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PLANNING FOR RESILIENT LAKESIDE TOWNS: THE CASE OF KARIBA TOWN MASTER PLAN PROCESS, ZIMBABWE

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ABSTRACT

Kariba Town, in the west of Zimbabwe, is one of the most important urban settlements in the country. The town is situated on the border with Zambia, it has a thriving tourism sector, with people drawn mainly to the Kariba Dam. The town has a very dynamic fishing industry, supplying both fresh and dried fish to the rest of the country and beyond. However, the town is crucially important for both Zimbabwe and Zambia because of the hydro-electricity power plant that provides most of the electricity requirements for both countries. With all these key responsibilities bestowed on the town, there is need to ensure that the spatial and strategic planning processes for the town adequately addresses all the components that allow the town and residents to continue to function. In November 2023, the President of Zimbabwe issued out a Call to Action - No Compromise on Service Delivery. The Action was made in the context of deteriorating service delivery by local authorities, initially urban and then also the rural authorities. This paper describes the planning process that guided the response to the call to action. It consists mainly of a desk review. The main finding from the paper is that master planning provides an opportunity for holistic and integrated planning and development, especially for multifunctional coastal or lakeside towns. The key conclusion and recommendation is that all the provisions of the Kariba Town master plan should be implemented and adhered to.

KEY WORDS lakeside towns, urban planning, service provision, resilience

1. INTRODUCTION

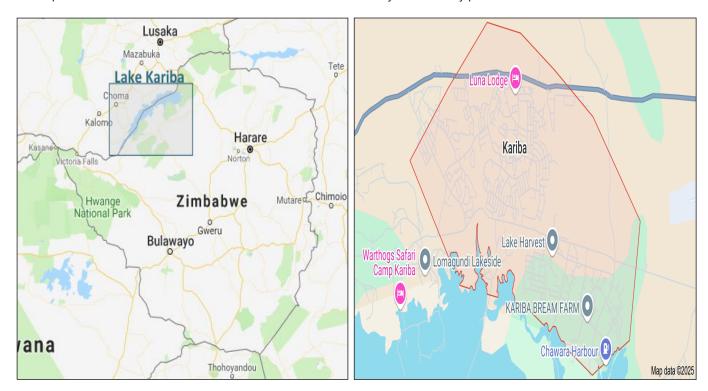
African coastal towns have a rich history and have played significant roles in continent's development. Many of these towns, such as Mombasa in Kenya, Accra in Ghana, and Cape Town in South Africa, served as vital hubs in ancient trade routes that connected Africa to the Middle East, Europe, and Asia (Smith, 2023). The Swahili Coast, stretching from Somalia to Mozambique, was particularly influential, with cities like Kilwa Kisiwani and Zanzibar becoming thriving centres of trade, culture, and learning from the 10th century onward (Jones, 2022). These towns facilitated the exchange of goods such as gold, ivory, and spices, and were instrumental in the spread of Islam and other cultural influences (Doe, 2021). The colonial era brought profound changes, as European powers established ports and built infrastructure to support the extraction and export of resources, often leading to the displacement of local communities and the reconfiguration of urban landscapes (Brown, 2020). In the post-colonial period, many coastal towns have evolved into major urban centres, balancing their historical legacies with modernization and tourism development. For instance, Cape Town is renowned for its blend of historical architecture and modern amenities, attracting millions of visitors annually (White, 2019).

Zimbabwe, being a landlocked country, does not have coastal towns in the conventional sense. However, it has towns and cities that are situated on the shores of significant bodies of water, such as Lake Kariba, which can be considered "coastal" in a broader sense due to their waterfront locations and maritime activities. Two notable towns in this context are Kariba and Binga. Both Kariba and Binga have histories

intertwined with the development of the Kariba Dam and the subsequent changes it brought to the region. The creation of the lake significantly altered the local environment and the livelihoods of communities, particularly the Tonga people, who were relocated from their ancestral lands. Whilst detailing the master planning process undertaken by Kariba Town Council in response to the Presidential Call to Action, the paper provides lessons for future planning and development for multi-functional urban settlements. Today, these towns are crucial for tourism and local economies. providing unique insights into the intersection of natural and human history in Zimbabwe. The need for a holistic and integrated planning approach for suck kinds of urban settlements cannot be overemphasised.

2. HISTORICAL BACKGROUND OF KARIBA

Kariba is situated in the Zambezi Valley in the Mashonaland West Province of Zimbabwe near the Zambian border. The town developed as a result of the construction of the Kariba dam wall and hydro-electricity power station.



(a) Map of Kariba Town in Zimbabwe and (b) Detailed layout of the town https://www.google.com/search?q=map+of+Kariba+Town&rlz=

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 with nine elected councillors who are the policy makers (Municipality of Kariba, 2024). The town of Kariba was initially developed to house the workers involved in the dam's

construction and has since evolved into a popular tourist destination. The dam itself is a marvel of engineering and plays a crucial role in hydroelectric power generation for both Zimbabwe and Zambia. According to the 2012 population census the town had a population of 26 451 with a growth rate of 2.5% per annum (Zimstat, 2012).

