

# **MUNICIPALITY OF KARIBA**

# **MASTER PLAN 2024**

# **EXECUTIVE SUMMARY**

**Prepared by** 

Nelson N. Thema Regional and Urban Planner

# MUNICIPALITY OF KARIBA (MOK) MASTER PLAN 2024

# **EXECUTIVE SUMMARY**

# 1.0 Overview

This Master Plan preparation process was undertaken in accordance with the provisions of Part IV of the Regional Town and Country Planning Act Chapter 29:12. Revised Edition 1996, and its accompanying regulations.

The Master Plan preparation process involved the following stages from inception to completion:

- Preliminary procedures, including Consultants engagement
- The Inception Report
- The Study of the Planning area
- The preparation of the Report of Study which details the existing situational analysis of the Planning Area
- The Written Statement that details Master Plan goals, proposals and proposed policies, to create the Master Plan, including its presentation to and validation by the Local Planning Authority.
- Presentation of the completed Master Plan

This is the presentation of the Master Plan for the Planning Area for the period 2024-2039 (15 years)

# 1.1 The Rationale and Basis for the Project

On 1 November 2023, The President of Zimbabwe, His Excellency DR ED Mnangagwa proclaimed a directive that instructed all Local Authorities to have put in place Master Plans by the 30<sup>th</sup> of June 2024 in order to have plans that guide orderly, sustainable development and its control in their areas of jurisdiction.

The Directive was called A Call to Action – No Compromise to Service Delivery (Blue Print for Service Delivery by Local Authorities). Issued by the President of Zimbabwe on 1 November 2023.

It directed the preparation of Master Plans by each local authority in Zimbabwe. It was directed at all local authorities in Zimbabwe, including rural district councils, most of which had never had a Master Plan prepared for them.

In terms of the Regional, Town and Country Planning Act, Chapter 29:12, Revised Edition 1996, the spirit and purpose of spatial planning (including Master Planning), is:

• To provide for the planning of regions, districts and local areas with the object of conserving and improving the physical environment and in particular promoting health, safety, order, amenity, convenience and general welfare, as well as efficiency and economy in the process of development and the improvement of communications;

- To authorize the making of regional plans, master plans and local plans, whether urban or rural;
- To provide for the protection of urban and rural amenities and the preservation of buildings and trees and generally to regulate the appearance of the townscape and landscape;
- To provide for the acquisition of land;
- To provide for the control over development, including use of land and buildings;
- To regulate the subdivision and consolidation of pieces of land, and;
- To provide for matters incidental to or connected with the foregoing.

The above is the basis on which the Master Plan was prepared for the Planning Area.

# **1.2** The Inception Report

Following the appointment of the Lead Planner to undertake the Master Plan preparation exercise, the Lead Planner presented the Inception Plan for the project to Council. The inception report was presented, discussed and adopted by Council.

The Inception Report covered the following:

- a) Purpose of the project
- b) Project activities
- c) Work plan
- d) Project time table
- e) Project milestones
- f) Project outcomes and expectations

The inception Report was prepared and physically presented to Council by the Consultant. Its acceptance and adoption by the Council set the stage for the execution of the Master Plan preparation project, starting with the Planning Area Study, as required by the law.

## **1.3** The Report of Study

This Report of Study involved primary and secondary data collection of the situation in the District following identified thematic areas. The data was then analysed to enable derivation and articulation of proposals to build up to the Written Statement.

Various methods of data collection were used in this exercise, including:

- Stakeholder engagements, involving personal and group meetings, interviews with local and central government ministries, departments and agencies, statutory bodies, service providers, development partners and agencies, non-governmental organizations (NGO's), Council officials, Councillors, business people and representatives, community elders, etc.
- Existing document and data review and analysis.
- Ward Outreach meetings where research teams physically met and addressed District residents where their views and contributions towards the preparation of the Master Plan were gathered and subsequently analysed.
- Physical administration of questionnaires.

- Social Media (WhatsApp group engagements) where residents were invited to join and freely make contributions to the Master Plan preparation process.
- Community Radio Outreach, using Kasambabezi Radio, where stakeholders and residents were free to make contributions on the project via interactive radio programmes.
- Various physical inspections by the Master Plan preparation team in the study area.

This Report of Study presented the following:

- a) Primary and Secondary data collected by the Master Plan preparation team on the ground.
- b) Methods and processes of data collection.
- c) Analysis of the collected data, including statistical analysis of all the collected data.
- d) Detailed presentation of the findings of the Planning Area study process.
- e) Summary or Outline proposals for the Master Plan.

# **1.4** The Written Statement

The Written Statement has Three Parts:

Part 1 - Explained and analysed the contents of the Report of Study to the Master Plan.

- Part 2 Further expounded and indicated alternative policy choices related to feasible alternative patterns of physical development as well as presenting a comparison of these alternative strategies based on and around the aims and objectives for various aspects as explored in the Report of study. It also indicated the preferred strategy or the policy choices that were selected to best achieve the aims and objectives of the Master Plan.
- Part 3 Stated the policies and general proposals formulated for the Master Plan as well as providing justification for the proffered Master Plan proposals. This part also suggested possible implementation alternatives so that the Master Plan aims and goals can be achieved during its life.

## 1.5 Process Flow

Item	Date of Presentation to and Validation by Council
Inception Report	22 April 2024
Report of Study	13 June 2024
Written Statement	26 June 2024

# 1.6 Conclusion

This is the presentation of the Master Plan for the Local Authority for the 15-year period (2024 -2039).

#### MUNICIPALITY OF KARIBA

# MINUTES OF THE SPECIAL COUNCIL MEETING HELD IN THE COUNCIL BOARDROOM MUNICIPAL OFFICES KARIBA HEIGHTS ON TUESDAY 16<sup>TH</sup> APRIL 2024 AT 1016 HOURS

#### PRESENT

His worship the Mayor: Councillor R. Maoneyi - Chairing

#### COUNCILLORS

Councillors O.H Chiriseri, T. Kayungwa, T. Masuku, G. Masendu, M. Mukutirwa, M Maulidi, S.T. Sibanda

#### OFFICIALS

R. Kamhoti	-	Town Clerk
S. Chitenhe	-	Director of Financial Services
G. T. Magijani	-	Director of Housing and Community Services
A Machaya	-	Assistant Director of Engineering Services
J.T. Tetena		Town Planning Technician
L. Maburutse	-	PA to the Office of the Town Clerk - Minuting, ARIBA
PLANNING OFFICIALS		A Cast and Cast
N. N Thema	-	Urban Regional Planner UNICIP CLERN
Dr. Sacha Joji	-	Planner and Project Coordinator
Mr Kaundura	-	Urban Regional Planner, UNICIPALITY SOFFICE Planner and Project Coordinator Economist/Business Adviser
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IN ATTENDANCE		P.O. BU 214 6100.010
Ms Chaderopa	8 <b>—</b> 8	Economist – District Development Coordinator's Office
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#### 1. OPENING PRAYER

Cllr O.H. Chiriseri opened with a word of prayer.

### 2. APOLOGIES FOR ABSENCE

Apologies for absence were received from Cllr E. Sefulani, Cllr T. Mapondera and Director of Engineering Services Engineer N. Nyaningwe.

#### 3. DECLARATION OF INTEREST

None

## 4. WELCOME REMARKS

The Town Clerk Mr R. Kamhoti welcomed members to the meeting and introduced the visitors to the meeting. He then requested the Mayor to introduce the Councillors and thereafter requested Mr Thema to present the Inception Report and the report was presented as follows;

#### C/49/24 MASTER PLAN INCEPTION REPORT

### Introduction and Background

He informed the Meeting that on 1<sup>st</sup> November 2024 His Excellency The President in his clarion "Call to Action - No Compromise on Service Delivery" with respect to land use management and called on all Local Authorities to prepare and approve Master Plans by 30<sup>th</sup> June 2024 in order to bring order to the management of land use within their jurisdictions.

He went on further to say that all LAs, RDCs included, have requisite capacity, i.e. planners and technicians, equipment and ICTs, office space and mobility, and to set up planning departments with a budget and that planners should participate at senior management level and attend Council meetings.

This call resulted in the Ministry of Local Government and Public Works, Department of Spatial Planning and Development making arrangements to assist Rural District and Urban Councils by seconding Lead Town Planners to help prepare their Master Plans.

#### Appointment of Consultant

Nelson Nehemiah Thema, Urban and Regional Planner was appointed as the Lead Planner to head a team of experts "THE TEAM" to prepare a Master Plan for Municipality of Kariba. Nelson Nehemiah Thema is a qualified and experienced Urban and Regional Planner who has worked for many years as a Senior Town Planner in the Municipality of Harare and Ekurhuleni Metropolitan Municipality, Republic of South Africa. He has vast experience in all aspects of Regional and Urban Planning, including the Preparation and Management of different levels of Development Plans.

Mr N. N. Thema has also worked in the Private Sector and has accumulated experience in the Implementation and Management of Development Projects

#### Nelson Nehemiah Thema

Urban and Regional Planner

#### The Core Team

The Core Team for Municipality of Kariba Master Plan preparation consists of the following;

- Lead Planner Nelson N. Thema, (Urban and Regional Planner) Masters in Urban and Regional Planning and over 40 years' experience in Town Planning in Zimbabwe (City of Harare) and Republic of South Africa (Ekurhuleni Metropolitan Municipality), and in the Private Sector, in every aspect of Planning and Development.
- Planner and Project Coordinator Dr Sasha Jogi, PHD in Planning, Environmental Planning and Development in the Public and Private Sector. .A fellow of the Zimbabwe Institute of Regional and Urban Planners (ZIRUP)
- **Research Planner** Reginald Dziwa is an Urban Planner and Real Estate Practitioner. He is a Member of the Real Estate Institute of Zimbabwe, Estate Agents Council of Zimbabwe and the Valuers Council of Zimbabwe
- Data Analyst and GIS Specialist Trymore Muderere is as an Urban Planner skilled in land use planning and the application of GIS & Remote Sensing approaches and methods in urban planning and modelling of urban spatial phenomena. MPhil Science Geography, Geospatial Sciences and Earth Observation (Urban Landscape Ecology), University of Zimbabwe.
- Business Advisor (Local Specialist) Joseph Kaundura is a Chartered Accountant Association of Chartered Certified Accountants (ACCA). Part Institute of Administration & Commerce.
- Secretariat and Communication/Document Coordinator Ms Usha Patel has 40 years' experience in the fields of Human Resources, Administration, Training and Market Research in Government, Non-profit Organisations and the Private Sector. B.A Hons (History and Sociology), University of Zimbabwe.



Other specialists in specific fields - To be co-opted as and when required including:-

Infrastructure Engineers (Roads, Transport, Water and Electrical), Environmentalist, Wildlife Expert, Veterinarian, Forestry Expert, Geologist/Mining Expert, Gender and Youth Expert, Economist, Marine Biologist etc.

# Rationale for the Master Plan

#### Master Planning and Master Plans

The preamble to the Act to provides for the planning of regions, districts and local areas with the object of conserving and improving the physical environment and in particular promoting health, safety, order, amenity, convenience and general welfare, as well as efficiency and economy in the process of development and the improvement of communications.

The rationale and logic for Master Plans and Planning in general is captured in the **Regional Town and Country Planning Act Cap 22 of 1976, as amended** and as supported by the attendant Regulations RGN 248, and Statutory Instruments (SI 126 of 1994) and it is in accordance with the dictates of this Act that this Master Plan will be prepared.

#### The Purpose of the Master Plan Exercise

A Master Plan is a **Statutory Document** which outlines the scope of socio-economic features of the area, sets out developmental conditions and objectives of the area's stakeholders, and proposes directions for future development. It is a dynamic, long-term plan (10 - 15 years) which provides a **Conceptual Framework** for current and future development.

In general, a Master Plan provides for a variety of benefits for the Local Authority, its residents and stakeholders;

- It examines and synthesizes, through established research methods, the existing physical and socio-
- economic characteristics of the area, so that all interested parties can understand the existing environment.
- It analyses, using modern analytical tools, the data and information obtained, in order to deduce patterns and trends which inform planners of possible developmental directions.
- It sets out recommendations for current and future development arising out of observed patterns, trends and developmental challenges identified from the research, data analysis, observation, and stakeholder consultations.
- The Master Plan preparation process also establishes a **participatory and consultative process** which enables every stakeholder to be heard and to participate in the decision-making process, both at the preparation stage, as well as in future land use planning and development management.
- Lastly, the Approved Master Plan becomes a tool for future land use planning and management, as well as development decision making.

#### Scope of Work

The Scope of Work is the area in an agreement where the work to be performed is described. To fully understand the task at hand, the Master Plan Preparation Team will engage in research and analysis of the area through various methods. This includes desk top reviews of data in the Plan Area in order to understand the Scope of Work of the Plan Area as well as the major issues arising therefrom. This gives the Team an understanding of the area in general and an introduction to expected issues.

#### Approach and Methodology

The Approach and Methodology selected will determine the final output of the characteristics of the Plan Area.



#### **Review of Study Area**

A review of the area involves a general understanding of the locality of the area, the history of economic development of the area, the general socio-economic characteristics, and the infrastructural features of the Plan Area, which will give the Team a general idea of what to expect. A visit to the area to see existing conditions and discussion with available stakeholders is important.

#### Data Collection

This is an important part of Master Plan preparation as it involves the collection and analysis of data on population characteristics, economic development and activity in the Plan Area, infrastructure development, access to social development and economic facilities. The sources of data include: -

- Primary data
- Secondary data
- Situational analysis
- Stakeholder consultations
- Field visits
- Interviews
- Mapping and GIS analysis

#### Methods of Data Analysis

- Quantitative and
- Qualitative Statistical Analysis

#### Stakeholder Engagement

MUNICIPALITY OF KARIBA TOWN CLERK'S OFFICE D. 201-2014 P.O. EOX 130 Keriba P.O. EOX 130 Keriba P.O. EOX 130 Keriba Tel: (0 61) 214 6 (59, 6194 / 5 mok@hanibamum.org.zw

It is imperative for the preparation of the Master Plan to engage all stakeholders in the area, not only to obtain their input in terms of ideas and perspectives, but also to enhance participation and ownership. Engagement with stakeholders will take the form of **individual engagements and stakeholder workshops**. In the context of the Municipality of Kariba, the key stakeholders include:-

- Councillors
- Chiefs and Traditional Leaders
- Council Management and staff
- The Business Community and Associations
- Government Departments
- Surrounding Local Authorities
- Investment Leaders
- Other Interested and Affected Parties.

## Project Work Programme

- a. Flow Chart (See Appendix 3)
- b. Gantt Chart (See Appendix 4)

## Key Milestones

As indicated in the above Project Work Programme, the key milestones expected in this exercise are as follows:

# Inception Report

This is the Report which introduces the Master Plan Concept, outlines the process for its preparation, introduces the Core Team which will lead the process, highlights the approach and methodology, sets out

the programme, and enables the Local Authority and interested stakeholders to fully understand what the Master Plan entails and brings to the future of its citizens.

#### Report of Study

The Report of Study will highlight the findings of the research, data analysis, stakeholder engagements and put together the resulting understanding of the Municipality's socio-economic and developmental situation. From these findings, the Team will extract trends, patterns and expectations which will result in recommendations for future development proposals.

#### Stakeholder Workshop 1

After the drafting of the Report of Study, the Team will present the Report to the Local Authority as well as present it before a Stakeholder Workshop to get input and additional ideas from the stakeholders. This is to ensure that the Team has captured the views, inputs and ideas of the stakeholders fully. All new ideas and inputs will be added to the Report, which will be adjusted accordingly.

#### Written Statement

Based on the findings recorded in the Report of Study, the Team will prepare a Written Statement, making Recommendations and Proposals for the Plan Area. These will constitute the Recommendations and Proposals for the new Master Plan.

#### Stakeholder Workshop 2

Again, the Written Statement, containing the new Recommendations and Proposals, will be presented to the Local Authority and before a Stakeholder Workshop for further discussion before being recommended for the Master Plan Adoption.

#### Master Plan Adoption

A Master Plan is considered Adopted after Council Resolution by the Local Authority through its relevant Committee and Full Council meetings.

#### Master Plan Public Exhibition

After Adoption by the Local Planning Authority the Master Plan will be put on Public Display by the Ministry and then Approved.

#### Way Forward

The Local Authority, Municipality of Kariba, will be in possession of a significant development tool in approaching the management and development of the Master Plan Area.

#### Expected Outcomes

An Approved Master Plan becomes the Local Authority's guide for future land use planning and control. It reflects the Local Authority's vision for future physical and socio-economic development and represents the aspirations of its residents. The Master Plan is owned by the Local Authority and its residents and is their tool for future development and investment.

Ideally a Master Plan will have a life expectancy of 10 to 15 years, during which time the Council can use it as a tool for guiding investment and development, but in today's fast changing world and fast paced technological advancement, it may become necessary for Council to review the Master Plan and its provisions much earlier than anticipated. The point here is that this is the Local Authority's tool, which it can use as long as its provisions and assumptions remain valid, and which it can review as and when FFICE necessary to do so.

# Possible Future Developments

**Possible Future Developments** There are a **Family of Plans** which allow for the creation of more detailed plans in the form of - ation of P.O. EOX 130 Kerlb3 A15 Fol: (0 61) 214 6189, and and Tol: (0 61) 214 6189, and and

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- Local Development Plans,
- Local Priority Plans and
- Local Subject Plans and similar instruments.

The Local Authority may also wish to take advantage of the existence of the Master Plan to examine and plan specific areas of the district according to the above Statutory Instruments.

These enable the Council to look deeper at a specific area, for a specific purpose in order to plan it for a desired purpose. In other words, the Master Plan provides a wider perspective, while the Local Plan develops into specific requirements aimed at specific outcomes.

Finally, the planning process also allows for the preparation of Subdivision Development Plans providing for detailed plans with specific development conditions.

After the presentation the Mayor invited the Councillors to comment on the Inception Report.

Qstn: Councillor Masendu wanted to know how they were going to approach or select the Stakeholders to attend this workshop.

Ans: The Business Consultant (Mr Kaondera) will need the help of Councillors and business Community etc. At the present moment there is a platform on radio where Mr Kaondera will disseminate information about the Master Plan. Stakeholders are free to ask anything concerning the Master Plan.

Qstn: Cllr Maulidi wanted to know whether the team will be staying in Kariba or not?

Ans: They will operate in and out of Kariba.

Qstn: Cllr Tabvunya, What time do you need to finish the work?Ans: 6 months.

e 11 -

Qstn: So in 2 months are you going to finish, isn't a rush job?

Ans: We will try to finish within that period.

Lastly the Mayor had a number of issues that includes:

- Township balance
- Economic growth
- Idle land
- Game corridors etc. whether the Municipality is going to benefit from the corridors or not.

The Director of Financial Services presented the Contractual obligation. The Council's concern was on the Professional Fees with a total of \$130 000.00. The main worry was on the Expects (Consulting Team) where some of the expects were not required here in Kariba like the Veterinary Specialist, Agronomist etc. in response the meeting was informed that the Exports were not limited and may vary according to each Local Authority but the \$130 000 remains the same.

The meeting was informed that the Local Authority may negotiate towards the \$50 000 which cover

- Accommodation
- Transport
- Communication
- Consultation meetings
- Vehicle hire and fuel
- Food.

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Subsequently the Council

# <u>RESOLVED</u>

THAT the Inception Report on the new Master Plan be adopted.

# 8 <u>Closing Prayer</u>

Cllr Nderere closed with a word of prayer.

The meeting ended at 1135 hours P.N. MADNE 24 16/05/ Date:\_\_\_\_ Signature: Chairperson ARIBA



#### MUNICIPALITY OF KARIBA

# MINUTES OF THE SPECIAL COUNCIL MEETING HELD IN THE COUNCIL BOARDROOM, MUNICIPAL OFFICES, HEIGHTS KARIBA ON THURSDAY 12 JUNE 2024 AT 1027 HOURS

#### PRESENT

His Worship the Mayor Councillor R.N. Maoneyi - Chairing

#### COUNCILLORS

Deputy Mayor Councillor T. Mapondera, O.H. Chiriseri, T. Kayungwa, G. Masendu, T. Masuku, M. Maulidi, N. Mukutirwa, W. Nderere, E. Sefulani, S.T. Sibanda & R. Tabvunya

#### OFFICIALS

R. Kamhoti	-	Town Clerk
S. Chitenhe	-	Director of Financial Services
N. Nyaningwe	-	Director of Engineering Services
C. Mutumbami	-	Assistant Director of Housing & Community Services
T.J Tetena	-	Town Planning Technician
B. Mlambo	-	Registry & Committee Officer
PLANNING OFF	ICIALS	Regional & Urban Planner (Lead Planner)
N.N. Thema	-	Regional & Urban Planner (Lead Planner)
J. Kaundura	-	Regional & Urban Planner (Lead Planner) Business Consultant

#### PLANNING OFFICIALS

N.N. Thema	-	Regional & Urban Planner (Lead Planner)
J. Kaundura	-	Business Consultant

#### IN ATTENDANCE

A. Gumbochuma	-	District Development Coordinator	
L. Chaderopa	-	Economist	

#### 1. OPENING PRAYER

Councillor O.H. Chiriseri led with a word of prayer.

#### 2. APOLOGIES FOR ABSENCE

Apologies for absence were tendered for the Director of Housing and Community Services who was out of town on Council business.

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#### 3. DECLARATION OF INTEREST

None

#### 4. OBJECTIVES OF THE MEETING

To present and adopt the Masterplan Report of study.

#### C/70/24 PRESENTATION OF THE REPORT OF STUDY

The Lead Planner Mr N. Thema took the meeting through 6 chapters of the Master Plan Report of study giving explanations. Areas covered during the presentation are as follows;

- Chapter 1: Introduction of the Kariba Municipality Masterplan
- Chapter 2: Materials and methods used for data collection and analysis.
- Chapter 3: Key study findings - statistical data analysis.
- Chapter 4: Key study findings - key findings of the study via outreach programs
- Summary of issues and outline of potential proposals Chapter 5:
- Chapter 6: Conclusion

During the presentation the lead planner reported that the report of study seeks, inter alia, to:

a) To fulfil the requirements of Section 13 of the Regional, Town and Country Planning Act Chapter 29:12 of 1996 as s revised,

b) To fulfil the requirements of Call-to-Action Blue-Print on Service Delivery.

- c) To characterize the pattern, form and function of operative land uses and the general preferences of space users,
- d) To characterize land use and land cover types for the district,
- e) To examine the demographic and socio-economic profile of the study area,
- f) To examine the level of satisfaction of residents to service delivery and adequacy of services,
- g) To identify the most deficient services in the district as well as establish what residents think should be done to address the deficiencies,
- h) To identity resources not being exploited in the district,
- i) To identity and examine important development projects in the district,
- j) To identity desired economic development projects in the district,
- k) To examine water and sewer infrastructure capacities and perceived/potential problems and recommend ways of resolving the problems in the area,
- To examine the road network, linkages, condition and circulation patterns in relation to the existing uses socioeconomic needs of the population within and outside the area,
- m) To inform the Written Statement's policies, proposals and development parameters and controls,
- n) To examine opportunities and constraints needed to inform and guide policy prescriptions in the Written Statement,
- o) To identify projects that will drive the implementation of the plan.

Overally, the fulfilment of these objectives would provide the background to the subsequent Policy Proposals and Recommendations as contained in the Written Statement.

