

2023-2033



KEHANCHA MUNICIPALITY ISUDP

*A vibrant, competitive and
Sustainable Municipality*



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Foreword

Kehancha town was conferred a municipal status on 14st February 2023 through a Gazette notice in the Kenya Gazette as stipulated in the Urban Areas and Cities Act, 2011 (amended). In view of the above, a review of the Kehancha Integrated Strategic Urban Development Plan was then done to be in line with the provisions of the Constitution of Kenya 2010 and other enabling pieces of legislations.

This ISUDP therefore has incorporated the changes in the legislations and the policy framework, demography and the needs of the municipality and to ensure the approval of the plan. The preparation of this plan has involved mapping of the existing infrastructure, spatial structure of the population and economic activities, identification of opportunities and constraints and development of strategies and provision of solutions that best suits the municipality.

Stakeholder involvement was key in preparation of this plan and hence a representation of the general public, county government and national government agencies was ensured. This plan looks forward to boost socio-economic development of the municipality thereby enabling it to achieve its long term vision of being a vibrant, competitive and sustainable municipality.

Hon. John Kobado

County Executive Committee Member

Lands, Housing, Physical Planning & Urban Development

Abbreviations

| | |
|----------------|--|
| CBD | Central Business District |
| CIDP | County Integrated Development Plan |
| ECDE | Early Childhood Developments Centres |
| GoK | Government of Kenya |
| Ha | Hectares |
| ICT | Information Communication Technology |
| IDep | Integrated Development Plan |
| ISUDP | Integrated Strategic Urban Development Plan |
| KENHA | Kenya Highways Authority |
| KERRA | Kenya Rural Roads Authority |
| KETRACO | Kenya Electricity Transmission Company |
| KISIP | Kenya Informal Settlement Improvement Program |
| KMTC | Kenya Medical Training College |
| KURA | Kenya Urban Roads Authority |
| KUSP | Kenya Urban Support Program |
| MCG | Migori County Government |
| MIWASCO | Migori Water and Sanitation Company |
| NEMA | National Environment Management Authority |
| NHC | National Housing Corporation |
| NMT | Non-Motorized Transport |
| PPP | Public Private Partnerships |
| PSV | Public Service Vehicles |
| SME | Small and Micro Enterprises |
| SPSS | Statistical Package for the Social Sciences |
| UACA | Urban Areas and Cities Act |
| UPAL | Arban and Peri Urban Agriculture and Livestock |
| WARMA | Water Resources Regulatory Authority |

CHAPTER ONE: INTRODUCTION

1.1. General Background

Over the last decade, Kenya has been urbanizing rapidly mainly due to rural urban migration and high rate of population growth. In the year 2005, 20.4 % of the population resided in urban areas. This is projected to rise to 60% in the year 2030 (GOK 2007). This rapid growth needs to be guided by a planned programme in urbanization consistent with the principles in the social pillar envisaged in vision 2030. It is against this background that this plan is premised.

Urbanization in Kenya like any other developing country is generating a lot of concern due to the challenges it imposes on the future development of the cities and towns. The authority's ability to respond to the needs of the urban residents by providing the requisite public goods and services has been overwhelmed by the rapid urbanization that has been witnessed. The urbanization trend with its characteristics such as rapid demographic growth, spatial expansion., economic differentiation, social complexity, cultural diversity and institutional fragmentation call for an efficient and responsive mechanism to reduce the ancillary impacts of urbanization such as poverty, inequality, traffic congestion, growth of informal settlements and environmental degradation. Further, rapid urbanization has led to poor arrangement of houses and other infrastructure within the urban set up leading to disharmony in various functions such as accessibility and maintenance of a healthy environment.

1.2. Purpose and Goal.

Purpose of this Local Physical and Land Use Development Plan as provided for in Section 46 of the Physical and Land Use Planning Act, No. 13 of 2019 is to provide framework for:

- a) Zoning, urban renewal, or redevelopment;
- b) Guiding and coordinating the development of infrastructure;
- c) Regulating the land use and land development;
- d) Providing a framework for coordinating various sectoral agencies; and
- e) Providing a framework and guidelines on building and works development in the city, municipality, urban area, or other smaller urban centres including local centres, and market centres.

1.3. Planning Problem in Kehancha

Kehancha town has in the recent past witnessed an upsurge in population growth owing to its role as an administrative headquarter of Kuria west Sub County. This rapid expansion calls for planning interventions to aid the town in its development. The Physical and Land Use Planning Act, No. 13 of 2019, Urban Areas and Cities Act, and the County Government Act provide all counties and urban areas with the mandate to ensure that all developments conform to the recommended planning standards. It is against this backdrop that a deliberate exercise aimed at directing the use and development of scarce resources in harmony with the environment is needed to promote health, safety, amenity, social equity, convenience and environmental conservation in Kehancha town. The town's Local Physical and Land Use Development Plan is therefore intended to provide a guideline on its physical growth in order to address the various land use concerns such as environmental, social and economic issues thereby achieving sustainable development.

Legally the responsibility for urban planning of Kehancha town rests with the county government, which also takes care of most management, maintenance and provision of infrastructure and basic services. Currently, there is no legally approved master plan for Kehancha town. Some plans with different thematic scope have been developed but they have neither been endorsed as legal documents. In principle, they have not served as a proper framework for spatial and social development but only for a few casual interventions and thus making development control difficult.

The responsibilities for town development and management are dispersed in a maze of government institutions, agencies, departments and divisions without any coordinating agency. Duplication and gaps are common.

1.3.1. Planning Challenges in Kehancha Town

Kehancha town just like many other townships in Kenya is faced with a myriad of development challenges, principal among them being planning and management problems. The land use profile is characterized by congested CBD, Mushrooming slums and narrow 6m access roads. The key planning issues in Kehancha include:

- i. Unplanned and uncoordinated urban growth and economic development.
- ii. Poor road network and transport system.
- iii. Rapid growth and illegal subdivisions, informal land transactions.
- iv. Urban sprawl and slum expansion.

- v. High level of unemployment and declining opportunities.
- vi. Increased pollution and deterioration of the environment.
- vii. Inadequate service delivery.

