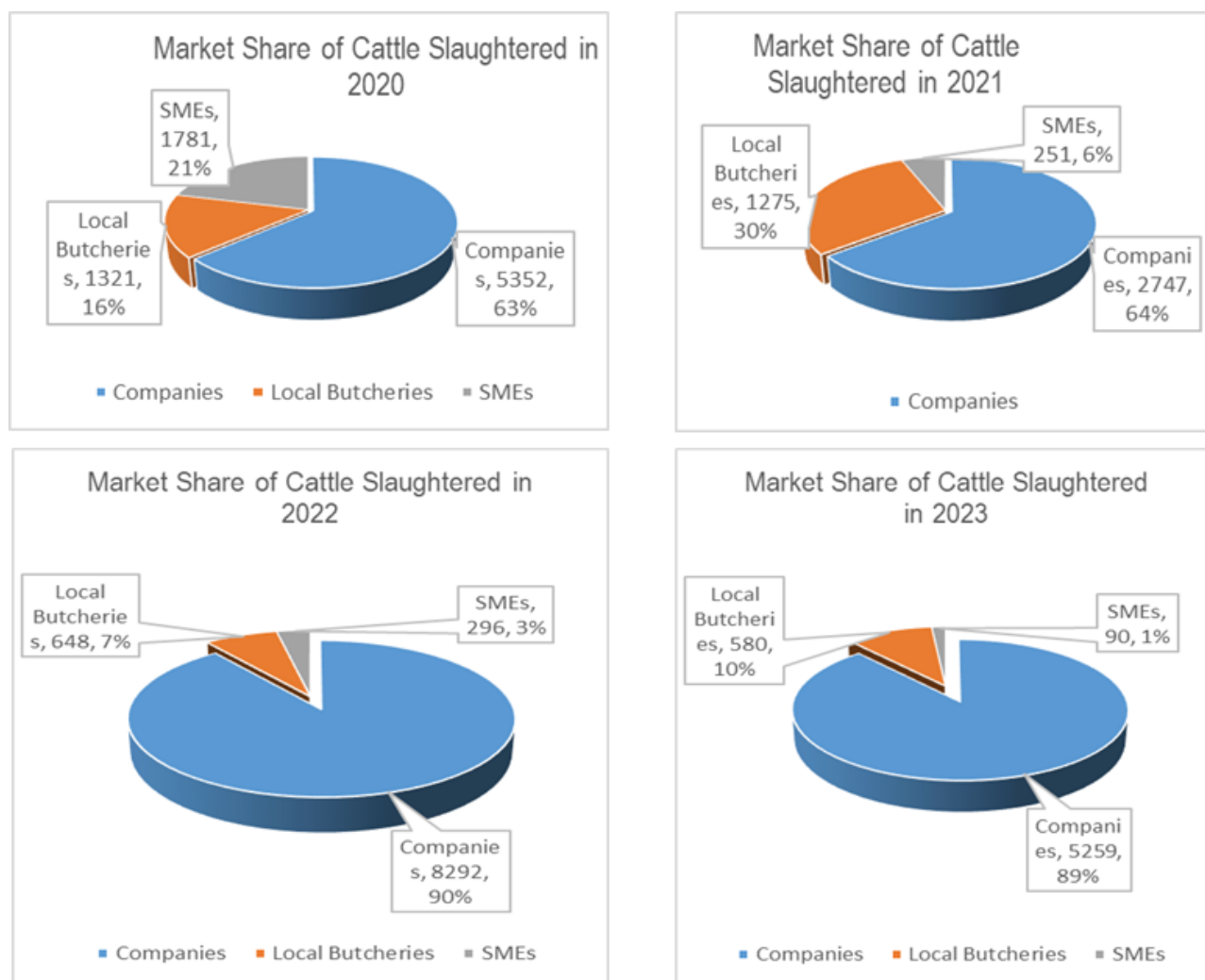


Source: MFL Senanga 2023

The economic participation of companies, Small and Medium Enterprises (SMEs) and Local Butcheries in terms of market share in the beef value chain See Figure 28. The companies (abattoirs) have increased their market share of beef sales from 64 percent of the total number of cattle slaughtered in the year 2020 to 89 percent in 2023. This growth has been at the expense of both the SMEs and Local Butcheries whose market share decreased from 21 percent and 16 percent in year the 2020 to 1 percent and 10 percent in 2023 respectively. This reduction in market share translated into loss of economic activity or opportunity for the SMEs and Local Butcheries. During the same period the number of SMEs decreased from 45 to 6 mainly due to lack of a dedicated abattoir facility which is open to the general public. Only two of the three operational abattoirs have arrangements for local butcherries to slaughter their cattle.

Over the last 4 years the district has recorded an increase in production and marketing of small livestock and poultry. The chart below shows the trends in livestock and livestock products marketed between 2021 and 2023.

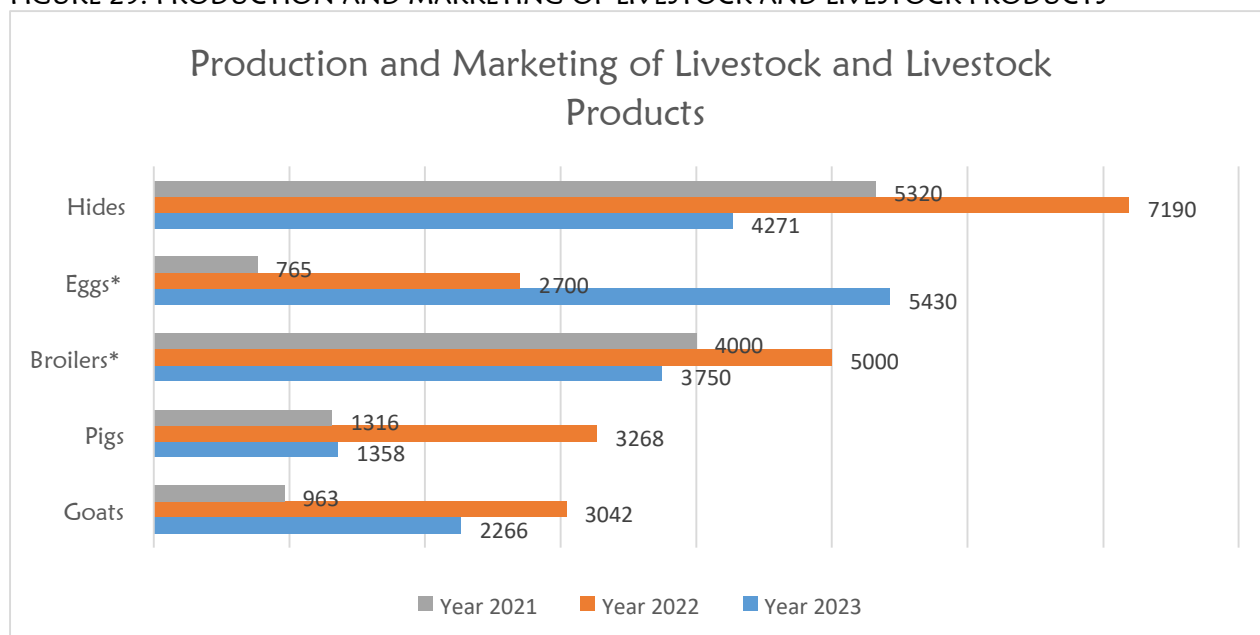
FIGURE 29: TRENDS IN BEEF MARKET SHARE FOR VALUE CHAIN ACTORS



Source: MFL Senanga 2020,2021,2022,2023

There has been steady increase in production and marketing of pigs and goats from 1,316 and 963 in 2021 to 3,268 and 3,042 in 2022 respectively. The reduction observed in 2023 was on account of a 3-month livestock movement and slaughter ban due to the outbreak of anthrax disease in the district. Egg production increased exponentially from 765 trays locally produced in 2021 to 54,300 trays in 2023, this was as a result of entry into market of one commercial farmer with over 6,000-layer chicken production capacity. Broiler chicken marketing recorded the highest production and marketing of 50,000 birds in 2022. See figure 29.

FIGURE 29: PRODUCTION AND MARKETING OF LIVESTOCK AND LIVESTOCK PRODUCTS



Source: MFL Senanga, 2023

The district is a net exporter of cattle carcasses, goat carcasses, live goats, live pigs, hides and sour milk but imports 22 percent of eggs and 53 percent of broiler chickens to meet consumer demand. This indicates potential for investment in poultry production, processing of livestock products and value addition for hides. See table 19.

The district has been experiencing frequent animal disease incidences/outbreaks such as Foot and Mouth Disease and Anthrax in 2021 and 2023 respectively, which led to over 3 months ban in animal movement and slaughter. Sibukali ward is endemic to anthrax disease with cases reported and confirmed yearly since 2019.

The factors negatively impacting the subsector include high animal disease burden, poor livestock management by livestock farmers, low adoption of sustainable practices, low coverage of livestock and veterinary extension services, low utilisation of the innovations and technologies regarding value chain and value addition, as well as low access to funding among the livestock farmers.

The increase in the livestock disease burden has been largely due to noncompliance to livestock movement restrictions and protocols, inadequate number of veterinary extension staff as well as inadequate supplies and availability of animal vaccines and drugs at community levels.

TABLE 21: STATISTICS OF MARKETED LIVESTOCK, LIVESTOCK PRODUCTS AND POULTRY IN 2023

TYPE OF LIVESTOCK/LIVESTOCK PRODUCTS	(A) LOCALLY PRODUCED	(B) IMPORTED (OUTSIDE DISTRICT)	OFF TAKE (OUT OF DISTRICT)	LOCALLY CONSUMED	(A+B) TOTAL
Live Cattle:	3,129	3,181	433	N/A	6,310
Carcass:	N/A	N/A	5,925	605	-
Hides:	3,129	N/A	4,271	NIL	-
Goats (live)	2,266	452	644	NIL	2,910
Goat Carcasses	2,074	N/A	2,998	NIL	-
Pigs (live)	1,358	326	1,684	-	1,684
Broilers Chickens (Kg)	75,020	82,304.5	NIL	154,324.5	154,324.5
Milk (ltr)	169,600	21,431.5	84,800	106231.5	191,031.5
Eggs (Trays)	54,930	15,500		70,430	70,430

Source: MFL Senanga, 2023

6.6.2.3. Quality of service and service indicators

The quality of services has continued to remain below expectation due to a number of factors such as inadequate extension services.

TABLE 22: LIVESTOCK SERVICE INDICATORS

INDICATOR	CURRENT STATUS	STANDARD/TARGET
Proportion of livestock farmers receiving Extension Services	50%	100%
Proportion of Livestock activities implemented	60%	100%
Proportion of farmers using improved goat housing	35%	100%
Proportion of animals issued with livestock movement permits,	90%	100%
Proportion of animals vaccinated against diseases of zoonotic importance	90%	100%
No. of Extension Staff Camp Housing	4	14
No. of Motorcycles	5	14
No. of cold store facilities for veterinary use	10%	100%
Extension Officer to farmer ratio	1:1500	1:500
Number of manned Veterinary camps	7	14

Source: MFL Senanga, 2023

6.6.2.4. Issues arising from public participation

The core issues submitted from public consultations from the ward development committees, and district stakeholders included low production and productivity. The key drivers to the eminent low productivity submitted included, inadequate drugs and vaccines, high disease prevalence, inadequate extension staff and services. Low incomes to purchase farm inputs and equipment, inadequate livestock infrastructure, Low access to financing and markets.

6.6.2.5. Impact of changes anticipated over the next ten (10) years

The anticipated changes over the next ten (10) years include increase in both human and animal population. This will structure participation of the population and structure livestock service demands in the subsector. The anticipated increase animal population will impact on

pastures in the rangelands for animal grazing. This will most manifest in expansion of the existing and proposed infrastructure to cater for the anticipated growth and improved services in the livestock subsector.

TABLE 23: PROJECTED LIVESTOCK FUTURE DEMANDS AND SUPPLY

INDICATOR	ESTIMATED DEMAND IN 10 YEARS	ESTIMATED SUPPLY IN 10 YEARS	ESTIMATED DEFICIT (MT)
Livestock production (Tonnes)			
Beef	543	1090	Surplus (547)
Goat Meat	181	848	Surplus (667)
Pork	274	776	Surplus (501)
Broiler Chicken	587	249.4	Deficit (337.6)
Layer eggs	215	126.8	Deficit (88.2)

Source: MoLF

The population of the district is growing at a rate of 3.9 percent (ZAMSTATS, 2022) and is also expected to result in increased number of farmers in the district in ten years from (4,990) in 2024 to (7,316) in 2034. Currently, the subsector has a support staff deficit of (13). At the current population growth rate, the district will need (28) extension staff (including the current shortfall) to adequately provide services to the farmers.

6.6.2.6. Impact of continuation of existing trends

The majority of the farmers graze their animals in communal grazing areas. With the projected increase in animal population and livestock farmers, this mode of livestock feeding is likely to impact on the environment and contribute to deterioration of soil states and increase in soil erosion in the rangelands. The practice in the overstocked grazing land will lead to poor regeneration of pastures which will negatively affect production and productivity and consequently limit the growth of the subsector in areas such as Nande, Lui Wanyau and Sikumbi veterinary camps.

6.6.2.7. Environment and climate change effects

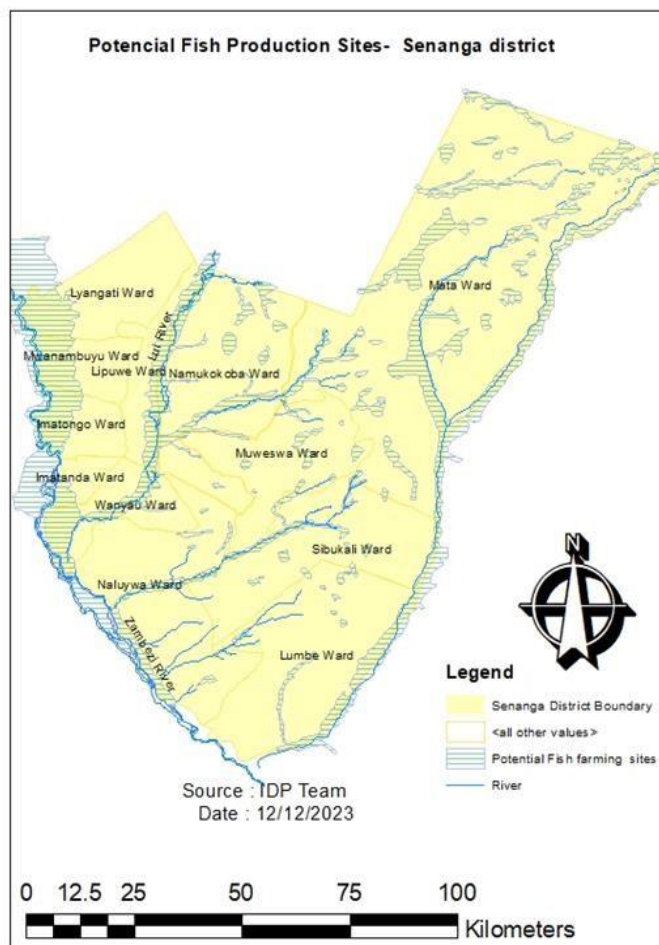
Climate change effects such as drought impacts negatively on water sources, pastures and contributes to increased occurrence of certain livestock diseases such as anthrax. These climate change variability effects will impact livestock farmers in terms of cost of access to livestock care services and veterinary drugs. The impact weighs more on the female and youth populations who to a greater extent rear small livestock and thereby contribute to increased vulnerability especially among female and child headed households.

6.6.3. FISHERIES SUB-SECTOR

6.6.3.1. Fisheries production and productivity

The district has a great potential in fish production owing to availability of rivers, wetlands, dambos and lagoons in the district which could be used for fish production. The most common exploited fish species in capture fisheries include Red Breasted Bream (*C. rendalli*), Three Spotted Bream (*O. andersonii*), Barbel Fish (*Clarias spp*), Tiger fish (*H. vittatus*), Green Headed Bream (*O. macrochir*), Barbs/Limbala (*Barbus spp*) and Nembela, Tupepe, Ndikusi (*Mormyridae* family).

FIGURE 30: FISH PRODUCTION AREAS



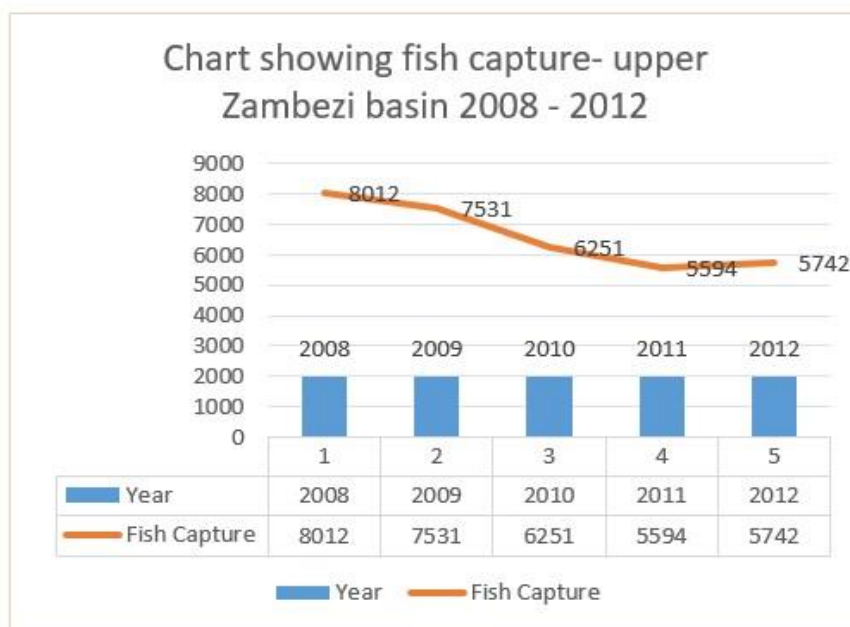
Although the subsector has potential to contribute to the growth of the agriculture sector, and satisfy high demand and ready market for fish both locally and outside the district, fish productivity has continued to reduce over the years. Among the driving factors to this status quo is Illegal, Unreported and Unregulated (IUU) fishing, increased fishing pressure on capture fisheries as a result of population growth and regulatory policy that does not limit number of nets per fisher.

Further, inadequate cold storage capacity and low adoption of best practices in fish processing and preservation have led to high post-harvest losses of up to 25 percent (World fish value chain report, 2013).

In 2013 the district had a total number of 663 artisanal fishers operating from 53 fishing camps out of which 32 are temporal and 21 are permanent camps. With the increase in population in the last 10 years the number is projected to have grown to 1,010 in 2024.

In aquaculture, lack of a fish hatchery in the district has hampered growth due to high cost of transporting fingerlings from as far as Koama and outside the province. Further, non-availability of input suppliers in the district has a compounding effect. Currently the district has a total of 110 fish farmers out of which only 5 individual households and 10 groups account for 26 production ponds existing in the district with a total production of 1 metric tonnes. The district has 26 fish cages which are not in production, the funder Citizens Economic Empowerment Commission (CEEC) in conjunction with Ministry of Fisheries and Livestock and Department of Cooperatives is in the process of revamping production.

FIGURE 31: CAPTURE FISHERIES PRODUCTION TRENDS FOR THE UPPER ZAMBEZI RIVER FISHERY



Source: DoF, 2013.

The trend from 2008 to 2012 Surveys, indicates that capture fisheries in the Zambezi basin has been dwindling over the years i.e. from 8,012 metric tonnes to 5,742 metric tonnes between 2008 and 2012.

6.6.3.2. Actors impacting the fisheries sector

The factors contributing to the observed dwindling capture fisheries production, include inadequate enforcement of fisheries regulations, high fish postharvest losses, climate change effects such as droughts which result in low to lack of water in spawning and nursery grounds that promote fish proliferation. There is also rampant use of illegal and destructive fishing gear such as drag nets (locally known as sefa sefa or chikukula), and poisonous plants.

In aquaculture, the initial high cost of setting up an aquaculture facility has excluded a lot of farmers from engaging in to the practice. This is compounded by lack of fish hatcheries, commercial feed and fish farming equipment sellers which has led to a poorly organised fish value chain to support aquaculture production in the district.

6.6.3.3. Quality of service and services indicators

Generally, performance of the subsector is low. Fisheries production in the province is dwindling from 8,012 metric tonnes to 5,742 metric tonnes between 2008 and 2012 instead of increasing. Number of fish ponds and cage fishing activities continue to remain below potential.

TABLE 22: FISHERIES SERVICE INDICATORS

INDICATOR	CURRENT STATUS	STANDARD
Extension Officer to Farmer ratio	1:1100	1:500
Proportion of fish farmers receiving Extension Services	65%	100%
Proportion of fishers receiving Extension Services	30%	100%
Proportion of fisheries activities implemented	50%	100%
Proportion of fishing villages with fisheries management committees	25%	100%

6.6.3.4. Issues arising from public participation

The key issues captured from the public submission highlight low fish catches resulting from effects of droughts, use of destructive fishing gear, non-observance of the annual fishing ban by some fishers and low participation in fish farming as mostly contributing to the eminent low fish production. Low participation of traditional leaders in prohibiting illegal methods right in communities where the practices are implemented.

6.6.3.5. Impact of changes anticipated over the next ten (10) years

Over the next ten (10) years fish demand will increase on account of population growth which will consequently lead to increased fishing pressure on the capture fisheries which would have reached its maximum sustainable yield. Climate change effects will continue to have their toll on fisheries and aquaculture bring about both opportunities and challenges. Aquaculture is expected to grow on account of increased fish demand and fill up the plateaued fish supply from capture fisheries. It is also anticipated that the interventions that would be implemented in the plan period would contribute to mitigation of the negative effects of population pressure and climate change impacts.