#### QUESTION AND ANSWER SESSION

**Comment:** Chapter 4 Key Study Findings - (d) The Municipality boundary should be extended eastwards to eat into the Nyami-Nyami Rural NRDC's Wards 1 and 2 was supposed to read that the Municipality boundary should be extended eastwards to eat into NRDC's Ward 2.

Qstn: How far have you gone in claiming back the islands purported to be under NRDC?

- Ans: We are in the process to establish what happened in a later proclamation that took the land from Mok giving it to Nyami-Nyami. Further information regarding this matter will be availed in due course.
- Qstn: Where are you going to place the home industry, and where are you going to locate the Education District?
- Ans: We are just finishing the information gathering process, the mandate to identify where the home industry and other issues related to this matter lies with the Municipality of Kariba, and such issues should be included in the subsequent Local Development Plans.

Comment: The issue of shared development plans is out of context and should not be incorporated in this report. As Kariba Municipality we need more land as per previous proclamations which we think were not revoked. Kindly pursue this issue and advise us in due course. Lead Planners should further look into proclamation issues regarding the establishment of Nyami-Nyami Rural District Council and the Municipality of Kariba. The proclamations are as follows;

- NRDC Area S.I. 333/1985 Plan 74/9/84
- Proclamation 39 of 1992 established Nyaminyami Rural District Council.
- S.I.749 of 1980 1<sup>st</sup> July 1993 Plan 145:6:92
- Kariba Map 1628D2
- Deed of Grant 4006/2002 September 2005
- S.G. No. 19/2005
  - Parks & Wildlife Mgt vs MOK HH342-10

Qstn: How far have we gone with the CBD project?

Ans: CBZ is currently coming up with a local subject plan in this regard.

## Next Steps

The next step will be to present a written statement covering the following;

- Synthesis of the study report.
- Amplification of issues identified
- Policies and proposals
- Maps, Plans and Layout

#### Logical follow Up Plans

- Local Development Plans
- Local priority plans
- Local subject plan
- Local layout plan

After consideration the Council

#### RESOLVED

THAT the Municipality of Kariba Masterplan Report of study be adopted with a proviso to generate an addendum incorporating contributions cited above.

Proposed - Councillor T. Kayungwa

Seconded - Councillor N. Mukutirwa

5. CLOSING PRAYER

The Deputy Mayor Councillor T. Mapondera closed with a word of prayer.

6. CLOSING PRAYER

Councillor Nderere closed with a word of prayer.

#### The meeting ended at 1140 hours

RAPHN MADR Date: Name: Signature: Chairperson





# MUNICIPALITY OF KARIBA

# MASTER PLAN 2024

# **Report of Study**

Prepared by

Nelson N. Thema Regional and Urban Planner

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# **Report of Study Validation**

This Master Plan has been prepared in terms of Part IV of the Regional, Town and Country Planning Act, Chapter 29:12, Revised Edition, 1996 and the Regional, Town and Country Planning (Master and Local Plans) Regulations, Government Notice No. 248 of 1977.

Certified that this is a true copy of the Kariba Town Master Plan Adopted by the Kariba Town Full Council at its meeting held on the.....day of June 2024

# **MUNICIPALITY OF KARIBA MASTER PLAN 2024**

# **REPORT OF STUDY**

# A. EXECUTIVE SUMMARY

This Report of Study has been prepared as part of the Master Plan preparation process for the Municipality of Kariba (MOK)

The Master Plan preparation process involves two stages to complete - the preparation of the **Report of Study** which details the existing situational analysis and the **Written Statement** that details Master Plan proposals and proposed policies, to create the Master Plan.

This process is a legal requirement in terms of Part IV of the Regional Town and Country Planning Act Chapter 29:12(1996).

This Report of Study involved secondary and primary data collection of the situation in the Municipality following identified thematic areas. This data was then analysed to enable derivation and articulation of proposals that will build up to the Written Statement.

Various methods of data collection were used, including:

- Stakeholder engagements, including personal and group meetings and interviews with local and central government ministries, departments and agencies, development partners and agencies, non-governmental organisations (NGO's), etc
- Existing document and data review and analysis
- Ward Outreach meetings where research teams physically met and addressed District residents and gathered their views and contributions towards the preparation of the Master Plan.
- Physical administration of questionnaires.
- A radio outreach program on Kasambabezi FM where residents were invited to fully participate and contribute to the Master Planning process.
- A WhatsApp group where residents were invited to join and freely make contributions to the Master Plan preparation process
- Various physical inspections by the Master Plan preparation team in the planning area and district

Therefore, this Report of Study presents:

- a) Primary and secondary data collected by the Master Plan preparation team on the ground
- b) Methods of data collection
- c) Analysis of the collected data

- d) Summary findings of the study process
- e) Summary proposals for the Master Plan.

The next step will be for the planners to produce a Written Statement in terms of the accepted processes for the preparation of a Master Plan and in terms of the existing legislation.

# B. <u>ACKNOWLEDGEMENTS</u>

The Master Plan Preparation team would like to take the opportunity to appreciate and acknowledge every stakeholder who participated in the development of this Report of Study. These stakeholders include heads of government departments and agencies in the District and Province, Council officials, council development partners and the professionals we interacted with during the data collection process.

Our sincere acknowledgement also goes to the traditional and political leadership and their constituency members who gave their time to attend the outreach meetings we held with them at various Ward centres. They gave us their heartfelt contributions towards the development proposals for the planning area. Without the participation of everyone who gave their time to this process this report would not have been successfully completed.

Acknowledgements are also extended to the Master Plan Preparation Team that worked hard to see the success of the data gathering process. The team included three Senior Town Planners, a Business Development Advisor, Geographic Information Specialists, Engineering advisors and our research assistants as the core members.

It should be noted that all the research assistants were drawn from the local communities. In effect, they were both researchers and project participants.

Thank you everyone who assisted or participated.

# **CHAPTER 1**

# 1.0 Introduction

This Chapter outlines the purpose and background to the Master Planning process.

# 1.1. Kariba Town Master Plan

# 1.1.1. Scope of Master Plan Preparation

The Master Plan has been prepared in terms of Part IV of the Regional, Town and Country Planning Act Chapter 29:12 of 1996 Revised Edition and the Regional, Town and Country Planning (Master and Local Plans) Regulations, Government Notice No 248 of 1977 which requires the Local Authority to prepare and submit to the Minister a Master Plan in respect of the area within its jurisdiction.

The Regional, Town and Country Planning Act Chapter 29:12 of 1996 Revised Edition provides for the planning of regions, districts or local areas with the objective of conserving and improving the physical environment and in particular promoting health, safety, order, amenity, convenience and general welfare including efficiency and economy in the process of development and the improvement of communications.

The Master Plan establishes aims, policies and general proposals and provides a broad framework for the future development of the plan area, setting the context for the preparation of detailed local plans.

# **1.1.2.** The Need for Master Plan Preparation

# a) <u>Presidential 'Call to Action' Directive</u>

On 1 November 2023, The President of Zimbabwe, His Excellency DR ED Mnangagwa proclaimed a directive that instructed all Local Authorities to have put in place Master Plans by the 30<sup>th</sup> of June 2024 in order to have plans that guide orderly, sustainable development and its control in their areas of jurisdiction.

The Directive was called A Call to Action – No Compromise to Service Delivery (Blue Print for Service Delivery by Local Authorities). Issued by the President of Zimbabwe on 1 November 2023.

It directed the preparation of Master Plans by each local authority in Zimbabwe. It was directed at all local authorities in Zimbabwe, including rural district councils, most of which had never had a Master Plan prepared for them.

# b) Regional Town and Country Planning Act

The Regional, Town and Country Planning Act Chapter 29:12 of 1996 as revised (hereafter the Act) in Part IV specifically Section 13 requires Local Planning Authorities to prepare Master and Local Plans Specifically, Section 17 (1) further elaborates that the Local Planning Authorities should at all times determine the desirability of preparing or reviewing a Master or Local Plan for any part of the area for which it is the Local Planning Authority as well as keep Master and Local Development Plans under constant examination. If as a result of such determination the assumptions under which the Master or Local Plan are based, are found to be no longer valid the Local Planning Authority is mandated to consider appropriate proposals for the alteration, or repeal of such a plan.

Over time Local Authorities have not been preparing Master Plans despite their importance in coordinating development and service delivery. The President of the Republic of Zimbabwe His Excellency Dr. E.D. Mnangagwa concerned about the deteriorating level of service delivery and the centrality of Master Plans in sound management of Local Authorities launched the Call to Action Blue Print on Service Delivery towards attainment of Vision 2030. Action Point 6 requires all Local Authorities to have Master Plans by 30 June 2024.

The Kariba Municipality Master Plan will thus be prepared in terms of Part IV of The Regional, Town and Country Planning Act Chapter 29:12 of 1996 and The Regional, Town and Country Planning (Master and Local Plans) Regulations, Government Notice No. 248 of 1977 as read with the Call to Action Blue-Print. In pursuance of the provisions Kariba Town has resolved to prepare the Master Plan to rationalise, coordinate and harmonise land uses and control the process of development in space and time in the district. This Report of Study has been prepared to examine and capture development dynamics in the Kariba District (being the Study and Planning Boundary Area as defined in this report) with a view of unpacking development control parameters in order to unlock the development potential, invigorate and rejuvenate the way of life, control the commercialisation of the waterfront, natural resources, and development character whilst balancing that with the need to conserve and preserve where possible the existing development and the environment.

In terms of the Regional, Town and Country Planning Act, Chapter 29:12, Revised Edition 1996, the spirit and purpose of spatial planning (including Master Planning), is:

• To provide for the planning of regions, districts and local areas with the object of conserving and improving the physical environment and in particular promoting health, safety, order, amenity, convenience and general welfare, as well as efficiency and economy in the process of development and the improvement of communications;

- To authorize the making of regional plans, master plans and local plans, whether urban or rural;
- To provide for the protection of urban and rural amenities and the preservation of buildings and trees and generally to regulate the appearance of the townscape and landscape;
- To provide for the acquisition of land;
- To provide for the control over development, including use of land and buildings;
- To regulate the subdivision and consolidation of pieces of land, and;
- To provide for matters incidental to or connected with the foregoing.

# c) Council Vision, Mission and Objectives

The Council's vision and mission is to become a viable and effective Local Authority providing affordable, efficient, viable and sustainable service delivery throughout the Municipal area and for the benefit of all residents of the Municipality.

The current motto of the Municipality is to be 'The Ultimate Tourist Destination embedded in a thriving community by 2025'.

This vision was coined by the Municipality of Kariba in line with the Kariba town's major activities that are anchored on the lake Kariba and wildlife which is found in the area. Kariba is competing with other tourists' destinations like Victoria Falls, Great Zimbabwe, Nyanga, Hwange among others and the town envisions to be the best destination compared to these ones. This can be achieved through attracting new investors and growing existing tourism products which will lure the tourists to Kariba. There is therefore need to create new nodes for tourism related activities both on the Lake and land. Careful attention will be exercised in factoring sustainability of such activities and the preservation of the environment.

The Vision also resonates well with the National Vision: that of being an Upper Middle Income Society by 2030. For Kariba a "Thriving Community" denotes a community which has attained "Upper Middle Income" status and enjoys goods and services from the Municipality which are consistent with that status.

Kariba is a resort town and its economy is dependent on the lake with the following main economic activities:

- Fishing
- Tourism
- Electricity generation
- Crocodile farming.

The Council is guided by the provisions of the Urban Councils Act (Cap 29:15) which stipulates the Council's responsibilities as, *inter alia*:

- Maintenance of Council Roads and infrastructure.
- Formulation and Enforcement of Council bye-laws.
- *Regulation of all trading operations in the Municipal area.*
- Provision of basic housing and social services to the community of the Municipality of Kariba.
- Provision of sustainable environmental management.
- Mobilization of resources to sustain the development of the Municipality of Kariba.
- d) National Development Policies, Strategies and Statutes

The Master Plan preparation process is also guided by various national development planning policies that guide national economic and social development at the national level. These provide the overall framework for national development. This Master Plan derives its objectives from these various national stated policies and statutes.

The details of these policies and statutes can be studied separately but they provide the basis and foundation to the preparation of this Master Plan.

Such National Policies, statutes and development strategies include, but are not limited to:

- Vision 2030
- National Development Strategy (NDS 1) (2021-2025)
- Zimbabwe National Industrial Development Policy (2019-2023)
- Devolution ad Decentralization Policy
- National Climate Policy (2016)
- Regional Town and Country Planning Act
- Urban Councils Act (Cap 29:15)
- Forestry Act (Cap 19:05)
- National Tourism Master Plan
- National Biophysical Master Plan
- Kariba Regional Tourism Development and Marketing Strategy
- Wildlife Management Policy
- National Parks Management Programs

It should be mentioned that, drawing inspiration from the National Development Strategy 1 and the Zimbabwe Vision 2030, The Government launched the Kariba Regional Tourism Development and Marketing Strategy that aims to revive tourism in Kariba. The strategy aims at revitalizing the region with the inclusion of Mana Pools, Municipality of Kariba, Chinhoyi Caves and Lake Kariba. Through the preparation of the Kariba Master Plan there is an anticipated growth hence the need for this Master Plan so that sustainable development can be achieved whilst preserving the natural and cultural heritage of the town and the region.

The above is the basis on which the Master Plan was prepared for the Planning Area.

# 1.1.3 Aim and Objectives of Study

To examine land use, development trends, provision of services, environment and the socio-economic profile of Kariba Master Plan study area in terms of Part IV of the Regional, Town and Country Planning Act Chapter 29:12 Revised Edition 1996 as read with the Master and Local Plans Regulations (RGN) 248 of 1977 and the Call-to-Action Blue-Print on Service Delivery.

# 1.1.4 Objectives of Study

Specifically, the Report of Study seeks, inter alia, to:

- a) fulfil the requirements of Section 13 of the Regional, Town and Country Planning Act Chapter 29:12 of 1996 as revised,
- b) fulfil the requirements of Call-to-Action Blue-Print on Service Delivery.
- c) characterize the pattern, form and function of operative land uses and the general preferences of space users,
- d) to characterize land use and land cover types for the district,
- e) examine the demographic and socio-economic profile of the study area,
- f) examine the level of satisfaction of residents to service delivery and adequacy of services,
- g) to identify the most deficient services in the district as well as establish what residents think should be done to address the deficiencies,
- h) to identity resources not being exploited in the district,
- i) to identity and examine important development projects in the district,
- j) to identity desired economic development projects in the district,
- k) examine water and sewer infrastructure capacities and perceived/potential problems and recommend ways of resolving the problems in the area,
- examine the road network, linkages, condition and circulation patterns in relation to the existing uses socio-economic needs of the population within and outside the area,
- m) inform the Written Statement's policies, proposals and development parameters and controls,
- n) examine opportunities and constraints needed to inform and guide policy prescriptions in the Written Statement,
- o) identify projects that will drive the implementation of the plan.

Overall, the fulfilment of these objectives will provide the background to the subsequent policy proposals as contained in the Written Statement.

# **1.2** General Overview of Planning Process

This report is prepared to fulfil the requirements of Part IV of the Regional, Town and Country Planning Act, Chapter 29:12, Revised Edition, 1996 and Section 3 of the Regional, Town and Country Planning (Master and Local Plans) Regulations, Government Notice No 248 of 1977 as read with the Call to Action Blue Print on Service Delivery. This report examines the issues/challenges facing the Kariba Municipality and Master Plan Planning Area in general (hereafter the Study Area) as a precursor to the development of strategies to unlock and scale-up development by solving problems identified, while exploiting opportunities and potential in the area through a diverse range of development packages mediated through planning proposals and their associated development control parameters.

# CHAPTER 2 GENERAL BACKGROUND INFORMATION (EXISTING SITUATION)

# 2.0 Introduction

This Chapter presents background information on Kariba Town. This information is secondary data that was obtained from various sources, including but not limited to:

- The Council and its various departments
- Central Government Ministries and Departments
- Provincial Authorities
- Desk studies and existing literature reviews
- Council's Professional Consultants
- Commercial and Industrial stakeholders
- Other relevant sources

This information was collected and analysed using the following methods, *inter alia*:

- Document searches and reviews
- Physical interviews
- Stakeholder meetings and seminars
- Correspondence written and verbal
- Other relevant sources

## 2.1 Historical Background of Kariba Town

Kariba town developed as a result of the construction of the Kariba dam wall and Hydro Electricity Power Station in 1955. As an administrative centre, the town started as a Local Board in 1972, grew into a Town Council in 1982 and gained its current Municipal status in January 1999. The Town is divided into 9 administrative wards and has 207 employees, nine elected Councillors and three Councillors representing the women's quota, who are all policy makers. According to the 2022 population census the town has a population of 27,901. The town is situated in the Zambezi Valley in Mashonaland West Province of Zimbabwe near the Zambian border. The town has a total area of 2161,3682 hectares.

The Kariba town is located approximately 249 kilometres by road Northwest of Chinhoyi the nearest large town, and the location of the provincial headquarters. This location lies about 366 kilometres, northwest of Harare, Zimbabwe's capital and largest city. Kariba Town is located on the shores of Kariba Dam along the Zambezi River, the town also serves as a border post between Zimbabwe and Zambia. The coordinates of Kariba are 16.5166° S, 28.8489° E (Latitude: -16° 31' 0.01" S and Longitude: 28° 48' 0.00" E). The air temperature varies between 15°C and 45°C depending on the season, and records an average of 20 degrees celcius with distinct seasonal variances. Highest temperatures are recorded in October and November (mean monthly average 35°C), and gradually decreases during the winter season in June and July (mean monthly average 13 °C). Rainfall is low and

erratic with less than 900mm per annum. Kariba is a resort town and its economy is dependent on the lake with the following main economic activities:

- Fishing
- Tourism
- Electricity generation
- Crocodile farming.

Kariba provides an alternative border entry into Zambia in addition to the Chirundu and Victoria Falls border posts. It is serviced by a well maintained road infrastructure network. MOK lies in the centre of the Zambezi Valley which is abundantly rich in a wide range of natural and man-made resources that can help make Kariba rival the very best of the world's favourite tourist destinations. Kariba is situated in a scenic National Parks & Wildlife area, on the shores of Lake Kariba. The town presents a unique experience-possibly worldwide-where wild animals roam without frontiers and co-exist with human beings.

The town boasts of bigger hotels mainly Caribbea Bay, Cutty Sark and Upper Market Lodges such as Tamarind, Water Front, Samanyanga and Kariba Safari Lodge which have various scenic views of the lake and fauna. The town has a number of investment opportunities in housing estates, tourism related business stands and commercial stands. Kariba has an abundant water supply of low turbidity from the Lake Kariba, which does not require extensive purification and the significant cost drivers are repairs, maintenance and electricity charges. The terrain of Kariba Town is hilly and requires extensive pumping to ensure that all residents have adequate water supply. The largest consumers of water are hotels, lodges and industry but the economic downturn has reduced the demand significantly.

Informal industrial and commercial activities in the Town include:

- Quarry stone mining
- Curios and Sculpture
- Home industries (iron craft, metal work, carpentry, dress making, etc)
- Fruit and vegetable markets
- General trading activities

# 2.2 Municipality Vision

# 'The Ultimate Tourist Destination embedded in a thriving community by 2025'

This vision was coined by the Municipality of Kariba in line with the Kariba town's major activities that are anchored on the lake Kariba and wildlife which is found in the area. Kariba is competing with other tourists' destinations like Victoria Falls, Great Zimbabwe, Nyanga, Hwange among others and the town envisions to be the best destination compared to these ones. This can be achieved through attracting new investors and growing existing tourism products which will lure the tourists to Kariba.

There is therefore need to create new nodes for tourism related activities both on the Lake and land. Careful attention will be exercised in factoring sustainability of such activities and the preservation of the Environment. This touches on Programme 6 (Natural Resources, Conservation and Environmental Management) of the Integrated Results Based Management System (IRBM) currently being rolled out to all Sections of the Public Sector. Once that is achieved to the fullest, the community will benefit through employment creation and uplifting of their livelihoods.

The Vision also resonates well with the National Vision: that of being an Upper Middle Income Society by 2030. For Kariba a "Thriving Community" denotes a community which has attained "Upper Middle Income" status and enjoys goods and services from the Municipality which are consistent with that status.

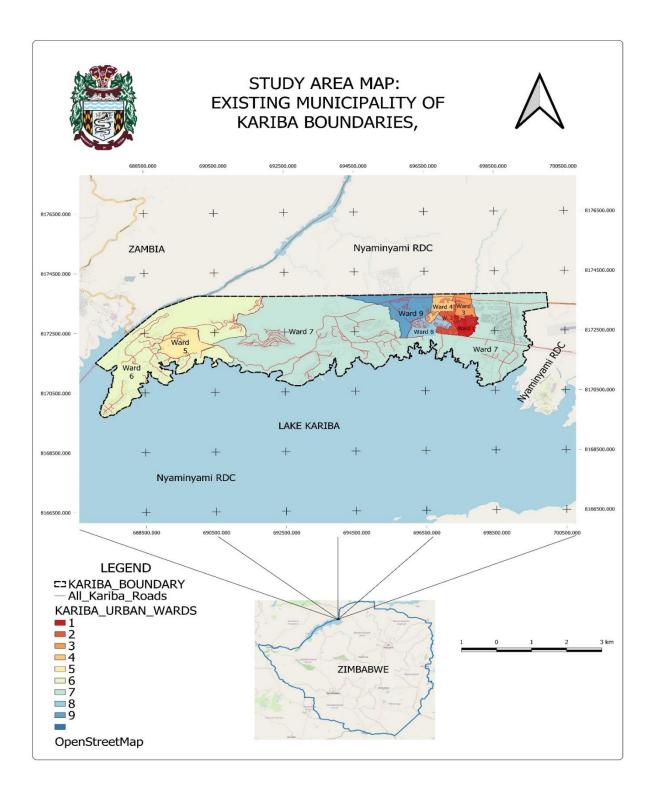
While it is recognised that the mainstay of the Municipality is power generation since it is the home of the biggest hydro-power generation in the country with a total generation capacity of 1,050MW to the national grid. Kariba is likely to be the home of floating solar power project which intends to be added to the national grid. The Municipality is also pursuing the issue of solar energy to power its water stations and infrastructure as well as contributing to the national grid. The earmarked water stations comprise Breezes abstraction and water purification and Zambezi abstraction and water purification. The Municipality is incurring an electricity bill of USD100,000.00 per month and the introduction of solar energy will go a long way in lessening the electricity bill for the Municipality. The NDS1 recognises that opening up of new tourism resorts in Kariba town will improve the national tourism growth which offers a broader spectrum to expand the local Economy and boost household incomes. This Sector is anchored on one of the biggest water bodies worldwide and the location of the Municipality in the middle of a National Park with abundant flora and fauna. This also attracts industries that support this Sector (including boat building and maintenance) and services (including banking, tour operators, transportation in its various modes).

# 2.3 Existing Town Boundaries

In terms of Section 4 of the Urban Councils Act [Cap 214], the President may establish a town with a town council and define the area of the council. Subsequently, the council area may be redefined. Kariba and its council were established in terms of Proclamation 8 of 1977 published in SI 359 of 1977 and

the subsequent description, which is contained in Proclamation 12 of 1985 published in SI 332 of 1985.

The current municipal boundaries are as shown on the Map below:



# Municipality of Kariba Boundaries and Study area

This Master plan is primarily focussed on and within the existing boundaries of Municipality of Kariba, However, it should be noted that the town is now very restricted in terms of development land availability. The study showed that the town boundaries may need to be extended for future town development and expansion.