The Kehancha Local Physical and Land Use Plan will therefore help in attaining the following:

- i. Integrate land use and infrastructure planning to improve the built, economic and social environments of the town.
- ii. Reduce land use conflict and enhance urban safety.
- iii. Encourage economic development while promoting the efficient use of land and protection of significant natural and heritage features.
- iv. Adaptation to climate change, including reduced vulnerability to natural disasters

1.4. Vision

The vision for Kehancha town was crafted by the residents and fine-tuned by the planning team and later validated during the validation workshop and therefore is a product of collaborative engagement between various stakeholders. The vision as validated is: *A vibrant, competitive and sustainable town*

1.5. Objectives of the plan

The overall objective of the planning exercise was to prepare an integrated urban development plan in order to:

- Promote integrated development of socio-economic activities.
- Provide and develop sustainable human environment and resource system
- Preserve and protect existing features and fragile ecosystem
- Create the town's character and ensure compactness of the urban form and design
- Provide policy framework for socio-economic investments, economic use of space, preservation of community facilities, and infrastructural services.
- Provide framework of plan implementation, organization and administration requirement and resources for implementing the plan.

1.6 Scope of the plan

The Kehancha Local Physical and Land Use Plan is to guide the towns development for the next 20 years (2023-2033). The planning area is 178km² and is based on the assumption that

annual development will take place at a coverage rate of 0.5km². This covers Masaba, Bukira Central/Ikerege and Masaba wards.

1.7 Outputs.

The main output of the plan is an Integrated Strategic Urban Development Plan that provides both long term and short-term strategies for guiding development of the town and its environs. The long-term framework offers the desirable spatial structure and indicates broad land use proposals. The short-term framework specifies the appropriate actions and their location within the planning area. These include the following:

- Area Action Plans.
- Transportation Strategy
- Environmental Protection and Conservation Strategy
- Economic (Investment) strategy
- Housing Strategy.
- Implementation Strategy

1.8. TERMS OF REFERENCE

The plan was prepared in response to the following terms of reference:

- Carry out a physical and natural ecological features study of town and its outlying region with view to preparing a strategy for their efficient use, conservation and spur economic development.
- Determine the existing resource potentials with view to their maximum utilization.
- Undertake a Land-Use and Socio-economic studies with a view to proposing a policy/strategy for mixed land uses, minimum standards applicable in urban areas; and minimum agricultural economic units.
- Mapping and digitization of topographical cadastral features and natural resources of the town.
- Identify the existing land malpractices and settlements and propose strategies for improved land Management, administration, development approval, control and regularization.

- Undertake an assessment of transport, infrastructure and utility needs, housing and community services and propose new strategies.
- Prepare analysis reports and present proposals for future spatial, demographic, social and economic growth.
- Prepare a long term 20 years Integrated Strategic Development Plan for town, together with detailed plans in the identified areas.
- Prepare attendant transport infrastructure services and community development facility plans.
- Identify suitable land for both public purpose and utilities
- Prepare plan implementation schedule, planning and development policy guidelines and attendant resource and institutional requirements.

1.9 Methodology

The process involved two distinct but related activities, that is, digital mapping and the use of the resultant digital map in the preparation of the Local Physical and Land Use Development Plan for the town.

1.8.1 Strategic Planning Approach

The conventional urban planning approaches that have been applied in Kenya have been found to be inadequate since they adopted planning laws and regulations from the colonial administration. These approaches set standards that were too high when it comes to development while in some cases, emphasis was on the built-up zones of the townships instead of seeing the town as a unit. This led to the adoption of strategic planning which is a more holistic, inclusive and integrated approach which focuses on the; planning of the whole township, residents' views, local governance and gender equity among others. It is this approach which was adopted for the planning of Kehancha town. The three key questions that this approach addresses include:

- Where are we today?
- Where do we want to go?
- How do we get there?

1.8.2 Digital Mapping

The objective of the Digital topographical survey was to: Provide a reliable digital map of Kehancha town for planning and use in infrastructure design and maintenance program.

The planning team endeavored to provide a methodology that provides accuracy and flexibility without sacrificing the quality of products required. This method was used to develop the following final documents:

- Satellite imagery/aerial photography in both hard and soft copies that are georeferenced.
- Preliminary maps.
- Cadastral layer of the registered land parcels.
- Final digital maps and hard copies.

1.8.3 Planning Approach

After the development of the digital maps, the planning process involved five main steps or phases:

1.8.3.1 Phase One: Preparatory

This phase included undertaking reconnaissance visit, meeting with County Government and the National Government officials. A consultative meeting was also held with key stakeholders. The result of the meeting was the formation of a steering Committee. The committee has 20 members and comprised of officials from line ministries such as the representative of the DCC, Physical Planning Officer, Statistics Officer, Water Officer, NEMA officer, Sub County Administrator, and Engineer. Other members include the representative of Bodaboda Association, Trade Association, women and youth groups and residents' associations amongst others.

1.8.3.2 Phase Two: Sensitization of Stakeholder

Stakeholders' involvement and participation was an important task for the project as it gave them the opportunity to obtain ownership of the process, Identify the planning status of the urban centre in question, determine issues to be considered in the data collection and analysis as well as establish the extent of the planning area.

Visioning and Objective Settings Workshop

As part of the sensitization process, a Visioning and Objective Setting Workshop was held on with membership from the National and Local Governments, the business community, professionals, residents etc. The workshop was divided into six (6) thematic groups to enable them deliberated on planning issues. These thematic groups included;

- Land use

- Transportation and other Infrastructure
- Governance and Capacity Building
- Environmental
- Economic and Investment
- Housing and Upgrading of Informal Settlement

These deliberations led to the formation of a common vision statement for the town. All the thematic groups proposed their visions and stakeholders mandated the planning team to construct one common vision statement from all the proposed visions.

1.8.3.3 Phase Three: Investigative phase

The main aim of this phase was to collect data to be used in the actual preparation of the plan, and it involved several steps, beginning with field survey. Field survey involved recruiting and training of research assistant, fine tuning of data collection tools and approaches to fit the challenges and issues arising from the reconnaissance and stakeholder's sensitization. Other activities included sampling of households and conducting interviews, and data analysis. The main steps involved included:

Identification of sources of primary and secondary data

- Collection and analysis of data on planning components
- Identification of key issues for planning
- Presentation of the findings to a validation workshop

Data Collection

The techniques for data collection included questionnaires, interviews, observation and photographs. A survey using questionnaires with carefully agreed representative sample of the population was conducted. The sample sizes in the town were determined after the reconnaissance survey.