The projected population growth would also result in increased service demands with regards to human resources, transport for surveillance, equipment and enforcement on compliance with fisheries regulations.

TABLE 24: FISH FUTURE DEMANDS AND SUPPLY SERVICE DEMANDS

INDICATOR	ESTIMATED DEMAND IN 10 YEARS	ESTIMATED SUPPLY IN 10 YEARS	ESTIMATED DEFICIT (MT)
Fish (metric tonnes)	2,390	1,437	953

6.6.3.6. Impact of continuation of existing trends

The Continuation of the current trends without measures to counter the eminent trends would result in loss of livelihoods for most of the households engaged in the fishing industry encompassing the fishers and the traders as a result of fish stocks being over fished. The loss of aquatic biodiversity owing the continued usage of destructive fish gear and poisons is also anticipated. It would also impact on the nutrition states and incomes and induce poverty at household levels especially for women and children.

6.6.3.7. Environment and climate change effects

Climate change variability affects capture fisheries by causing extremities in water temperatures. Low water temperatures stress fish and result in fish diseases such as Epizootic Ulcerative Syndrome (EUS) which causes high fish mortalities, whereas high water temperatures reduce dissolved oxygen availability in water thereby negatively affecting fish production and productivity. This would most affect the women and youths who are engaged in the fishing industry.

6.6.3.8. Climate change and gender analysis

Climate change effects such as drought and high temperatures would affect aquaculture due to drying of water bodies and ponds thus reducing fish production and productivity. It also reduces water flows to spawning grounds and consequently reduce fish proliferation and production, low fish production would affect both fishers and trader's livelihoods, and incomes at household levels. However, majority in the fish trading industry in the district are women. As a consequence, women would be the most impacted by climate change effects. Poor incomes at households among women would also negatively affect wellness, education states, and food availability at household levels.

6.6.4. MANUFACTURING, TRADE AND COMMERCE

The Manufacturing, trade and commerce sector, play an important role in the district. The sector contributes to employment, comparative advantages and competitiveness of the district. The district has an approximate total of 800 traders (Senanga Town Council, 2024) and manufacturing at small scale comprising of timber processing and food (rice, maize, cassava milling) and supplying goods and services to the communities in the district.

6.6.4.1. Key priority programmes implemented at a local level

The key priority programmes implemented in the district included;

i. Promote Value Addition and Manufacturing

This included value chain development, market linkages and skills training.

6.6.4.2. Status of implementation of existing plans and strategies in the district

Although the district statistical data on various economic indicators is scanty to adequately highlight economic performance, the district data show that there has been an increase in traders, individuals, groups and cooperative registering to participate in various economic entrepreneurial activities in the district between 2022 and 2023.

Manufacturing in the district is mainly characterised by processing of food and non-food products. Among the foods processed include peanut butter, rice, maize, bread making, mincemeat and sausage. Timber processing is done at small scale level mainly involving sawing without curing. This feeds into artisanal and cooperatives/groups who are engaged in carpentry and joinery.

Trade and commerce is mainly characterised by mixed wholesale and retail trading of merchandise such as groceries, clothing, hardware, restaurants, fruits and vegetables. These activities are conducted in markets namely Old and New market, Kaprivi, Katuya, Limoneno markets and shops constructed along Senanga-Mongu road (from the roundabout to CBD) others are scattered in the growth nodes such as Nande and Maziba among others.

The district has the potential to grow the sector through food processing such as mangoes, cashew nut, groundnuts and vegetables which has remained generally undeveloped. The district has also six financial institutions that support production and productivity of the formal and informal sector.

6.6.4.3. Low processing and value addition capacity

The factors contributing to low processing and value addition include inadequate skills and capacity among the key populations required to work on the available raw materials such as hides, timber, milk and fish. The district has poor sandy roads which hamper and raise costs of transportation of raw materials.

There are also countable but limited wholesale infrastructure resulting in inefficient and ineffective means of supplying goods and supplies to the district owing to longer distances to sources of materials. Infrastructure such as storage facilities and cold chains are also lacking.

The trading (or market) infrastructure is mainly undeveloped with most of the structures being constructed by individuals and business entities with means whilst those without have put makeshift ones.

6.6.4.4. Issues arising from public participation

The key issues arising from the public participation highlighted inadequate skills and capacity to process raw materials into finished goods. There also exists low access to capital to acquire processing equipment, inadequate trading infrastructure, poor transport infrastructure and long distance to material sources.

6.6.4.6. Impact of changes anticipated over the next ten (10) years

The ever-increasing population and skills development programmes would most likely increase on the number of enterprises. This could also increase indiscriminate waste disposal, environmental contaminants, and pollutants with consequents of high costs of solid waste management in the district. Population pressure could also translate into increasing illegal land use changes and likely conflicts as a result of none conforming land use activities arising from demand for trade space. The population pressure overall thus would also increase service demands with regards to land use, land availability, sanitary environments among others. It is also anticipated that measures that would be put in place would also contribute to amelioration of the anticipated effects of population pressure.

6.6.4.7. Impact of continuation of existing trends

The continuation of the existing trend of low productivity, inadequate skills and lack of available and organised trade spaces would continue to render the district less competitive with likely effects of loss of business opportunities and acumen among the local business community. Continuation of the trends would also impact negatively on growth of the sector and negation of livelihoods of the business community.

6.6.4.8 Climate change effects and gender analysis

The climate change effects would impact among the business community mainly impacts on productivity by inducing effects of power outages and water supplies. This results in low productivity, loss of business and target incomes at household levels

Statistically, the district has more female gender involved in trade activities ranging from hawkers to large scale trading. Impacts of climate change on large scale productivity due to power outages, result in low cash flows towards small scale trading a space where most youths and women to a larger extend are found there by impacting home taking incomes there by inducing vulnerability especially among the youth and women.

6.6.5. MINING SUB - SECTOR

6.6.5.1. Key priority strategies implemented at local level

The key programme priorities implemented in the sector include;

i. Promotion of traditional and non-traditional mining

- Artisanal and small-scale mining development;
- TEVET skills development, mentorship and apprenticeship.

6.6.5.2. Status of implementation of existing plans and strategies in the district

Senanga district has a history of mining of iron ore at Kakenge mine in Muweswa ward of Senanga district. Although such historical perspectives serve as indicators for mineral deposits in the district, the district mineral resources largely remain unknown owing to the unexplored mineral resources.

Senanga district lies in the central part of western province that has not been mapped or explored for mineral resources. As such, mining in the district has been limited to quarry for stones and sands for construction of either roads, housing, and or organisational infrastructure in the district.

Quarrying for sand and stone is mainly done in Litambya along the Wayama river, Ngombeta and Namaenya areas. The quarrying is done with simple tools like picks and crushed with hammers to varying sizes for construction requirements. The quarry sites of stones and sand by the local populace however, lack environmental management plans to help mitigate likely future environmental impacts. Additionally, most of the miners are working as individual households and not in formalised registered groups. This results in challenges for the mining groups to access funding for investments in terms of improved tools, equipment and productivity.

Photos showing stone quarry site along Wayama river- Senanga



Source: Senanga Town Council, 2024

6.6.5.3. Quality of service including key performance indicators

The stones are crushed using hand held hummers as a result they fall short of meeting standards in terms of aggregate grading and standardised units of measure.

6.6.5.4 Issues arising from the public participation process

During the public consultations conducted with District and Ward level stakeholders the key issues raised included lack of information on availability of minerals and investment in the exploration of mineral resources in the district. There is the need for monitoring support of local mining to ensure adequate environmental mitigation plans, collaboration among all actors to ensure liaison, terms, conditions and mitigation of perceived impacts.

6.6.5.5. Impact of the changes anticipated over the next ten (10) years

The key changes anticipated over the next ten (10) years owing to increasing population change include extensive mining of sands in undesignated land use. This would affect the environment, the scenic beauty of the district and changes of land use. It is also anticipated that land use plans consensually developed with actors would mitigate such anticipated effects on illicit and none organised mining. The district also envisages that in the next ten (10) years the government would have undertaken exploration of minerals in the district and promoted investments towards development of established in mining industry.

6.6.5.6. The impact of continuation of existing trends on mining

The impact of continuation of the existing mining trend will include peddling of low economic options for the small-scale miners, low economic development, and overall perpetuation of Poverty. Additionally, mining activities are likely to affect other land uses and consequently result in inaccessibility of other land uses key among them land scenic beauty.

6.6.5.7. Environment, climate change effects and gender analysis

Mining activities mostly done by the local populace in the district are poorly organised and lack environmental management plans. As a consequence, the activities could serve as potential hazards. Monitoring of the activities in the plan period and organisation of mining groups would be imperative to ensure adequate environmental management plans for the mining areas.

The mining activities are conducted by both male and female miners at sites located closer to home steads in most cases. Usage of simple tools such as shovels and picks currently in use, helps reduce dust environments. Employment of relatively heavy equipment would translate in increasing dust environment to near home steads. Additionally, the effects of climate change such as flooding are likely to reduce mining of stones to a seasonal activity owing to flooding of mining areas considering that the location is only few meters to the Zambezi and Wayama rivers which flood seasonally.

At the household levels climate effects such as flooding would result in temporal suspension of mining activities. This would negatively impact livelihoods and income states at household levels and increased vulnerability and poverty. Additionally, high temperatures due to climate

change increases disease incidences likely to affect mining outputs and incomes at household levels. Such effects will affect households' dependent on mining activities for livelihoods. Women and children are likely to be affected the most considering that most women are charged with responsibility to take care of children.

6.6.6. TOURISM SECTOR

Tourism plays an important role in the development of cultural artefacts, cross learning and cross pollination of cultural values, ideas and experiences necessary for development. It also contributes to preservation and development of natural resources. Tourism in the district contributes to employment mainly through the hospitality industry. The district has a total of fifteen (15) lodges which contribute to employment and livelihoods.

6.6.6.1. Key priority strategies to be implemented at local level

Programme: Promote tourism growth.

Programmes being implemented include tourism product development, tourism promotion and wildlife management.

6.6.6.2 Status of implementation of existing plans and strategies in the district

The sector has a number of tourism attraction sites which include the Ngonye falls, cultural heritage sites, beautiful river-line sceneries along the Zambezi River. There are also traditional ceremonies such as Kuomboka, initiation ceremonies and rivers such as the Zambezi River which could be utilised for sport tourism, such as fishing, regatta among others. Due to its centrality, the district has its share of conferences which contribute to sustainability of the hospitality industry. However, most of the tourism potential sites and activities remain poorly coordinated, supported and underdeveloped resulting in poor development of the sector hence, the need to designate a suitable area for tourism development. The tourism potential of the district is inadequately explored and marketed resulting in low investments, substandard hospitality infrastructure and inadequate trained staff in the hospitality industry.

6.6.6.3. Quality of service including service indicators

Although the district has a number of lodges which house the participants, most of the Lodges lack capacity to handle big conferences. Tourist sites are limited owing to low investments in tourism attraction centres such as ex-situ (zoo or ranch) wildlife sites, recreation centres, and play parks among others.

6.6.6.4 Issues arising from public submissions

During the public consultations conducted with district and ward level stakeholders, key issues raised by the public submissions highlighted low investment in the tourism sector resulting in poor trained hospitality staff in the lodges, as well as in tourism infrastructure in the industry.

6.6.6.5. Impact of the changes anticipated over the next ten (10) years

The impact of changes anticipated over the next ten (10) years, if the current trends are not halted or minimised, include reduction of tourism activities, limited tourism infrastructure development, negated cultural exchanges and employment.

6.6.6.6 The impact of continuation of existing trends

The continuation of existing trends would result in shrinkage of tourism and resultant benefits of cultural exchanges, tourism investments, increased unemployment at the local level and loss of opportunistic livelihoods.

6.6.6.7 Climate change effects and gender analysis

Climate change impacts are likely to affect tourism activities such as visits to the Ngonye falls, Kuomboka traditional ceremonies and consequently reduced number of tourists. This has repercussions of limiting employment opportunities with overall impact on the vulnerable categories such as women and children.

6.6.7. ECONOMIC INFRASTRUCTURE – SECTOR

6.6.7.1. Overview

Economic infrastructure is critical to enhanced productivity and development in the district. It is essential in ensuring efficient and effective means of material flows (supply of goods and services), communication necessary for business, marketing and financial transactions, as well as energy critical for production and productivity. The sector contributes to employment and facilitation of livelihood activities in a number of ways.

6.6.7.2. Key priority strategies to be implemented at local level.

Development Outcome 1: An Industrialised and Diversified Economy

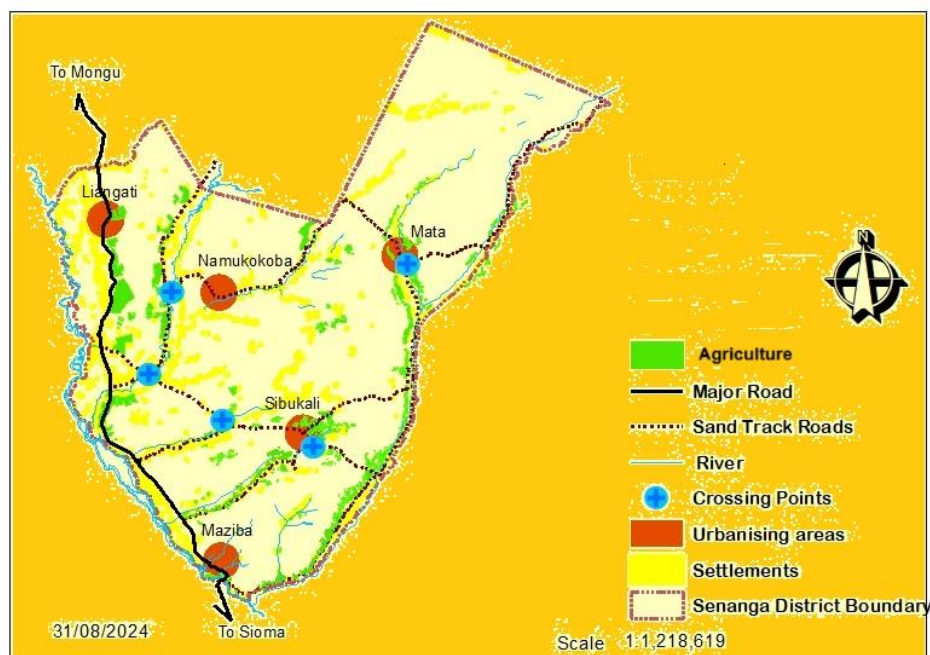
Strategy 5: Improve Transport and logistics

Implemented programmes include Aviation infrastructure maintenance, Road development and maintenance, Inland water development and maintenance and Warehousing development.

6.6.7.3. Status of implementation of existing plans and strategies in the district.

The key economic infrastructure eminent in the district include transport, communication towers (Internet, TV, Radio receptions) and energy infrastructure. The target priority programmes in the sector include improvement of road infrastructure by upgrading key priority existing urban and rural roads from sandy track roads to gravel roads, ensure maintenance of both gravelled and bituminous standard roads, enhance communication through radio coverage, construction of communication infrastructure (Towers) and promoting alternative energy sources alongside conventional energy supply.

FIGURE 32: MAP SHOWING ACCESS ROADS



Source: IDP facilitation Team, 2024

6.6.7.4. Transport sub-sector

The transport sector in the district comprises mainly of road, air, and water transport some areas. Roads in the district are segmented in three (3) main categories namely Township roads, inter district roads and intra district roads. The roads sector is key to enhanced economic functions and livelihood activities at households and community levels.

Transport infrastructure also plays a pivotal role in facilitating social services delivery key among them education, health, agricultural and commercial services.

6.6.7.5. Township and intra feeder roads

Township Access Roads in the district are sandy tracks in nature. Only two (2) of the township roads measuring 1.5 Kilometres have been upgraded to gravel standard through government capital funds support by Central government through the Local Authority. A total of 50.5 kilometres of township roads and all intra district access roads remain sandy tracks in nature. This affects efficiency in terms of delivery of social services, in the agricultural, community development, health, education among sectors.

FIGURE 33: PICTURE SHOWING STATE OF URBAN AND RURAL ROADS



Source: Field Photo, 2024

The status of the access roads also impedes access of the general members of the public to efficient public or private transport. In rural parts of the district the majority of the members of the general public including government service workers use oxcarts as a major mode of transport. This contributes to longer duration of workers out of service stations contributing to poor social services at the community level.

6.6.7.6. Inter district roads

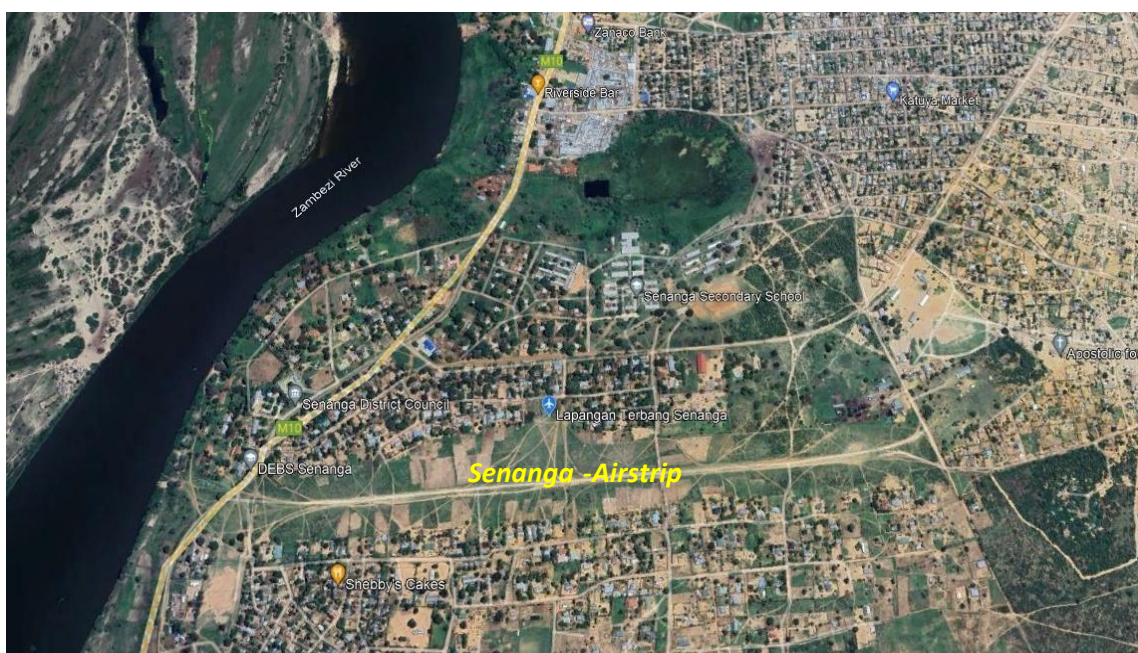
The inter- district roads include the Senanga-Sesheke Road (M10) in the southern direction linking the district to Sioma and Senanga-Mongu Road (M10) in the northern direction linking the district to Mongu via Nalolo.

The Senanga-Sesheke road via Sioma is still in good state while Senanga-Mongu road, has a stretch of about 20 Kilometres (Namatombo to Itufa) which is in needs continuous rehabilitation.

6.6.7.7. Air transport

The Air transport is one of the most efficient modes of transport critical to efficient services delivery. However, the mode of transport in the district is poorly developed. This is associated to low productivity, and incomes and poorly developed commercial ventures in the district. As a consequence, there is inadequate clientele to sustain costs of air transport operations to the district. As such, there are no service airlines currently servicing the district. The air infrastructure (airstrip) that is periodically utilised for emergency operational landing by national air crafts is also in a deplorable state while other supportive infrastructure such as fire, communication equipment, fence inter alia are in deplorable states. The air strip is also surrounded by residential areas who traverse the air strip making the current site unsuitable for use. Considering relocation of the air strip would thus be necessary in the plan implementation period.

FIGURE 30: PLATE SHOWING ENCROACHED AIR STRIP IMAGERY

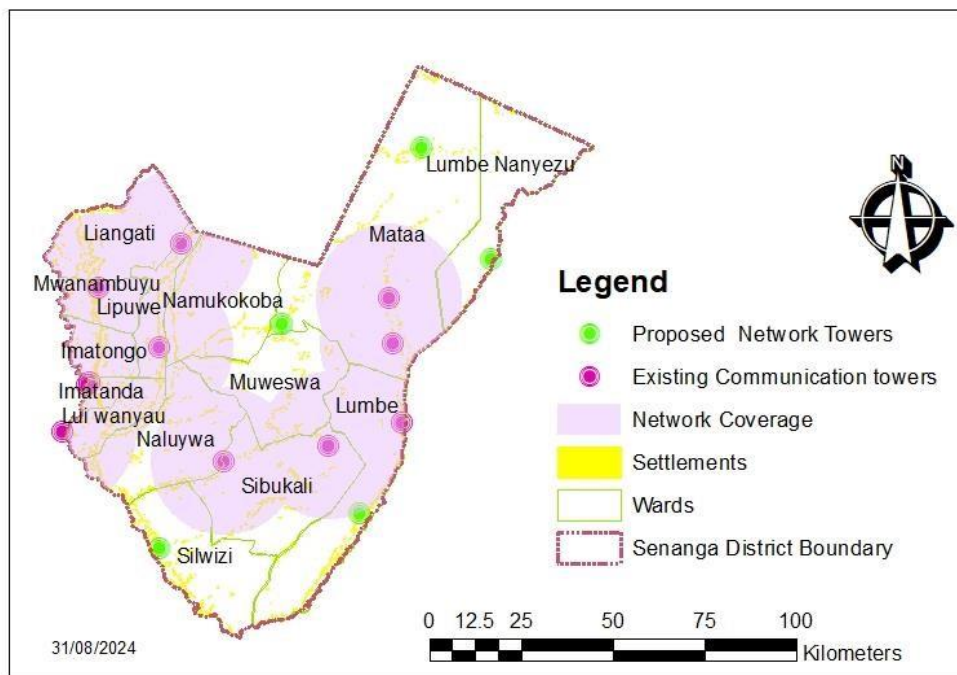


Source: Satellite image adapted from Google earth, December, 2023

6.6.8. COMMUNICATION SUB SECTOR

The district has a total of three network providers namely Zamtel, Airtel and MTN with a total number of 10 Network towers with a coverage of about 20 kilometres radius dotted around the district. However, connectivity to communication network remains a challenge. Only 42 percent of the wards are adequately covered by network while the other 58 percent of the wards encompassing Naluywa, Silwizi, Lumbe, Muweswa, Namukokoba, Sibukali Mata and Lumbe Nanyezu wards are inadequately covered by network providers.