# This matter is dealt with further in the Written Statement to this Master Plan.

# 2.4 **Population Statistics**

The Table below shows the population statistics for Kariba Town, based on Ward, gender and number of households. This is according to the 2022 National Census Statistics.

Ward	Male	Female	Total	No. of households
1	2,479	2,738	5,217	1,407
2	4,673	5,000	9,673	2,636
3	2,661	2,656	5,317	1,489
4	728	766	1,494	410
5	901	900	1,801	491
6	588	651	1,239	350
7	510	473	983	257
8	478	440	918	283
9	669	599	1,268	376
Total	13,687	14,223	27,910	7,699

# Kariba Population (Source: National Census 2022)

Further statistics are as follows:

- Male to female ratio follows the national and provincial average/trend of 48% Males to 52% Females
- An average of 4 persons per household
- An average annual population growth rate of 1.5%

# Population Growth Projections

Based on the average annual population growth derived from the 2022 Annual Census, and holding everything else equal, the projected population growth for Kariba Town would look as follows:

Year	Population	Annual Increase	<b>Projected Population</b>
2022	27,910	419	28,329
2023	28,329	425	28,754
2024	28,754	431	29,185
2025	29,185	438	29,623
2026	29,623	444	30,067
2027	30,067	451	30,518
2028	30,518	458	30,976
2029	30,976	465	31,440
2030	31,440	472	31,912
2031	31,912	479	32,391
2032	32,391	486	32,877
2033	32,877	493	33,370
2034	33,370	501	33,870
2035	33,870	508	34,378
2036	34,378	516	34,894
2037	34,894	523	35,417
2038	35,417	531	35,949
2039	35,949	539	36,488
2040	36,488	547	37,035

Therefore, the projected population for Kariba would be as follows:

Period	Year	Projected Population (nearest '000)
Short term (5 years)	2030	32,000
Medium Term (10 years)	2035	34,000
Long Term (15 years)	2040	37,000

# 2.5 Key Service Delivery Issues for Council

- Protection of public sewers
- Water provision services
- Protection of public drains
- Provision of roads
- Provision of Public lighting

# 2.6 Roads, Transport and Communications

- Roads Kariba is connected to the major cities and towns and the rest of Zimbabwe by tarred road.
- Water transport the area has water vessels, ferries and boats that transport people and goods across and along the Lake to Kariba Rural, Nyaminyami, Binga and Mlibizi areas, etc
- Air transport Kariba has an airport that accommodates small to medium aircrafts.

# Town Roads network status

Urban roads	Kilometres
Graveled	34.75
Tarred	47.25

- The road network is now old but Council has managed to preserve it to continuously serve the purpose through periodic and routine interventions.
- A few roads have potholes, especially in Nyamhunga and Mahombekombe.
- Pothole patching methods may be either temporary or semi-permanent. Temporary patching is reserved for weather conditions that are not favourable to a more permanent solution and usually uses a cold mix asphalt patching compound placed in an expedient manner to temporarily restore pavement smoothness. Semi-permanent patching uses more care in reconstructing the perimeter of the failed area to blend with the surrounding pavement and usually employs a hot-mix asphalt fill above replacement of appropriate base materials.
- 38% of the roads require rehabilitation intervention.
- The Council has an annual routine maintenance program on all our roads to save them from excessive depreciation. Periodic maintenance is also instituted depending on the availability of funding but of late Council has been receiving funds for ERRP2 which has changed the outlook of the road infrastructure tremendously.
- Priority areas in terms of roads servicing focuses on major roads that service schools, health care centres, shopping areas and tourism areas of interests.

# 2.7 Water Supply Infrastructure

The source of raw water for the Town is lake Kariba which has a storage capacity of 185 billion cubic metres of water. Raw water is abstracted from the Zambezi River.

The Municipality of Kariba water supply infrastructure comprises the Zambezi water abstraction point that supplies to the Mahombekombe water treatment and pumping station. Also there is the Breezes water abstraction point and pumping station that has a water augmentation program that will see capacity at the Breezes Water Plant being increased from the current 12 mega litres a day to 18 mega litres a day.

The Council operates the following 2No water treatment plants:

## Name

Mahombekombe water works (commissioned in 1960s)

Breezes water works (commissioned in 1999)

Water Reservoir Storage Capacities

**Design & Production Capacity (Daily)** 

9ML/ day Design Capacity 6ML/day Production capacity

12ML/ day Design Capacity 9ML/day Production capacity

Name of Water Storage Site	Supply Capacity in Cubic metres
Nyamhunga	4,500
Batonga	2,000
Baobab	4,000
Hospital	350
Heights	1,135
Gib Coyne	2,000
Camp Hill	110
Mica Point	2,000
Yellow Tree	45
Total	16,140

The efficiency of the current water treatment works averages 90% efficiency @ 10% station losses. The average water supply for the town is 21 hours, and percentage of water supply coverage the whole town is about 98%.

The average supply of treated water for the town on a daily basis is 15ML/day against an average demand of water for the town on a daily basis of 18ML/day. The current supply capacity is not adequate to meet 2-day retention time. Water augmentation measures are required to meet the deficit, especially with the coming on board of the Kasese new location. An additional 6ML/day will be required as a water supply augmentation measure.

The treated water for human consumption currently meets Standards Association of Zimbabwe (SAZ) and World Health Organisation (WHO) standards and ratings. The water distribution channels in the town are satisfactory.

At present, there is no water rationing in Kariba. Gaps without water range from 1-5hrs in selected areas.

The volume of non-revenue water per year is 60% @ 3667ML/Yr. (2023 water statistics compilation). There are 3 public water taps/points, with no meters at Nyamhunga, Batonga & Mahombekombe markets.

The major causes of water leakages within the water distribution network include:

- Rusting of Old GI pipes in Mahombekombe.
- Pressure in Old AC pipes, pumping mains.

• Vandalism by elephants.

The last regular upgrading and replacement of obsolete equipment was performed as follows:

- 2021- installation of new pumps (replacements in selected stations)
- 2022, rehabilitation of Hospital line (replacement)
- 2024- Filter bridge and media replacement @ Breezes station.
- There has been no major upgrading in recent times.

There are no alternative sources of portable water within the local area and there are no boreholes under Council's administration.

The plans a to ensure adequate supply of quality water in the long run include Water augmentation plans for additional 6ML/day (Upgrading Breezes water treatment plant)

# 2.8 Public Sewerage Services

Kariba uses the Biological Treatment sewer system. It has 2No sewer treatment plants, both of which are operational:

- Mahombekombe Ponds commissioned in 1960s
- Nyamhunga Ponds commissioned in 1970s

The current processing capacity of the sewer treatment plant is: Capacity 3,8ML/day, Daily Production 3,6ML/day.

The Municipality's waste water treatment plant has a capacity to treat about 3.2 megalitres of waste water per day and the coverage of waste water treatment and collection is 100%.

All high density housing units are connected to the public sewer system.

The Council currently experiences sewer spillages and blockages in the following Municipal areas:

- Nyamhunga 1,2,3
- Batonga
- Mahombekombe
- DA camp
- Heights septic soakaways

The major causes of sewer blockages and spillages include:

- Silting in mains.
- Dumping of foreign materials, animal hides.
- Overload due to population growth.
- Silting in mains.
- Dumping of foreign materials, animal hides.
- Overload due to population growth.

To manage sewer spillages Council has put the following measures in place:

- Rehabilitation exercise is on-going.
- 24/7 sewer un blocking team
- De-silting and sewer maintenance team
- Raising of low lying manholes.

#### 2.9 Storm water Drainage and Public Drains

The council's water drainage system up to standard in some areas but below standard in others. Improvement of drainage is required in some areas, especially given the nature of the terrain in the Town.

Some of the residents do illegal dumping in drainage systems despite that the council has scheduled collection of refuse. It is an area that need continuous awareness campaigns to educate such residents of the dangers associated to blockages of public drainage.

The land is generally sloppy that it drives away flows towards the lake. Possibility of flash floods is minute.

#### 2.10 Solid Waste Disposal Infrastructure

The Municipality has a refuse compactor, two refuse compactor trucks, 1 refuse truck and a tractor for solid waste collection. The Council is currently making strides to upgrade its dumpsite to a land fill site. The area has already been fenced and electrified.

#### 2.11 Public Lighting

Distribution of public lights

Tower lights	<b>Working</b> n/a	<b>Not working</b> N/a	<b>Total</b> N/a
Conventional Street lights	160	166	326 (some on prepaid meters)
Solar lights	410	30	440

Examples of areas or streets with no street lights include Batonga area streets, Nyamhunga 1,2,3 area streets and Heights area feeder street. Every Budget year 2021-2025 {220 streetlights to be installed/budget year).

The possible dangers of not having public lighting in the Municipal area are Humananimal conflicts. Council follows a weekly routine to attend to faulty street lights.

#### 2.12 Existing Health Facilities

<b>Owner/Operator</b>	Status	Name/Location
Government	District Hospital	<ul> <li>Kariba District Hospital/Heights</li> </ul>
Council	Clinics	<ul><li>Nyamhunga</li><li>Mahombekombe</li></ul>
Private	Clinics	<ul> <li>Mothercare</li> <li>Lighthouse</li> <li>MARS</li> </ul>
		<ul><li>Neptune</li><li>InterAfrica</li></ul>

#### Source: Council/Ministry of Health and Child Welfare

The following were noted with respect to Health facilities:

- a) The majority of the population in Kariba lives in Nyamhunga Township. This area is only served by a clinic. Residents indicated that it is over-burdened. There were suggestions that it is either upgraded to a higher level facility or that another/second clinic be established in Nyamhunga.
- b) Transport to the District Hospital at Heights also appear to be problematic for the residents of Nyamhunga in the case of a health emergency. This may be assisted by the provision of a proper and efficient ambulance service or by the upgrade of Nyamhunga Clinic to a higher level health service facility.

#### 2.13 Existing Education Facilities

#### **Primary Schools Owner/Operator** Name/Location Government • Nyamhunga Primary School Kariba Heights Primary School Council • Nyanhewe Primary School Mahombekombe Primary School • Private Charara Primary School • Lake View Primary School • Elite Primary School •

Source: Council/Ministry of Primary and Secondary Education

#### Secondary Schools

Private

<b>Owner/Operator</b>	Name/Location		
Government	Nyamhunga High School		
Council	Mahombekombe Secondary		

- Mahombekombe Secondary School
- Patsaka Trust School
  - Kariba Academy

# Source: Council/Ministry of Primary and Secondary Education

The following were noted with respect to Education facilities:

- There is no formal boarding school in Kariba Town primary or secondary
- There is no technical training or tertiary education institution in Kariba. •

#### 2.14 **Recreational Facilities**

The Municipality has a 5,000 seater Nyamhunga Stadium which hosts Premier Soccer League matches. It also owns Chaminuka Stadium which is fit to host lower divisions and social league matches.

The town also houses private recreational boating facilities, a private health fitness club abd gym, swimming pools (Mopani Bay Camp site), Caribbea Bay Hotel, Cutty Sark Hotel, Tamarind Lodges, etc.

Besides the stadiums, there are no dedicated indoor sports and recreational facilities in either Mahombekombe or Nyamhunga Townships.

#### 2.15 **Environmental Management issues and the Zambezi Biosphere**

The Municipality of Kariba is located in a largely national parks area which has a variety of game animals (the 'Big Five' as well as zebra, giraffe, impala and other smaller game species). The town is also located on the edge of the largest man-made Lake in the world which is a major tourist attraction.

The Lake Kariba is the largest man-made lake in Africa, offering stunning views and water-based activities is part of the Zambezi Biosphere which is a UNESCO designated world heritage area that stretches from Victoria Falls through Kariba to Mana Pools. These are vital areas for ecological conservation and sustainable human development that contains riverine and terrestrial ecosystems unique to the sub-continent.

The prime areas within the Municipality of Kariba's jurisdiction should be reserved for conservation and safari based tourism facilities through establishment of planning mechanisms that will protect the precious wildlife and biodiversity.

There are various environmental issues that need to be taken into account when planning for Kariba Town, including, but not limited to:

• The preservation of the environment

- Prevention of pollution to the Lake
- Preservation and development of marine resources
- Management and preservation of wildlife resources around the municipal area
- Management of human- wildlife conflict
- Biodiversity management
- Climate change management
- Environmental pollution issues, including sewer and solid waste disposal strategies
- Water supply adequacy for both the human and animal populations
- Relationship and management between urban areas and national parks areas and jurisdictions

# 2.16 Land ownership

Land in Kariba is currently owned in the following categories

- Zimbabwe Power Company Generation station and Power line servitudes
- National Parks Land, including the Lake
- Other State Land
- Municipal Land
- Tourism sites
- Private land
- Commonage

The matter of land ownership is also addressed further in the Written Statement to the Master Plan.

The Municipality seems to be in need of more development and expansion land.

#### 2.17 Local Development Plans

There are areas in the town that may require short to medium term action by the Municipality in terms of planning and development (or redevelopment).

These plans could be (as defined by planning laws):

- Local Development Plans
- Local Priority Plans
- Local Subject Plans
- Layout Plans

These areas include:

- The proposed central business district (CBD)
- Mahombekombe redevelopment
- Mopani Bay commercial node
- Mica Point Vacant Land
- Kariba Township Vacant land to the northern boundary (opposite side of Nyamhunga Township).

#### 2.18 Available Land Development Opportunities

Project	Description
Batonga Schools	<ul> <li>Primary school stands +/-4 hectares of land. Ready to build.</li> <li>Secondary school +/-12 hectares of land. Ready to build.</li> </ul>
Batonga Flats development	<ul> <li>Three approved and designated stands measuring 1.08 Ha, 1.1162 Ha and 0.3415 ha. Ready to build.</li> </ul>
Batonga Polyclinic	• In a medium density zone, the stand is approximately 11,000 hectares in size. Building plans already available
Windsor Commercial stands	• Overlooking the Lake with excellent views are 19 stands measuring a minimum of a hectare each. Ready to build.

# Source: Council/MOK

#### 2.19 Investment and Partnership Arrangements

The Council is willing to enter into partnerships for land and infrastructure development. Such partnerships can involve Council providing the land, infrastructure and administrative support and the investors contributing development finance. The structure of such partnership or Joint Venture arrangements can be discussed and agreed with Council on a case-by-case basis.

Obviously the Council will also be able to sell land outright to a potential investor developer at agreed prices and terms for approved new land development projects. Council will provide all the required support for such initiatives.

## 2.20 Other Matters

- Time taken to process/approve business licence applications a temporary licence can be availed within a week whilst a substantive licence can be processed within a month.
- Time taken to process building plans the Municipality takes about 7 days to process building plans.

# CHAPTER 3 STUDY METHODOLOGY

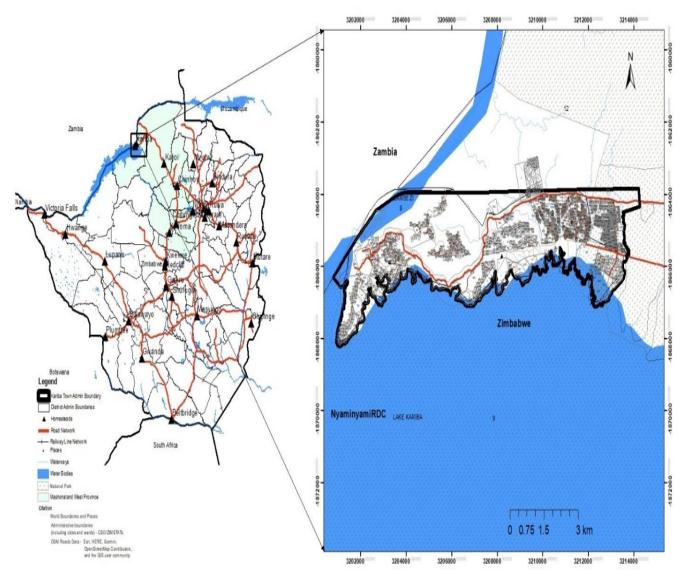
#### 3.0 Materials and Methods

This chapter outlines the study methodology in terms of materials and methods used for data collection and analysis. The study adopted a trans-disciplinary methodological approach based on mixed methods coupling quantitative and qualitative approaches.

A systematic approach was adopted for data types identification and collection, storage and analysis in Socio-Economic Studies, Physiographic Analysis, Land Use Studies, Traffic and Transportation Analysis and Bulk Infrastructure Scoping. The subsections below illustrate the study approaches and methods from Data Types Identification, Collection and Analysis for the thematic areas.

#### 3.1 Study Area

Section 13(1)(a) of the Regional, Town and Country Planning Act, Chapter 29:12, provides that the Local Planning Authority 'shall undertake a study of the planning area and, to the extent it considers necessary, of any neighbouring area, examining such matters as it considers may be likely to affect the development or redevelopment of the area or the planning of its development or redevelopment'. The study boundary will comprise of the Kariba Municipality Boundary and the area immediately around it in the neighbouring District of Nyaminyami RDC e.t.c (see figure below).



**Study Area Map** 

Kariba Town is an urban Local Authority in Mashonaland West Province located in the North western region of Zimbabwe adjacent to Lake Kariba and on the border between Zimbabwe and Zambia. The district is surrounded by Nyaminyami RDC except to the west where it shares a boundary with Zambia

# 3.2 Data Collection Methodology

Information and data were obtained and collected using various methods as shown below:

## 3.2.1 Secondary Data and sources

- Desk studies and existing literature review
- Existing reports, plans and maps
- Various existing District surveys and Statistical data reports
- Previous Planning reports
- Previous Research Studies, including dedicated research and academic theses

# 3.2.2 Primary Data and Sources

- Personal interviews
- Questionnaire Administration (General and Theme specific questionnaires)
- Physical Surveys
- Site and Field Observations
- Stakeholder meetings and workshops
- Community Outreach Meetings
- Meeting minutes and notes
- Pictorial evidence
- Electronic evidence audio and video records

#### 3.2.3 **Questionnaires Content**

All questionnaires were designed to address and establish data from all the stakeholders on the following, *inter alia*:

- Existing land development, infrastructure and service provision
- Identify available natural and other resources and how they are being exploited
- Challenges and areas of deficit in existing resource utilization and service provision, including identification of 'low hanging fruit'.
- Service delivery by Council
- Opportunities available
- Recommendations on how to deal with challenges
- Expectations, wishes and plans
- Any other pertinent matters

# 3.2.4 Ward Outreach Programs

Ward outreach programs were community meetings where the Master Plan team met communities in their own areas/spaces and openly interacted with them.

Rationale of the Outreach Programs

- Face to face meetings with Resident communities in their own space
- 'Town Hall meetings or 'Community meetings'
- Meet local leadership including Councillors, Community Elders and residents in their own wards.
- Engage with Communities on a 'personal' level.

#### Outreach Meetings Modus Operandi

The Outreach meetings typically involved the following:

- Introductions
- Address by the Planners on the Spirit and Purpose of the Master Plan Preparation exercise and the meeting
- Plenary session where all residents present and attending contribute to the spirit and purpose of the meeting
- Planning team takes physical meeting notes, an attendance register and either an audio or video recording (or both) of the proceedings for record purposes.

The outreach programs physically reached at least 1,000 people in total.

All wards had Outreach meetings held.

The biggest attendances were in Mahombekombe and Nyamhunga, The Kariba Heights produced the smallest attendance.

#### 3.2.5 Other Media Outreach Programs

- Kariba Hard Talk WhatsApp Group +/-1000 participants
- Greater Kariba District WhatsApp groups +/-1000 participants
- Kasambabezi FM Phone in Radio Program 4No sessions of one hour each number of participants indeterminate.

#### 3.2.6 Comment on the Data gathered during the outreach programs

- a) The attendance was very good and positive and enabled researchers to gather a lot of data on many varied issues from many respondents as summarized above within a short space of time and reaching a wide range of residents.
- b) The issues which were being raised and responses to questionnaires tally with the responses that the researchers got

from secondary data collections and responses from the organizations and professionals

- c) This public participation process enabled fulfilment of the requisite statutory requirements and also got the critical buy in from the various stakeholders
- d) However, researchers were aware of the possible biases that may arise from such data gathering methods such as
- Sample may not be fully representative for example children and younger people may not attend such meetings
- At such meetings certain leaders, representatives or dominant individuals tend to carry the day and their views may appear to be everyone else's view
- Participants appeared not to fully appreciate that a Master Plan is a futuristic planning tool which needs their input in its preparation process and instead used the platform as a grievance airing platform
- Some participants took the Outreach meetings as platforms to air their general grievances and make outright political statements. This was tempered by the Planning Consultant in attendance, acting as an independent arbiter and consultant.

These biases were balanced off through other data gathering methods that were used by the research team

# **3.3** Data Types, Collection and Analysis

The study acquired primary and secondary data (aspatial and spatial) for the thematic areas identified as follows:

#### **3.3.1** Data Types and Data Collection

#### a) Land Use and Socio-Economic Data

Land use and socio-economic data was collected from cadastral records and land use maps for parks, national rural homesteads data and ground coupling the Surveyor General's Topographic Maps and Cadastral Diagrams. Socio-Economic Surveys were administered using key informant interviews and residents' questionnaires. Data was collected using stratified random sampling protocol. The socio-economic survey was carried out to establish the Land Use, Demographic and Socio-economic profile. Statistical Package for Social Sciences (SPSS) and XLT Stats Software was adopted for coding and data analysis. Spatial statistical techniques including spatial overlay analysis were adopted in a GIS format to characterise the spatial clusters of various socio-economic variables including how the experiences of space users vary in space and time.

# b) Environmental Data

Environmental data as derived from Landsat Satellite to derive and characterise land use/cover variables. Terrain and hydrological data was derived from the Digital Elevation Model Satellite Data. Water bodies data was derived from Open Stream Map.

#### c) Population and Demographics

Population Data was derived from ZIMSTATs as well as remotely sensed data.

#### d) Water and Sanitation

Water and sanitation data was derived from field work and council records.

#### e) Roads and Infrastructure Data

Road infrastructure data was derived from Open Stream Map and cadastral data from the Surveyor General's Office.

## 3.4 Data Analysis

Statistical Data analysis was done in ArGIS software for satellite and georeferenced data. Whereas, socio-economic data was coded and analysed in Statistical Package for Social Sciences (SPSS) and XLT Stats Software was adopted for coding and data analysis.

Narrative data was also taken into account to either confirm or corroborate the statistical data as derived from administered questionnaires.

# CHAPTER 4

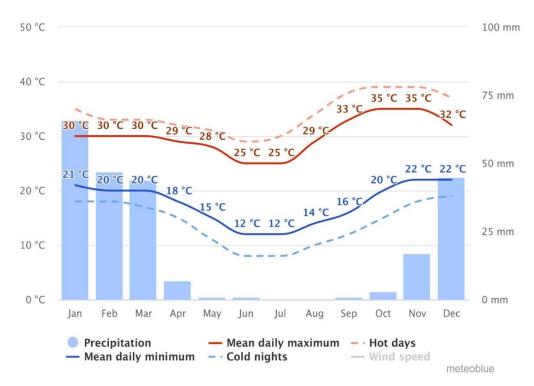
# KEY STUDY FINDINGS – STATISTICAL DATA ANALYSIS (QUESTIONNAIRES)

## 4.0 Environmental and Physical Characteristics

#### 4.1 Microclimate

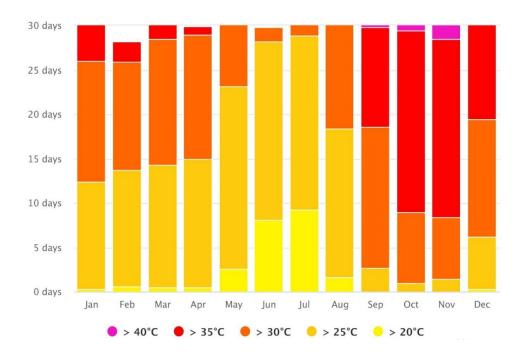
#### Temperature and Precipitation

Kariba has a mean daily maximum temperature (solid red line) for is around  $35^{\circ}$ C (the hottest days are over  $35^{\circ}$ C -see dashed red line) and mean daily minimum temperature (solid blue line) of  $12^{\circ}$ C (the coldest days are below  $12^{\circ}$ C -see dashed blue line) over the last 30 years. In terms of precipitation the area experiences monthly precipitation above 150mm are mostly wet, below 30mm mostly dry (See figure below).