Kariba has a rich history linked to the construction of the Kariba Dam and the resulting displacement of local communities, particularly the Tonga people. This history is reflected in the town's cultural landscape, with monuments and museums commemorating these events. Preserving and promoting this heritage is important for cultural identity and can also attract cultural tourism (McGregor, 1995). Efforts to document and celebrate the traditions and history of the local communities contribute to a deeper understanding of the region's past.

The whole conversation on lakeside and coastal towns must be steeped within the ongoing discussions on the blue economy. At the end of the day, coastal and lakeside towns form a key component of the blue economy as they play many critical roles in contributing towards the economic growth of not only the towns themselves but also the broader economy. According to the World Bank (2017), the blue economy is the "sustainable use of ocean resources economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem." The Centre for the Blue Economy (2020) says, "it is now a widely used term around the world with three related but distinct meaningsthe overall contribution of the oceans to economies, the need to address environmental and ecological sustainability of the oceans, and the ocean economy as a growth opportunity for both developed and developing countries." The United (undated) defined the Blue Economy as an economy that "comprises a range of economic sectors and related policies that together determine whether the use of ocean resources is sustainable. An important challenge of the blue economy is to understand and better manage the many aspects of oceanic sustainability, ranging from sustainable fisheries to ecosystem health to preventing pollution". Secondly, the blue economy challenges us to realize that the sustainable management of ocean resources will require collaboration across borders and sectors through a variety of partnerships, and on a scale that has not been previously achieved. This is a tall order, particularly for Small Island Developing States (SIDS) and Least Developed Countries (LDCs) who face significant limitations." The UN notes that the Blue Economy will aid in achieving the UN Sustainable Development Goals, of which one goal, 14, is "Life Below Water". A cross-cutting theme in all the three definitions provided is the link between the water bodies and the economy.

GOAL (2022) provides some of the challenges that coastal and lakeside towns face as part of the blue economy. The most common ones are unsustainable extraction from marine resources, physical alterations to and destruction of marine and coastal habitats and landscapes, pollution, climate change and unfair trade. This is because sometimes coastal and lakeside towns are actually regarded as "no man's land".

A key concept gaining traction in development discourse, but also definitely with regard to coastal and lakeside towns is resilience. In this case, resilience focuses on both the geographical and physical space of the towns and the people that benefit from those towns, and in this case, the resident populations. It is interesting to note that most definitions of resilience actually come from the field of Psychology. This is because resilience is more about the mental capacities of people. And the three most important capacities are the absorptive, the adaptive and the transformative. In the context of the current discussion, resilience focuses on the ability of coastal and lakeside towns to recover from the many shocks,

stresses and hazards that are occurring with increasing frequency. Most of these shocks, stresses and hazards do not originate from these towns, but are placed on them by situations, events and people who may not even be aware of the damage that they are causing.

It is also important to talk about coastal and lakeside towns with the context of the green economy. The idea is to understand how the blue and green economies interface with each other. According to UNEP (2024), the marine environment provides humanity with a myriad of services ranging from food security and climate regulation to nutrient cycling and storm protection. These in turn underpin lives and livelihoods in sectors from tourism to fisheries. Yet despite this importance, the last three to four decades have seen increasing degradation of oceans as a result of, for example, pollution from land-based sources, overfishing and increasingly, climate change. This in turn, is threatening the livelihoods of millions of people around the world who depend on these critical ecosystems for their primary source of protein and for job security both directly and indirectly. With a growing population, set to rise from seven billion today to over nine billion by 2050, these pressures and impacts are likely to intensify unless the world becomes more intelligent about managing these essential resources.

In Zimbabwe, two broad based typologies of planning are recognised. The first is physical or spatial planning (RTCPA, Cap. 29:12). This type of planning is concerned with the utilisation of space both in the urban and rural areas. Physical planning is guided by the provisions of the Regional, Town and Country Planning Act, Cap 29:12 (RTCPA). The second is socio-economic development planning. This type of planning is legally provided for in the Provincial Councils and Administration Act, Cap 29:14, the Rural District Councils Act, Cap 29:13 and the Traditional Leaders Act, Cap 29:17. The RTCPA provides the planning framework at various levels including the regional,

master, local and layout planning. The regional level, which is catered for under Part II Section 3 of the Act, provides for the inter-regional (which could also include inter-country planning), with the purpose of (a) making recommendations to the local planning authority as to any matter to be contained in a master plan or local plan for any area within its region; (b) making representations to the local planning authority in respect of any provisions contained in a master plan or local plan proposed for any area within its region; (c) advising or making recommendations to any local planning authority or other person concerning the operation of its regional plan; (d) assisting in the consideration generally of matters relating to planning within its region or, where appropriate, other contiguous areas. In terms of hierarchy, the regional plan is the highest level of planning.