Interviews were held with a variety of stakeholders which included representatives of the residents of the town, the business community, various interest groups and officials of the national and local governments. These included the Deputy County Commissioner; Sub County Officers, Area Chiefs and Assistant chiefs and the village elders. Other key informants included officials from all government ministries such the Ministry of Planning, National Development and Vision 2030, Ministry of Lands, District Surveyor, , all food and

livestock related ministries, Environment and Forestry officers, Sub County Water Officer, Health Officer, Education Officer and CDF officials from Kuria west constituency. These group of individuals gave an in-depth experience of on challenges and constraints affecting the town.

Data Analysis

Statistical Package for Social Sciences (SPSS) was used for processing the household data collected. Processing of data involved the following;

- Coding of questionnaires,
- Development of SPSS frame for data entry,
- Data entry,
- Data cleaning,
- Developing table of frequencies.

Data analysis was through triangulation of data of the household survey data, interviews and literature review. The analyzed data led to the development of the following:

- Situational analysis of existing services, land and financial capability
- Challenges affecting the town in the provision of its services
- Emerging planning issues
- Way forward
- Development of sectoral strategies in the following sectors:
 - ✓ Transportation
 - ✓ Environment
 - ✓ Housing and settlement upgrading
 - ✓ Social infrastructure
 - ✓ Economic and Investment
 - ✓ Revenue Enhancement

Stakeholder forum

A one-day stakeholder workshop was held to validate the aspirations and concerns of the stakeholders. They assisted in refining the proposals, and was useful in promoting and popularizing implementation strategies and findings.

1.8.3.4 Phase Four: Draft Integrated Strategic Urban Development Plan

- Modeling spatial scenarios showing desired outcomes, alternatives, strategies and programmes.
- Development of implementation plan.

1.8.3.5 Phase Five: Approval and Publication of Final Plan for Kehancha Town

On completion, the final strategic urban development plan will be submitted to department of Lands, Housing and Physical Planning for adoption and for further submission to the county executive committee for consideration and onward submission to the County Assembly for approval.

1.8.3.6 Monitoring and Evaluation of the Integrated Strategic urban Development Plan

Monitoring and evaluation strategy for implementing the plan was prepared so as to ensure better coordination amongst urban development actors, enhance and structure participation of different actors and have a clear resource mobilization strategy.

1.8.3.7 Implementation of the Plan

Plan implementation is highlighted in the Implementation Matrix. For successful implementation of the plan, partnership between the county government, government ministries, CSOs, private sector and other bodies responsible for the plan implementation is needed.

1.8.3.8 Training and Skills Transfer

An important part of this assignment included a programme of training, capacity building, and skills transfer, in particular to the selected staff of County Government of Migori. A hands-on training for a few selected technical staff has been in progress since initiation of the project. This was to ensure a clear understanding of the final strategic urban development plan, and a long-term sustainability and efficiency during implementation stage. A much higher level of training was undertaken upon completion of the plan to assist the staff in plan implementation and on the use of various software used in the development of this plan.