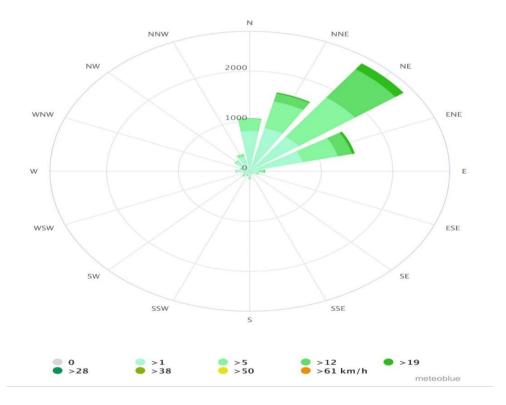
#### Average Temperature and Precipitation Patterns for Kariba Town

In terms of temperature the ranges September to December are the hottest months of the year. Whereas the months of May to August are moderately warm and within parameters of human conform. The Figure below illustrates the temperature variation model for the study area.



#### **Temperature Variation Model**

The wind rose for Kariba shows how many hours per year the wind blows from the indicated direction. The most dominant wind blows from South-West (SW) to North-East (NE). This wind has a characteristic strong westwind, which makes crossings from East to West very difficult especially for sailing boats. The Figure below illustrates the wind rose for the study area

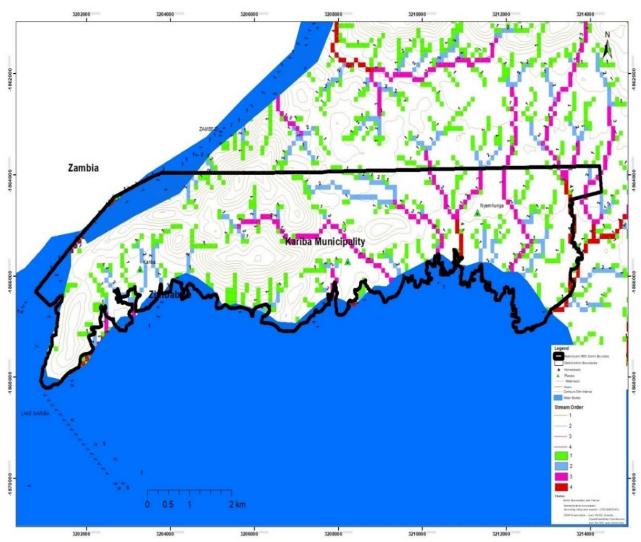


Wind Direction Observed for Kariba

## 4.2 Drainage System, Catchment Delineation and Wetland Characterization

#### Stream Ordering and Catchment Delineation

The district has one Catchment Delineated i.e. the Kariba Catchment. Whereas in terms of streams orders a hierarchy of six (6) stream orders i.e. first order streams, second order streams, third order streams up to sixth order streams was derived from a Digital Elevation Model in a GIS. Of the stream orders delineated the third and subsequent order streams are of ecological importance (perennial flow streams/rivers/swampy areas/wetlands/Lake), while first and second order streams have limited ecological importance, since they represent paths of least resistance to flow in the event of flooding or rainfall run-off thus represent ephemeral flows. However, while the second order streams up to 6<sup>th</sup> order streams should not be interfered with during land development as they correspond with wetlands, whereas first order streams may have a bearing of infrastructure proposals that address storm water drainage, river crossing points including protection of properties from run-off as they represent paths of least resistance in the event of a run-off.

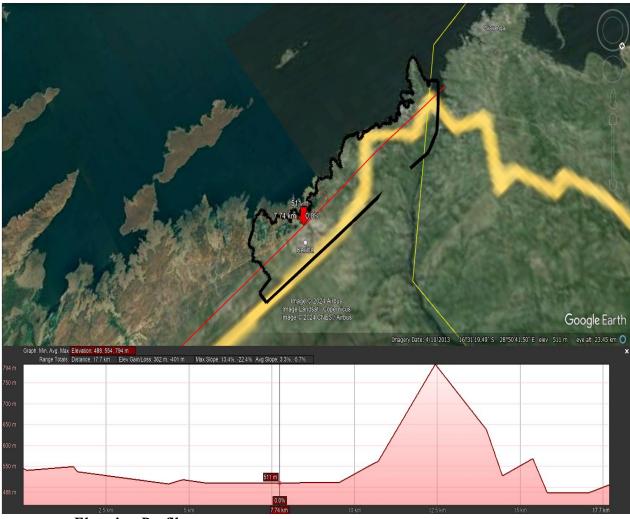


Stream Ordering and drainage delineation.

# 4.3 Terrain

# Elevation Profile

The elevation profile for the area ranges from 488m above mean sea level to 791m above mean sea level (hereafter a.b.m.s.l) (see Figure below). The variation in elevation values has a bearing on distribution of service infrastructure particularly sewerage infrastructure.



**Elevation** Profile

# 4.4 Biodiversity and Wildlife

In terms of vegetation type the dominant vegetation cover types include miombo dominant), most dominant), (most mopane (second acacia and terminalia/combretum. The region is very arid and thus sustains thorny bushes and shrubs. The Town is located around Game Parks and thus is important as a wildlife corridor. A variety of game animals utilise the same landscape with humans creating a unique biophilic urban landscapes. Several undeveloped land parcels and patches act as wildlife corridors. It is important that such areas be reserved from development and that the Town assumes a dispersed development strategy as opposed to densification.

#### 4.5 Disaster Profile

The disaster risk susceptibility profile for the district makes it prone to earth tremors and flooding. Flooding events are related to water level rise within the Kariba Catchment and localised flash floods only in the event of storms.

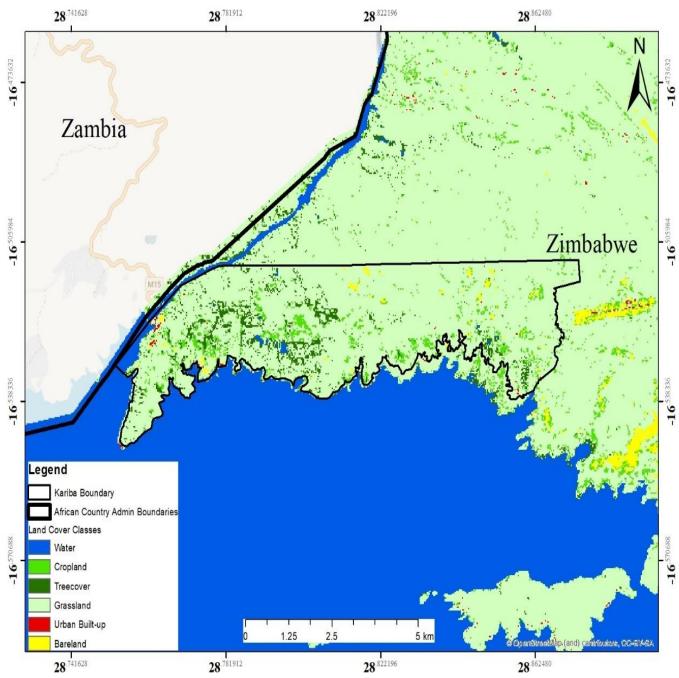
#### 4.6 Implications for Planning

Environmental Data has important implications for planning. Primarily stream ordering data will inform development of roads and drainage infrastructure. Whereas wildlife corridors should guide urban development to minimise human-wildlife conflict.

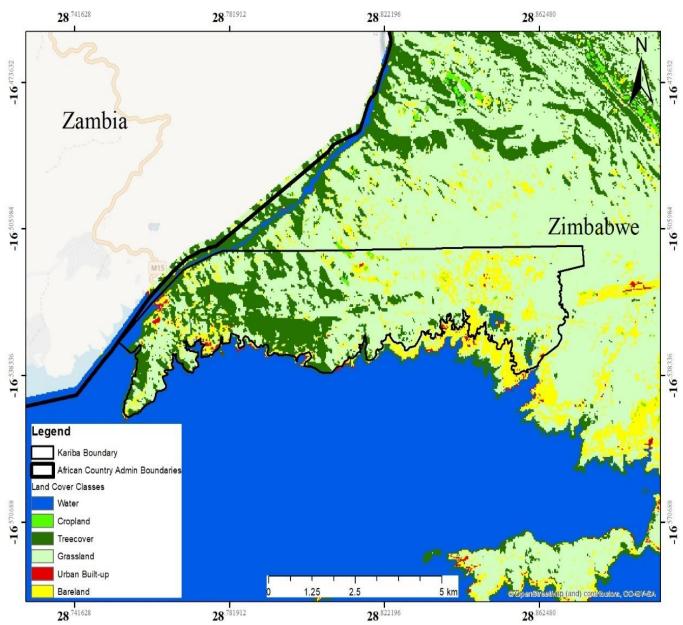
#### 4.7 Land Use Studies

Land Use-Land Cover

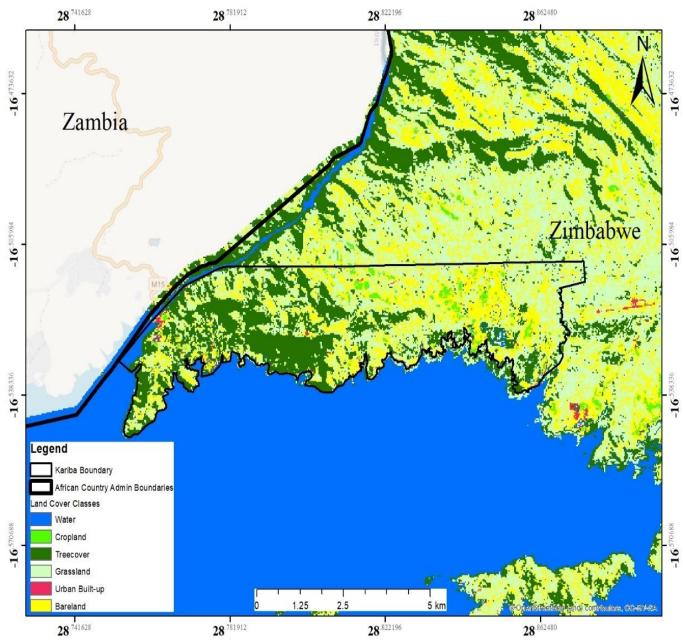
Land Use – Land Cover data is useful indicator of the state of interaction between human development and the environment in space and time. The study observed that Grassland cover has been increasing between 1993 and 2023. Remotely sensed data indicated that in 1993 grassland cover type constituted 30 hectares and in 2003 was 1708 hectares, in 2013 it was 1021 hectares and in 2023 is was 1275 hectares. Whereas urban built-up area (impervious surface/tarmac has been constantly increasing from 21 hectares in 1993, 22 hectares in 2003, 70 hectares in 2013 and 165 hectares in 2023. The bare ground cover type also indicative of human disturbance (unpaved surface area, land under serving e.t.c) was around 6 hectares in 1991, 338 in 2003, 460 in 2013 and 771 hectares in 2023. Tree-cover or forested area has surprisingly been on a steady increase from 161 hectares in 1993, 970 hectares in 2003, 956 hectares in 2013 and 727 hectares in 2023 (see figures below).



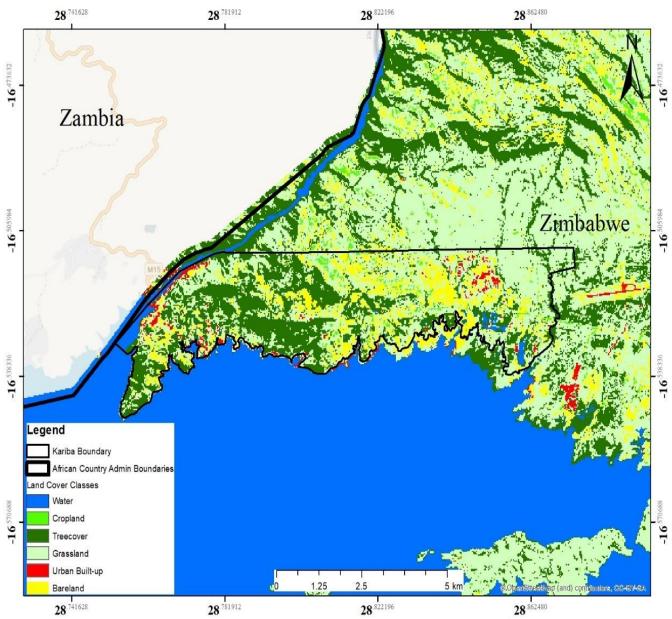
Kariba Municipality land use/land cover map for 1993



Kariba Municipality land use/land cover map for 2003



Kariba Municipality land use/land cover map for 2013



Kariba Municipality land use/land cover map for 2023.

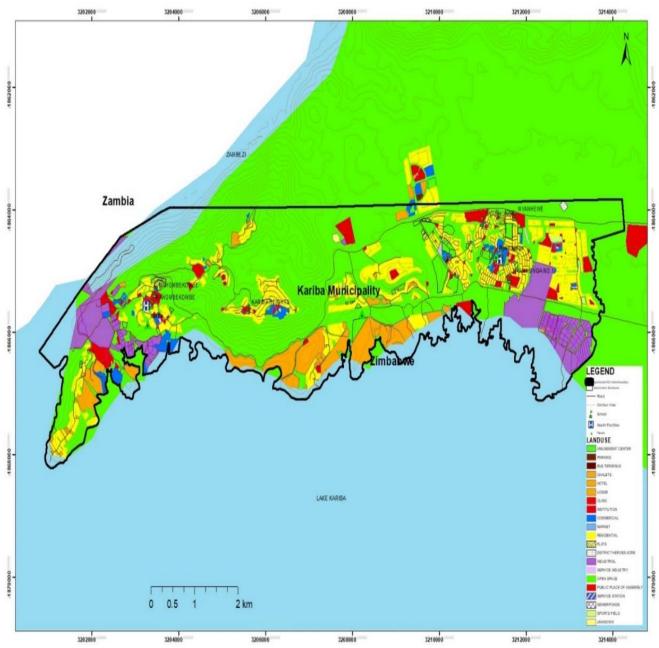
# 4.8 Land Use Classification

The study observed a well-planned and structured land use system for Kariba. The dominant land use is open space reservations consistent with the town's open spaces (see area covered by green spaces) which serve as wildlife corridors. The major threat facing these corridors is fragmentation arising from infill development and subdivisions.

The second dominant land use is residential (area coloured yellow). High density is in Nyamhunga, whereas low density is in Baobab towards the town centre, these have been extending over time marked by recent subdivisions outside the urban boundary towards the north. The light and general industrial use (land parcels hatched purple) is around the Mahombekombe and south east.

Consistent with the resort town heritage the bulk of the water front has hotels, lodges and chalets (see figure below). major commercial uses are situated in

Mahombekombe, Kariba Heights and Nyamhunga. It is emerging that the municipality has in principle exhausted land for expansion given the wildlife corridor heritage.



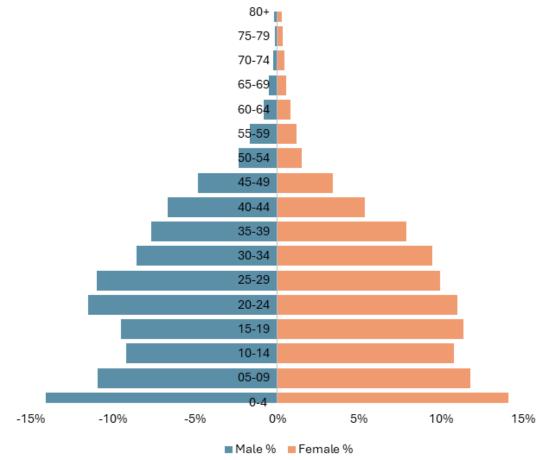
Land use classification scheme for Kariba Municipality

#### **4.9 Demographic Characteristics**

#### 4.9.1 Population Structure

#### 4.9.1.1 Age-Sex Pyramid

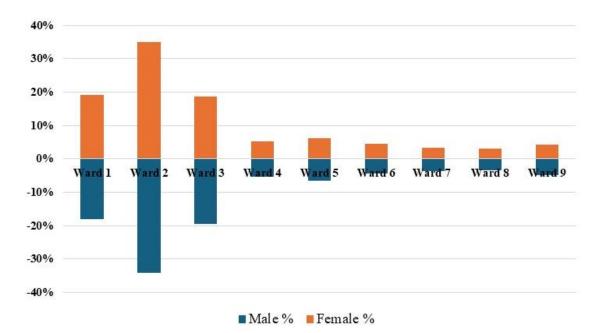
Kariba has a population of 31921 people. 53.04% (16931) are female and 46.96 are male (14990). The cross-sectional demographic profile of the study area indicated that demographic profile of Kariba is largely youthful i.e. 1-40 years of age (accounting for 84.5% of which 46% are male and 54% are female). The ageing (+65 years of age) population is extremely low accounting for 1.35%. Whereas the working class 18years to 64 account for 52.6% of the population. Children under the age of 19 account for 46% of the population. The results indicate that the study area has the bulk of its population in the productive/youthful age group, hence a highly youthful population and decreasing elderly resident population (see figure 3.11). The population profile influence land usages and required socio-economic facilities, hence has important implications for planning.



Age Sex Pyramid for the Kariba Municipality Planning Area

#### 4.9.1.2 Population Density

The study observed that in terms of population density Ward 2 is the most populous ward followed by ward 1 and 3 respectively. Whereas wards 4 to 9 has almost similar densities. Population density has a critical bearing on service delivery and demand for critical services and support infrastructure.

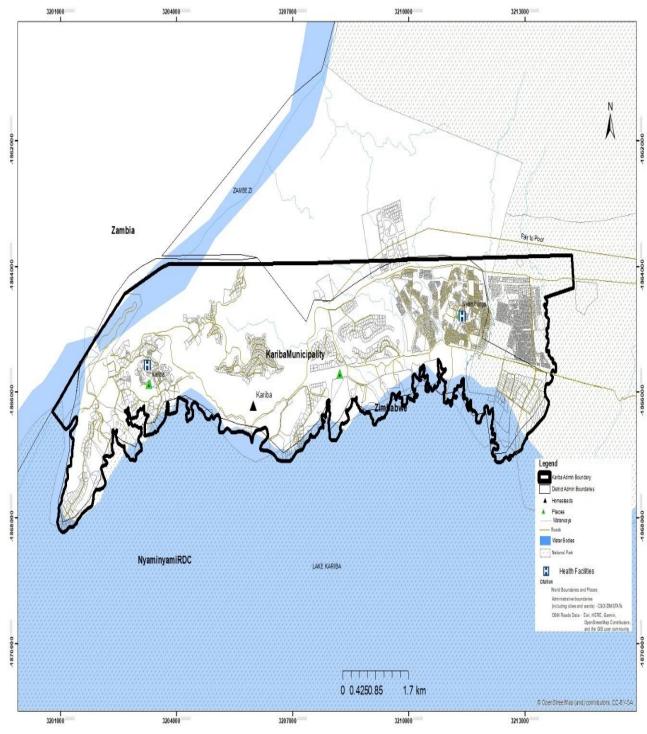


Kariba Wards Population Stratification

# 4.9.2 Health

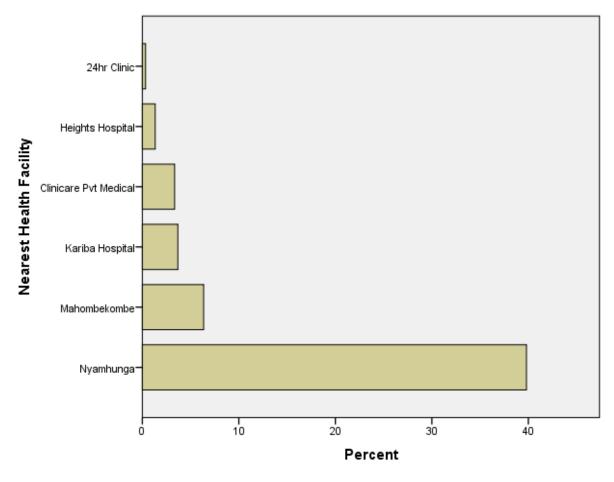
# 4.9.2.1 Distribution of Health Facilities

The study established 2 public health facilities one in Nyamhunga and the second in Mahombekombe. The provision of health facilities for the town is not correlated with the population. For instance, the catchment of Nyamhunga Health Centre has 72.4% of the population.



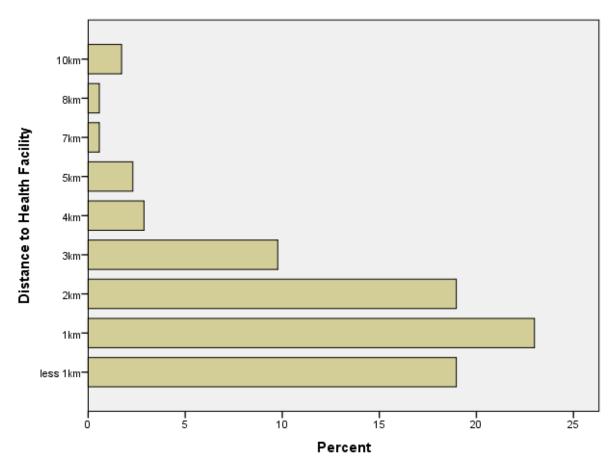
**Distribution of Health Facilities** 

4.9.2.2 Preferred Health Facilities and Travel Distance
Mahombekombe (11.6%), Heights Hospital (2.4%), Nyamhunga (72.6%), Clinicare Pvt Medical (6.1%), Kariba Hospital (6.7%) and 24hr Clinic (0.6%).



Nearest Health Facility

In terms of distance to health facilities it was observed that: patients who travelled less than 1km were 24.1%, 1km were 29.2%, 2km were 24.1%, 3km were 12.4%, 4km were 3.6%, 5km were 2.9%, 7km were 0.7%, 8km were 0.7%, and 10km were 2.2%.