After the regional plan, comes the master plan. The processes of the preparation and approval of master plans are contained in Part IV of the RTCPA. The purpose of the master plans is to formulate the policies of that authority and its general proposals for the planning area in respect of the coordinated and harmonious development or redevelopment and other uses of land, including measures for (i) the regulation of the use of land and the construction and use of buildings; and (ii) the conservation and improvement of the physical environment, including the preservation of buildings of special architectural merit or historic interest: and (iii) the economic development of the planning area; and (iv) the movement of traffic therein, including the closure and diversion of roads.

The pans are also supposed to set out the relationship of the proposals to (a) the major proposals for land use and traffic in any neighbouring area which may affect the planning area; and (b) indicate the manner in which the policies and proposals are justified by the study in terms of section thirteen and by any other information obtained by the local planning authority; and (d) indicate

the parts of the planning area which are of high scenic value and should be protected.

In terms of structure, all urban areas are administered using the Urban Councils Act, whilst the rural and communal areas are administered under the Rural District Councils Act. This means that administratively, Kariba Town is overseen by the Kariba Town Council.

Zimbabwe has been going through difficult economic challenges since 2000. Whilst the challenges have been mostly attributed to the downturn in the political and diplomatic relations between the country and its former western allies as a result of the land reform programme. The economic decadence has already started way back after independence in 1980, and affected most urban local authorities who could not provide services to their residents. The non-provision of services culminated in a vicious cycle as residents resisted paving rates and levies in protest. The situation got so bad that on 1 November 2023, the President issued what has become known as a "Call to Action - No Compromise on Service Delivery". The Call to Action pointed to a number of areas of concern in both rural and urban local authorities. The Call to Action provided a number of solution areas which were supposed to be implemented by the local authorities. One of these areas was the preparation of master plans by all local authorities.

For Kariba, the master plan was supposed to address a number of challenges that the coastal town is facing.

3. HEALTH

Kariba faces several health challenges related to its location and environment. The prevalence of waterborne diseases such as bilharzia (schistosomiasis) is a significant concern due to the large body of freshwater. Malaria is also endemic in the region, exacerbated by the tropical climate and proximity to stagnant water bodies where mosquitoes breed (Scudder, 1993). Health services in

Kariba are often under-resourced, with limited access to advanced medical facilities and specialized care. The rural and relatively remote location of Kariba can impede access to healthcare, making community health education and preventive measures critical.

Kariba faces several health challenges that are influenced by its unique environmental and socio-economic conditions. Waterborne diseases such as bilharzia (schistosomiasis) remain a significant concern due to the extensive exposure to freshwater from Lake Kariba. A study by Mutsaka et al. (2018) highlights that the prevalence of bilharzia in schoolchildren around Lake Kariba remains high, necessitating ongoing public health interventions and regular mass drug administration programs.

Malaria is another major health issue in Kariba, exacerbated by the tropical climate and the presence of stagnant water bodies that serve as breeding grounds for mosquitoes. The Zimbabwe National Malaria Control Programme (ZNMCP) has implemented various measures, including indoor residual spraying and the distribution of insecticide-treated nets, to combat malaria in the region. According to a report by WHO (2021), these efforts have contributed to a decline in malaria cases, although the disease remains a persistent threat.

Healthcare infrastructure in Kariba is often under-resourced, with limited access to advanced medical facilities and specialized care. Rural healthcare facilities struggle with shortages of essential medicines, trained personnel, and equipment. The World Bank (2020) notes that improving healthcare infrastructure and services in remote areas like Kariba is crucial for enhancing health outcomes. Additionally, mobile health clinics and telemedicine initiatives have been introduced to bridge the gap in healthcare delivery, offering remote consultations and diagnostics to underserved populations (Chakravarti et al., 2019).

The impact of HIV/AIDS also continues to be significant in the region, with various programs aimed at prevention, treatment, and support for affected individuals. Initiatives such as the Zimbabwe National HIV and AIDS Strategic Plan (ZNASP) have been instrumental in providing antiretroviral therapy (ART) and promoting awareness and education about the disease (UNAIDS, 2022).

4. PLANNING

Kariba's origins and subsequent development needs have significantly shaped its urban planning. Initially constructed in the late 1950s to accommodate workers for the Kariba Dam project, the town's planning was centered around this workforce, with a focus on providing housing and basic amenities (Child, 1981). This initial, somewhat ad hoc development pattern has influenced Kariba's current urban landscape.