FIGURE 34: MAP SHOWING COMMUNICATION COVERAGE



Source: Primary Field Data, 2024

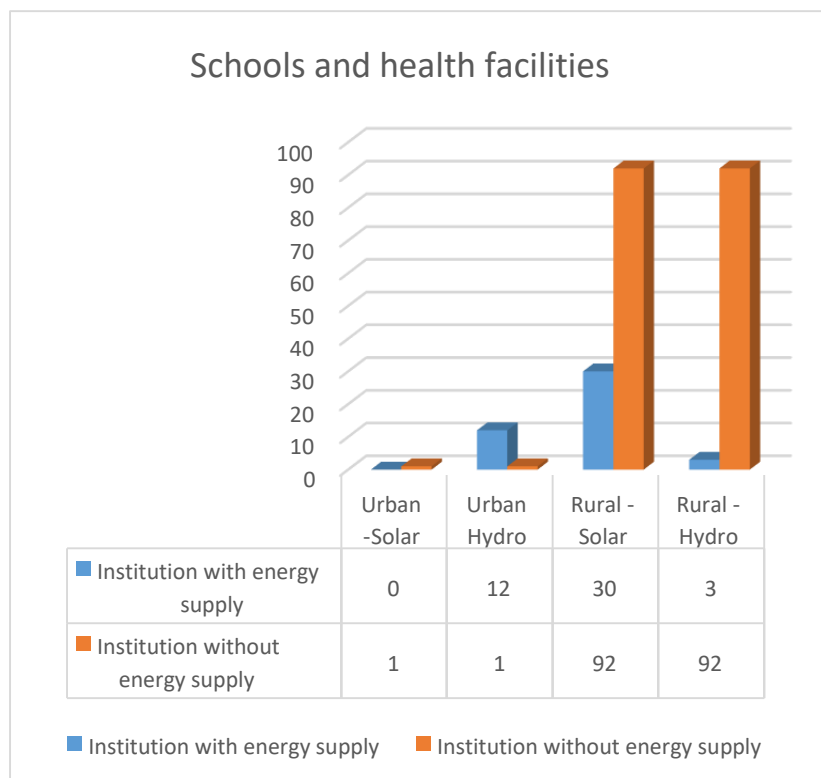
Poor network coverage affects access to information, while limiting employment opportunities supported by communication infrastructure such as mobile money, marketing of products and trade inter alia. It also affects timely access to health care services such as referral services for medical care. Improving communication infrastructure in the plan period would enhance efficiency of information flow and trade in the affected areas.

6.6.9. ENERGY SUB- SECTOR

The energy sources in the district comprises mainly of hydro, solar power wood fuel, charcoal and lubricant filling stations. Hydro power connectivity in the district is supplied by ZESCO Corporation. Access to power supply has continued to remain relatively low in the district. In terms of power connectivity, over 59 percent (4,369) of urban households and institutions are connected to power through the national grid out of a total of 7,405 urban households. A majority of rural households 15,003 households and institutions in the district remain poorly connected to power sources.

The district has potential to contribute to power generation through the Ngonye falls and off grid solutions such as solar owing to high sun shine hours of up to 8 hourly per day.

FIGURE 35: POWER CONNECTIVITY IN PUBLIC INSTITUTIONS



The statistics on number of households connected to solar energy and connectivity was yet to be ascertained for both rural and urban households. At the institutional level however, a total of 30 (19 health facilities and 11 schools) have been connected to solar energy.

Out of a total of 107 public schools 92 accounting for 86 percent are not connected to either hydro or solar energy. Additionally, the 12 out of 86 public institutions connected to solar energy have defective solar batteries resulting in

inadequate power supply for both health and education facilities (infrastructure). This has resulted in poor quality of service provision and affect overall outcomes of services for either patients or learners in affected institutions.

The 18,039, households and institutions in both rural and urban areas which are not connected to either solar or hydro power rely on usage of either wood fuels or charcoal. The urban area in the district is the major market for charcoal while rural areas mainly rely on wood fuels. The alternative cleaner energy sources such as gas, solar energy are less utilised in the district due to low supplies, and awareness on the energy sources. Poor utilisation of cleaner energy sources and reliance on charcoal contributes to increased climate change effects, and increase vulnerability (UNICEF, 2019), promotion of cleaner energy sources, awareness on importance of cleaner energy usage would thus be inevitable in the plan implementation phase.

The district has only one filling station for fuel supplies to service the transport sector industry. The available filling station is mainly catering for supply of lubricants for only road and water transport. Lubricants for air transport are not available in the district largely due to less development of the air infrastructure and transport systems in the district.

6.6.9.1. Quality of service including key performance indicators

Although the district has standard inter district roads of bituminous standard, the rural and urban roads remain poor sandy roads. This has resulted in both rural and township areas

being poorly serviced by efficient transport systems. Air transport is also none existent in the district. This has contributed to limited options of transport to solely the road transport systems. There is only one filling station in the district. This results in short supplies of fuels and lubricants, thus challenging efficiency of road transport in the district. Other parts of the district still lack access to communication network services despite having all the three network providers.

6.6.9.2. Issues arising from the public participation process

During public consultations conducted at district and ward level, stakeholders sighted poor states of roads, low access to communication and power connectivity as factors impacting negatively on the growth of the sector and livelihoods in the district.

6.6.9.3. Impact of the changes anticipated over the next ten (10) years

The continued increase in population is anticipated to increase volumes of trade which would require efficient transportation of material flows and increased calls of good facilitation roads. It is also anticipated that population growth vehicular volumes in the district alongside skills development increase in production that would increase demand for energy sources and communication. There is also a chance that development of natural resources (minerals) could increase investments in natural resources development that would demand for more efficient modes of transport such as air transport. Ensuring responsive and balanced development of economic infrastructure in anticipated service demands would thus be imperative to a futuristic focussed and responsive development in the district.

The sector would provide investment opportunities in construction works of upgrading the townships and rural road works. The hydro power, solar and communication connectivity would also contribute to opportunities in the sector and contribute to job creation through component supplies and labour to undertake required works. Communication infrastructure would also enhance marketing and ease commercial transactions through the digital communication platforms.

6.6.9.4. The impact of continuation of existing trends

The continuation of the current poor states of economic infrastructure (transport, energy and communication) would contribute to loss of livelihoods and perpetuate intergenerational poverty in the district. The poor access to transport infrastructure impede access to social services, amenities and markets while low connectivity and access to energy infrastructure results underperforming enterprises' productivity while inducing over reliance on natural forest resources for energy thus inducing climate change effects, vulnerability and poverty at household levels. Poor communication state would limit access to information, employment opportunities and access to marketing information critical for business acumen, comparative advantage and local economic development in the district.

6.6.9.5. Climate change effects and gender analysis

Climate change impacts are likely to affect non-climate resilient designed infrastructure such as bridges, roads, classroom blocks, communication towers and energy infrastructure through violent storms and extreme temperatures in the district. As a result, access to markets and

social services such as education and health would be affected. The impacts on energy infrastructure would induce frequent shut down of supplies and consequently disrupt enterprises thus negatively disturbing livelihoods. Climate change effects would mostly impact women who are charged with responsibility of child care at household levels as well children's health and wellbeing.

Ensuring construction of resilient communication, roads, power and energy infrastructure would thus be imperative in the plan implementation period.

6.6.10. GREEN ECONOMY AND ENVIRONMENTAL SUSTAINABILITY

6.6.10.1 Overview.

The environment houses supportive ecosystems and assure availability of natural resources upon which livelihoods in the district are anchored. The environment encompasses natural resources such as forests (flora), wildlife (fauna), land, water, air, and mineral resources and an array of forest products which support human livelihoods.

6.6.10.2. Key priority strategies to be implemented at a local level.

Development Outcome 1: Enhanced Mitigation and Adaptation to Climate Change

Strategy 1: Strengthening Climate Change Adaptation

Programmes include institutional framework strengthening, climate change mainstreaming, Long- term adaptation planning, Nature based solutions, sustainable agriculture, sustainable land, forest and water management and climate resilient infrastructure development.

Strategy 2: Strengthen climate change mitigation

Programmes are sustainable consumption and production, sustainable land management, Pollution prevention and control, sustainable forest management, green and renewable energy.

Development Outcome 2: Sustainable Environment and Natural Resources Management

Strategy 1: Promote Integrated environment management

Programmes include Pollution prevention and control, Chemical waste management, environmental compliance tracking, environmental services evaluation and urban and regional planning.

Strategy 2: Enhance Natural Resource management

Programmes are Sustainable land and forestry management, sustainable wildlife and fisheries management, Community based natural resource management, water catchment protection and conservation.

6.6.10.3. Status of implementation of existing plans and strategies in the district

6.6.10.4. Forestry

The district has a total of 1,068,243 hectares of forest cover and a total of 54,188 hectares of protected forests. The protected forests include one (1) local and five (5) national forests. These forests comprise of some species of economic value contributing to the timber industry.

Figure .. one of the timber merchants in Senanga



The major timber species available in the district include rosewood and Mukwa. Due to availability of timber species, the district has a total of six (6) licensed timber concessioners. These contribute to employment and revenue in the district and the nation as a whole.

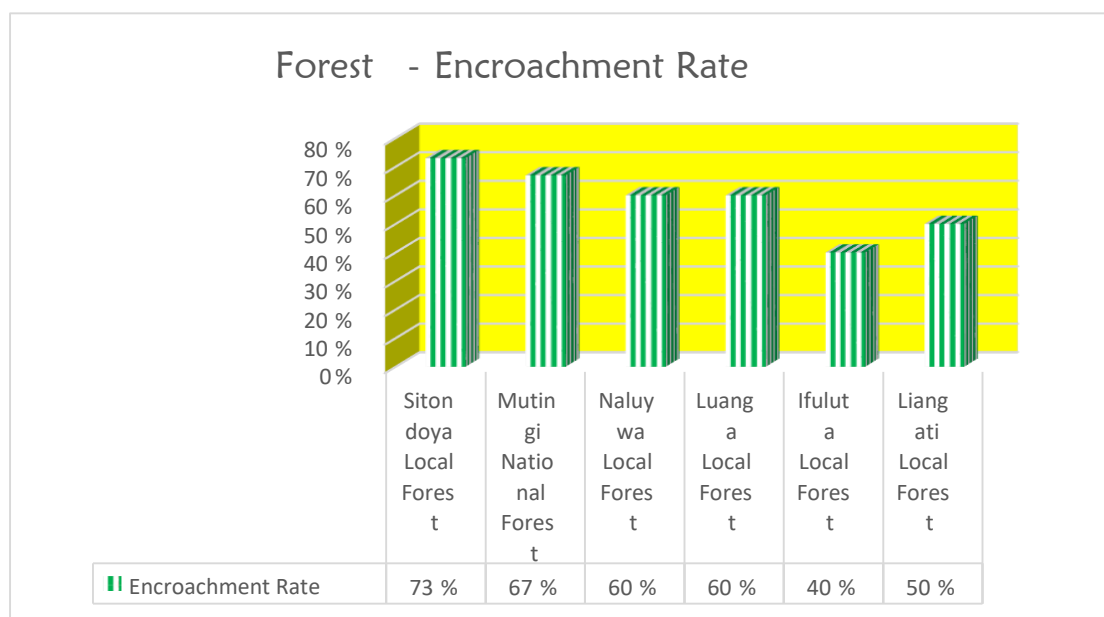
Source: Field Photo, 2024

The forests also support other products and value chains of honey production and processing in the district. Despite the benefits of the forests however, most of the district have continued to lose forest cover due to encroachments on protected forests. Some protected forests have lost vegetation cover of between 40-73 percent due to anthropogenic activities (Global Forest watch, 2024).

According to Global Forest watch, (2024 between 2005 and 2022), regeneration rate stood at 5.1 percent while forest cover loss stood at 15 percent. In 2023 alone, the district lost 75 hectares of forest cover due to agriculture settlements and other human activities. This shows that rate of regeneration is three (3) times slower than the pace at which the forest cover is being lost. Land scape analysis have also indicated that settlements and agricultural activities have encroached on protected forest reserves because of population pressure.

The Loss of forest cover contribute to increased effects of climate change impacts (Alkama, & Cescatti, 2016). In the district, severe temperatures, droughts, floods, poor food harvests and power outages are eminent and continue to negatively impact livelihoods and contribute to increased cost of living especially among the 80 percent of the district's poor households

FIGURE 36: FOREST ENCROACHMENT LEVELS



Source DFO, 2024

The forests possess a number of fruit trees namely Mahuluhulu, Mumbole, Mubula, Mawawa and some of the trees are used for medicinal applications which are Rosewood, Muzauli, Moringa, Mungongo, Mutuya to mention but a few.

The district has a potential for honey production due to the availability of water and tree species which support beekeeping. Currently, there are fifty-eight (58) beekeepers that are into honey production as an alternative livelihood.

The factors contributing to poor utilisation of forest resources include increasing demand of charcoal for energy especially in urban areas, demands for more land for food production and livelihoods. Increasing poverty levels and inadequate alternative livelihood activities resulting direct harvesting of forest products such as poles for sale. The utilisation of forest and other environmental resources at community levels are also poorly monitored due to inadequate community based human resources at ward levels and lack of transport to monitor and enhance nursery management, forest protection, extension services, forest maintenance, licencing and revenue collection.

6.6.9.4. Quality of service including key performance indicators

The sector enlisted an increase of 307 percent in terms of collection of non-revenue tax between 2021 and 2022 and a reduction of 13.8 percent between 2022 and 2024 owing to number of running concessions. The sector also increased the number of planted trees from 0 in 2021 to 4,321 in 2022, 2,345 in 2023 and 2,120 in 2024. The tree species planted include indigenous species, exotic species as well as fruit trees.

Hectarege forest designated as community forest management areas – the district has no designated forest under community management.

Number of concession licences issued – there are six (6) concessioners operating in the district.
Number of export permits issued in 2023 and 2024.

6.6.9.5 Issues arising from public submissions.

During the public consultations conducted with district and ward level stakeholders, key issues raised by the public submissions highlighted unsustainable utilisation of forest resources eminent in encroachment of forest resources due to lack of awareness. High poverty levels resulting on overdependence on direct forest products and lack of alternative livelihood sources at household levels also contributes to increasing forest degradation, deforestation and unsustainable utilisation of forest resources.

6.6.9.6. Impact of the changes anticipated over the next ten (10) years.

The anticipated changes over the next ten (10) years if the current trends are not halted or minimised, include increased loss of forest cover, loss of biodiversity, drying of water sources, and migration of wildlife into some communities and of loss of livelihoods.

6.6.9.7. The impact of continuation of existing trends.

The continuation of the existing trends will continue to negatively impact on means of productivity such as enterprises, food production, loss of livelihoods, drying up of water sources and loss of biodiversity.

6.6.9.8. Climate change impacts and gender analysis.

Climate change effects would lead to forest degradation, loss of non-drought resistant tree species and habitat loss. Consequently, leading to reduced productivity especially among crop farmers and fishers who are reliant on natural waters, and emaciated livestock thereby impacting community livelihoods and incomes. Mostly, women and children are the most affected by the impacts of climate change.

6.6.10. GOOD GOVERNANCE

Good governance plays a critical role in ensuring balanced and equitable development. In the district, priority programmes implemented include promotion of decentralisation through participation of the general populace in democratic processes and decision making. The protection of property, life and resources through enforcement of the rule of law, promotion of transparency through public access to information, land management and administration speak to good governance practices.

6.6.10.1. Key priority strategies are to be implemented at local level

- i. The priority programmes being implemented include;
- ii. the decentralised public delivery systems comprising of the Sector devolution and Fiscal decentralisation
- iii. improve rule, strengthen human rights and constitutionalism,
- iv. strengthen the criminal and justice system and
- v. enhance rule of law,
- vi. crime prevention,
- vii. detection and prosecution,
- viii. Infrastructure development.

6.6.10.2 Status of implementation of existing plans and strategies in the district

The district through the decentralisation processes established ward development structures at ward level to facilitate for participation of communities in decision making processes in challenges impacting communities. All the ward development committees (WDCs) have been oriented in their roles, however majority of WDCs still require capacity building and coaching in their mandates to ensure balanced delivery on social services to the community.

The enforcement of rule of law is affected by inadequate police posts, and transport. The Law enforcement officers encompassing Zambia police and correctional service do not have camp houses for easy coordination, management and timely response to emergency security related issues in the district. Additionally, infrastructure such as police posts are inadequate. The district has two police posts (Nande and Katuya) out of a total 4 police posts required resulting in communities walking longer distances to report crime. There is also non-existence of juvenile and adequate female holding cells. This results in juveniles temporarily being held together with adults and transferred to appropriate facilities out of the district.

The district also promotes access to information by ensuring information dissemination to the general public through the media. The access to information however, faces challenges due to lack of radio reception in some wards such as Lumbe, Muweswa, Namukokoba, Mata and Lumbe Nanyezu ward. The district also has social media platforms which includes Facebook page accounts and website which are used to publicise government implemented programmes, communicate on planned activities and development interventions to ensure information interchange and foster transparency at the community level.

6.6.10.3. Quality of service including key indicators

The access to police services remains low in the district owing to longer distances of up to 150 Kilometres which people travel to report cases. The district police and correctional services offices lack camp houses according to required standards to ensure enhanced coordination in implementation of security matters. The Correctional services also lack appropriate Juvenile and women holding cells and ablution. Inadequate funding compromise police service provision and inter alia.

6.6.10.4. Issues arising from public submissions

During the public consultations conducted at district and ward level stakeholders, concerns about lack of juvenile holding, cells owing to inadequate funding from the sector which is negatively impacting juvenile justice process were raised.

6.6.10.5 Impact of the changes anticipated over the next ten (10) years

The ever-increasing population and likely future contestations on land issues, climate change and increase in vulnerability at household levels would result in increased vice and increased demand for security services. This would impact on available bed space in holding cells and capacity.

6.6.10.6. The impact of continuation of existing trends

Continuation of existing trends reflecting low security infrastructure would result in low reporting of security cases. This would further translate in increased vices and incidences of violations of rule of law. There would also be continuation of delays in coordination man power for emergency operations due to lack of camp housing for officers.

6.6.10.7. Climate change impacts and gender analysis

Climate change would most likely increase vulnerability at household levels, this would further result in increased vices and increase in arrests. Rates of crime indicates that men commit more crime than females. This implies that women are most likely to be burdened by responsibilities of child care. Children would be victims of disrupted homes.

TABLE 25: SUMMARY OF CORE ISSUES

CORE ISSUE	DESCRIPTION
Access to health services	The district is characterized by low access to quality health services especially in the rural wards.
Access to safe water supply and sanitation	There is generally low access to safe and clean drinking water supply and low adoption of sanitation and hygiene practices.
Learner performance	Low learner performance, poor progression and completion rates.
Literacy levels	Low literacy levels resulting in 49% of learners not able to read and write
Education infrastructure	Poor state of infrastructure characterized by pole and mud and inadequate furniture
Vulnerability and inequality	High vulnerability and inequalities at household level
Production and productivity	Low production and productivity in the crop, livestock and fisheries subsectors

Trade and commerce	Inadequate appropriate trading infrastructure and low value chain
Stone quarrying and sand mining	Poorly organized groups and lack of access to finance
Road transport	Most access roads are sandy tracks resulting into poor access to social services
Communication network	Low access to communication network / coverage
Power connectivity	Low access to power connectivity especially in the rural wards
Environmental Protection	Encroachment of protected forests and deforestation
Waste disposal	Indiscriminate disposal of waste
Tourism	Underdeveloped tourism infrastructure
Unplanned settlements	Increase in the number of unplanned settlements
Land for development	Inadequate land for developments in council jurisdiction
Good governance	Low access to rule of law, justice and information

PART THREE: DEVELOPMENT FRAMEWORK

7.1. Introduction

This section describes the goals, objectives and strategies aimed at attaining development programmes for Senanga district. It describes and highlights spatial references of implementation programmes and the long-term vision for the district IDP centred on the planning values that informs this strategic development framework (SDF) whilst acknowledging the opportunities and challenges obtaining in the district. The vision describes how the district will attain the objectives of the planning programmes and attain the aspired state.

The development framework (SDF) outlines the goals, strategies and development objectives for the IDP. The SDF also facilitates for alignment of planning programmes with other policy documents such as the 8th national development plan, Vision 2030 among others applicable laws and policies.

7.2. Vision statement

The community in Senanga district aspire and envisions to see a Senanga district with efficient service delivery, efficient social services infrastructure, inclusive and diverse socio-economic and sustained environmental programmes. This resulted in the district vision dubbed;

“An inclusive, diversified socio economic and environmentally sustainable District by 2034”

To achieve this vision, adequate investment in enabling infrastructure across sectors, protection of environment and ecosystems as well as investment in core economic productive areas of the district will be inevitable. Key among such viable programmes includes development of socio economic and production infrastructure, social services, diversified energy sources, water supply and sanitation services.