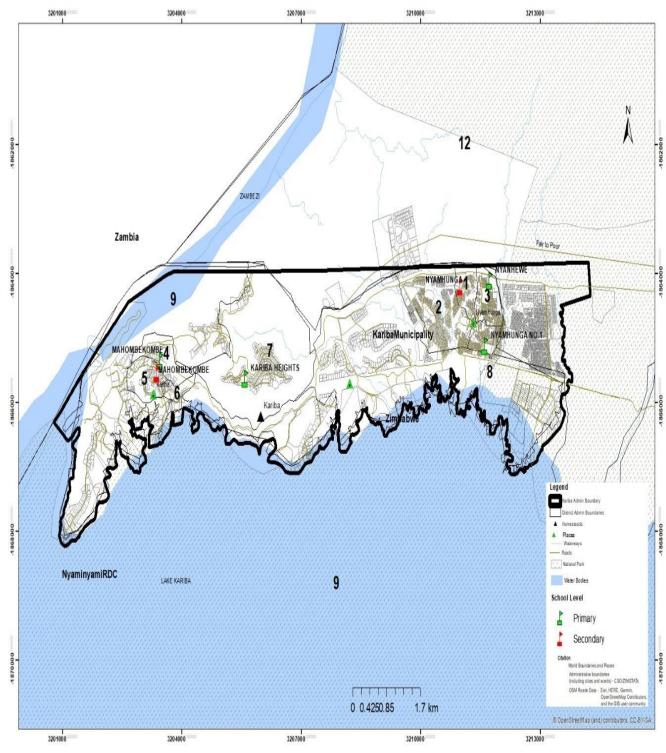


Distance to health facilities

# 4.9.3 Education

#### 4.9.3.1 Primary and Secondary Education Facilities

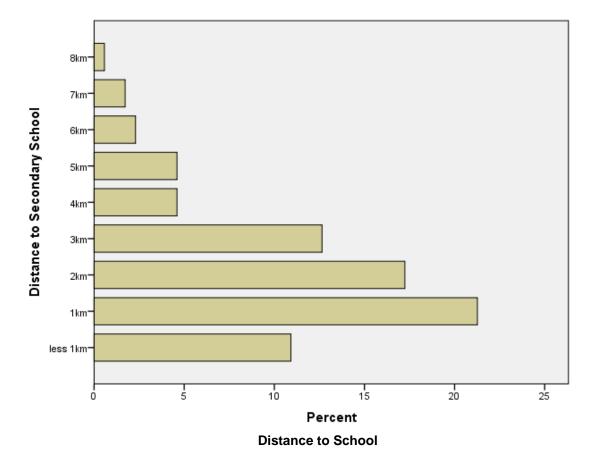
The study established that the municipality has 4 primary schools (Nyamhunga 1, Kariba Heights, Nyanhewe, and Mahombekombe Primary Schools) and 2 secondary schools (Nyamhunga and Mahombekombe Secondary Schools). There is scope for more educational facilities given the population trajectories estimated at 31921 people.



Distribution of Primary and Secondary Education Facilities

# 4.9.3.2 Nearest Secondary School and Travel Distance

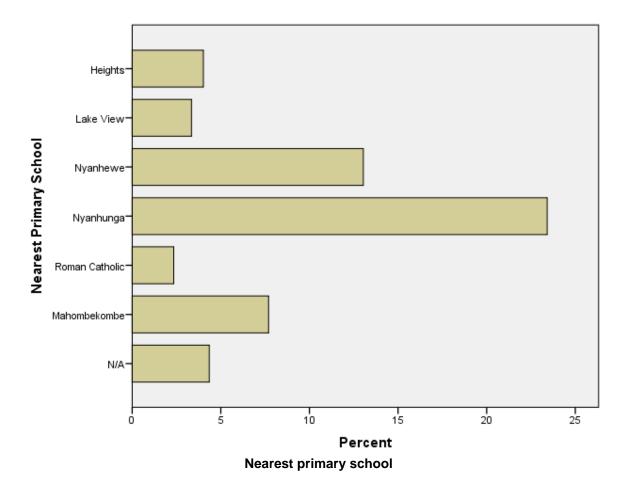
Nearest secondary schools were Mahombekombe (20.1%) and Nyamhunga (79.9%). In terms of distance to school it was observed that those that travel less 1km were 14.4%, 1km were 28%, 2kmwere 22.7%,



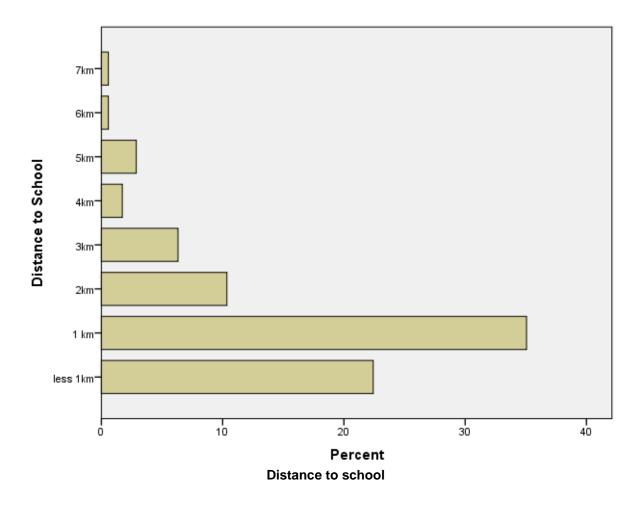
3km were 16.7%, 4km were 6.1%, 5km 6.1%, 6km were 3%, 7km were 2.3% and 8km were 0.8%.

4.9.3.3 Nearest Primary School and Travel Distance

Mahombekombe (14.3%), Roman Catholic (4.3%), Nyamhunga (43.5%), Nyanhewe (24.2%), Lake View (6.2%), Heights (7.5%).



Distances to primary school observed were <1km (28.1%), 1 km (43.9%), 2km (12.9%), 3km (7.9%), 4km (2.2%), 5km (3.6%), 6km (0.7%) and 7km (0.7%).



#### 4.9.3.4 Level of Education

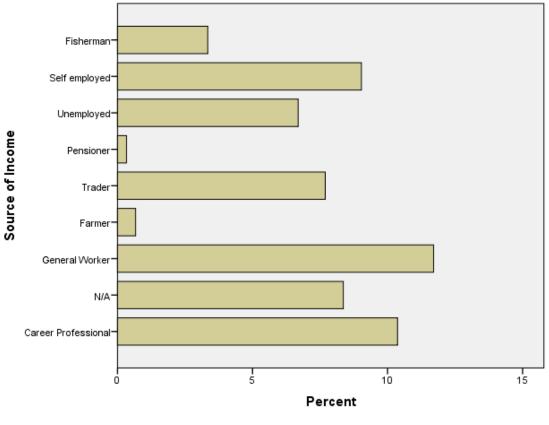
The study observed that 5.7% of the respondents have Never been to School, whereas 8.0% had gone up to <Grade 7, 3.4% up to ZJC, 53.4% up to 0'Level, 6.9% up to A 'Level, 1.7% had a Certificate, 12.1% had a Diploma, 8.0% had a Degree and 0.6% Master's Degree. This Implies the need for more tertiary education facilities such as vocational training centres to prepare the bulk of the population for employment and attainment of a profession. This allowing for ease of integration into the work force and earning a living.

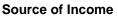
## 4.10 Economy and Consumer Preferences

#### 4.10.1 Employment Status

4.10.1.1 Source of Income

General Worker (20.1%), Career Professional (17.8%), Self-employed (15.5%), Trader (13.2%), Unemployed (11.5%), N/A (14.4%), Fisherman (5.7%), Farmer (1.1%), Pensioner (0.6)





#### 4.10.2 Shopping Facilities

TM (32.1%), Jumbo Complex (1.8%), Zapala (2.4%), Danda (2.4%), Mahombekombe (5.4%), CBD (3.0%), Nyamhunga (15.5%), Kariba Market (1.2%), Zambia (2.4%), 1-9 (3.0%) and 1-3 (31.0)

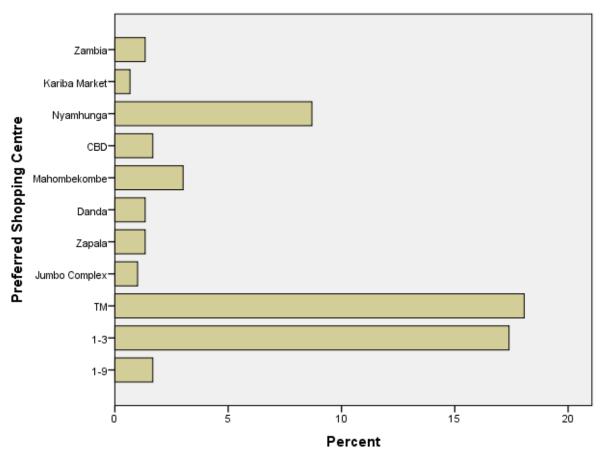


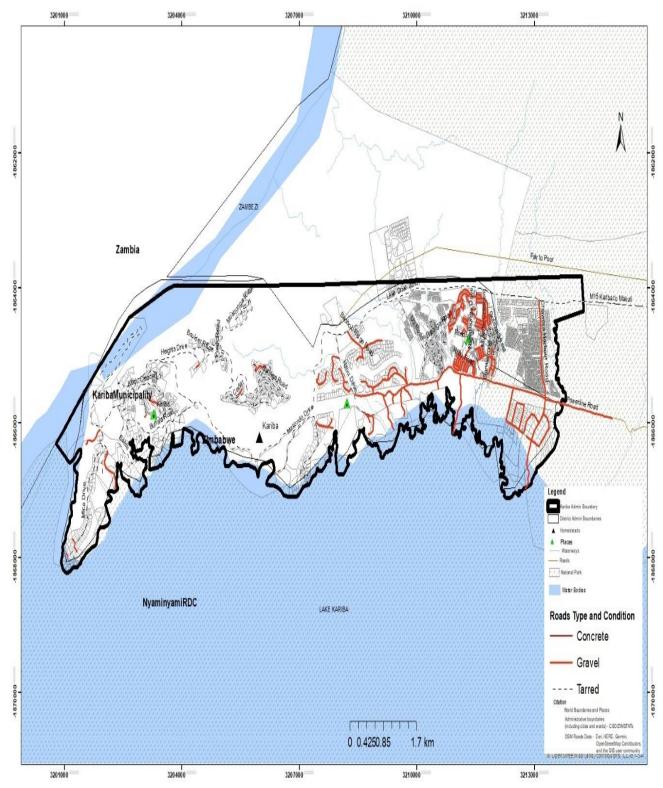
Figure 0.1: Preferred Shopping Centre

# 4.11 Infrastructure

#### 4.11.1 Traffic and Transportation

#### 4.11.1.1 Road network and Street Furniture Condition

In order to assess the condition of roads and streetlights condition in the study area, the Team made visual observation of the roads in the CBD and the residential areas. These observations were then triangulated by the results of the Road Inventory and Condition survey conducted by Kariba Municipality in 2019. The general Visual Condition Index is an integral component of a Pavement Management System. The Visual Condition Index (VCI) is the measurement of the pavement condition of a specific section of road. Although the road drainage system is generally good, the majority of surfaced roads within the study area are in poor shape. Although exhibiting good drainage, the majority of them with the exception of those in the CBD exhibit low V.C.I (below 0.7) meaning poor condition (see Figure 3.15). Most of the roads are classified under earth and gravel roads. Furthermore, the public transport infrastructure such as bus termini and ablution facilities have suffered deterioration. Roads illustrated in red are gravel (i.e. 96 out of 223 (43.1)). and those in stripped black and white are tarred (i.e. 93 out of 223 (41.7%)). Whereas, 1 has concrete (0.5%) Oleander Close)) and 33 roads (14.8%) are unofficial and not serviced.



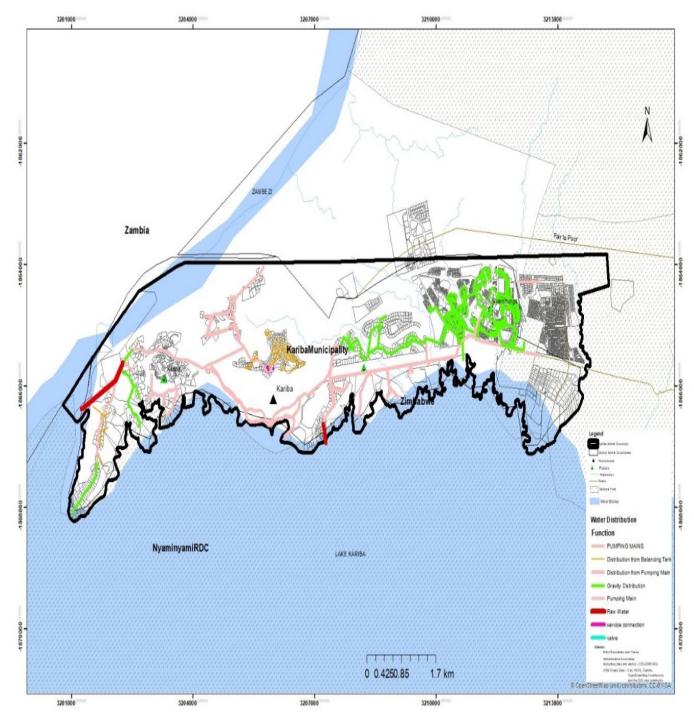
Road network and condition survey

The majority of roads in Nyamhunga (high density) area are earth roads with a V.C.I of less than 0.7, which means that they are in poor condition. This is contributing to poor accessibility by formal public transport, due to the increased vehicle maintenance costs (high frequent breakdowns on vehicle suspension and tire bursts) incurred by the operator, thereby increasing the

vehicle Total Cost of Ownership, (TCO). The vandalized public transport infrastructure and the poorly maintained ablution facilities at bus termini has contributed to the shunning of bus termini and the increased use of undesignated sites as bus stops.

#### 4.11.2 Water Infrastructure

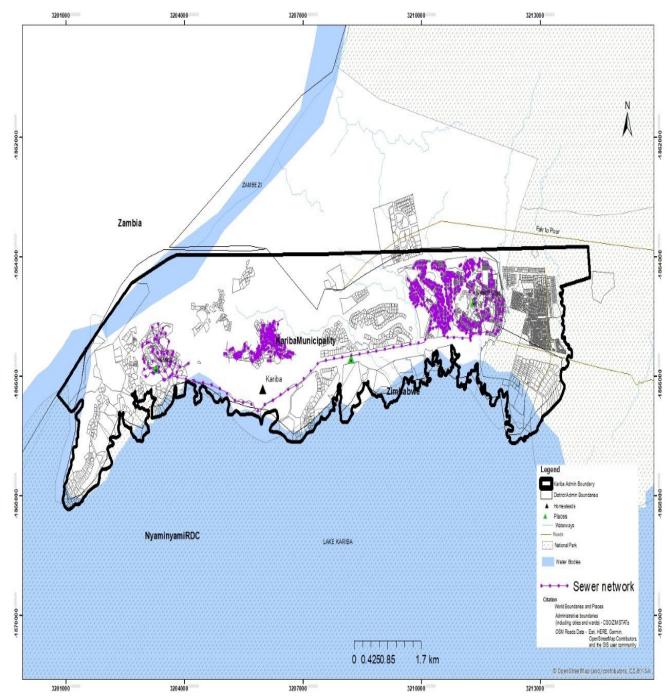
The bulk of Kariba Municipality has access to water infrastructure. The municipality has 2 water abstraction points (illustrated red on the map). Whereas the distribution is either by pumping from mains or by graving from a balancing tank (see Figure 3.16) such as the one installed at Baobab Hill (being the highest peak point in terms of elevation). Areas around Nyamhunga and Kariba Heights receive water distributed by gravity (this area is relatively flat or gently sloping) as illustrated on figure 3.5 with elevation ranging between 513m and 527m a.b.m.s.l. Water connection is yet to be extended to recent settlements and expansion areas.



Kariba water network and function

# 4.11.3 Sewerage Infrastructure

The Kariba sewerage infrastructure network spans over 54.614km. The infrastructure is concentrated in Nyamhunga High density area and some parts of Mahombekombe. Newly developed areas are not connected as well as low density areas, which are under septic tanks. The wastewater is collected and treated at treatment works.



Kariba sewer network and function

#### 4.12 Service Delivery

#### 4.12.1 Service Delivery Expectations

Service delivery is a function of statutory obligations and citizens' expectations of their expectations of the Municipality's obligations to them. The study established that 49.7% of Kariba Residents expect Council to provide all of the following expectations:

Water Supply, Housing Facilities, Road Maintenance, Maintenance of Public Buildings and Health Centres, Educational Facilities, Recreational Facilities and Benefit from Kariba the Lake (1-7). Whereas some isolated services namely: Water Supply (13.6%), Housing Facilities (3%), Road Maintenance (4.1%), Support existing Buildings and Health Centres (0.6%), Educational Facilities (2.4%), Recreational Facilities (2.4%) and Benefits from Kariba (1.2%) (see Table 3.1).

#### **Table 0.1: Expected Services from Council**

Expected Services	Frequency	Percent
Water Supply	23	13.6
Housing Facilities	5	3.0
Road Maintenance	7	4.1
Support existing Buildings and Health Centres	1	0.6
Educational Facilities	4	2.4
Recreational Facilities	4	2.4
Benefit from Kariba	2	1.2
1-7	84	49.7
N/A	39	23.1
Total	169	100

# 4.12.2 Level of Satisfaction with Service Delivery

39.1% were satisfied with service delivery whereas 60.9% were dissatisfied. Excellent (9.8%), Good (20.1%), Average (43.7%), Poor (11.5%), Very Poor (10.3%) and N/A (4.6%).

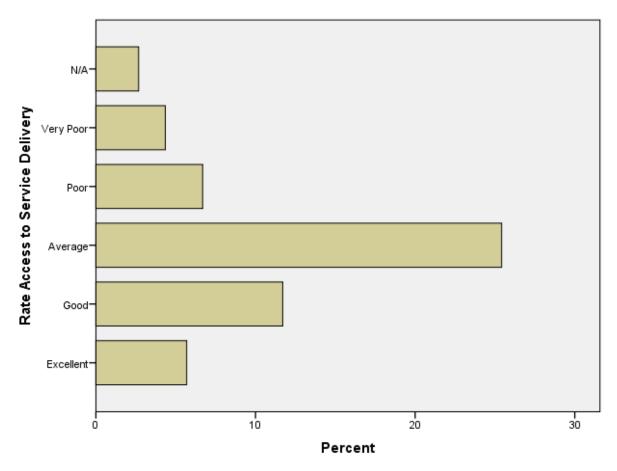


Figure 0.2: Rate access to services

# 4.12.3 The Reason for Non-Satisfaction with Service Delivery

The reasons for Non-Satisfaction with Service Delivery included, Poor Delivery of All Service (21.3%), none collection of refuse (5.7%), Poor water and drainage systems (6.9%), lack of clinics or health facilities (3.4%), Poor Roads (1.1%), Shortage of Water for Domestic Use (10.3%), No Roads and Water Supply (1.7%), Poor Education Facilities (2.3%) and No Shopping Areas (1.1%) while 46% did not wish to let the reason known.

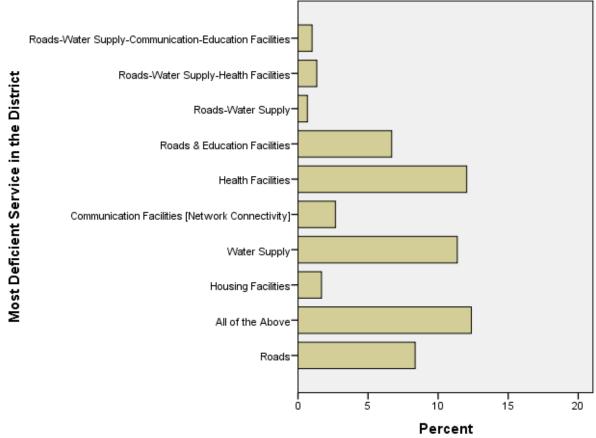


Figure 0.3: Deficient service in the district

#### 4.12.4 Most Deficient Service in the District

In terms of Most Deficient Service in the District residents highlighted that Health Facilities was the most deficient service (20.7%), followed by Water Supply (19.5%), Roads (14.4%) (Roads-Water Supply 1.1%), Roads & Education Facilities (11.5%), Communication Facilities especially Network Connectivity was deemed deficient (4.6%), Roads-Water Supply-Health Facilities (2.3%), Housing Facilities (2.9%), Roads-Water Supply-Communication-Education Facilities (1.7%) while 20% cited that almost all services were not efficient. Road, water supply, education features frequently as pain areas for residents.

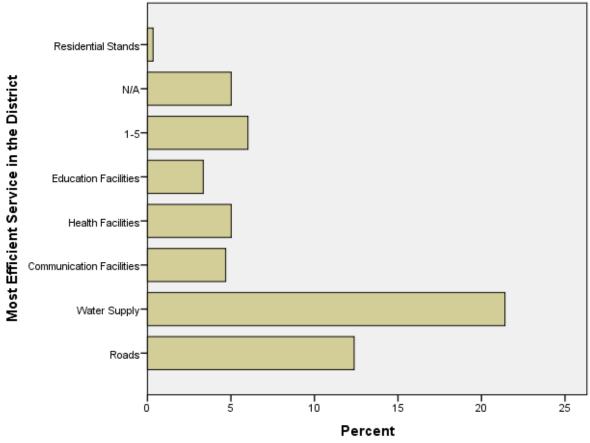
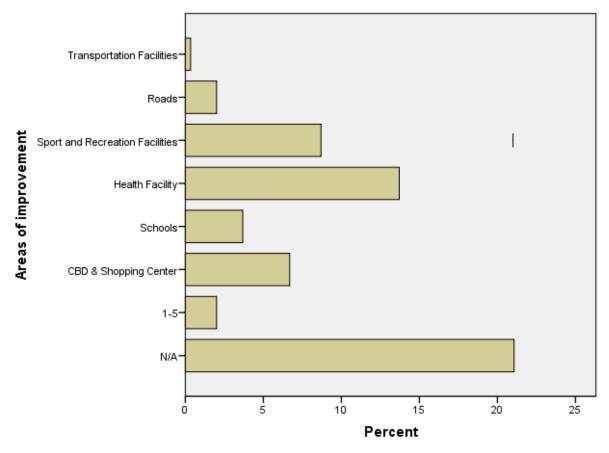


Figure 0.4: Most efficient services

# 4.12.5 Areas in need of improvement

Central Business District (CBD) and Neighbourhood Shopping Centres (11.5%), Schools (6.3%), Health Facility (23.6%), Sport and Recreation Facilities (14.9%), most of the above (1-5 on map) 3.4%)), Roads (3.4%), Transportation Facilities (0.6%).





# 4.13 Resource Exploitation and Suggested Development Projects with wider socio-economic Impact

#### 4.13.1 Unexploited Resources

Naturally occurring resources are key in unlocking the comparative advantage of a district. The study established that Kariba Residents identified the following as critical recourses that are not fully exploited: Water Supply (3%), Solar Energy (4%), Wildlife (17.8%), Land (7.9%), Mining of Minerals (1%), Water-Lakeshore Stands-Tourism-Forests-Wildlife-Solar Energy (10.9%), Wildlife-Mining-Forestry (44.6%) and Land-Water-Forestry (10.9%).

# 4.13.2 Three Most Important Development Projects

Water Supply (4.7%), Educational Facilities (8.5%), Road Construction (2.3%), Health Facilities (1.6%), Recreational Facilities (10.1%), Shopping Mall (17.1%), Fishing (5.4%), Residential (17.8%), All of Above (32.6%).