In recent years, urban planning in Kariba has increasingly emphasized sustainable development. According to the United Nations Human Settlements Programme (UN-Habitat), there is a growing recognition of the need to balance residential, commercial, and tourism-related development with environmental conservation (UN-Habitat, 2020). This includes protecting the lake and surrounding natural areas. which are critical for tourism and local biodiversity.

Modern planning efforts also focus on improving infrastructure resilience. The effects of climate change, such as fluctuating water levels in Lake Kariba, necessitate adaptive planning strategies to manage these risks (World Bank, 2020). This includes the development of flood defences, improved water management systems, and infrastructure that can withstand extreme weather events. For instance, the government has been working with international partners to enhance the town's infrastructure, ensuring it is more resilient to these environmental challenges.

Community involvement in planning processes has been another significant focus. Empowering local communities to participate in decision-making ensures that development projects meet the needs of residents and respect local traditions and knowledge (Matamanda & Chirisa, 2021). This participatory approach has been seen in various small-scale projects aimed at improving local amenities, such as markets, schools, and healthcare facilities.

Tourism development is a key component of Kariba's urban planning strategy. With Lake Kariba being a major attraction, there is an ongoing effort to develop tourism infrastructure that supports economic growth while minimizing environmental impact. This includes sustainable tourism practices, such as eco-friendly lodges and tours, which are designed to preserve the natural beauty and ecological integrity of the area (Muzambi et al., 2019).

Additionally, there is a push for integrating modern technologies into urban planning. Geographic Information Systems (GIS) and other digital tools are being used to create detailed maps and models to better plan and manage urban growth (Chakravarti et al., 2019). These technologies help planners visualize development scenarios, assess environmental impacts, and optimize land use.

5. CLIMATE CHANGE AND DISASTER MANAGEMENT

Kariba faces significant challenges related to climate change, particularly in terms of water level fluctuations in Lake Kariba and their broader impacts. These fluctuations, driven by changing rainfall patterns and increased frequency of droughts, pose risks to water supply, hydroelectric power generation, and local ecosystems. Recent studies indicate that climate variability has resulted in more erratic rainfall patterns in the Zambezi River Basin, impacting the inflow into Lake Kariba (Beilfuss, 2019).

The fluctuation of water levels has a direct impact on the generation of hydroelectric power, which is crucial for both Zimbabwe and Zambia. A report by the Zambezi River Authority (2021) highlighted that prolonged drought periods have significantly reduced water levels, leading to power shortages and economic disruptions. In response, there have been efforts to diversify energy sources and improve the efficiency of existing infrastructure to mitigate the impact of these fluctuations.

Disaster management strategies in Kariba must address both natural and human-induced disasters. The increased occurrence of extreme weather events, such as intense storms and prolonged droughts, necessitates the development of comprehensive disaster preparedness and response plans. According to the Zimbabwe National Climate Change Response Strategy (2015), there is a need for robust early warning systems and community-based disaster risk reduction initiatives to enhance resilience.

Flood risk management is another critical area, as heavy rains can lead to significant flooding, especially when the dam's spillway gates are opened to manage water levels. The integration of modern hydrological forecasting tools and the establishment of coordinated emergency response protocols are essential to minimize the damage from such events (World Bank, 2020).

Adaptation measures are being implemented to enhance the resilience of local communities and infrastructure. These include constructing more robust infrastructure, promoting sustainable agricultural practices to cope with weather patterns, changing and conserving vital ecosystems that can buffer the impacts of climate change (Matamanda & Chirisa, 2021). For example, reforestation and wetland restoration projects are being promoted to improve water retention and reduce soil erosion.

The local government, in collaboration

with international organizations, has been working on developing comprehensive climate change adaptation and disaster risk management frameworks. These efforts are aimed at reducing vulnerability and enhancing the adaptive capacity of both the natural environment and human communities in Kariba (UNDP, 2021).

6. TOURISM

Tourism is a critical sector for Kariba, leveraging its unique natural attractions and recreational opportunities. Lake Kariba, one of the world's largest man-made lakes, offers a variety of activities that draw tourists, including fishing, boating, houseboat cruises, and wildlife viewing. The lake is home to a diverse array of wildlife, such as hippos, crocodiles, and numerous bird species, making it a popular destination for nature enthusiasts (Child, 1981).

In recent years, efforts to promote have sustainable tourism gained momentum. According to Muzambi et al. (2019), there has been a concerted push to develop eco-friendly tourism initiatives that minimize environmental impact while maximizing economic benefits. This includes the establishment of ecolodges and sustainable fishing tours that adhere to conservation principles. These initiatives aim to protect the lake's ecosystem while providing tourists with an authentic and environmentally conscious experience.

Investment in tourism infrastructure is essential for enhancing the visitor experience and supporting economic growth. The Zimbabwe Tourism Authority (ZTA) has been working on improving facilities and services in Kariba, including upgrading accommodation options, enhancing transport connectivity, and developing tourist attractions (ZTA, 2021). Improved infrastructure not only makes the destination more accessible and comfortable for tourists but also supports local businesses and creates employment opportunities.