CHAPTER TWO: PLANNING CONTEXT

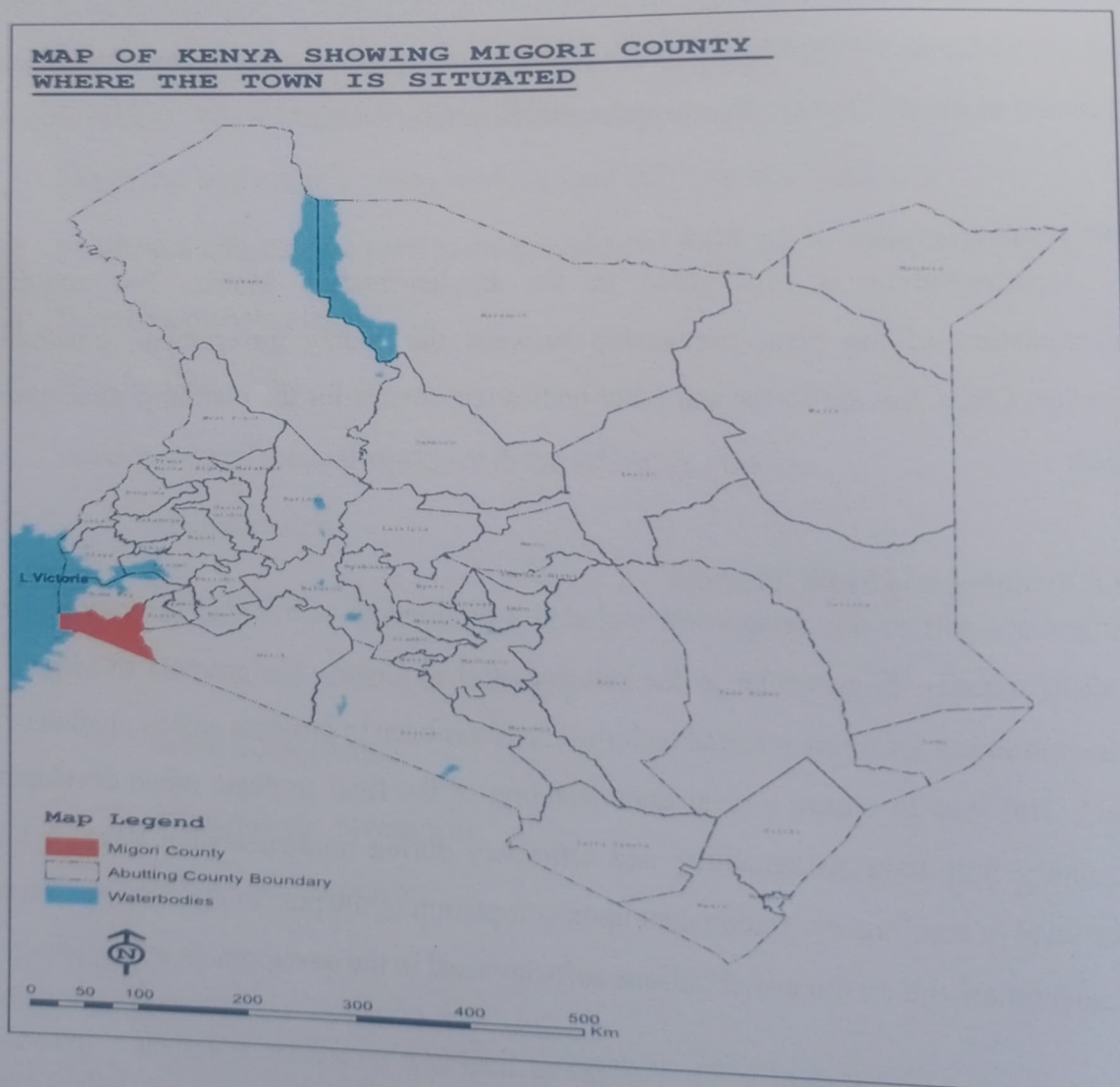
2.1 Introduction

This plan has been prepared within the context of: the Constitution of Kenya; the Vision 2030 national development blue print; various sectoral policy frameworks; relevant legislative provisions; the terms of reference and stakeholder concerns. This are discussed below.

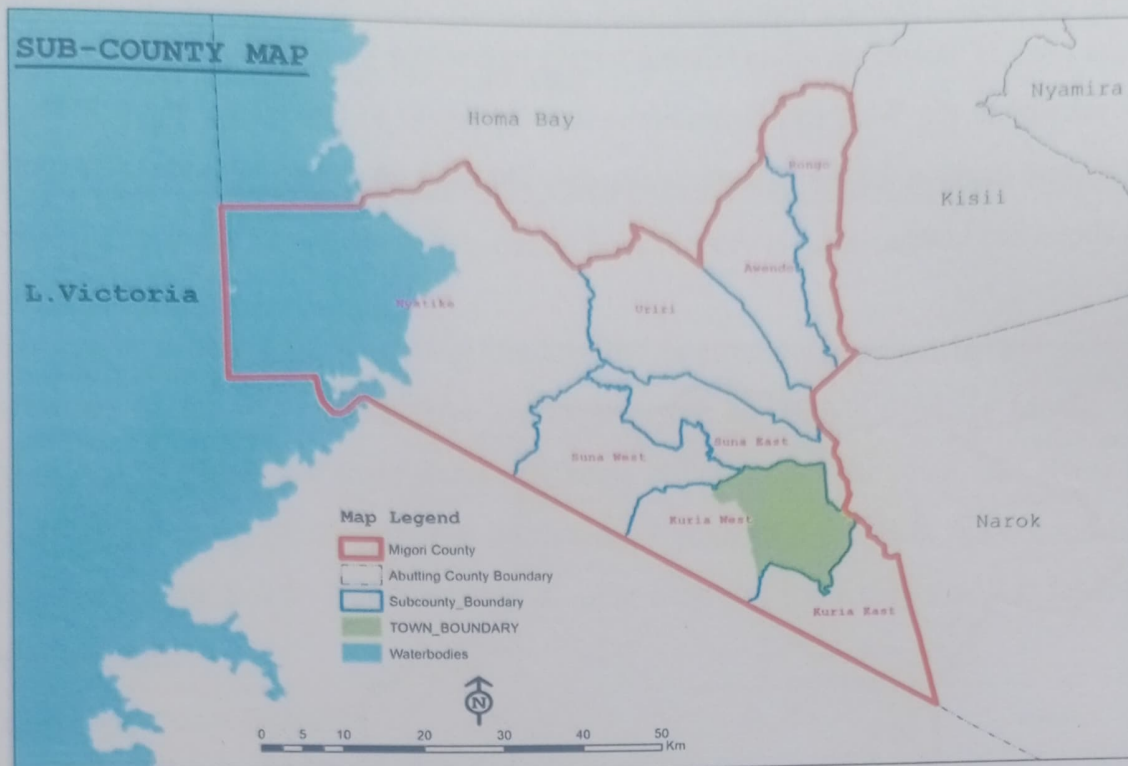
2.2 Part One -Physical Characteristics.

2.2.1 Location and Size

Kehancha is located in Kuria west sub county, Migori County, off C13 Migori –Lorgorian road. It is 368km west of Nairobi and 156km South of Kisumu. Geographically it covers 178 km².



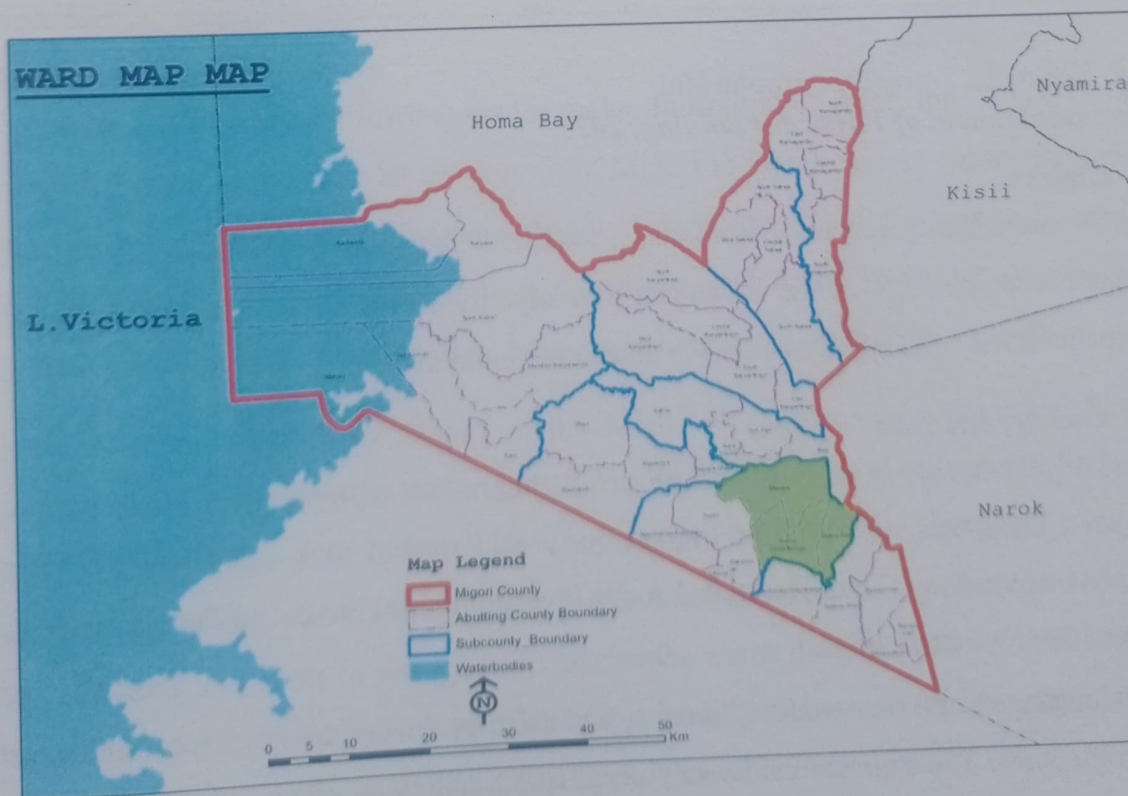
*Map 1: National context of the Kehancha Town.
Source: Department of Physical Planning, 2023*