The principles underlying the vision included social spatial justice, equity, liveability and physical integration. The envisioned future of the district will be achieved through integration of services through a web of interconnected social, commercial, industrial, and agricultural nodes and corridors. The integration of services results in maximal utilization of space and collective benefits to the district economy. It brings about inclusiveness and fair participation by all players resulting in enabled capacity, abilities and increased productivity.

The majority of the urban community are in the informal sector thus facilitating for a fair platform in terms of productive infrastructure, would be critical in the re-organisation of the informal sector into SMEs, enhanced participation and productivity. Liveability of a community on the other hand relate to easy access to supportive infrastructure, and services with possibilities and availability of alternative options and choices.

7.3. Goals, objectives and strategies

Arising from the synthesis of issues report, the idealised development concepts, the goals, objectives and responsive strategies identified to develop the district are framed as follows;

TABLE 26: GOAL 1: TO IMPROVE ACCESS TO QUALITY SOCIAL SERVICES

SPECIFIC OBJECTIVES	STRATEGIES
Education, overall objective: To enhance the quality, access, and efficiency of education to ensure equitable and inclusive education for all learners by 2034.	
To increase literacy levels in the district from 51% to 70% by 2034	Teacher Recruitment (ECE, Primary & Secondary)
	Teacher capacity building
To Improve learner performance from 40% to 60% by 2034	Provision of learning and teaching materials
	Enhance continence assessments
	Enhance continuing professional development
To Improve educational Infrastructure, infrastructure and equipment from 25% to 75% by 2034	Construction of classroom blocks
	Construction of specialised rooms
	Procurement of learning furniture and equipment
To promote skills development by equipping learners with appropriate skills through bursary support from 343 to 1,400 learners by 2034	Promote skills development bursary support
	Publicity of skills funding procedure and programmes in the district
	Support relevant skills sets in eminent potential growth areas of the district
Health overall objective: To provide affordable quality health care services and improve the health status of population by 2034	
To increase the coverage of fully immunized under ones from 68% to 95% by 2034	Increase availability for cold chain storage
	Strengthening supplemental immunization activities
To increase the proportion of pregnant women attending first antenatal care from 68% to 95% by 2034	Staff capacity building in antenatal care
	Develop and implement a communication strategy for maternal and reproductive health
To reduce malaria incidence from 639 to 130/1000 by 2034	Implement high impact malaria interventions
	Enhanced malaria surveillance at all levels
Increase institutional deliveries from 43% to 50% by 2034	Construction and equipping of maternal annexes
	Increase skilled health personnel
	Construction of health infrastructure
To maintain the percentage of people living with HIV on ART suppressed viral load above 95% by 2034	Establish and strengthen the electronic viral load monitoring system through improved interoperability of systems
	Scaling up viral load coverage in areas of low viral load suppression coverage
WASH overall objective: Improve access to water supply and sanitation services from 31% to 60% by 2034	
To improve access to water supply in public institutions from 75% to 100% by 2034	Drilling of boreholes and equipping them with hand pumps
	Upgrading of hand pumps to water reticulation systems
	Rehabilitation of water infrastructure
To improve access to water supply in community level from 31% to 60% by 2034	Construction of water reticulation systems
	Champions and SAG Groups civic leaders and traditional leadership in WASH interventions
	Capacity building of WASH committees, APMs,
To improve access to sanitation and hygiene services in the district from 16% to 30%	Promote construction of sanitation facilities at community levels
	Promote awareness sanitation hygiene practices
	Promote construction of sanitation facilities at community levels
	Construction of water borne sanitation facilities in public institutions
To reduce indiscriminate waste disposal through waste collection subscriptions from 18 to 1,727 households and business entities by 2034	Facilitate and promote land use management.
	Establishment of a designated dumpsite and cemetery
	Promote sanitary environment through solid and water waste management

Community Development and Social Protection Overall object:	
To improve basic social protection coverage from 23% to 40% by 2034	Increase the number beneficiaries supported with social protection packages
	Increase the number of vulnerable households accessing productivity grants
	Increase the number of enterprising women accessing micro loans
	Provision of adult literacy learning materials
	Capacity build volunteer literacy instructors
	Equip SCT beneficiary household with community group saving skills
	Facilitate registration of community saving groups
	To Facilitate community savings groups to funding sources
	Improve coverage of basic social protection services
Improve access to sports, recreation and social amenities by 2034	Enhance public access to social amenities

TABLE 27: GOAL NO. 2. TO ENHANCE ECONOMIC PRODUCTION AND PRODUCTIVITY IN THE DISTRICT.

OBJECTIVES	STRATEGIES
Agriculture overall objective: To increase crop, livestock and fisheries production and productivity by 2034	
To increase crop yields (Mt/Ha) maize from 0.5 to 3, Sorghum 0.6 to 1, millet 0.5 to 1, mixed beans 0.4 to 2, rice 0.2 to 2 and cowpeas 0.4 to 1 by 2034	Promote food production, productivity through irrigation and mechanisation practices.
	Promote early maturing crop varieties
	Capacity building of farmers in climate smart agriculture
	Enhance farmer access to market linkages
	Enhance extension services
To increase livestock and fisheries production (MT) beef from 543 to 1,090, Goat meat 181 to 848, Pork 274 to 776, broiler chickens 587 to 2,494, layer eggs from 215 to 1,268 and fish 602 to 1,437 by 2034	Promote crop diversification
	Enhance treatment of livestock diseases and vaccination
	Promote livestock infrastructure establishment
Increase livestock (by type) population: cattle from 46,830 to 110,423, Pigs from 8,830 to 20,821, goats 9824 to 23,164, village chickens 63,870 to 150,602, broilers 5000 to 11,790 layers 5,522 to 13,021 by 2034	Facilitate farmer linkages to the market.
	Enhance extension services
	Promote aquaculture production
To increase the number of entrepreneurs accessing financial support for economic activities from 18 to 268 by 2034	Promote value addition and value chain
	Facilitate access to financial services and support
To increase the number of Kilometres of gravel roads network from 1.5 to 50 in the urban areas and 9.3 to 450 in rural areas by 2034	Capacity building of entrepreneurs in commerce and trade
	Upgrade sandy track roads in the township to gravel standard
	Upgrade sandy track roads in rural areas to standard gravel feeder roads
To increase the number of communication towers from 10 to 15 by 2034	Rehabilitate current access roads
	Construction of communication towers
	Improve radio coverage

TABLE 28: GOAL 3: TO PROMOTE DEVELOPMENT AND MANAGEMENT OF NATURAL RESOURCES

Overall objective: To promote sustainable environmental management and utilisation of natural resources	
SPECIFIC OBJECTIVES	STRATEGIES
To improve forest management and conservation across 8 zones by 2034	Facilitate sustainable utilisation of forest, land, water and air resources.
	Promote partnerships that enhance sustainable use of natural and environmental resources
	Formation of Community Forest management groups to enhance community based natural resource management
To promote value addition of forest, produce across 8 zones by 2034	Promote value addition of forest produce such as mushroom growing, extraction of oil and briquette making
To restore 5,000 Hectares of forest cover by 2034	Promote afforestation, reforestation and agroforestry
To promote alternative livelihood by facilitating apiculture trainings from 1 to 10 by 2034	Promotion of alternative livelihood in bee keeping
To enhance forestry extension services across 8 zones by 2034	Enhance forestry extension services (provision of education and awareness)
To promote tourism development and marketing by establishing one tourism hub by 2034	Facilitate capacity building of staff in the hospitality industry
	Promote and facilitate fish sporting activities
	Promote and facilitate investment in tourism infrastructure and culture
	Promote awareness on animal – human conflicts.

TABLE 29: GOAL 4: TO ENHANCE RULE OF LAW AND GOOD GOVERNANCE

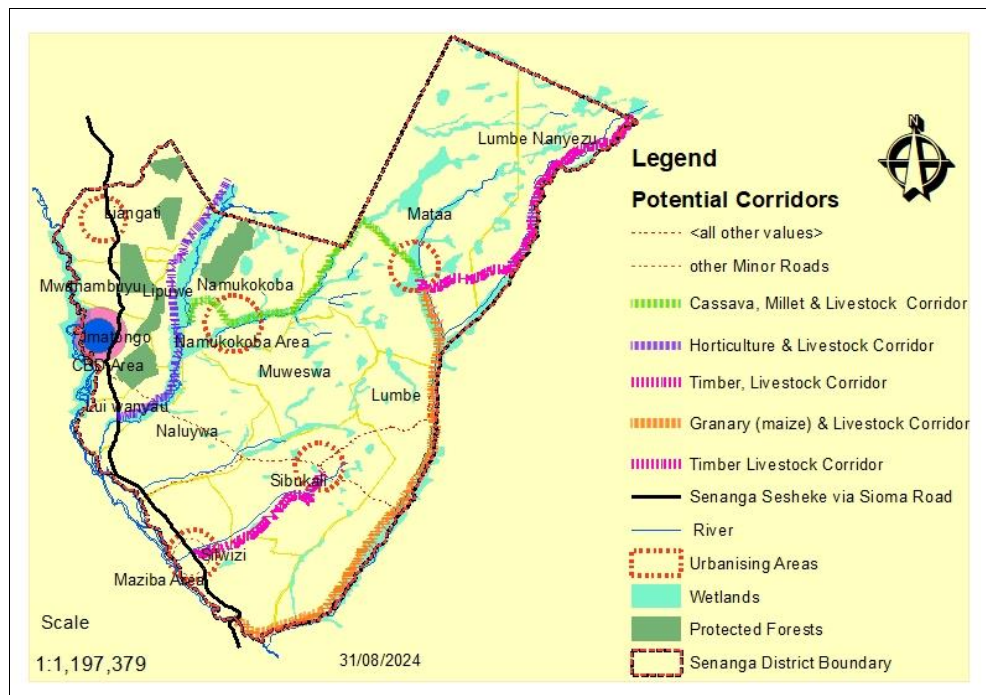
Overall objective: To improve access to rule of law, justice and information by 2034	
SPECIFIC OBJECTIVES	STRATEGIES
To enhance community participation in governance and decision-making processes in the 14 wards by 2034	Enhance governance systems by facilitating WDCs operations, capacity building and construction of appropriate infrastructure
To promote the rule of law and access to justice in the 14 wards by 2034	Raise awareness on corruption activities in institutions
	Enhance quality child protection services through the construction of appropriate infrastructure
To promote equitable distribution of resources across the 14 wards by 2034	Enhance inclusive access to natural resources such as land and community participation in resource allocation decisions and utilization
To enhance coordination among all community actors across the 14 wards by 2034	Enhance coordination between community and law enforcement agencies

8.0. DEVELOPMENT SCENARIOS

8.1. The Corridor Development Concept

The corridor development concept is one of concept applied in rational spatial planning and economic restructuring. The principles underlying the corridor development concept include agglomeration encompassing development of economic activities prevalent in the area, Linkages between nodes providing access to different levels of economic opportunities and established highly developed centre or node that supports the flow of economic activities along corridors.

FIGURE 31: MAP SHOWING CORRIDOR DEVELOPMENT CONCEPT



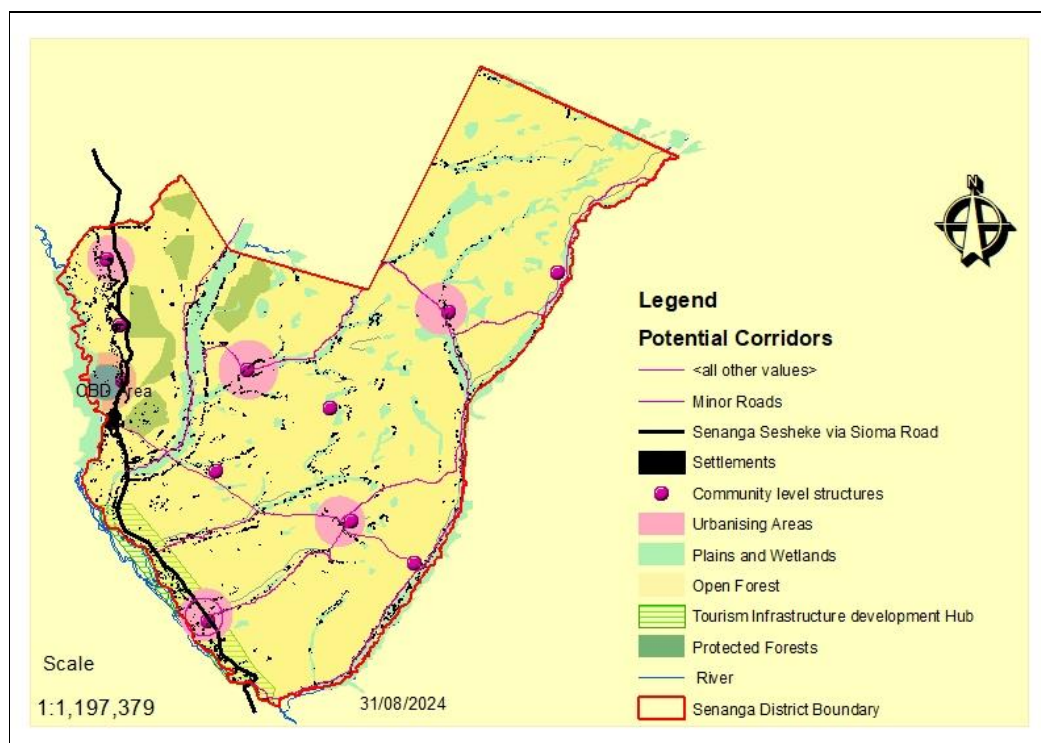
Source: IDP facilitation team, 2024

The corridor development concept could also be applicable to the district. The district has an established urban centre that could support economic activities eminent along different corridors. It has also endowments of different natural resources such as forest, water resources, and agricultural potentials along nodal areas which could be developed as a collection (agglomeration) to give an economic sense. The urbanising centres critical to support development of the corridors however lack a number of amenities such as power connectivity, supportive water infrastructure and the relevant technology critical for development of resources available along eminent resources along the identified corridors.

8.2. Growth Pole (decentralised) development Approach

Growth pole development concept is among the development approaches that promote integration at different levels of socio economic development. The urbanizing areas (growth poles) serve as centers of investment and innovations that can easily spur replication of innovations and development at lower levels of society. The model promote some level of skilled human resource, social and economic infrastructure development at growth poles critical for both economic and social services delivery.

FIGURE 32: MAP SHOWING GROWTH POLE DEVELOPMENT SCENARIO



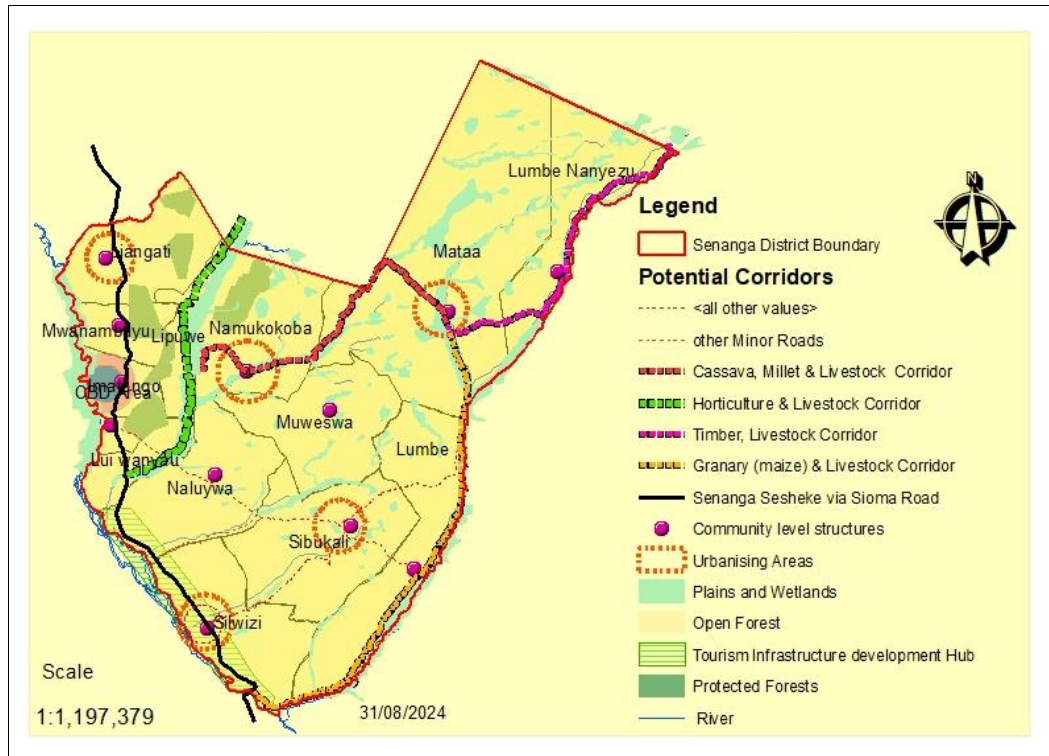
Source IDP facilitation team, 2024

The model could also be applied for developmental growth in the district. The district has also some urbanising areas which could also serve as centres of investment focus. Such an approach will ease access to social services by reducing distances most members of the communities travel to access social services such as specialised health care services, education, goods and services among others. The approach although taking services closer to the people, it could lead to economic disparities arising from concentration of resources and investments in particular locations at the expense of others. This could lead to stagnation of other areas ascent or closer to emerging growth poles.

8.3. Strategic Urban Development Concept

The strategic urban development concept, is underpinned by a set of developed strategic goals and objectives tailored towards economic growth of the urban setting. The strategic goals encompasses goals such as improving access to transport, public amenities, improving quality of citizen, and investments in core economic potentials of the urban spaces. The concept is a flexible model which allows interrogation of critical economic variables a particular urban setting should strategically consider to invest in for purposes of realising the desired economic growth.

FIGURE 33: MAP SHOWING STRATEGIC URBAN DEVELOPMENT CONCEPT



The concept could also be applicable to the district through setting of appropriate goals and objectives aimed at enhancing investment in needy areas such as social and economic infrastructure aimed at improving access to social services and economic growth. The Concept also allows for priority setting at district level allowing for development of interventions that are responsive to emergent challenges facing the district. The concept is flexible and could is flexible and could integrate different models such as growth pole and nodal development concepts through strategic goal setting to attain the most economic development.

8.4. Choice of development Approach

The Development approach that will be used in this plan will be the strategic development Scenario owing to its applicability, and flexibility. The approach has benefits of needs assessment and development of responsive interventions to emerging and existing challenges eminent in the district.

9.0. THE DISTRICT SPATIAL DEVELOPMENT FRAMEWORK (SDF)

9.1. SOCIAL SERVICES SPATIAL DEVELOPMENT FRAMEWORK

9.1.1. Health spatial development framework

FIGURE 29: MAP SPATIAL DISTRIBUTION OF HEALTH FACILITIES AND PROPOSED DEVELOPMENTS IN THE PLAN IMPLEMENTATION PERIOD



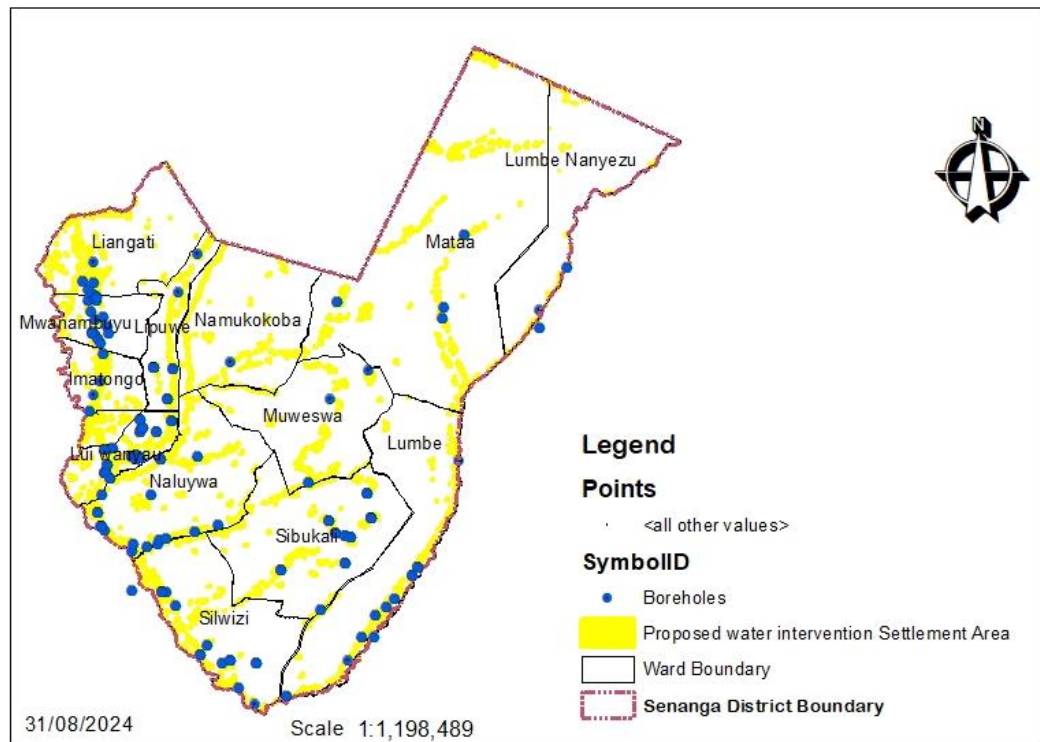
Source: IDP facilitation Team, 2024

Access to quality health care services in the district has been poor due to inadequate health facilities, staff housing, insufficient medical equipment, maternity annexes, Mothers shelters and inadequate qualified personnel. The sector has also been challenged by inadequate of referral health facilities, and supportive infrastructure such as portable water to facilities, adequate power supply and transport. Such challenges constrained access to quality health care services, specialised referral health services and public health intervention to ensure disease surveillance and prevention.