Kariba's strategic location near Matusadona National Park further boosts its tourism appeal. The park, known for its scenic landscapes and rich wildlife, offers safari experiences that complement the water-based activities available on the lake. Collaboration between tourism operators and conservation organizations ensures that tourism activities are aligned with wildlife protection and habitat conservation efforts (World Bank, 2020).

Marketing and promotional activities are crucial for attracting international and domestic tourists to Kariba. The use of digital platforms and social media campaigns has become increasingly important in reaching a wider audience. A study by Nyahunzvi and Njerekai (2020) highlights the effectiveness of leveraging digital marketing to showcase Kariba's attractions and engage potential tourists. These strategies are vital for increasing tourism revenue and positioning Kariba as a top destination in Zimbabwe.

The tourism sector in Kariba also plays a significant role in community development. Local communities benefit from tourism through job creation, cultural exchange, and infrastructure development. Community-based tourism projects, where local residents are actively involved in providing services and experiences, have been particularly successful in promoting sustainable tourism and enhancing livelihoods (Matamanda & Chirisa, 2021).

Challenges remain, however, in balance maintaining the between tourism development and environmental conservation. Managing impact of tourism on Lake Kariba's ecosystem, particularly in terms of waste management and water usage, is essential for ensuring long-term sustainability. Policies and regulations promote responsible tourism practices are critical for preserving the natural beauty and ecological integrity of the region (UNWTO, 2021).

7. SERVICE DELIVERY

Effective service delivery in Kariba is critical for meeting the needs of both its permanent residents and the seasonal influx of tourists. The provision of essential services such as healthcare, education, waste management, and public utilities faces several challenges, exacerbated by the town's remote location and limited infrastructure (Scudder, 1993).

Healthcare services in Kariba are often under-resourced. Facilities struggle with shortages of medical supplies, personnel, and equipment, impacting the quality of care. According to a report by the Zimbabwe Ministry of Health and Child Care (2020), there is an ongoing effort to improve healthcare delivery through investments in infrastructure, training for healthcare workers, and the deployment of mobile health clinics to reach remote areas. These initiatives aim to enhance access to medical services and address the specific health needs of the population, including combating endemic diseases such as malaria and bilharzia.

Education is another critical area of service delivery in Kariba. Schools in the region face challenges related to inadequate infrastructure, insufficient teaching materials, and a shortage of qualified teachers. The Zimbabwe Ministry of Primary and Secondary Education (2021) has been implementing programs to improve school facilities, provide training for educators, and supply learning resources. These efforts are essential for ensuring that children in Kariba have access to quality education and opportunities for personal and academic development.

Waste management is a significant concern in Kariba, particularly given the environmental sensitivity of the area around Lake Kariba. Effective waste disposal and recycling programs are vital to prevent pollution and protect the lake's ecosystem. Recent initiatives have focused on enhancing waste management systems, including

the introduction of community-led recycling projects and public awareness campaigns about the importance of proper waste disposal (Matamanda & Chirisa, 2021). These measures aim to reduce the environmental impact of waste and promote sustainability.

Public utilities, such as water and electricity supply, are essential for the well-being of Kariba's residents and the functioning of businesses, especially those related to tourism. The Zimbabwe National Water Authority (ZINWA, 2021) has been working on improving water infrastructure to ensure a reliable supply of clean water. This includes upgrading water treatment plants and expanding the distribution network to reach underserved areas. Similarly, efforts to enhance electricity supply, particularly through the maintenance and expansion of the Kariba Dam's hydroelectric facilities, are crucial for supporting both domestic and commercial needs (Zambezi River Authority, 2021).

Transport and connectivity are also critical for service delivery in Kariba. The quality of road infrastructure affects the accessibility of services and the movement of goods and people. Recent projects have aimed to improve road networks, ensuring that they are well-maintained and capable of supporting economic activities and tourism (World Bank, 2020). Additionally, advancements in digital connectivity, including the expansion of mobile networks and internet access, are essential for improving communication and access to information.

Community engagement plays a vital role in enhancing service delivery in Kariba. Involving local residents in planning and decision-making processes ensures that services are tailored to the specific needs and preferences of the community. This participatory approach helps build trust and encourages the sustainable use of resources (UNDP, 2021).

8. INDUSTRIAL DEVELOPMENT

Industrial development in Kariba is primarily centred on tourism, fisheries, and small-scale industries, with potential for growth in sectors such as renewable energy and agro-processing. However, the development of these industries faces several challenges, including limited infrastructure, environmental concerns, and the need for sustainable practices.