Map 2: Regional Context of Kehancha Town
Source: Department of Physical Planning, 2023

2.2.2 Political and Administrative Units

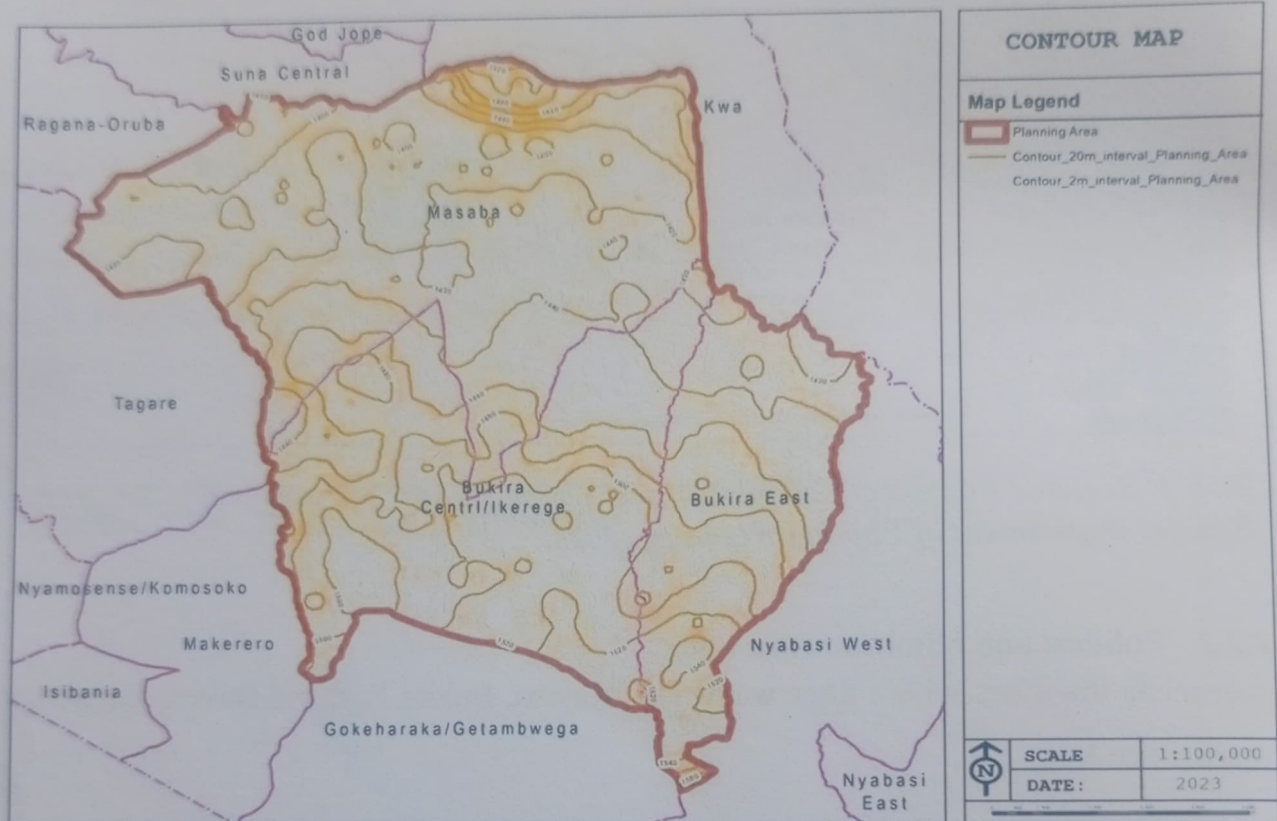
Kehancha town lies within three wards i.e., Masaba, Bukira East and Bukira central/Ikerege wards. See Map 2.1.



Map 3: Ward Map of Kehancha Town
Source: Department of Physical Planning, 2023

2.2.3 Topography

Kehancha town is located on an undulating terrain intersected by Hibwa River in the North west, Nyakwiri to the West and Nyamikomo and Nyangutu to the South. and a broad-U-shaped bottom lands in the South towards Ikerege. The altitude ranges from about 1120m to 1450m above Sea Level.



Map 4: Kehancha Town Topography Map

Source: Department of Physical Planning, 2023

2.2.4 Climate

Kehancha municipality receives significant rainfall ranging between 1000-1600 mm. The mean annual temperature of the Kehancha Municipality varies from 17°C and 28°C. The municipality has a wind speed of 10km/hr and a precipitation of 2%.

2.2.5 Geology and Soils

Kehancha Municipality is characterized by undulating terrain in most areas. The geology of the town's topography is underlain by 'relatively acid' parent rock and Granite covering most parts of the town. Undifferentiated rocks (Petroplinthlite) consist of the gold belt that traverses the town from the east.

Soils along rivers and river valleys, terraces, and swamps are derived from alluvial deposits and colluviums. The soils are moderately deep, rocky and stony consisting of well-drained

sandy-loamy of natural fertility. Kehancha cascades within the LMI agro-ecological zone which is suitable for sweet potatoes growing.