To redress such challenges eminent in the sector, and ensure expanded access to health care services, the sector in the plan implementation period will focus on enhancing improvement of institutional deliveries by constructing mother's shelters, maternity annexes. The sector will also focus on improving health facilities by constructing new health facilities such as health centres, mini and district hospitals while improving the existing health infrastructure in terms of housing, sanitation facilities, portable water and power connectivity so as to reduce on distances travelled by communities to access health care and referral services for specialised care. The sector will also promote public health interventions encompassing improvement of immunisation coverage of under five children, Malaria preventive measures and TB, HIV prevention and treatment of people living with HIV/AIDS.

9.1.2. Wash spatial development framework

FIGURE 34: MAP SHOWING SETTLEMENTS WITH ACCESS TO SAFE WATER



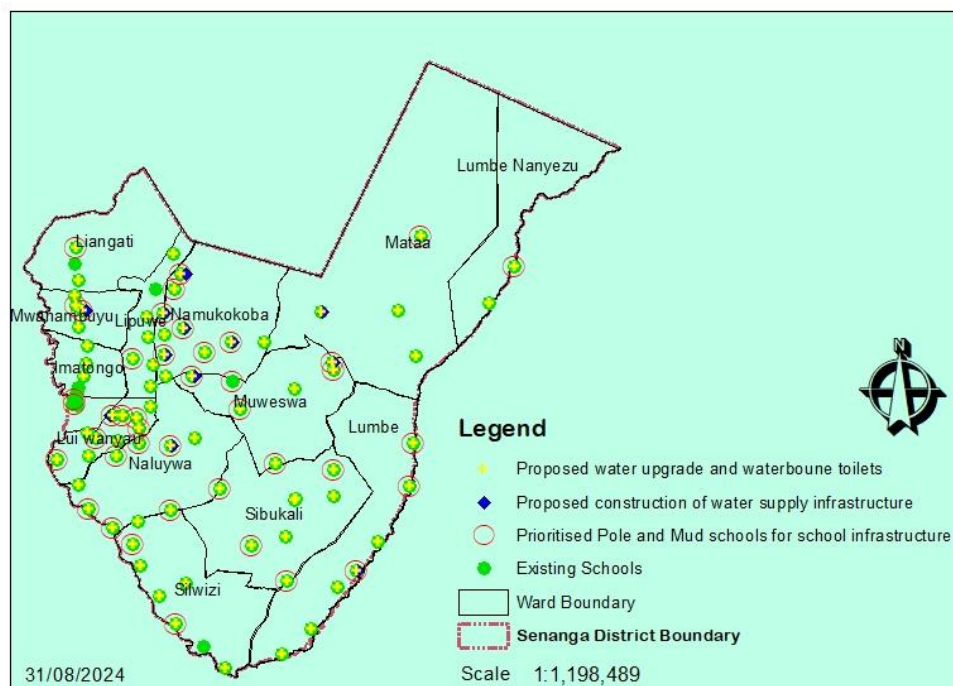
Source: Field Data, 2024; Grid 3, 2024

The sector faces challenges of poor access to safe water and sanitation facilities along with poor sanitation and hygiene practices. A majority of the community walk longer distances beyond the recommended one kilometre to access safe water. Other communities depend of open sources of water for their livelihoods while a majority population's lack access to sanitation facilities and practice poor sanitation hygiene practices. Poor access to safe water and sanitation facilities contribute to water Bourne and water related diseases, poor community health states, poor productivity and poverty.

To redress the eminent challenges in the plan period, the sector will focus on improving access to safe water by constructing new water infrastructure in poorly serviced communities and public institutions, promote sustainable operations and maintenance of water infrastructure maintenance. The sector will also focus on improving existing water infrastructure from hand pumps to reticulation water systems in public institutions, while promoting programmes such as community led total sanitation aimed at improving sanitation hygiene practices, capacity building of community structures in sanitation and hygiene practices and promotion of construction of sanitation facilities at community levels. The sector will further focus on promoting sanitary environments by implementing interventions aimed at reducing indiscriminate waste disposal especially in urban and urbanising villages.

9.1.3. Education Spatial Development Framework

FIGURE 35 : MAP SHOWING SPATIAL DISTRIBUTION OF EDUCATION FACILITIES



Source, Field data, 2024

The education sector faces challenges of inadequate school infrastructure with regards to availability of standard classrooms, housing, sanitation facilities in schools, school furniture, power and water connectivity and teaching staff.

To redress the challenges eminent in the sector in the plan implementation period, the sector will focus on improving access to quality education by constructing educational infrastructure such as classrooms, staff housing and sanitation facilities prioritising the existing schools with pole and mad infrastructure. The sector will also focus on improving furniture, water supply infrastructure and power connectivity in schools, in order to enhance conducive learning environment.

9.1.4. Community development spatial development framework

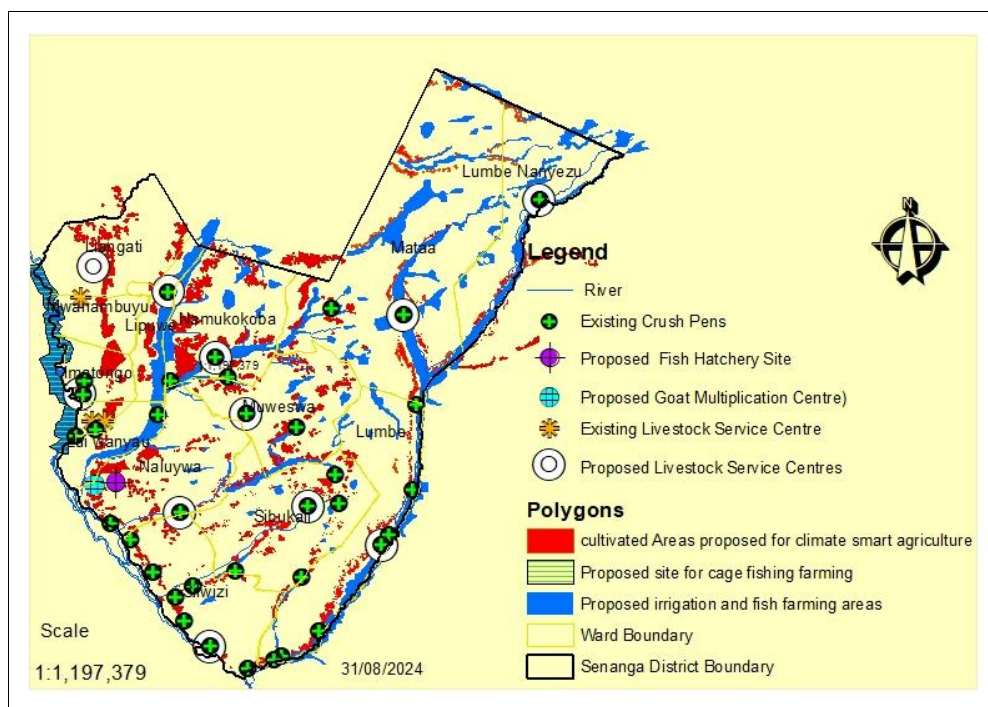
The sector faces challenges of high levels of vulnerability and poverty levels at household levels exacerbated by climate change impacts such as droughts. This contributes to increasing vice such as theft and emergence of violence and attacks on other community members. The sector also face challenges of inadequate amenities to support development of skills encompassing sports development, productivity and entrepreneurial among especially the youths,

To address these challenges in the plan implementation period, the sector will enhance access to social amenities by constructing social amenities such recreational and skills development and training facilities, It will also promote interventions aimed reducing inequalities and vulnerability such as access to capital, farming inputs, grants and bursary support to identified

learners from vulnerable households. The sector will also focus on enhancing social protection to avert vulnerability of victims of gender based violence.

9.1.5. Agricultural spatial development framework

FIGURE 36: MAP SHOWING DISTRIBUTION OF EXISTING AND PROPOSED AGRICULTURAL INTERVENTIONS



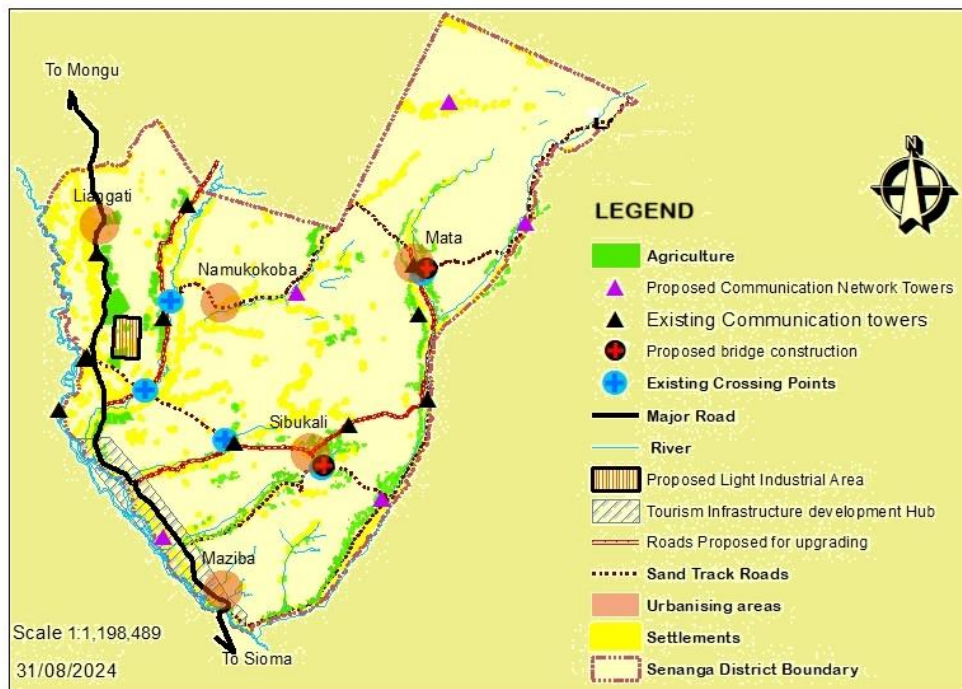
Source: IDP facilitation team, 2024.

The sector faces challenges of low productivity and production with regards to crop, livestock and fisheries sector. The crop sector was impacted by poor access to recommended seed, low mechanisation, and low utilisation of climate smart agriculture (CSA) practices. As well as low irrigation practices due to low access to capital. The livestock sector was affected by high disease prevalence, shrinking access to markets especially among local entrepreneurs, while fisheries is impacted by distant sources of fingerlings, access to capital for fish farming.

To redress these challenges in the plan period, the crop sector will focus on promoting irrigation, climate smart agricultural interventions, mechanisation and improved access to quality seed. The livestock sector will focus on promoting livestock value chain and disease control and market linkages while fisheries sector will focus on promoting aqua culture and extension services.

9.1.6. Economic infrastructure spatial development framework

FIGURE 37: MAP SHOWING EXISTING AND PROPOSED ECONOMIC INFRASTRUCTURE



Source: IDP facilitation Team, 2024

Economic infrastructure such as communication, access roads, industrial yards and tourism promotion are inevitable for local economic development, competitive advantage and economic growth of the district. Currently most of the economic infrastructure are in a state of underdevelopment. In the plan implementation period, the district has prioritised a number of projects aimed at enhancing the development state of the economic infrastructure. These will include the following;

To address such challenges in the plan implementation period the sector will focus on improving economic infrastructure by upgrading priority urban and rural access roads infrastructure from sand tracks to gravel standard, improving communication infrastructure. The sector will also enhance economic activities by establishing an industrial yard, the tourism hub.

9.1.7. Economic Sector

The economic sector is challenged by low access to capital by most small scale and medium entrepreneurs, non-formalisation of groups for easy access to capital, and poor culture of working together by most formalised groups and poor utilisation of environmental and natural resources. This has resulted in continued low productivity and production among most small and medium entrepreneurs (SMEs).

To address these challenges in the plan period, the sector will also promote sustainable use of environmental resources while promoting formalisation of informal groupings

participating in mining, timber and trade in the district. The sector will also facilitate support interventions towards access to capital in order to enhance growths.

9.1.8. Good governance

To ensure successful implementation of the plan, awareness of corruption activities, strengthening of coordination among various actors, promotion of child rights and participation of communities in governance systems and decision making processes at the local levels will be promoted in the plan implementation phase.

PART FOUR: IMPLEMENTATION PROGRAMME

IMPLEMENTATION PLAN: HUMAN AND SOCIAL DEVELOPMENT - HEALTH SERVICES

GOAL: 1		TO IMPROVE ACCESS TO QUALITY SOCIAL SERVICES							
OBJECTIVE: 1		IMPROVE INSTITUTIONAL DELIVERIES FROM 43% TO 55% BY 2034							
STRATEGIES	KEY ACTIVITIES	TARGET LOCATION / GROUP BY PRIORITY	TOTALS	2025	2026	2027	2028	2029	RESPONSIBLE AGENCY/ UNIT
Improve maternal services	Design, Cost, Monitor, Construction of maternity Annexes and mother's shelters	All wards	15	3	3	3	3	3	GRZ/MOH/LA
	Design, Cost, Monitor, Construction of mother's shelters		10	2	2	2	2	2	GRZ/MOH/LA
Increase skilled health personnel	Lobby for recruitment of midwifery staff		11	4	2	2	2	1	GRZ/MOH/LA
OBJECTIVE: 2		INCREASE NUMBER OF REFERRAL SERVICES FOR SPECIALIZED CARE FROM 1 TO 4 BY 2034							
Improve referral services	Design, Cost, Monitor Construction of Mini-Hospitals	Sibukali, Mata, Lui Namabunga	3	1	1	1	0	0	GRZ/MOH/LA
	Design, Cost, Monitor Construction of district Hospital	1 District Hospital - Appendix 1	1	0	1	0	0	0	GRZ/MOH/LA
	Advertise, Tender, Procure Ambulances for referral services.	Senanga District Health Office, Senanga District Hospital	2	1	0	1	0	0	GRZ/MOH/LA
OBJECTIVE: 3		IMPROVE COMMUNITY ACCESS TO HEALTH CARE SERVICES BY CONSTRUCTING 12 NEW HEALTH FACILITIES BY 2034							
Enhanced infrastructure development for quality service delivery	Design, Cost, Monitor Construction of new health posts and associated infrastructure	Sabelo, Namanyingi, Lukombwe, Sisapi Luhomba	5	1	1	1	1	1	GRZ/MOH/LA
	Design, Cost, Monitor Construction of new housing facilities for new health posts	Sabelo, Namanyingi, Lukombwe, Sisapi Luhomba	5	1	1	1	1	1	GRZ/MOH/LA
	Design, Cost, Monitor Construction of incinerators in health facilities	Appendix 1	13	2	2	3	3	3	GRZ/MOH

	Cost, Monitor Rehabilitation of health facility infrastructure	Lui river , mata, Maziba, Mweswa, Mumbula, Lumbe Nanyezu, Mutwa health facilities	7	3	3	1	0	0	GRZ/MOH/LA
	Design, Cost, Monitor Construction of semi-detached staff housing for existing health facilities	Sabelo, Namanyingi, Lukombwe, Sisapi Luhomba	5	1	1	1	1	1	GRZ/MOH/LA
	Advertise, Tender, Procure health equipment in health facilities	All health facilities	21	4	4	4	4	5	GRZ/MOH/LA/ World Vision
Improve lighting services in health infrastructure	Design, Cost, Monitor Upgrade of solar power in health facilities	All health facilities	16	4	4	4	4	0	GRZ/MOH/LA
	Design, Cost, Monitor Construction of solar mini grid at growth Pole	Sibukali	1	1	0	0	0	0	GRZ/WPPA/LA/ GDS international
OBJECTIVE: 4	TO INCREASE THE COVERAGE OF FULLY IMMUNIZED UNDER ONES FROM 68% TO 95% BY 2034								
Increase availability for cold chain storage	Advertise, Tender, Procure health cold chain equipment in health facilities	All health facilities	9	2	2	2	2	5	GRZ/MOH/LA/ World Vision
Strengthening supplemental immunization activities	Conducting biannual immunization campaigns	All health facilities	10	2	2	2	2	2	GRZ/MOH/LA/ World Vision
OBJECTIVE: 5	TO REDUCE MALARIA INCIDENCE FROM 639 TO 130/1000 BY 2034								
Implement high impact malaria interventions	Conducting annual Indoor Residual Spraying (IRS) campaigns	All wards	5	1	1	1	1	1	GRZ/MOH/LA/ Global Fund
Enhanced malaria surveillance at all levels	Weekly reporting of malaria cases	All wards	250	52	52	52	52	52	GRZ/MOH/LA/ Global Fund
OBJECTIVE: 6	TO MAINTAIN THE PERCENTAGE OF PEOPLE LIVING WITH HIV ON ART SUPPRESSED VIRAL LOAD ABOVE 95% BY 2034								
Establish and strengthen the electronic viral load monitoring system through improved interoperability of systems	Capacity building in interoperability system	All health facilities	26	22	23	24	25	26	GRZ/MOH/LA/ CoAg/Global Fund

Scaling up viral load coverage in areas of low viral load suppression coverage	Increase collection frequency of samples	All wards	250	52	52	52	52	52	GRZ/MOH/LA/ CoAg/Global Fund
Improve Sample storage capacity	Advertise, Tender, Procure health sample fridges in health facilities	All health facilities	9	2	2	2	2	5	GRZ/MOH/LA/ CoAg/Global Fund

CAPITAL INVESTMENT PLAN: HUMAN AND SOCIAL DEVELOPMENT - HEALTH SERVICES

GOAL	TO IMPROVE ACCESS TO SOCIAL SERVICES BY 2034					
OBJECTIVE	TO PROVIDE AFFORDABLE QUALITY HEALTH CARE SERVICES AND IMPROVE THE HEALTH STATUS OF POPULATION BY 2034					
STRATEGIES	PROGRAMME	INPUT	COST (ZK)	SOURCE OF FUNDING	SOURCE OF INFORMATION	RESPONSIBLE INSTITUTION
Enhanced infrastructure development for quality service delivery	Infrastructure Development	Land, Design, Bill of Quantities, Construction, Supervision	K64,908,275	LA (CDF & Local Revenue)	LA/MOH	LA/MOH/
Improve maternal services						
Improve referral services						
Increase skilled health personnel	HRA	Recruitment of staff	TBA	MOH	MOH	LA/MOH/
Increase access to quality health care	District Health Services Operations	Procurement of fuel, medical products, repair and maintenance of vehicle	K16,064,565.00	GRZ Grant	MOH	LA

IMPLEMENTATION PLAN: HUMAN AND SOCIAL DEVELOPMENT – WASH

GOAL:	IMPROVE ACCESS TO SOCIAL SERVICES BY 2034								
OBJECTIVE:	THE LOCAL AUTHORITIES AND OTHER GOVERNMENT PARTNERS WILL FOCUS ON INCREASING ACCESS TO SAFE WATER SUPPLY FROM 31% TO 60% BY 2034								
STRATEGY	ACTIVITIES	TARGET LOCATION/GROUP BY PRIORITY	TOTAL	2025	2026	2027	2028	2029	RESPONSIBLE AGENCY/ UNIT
Improve community access to safe and clean water supply	Design, Cost, Monitor Construction of mechanized water infrastructure at Community level	All 14 wards	50	10	10	10	10	10	GRZ/ LA, WVZ, Mafisa, Christian Brothers
	Design, Cost, Monitor drilling of hand operated boreholes community level	All 14 wards	100	20	20	20	20	20	GRZ/ LA, WVZ,
	Design, Cost, Monitor Rehabilitation of 49 none functional community water points	All 14 wards	25	5	5	5	5	5	GRZ/LA, WVZ, Christian Brothers
Improve access to safe and clean water supply at public institutions	Design, Cost, Monitor Upgrading of hand pumps to water reticulation systems in health and associated public facilities	All Wards (Imatongo, Wanyau, Siliwzi, Naluywa, Lumbe, Muweswa)	13	4	4	4	3	3	GRZ/MOH/LA/World Vision
	Design, Cost, Monitor Construction of water reticulation systems for new health posts	Sabelo, Namanyingi, Lukombwe, Sisapi Luhomba	5	1	1	1	1	1	GRZ/MOH/LA/World Vision
	Upgrading of 92 hand pumps to water reticulation systems	Schools, Health facilities	50	10	10	10	10	10	GRZ/ LA/ Other
	Construction of 15 water new boreholes in schools	15 schools see Apendix 1	15	3	3	3	3	3	GRZ/ LA/ Other
Promote Improved Sanitation public facilities	Design, Cost, Monitor Construction of Ablution	Sabelo, Namanyingi, Lukombwe, Sisapi Luhomba	5	1	1	1	1	1	GRZ/MOH/LA

	Blocks for new proposed health facilities								
	Design, Cost, Monitor Construction of flushable sanitation facilities in existing health facilities	Mata, Sibukali, Itufa, Maziba, Namukokoba	5	1	1	1	1	1	GRZ/MOH/LA
	Design, Cost, Monitor Construction of staff sanitation facilities at new health post	Sabelo, Namanyingi, Lukombwe, Sisapi Luhomba	5	1	1	1	1	1	GRZ/MOH/LA
	Construction of 212 flushable Ablution blocks	All schools - Appenx 1	3	0	1	1	1	0	GRZ / LA/ Other
	Design, Cost, Monitor Construction of Septic tanks	All 14 wards	25	5	5	5	5	5	GRZ / LA, WVZ, Christian Brothers
OBJECTIVE:	TO REDUCE INDISCRIMINATE WASTE DISPOSAL THROUGH WASTE COLLECTION SUBSCRIPTIONS FROM 18 TO 1,727 HOUSEHOLDS AND BUSINESS ENTITIES BY 2034								
Promote sanitary environment through solid and water waste management	Procurement of 90 assorted wheely Bins for sorting waste at source	Imatanda, Imatongo	90	0	30	30	30	0	LA/MLG&RD
	Waste Collection Subscription	Imatanda, Imatongo	1500	306	612	918	1224	1500	LA/MLG&RD
	Construction of 7 segmented solid waste collection Refuse Bays	Imatanda, Imatongo	7	3	3	1	0	0	LA/MLG&RD
Establishment of a designated dumpsite and cemetery	Procurement of land for burial site and dumpsite	Imatanda, Imatongo	2	1	1	0	0	0	LA/MLG&RD