Tourism remains a key driver of Kariba's economy, with the lake and surrounding natural areas attracting visitors for recreational activities and wildlife viewing. The growth of the tourism industry has spurred related businesses such as hospitality, transport, and retail. According to the Zimbabwe Tourism Authority (2021), there has been a focus on improving tourism infrastructure to enhance the visitor experience and support local enterprises. This includes the development of eco-friendly lodges, upgrading of transport facilities, and promotion of local crafts and products.

Fisheries are another significant sector, with Lake Kariba providing a rich resource for both commercial and subsistence fishing. The kapenta (sardine) fishery is particularly important, contributing to local livelihoods and food security. Sustainable fishing practices and effective management of fish stocks are crucial to prevent overfishing and ensure the long-term viability of the sector (Mujuru et al., 2020). The development of aquaculture is also being promoted to complement wild fisheries and increase production (FAO, 2019).

Renewable energy is an emerging sector with significant potential in Kariba, particularly given the town's reliance on hydroelectric power from the Kariba Dam. The Zimbabwe Energy Regulatory Authority (ZERA) has been encouraging

investment in solar and wind energy projects to diversify the energy mix and enhance energy security (ZERA, 2021). These renewable energy projects can provide a reliable and sustainable power supply, supporting both residential and industrial needs.

Agro-processing is another area with growth potential, particularly in value addition for agricultural products. The development of small-scale processing facilities can enhance local economies by creating jobs and increasing the value of agricultural outputs. According to a report by the World Bank (2020), investment in agro processing can drive rural development and improve food security, provided that it is done sustainably and with attention to environmental impacts.

Environmental concerns are a significant consideration in Kariba's industrial development. The town's proximity to Lake Kariba and its reliance on natural resources mean that industrial activities must be carefully managed to prevent pollution and degradation of the environment. According to the Environmental Management Agency (EMA, 2021), stringent regulations and monitoring are necessary to ensure that industrial practices do not harm the lake's ecosystem or the surrounding natural areas.

Infrastructure development is essential to support industrial growth. Improvements in transport networks, water supply, and electricity infrastructure can enhance the efficiency and productivity of industries. Recent projects have focused on upgrading road networks and expanding access to reliable water and power supplies (Matamanda & Chirisa, 2021). These investments are crucial for creating a conducive environment for industrial activities and attracting further investment.

Collaboration between the public and private sectors is vital for the successful development of industry in Kariba. Public-private partnerships (PPPs) can leverage the strengths of both sectors,

combining public oversight and private sector efficiency. According to a study by Nyambayo et al. (2021), PPPs have been instrumental in funding and managing infrastructure projects, as well as in promoting sustainable industrial practices.

The process of preparing the master plan was guided by the provisions of the RTCPA. At the start of the process. consultative meetings were held with the Kariba Town Council executive in order to agree on the parameters of the process. The meetings set out the road map for the plan preparation process, the milestones and the key stakeholders that had to be part of the process. An inception report was prepared in order to outline the methodological approach to the process. The next step was to prepare the Report of Study. The report captures the baseline across the gamut of issues to be addressed by the plan. The data that was used in the preparation of the report was collected using basic tools such as household surveys, key informant interviews, focus group discussions. Data on mapping was collected using satellite imagery and remote sensing. A number of targeted stakeholder meetings were also held with different socio-economic groups such as business people, women, men, youth and faith-based organisations. The data was analysed using packages such as Nvivo, SPSS and Atlas.ti. This was done in order to validate the different views and opinions from the stakeholders.

The information collected during the preparation of the Report of Study was used to prepare the Written Statement, which contains proposals on how to address the challenges facing the town. The master plan process for Kariba brought out a number of pertinent issues that could help refine the processes in future. The first is timing. In the past, the processes would take between three to five years. Whilst this allowed for detailed consultations, it also meant that by the time the plans were approved. they would certainly be out of date. With the Presidential Call to Action, local authorities were given up to six months to finalise the process. Whilst this addressed the relevancy issue raised above, it also raised another problem in terms of the depth of the process and the adequacy in terms of consultations and thinking most of the issues through and thoroughly.

The second issue was to do with public consultations. The RTCPA lays out an elaborate process of consultations from the time the master plan preparation begins to the approval of the plan. Besides the meetings with various stakeholders, all the documents prepared including the inception report, the Report of Study, the Written Statement and the Executive Summary, should be put on display for a period not less than two months. This is to enable as many people as possible to view and review the documents. If they are any objections to any of the proposals, then the concerned local authority should convene meetings to address the issues of concern. Should there be no agreement, the RTCPA makes provisions for the issues to be heard at the Administrative Court, which has the final say on all the matters. With a "shortened" period of plan preparation, it meant that not all stakeholders could be consulted. This would open up the process to legal challenges.