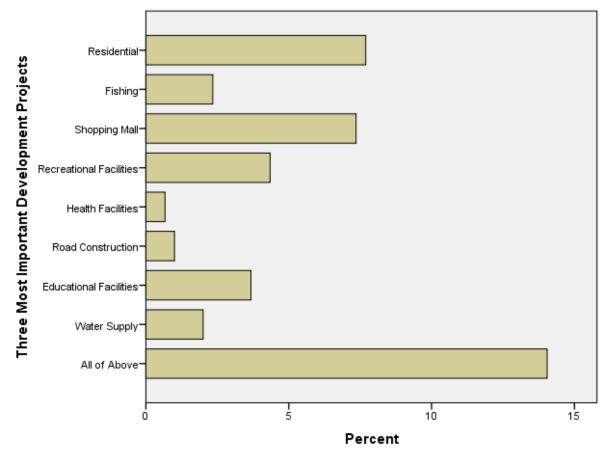
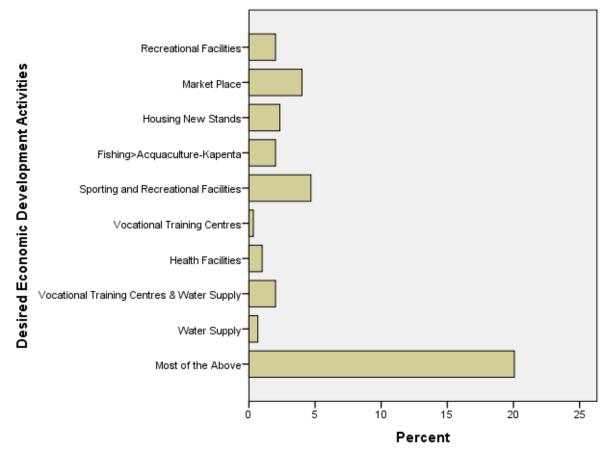


Figure 0.6: Important development projects

# 4.13.3 Desired Economic development Improvements

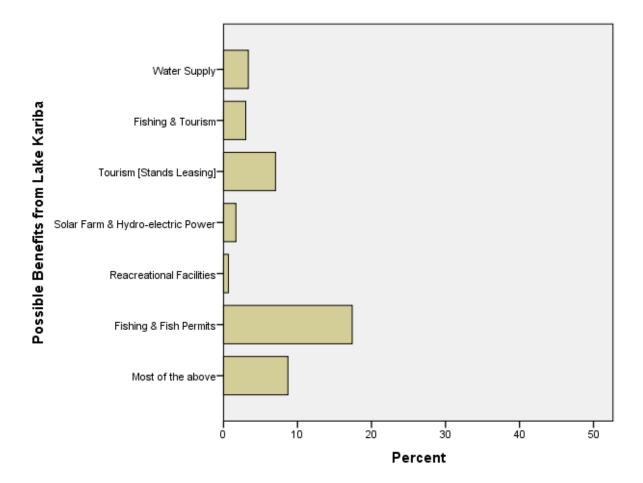
Water Supply (1.7%), Vocational Training Centres and Water Supply (5.1%), Health Facilities (2.6%), Vocational Training Centres (0.9%), Sporting and Recreational Facilities (12%), Fishing>Acquaculture-Kapenta (5.1%), Housing New Stands (6%), Market Place (10.3%), Recreational Facilities (5.1%) and Most of the Above (51.3%).



Desired economic activities

# 4.13.4 Possible Benefits from Lake Kariba

Fishing and Fish Permits (41.6%), Recreational Facilities (1.6%), Solar Farm and Hydro-electric Power (4%), Tourism [Stands Leasing] (16.8%), Fishing and Tourism (7.2%), Water Supply (0.1%) and Most of the above (20.8%).



#### 4.14 Residents' perception of critical issues

- Improved Sanitation Facilities (8.9%)
- Residential Stands and Housing Development (17.7%)
- Construct Feeder Roads (1.3%)
- Solve Human Wildlife Conflict (8.9%)
- Establishment of more ECD, VTC and Tertiary Education (1.3%),
- Airport Renovation and upgrade (3.8%)
- Most of the above (57%).

# CHAPTER 4 KEY STUDY FINDINGS

# Key Findings of Study via Outreach Programs (including Social media) and via Consultant Team Physical Inspections

This Chapter lists the issues that were raised during the physical Outreach programs, complemented by the use of radio and Social Media platforms. It also shows the issues that the Consultant picked up through physical inspections and discussions with various local and central government officials.

The Team's findings are presented below:

- a) Kariba's development thrust should remain focussed on tourism development which should be focused on the Regional Context. The town is currently in a stagnant phase of urban development
- b) A new town centre is needed. Land has already been identified.
- c) The town needs more land for residential and institutional development
- d) The town boundary should be extended eastwards to eat into NRDC's Wards 1 and 2
- e) The apparent conflict of interests between MOK and National Parks over land and jurisdiction matters should be amicably resolved so that they work together in the common interest.
- f) There is a need for an understanding between the three entities to identify common interests and modalities for turning conflict into cooperative interest.
- g) Mahombekombe should be decommissioned and cleared and turned into a tourist accommodation zone. Hotels, lodges, boating and fishing clubs, etc. Land should be set aside for this relocation over the coming years.
- h) The District hospital at Heights is inadequate and inaccessible to the greater population of Kariba. A new hospital should be built in or around Nyamhunga where the bulk of the population lives. Alternatively, the current Nyamhunga Clinic should be upgraded to a district hospital alongside the Kariba Hospital at Heights.
- i) There are not enough primary and secondary schools in Kariba. As a result, there has been a proliferation of private schools operating out of private homes with inadequate infrastructure. Land should be set aside for boarding schools too private or public.
- j) Human/Wildlife conflict is a serious matter. Unnecessary loss of life. Council and National Parks should agree on ground rules on how to manage this matter. For example, the population of crocodiles in the Lake must be controlled and managed.
- k) The Lake may now be a victim of overfishing. Need to look at the management of fish breeding and nutrition in the Lake.

- 1) There are no tertiary education institutions in Kariba. Land should be reserved for vocational training and tertiary education facilities with a bias towards tourism, marine biology, wild life management and aquaculture, etc
- m) Hillsides facing the Lake can be very amenable to scenic development. Theses should be utilised as available development land.
- n) The lakeshore is rather inaccessible. There may be need for a proper road that runs along the shoreline. The only road in Kariba is the main road Makuti to Kariba. An internal road that runs along the shoreline to 'ring road' the town could create further development opportunities.
- o) Places like Mopani Bay are underutilised. They should be developed into vibrant tourism sites in the town. They should not be turned into commercial areas/shops like some Council officials have suggested. They should remain pristine and tourist areas as they have always been.
- p) It seems like the issuance of fishing and boating permits and operations are a contentious issue.
- q) There are significant islands on the Lake that are not being developed and could be developed. The issue of who owns and runs the Lake seems blurred and needs to be discussed. There seems to be a cat fight between Council, National Parks, Ministry, etc.
- r) Generally, Kariba residents felt that they are not benefitting anything from the Lake.
- s) The glitter stone quarry to the east of the town should be formalised and run as a proper resource extraction business.
- t) Population and services available are not correlated there is need for greater attention towards development of support institutions across scales,
- u) Wildlife corridors are an essential life-support system for continuation of biodiversity in the area that requires attention and protection
- v) The need for land for urban expansion is apparent
- w) Creation new business nodes and CBD redevelopment,
- x) Road network require attention through development of all gravel roads which constitute a significant part of the study area.
- y) Relocation of settlements under power lines

# CHAPTER 5 SUMMARY OF ISSUES & OUTLINE PROPOSALS

# 5.1 Kariba within the Regional Context

Kariba should be planned for within the Regional Context as an important urban centre in the Zambezi Valley. It is an important node that should be linked to Victoria Falls in the west and Mana Pools in the east. Its linkages to the Nyaminyami District and Chirundu should also be further developed so that it becomes the regional centre in the Zambezi Valley.

# 5.2 Growing the Regional Complex

Kariba Town should be seen as a growing regional complex based on water, game and tourism. Its planning should take into account:

- Water (Lake Kariba) and its Activities
- Game and its Activities
- Tourism and its Activities
- The Combined Complex

# 5.3 Kariba as a Municipality

In future Kariba should be seen as The Municipality of the Region, providing a regional focal point and a regional hub from which Zambezi Valley regional development should radiate outwards.

# 5.4 Economic and Industrial Base

The following seemingly faltering of stagnant commercial and industrial activities and sectors should be supported, promoted and further developed.

- The Fishing Industry
- The Recreation Industry, eg Tiger Fishing, water sports, etc
- Houseboats and Game Viewing
- Private Lodges and other hospitality industry facilities

# 5.5 Focus on Study Findings

Kariba's focus must remain on Tourism in a Regional Context. Future initiatives must be focussed on sstrategies to re-develop and re-energize the tourism industry in the town as well as to strengthen regional supporting ties. This can be assisted by creating new focal points in the town such as at Mopani Bay.

# 5.6 Internal Development of Kariba Town

Within the Kariba town there is a need to develop a new hierarchy of urban nodes, to introduce new supporting facilities for those nodes, to develop a new accessible Civic Centre and to re-plan the Town to create centres of activity.

## 5.7 Expansion of Land Area

There is limited flat land available in the town as the Municipality is boxed in by neighbours such as Nyaminyami and National Parks as well as the international border to the north. There is a need to foster shared development visions between the Municipality and its neighbours. There is also a need to develop shared development plans, mechanics for further land acquisition as well as revenue sharing schemes with neighbours where the interests of the parties coincide.

# 5.8 <u>Re-planning the Extended Use of Land</u>

Some of the mountainsides and hillsides around the town can be designed for scenic housing development, especially on the Lake facing side.

Islands on the Lake and the Waterfront can also be developed for Tourist Accommodation and activities. Mahombemakombe will need to be demolished and residents relocated elsewhere. The land thus released can be used for the creation of another urban node or CBD. Mopani Bay should also be designed for a new Tourist CBD.

# 5.9 <u>Infrastructure</u>

Outline proposals on roads development include:

- Re-design and develop the Main Road to Kariba into a proper national road.
- Re-plan the road system for greater accessibility with alternative internal routes
- Develop a Shoreline Scenic Road
- Create Regional link routes e.g. Siakobvu Road. This is very important for regional integration and development.

# 5.10 Create/Attract New Additional Uses

There is a need to create and attract new economic and commercial activities in order to expand the town's economic base. The following initiatives are suggested:

- Water/Marine, Tourism and Wildlife Management
- Focus on the Lake to enhance diversity in industrial development
- Encourage the growth of Mixed Use Development Hubs
- Mopani Bay designed for new Tourist CBD.

### 5.11 Educational and Health Facilities

The study showed that there are not enough Primary and Secondary Schools in Kariba, hence the proliferation of private schools, most of which are operating from residential premises. The existing schools in Nyamhunga are over-subscribed and over-crowded. There is need for boarding schools in the town.

Tertiary Training in skills that benefit Kariba is required. This should focus on marine resources development and wildlife management among other skills. This will also draw a new population to Kariba that will benefit the town.

There are no Vocational Training facilities in Kariba. The establishment of the same will help reduce unemployment and also benefit surrounding districts such as Nyaminyami.

There is a need for a complete range of health facilities including a new hospital around Nyamhunga where the bulk of Kariba's population lives. The Kariba Hospital at heights is removed from where the needy population lives and is not very accessible, especially in cases of emergency. Currently, the Nyamhunga Clinic is over-subscribed and over-crowded.

# 5.12 Administrative and Management Re-Tool

In terms of civic administration, a new Department is required to initiate and spearhead urban development. Such a Department should be staffed by people with requisite skills who are able to think outside the Municipal Box. They should bring a new approach to the town's development focussing on new ideas and new perspectives and a new desire to initiate and lead.

# CHAPTER 6 CONCLUSION

The conclusion and completion of the Report of Study leads to the preparation of the Master Plan Report Written Statement Stage.

Situational analysis done during the Study stage identified the opportunities and strengths of the Municipal area as well as its weaknesses and threats to urban and regional development.

Based on these findings, recommendations and proposals can now be built into a Written Statement that is basically the plan to be followed in the development of Kariba Master Plan area for the next 15 to 20 years.

The Written Statement for the Master Plan will outline, among other things:

- a) Development proposals and policies
- b) The desirable future development trajectory for Kariba Town
- c) The implementation matrix for the Master Plan
- d) Subsidiary Plans that will be required to fully implement the Master Plan going into the future.



# **MUNICIPALITY OF KARIBA**

# **MASTER PLAN 2024**

Written Statement

Prepared by

Nelson N. Thema Regional and Urban Planner

#### Written Statement Validation

This Master Plan has been prepared in terms of Part IV of the Regional, Town and Country Planning Act, Chapter 29:12, Revised Edition, 1996 and the Regional, Town and Country Planning (Master and Local Plans) Regulations, Government Notice No. 248 of 1977.

Certified that this is a true copy of the Municipality of Kariba Town Master Plan Written Statement that was adopted by the Full Kariba Town Council at its meeting held on the......day of June 2024

Minute Item.....

......Town Planner

......Town Clerk

......Mayor

# **EXECUTIVE SUMMARY**

This Written Statement has been prepared as part of the Master Plan preparation process for the Municipality of Kariba (MOK).

The Master Plan preparation process involves four distinct stages:

- The Inception Report, which outlines, for the benefit of the Client, the processes to be followed in the preparation.
- The research and data collection process, which informs the Lead Planner of the situation on the ground, and data analysis, which enables the Planner to draw conclusions about Recommendations and Proposals.
- The Report of Study which details the existing situational analysis, and findings of the research/data collection and analysis processes; and
- The Written Statement which details Master Plan Recommendations and Proposals. The two documents, the Report of Study and the Written Statement, read together, constitute the Master Plan.

This process is a legal requirement in terms of Part IV of the Regional Town and Country Planning Act Chapter 29:12, Revised Edition, 1996.

This document is the Written Statement for the proposed Municipality of Kariba Master Plan 2024,

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Map 2	Proposed Shoreline Road
Map 3	Land Use Map
Map 4	Kariba Property Classes
Map 5	Wildlife areas and Game Corridors
Map 6	Expansion Proposal Map
Map 7	Master Plan Proposals Map

#### CHAPTER 1 PROJECT OVERVIEW

#### 1.1 Introduction and Background

The Written Statement for Municipality of Kariba Master Plan is the fourth stage in the Master Plan Preparation process. The Master Plan is a strategic guide intended to help the Municipality make decisions about land development and use in the area. It aims to promote orderly growth and development.

The document is structured to provide a clear flow of information, leading to recommended policies, strategies, and proposals. The Written Statement stems from the Report of Study's (RoS) findings by building on the outcomes of surveys and researches conducted during the Report of Study data collection stage. This helps identify planning issues, challenges, constraints, and opportunities, all of which are outlined in the Written Statement. The plan proposals which are contained in the Written Statement are designed to address each specific issue that has been identified through the study and for which development proposals are then identified.

Throughout the document, efforts have been made to clearly outline issues, make Recommendations, and Proposals for achieving the plan goals, objectives, and the reasons behind each proposal and recommendation, in a logical manner, to provide insight into the reasoning and thought process behind them.

#### **1.2** The Scope and Objectives of the Written Statement

The major goal of Municipality of Kariba Master Plan (2024-2039) is to turn the Planning Area into a well-planned settlement that is co-ordinated, harmonious, attractive, functional, safe, liveable and portrays an image and character befitting an urban municipality which is the Regional Core of Tourist activities based on Water and its Activities, Tourism and its Activities, and Game and its Activities.

The Master Plan Recommendations and Proposals outlined in this part of the Master Plan are compatible with issues derived from the Report of Study. The goals and specific objectives which the plan seeks to achieve and attain were largely informed by and derived from identified planning issues and challenges, outcomes of consultations through Stakeholder Workshop and Community Consultation meetings. In other words, these emanate from within the Municipality itself.

Derivation of goals and objectives also came from the interviews held with Representatives of Government departments, Agencies and the Municipality itself. It was on the basis of these that the following plan goals and objectives were generated and formulated:

Specifically, the Written Statement seeks to, inter alia:

- a) fulfil the requirements of Section 13 of the Regional, Town and Country Planning Act Chapter 29:12 of 1996 as revised,
- b) fulfil the requirements of Call-to-Action Blue-Print on Service Delivery.

- c) identify the pattern, form and function of operative land uses and the general preferences of space users,
- d) characterize land use and land cover types for the Municipality so as to derive development policies and strategies for the Planning area.
- e) enhance service delivery by the local authority for the benefit of its entire population.
- f) identity the resources that are available in the Planning area that will be available for the physical development of the Planning area.
- g) identity and examine imperative and important social and economic development projects in the Planning area.
- h) identify the possible constraints to the development of the planning area and possible mitigation measures to such constraints.
- i) inform the Municipality and interested parties of policies, proposals and development parameters and controls,
- j) examine opportunities and constraints needed to inform and guide policy prescriptions through the Written Statement,
- k) identify the resources and projects that will drive the implementation of the plan.

Overall, the fulfilment of these objectives will lie in the the subsequent Policy Proposals and Recommendations as contained in the Written Statement.

#### **1.3** The Structure of the Written Statement

The Written Statement has been prepared in accordance with the same Part IV Section 14 of the Regional Town and Country Planning Act (Chapter 29:12) of 1996 and the Master and Local Plans Regulations No 248 0f 1977.

In general, the Master Plan shall fulfil the requirements of Section 5(1) of RGN No. 248 of 1977, which states, *inter alia*:

#### Part I:

- a) Contain and explain the contents of the Report of Study to the Master Plan;
- b) Explain the national and regional context of the planning area and how they are treated in the Master Plan;
- c) Explain the national and regional context of the planning area and how they are treated in the Master Plan;
- d) Explain the economic and social circumstances of the planning area and how they are treated in the Master Plan;
- e) Assess, from the findings of the Report of Study, likely changes in population factors, economic development and structure of employment and any impact that these factors may have upon any policies or proposals that may be proffered as part of the Master Plan;
- f) Contain forecasts of the activities in the planning area with a view to assessing the need and opportunity for change, particularly with respect to land use and transportation policies and proposals, taking into account the findings, analysis and conclusions of the Report of Study relating to the social, economic and environmental characteristics of the planning area;

g) Explain from an analysis of the information gathered in the Report of Study, the manner in which that information is used to identify the main policy choices for the planning area, particularly with respect to the future structure of land use, employment and transportation networks.

# Part II

- a) Further expounds on the aims and objectives for various aspects explored in the study, such as population, housing, employment, transportation and infrastructure, and land servicing. Sets out the objectives to demonstrate how these aims will be achieved.
- b) Indicate alternative policy choices related to feasible alternative patterns of physical development as well as presenting a comparison of these alternative strategies based on the resources likely to be available for the implementation and the constraints that may limit the implementation of each of those policies or alternative development strategies;
- c) Indicate the preferred strategy or the policy choices that is selected to best achieve the aims and objectives of the Master Plan.

# Part III

- a) State the policies and general proposals formulated for the Master Plan. Such policies and proposals should consider:
  - Population distribution and structure of employment
  - Development of major principal uses residential, commercial, industrial and other;
  - Provision of public utility services;
  - Communication and transportation systems in relation to land use patterns;
  - Provision of social services including education, health, sports and recreation, etc
  - Development of urban centres and other development nodes;
  - Environmental management, protection and preservation;
  - Development control and management;
  - Promote co-ordinated and harmonious development of the plan area in pursuit of the Master Plan aims and objectives;
  - Explain the relationship between the various policies formulated for the Master Plan;
  - Phasing and ordering of the implementation priorities for the Master Plan;
  - Considerations of the need to align the development of the plan area vis-à-vis neighbouring local authorities;
  - Justification for the proffered Master Plan proposals.

This Master Plan shall also include, wherever relevant:

• Tables and Figures

• Maps

The Written Statement of the Master Plan must always be read together with the Report of Study because the latter informs the other and gives background to the Recommendations and Proposals made in the Written Statement.

### CHAPTER 2 GENERAL BACKGROUND INFORMATION

### 2.0 Introduction

This Chapter presents background information on Kariba Town. This information is secondary data that was obtained from various sources, including but not limited to:

- The Council and its various departments
- Central Government Ministries and Departments
- Provincial Authorities
- Desk studies and existing literature reviews
- Council's Professional Consultants
- Commercial and Industrial stakeholders
- Other relevant sources

This information was collected and analysed using the following methods, inter alia:

- Document searches and reviews
- Physical interviews
- Stakeholder meetings and seminars
- Correspondence written and verbal
- Other relevant sources

### 2.1 Historical Background of Kariba Town

Kariba town developed as a result of the construction of the Kariba dam wall and Hydro Electricity Power Station in 1955. As an administrative centre, the town started as a Local Board in 1972, grew into a Town Council in 1982 and gained its current Municipal status in January 1999.

The Town is divided into 9 administrative wards and has 207 employees, nine elected Councillors and three Councillors representing the women's quota, who are all policy makers. According to the 2022 population census the town has a population of 27,901. The town is situated in the Zambezi Valley in Mashonaland West Province of Zimbabwe near the Zambian border. The town has a total area of 2161,3682 hectares.

The Kariba town is located approximately 249 kilometres by road Northwest of Chinhoyi the nearest large town, and the location of the provincial headquarters. This location lies about 366 kilometres, northwest of Harare, Zimbabwe's capital and largest city. Kariba Town is located on the shores of Kariba Dam along the Zambezi River, the town also serves as a border post between Zimbabwe and Zambia. The coordinates of Kariba are 16.5166° S, 28.8489° E (Latitude: -16° 31' 0.01" S and Longitude: 28° 48' 0.00" E). The air temperature varies between 15°C and 45°C depending on the season, and records an average of 20 degrees celcius with distinct seasonal variances. Highest temperatures are recorded in October and November (mean monthly average 35°C), and gradually decreases during the winter season in June and July (mean monthly average 13 °C). Rainfall is low and erratic with less than 900mm per annum. Kariba is a resort town and its economy is dependent on the lake with the following main economic activities:

• Fishing

- Tourism
- Electricity generation
- Crocodile farming.

Kariba provides an alternative border entry into Zambia in addition to the Chirundu and Victoria Falls border posts. It is serviced by a well maintained road infrastructure network. MOK lies in the centre of the Zambezi Valley which is abundantly rich in a wide range of natural and man-made resources that can help make Kariba rival the very best of the world's favourite tourist destinations. Kariba is situated in a scenic National Parks & Wildlife area, on the shores of Lake Kariba. The town presents a unique experience-possibly worldwide-where wild animals roam without frontiers and co-exist with human beings.

The town boasts of bigger hotels mainly Caribbea Bay, Cutty Sark and Upper Market Lodges such as Tamarind, Water Front, Samanyanga and Kariba Safari Lodge which have various scenic views of the lake and fauna. The town has a number of investment opportunities in housing estates, tourism related business stands and commercial stands. Kariba has an abundant water supply of low turbidity from the Lake Kariba, which does not require extensive purification and the significant cost drivers are repairs, maintenance and electricity charges. The terrain of Kariba Town is hilly and requires extensive pumping to ensure that all residents have adequate water supply. The largest consumers of water are hotels, lodges and industry but the economic downturn has reduced the demand significantly.

Informal industrial and commercial activities in the Town include:

- Quarry stone mining
- Curios and Sculpture
- Home industries (iron craft, metal work, carpentry, dress making, etc)
- Fruit and vegetable markets
- General trading activities

# 2.3 Municipality Vision

# 'The Ultimate Tourist Destination embedded in a thriving community by 2025'

This vision was coined by the Municipality of Kariba in line with the Kariba town's major activities that are anchored on the lake Kariba and wildlife which is found in the area. Kariba is competing with other tourists' destinations like Victoria Falls, Great Zimbabwe, Nyanga, Hwange among others and the town envisions to be the best destination compared to these ones. This can be achieved through attracting new investors and growing existing tourism products which will lure the tourists to Kariba.

There is therefore need to create new nodes for tourism related activities both on the Lake and land. Careful attention will be exercised in factoring sustainability of such activities and the preservation of the Environment. This touches on Programme 6 (Natural Resources, Conservation and Environmental Management) of the Integrated Results Based Management System (IRBM) currently being rolled out to all Sections of the Public Sector. Once that is achieved to the fullest, the community will benefit through employment creation and uplifting of their livelihoods.