2.2.6 Vegetation

The natural vegetation is characterized by shrub and thickets with some have indigenous tree species. There are no distinct forests but on farm forestry is practiced.

2.2.7 Drainage

The spatial structure of Kehancha Municipality is strongly impacted by the geo-physical properties of site and context. The Municipality has an altitude of about 1468m. Various tributaries which are the main rivers that helps in draining of the town. The rivers include River Migori to the north, Hibwa to north west, Nyakwiri to the West and Nyamikomo and Nyangutu to the South. Due the gentle sloping nature of the Kehancha, it is favorable for developments.

2.2.8 Functional Context

Kehancha town as the headquarter of Kuria west sub county plays a major functional role as an administrative centre. It is the second commercial hub in the sub county with commercial activities such as hotels, wholesale & retail shops and banks. It also has a newly established medical training college, level 4 hospital, technical training institute, National Cereals and Produce Board store and prison. The town however lacks heavy commercial industries and therefore there should be a plan to attract such investments for job creation and overall economic development.

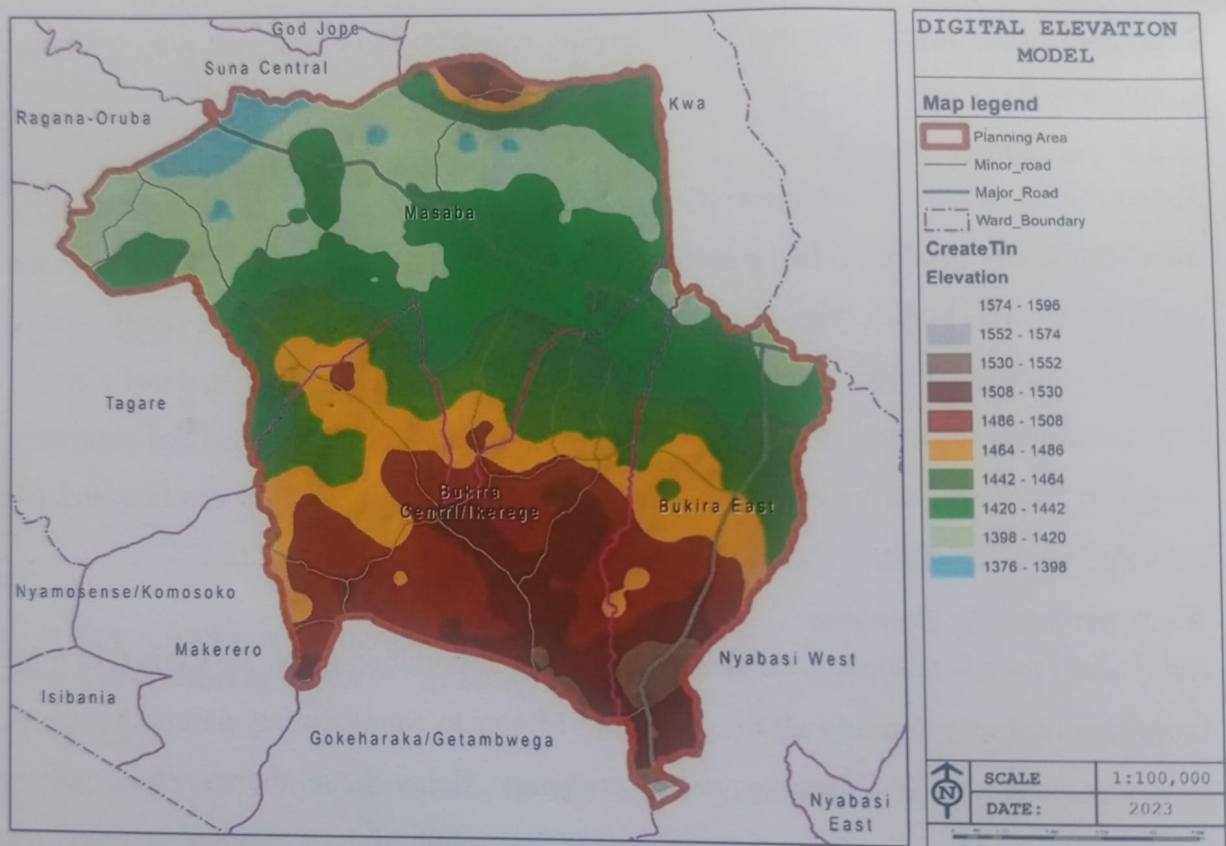
2.2.9 Structuring Elements

Kehancha Town is a linear town along the major transportation route, the Class C13 Migori – Lorgorian highway running all the way from Migori to Narok county passes through major Urban areas of Masaba, Nyamagagana, Kurutyange, Kehancha all the way to Lorgorian and Ntimaru towns. The other road that determines the growth of the Town is Kehancha Junction to Taranganya all the way to Ntimaru. Major developments are along these roads.

River Valleys – the River Migori in the Migori – Narok county boundary forms the boundary thus restricting development in these areas. The area along the Kenya Tanzania Border along Masangora – Jerusalem-Nyametaburo Road is characterized by very busy commercial activities owing to the cross-border trade activities taking place between Kenya and Tanzania. The areas of Ikerege and Gokeharaka wards have rural settlements with large land parcels potential for agriculture. The international boundary and the No man's land give a break to urban structures and restrict any form of urban development.

2.2.10 Terrain Features

Kehancha Municipality is characterized by undulating terrain in most areas. The geology of the town's topography is underlain by 'relatively acid' parent rock and Granite covering most parts of the town. Undifferentiated rocks (Petroplinthite) consist of the gold belt that traverses the town from the east determine the drainage of the Town. The highest part of the town is between Kubinto and Masangora the lowest areas of the town is around Kendege Technical Training Institute and areas of Kiamakobe. There is also a depression in Gokeharaka Ward around where spring water drains from towards the Kenya Tanzania boarder.