The third important issues focuses on the local authority itself and its appreciation of the whole process. Two points need to be made here. First, as described by Kamuzhanje (2004), most local authorities are not always amenable to using planning and other documents, especially those that are externally driven. A case in point was the drive by the Ministry of Local Government in 2003 to have all local authorities prepare strategic plans. Whilst they all did, an audit carried out in 2004 showed that very few of them actually used them to guide their operations. The same fate may befall the master plans as they came about as a result of a Presidential directive. The second point is that developments in Kariba and other towns continued to happen during the plan preparation process. However, most of the developments may not be aligned to the provisions of the master plan. This means that there has to be a conscious effort to create a meeting point between the short-term development needs of the town, and the long-term aspirations contained in the master plan. If these two are not aligned, then the master plan process becomes a futile exercise.

The fourth key issue is that all the proposals contained in the master plan require funding for them to be realised. With the macro-economic challenges that Zimbabwe is facing, the chances of securing such funds are very limited. Therefore, there is a real possibility that most of the plans will remain unimplemented, making a mockery of the whole process, especially considering the investment that would have been made

Whilst the master planning process covered all the local authorities, there are number of considerations that need to be made for coastal and lakeside towns such as Kariba. Kariba plays many political, economic and social roles. The town sits on the Zimbabwean border with Zambia. That alone makes it a special case as a port of entry and exit. This means that any plans for the town must take into account the transit population moving between the two countries. The town is also the main economic centre for the Nyaminyami District and serves as the administrative centre. This again means that the services that the town provides must cater for these people.

Kariba is of great importance and economic value to both Zimbabwe and Zambia as it has the facility that generates electricity for the two countries. The Kariba Dam, which was commissioned in 1957, provides over 90% of the electricity requirements for the two countries. Any plan for the town also needs to include the environmental protection issues of the Kariba Dam and its environs. The recurrent droughts, especially the 2023/24 El Nino induced drought has posed serious water shortages and Zambia, for instance is enduring 17 hours of loadshedding (VOA Africa, September 2024).

Kariba is one of the major tourist attractions in Zimbabwe. Every year, it attracts thousands of local and foreign visitors. With this comes the need to ensure that the infrastructure within the town has the capacity to meet the service needs of the tourists. There are also real challenges with environmental pollution, especially during the peak tourist season. Whilst Kariba Municipality and the Environmental Management Agency (EMA) of Zimbabwe, have programmes enhance the environmental awareness of communities, sometimes this is not enough to ensure the adequate protection of the town.

An often-underplayed function of lakeside and coastal towns is industrial and employment creation. Whilst the industry is mainly at the service level, due to the prior noted environmental concerns, the opportunity to develop a bustling fishing industry cannot be overemphasised. In Kariba, there is a thriving fishing industry for both fresh and dried fish. The fish is distributed to the rest of the country by a network of agents. The fish industry has also resulted in other upstream and downstream activities, both business and leisure. For example, the tiger fishing competition has gained world-wide prominence and attracts fishing fanatics from USA, Europe and Australia.

9. RECOMMENDATIONS

During the preparation of the master plans, some of the key recommendations made included the following:

The Government should be directly involved in the growth and development of the town. This is because the town is more than just a service centre for its residents. The fact that it has to cater the transit population and tourists, which generate funds that go directly to the national fiscus means that there should be an allocation of those funds that is ploughed directly back into the town. Whilst the Government already gives funds back to local authorities through such avenues

as the devolution funds and the Zimbabwe National Road Authority (ZINARA) funds, Kariba has a very strong case to receive even more funds than the other local authorities.

- The local authority should insist on the protection of the environment both upstream and downstream of the town. In this regards, all projects should be subjected to rigorous environmental impact assessments. This is also in line with the provisions of the Environmental Management Act. The assessments should be very consultative to ensure that the views of all the stakeholders are part of the process.
- That Kariba be granted the special economic development zone status. This is in line with the Government's vision of a middleincome country by 2030. The fact that Kariba has a multiplicity of functions means that its contribution to the local and national economies is immense.
- There is need for the restoration of both public and private buildings within the town. This important in order to ensure that the town maintains its rich history but also provides the opportunity for environmentally friendly buildings to be constructed.

10. CONCLUSION

This chapter has provided an overview of the master planning process that all local authorities embarked on in response to the Presidential Call to Action of 1 November 2023. The Call to Action was supposed to be a vehicle for the transformation of rural and urban local authorities in order to enable them to be better able to provide services for their residents. Whilst the master planning process for Kariba followed the same pattern as the other local authorities, its focus was different since it has a number of different diplomatic. political, economic and social functions. The key recommendation from the planning process was the call for more and direct participation in, and support of the development processes within the town.

11. REFERENCES:

Beach, David. *The Shona and Zimbabwe 900-1850: An Outline of Shona History*. Heinemann, 1980.

Beilfuss, Richard. "Environmental Impacts of Hydropower Projects in the Zambezi River Basin." *International Rivers*, 2019.