CAPITAL INVESTMENT PLAN: HUMAN AND SOCIAL DEVELOPMENT – WASH

GOAL:	IMPROVE ACCESS TO SOCIAL SERVICES BY 2034					
OBJECTIVE:	THE LOCAL AUTHORITIES AND OTHER GOVERNMENT PARTNERS WILL FOCUS ON INCREASING ACCESS TO SAFE WATER SUPPLY FROM 31% TO 60% BY 2034					
STRATEGIES	PROGRAMME	INPUT	COST (ZK)	SOURCE OF FUNDING	SOURCE OF INFORMATION	RESPONSIBLE INSTITUTION
Construction water reticulation systems and hand pumps Rehabilitation of water infrastructure	Water Infrastructure Development	Design, Bill of Quantities, Construction, Supervision	72,000,000	GRZ, World Vision, Mafisa,	LA, World Vision, Mafisa	LA/World Vision/Mafisa
Promote awareness sanitation hygiene practices Capacity building of WASH committees, APMs,	Operations	Fuel, Stationery, Toll fees, allowance	543,353.90	GRZ, World Vision, Mafisa,	LA, World Vision, Mafisa	LA/World Vision/Mafisa

IMPLEMENTATION PLAN: HUMAN AND SOCIAL DEVELOPMENT – EDUCATION

GOAL:	TO PROVIDE EQUITABLE ACCESS TO QUALITY EDUCATION THAT ENSURES IMPROVED LEARNING OUTCOMES, PARTICIPATION, AND THE DEVELOPMENT OF RELEVANT SKILLS BY 2034.								
OBJECTIVE:	TO ENHANCE THE QUALITY, ACCESS, AND EFFICIENCY OF THE EDUCATION SYSTEM TO ENSURE EQUITABLE AND INCLUSIVE EDUCATION FOR ALL LEARNERS BY 2034.								
STRATEGIES	ACTIVITIES	TARGET LOCATION/GROUP BY PRIORITY	TOTAL	2025	2026	2027	2028	2029	RESPONSIBLE AGENCY/ UNIT
OBJECTIVE: 1	TO INCREASE LITERACY LEVELS IN THE DISTRICT FROM 51% TO 70% BY 2034								
Improve human resource capacity	Teacher Recruitment (ECE, Primary & Secondary)	All schools - refer	453	78	75	75	75	75	GRZ/ LA/ Other
OBJECTIVE: 2	TO IMPROVE EDUCATIONAL INFRASTRUCTURE, FURNITURE AND EQUIPMENT FROM 25% TO 75% BY 2034								

Improve Educational Infrastructure, furniture and Equipment	Construction of 1x3 classrooms Blocks	x 1x3 CRBs Required	27	6	6	5	5	5	GRZ/ LA/ Other
	Construction of 1x3 CRB special education classrooms	Senanga School for the deaf	1	0	0	1	0	0	GRZ/ LA/ Other
	Procurement of desks	All wards	5,775	5,775	0	0	0	0	GRZ/ LA/ Other
	Construction of 2 blocks of Dormitories for learners with special education	Senanga School for the deaf	2	0	0	1	0	0	GRZ/ LA/ Other
	Rehabilitation of 1 block of Boys dormitory	Senanga School for the deaf	1	0	10	0	0	0	GRZ/ LA/ Other
	Upgrading of 2 x3 CRB to a dormitory	Senanga Boarding Secondary School	2	2	0	0	0	0	GRZ/ LA/ Other
	Construction of 8 Boarding facilities	Sibukali secondary school, Lui Namabunga Secondary School, Liangati Secondary School, Songa Secondary School	6	2	0	2	0	2	GRZ/ LA/ Other
	Construction of Laboratories	Namalangu, Matauka, Senanga Day, Liangati, Lui Namabunga, Sibukali	6	2	2	2	2	2	GRZ/ LA/ Other
	Construction of ICT specialized rooms	Matauka, Senanga Day, Namalangu, Liangati, Lui namabunga, Sibukali	5	1	1	1	1	1	GRZ/ LA/ Other
	Construction of HE specialized rooms	Matauka, Senanga Day, Namalangu, Liangati, Lui namabunga, Sibukali	6	1	1	1	1	1	GRZ/ LA/ Other
	Construction of Design & Technology	Senanga Day, Matauka, Lui Namabunga, Sibukali, Liangati	6	1	1	1	1	1	GRZ/ LA/ Other
	Construction of ART Rooms	Senanga Day, Matauka, Lui Namabunga, Sibukali, Liangati	6	1	1	1	1	1	GRZ/ LA/ Other
Construction of staff housing units 599	All schools - refer Appendix 1	5	1	1	1	1	1	GRZ/ LA/ Other	

Improve access to power in learning institutions	Increase Power connectivity to 53 schools	53 Schools -See appendix 1	53	10	10	10	10	10	GRZ/ LA/ Other
Improve access to Sanitation facilities	Construction of flushable Ablution blocks (212)	All schools in all wards	212	2	4	8	10	3	GRZ/ LA/ Other
Improve access to safe drinking water in learning institutions	Construction of 15 New water reticulation systems	Namukokoba Muweswa, Naluywa, Liangati, Mata & Mwanambuyu wards	15	10	5	0	0	0	GRZ/ LA/ Other
	Upgrading of 91 hand pumps to water reticulation systems	Refer to Appendix 4	91	10	10	10	10	10	GRZ/ LA/ Other
	Rehabilitation of water infrastructure	Senanga Secondary and Namalangu Secondary	2	2	0	0	0	0	GRZ/ LA/ Other
OJECTIVE: 3	TO IMPROVE LEARNER PERFORMANCE FROM 40% TO 60% BY 2034								
Increase the number of children aged 3 to 6 years accessing ECE	Enhance ECE enrolment	All ECE annexed schools	47,08	292	322	354	389	428	GRZ/ DEB/ Other
Increase the transition rates from grades 7 to 8 and 9 to 10	Conduct continuous Assessments	All primary schools	45	9	9	9	9	9	GRZ/ DEB/ Other
Increase Completion rate at Grade 12 from 41.82% to 75% by 2034	Conduct Continuous Assessments	All secondary schools	45	9	9	9	9	9	GRZ/ DEB/ Other
Provision of learning and teaching materials	Procurement of teaching and learning materials	All schools and Senanga district as a whole	85,480	11,487	13,784	16,541	19,849	23,819	GRZ/ DEB/ Other
OBJECTIVE: 4	TO PROMOTE SKILLS DEVELOPMENT BY EQUIPPING LEARNERS WITH APPROPRIATE SKILLS THROUGH BURSARY SUPPORT FROM 343 TO 1,400 LEARNERS BY 2034								
Promote skills development through bursary support	Support qualified individuals through bursary	All wards	1,400	343	250	282	250	275	GRZ/ DEB/ Other

Publicity of skills funding procedure and programmes in the district	Disseminate information to	All wards	14	14	14	14	14	14	GRZ/ DEB/ Other
Support relevant skills sets in eminent potential growth areas of the district	Identification of relevant skills set	All wards	1,400	343	250	282	250	275	GRZ/ DEB/ Other

CAPITAL INVESTMENT PLAN: HUMAN AND SOCIAL DEVELOPMENT – EDUCATION

GOAL	TO PROVIDE EQUITABLE ACCESS TO QUALITY EDUCATION THAT ENSURES IMPROVED LEARNING OUTCOMES, PARTICIPATION, AND THE DEVELOPMENT OF RELEVANT SKILLS BY 2034.					
OBJECTIVE	TO ENHANCE THE QUALITY, ACCESS, AND EFFICIENCY OF THE EDUCATION SYSTEM TO ENSURE EQUITABLE AND INCLUSIVE EDUCATION FOR ALL LEARNERS BY 2034.					
STRATEGIES	PROGRAMME	INPUT	COST (ZK)	SOURCE OF FUNDING	SOURCE OF INFORMATION	RESPONSIBLE INSTITUTION
Improve human resource capacity ECE, Primary & Secondary	Management & Support Services	Vacancies, location, TA, Submission of Staff Returns	TBA	MOE	MOE	DEB
Improve Educational Infrastructure, furniture and Equipment	Infrastructure Development	Land, Design, BOQ, Construction, Supervision	K57,102,392	CDF, CP	MOE	DEB

IMPLEMENTATION PLAN: COMMUNITY DEVELOPMENT AND SOCIAL PROTECTION

GOAL 1:	TO IMPROVE BASIC SOCIAL PROTECTION SERVICES								
OBJECTIVE:	TO IMPROVE CHILD SPORT, RECREATION AND PUBLIC AMENITIES BY 2034								
STRATEGIES	ACTIVITIES	TARGET LOCATION / GROUP BY PRIORITY	TOTAL	2025	2026	2027	2028	2029	RESPONSIBLE AGENCY / UNIT
Enhance public access to social amenities	Construction of '(1) one safe homes / Spaces	Imatanda	1	0	1	0	0	0	GRZ/ LA
	Construction of 1 sports complex	Imatanda / Imatongo	1	0	0	1	0	0	GRZ/ LA
	Construction of 1 Library facility	Imatanda/ Imatongo	1	0	0	0	1	0	GRZ/ LA
	Construction of 1 Play park	Imatongo / Imatanda	1	0	0	0	0	1	GRZ/ LA
	Construction of 2 new markets	Imatanda / Imatongo	2	0	1	0	1	0	GRZ/ LA
	Upgrading of 3 existing markets	Imatanda/ Imatongo	2	1	0	0	0	0	GRZ/ LA
	Construction of 1 bus station	Imatanda/ Imatongo	1	1	0	0	0	0	GRZ/ LA
	Construction of 1 conference facility	Imatanda/ Imatongo	1	1	0	0	0	0	GRZ/ LA
	Construction of 1 trade school	Imatongo / Imatanda	1	0	1	0	0	0	GRZ/ LA
	Construction of 1 safe Homes for the aged	Imatanda/ Imatongo	1	0	0	1	0	0	GRZ/ LA
Reduce development inequalities	Replanning and development of unplanned settlements (4 areas)	Imatanda, Imatongo	4	0	2	0	0	2	GRZ/ LA
	Acquisition of 100 Ha of land for development of Amenities	Imatanda/ Imatongo	100	10	40	0	0	0	GRZ/ LA
Enhance public and Social Housing	Construction of 14 staff housing	Imatanda, Imatongo, Mwanambuyu , Liangati, Lipuwe, Wanyau,	14	3	3	3	3	2	GRZ/ LA
Improve coverage of Basic Social Protection Services.	Identification of eligible social cash transfer beneficiaries	All wards	25,000	5,000	5,000	5,000	5,000	5,000	
	Identification of eligible food security pack program beneficiaries	All wards	7,500	1,500	1,500	1,500	1,500	1,500	

Linking community savings groups to funding sources	All wards	350	70	70	70	70	70	
Facilitation of registration for community savings groups	All wards	350	70	70	70	70	70	
Training of volunteer literacy instructors	All wards	700	140	140	140	140	140	
Formation and registration of women clubs	All wards	500	100	100	100	100	100	
Training of women clubs and saving groups in basic business skills	All wards	500	100	100	100	100	100	
Providing in kind support to vulnerable individuals (PWAS)	All wards	500	100	100	100	100	100	

CAPITAL INVESTMENT PLAN: COMMUNITY DEVELOPMENT AND SOCIAL PROTECTION

GOAL	TO IMPROVE BASIC SOCIAL PROTECTION SERVICES					
OBJECTIVE	TO IMPROVE CHILD SPORT, RECREATION AND PUBLIC AMENITIES BY 2034					
STRATEGIES	PROGRAMME	INPUT	COST (ZK)	SOURCE OF FUNDING	SOURCE OF INFORMATION	RESPONSIBLE INSTITUTION
Enhance public access to social amenities	Infrastructure Development	Land, Design, BOQ, Construction, Supervision	K86,301,489	LA (CDF and Local Revenue), CP	LA	LA/
Reduce development inequalities						
Enhance public and Social Housing						
Improve coverage of Basic Social Protection Services.						

IMPLEMENTATION PLAN: AGRICULTURE SECTOR

GOAL	TO IMPROVE ECONOMIC PRODUCTION AND PRODUCTIVITY IN THE DISTRICT								
OVERALL OBJECTIVE	TO INCREASE CROP, LIVESTOCK AND FISHERIES PRODUCTION AND PRODUCTIVITY BY 2034								
STRATEGIES	ACTIVITIES	TARGET LOCATION/GROUP BY PRIORITY	TOTAL	2025	2026	2027	2028	2029	RESPONSIBLE AGENCY/ UNIT
Promote climate smart agriculture	Construction of 3 x 10 Hectares of irrigation schemes	Sabelo, Kakenge, Lukanda	3	1	1	1	0	0	MoA / LA/SCRALA
Promote food production, productivity through irrigation and mechanisation practices.	Procurement of tractors & associated implements	Imatanda	1	0	0	1	0	0	MOA/LA
	Construction of 1 Mechanization service center	Imatanda	1	0	0	0	0	1	MOA
Enhance farmer access to market linkages	Construction of 5 bulking storage facility	Sibukali, Mata, Muweswa, Lui Mwemba, Mutwa	5	1	1	1	1	1	MoA, UNDP, LA
	Construction of 1 Livestock Marketing Center	Imatongo	1	1	0	0	0	0	MFL / LA
	Construction of 1 fish marketing center	Imatanda	1	1		0	0	0	CEEC/ MFL / LA
Promote livestock production	Rehabilitation of Livestock Service Centers	Mwanambuyu	1	1	0	0	0	0	MFL / PDU / LA
	Completion of Goat Multiplication Centre	Naluywa	1	1	0	0	0	0	GRZ / MoLF /LA
	Construction of 5 Livestock centers	Wanyau, Liangati, Naluywa, Sibukali,	5	1	1	1	1	1	GRZ / MoLF /LA/Mafisa
	Construction of 40 Crush pens	All 14 Wards	20	4	4	4	4	4	LA/Mafisa
Promote Aquaculture production	Installation of 52 fish cages	Imatanda	52	1	0	0	0	0	CEEC/ MFL / LA
	Construction of fish hatchery	Imatongo	1	0	1	0	0	0	CEEC/ MFL / LA
promotion of agricultural produce value addition	Construction of 1 fish processing plant	Imatanda	1	1	0	0	0	0	CEEC/ MFL / LA
	Construction of 1 tannery	Imatanda/Imatongo	1	0	0	0	1	0	GRZ / MoLF /LA

Enhance agricultural extension services	Rehabilitation of 4 veterinary staff houses	Mata, Wanyau, Mwanambuyu, Sibukali	4	2	2	0	0	0	GRZ / MoLF /LA
	Construction of 17 fisheries, livestock and veterinary camp houses	Muweswa, Namukokoba, Lipuwe, Silwizi, Naluywa, Lumbe, Lumbe Nanyezu, Liangati	4	1	1	1	1	0	GRZ / MoLF /LA
	Rehabilitation of 6 agricultural camp houses	Seyi, Sibukali, Mata, Lipuwe, Mwanamwalye, Ngundi	6	1	1	1	1	2	GRZ / MoA / LA
	Construction of 4 agricultural Block Houses	Wanyau, Sibukali, Mata, Liangati	0	0	0	0	0	0	GRZ / MoA / LA
	Construction of 7 agricultural camp Houses	Lukanda, Kaeya, Mutwa, Muweswa, Kakenge, Lumbe, Mumbula	3	0	0	1	1	1	GRZ / MoA / LA

CAPITAL INVESTMENT PLAN: AGRICULTURE SECTOR

GOAL	TO IMPROVE ECONOMIC PRODUCTION AND PRODUCTIVITY IN THE DISTRICT BY 2034					
OBJECTIVE	TO IMPROVE AGRICULTURE PRODUCTION AND PRODUCTIVITY					
STRATEGIES	PROGRAMME	INPUT	COST (ZK)	SOURCE OF FUNDING	SOURCE OF INFORMATION	RESPONSIBLE INSTITUTION
Enhance Agriculture Production and Productivity	HRA	Staff recruitment, vacancies, location, TA, submission of staff returns	TBA	MFL/MOA	MFL/MOA	LA/MFL/MOA
	Infrastructure Development	Land, Design, BOQ, Construction, Supervision	K9,288,400			
	Agricultural, Fisheries and Livestock Services	Trainings, extension visits, vaccinations, fuel, vehicle repairs, allowances, stationery, utility bills,	K5,659,847.03			

IMPLEMENTATION PLAN: ECONOMIC INFRASTRUCTURE

OBJECTIVE 2:		TO INCREASE THE NUMBER OF KILOMETRES OF GRAVEL ROADS NETWORK FROM 1.5 TO 50 IN THE URBAN AREAS AND 9.3 TO 450 IN RURAL AREAS BY 2034							
STRATEGIES	ACTIVITIES	TARGET LOCATION/GROUP BY PRIORITY	TOTAL	2025	2026	2027	2028	2029	RESPONSIBLE AGENCY/ UNIT
Improve urban road infrastructure	Maintenance of 45 km bituminous road (township roads)	Senanga - Namatombo Area	162 SQM	0	1	0	0	0	GRZ/ LA
	Maintenance of 50 km gravel roads (township roads)	Imatanda	50	9.2	0	0	0	0	GRZ/ LA
	Paving of township roads (7km)	Imatanda	7	1.5	2.5	1.5	1.5	1.5	GRZ/ LA
	Construction of parking Lots	Central business district	600 SQM	1	0	0	0	0	GRZ/ LA
Improve rural roads access	Construction of 75 km of Ngundi - Sibukali Road gravel roads roads	Ngundi/ Sibukali	75	0	0	0	75	0	GRZ/ LA
	Construction of 66 km gravel roads from Namushakende – Lipuwe – Seyi (km)	Lipuwe/ Namushakendi	66	1	0	0	0	0	GRZ/ LA
	Construction of 90 km gravel road from Sibukali - Mata	Ngundi/ Sibukali	90	0	0	0	0	1	GRZ/ LA
	Construction of Sibukali-Lumbe Nanyenzu Bridge	Lumbe Nanyenzu Bridge	1	1	0	0	0	0	GRZ/ LA
	Construction of Bridge at Kakenge Mwale Bridge	Kakenge Crossing Point	1	1	0	0	0	1	GRZ/ LA
	Construction of bridge at Kasinzi Stream	Kasizi bridge, Liyoyelo bridge	1	1	0	0	0	1	GRZ/ LA
	Construction of bridge at Tapa - Lilela Namabunga	Lilela Namabunga	1	1	0	0	0	1	GRZ/ LA

	Procurement of 6x6 truck to support road maintenance works and transportation of materials	All wards	1	1	0	0	0	0	GRZ/ LA
	Construction of 20 Culverts	All wards	20	4	4	4	4	4	GRZ/ LA
Improve network coverage	Construction and installation of 5 network towers	Namukokoba, Lui Wanyau, Liyoyelo, Songa	1	0	0	0	1	0	GRZ/ LA
Improve access to off-grid electricity	Construction of 1 solar mini-grid	Sibukali	1	1	0	0	0	0	GRZ/ IPP/LA
Improvement of air transport infrastructure	Construction of airstrip	Situnga	1	0	0	0	0	1	GRZ/ LA
Promote local extractive industry initiatives	Procurement of 10 min mobile jaw stone crushing equipment	Naluywa, Imatongo	10	2	2	2	2	2	GRZ/ LA
Enhance economic productivity	Construction of one light industry area	Imatanda/ Imatongo	1	0	0	0	0	1	PRIVATE SECTOR/LA
	Facilitate establishment of 1 filling station service	Imatanda/ Imatongo	1	1	0	0	0	0	PRIVATE SECTOR/LA
	Construction of 1 fire service station	Imatanda/ Imatongo	1	0	0	1	0	0	GRZ/LA
	Procurement of fire tender and service equipment	Imatanda/ Imatongo	1	0	0	0	1	0	GRZ/LA
	Acquisition of 50 Ha. Of land	Imatanda/ Imatongo	50	50	0	0	0	0	GRZ/LA

CAPITAL INVESTMENT PLAN: ECONOMIC INFRASTRUCTURE

GOAL	TO IMPROVE ECONOMIC PRODUCTION AND PRODUCTIVITY IN THE DISTRICT BY 2034					
OBJECTIVE 2	To increase the number of Kilometres of gravel roads network from 1.5 to 50 in the urban areas and 9.3 to 450 in rural areas by 2034					
STRATEGIES	PROGRAMME	INPUT	COST (ZK)	SOURCE OF FUNDING	SOURCE OF INFORMATION	RESPONSIBLE INSTITUTION
Improve urban road infrastructure	Infrastructure Development	Land, Design, BOQ, Construction, Supervision	K112.092,086.00	GRZ/CP/RDA/LA	LA/	LA/RDA/
Improve rural roads access						
Improve network coverage						
Improve access to off-grid electricity						
Improvement of air transport infrastructure						
Enhance economic productivity						
Promote local extractive industry initiatives						