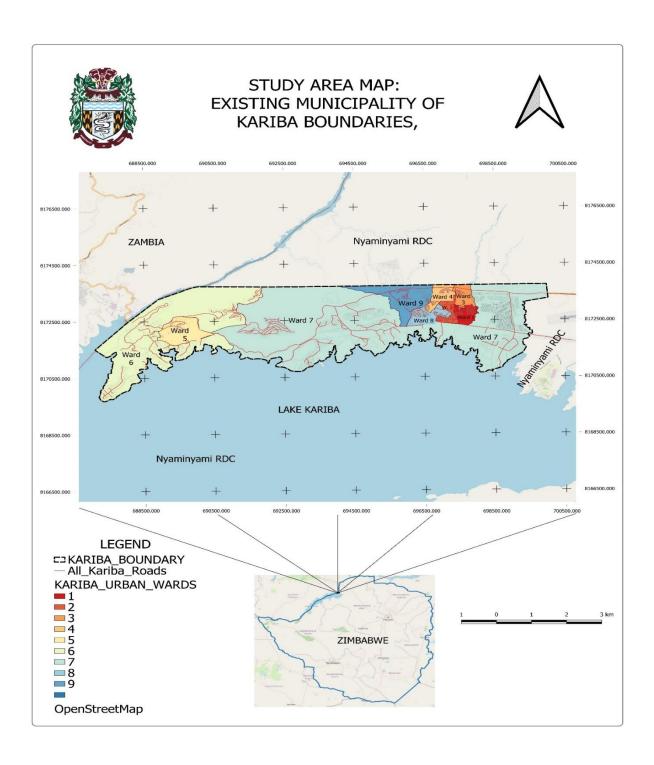
The Vision also resonates well with the National Vision: that of being an Upper Middle Income Society by 2030. For Kariba a "Thriving Community" denotes a community which has attained "Upper Middle Income" status and enjoys goods and services from the Municipality which are consistent with that status.

While it is recognised that the mainstay of the Municipality is power generation since it is the home of the biggest hydro-power generation in the country with a total generation capacity of 1,050MW to the national grid. Kariba is likely to be the home of floating solar power project which intends to be added to the national grid. The Municipality is also pursuing the issue of solar energy to power its water stations and infrastructure as well as contributing to the national grid. The earmarked water stations comprise Breezes abstraction and water purification and Zambezi abstraction and water purification. The Municipality is incurring an electricity bill of USD100,000.00 per month and the introduction of solar energy will go a long way in lessening the electricity bill for the Municipality. The NDS1 recognises that opening up of new tourism resorts in Kariba town will improve the national tourism growth which offers a broader spectrum to expand the local Economy and boost household incomes. This Sector is anchored on one of the biggest water bodies worldwide and the location of the Municipality in the middle of a National Park with abundant flora and fauna. This also attracts industries that support this Sector (including boat building and maintenance) and services (including banking, tour operators, transportation in its various modes).

# 2.4 Existing Town Boundaries

In terms of Section 4 of the Urban Councils Act [Cap 214], the President may establish a town with a town council and define the area of the council. Subsequently, the council area may be redefined. Kariba and its council were established in terms of Proclamation 8 of 1977 published in SI 359 of 1977 and the subsequent description, which is contained in Proclamation 12 of 1985 published in SI 332 of 1985.

The current municipal boundaries are as shown on the Map below:



Map 1: Municipality of Kariba Boundaries and Study area

This Master plan is primarily focussed on and within the existing boundaries of Municipality of Kariba, However, it should be noted that the town is now very restricted in terms of development land availability. There is a major electricity power line servitude that runs right across the town. The study showed that the town boundaries may either need to be extended for future town development and expansion or the Municipality will need to work closely with its neighbouring local authority NRDC on expanded land development.

# CHAPTER 3 ISSUES AND FINDINGS FROM THE REPORT OF STUDY

The findings of the various forms of data collection, stakeholder consultations and other forms of research were highlighted in the Report of Study but are repeated here for ease of reference as they lead to the next Chapter which makes Recommendations and Proposals based on them.

These findings are presented below:

#### **3.1 Population Statistics**

The population statistics for Kariba Town, derived from the 2022 National Census are shown below:

Description	Population Number
Males	13,687
Females	14,223
Total population	27,910
Total number of households	7,699

- The most populous wards in Kariba are in Nyamhunga (Wards 1-3) and Mahombekombe, which are high density suburbs.
- Male to female ratio follows the national and provincial average/trend of 48% Males to 52% Females
- An average of 4 persons per household
- An average annual population growth rate of 1.5%.

Based on the average annual population growth derived from the 2022 Annual Census, and holding everything else equal, the projected population growth for Kariba Town would look as follows:

Period	Year	Projected Population (nearest '000)
Short term (5 years)	2030	32,000
Medium Term (10 years)	2035	34,000
Long Term (15 years)	2040	37,000

#### 3.2 Key Service Delivery Issues for Council

- Protection of public sewers
- Water provision services
- Protection of public drains
- Provision of roads

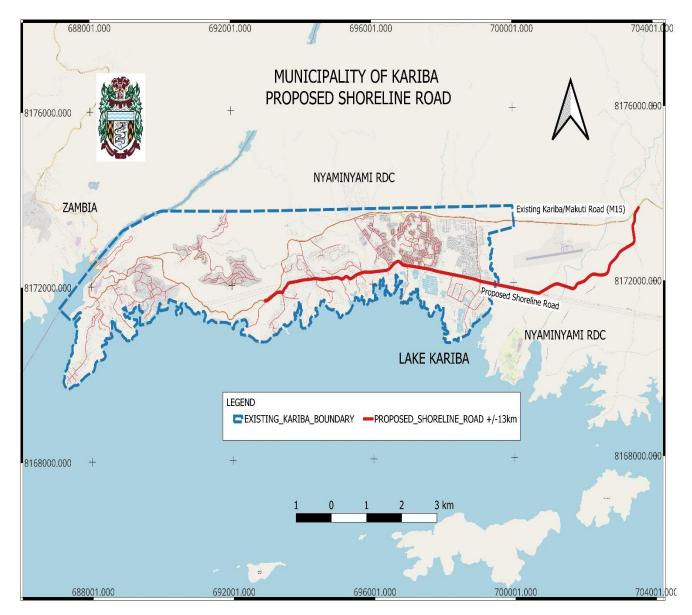
• Provision of Public lighting

### **3.3** Roads, Transport and Communications

- Transport networks in Kariba comprise roads, water transport and air transport.
- Kariba has a total of 34.75 km of gravel roads and 47.25 km of tarred roads.
- The road network is now old and requires periodic and routine interventions.
- A few roads have potholes, especially in Nyamhunga and Mahombekombe
- 38% of the roads require rehabilitation intervention.
- Council runs an annual routine maintenance program on all roads.
- Priority areas in terms of roads servicing focuses on major roads that service schools, health care centres, shopping areas and tourism areas of interests.

The road network requires attention through improvement of existing roads, development of alternative routes, and surfacing of gravel roads which constitute a significant part of the study area.

The lakeshore is rather inaccessible. There may be need for a proper road that runs along the shoreline. The only road in Kariba is the main road – Makuti to Kariba. An internal road that runs along the shoreline to 'ring road' the town could create further development opportunities.



Map 2: Proposed Shoreline Road

# 3.4 Water Supply Infrastructure

The source of raw water for the Town is lake Kariba (storage capacity of 185 billion cubic metres of water. Raw water is abstracted from the Zambezi River.

The Municipality of Kariba water supply infrastructure comprises the Zambezi water abstraction point that supplies to the Mahombekombe water treatment and pumping station. There is also the Breezes water abstraction point and pumping station.

The Council operates the following 2No water treatment plants:

### Name

Mahombekombe water works (commissioned in 1960s)

**Design & Production Capacity (Daily)** 9ML/ day Design Capacity 6ML/day Production capacity

Breezes water works (commissioned in 1999) 12ML/ day Design Capacity 9ML/day Production capacity

- There are 9No Water Reservoir Storage facilities with a combined supply capacity of 16,140 cubic metres of water.
- The efficiency of the current water treatment works averages 90% efficiency @ 10% station losses.
- The average water supply for the town is 21 hours, and percentage of water supply coverage the whole town is about 98%.
- The average supply of treated water for the town on a daily basis is 15ML/day against an average demand of water for the town on a daily basis of 18ML/day.
- The current supply capacity is not adequate to meet 2-day retention time.
- Water augmentation measures are required to meet the deficit, especially with the coming on board of the Kasese new location. An additional 6ML/day will be required as a water supply augmentation measure.
- The treated water for human consumption currently meets Standards Association of Zimbabwe (SAZ) and World Health Organisation (WHO) standards and ratings.
- The water distribution channels in the town are satisfactory.
- At present, there is no water rationing in Kariba. Gaps without water range from 1-5hrs in selected areas.
- The volume of non-revenue water per year is 60% @ 3667ML/Yr. (2023 water statistics compilation).
- There are 3 public water taps/points, with no meters at Nyamhunga, Batonga & Mahombekombe markets.
- There are no alternative sources of portable water within the local area and there are no boreholes under Council's administration.
- The plans a to ensure adequate supply of quality water in the long run include Water augmentation plans for additional 6ML/day (Upgrading Breezes water treatment plant)

# 3.5 Public Sewerage Services

- Kariba uses the Biological Treatment sewer system. It has 2No sewer treatment plants, both of which are operational in Mahombekombe and Nyamhunga.
- The current processing capacity of the sewer treatment plant is: Capacity 3,8ML/day, Daily Production 3,6ML/day.
- The Municipality's waste water treatment plant has a capacity to treat about 3.2 megalitres of waste water per day and the coverage of waste water treatment and collection is 100%.
- All high density housing units are connected to the public sewer system.

#### 3.6 Storm water Drainage and Public Drains

- Improvement of drainage is required in some areas, especially given the nature of the terrain in the Town.
- Some of the residents do illegal dumping in drainage systems despite that the council has scheduled collection of refuse.
- The land is generally sloppy that it drives away flows towards the lake. Possibility of flash floods is minute.

#### 3.7 Solid Waste Disposal Infrastructure

The Municipality has a refuse compactor, two refuse compactor trucks, 1 refuse truck and a tractor for solid waste collection. The Council is currently making strides to upgrade its dumpsite to a land fill site. The area has already been fenced and electrified.

#### 3.8 Public Lighting

Kariba has a combination of Tower lights, conventional street lights and solar lighting as methods of public lighting

The danger of not having public lighting in the Municipal area are Human-animal conflicts. Council follows a weekly routine to attend to faulty street lights.

#### 3.9 Existing Health Facilities

- Kariba has one government district hospital, two council clinics and five privately owned/operated clinics.
- The majority of the population in Kariba lives in Nyamhunga Township, only served by a clinic, which appears to be over-burdened.
- Nyamhunga may require an upgrade to the existing clinic or another new clinic
- Transport to the District Hospital at Heights also appear to be problematic for the residents of Nyamhunga in the case of a health emergency.
- The District hospital at Heights is inadequate and inaccessible to the greater population of Kariba. A new hospital should be built in or around Nyamhunga where the bulk of the population lives. Alternatively, the current Nyamhunga Clinic should be upgraded to a district hospital alongside the Kariba Hospital at Heights.

#### **3.10** Existing Education Facilities

- Kariba has 2No government, 2No Council and 3No privately run primary schools
- Kariba has 1No government, 1No Council and INo privately run secondary schools
- There is no formal boarding school in Kariba Town primary or secondary
- There is no technical training or tertiary education institution in Kariba.

There are not enough primary and secondary schools in Kariba. As a result, there has been a proliferation of private schools operating out of private homes with inadequate infrastructure. Land should be set aside for boarding schools too, whether private or public.

Population and educational services available are not correlated there is need for greater attention towards development of support institutions across all levels of educational institutions.

There are no tertiary education institutions in Kariba. Land should be reserved for vocational training and tertiary education facilities with a bias towards tourism, marine biology, wild life management and aquaculture.

#### **3.11** Recreational Facilities

- The Municipality has a 5,000 seater Nyamhunga Stadium suitable for top flight football matches.
- It also owns Chaminuka Stadium suitable for lower divisions and social league matches.
- The town also houses private recreational boating facilities, a private health fitness club and gym, swimming pools
- There are no dedicated indoor sports and recreational facilities in either Mahombekombe or Nyamhunga Townships.

#### 3.12 Environmental Management issues and the Zambezi Biosphere

There are various environmental issues that need to be taken into account when planning for Kariba Town, including, but not limited to:

- The preservation of the environment
- Prevention of pollution to the Lake
- Preservation and development of marine resources
- Management and preservation of wildlife resources around the municipal area
- Management of human- wildlife conflict
- Biodiversity management
- Climate change management
- Environmental pollution issues, including sewer and solid waste disposal strategies
- Water supply adequacy for both the human and animal populations
- Relationship and management between urban areas and national parks areas and jurisdictions

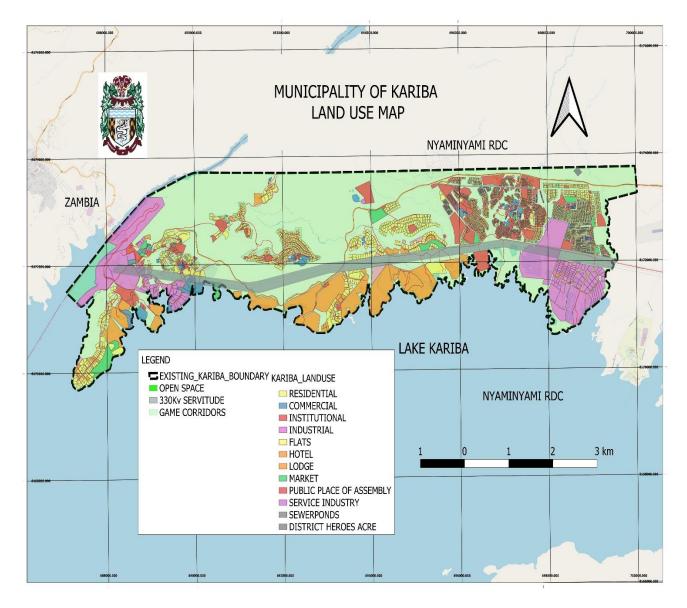
#### 3.13 Land ownership and Land Use

Land in Kariba is currently owned in the following categories

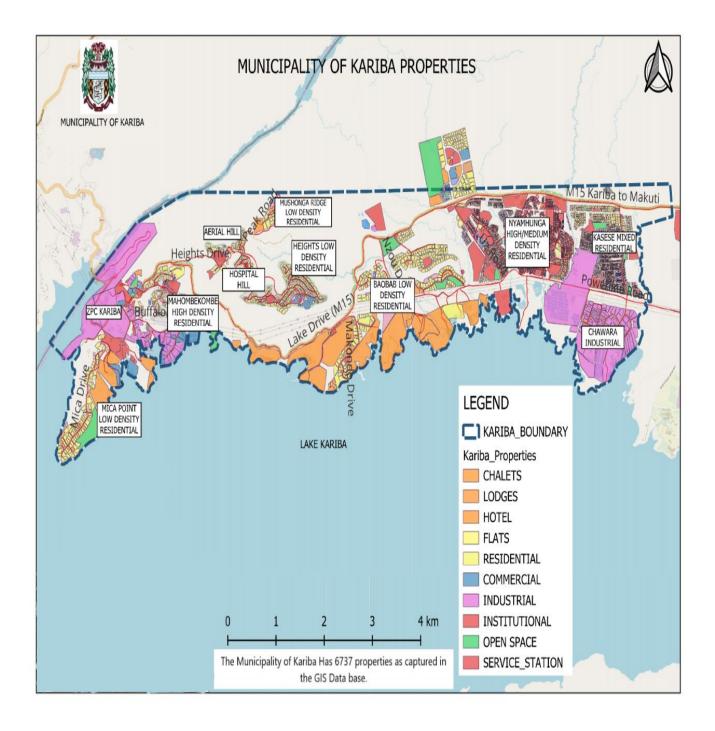
- Zimbabwe Power Company Generation station and Power line servitudes
- National Parks Land, including the Lake
- Other State Land
- Municipal Land
- Tourism sites
- Private land
- Commonage

The Municipality seems to be in need of more development and expansion land.

The Map below shows the current land use and land ownership structure in the Kariba municipal area.



Map 3: Kariba Land Use



The Map below shows the various classes of properties in Kariba:

Map 4: Kariba Various Property Classes

# 3.14 Lake Kariba



Images of Kariba Dam and a Harbour on the Lake



Images of a stunning Kariba sunset and a Houseboat on the Lake

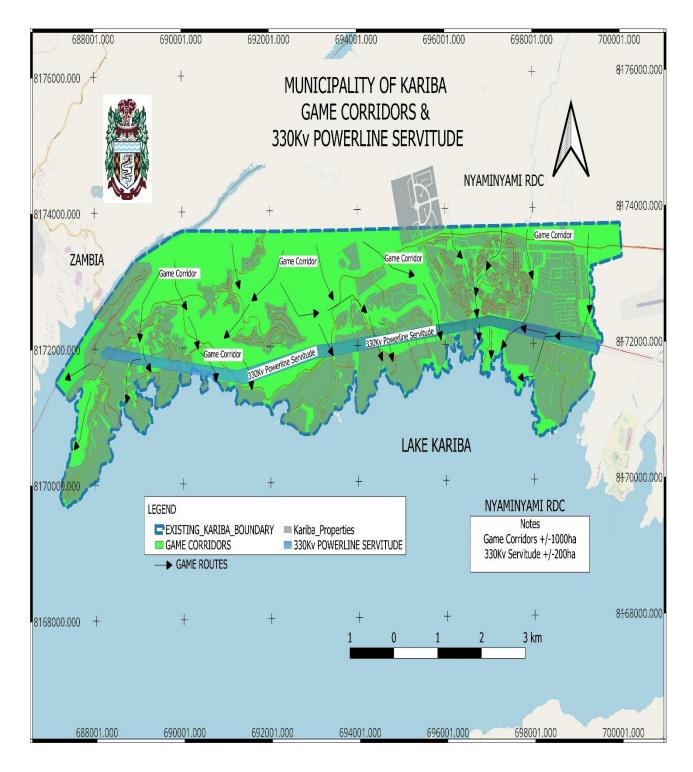
- The Lake may now be a victim of overfishing, resulting in declining catches and loss of income for those engaged in the occupation and associated side lines. There is need to look at the management of fish breeding and nutrition in the Lake.
- It seems like the issuance of fishing and boating permits and operations are a contentious issue which needs examination and resolution to improve the industry.
- Generally, Kariba residents felt that they are not benefitting anything from the Lake in the form of recreational value and/or economic income.

#### 3.15 Land Management

- The apparent conflict of interests between MOK and National Parks over land and jurisdiction matters should be amicably resolved so that they work together in the common interest.
- There is a need for an understanding between the three entities, namely NRDC, National Parks, and MOK, to identify common interests and modalities for turning conflict into cooperative interest, particularly in respect of unlocking land for development.

#### 3.16 Human Wildlife Conflict and Game Corridors

- The ever-recurring Human/Wildlife conflict is a serious matter, resulting in unnecessary human injury and loss of life. Council and National Parks should agree on ground rules on how to manage this matter.
- Wildlife corridors are an essential life-support system for continuation of biodiversity in the area that requires attention and protection, with real, properly assessed needs for them versus their potential constriction on development, and human/animal conflict.
- The game areas and game corridors have the effect of restricting the expansion of Kariba in all directions. This is worsened by the existence of Lake Kariba to the south of the town.
- The Map below shows the wildlife areas and game corridors around the municipal area.



Map 5: Wildlife areas and Game Corridors

## 3.17 Land Development Opportunities

- Kariba's development thrust should remain focussed on tourism development which should be focused on the Regional Context. The town is currently in a stagnant phase of urban and economic development, but needs to revive and revitalize.
- The need for land for urban expansion is apparent
- There is a need for development and creation of new business and activity nodes and, of course, development of a vibrant CBD,
- Relocation of settlements under power lines is an urgent matter which must be attended to including a look at possible use of this land, which constitutes a significant portion of Kariba land.
- Hillsides facing the Lake can be very amenable to scenic development. Theses should be utilised as available development land.
- Places like Mopani Bay are underutilised. They should be developed into vibrant tourism sites in the town. They could be turned into new urban core development as some have suggested.
- Mahombekombe Township should be decommissioned and cleared and turned into a tourist accommodation zone, with hotels, lodges, boating and fishing clubs, etc. Land should be set aside for this relocation as soon as possible, as those living under the Power Lines are in real health danger.
- The town needs more land for residential and institutional development
- The town boundary should be extended eastwards to eat into NRDC's Ward 2. However, this will require high level engagements between the Kariba Municipality and the NRDC. Alternatively, this could be achieved through partnerships and joint venture arrangements between the two Councils where land development projects are undertaken on a win-win basis involving resources/land/capital contribution sharing underwritten by income/profits or revenue sharing arrangements.

# 3.18 Power Generation Opportunities – Sun and Wind

Kariba is anchored on power generation from the Kariba pwer station by the Zimbabwe Power Company. This power station is a major source of electricity for the whole of Zimbabwe. However, there may also be opportunities for the development of alternative sources of energy – solar and wind energy.

- Kariba is a hilly and mountainous place. There are possibilities for the development of solar energy installations on the north facing sides of the mountains and hills.
- The most dominant wind in Kariba blows from South-West (SW) to North-East (NE). This wind has a characteristic strong west-wind, which may present opportunities for the development of windmills to generate wind energy.

# 3.19 Local Development Plans

There are areas in the town that may require short to medium term action by the Municipality in terms of planning and development (or redevelopment).

These plans could be (as defined by planning laws):

- Local Development Plans
- Local Priority Plans
- Local Subject Plans
- Layout Plans

These areas include:

- The proposed central business district (CBD)
- Mahombekombe redevelopment
- Mopani Bay commercial node
- Mica Point Vacant Land
- Kariba Township Vacant land to the northern boundary (opposite side of Nyamhunga Township).

A new town centre is needed and land has already been identified. There is already potential for a developer.

It has also been suggested that the Kariba Master Plan should incorporate the land under the Council's direct control at Charara and also those islands (Antelope, Zebra and Sampakaruma Islands) which are ambiguously under the Council's authority. The Charara township area in particular is neglected in planning terms and has been allowed to develop beyond the capacity of its basic services. This area needs planning attention.

There are significant islands on the Lake that are not being developed, yet they have potential for tourist facility development. The issue of who owns and runs the Lake seems blurred and needs to be discussed and resolved for the benefit of development. There seems to be a cat fight between Council, National Parks, Ministry, which prevents a proper assessment of development potential and planning for such development.

## 3.20 Available Land Development Opportunities

Project	Description
Batonga Schools	• Primary school stands +/-4 hectares of land.
	• Secondary school +/-12 hectares of land.
Batonga Flats development	• Three stands - 1.08 Ha, 1.1162 Ha and
	0.3415 ha.
Batonga Polyclinic	• Approximately 11,000 hectares in size.
Windsor Commercial stands	• 19 stands - minimum of a hectare each.