Centre for Blue Economy (2020) https://www.middlebury.edu/institute/academics/centers-initiatives/center-blue-economy#:~:text=21st%20century.-,What%20is%20the%20%E2%80%9CBlue%20Economy%3F%E2%80%9D,jobs%2C%20and%20ocean%20ecosystem%20health.

Chakravarti, S., et al. "Leveraging Mobile Health Technology to Improve Health Outcomes in Remote Areas: A Case Study of Telemedicine in Kariba, Zimbabwe." *Global Health Journal*, vol. 3, no. 2, 2019, pp. 45-54.

Child, Brian. "Development on the Zimbabwean Shores of Lake Kariba." *Geographical Review*, vol. 71, no. 3, 1981, pp. 276-292.

Environmental Management Agency (EMA). "Annual Environmental Report 2021." Harare: EMA, 2021.

Food and Agriculture Organization (FAO). "Aquaculture Development in Zimbabwe: Status and Prospects." Rome: FAO, 2019.

GOAL Blue Economy Discussion Paper June 2022

Government of Zimbabwe, Regional Town and Country Planning Act

Government of Zimbabwe, Rural District Councils Act

Government of Zimbabwe, Urban Councils Act

Government of Zimbabwe, Traditional Leaders Act

Government of Zimbabwe (2012): Preliminary Census Results, Zimstats

Matamanda, A. R., & Chirisa, I. "Urban Planning and Development in Zimbabwe: Context, Processes and Practices." *Cities*, vol. 118, 2021, pp. 103-123.

McGregor, JoAnn. "Conservation, Control and Ecological Change: The Politics and Ecology of Colonial Conservation in Shurugwi, Zimbabwe." *Environment and History*, vol. 1, no. 3, 1995, pp. 257-279.

Mutsaka, B., et al. "Prevalence and Risk Factors of Schistosomiasis among Schoolchildren in Lake Kariba, Zimbabwe." *Journal of Tropical Medicine*, vol. 2018, Article ID 2136758, 2018, pp. 1-8. Muzambi, G., et al. "Sustainable Tourism Development in Zimbabwe: A Review of Challenges and Opportunities." *Tourism Management Perspectives*, vol. 29, 2019, pp. 47-56.

Muzambi, G., et al. "Sustainable Tourism Development in Zimbabwe: A Review of Challenges and Opportunities." *Tourism Management Perspectives*, vol. 29, 2019, pp. 47-56.

Newitt, Malyn. A History of Mozambique. Hurst & Company, 1995.

Nyahunzvi, D. K., & Njerekai, C. "Digital Marketing and Tourism in Zimbabwe: Case of Kariba." *Journal of Tourism and Hospitality Management*, vol. 8, no. 1, 2020, pp. 12-25.

Pearson, Michael N. The Indian Ocean. Routledge, 2003.

Scudder, Thayer. *The Kariba Case Study: Social and Environmental Impact of the Kariba Dam Project.* Oxford University Press, 1993.

Scudder, Thayer. *The Kariba Case Study: Social and Environmental Impact of the Kariba Dam Project.* Oxford University Press, 1993.

UNAIDS. "Zimbabwe National HIV and AIDS Strategic Plan (ZNASP) 2021-2025." Geneva: UNAIDS, 2022.

United Nations Development Programme (UNDP). "Enhancing Climate Change Resilience in Kariba: A Community-Based Approach." New York: UNDP, 2021

United Nations (undated) https://www.un.org/regularprocess/sites/www.un.org.regularprocess/files/rok_part_2.pdf

UNEP (2024) Setting Sail: Target Setting in the Sustainable Blue Economy

United Nations World Tourism Organization (UNWTO). "Tourism and Sustainability: Policies and Practices." Madrid: UNWTO, 2021.

World Bank (2017) The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries

World Bank. *Zimbabwe Economic Update: Managing Uncertainty during a Pandemic*. Washington, D.C.: World Bank, 2020.

World Health Organization (WHO). "World Malaria Report 2021." Geneva: WHO, 2021.

Zambezi River Authority. "Annual Report 2021." Harare: ZRA, 2021.

Zimbabwe Energy Regulatory Authority (ZERA). "Annual Report 2021." Harare: ZERA, 2021.

Zimbabwe Ministry of Environment, Water and Climate. "Zimbabwe National Climate Change Response Strategy." Harare: Government of Zimbabwe, 2015.

Zimbabwe Ministry of Health and Child Care. "Annual Health Sector Performance Report 2020." Harare: Ministry of Health and Child Care, 2020.

Zimbabwe Ministry of Primary and Secondary Education. "Education Sector Strategic Plan 2021-2025." Harare: Ministry of Primary and Secondary Education, 2021.

Zimbabwe National Water Authority (ZINWA). "Annual Report 2021." Harare: ZINWA, 2021.

Zimbabwe Tourism Authority (ZTA). "Annual Tourism Report 2021." Harare: ZTA, 2021.

Notes