INVESTMENT PLAN: ENVIRONMENT AND NATURAL RESOURCES

GOAL:	TO PROMOTE DEVELOPMENT AND MANAGEMENT OF NATURAL AND ENVIRONMENTAL RESOURCES IN THE DISTRICT BY 2034.								
OBJECTIVES:	1. TO PROMOTE SUSTAINABLE UTILISATION OF NATURAL AND ENVIRONMENTAL RESOURCES BY 2034 2. TO PROMOTE TOURISM DEVELOPMENT AND MARKETING								
STRATEGIES	ACTIVITIES	TARGET LOCATION/GROUP BY PRIORITY	TOTAL	2025	2026	2027	2028	2029	RESPONSIBLE AGENCY/ UNIT
Facilitate sustainable utilization of forest, land, water and air resources by formation of CFMGs and foster partnerships that promote natural resource management	Formation of 40 Community Forest Management Groups (CFMGs)	Muweswa, Lumbe, Mata, Sibulkali, Imatanta, Lumbe Nanyezu, Mwanambuyu, Liangati, Lipuwe, Imatongo, Silwizi, Wanyau and Imatanda	40	8	8	8	8	8	GRZ/ MoGEF/
Promote value addition of timber and other forest produce	Procurement of 40 processing Mushroom driers	Imatongo, Naluywa, Wanyau , Silwizi	40	8	8	8	8	8	GRZ/ MoGEF/, LA/ MENDEL
	Procurement of 40 oil extractor pressers	Imatongo, Naluywa, Wanyau , Silwizi	40	8	8	8	8	8	GRZ/ MoGEF/, LA/ MENDEL
	Procurement of 100 sawdust briquette making machines	Imatanda, Imatongo	100	20	20	20	20	20	GRZ/ MoGEF/, LA/ ETG
Promote afforestation, reforestation and agroforestry	Raising of seedlings (25,000) of different species	All wards	25,000	5,000	5,000	5,000	5,000	5,000	GRZ/ MoGEF/, LA/ ETG
Promotion of alternative livelihood	Procurement of (1000) beehives	Silwizi Liangati, Lipuwe, Mwanambuyu	1000	200	200	200	200	200	GRZ/ MoGEF/, LA/ MENDEL
Enhance forestry extension services	Construction of 8 camp houses	All wards	8	2	2	2	2	2	GRZ/ MoGEF/, LA/ MENDEL

Facilitate investment in tourism infrastructure and culture	Development of tourism sites	Silwizi, Mbuyu	1	0	1	0	0	0	LA & NHCC
	Development of historical sites	All wards	1	1	0	0	0	0	LA & NHCC

CAPITAL INVESTMENT PLAN: ENVIRONMENT AND NATURAL RESOURCES

GOAL	TO PROMOTE DEVELOPMENT AND MANAGEMENT OF NATURAL AND ENVIRONMENTAL RESOURCES IN THE DISTRICT BY 2034.					
OBJECTIVES	1. TO PROMOTE SUSTAINABLE UTILISATION OF NATURAL AND ENVIRONMENTAL RESOURCES BY 2034 2. TO PROMOTE TOURISM DEVELOPMENT AND MARKETING					
STRATEGIES	PROGRAMME	INPUT	COST (ZK)	SOURCE OF FUNDING	SOURCE OF INFORMATION	RESPONSIBLE INSTITUTION
Promote value addition of timber and other forest produce	Environmental Management	Empowerment loans & grants, Purchase of equipment, sensitizations, waste collection Design, construction and supervision	K21,279,600	LA/CP	LA, FD	LA, FD
Promotion of alternative livelihood						
Promote sustainable land use						
Promote sustainable waste management	Waste Management					

IMPLEMENTATION PLAN: GOOD GOVERNANCE AND RULE OF LAW

GOAL:	TO ENHANCE CONDUCIVE GOVERNANCE ENVIRONMENT AND RULE OF LAW								
OBJECTIVE:									
STRATEGIES	ACTIVITIES	TARGET LOCATION/GROUP BY PRIORITY	TOTAL	2025	2026	2027	2028	2029	RESPONSIBLE AGENCY / UNIT
Enhance quality child protection services through the construction of appropriate infrastructure	Construction of 1 juvenile cells	Imatanda / Imatongo	1	0	1	0	0	0	GRZ/ .MoJ/LA
	Construction of 1 Juvenile Courts	Imatanda/ Imatongo	1	0	0	1	0	0	GRZ/ .MoJ/LA
Enhance coordination between community and law enforcement agencies	Rehabilitation of 1 Judiciary infrastructure	Nande	1	0	0	0	1	0	GRZ/ .MoJ/LA
	Rehabilitation of 1 Judiciary infrastructure	Imatanda / Imatongo	1	0	1	0	0	0	GRZ/ .MoJ/LA
	Construction of 2 local courts	Sibukali, Mata, Imatanda	3	0	1	1	1	0	GRZ/ .MoJ/LA
	Construction of 3 staff houses	Sibukali, Mata,	3	0	1	1	1	0	GRZ/ .MoJ/LA
Enhance governance systems by facilitating WDCs operations, capacity building and construction of appropriate infrastructure	Construction of 14 WDC offices	Imatanda, Imatongo, Mata, Sibukali, Lumbe Nanyezu,	14	1	1	1	1	1	MoHA/ GRZ/LA
	Construction of 1 police station	Imatanda	1	0	0	1	0	0	MoHA/ GRZ/LA
	Construction of 4 police posts	Mata, Sibukali, Lipuwe, Maziba	5	0	1	1	0	0	MoHA/ GRZ/LA
	Construction of 4 police staff housing	Mata, Sibukali, Lipuwe, Maziba	4	0	1	1	1	1	MoHA/ GRZ/LA
Enhance governance systems by facilitating WDCs operations, capacity building and construction of appropriate infrastructure	Facilitation of 20 WDC meetings	All wards	20	4	4	4	4	4	MoHA/ GRZ/LA
	20 Community participation meetings conducted	All wards	20	4	4	4	4	4	MoHA/ GRZ/LA

CAPITAL INVESTMENT PLAN: GOOD GOVERNANCE AND RULE OF LAW

GOAL	TO ENHANCE CONDUCIVE GOVERNANCE ENVIRONMENT AND RULE OF LAW					
OBJECTIVE	TO INCREASE COMMUNITY ACCESS TO CHILD PROTECTION, JUSTICE AND RULE OF LAW					
STRATEGIES	PROGRAMME	INPUT	COST (ZK)	SOURCE OF FUNDING	SOURCE OF INFORMATION	RESPONSIBLE INSTITUTION
Enhance quality child protection services through the construction of appropriate infrastructure	Infrastructure Development	Land, Designs, Bill of Quantities and Construction	K22,514,716.00	LA/GRZ/CP	LA, Judiciary, Police	LA, Judiciary, Police
Enhance coordination between community and law enforcement agencies						
Enhance governance systems by facilitating WDCs operations, capacity building and construction of appropriate infrastructure						
Enhance inclusive access to natural resources such as land and community participation in resource allocation decisions and utilization	Operations to facilitate for meetings and other activities	Fuel, stationary, allowances and refreshments	K421,240.05	CDF/LA/GRZ	LA, MLG&RD	Local Authority
TOTAL			K22,935,956.05			

8.0. FINANCIAL PLAN

REVENUE SOURCE	AMOUNT	2025	2026	2027	2028	2029
GRANTS						
LOCAL AUTHORITY (LGEF)	10,231,551.00	10,231,551	11,254,706.10	12,155,082.59	13,370,590.85	14,707,649.93
DISTRICT HEALTH OFFICE	2,663,100.00	2,663,100.00	2,929,410.00	3,163,762.80	3,480,139.08	3,828,152.99
VET, FISHERIES AND LIVESTOCK	938,260.00	938,260.00	1,032,086.00	1,114,652.88	1,226,118.17	1,348,729.98
TRANSPORT	3,252,077.00	3,252,077.00	3,577,284.70	3,863,467.48	4,249,814.22	4,674,795.65
CDF FUNDING	36,058,151.00	36,058,151	39,663,966.10	43,630,362.71	47,993,398.98	52,792,738.88
ROADS GRANT	3,200,587.00	3,200,587	3,520,645.70	3,872,710.27	4,259,981.30	4,685,979.43
BASIC CAPITA GRANT- ZDSP	2,694,736.84	2,694,737	2,964,210.52	3,260,631.58	3,586,694.73	3,945,364.21
YOUTH SPORT AND ARTS	258,621.00	258,621.00	284,483.10	312,931.41	344,224.55	378,647.01
ARCHIVES - HOME AFFAIRS	19,241.00	19,241.00	21,165.10	23,281.61	25,609.77	28,170.75
TOURISM - CULTURAL MATTERS	10,852.00	10,852.00	11,937.20	13,130.92	14,444.01	15,888.41
AGRICULTURE SEVICES	529,000.00	529,000.00	581,900.00	640,090.00	704,099.00	774,508.90
GRANT IN LIEU OF RATES	200,000.00	200,000.00	220,000.00	242,000.00	266,200.00	292,820.00
SOCIAL PROTECTION AND COMMUNITY DEVELOPMENT	15,924,998.00	15,924,998.00	17,517,497.80	19,269,247.58	21,196,172.34	23,315,789.57
FORESTRY DEPARTMENT	30,000.00	30,000.00	33,000.00	36,300.00	39,930.00	43,923.00

EDUCATION	14,766,923.67	14,766,923.67	16,243,616.04	17,867,977.64	19,654,775.40	21,620,252.95
OTHER GRANTS	8,716,411.16	8,716,411.16	9,588,052.28	10,546,857.50	11,601,543.25	12,761,697.58
SUBTOTAL	99,494,509.67	75,981,175	83,579,292.32	91,561,351.82	100,717,487.00	110,789,235.70
<i>OWN SOURCE REVENUE</i>	<i>ESTIMATES</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>	<i>2028</i>	<i>2029</i>
Local Taxes	3,034,844.00	3,034,844.00	3,338,328.40	3,605,394.67	1,166,487.90	1,283,136.69
Fees & Charges	3,393,397.00	3,393,397.00	3,732,736.70	4,031,355.64	1,166,487.90	1,283,136.69
Licenses	403,323.00	403,323.00	443,655.30	479,147.72	1,166,487.90	1,283,136.69
Levies	852,730.00	852,730.00	938,003.00	1,013,043.24	1,166,487.90	1,283,136.69
Permits	367,476.00	367,476.00	404,223.60	436,561.49	1,166,487.90	1,283,136.69
Other Income	862,744.00	862,744.00	949,018.40	1,024,939.87	1,166,487.90	1,283,136.69
SUBTOTAL	8,914,514.00	8,914,514.00	9,805,965.40	10,590,442.63	6,998,927.42	7,698,820.17
TOTAL REVENUE	108,409,023.67	84,895,688.84	93,385,257.72	102,151,794.45	107,716,414.43	118,488,055.87

<i>EXPENDITURE</i>	<i>ESTIMATES</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>	<i>2028</i>	<i>2029</i>
CONSTITUENCY DEVELOPMENT FUND	36,058,151.00	36,058,151.00	39,663,966.10	42,837,083.39	47,120,791.73	51,832,870.90
LOCAL GOVERNANCE	2,210,046.00	2,210,046.00	2,431,050.60	2,625,534.65	2,888,088.11	3,176,896.92
INTEGRATED DEVELOPMENT PLANNING	1,829,599.00	1,829,599.00	2,012,558.90	2,173,563.61	2,390,919.97	2,630,011.97

PUBLIC HEALTH AND ENVIRONMENTAL PROTECTION	569,370.00	569,370	626,307.00	676,411.56	744,052.72	818,457.99
HOUSING AND COMMUNITY AMENITIES	11,120,037.00	11,120,037	12,232,040.70	13,210,603.96	14,531,664.35	15,984,830.79
RECREATION CULTURE AND RELIGION	260,345.00	260,345	286,379.50	309,289.86	340,218.85	374,240.73
EDUCATION AND SKILLS DEVELOPMENT	185,243.00	185,243	203,767.30	220,068.68	242,075.55	266,283.11
PUBLIC ORDER AND SAFETY	1,095,189.00	1,095,189	1,204,707.90	1,301,084.53	1,431,192.99	1,574,312.28
MANAGEMENT AND SUPPORT SERVICES	10,276,313.00	10,276,313	11,303,944.30	12,208,259.84	13,429,085.83	14,771,994.41
RESOURCE MOBILISATION AND MANAGEMENT	578,512.00	578,512	636,363.20	687,272.26	755,999.48	831,599.43
DISTRICT HEALTH SERVICES	2,663,100.00	2,663,100	2,929,410.00	3,163,762.80	3,480,139.08	3,828,152.99
FISHERIES,LIVESTOCK AND VETERINARY SERVICES	938,260.00	938,260.00	1,032,086.00	1,114,652.88	1,226,118.17	1,348,729.98
TRANSPORT SERVICES	3,252,077.00	51,490	376,697.70	406,833.52	447,516.87	492,268.55
AGRICULTURE	529,000.00	551,927	604,827.35	653,213.54	718,534.89	790,388.38
SOCIAL PROTECTION AND COMMUNITY DEVELOPMENT	15,924,998.00	15,924,998.00	17,517,497.80	18,918,897.62	20,810,787.39	22,891,866.13
YOUTH SPORT AND ARTS	258,621.00	258,621.00	284,483.10	307,241.75	337,965.92	371,762.52
ARCHIVES - HOME AFFAIRS	19,241.00	19,241.00	21,165.10	22,858.31	25,144.14	27,658.55
TOURISM - CULTURAL MATTERS	10,852.00	10,852.00	11,937.20	12,892.18	14,181.39	15,599.53
ROADS GRANT	3,200,587.00	3,200,587	3,520,645.70	3,802,297.36	4,182,527.09	4,600,779.80

BASIC CAPITA GRANT- ZDSP	2,694,736.84	2,694,737	2,964,210.52	3,201,347.37	3,521,482.10	3,873,630.31
FORESTRY	30,000.00	30,000	33,000.00	35,640.00	39,204.00	43,124.40
EDUCATION	14,766,923.67	14,766,923.67	16,243,616.04	17,543,105.32	19,297,415.85	21,227,157.44
TOTAL USE OF GOODS AND SERVICES	108,471,201.51	84,312,580	93,061,604	100,506,533	110,557,186	121,612,905

MONITORING AND EVALUATION PLAN

HEALTH SERVICES M&E PLAN

GOAL	TO IMPROVE ACCESS TO SOCIAL SERVICES								
OVERALL OBJECTIVE	TO PROVIDE AFFORDABLE QUALITY HEALTH CARE SERVICES AND IMPROVE THE HEALTH STATUS OF POPULATION BY 2034						INDICATOR	INFORMATION SOURCE	FREQUENCY
STRATEGIES	PROGRAMME	TARGET 2025	TARGET 2026	TARGET 2027	TARGET 2028	TARGET 2029			
Improve maternal services	Construction of Maternity Annexes	2	2	2	2	1	No. of maternity Annexes constructed	Council	Annual
	Procurement of equipment for Maternity Annexes	4	4	4	4	3	No. of maternity annex equipment procured	Council	Annual
	Construction of Mothers shelters	2	2	2	2	2	No. of Mothers Shelters constructed	Council	Bi-Annual
Improve referral services for specialized care services	Construction of district Hospital	0	1	0	0	0	No. of district Hospitals constructed	Council And MOH	Annual
	Construction of Mini Hospitals	0	1	1	1	0	No. of mini hospitals constructed	Council & MOH	Annual
Enhanced infrastructure development for quality service delivery	Construction of new health posts and associated infrastructure (mothers' shelter, Maternity annex)	1	1	1	1	1	No. of health Posts Constructed	Council	Annual
	Construction of new housing facilities for new health posts	1	1	1	1	1	No. of housing for new health posts constructed	Council	Quarterly
	Construction of water reticulation	1	1	1	1	1	No. of water reticulation	Council	Quarterly

	systems for new facilities for new health posts						systems constructed		
	Construction of Ablution Blocks for new proposed health facilities	1	1	1	1	1	No. of Sanitation facilities constructed for new health posts	Council	Quarterly
	Construction of incinerators in health facilities	2	2	3	3	3	No. of incinerators Constructed	Council	Quarterly
	Rehabilitation of health facility infrastructure	0	1	1	1	1	No. of health facilities Rehabilitated	Council	Quarterly
	Construction of semi-detached staff housing for staff in existing health facilities	1	1	1	1	1	No. of health facilities constructed in existing health facilities	Council	Quarterly
	Procurement of health equipment in health facilities	4	4	4	5	5	No. of health equipment procured	Council	Quarterly
Improve lighting services in health infrastructure	Upgrade of solar power in health facilities	4	4	4	3	0	No. health facilities with Upgrades of solar power	Council	Quarterly
	Construction of solar mini grid to Mata growth Pole	1	0	0	0	0	No. of Solar Min Grids Constructed	Council	Quarterly

EDUCATION SERVICES M&E PLAN

GOAL 1	TO PROVIDE EQUITABLE ACCESS TO QUALITY EDUCATION THAT ENSURES IMPROVED LEARNING OUTCOMES, PARTICIPATION, AND DEVELOPMENT OF RELEVANT SKILLS BY 2034.								
OBJECTIVE	TO ENHANCE THE QUALITY, ACCESS, AND EFFICIENCY OF THE EDUCATION SYSTEM TO ENSURE EQUITABLE AND INCLUSIVE EDUCATION FOR ALL LEARNERS BY 2034.								
STRATEGIES	PROGRAMME	TARGET 2025	TARGET 2026	TARGET 2027	TARGET 2028	TARGET 2029	INDICATOR	INFORMATION SOURCE	FREQUENCY
Improve human resource capacity	Teacher Recruitment (ECE, Primary & Secondary)	78	75	75	75	75	Number of teachers recruited	MOE	Annual
Improve Educational Infrastructure, furniture and Equipment	Construction of 1x3 classrooms Blocks	6	6	5	5	5	Number of classrooms constructed	Council/MOE	Annual
	Construction of 1x3 CRB special education classrooms	0	0	1	0	0	Number of classroom blocks constructed	Council/MOE	Annual
	Procurement of desks	5,775	0	0	0	0	Number of desks procured	Council/MOE	Semi annually
	Construction of 2 blocks of Dormitories for learners with special education	0	0	1	0	0	Number of dormitories constructed	Council/MOE	Annual
	Rehabilitation of 1 block of Boys dormitory	0	10	0	0	0	Number of dormitories rehabilitated	Council/MOE	Annual
	Upgrading of 2x3 CRB to a dormitory	2	0	0	0	0	Number of classrooms	Council/MOE	Annual

						upgraded to dormitories			
	Construction of 8 Boarding facilities	2	0	2	0	2	Number of boarding facilities constructed	Council/MOE	Annual
	Construction of Laboratories	2	2	2	2	2	Number of laboratories constructed	Council/MOE	Annual
	Construction of ICT specialized rooms	1	1	1	1	1	Number of ICT rooms constructed	Council/MOE	Annual
	Construction of HE specialized rooms	1	1	1	1	1	Number of HE specialized rooms constructed	Council/MOE	Annual
	Construction of Design & Technology	1	1	1	1	1	Number of design and technology rooms constructed	Council/MOE	Annual
	Construction of ART Rooms	1	1	1	1	1	Number of Art rooms constructed	Council/MOE	Annual
	Construction of semidetached staff housing units	1	1	1	1	1	Number of staff houses constructed	Council/MOE	Annual
	Off grid Power connection to schools	10	10	10	10	10	Number of schools connected to off grid power	MOE /GRZ	Annual
Increase the number of children aged 3 to 6 years accessing ECE	Enhance ECE enrolment	292	322	354	389	428	Number of ECE learners Enrolled	MOE /GRZ	Annual

Increase the transition rates from grades 7 to 8 and 9 to 10	Conduct continuous Assessments	9	9	9	9	9	Number of Continuous Assessments conducted	MOE /GRZ	Annual
Increase Completion rate at Grade 12 from 41.82% to 75% by 2034	Conduct Continuous Assessments	9	9	9	9	9	Number of Continuous Assessments conducted	MOE /GRZ	Annual
Provision of learning and teaching materials (Books)	Procurement of teaching and learning materials	11,487	13,784	16,541	19,849	23,819	Number of teaching/ learning materials procured	MOE /GRZ	Annual
Promote skills development through bursary support	Support qualified individuals through bursary	343	250	282	250	275	Number of beneficiaries supported	CDF/ Council	Annual
Publicity of skills funding procedure and Programme in the district	Disseminate information to would be beneficiaries	14	14	14	14	14	Number of wards communicated to	CDF/ Council	Annual
Support relevant skills sets in eminent potential growth areas of the district	Identification of relevant skills set	343	250	282	250	275	Number of growth nodes	CDF/ Council	Annual

WATER SUPPLY AND SANITATION SERVICES M&E PLAN

GOAL 1	TO IMPROVE ACCESS TO SOCIAL SERVICES BY 2034						INDICATOR	INFORMATION SOURCE	FREQUENCY
OBJECTIVE 3	THE LOCAL AUTHORITIES AND OTHER GOVERNMENT PARTNERS WILL FOCUS ON INCREASING ACCESS TO SAFE WATER SUPPLY FROM 31% TO 60% BY 2034								
STRATEGIES	PROGRAMME	TARGET 2025	TARGET 2026	TARGET 2027	TARGET 2028	TARGET 2029			
Improve community access to safe and clean water supply	Construction of mechanized water infrastructure	10	10	10	10	10	No. of water infrastructure Constructed	Council/CP	Annual
	drilling of hand operated boreholes	20	20	20	20	20	Number of public institutions upgraded to water reticulation systems	Council/CP	Annual
	Rehabilitation of non-functional water points	5	5	5	5	5	Number of infrastructure rehabilitated	Council/CP	Bi-Annual
Improve access to safe and clean water supply at public institutions	Upgrading of hand pumps to water reticulation systems in health and associated public facilities	4	4	4	3	3	Number of hand pumps upgraded to mechanized systems	Council/CP	Annual
	Construction of water reticulation systems for new Health posts	1	1	1	1	1	Number of mechanized waters	Council/CP	Annual
	Upgrading of 92 hand pumps to water reticulation systems in schools	10	10	10	10	10	Number of hand pumps upgraded to mechanized systems	Council/CP	Annual
	Construction of 15 new water boreholes in schools	3	3	3	3	3	Number of boreholes constructed	Council/CP	Quarterly