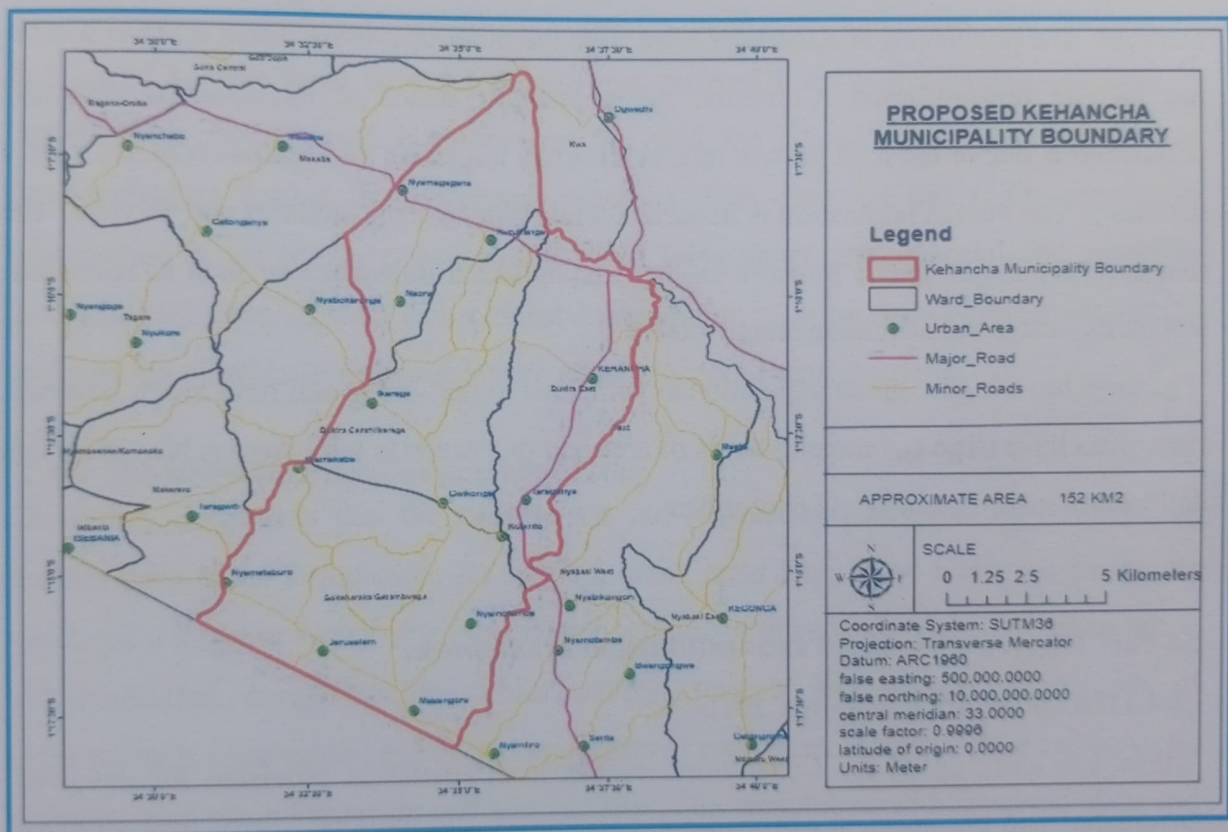
Map 5: Digital Elevation Model Map
Source: Physical Planning Office, 2023

Apart from some wetlands and rough terrain areas degraded by mining activities, other areas are suitable for other forms of development since the land is stable and not disaster prone. However, the flatness of the land, reduction of vegetation cover and poor drainage has contributed to flooding in the town during the rainy periods. See Map 4.2.

2.2.11 Urban Development Trends

Towns and markets are main space gathering region of socio-economic elements which play a decisive role on the distribution of future population and the land use pattern of the urban development. Kehancha has several peri-urban and market centres in its hinterland. The main

peri Urban and market centres outside Kehancha town include Masaba, Kurutiyanje, Nyamagagana Ikerege, Gokeharaka, Nyametaburo, Masangora, Taranganya, Kubinto, Gwikonge and Kiamakobe (Map 2.2). These centres have a bearing on the growth of Kehancha town since they are located at a distance of not more than 30 km from the CBD and along the main transport corridors radiating from the CBD. Their growth is also linked to Kehancha since some act as dormitory towns while others as key markets to its products or goods. The other markets within the township area are in Kehancha Chini and Kendege has growth as an educational centre will have a huge impact on Kehancha Municipality's development due to the continued location of major institutions like Kendege Technical Training College and Kenya Medical Training College. The development of these institutions will continue to attract other developments that will need proper development control.



Map 6: Regional Map Showing Strategic Market Centres.
 Source: Department of Physical Planning, 2023

Challenges

The key challenges here include:

- Ecological fragility due to mining activities.
- Land degradation,
- Loss of biodiversity,
- Destruction of wetlands and increased runoff

Opportunities

The town is endowed by few natural resources including gold, streams and rivers. These resources serve as a good potential for the town as they can be exploited and used for commercial and/or domestic purposes. Some sections of the town also have black cotton soil which can be used in the construction industry. The soil is also fertile for agriculture especially maize and sweet potatoes cultivation which is undertaken in large scale in the neighboring areas.

2.3 Part Two: Population Dynamics

Population dynamics is a major determining factor in the planning and development of any region. This is because its characteristics and structure greatly influence the direction and content of development as well as impacts on the provision of various infrastructural facilities. The population of Kehancha town, like the other upcoming urban areas in Kenya, has had an upward trend. Currently, the population stands at 82,914. The increased population is due to the high growth rate, rural-urban migration and extension of the town's boundary. The human population is important while planning for facilities and services. The increased population exerts pressure on the existing social infrastructure such as telephone, electricity, water and sanitation among others.

The town has a higher urban population as compared to peri-urban and rural areas; however, rural areas have large coverage in terms of area and this explains why there is bias in service delivery towards the urban and core-urban.

2.4 Part Three: Policy, Legal and Institutional Framework.

2.4.1 The Constitution of Kenya, 2010

Article 176 and 184 of the Constitution of Kenya 2010 makes provision for devolved governance and management of urban areas and cities. Specifically, article 184(1) of the constitution states a national legislation shall provide for the governance and management of urban areas and cities and shall, in particular –

- a) Establish criteria for classifying areas as urban areas and cities
- b) Establish the principles of governance and management of urban areas and cities
- c) Provide for participation by residents in the governance of urban areas and cities

Based on this background, the Urban and Cities Act, 2011 was enacted.