## **3.21** Investment and Partnership Arrangements

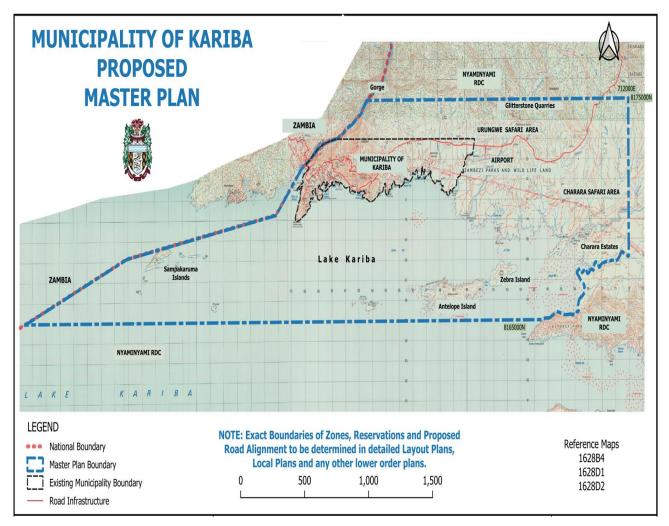
- Partnerships for land and infrastructure development.
- Joint Venture arrangements
- Outright land sales to potential investors or developers
- Council support for initiatives.

# 3.22 Business Licences and Building permit approvals

- Time taken to process/approve business licence applications a temporary licence can be availed within a week whilst a substantive licence can be processed within a month.
- Time taken to process building plans the Municipality takes about 7 days to process building plans.

## 3.23 Municipality proposal for Expansion

The Municipality has been discussing the possibility of the expansion of its boundaries from the current in pursuit of its further development. They have generated the map below in pursuit this proposal.



The Planner has investigated this matter and found out the following:

- a) This proposal will require resolution at the highest level and will require an extensive engagement between the Kariba Municipality and the Nyaminyami RDC and led by the Ministry of Local Government. This will be a high level engagement which will only be resolved at the highest level.
- b) However, the Planner was also advised of a change of policy at the Ministry. Relevant officials advised that the Ministry no longer supports acquisition of land by Urban Local Authorities for

purposes of expanded development. Instead, the Ministry now favours the "assistance" of poorer Rural Local Authorities by their Urban neighbours by urging the latter to provide development initiatives on land owned by the former. Therefore, the option of straight acquisition will not be supported at this time.

c) Instead the favoured option is that of Joint Committee Development, wherein the two Local Authorities enter into an agreement for the Urban (richer) Authority to initiate development under arrangements which not only facilitate the development, but result in the sharing of outcomes. This approach is referred to in this Draft Master Plan as "Shared Visions".

# **CHAPTER 4**

# DEVELOPMENT RECOMMENDATIONS AND PROPOSALS

## Preamble

The purpose of the Regional, Town and Country Planning Act, Chapter 29:12, Revised Edition 1996 is *(as directly quoted)*:

- To provide for the planning of regions, districts and local areas with the object of conserving and improving the physical environment and in particular promoting health, safety, order, amenity, convenience and general welfare, as well as efficiency and economy in the process of development and the improvement of communications;
- To authorize the making of regional plans, master plans and local plans, whether urban or rural;
- To provide for the protection of urban and rural amenities and the preservation of buildings and trees and generally to regulate the appearance of the townscape and landscape;
- To provide for the acquisition of land;
- To provide for the control over development, including use of land and buildings;
- To regulate the subdivision and consolidation of pieces of land, and;
- To provide for matters incidental to or connected with the foregoing.

This Chapter deals with Recommendations and Proposals, derived from findings articulated in the Report of Study in respect of the Planning area, which is the Municipality of Kariba.

# **RECOMMENDATION 1: Following Up on the Master Plan by the Next Level of** <u>Development Plans</u>

# Proposal 1.1

It is important for the Municipality to follow up on the Master Plan by: -

Identifying critical Recommendations and initiating the next level of Development Plans in order to implement the Recommendations of this Master Plan. In particular, the Municipality must identify critical need areas for which Local Plans must be prepared urgently.

# Proposal 1.2

Establish a list of areas requiring Local Plan preparation, so as to plan a sequential progression based on priority requirements. To identify the critical areas of need and establish a sequential process based on which will be attended to first in order to trigger a cascading effect.

# **RECOMMENDATION 2: To grow Kariba as the Regional Tourist Node**

### **Proposal 2.1**

The Municipality must draw up plans to lift Kariba to become the centre of tourist activities in the region, linking activities in all surrounding centres such as Victoria Falls, Nyaminyami, Mana Pools and other smaller regional tourist centres.

### Proposal 2.2

All efforts must be made to re-energize and redevelop those activities that gave Kariba a distinct advantage in the following areas: -

Water and its activities

Game and its activities

Tourism and its activities

## **Proposal 2.3**

Measures must be taken to re activate the deteriorating core activities of Kariba in the following areas:

- The Fishing Industry
- The House Boating and Hosting Industry
- The Conferencing Industry
- The Tourist and Game Viewing Industry
- The Lake Sporting Industry.

## **RECOMMENDATION 3: To grow Kariba's Industrial Base**

### **Proposal 3.1**

To find solutions to the deteriorating industrial base of the Municipality in the following areas:

The Fishing Industry The Recreation industry Houseboats band Game viewing Lodges and conferencing

## Proposal 3.2

To encourage the development of new industrial and commercial development so as to increase income and employment and general income for the population, as well as build up existing activities, such as stone quarrying, banana growing and fish farming.

## Proposal 3.3

To increase the industrial base of the Municipality by attracting new activities such as processing of local produce and natural resources which will add more value to the employment base of the town.

# Proposal 3.4

Create and attract new economic and commercial activities in order to expand the town's economic base in the following areas: -

Water/Marine sporting activities

Focus on the lake to enhance diversity in industrial development.

Encourage the growth of Mixed-Use Development Hubs.

## **RECOMMENDATION 4: Re-planning the Extended Use of Land**

## Proposal 4.1

Design and develop mountainsides for scenic housing development and scenic tourist facilities.

## Proposal 4.2

Design and develop a scenic road along the lake shore to attract new activities and encourage lake shore development and use.

## **Proposal 4.3**

Make better use of islands on the lake for both tourist facilities and on-lake activities. Encourage the development of land sold to developers to bring forward such development at pain of re-possession.

# **RECOMMENDATION 5: Rezoning of Land to facilitate Mixed Development**

# Proposal 5.1

Rezoning of Stand 3253 Kariba from Recreation Use to Commercial, Institutional and Recreation.

# Proposal 5.2

Rezoning of Mica Point Open Spaces to Low Density Residential, Hotels and Lodges.

# Proposal 5.3

Rezoning of Stand 1202 Kariba from Industrial to Recreation.

# **RECOMMENDATION 6: Development of New Activity Nodes**

# Proposal 6.1

Develop new activity notes, particularly in redevelopment areas such as Mahombekombe, Kariba Heights, Mica Point and Mopani Bay.

# Proposal 6.2

Demolish and re-develop Mahombekombe area into a new urban node while relocating current residents, particularly those living under electricity power lines.

# Proposal 6.3

Identify suitable nodes for creation of new centres of attraction for urban activities such as specialized activity zones.

# **RECOMMENDATION 7: Increased Infrastructure Development**

# Proposal 7.1

Redevelop and improve the main road into Kariba from Makuti to make it a more attractive drive and reset markers and signage.

# Proposal 7.2

Re-plan the internal road system to improve accessibility and create alternative access routes.

# Proposal 7.3

Develop a shoreline scenic route

#### **Proposal 7.4**

Create and develop regional link roads to make Kariba more accessible from different regional directions, such as connections through Nyaminyami RDC.

### **Proposal 7.5**

Develop infrastructural services (water supply, Sewerage disposal, road networks which will match expected growth.

#### **Proposal 7.6**

Improve Regional and International air links through development of a new International Airport and attendant flights.

### **RECOMMENDATION 8: Development of Solar Energy**

Kariba has some of the greatest potential for development of solar energy, due to its abundant supply of sunshine and heat. It is natural therefore that it should begin to develop the potential.

#### **Proposal 8.1**

Encourage the use of solar energy in all new buildings, both individual private dwellings and public buildings.

### Proposal 8.2

Develop solar farms, particularly on mountain sides and available sterile and inaccessible land. Encourage solar energy developers to look at available areas for development of solar energy as a business venture, either individually or in partnership with the Municipality.

### **RECOMMENDATION 9: Realignment of Game Access Routes**

#### **Proposal 9.1**

Initiate discussions with National Parks to re-design and re-alight animal corridors in order to free up adjacent land for development while retaining adequate access for the animals.

## Proposal 9.2

Initiate a Development Plan with National Parks for release of developable land which does not compromise human/animal conflict.

## **Proposal 9.3**

Re-align game corridors such that they utilize as much as possible 'sterile land' which is not available for other uses, such as power line reservations.

## **Proposal 9.4**

Utilize sterile land such as power line reservations for animal grazing and therefore viewing activities.

# **RECOMMENDATION 10: Expanding the Land Area**

Clearly Kariba Municipality has a limited amount of land for development purposes. Both the Community outreach findings and input by Stakeholders identified this as a critical issue. The problem mostly arises from the fact that the Municipality is located on the shores of Kariba Lake, where most of the land is mountainous, and then is boxed in by Nyaminyami Rural District Council (NRDC) land on the eastern and southern sides. The little available land is then restricted by the needs of Game corridors through National Parks.

## Proposal 10.1

The Municipality to engage the Ministry of Local Government to convene a high level engagement with the Nyaminyami RDC to find ways in which the two local authorities can cooperate for future mutual benefit and especially for Kariba's urban expansion and planning.

## Proposal 10.2

Identify and employ an appropriate Town Planner to manage the application for incorporation of the land area for development.

## Proposal 10.3

The assigned Town Planner to develop a Local Development Plan for the discussion process and to provide services for any technical expertise required for the process.

### **RECOMMENDATION 11: Educational and Health Facilities**

### Proposal 11.1

Encourage the development of tertiary training institutions, particularly those focusing on Kariba's strengths such as Marine sciences, marine resource research and management, wildlife management skills and others relating to growth of Kariba's growth focus areas.

### Proposal 11.2

Encourage the development of Vocational training facilities, particularly in areas that will benefit identified skills required for Kariba's industrial base.

### Proposal 11.3

Development of a full range of health facilities, including the upgrading of existing clinics and other such facilities.

### **RECOMMENDATION 12: Administrative and Management Re-Tool**

There is a need for the Council Management to be reconstructed by the addition of a Development Initiation and Management Department which will be entrusted with the following: -

- Initiation of the Planning initiatives that are required to follow up on these Recommendations and Proposals
- Initiation of Development Proposals which will attract developers and investors as proposed in this Master Plan
- Management of a new focus area of identifying and attracting potential investors and developers as a full-time occupation.

# **RECOMMENDATION 13: Encouragement of Entrepreneurship and Self Reliance Proposal 13.1**

Develop facilities for self-advancement and growth of new ideas, particularly among the youth.

## Proposal 13.2

Provide facilities for self-employment such as People's Markets, Home industries and development of self-employment skills.

## Proposal 13.3

Provide facilities for supported self-development of people with disabilities, and special needs.

## Proposal 13.4

Provide centres for exploration of new ideas and funded training and promotion of new enterprises.

## **RECOMMENDATION 14: Promotion of Gender Equality and Fairness**

## Proposal 14.1

Encourage the ideal of gender equality and fair and just access for all residents in the distribution of Municipal services and development opportunities

### **RECOMMENDATION 15: Special Economic Zone**

## Proposal 15.1

Establish procedures for applying for Special Economic Zone Status for Kariba, and make the Application, in order to enhance investment prospects.

## **RECOMMENDATION 16: Value on Permits for Change of Use**

### Proposal 16.1

To add value of Permits granted for Change of Use

## **RECOMMENDATION 17: Golf Course**

### Proposal 17.1

Identify land for development of a Golf Course to be used in conjunction with major Kariba events such as the Tiger Fishing Contest.

## **RECOMMENDATION 18: Water Transport**

## Proposal 18.1

Identify ways of establishing Water transport to make it easier for travel between points across the lake from one another.

**RECOMMENDATION 19: Encourage the development of fish ponds as economic development in areas close to the lake where accessible for water pumping.** 

## **RECOMMENDATION 20: Kariba Airport**

Engage Civil Aviation Authorities on the further development of the Airport to improve national and regional links to Kariba. This will support and enhance the development of the town as a tourism regional hub.

## **RECOMMENDATION 21: Central Business District**

Progress the development of the proposed CBD on the land already identified. This will be a very significant addition to the Town's landscape, property base and revenue base.

## **CHAPTER 5**

## **IMPLEMENTATION STRATEGIES**

It is important for the Municipality to establish a strategy for the implementation of the Recommendations made above and the easier way is to divide them into groups on the basis of implementation timelines. A number of the Recommendations can be implemented in the short to medium term, while others need more lead time and therefore should be considered long term. Indeed, there are also those which should be regarded as perpetual in the sense that they should always be in the forefront of any development. The Master Plan Preparation Team suggests that the Recommendations be classified as follows: -

- Short Term Recommendations 1, 7, 10, 11.
- Medium Term Recommendations 2, 4, 6, 8, 9.
- Long Term Recommendations 3, 4, 5, 9.
- Perpetual Recommendations 11 and 12.

# **CHAPTER 6**

# FUNDING AND FINANCING

It is recognized that it is difficult for Municipalities to fund infrastructure development for purposes of expanding development and attracting investors because rates and taxes collected may not be enough for some major developments. However, it is important for the Municipality to target specific areas of income generation, so that cumulatively these sources of funds can grow and increasingly meet the Council's financial revenue needs. Examples of sources of revenue for funding infrastructure development are: -

• Sale of land

Municipalities generally obtain revenue from sale of land, but this tends to be abused by buyers who hold land for speculative purposes, such as holding the land for a while and then reselling when the price goes up.

Municipalities need to impose development conditions which enable them to impose fines for non-development or breach of conditions. This will ensure that developable land does not lie idle while Council loses out on potential rates income.

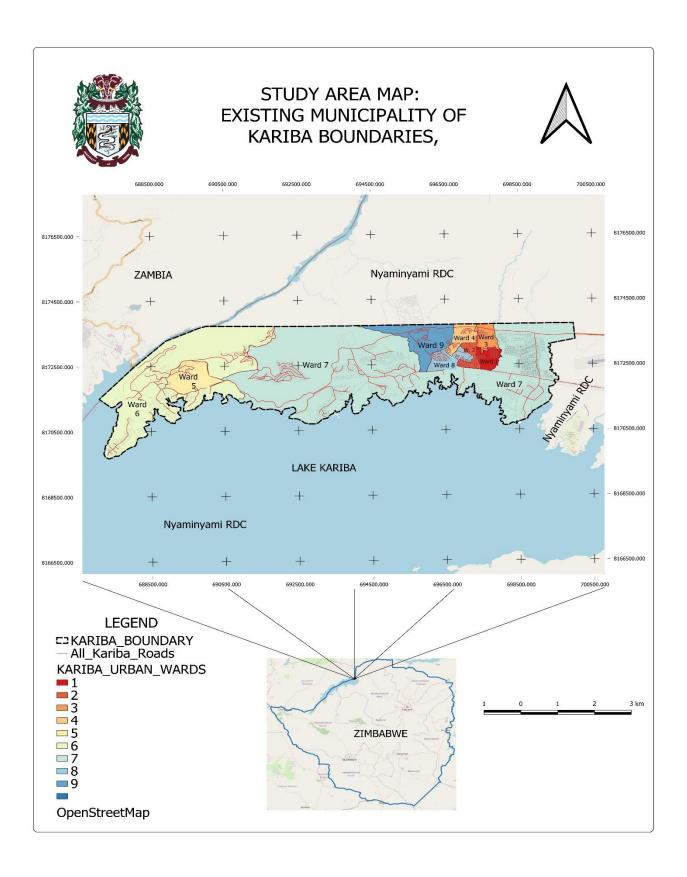
• Placing Value on 'The Permit'.

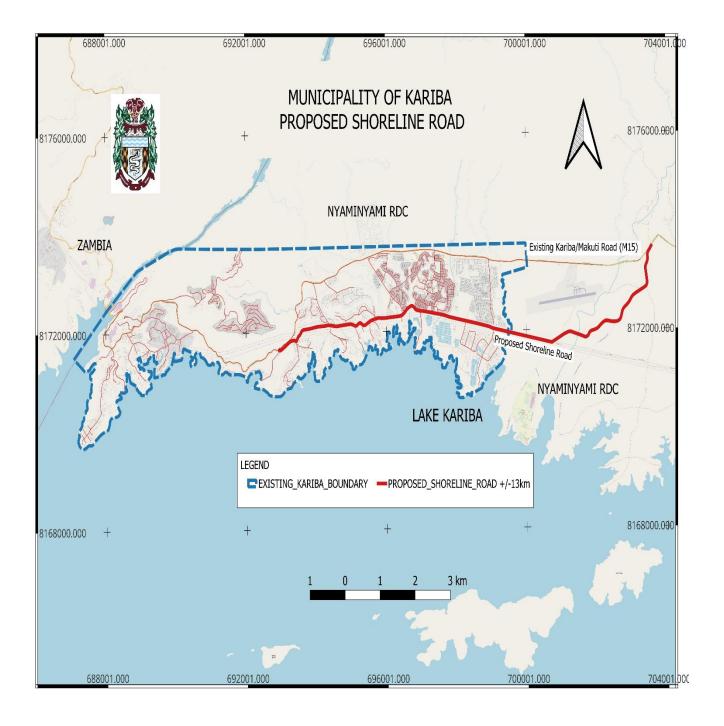
When a Council issues a Development Permit, it has given value to the piece of land in question. This value never benefits Council, while the Purchaser can make money trading the Development Rights.

It is here proposed that at the granting of the Permit, Council must put a value on its Permit (say 10% of development value). This value is then held in abeyance until the Developer fails to meet development deadlines, or breaks development conditions. This will ensure that Council can recover some value from permits that it issues.

Public/Private Sector Cooperation
 The most common method of enabling development is the Private/Public Partnership,
 where Council offers land and/or civil services to a developer who in turn puts in
 development finance to enable the development to take place. This form of partnership
 must be encouraged so that financing can be generated, particularly for major
 infrastructure development.

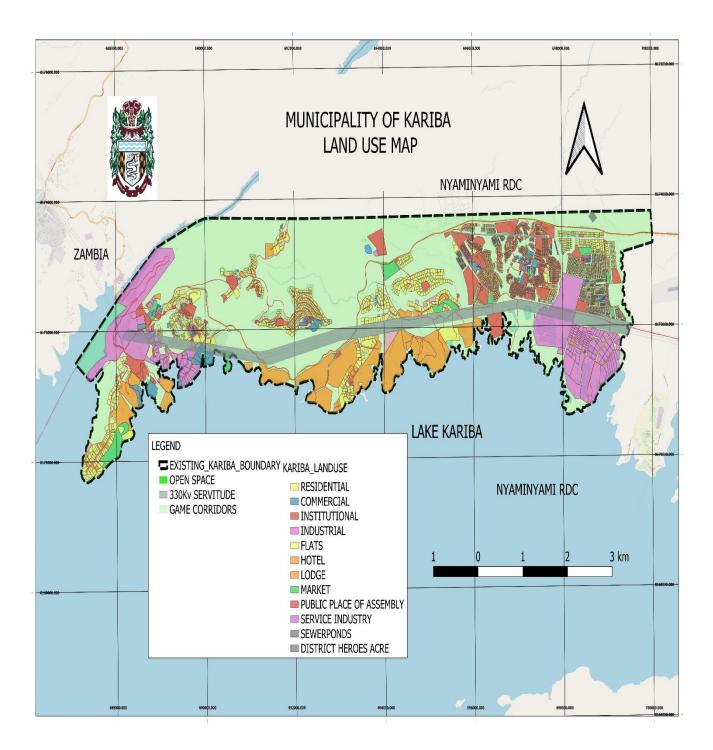
## MAP 1 - MUNICIPALITY OF KARIBA CURRENT BOUNDARIES



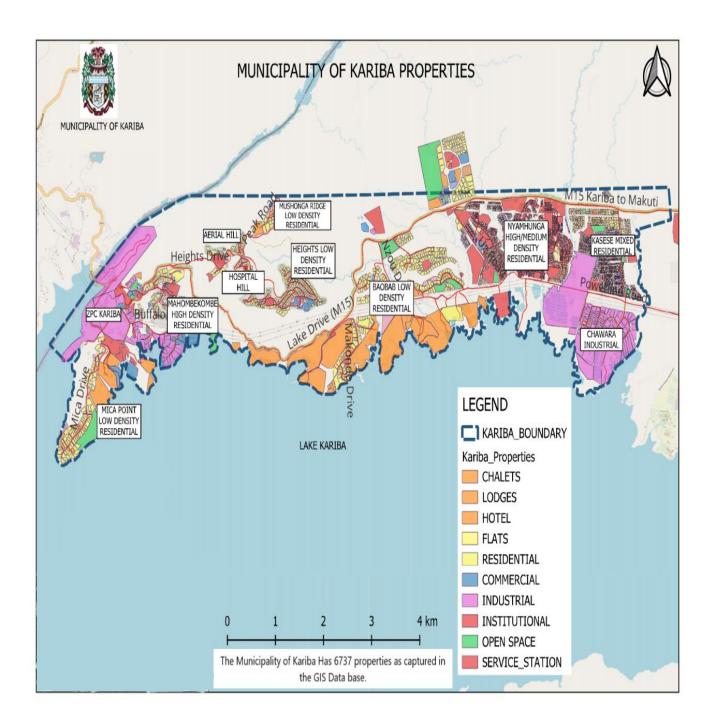


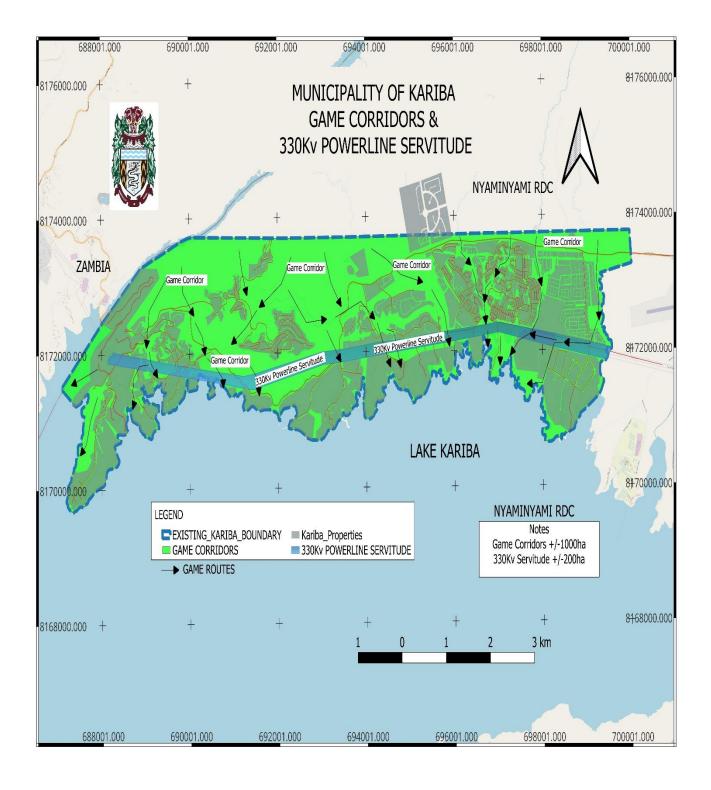
### **MAP 2: PROPOSED SHORELINE ROAD**

## **MAP 3: LANDUSE MAP**



### MAP 4: KARIBA PROPERTY CLASSES





## MAP 5: GAME CORRIDORS AND POWERLINE SERVITUDE