Promote Improved Sanitation public facilities	Construction of Ablution Blocks for new proposed health facilities	1	1	1	1	1	Number of ablution blocks constructed	Council/CP	Quarterly
	Construction of flushable sanitation facilities in existing health facilities	1	1	1	1	1	Number of flushable sanitation facilities constructed	Council/CP	Quarterly
	Construction of staff sanitation facilities at new health post	1	1	1	1	1	No. of sanitation facilities constructed	Council/CP	Quarterly
	Construction of flushable Ablution blocks	0	1	1	1	0	Number of flushable ablution blocks constructed	Council/CP	Quarterly
	Construction of Septic tanks	5	5	5	5	5	No. of septic tanks constructed	Council	Quarterly
	Construction of flushable Ablution blocks in schools	2	4	8	10	0	Number of Flushable ablution blocks constructed	Council/MOE	Annual
OBJECTIVE: 9	TO REDUCE INDISCRIMINATE WASTE DISPOSAL THROUGH WASTE COLLECTION SUBSCRIPTIONS FROM 18 TO 1,727 HOUSEHOLDS AND BUSINESS ENTITIES BY 2034								
Promote sanitary environment through solid and water waste management	Procurement of 60 assorted wheely Bins for sorting waste at source	0	30	30	30	0	# of assorted bins for waste characterisation	Council	Annual
	Construction of 7 segmented solid waste collection Refuse Bays	3	3	1	0	0	# of Segmented Solid Waste Bays constructed	Council	Annual
	Waste Collection Subscription	306	612	918	1224	1500	# of households subscribed	Council	Quarterly
Establishment of a designated dumpsite and cemetery	Procurement of land for burial site and dumpsite	1	1	0	0	0	# of hectors of land procured for Burial sites	Council	Annual

COMMUNITY DEVELOPMENT M&E PLAN

GOAL 1	TO IMPROVE ACCESS TO SOCIAL SERVICES
---------------	---

OBJECTIVE 4	IMPROVE ACCESS TO SOCIAL AMENITIES AND COMMUNITY WELFARE						INDICATOR	INFORMATION SOURCE	FREQUENCY
STRATEGIES	PROGRAMME	TARGET 2025	TARGET 2026	TARGET 2027	TARGET 2028	TARGET 2029			
Enhance public access to social amenities	Construction of '(1) one safe homes / Spaces	0	1	0	0	0	Number of safe homes constructed	Council	Annual
	Construction of 1 sports complex	0	0	1	0	0	Number of sports complexes constructed	Council	Annual
	Construction of 1 Library facility	0	0	0	1	0	Number of Libraries Constructed	Council	Annual
	Construction of 1 Play Park	0	0	0	0	1	Number of play parks constructed	Council And MOH	Annual
	Construction of 2 new markets	0	1	0	1	0	Number of Markets Constructed	Council & MLGRD	Annual
	Upgrading of 3 existing markets	1	0	0	0	0	Number of markets upgraded	Council	Annual
	Construction of 1 bus station	1	0	0	0	0	Number of bus station	Council & MLGRD	Annual
	Construction of 1 conference facility	1	0	0	0	0	Number of conference facilities	Council & MLGRD	Annual
Reduce development inequalities	Construction of 1 trade school	0	1	0	0	0	Number of trade schools	Council & MST	Annual
	Construction of 1 safe Homes for the aged	0	0	1	0	0	Number of safe homes for the aged	Council & MCD&SS	Annual
	Replanning and development of unplanned settlements (4 areas)	0	2	0	0	2	Number of unplanned settlement areas replanned and developed	Council, MLGRD % MoL	Annual

	Acquisition of 100 Ha of land for development of Amenities	10	40	0	0	0	Area of land for development of amenities aquired	Council, MLGRD % MoL	Annual
Enhance public and Social Housing	Construction of 14 staff housing	3	3	3	3	2	Construction of staff houses constructed	Council & MCDSS	Annually
Improve coverage of Basic Social Protection Services.	Identification of eligible social cash transfer beneficiaries	5,000	5,000	5,000	5,000	5,000	Number of eligible beneficiaries	MCD&SS	Annually
	Identification of eligible food security pack program beneficiaries	1,500	1,500	1,500	1,500	1,500	Number of eligible beneficiaries	MCD&SS	Annually
	Linking community savings groups to funding sources	70	70	70	70	70	Number of saving groups linked to funding sources	MCD&SS	Annually
	Facilitation of registration for community savings groups	70	70	70	70	70	Number of saving groups registered	MCD&SS	Annually
	Training of volunteer literacy instructors	140	140	140	140	140	Number of volunteers trained	MCD&SS	Annually
	Formation and registration of women clubs	100	100	100	100	100	Number of women clubs formed and registered	MCD&SS	Annually
	Training of women clubs and saving groups in basic business skills	100	100	100	100	100	Number of women clubs and saving groups trained in basic business skills	MCD&SS	Annually
	Providing in kind support to vulnerable individuals (PWAS)	100	100	100	100	100	Number of vulnerable individuals	MCD&SS	Annually

							supported with in kind support	
--	--	--	--	--	--	--	-----------------------------------	--

AGRICULTURE SERVICES M& E PLAN

GOAL 2	TO IMPROVE ECONOMIC PRODUCTION AND PRODUCTIVITY IN THE DISTRICT BY 2034								
OBJECTIVE 1	TO INCREASE CROP, LIVESTOCK AND FISHERIES PRODUCTION AND PRODUCTIVITY BY 2034								
STRATEGIES	PROGRAMME	TARGET 2025	TARGET 2026	TARGET 2027	TARGET 2028	TARGET 2029	INDICATOR	INFORMATION SOURCE	FREQUENCY
Enhance irrigation and mechanized farming	Construction of 3 x 10 Hectors of irrigation schemes	1	1	1	0	0	#of irrigation schemes constructed	MOA/Council	Annual
	Procurement of tractors & associated implements	0	0	1	0	0	# of tractors and associated equipment procured	Council	Annual
	Construction of 1 Mechanization service centre	0	0	0	0	1	# of mechanisation service centres constructed	Council	Bi-Annual
Enhance access to marketing facilities	Construction of 5 bulking storage facility	1	1	1	1	1	# of Bulking centres constructed	Council/ MOA	Annual
	Construction of 1 Livestock Marketing Centre	1	0	0	0	0	# of livestock Marketing Centre Constructed	Council & MFL	Annual
	Construction of 1 fish marketing centre	0	1	0	0	0	# of fish marketing centre constructed	Council/CEEC	Annual
Promote livestock production	Rehabilitation of Livestock Service Centres	1	0	0	0	0	# of livestock Marketing Centre Rehabilitated	Council	Quarterly

Promote Aquaculture production	Completion of Goat Multiplication Centre	1	0	0	0	0	# of Goat multiplication centres completed	Council	Quarterly
promotion of agricultural produce value addition	Construction of 5 Livestock centres	1	1	1	1	1	# of livestock centres constructed	Council/CP/MAFISA	Quarterly
	Construction of 40 Crush pens	8	8	8	8	8	# of Crush Pens Constructed	Council/CP/MAFISA	Quarterly
	Installation of 52 fish cages	26	26	0	0	0	# of fish Cages installed	Council/CEEC	Quarterly
	Construction of fish hatchery	0	1	0	0	0	# of Fish hatcheries Constructed	Council/CEEC	Quarterly
	Construction of 1 fish processing plant	0	0	1	0	0	# of Fish Processing Plant Constructed	Council/CEEC	Quarterly
	Construction of 1 tannery	0	0	0	1	0	# of tannery industry established	Council / CP / MAFISA	Annually
Enhance agricultural extension services	Rehabilitation of 4 veterinary staff houses	1	1	1	1	0	# of Veterinary Houses Rehabilitated	Council	Annually
	Construction of 17 fisheries, livestock and veterinary camp houses	4	1	1	1	0	# of Livestock camp Houses constructed	MFL/Council	Annually
	Rehabilitation of 6. Agricultural camp houses	1	1	1	1	2	# of Houses rehabilitated	Council	Annually
	Construction of 4 Agricultural Block Houses	0	0	0	0	0	# of Block Houses constructed	MOA/Council	Annually
	Construction of 7 Agricultural camp Houses	1	0	1	0	1	# of camp Houses constructed	MOA/Council	Annually

ECONOMIC INFRASTRUCTURE M& E PLAN

GOAL 2	TO ENHANCE ECONOMIC PRODUCTION AND PRODUCTIVITY IN THE DISTRICT BY 2034								
OBJECTIVE 2	TO IMPROVE ENTREPRENEURIAL SUPPORT AND ACCESS TO ECONOMIC INFRASTRUCTURE IN THE DISTRICT BY 2034						INDICATOR	INFORMATION SOURCE	FREQUENCY
STRATEGIES	PROGRAMME	TARGET 2025	TARGET 2026	TARGET 2027	TARGET 2028	TARGET 2029			
Improve road infrastructure	Maintenance of 45km bituminous road	45	45	45	45	45	# of kilometres of road maintained	Council	Annual
	Maintenance of 50 km gravel roads (township roads)	15	25	35	45	50	# of kilometres of road maintained	Council	Annual
Improving rural access	Construction of 75 km of Ngundi - Sibukali Road gravel road	0	40	35	0	0	# of kilometres of road constructed	Council/CP	Bi-Annual
	Construction of 66 km gravel roads from Namushakende – Lipuwe – Seyi (km)	30	36	0	0	0	# of kilometres of road constructed	Council / CP	Annual
	Construction of 90 km gravel road from Sibukali - Mata	0	0	0	45	45	# of kilometres of road constructed	Council/CP	Annual
	Construction of Sibukali-Lumbe Nanyezu Bridge	1	0	0	0	0	# of Bridges Constructed	Council	Quarterly
	Construction of bridge at Kakenge Crossing point	1	0	0	0	0	# of Bridges Constructed	Council	Quarterly
	Construction of bridge at Kasizi Stream	0	0	0	1	0	# of Bridges Constructed	Council	Quarterly
	Construction of bridge at Tapa - Lilela Namabunga	0	0	0	0	1	# of Bridges Constructed	Council	Quarterly
	Procurement of 6x6 Tipper truck to support road maintenance works and	1	0	1	0	0	# of 6x6 trucks procured	Council	Quarterly

	transportation of materials								
	Construction of 20 Culverts	4	4	4	4	4	# of Culverts constructed	Council	Quarterly
Communication towers	Construction and installation of 5 network towers	1	1	1	1	1	# of Towers Constructed	Council & ZICTA	Annually
Access to off-grid electricity	Construction of 1 solar mini-grid	1	0	0	0	0	# of Solar Min grids constructed	Council & WPPA	Quarterly
	Rural Electrification						# of Public Institutions connected	Council & REA	Annually
Improvement of air transport	Construction of airstrip	0	0	0	0	1	# of Air strips Constructed	Council & CIA	Annually
Improve fire services	Construction of 1 fire service station	0	0	0	0	0	# of fire service station Constructed	Council & MLGRD	Annually
	Procurement of fire tender and service equipment	0	0	0	0	0	# of Fire tender and service equipment Procured	Council & MLGRD	Annually
	Acquisition of 50 Ha. Of land for development of amenities	0	0	0	0	0	# of hectares of land acquired	Council	Annually
Mining	Procurement of 10 min mobile jaw stone crushing equipment	2	2	2	2	2	# of stone crushing Equipment	Council	Annually
Road Maintenance	Procurement of 1 Jaw stone crushing equipment to support road works	0	0	0	0	0	# of stone crushing Equipment	Council	Annually

ENVIRONMENTAL SUSTAINABILITY M & E PLAN

GOAL	TO PROMOTE DEVELOPMENT AND MANAGEMENT OF NATURAL AND ENVIRONMENTAL RESOURCES IN THE DISTRICT BY 2034.						INDICATOR	INFORMATION SOURCE	FREQUENCY
OBJECTIVE	Overall objective: TO PROMOTE SUSTAINABLE UTILISATION OF NATURAL RESOURCES AND ENVIRONMENT BY 2034 TO IMPROVE FOREST MANAGEMENT AND CONSERVATION ACROSS 8 ZONES BY 2034 TO PROMOTE VALUE ADDITION OF FOREST PRODUCE ACROSS 8 ZONES BY 2034 TO RESTORE 5,000 HECTARES OF FOREST COVER BY 2034 TO PROMOTE ALTERNATIVE LIVELIHOOD BY FACILITATING APICULTURE TRAININGS FROM 1 TO 10 BY 2034 TO ENHANCE FORESTRY EXTENSION SERVICES ACROSS 8 ZONES BY 2034 TO PROMOTE SUSTAINABLE WASTE MANAGEMENT								
STRATEGIES	PROGRAMME	TARGET 2025	TARGET 2026	TARGET 2027	TARGET 2028	TARGET 2029			
Facilitate sustainable utilisation of forest, land, water and air resources by formation of CFMGs and foster partnerships that promote natural resource management	Formation of 40 Community Forest Management Groups (CFMGs)	8	8	8	8	8	# of CFMGs formed and functional	Council/FD	Annual
Promote value addition of forest produce	Procurement of 40 processing Mushroom driers	8	8	8	8	8	# of mushroom driers procured	Council/FD	Annual
	Procurement of 40 oil extractor pressers	8	8	8	8	8	# of oil extractor oil pressers	Council/FD	Annual
	Procurement of 100 sawdust briquette making machines	20	20	20	20	20	# of saw dust briquette machines procured	Council/FD	Bi-Annual

Promote afforestation, reforestation and agroforestry	Raising of seedlings (25,000) of different species	5,000	5,000	5,000	5,000	5,000	# of seedlings raised	Council/FD	Annual
Promotion of alternative livelihood	Procurement of (1000) beehives	200	200	200	200	200	# of Be hives procured	Council/FD	Annual
	Trainings in Apiculture (Bee keeping)	4	0	0	0	0	# of trainings conducted	Council/FD	Annual
Enhance forestry extension services	Rehabilitation of 1 extension forest staff House	1	0	0	0	0	# of houses rehabilitated	Council/FD	
	Construction of 8 camp houses	2	2	2	2	2	# of houses constructed	Council/FD	
OBJECTIVE: 8	TO PROMOTE TOURISM DEVELOPMENT AND MARKETING BY ESTABLISHING ONE TOURISM HUB BY 2034								
Facilitate investment in tourism infrastructure and culture	Development of tourism sites	0	1	0	0	0	# of tourism sites facilitated for development	Council & NHCC	Annual
	Development of historical sites	1	0	0	0	0	Number of Historical sites facilitated for development	Council & NHCC	Annual

MONITORING AND EVALUATION PLAN: GOOD GOVERNANCE

GOAL	TO ENHANCE RULE OF LAW AND CONDUCTIVE ENVIRONMENT FOR PRODUCTIVITY IN THE DISTRICT BY 2034.								
OBJECTIVES	ENHANCE COMMUNITY PARTICIPATION IN GOVERNANCE AND DECISION-MAKING PROCESSES BY 2034 ENHANCE SUPPORT FOR THE RULE OF LAW ACTIVITIES BY 2034 ENHANCE INCLUSIVE COMMUNITY ACCESS TO LAND FOR DEVELOPMENT. ENHANCE COORDINATION AMONG ALL COMMUNITY ACTORS						INDICATOR	INFORMATION SOURCE	FREQUENCY
STRATEGIES	PROGRAMME	TARGET 2025	TARGET 2026	TARGET 2027	TARGET 2028	TARGET 2029			
Enhance quality child protection services through the construction of appropriate infrastructure	Construction of 1 juvenile cells	0	1	0	0	0	# of Juvenile cells Constructed	Council	Annual
	Construction of 1 sanitary facility and cell for female inmates	0	1	0	0	0	# of sanitary facilities constructed	Council & MHAIS	Annual
	Construction of 1 Juvenile Courts	0	0	1	0	0	# of Juvenile Courts constructed	Council	Annual
	Enhance support for the rule of Law activities by 2034	0	0	0	1	0	# of Juvenile Courts constructed	Council	Bi-Annual
OBJECTIVE:	TO ENHANCE COORDINATION AMONG ALL COMMUNITY ACTORS ACROSS THE 14 WARDS BY 2034								
Enhance coordination between community and law enforcement agencies	Rehabilitation of Judiciary infrastructure	0	1	1	1	0	# of Judiciary infrastructure rehabilitated	Council And MOJ	Annual
	Construction of local courts	0	1	1	1	0	# of Local Courts rehabilitated	Council & MOJ	Annual
	Construction of 3 staff houses	0	1	1	1	0	# of staff judiciary Houses constructed	Council & MOJ	Annual
OBJECTIVE:	TO ENHANCE COORDINATION AMONG ALL COMMUNITY ACTORS ACROSS THE 14 WARDS BY 2034								
Enhance governance systems by facilitating WDCs operations, capacity	Construction of 14 WDC offices	1	1	1	1	0	# of WDC Offices Constructed	Council & MLGRD	Annual
	Construction of 1 police station	0	0	1	0	0	# of police stations constructed	Council / MHAIS	Annual

building and construction of appropriate infrastructure	Construction of police posts	0	1	1	1	1	# of police Posts Constructed	Council	Annual
	Construction of 4 police staff housing	0	1	1	1	1	# of police staff houses constructed	Council	Annual
OBJECTIVE:	TO PROMOTE EQUITABLE DISTRIBUTION OF RESOURCES ACROSS THE 14 WARDS BY 2034								
Enhance inclusive access to natural resources such as land and community participation in resource allocation decisions and utilization	Facilitation of 20 WDC meetings	4	4	4	4	4	# of WDC meetings conducted	Council	Annual
	20 Community participation meetings conducted	4	4	4	4	4	# of Community participation meetings conducted	Council	Annual

REFERENCES

- Administration, D. (2023). *Community Development Fund Report*. Senanga.
- Agriculture, M. o. (2024). *Third Quarterly Report*. Senanga: MOA, Senanga.
- Ali, S. A. (2013). The impact of population growth on economic development in Pakistan. *Middle - East Journal of Science Research*, 18(4), 483-491.
- Alkama, R. &. (2016). Biophysical Climate impacts of recent changes in global forest cover. *Science*, 351 (6273), 600-604.
- Central Statistical Office. (2017). *Zambia Statistical Agency, Crop Forecast Survey*. Lusaka.
- Cescatti, A. &. (2016). Biophysical Climate Impacts of recent changes in global forest cover. *Science Advisor*, pp 600-604.
- Council, S. T. (2022,2023,2024). *Constituency Development Fund Quarterly Reports*. Senanga: STC.
- CSO. (2018). *Zambia Statistical Agency, Crop Forecast Survey*. Lusaka: Central Statistical Office.
- CSO. (2019). *Zambia Statistical Agency, Crop Forecast Survey*. Lusaka.
- CSO. (2021). *Zambia Statistical Agency, Crop Forecast Survey*. Lusaka: Central Statistical Office.
- CSO. (2022,2023,2024). *Zambia Statistical Agency, Crop Forecast Survey*. Lusaka: Central Statistical Office.
- Disabil, J. A. (2012, Oct). *Published online*. Retrieved from Published online: oct.10.Doi10.4102/1jord.v1i1,19
- Earth, G. (2024). *Google earth*.
- Fanshawe, D. B. (2010). Vegetation descriptions of upper Zambezi district of Zambia. *Occasional Publications in Biodiversity*, 22, 1-1237. 22, 1-237.
- Guide, Z. C. (2022). *Zambia Country Commercial Guide*. Lusaka.
- II, I. L. (2016). *Integrated Land Use Assessment II*. Zambia.
- J, K. (2022).
- Livestock, M. o. (2020, 2021, 2022, 2023). *Annual Report*. Senanga: Ministry of Fisheries and Livestock, Senanga.
- Ministry of Agriculture, S. (2024). *Zambai Inegrated Agricultural Management Information System*. Senanga.
- MoFNP. (2022). *8th National Development Plan*. Lusaka: MoFNP.
- MoH. (2022 -2026). *National Health Strategic Plan*. Lusaka: MoH.
- Plan, M. S. (2022 - 2026). *MoEdu Strategic Plan*. Senanga.

- Scholes R. J., D. P. (2022). Trends in Savanna structure and composition along an aridity gradient in the Kalahari. . *Journal of Vegetation Science*, 13(13), 419-428.
- Secretary, D. E. (2023). *Annual School Census*. Senanga: DEBS.
- Shepherd A, V. B. (2021). Zambia Poverty Dynamics, in Chronic poverty Networks. *Overseas Development Institute*,.
- TADAOM Y., T. I. (2013). Water Quality Preservation Effects of Riparian Forests in Watershed with Dairy Farming Areas in Eastern Hokkaido. *International Journal of Environmental and Rural Development*, , 4(1) 183-189.
- UNICEF. (2019). Power in public institutions. *Power in public institutions*.
- Unit, V. S. (2022, 2023). *Quarterly Reports, Zambia Police*. Senanga.
- Watch, G. F. (2024). *Global Forest Watch*. Zambia.
- Worldfish. (2013). *Zambia Fisheries Value Chain Report*. Lusaka.
- ZAMSTATS. (2018). *Zambia Health Demographic Survey*. Lusaka.
- ZAMSTATS. (2021, 2022, 2023). *Livestock Survey Reports*. Lusaka.
- ZAMSTATS. (2022). *Living Conditions and Monitoring Survey*. Lusaka.
- ZAMSTATS. (2022). *Zambia Preliminary Census*. Lusaka.