2.4.2 Vision 2030.

The spatial and land use planning process in the country is guided by various pieces of legislation. It should on the onset be pointed out that the physical planning process was undertaken within the broad development agenda as is envisaged in the country's development blueprint, Vision 2030. The main aim of Vision 2030 is to transform Kenya into "a newly industrializing, middle-income country providing a high quality of life to all its citizens in a clean and secure environment". On urbanization, this document observes that Kenya will be a predominantly urban country by the year 2030, with about 60% of the population residing in urban areas.

The Vision 2030 therefore proposes the initiation of a nationwide urban planning and development strategies, starting with the country's major cities and towns. The vision notes that Kenya's urban areas have for a long time suffered from poor planning, resulting in chaotic urban environment. It emphasizes the need and rationale for planning for urban development to correct this depressing situation. It is observed that if the process of urbanization is not properly managed, it could bring about serious social and economic problems such as congestion, environmental degradation poor infrastructure services and the proliferation of informal settlements with extremely poor living standards.

2.4.3 The National Urban Development Policy

The policy documents that the country has not adequately addressed the development realities prior to its formulation. As a result, urban areas have faced numerous challenges which are a threat to sustainable urbanization and urban planning: unbalanced urbanization and haphazard designation of urban centres, uneven and skewed distribution of infrastructure, urban sprawl and decay, high costs of provision of infrastructure and services, degradation of the environment and heritage sites, non-compliance with approved plans and mushrooming of informal settlements, and insecurity" (GoK, 2011 C: 4).

The policy therefore reinforces the need to recognize urban planning as an integrated process that seeks to address the numerous challenges facing our urban areas.

2.4.4 The National land Policy, Sessional paper No.3 of 2009

In Sessional paper no. 3 of 2009 on land policy, land use planning is considered essential to efficient and sustainable utilization and management of land and land-based resources. It is

observed that proper planning will facilitate coordinated development of urban and peri-urban areas in terms of housing, commercial, industrial and infrastructure development.

2.4.5 Physical and Land Use Planning Act, No. 13 of 2019.

This is a key legislation that governs physical planning, use and development of land in Kenya. It establishes the planning institutions and donates the planning at the County level to be initiated by the County Director of Physical and Land Use Planning. It also outlines the types of physical and land use development plans at the county level, how they are prepared and implemented. Further, it empowers the county government to exercise development control and ensure the plan implementation.

2.4.6 Urban Areas and Cities Act, 2011.

In the Urban Areas and Cities Act, 2011 the need for the preparation of integrated development plans to guide the urbanization process is outlined. It is pointed out that an integrated urban or city development would guide and inform all planning in the country.

Such a plan would be the basis for;

- The preparation of environmental management plans
- The preparation of valuation rolls for property taxation
- Provision of physical and social infrastructure and transportation
- Preparation of annual strategic plans
- Disaster preparedness and response
- Overall delivery of services including provision of water, electricity, health, telecommunications and solid waste management.

The County Government of Migori is charged with the general management of the town ranging from various activities such as control of development, collection of revenue, and delivery of services to the residents, such as water.

2.4.7 County Governments Act, No. 17 of 2012

It recognizes the urban areas and cities as the decentralized units of the County Government and stipulates that their management shall be as set out in the Urban Areas and Cities Act, 2011.

Other Acts and policies that guide development include;

- Survey Act Cap 299
- The Water Act, 2002
- The Land Act, 2012

- Land Registered, 2012
- Public Health Act Cap 242
- Environment Management and Coordination Act 1999
- Integrated National Transport Policy

The above laws and others as provided in various Acts directs planning and implementation of development projects and are therefore a set of tools available to the County Government of Kehancha in guiding any development activity within the town and its surroundings. It is therefore the responsibility of the county governments to ensure orderly and coordinated development of the town based on the provisions of the Acts and policy documents.

In essence the policies and legal framework for land planning exists in but most cases are not fully implemented. Even though there exists administrative set up to effect legal procedures regarding orderly land use development, there is an absence of proper coordination. It was also discovered that there is inefficiency management of land information records.

CHAPTER THREE: SITUATIONAL ANALYSIS

3.1 Introduction

The planning team analyzed the existing situation to get a starting point which led to a detailed analysis. It involved the analysis of existing literature on Kehancha town, observations, interviews and workshops with the stakeholders identified. The content includes stakeholders, community vision, demographics, housing, land management, urban infrastructure, urban environment, institutional settings, and management capacity.

Brief spatial analysis of the existing situation of the town was also made to appreciate the structural elements that control the growth pattern of the town including the road networks, drainage systems, markets, topographic features or historic patterns. It also helped to identify environmentally fragile parts of the town and where the informal settlements are located.

The rapid development of Kehancha town like any other town in Kenya has brought with it many development and planning challenges that required immediate redress. The main problems include uncoordinated development, inadequate and unsafe water supply, unplanned human settlements and encroachment into road reserves among others.

In view of the above, Kehancha integrated urban development plan has been prepared to guide the County Government of Migori in controlling development in order to create a friendly environment for human habitation and business investments.

3.2 Land Analysis

3.2.1 Land Tenure Structure

Land ownership within the town comes under two types of tenure system, that is, leasehold and freehold with the latter being predominant with approximately 90% while the former accounting for only 10%. The land subdivision within the freehold areas has not been properly controlled. The ongoing trend of uncontrolled land subdivision has made it difficult for the town to efficiently provide basic services. This is further exacerbated by the ever-increasing land value especially along the major link roads. Land owners in the town, because of the assumed autonomy due to absolute ownership, seem to direct and decide on the development trends and projects within town. The resultant outcome is uncoordinated development, encroachment into road reserves and deterioration in service provision. Public land offers the best alternative for the town's development. Acquisition of the existing stock

of land that is privately owned through land banking will provide the much-needed options for increasing the land available for development purposes.

Field survey found out that 34% of the respondent's own land in the town either through purchase, lease or inheritance. The most prominent land tenure system in the town is freehold at 70% followed by leasehold at 2% and 28% public land as shown by the Figure 2.2.

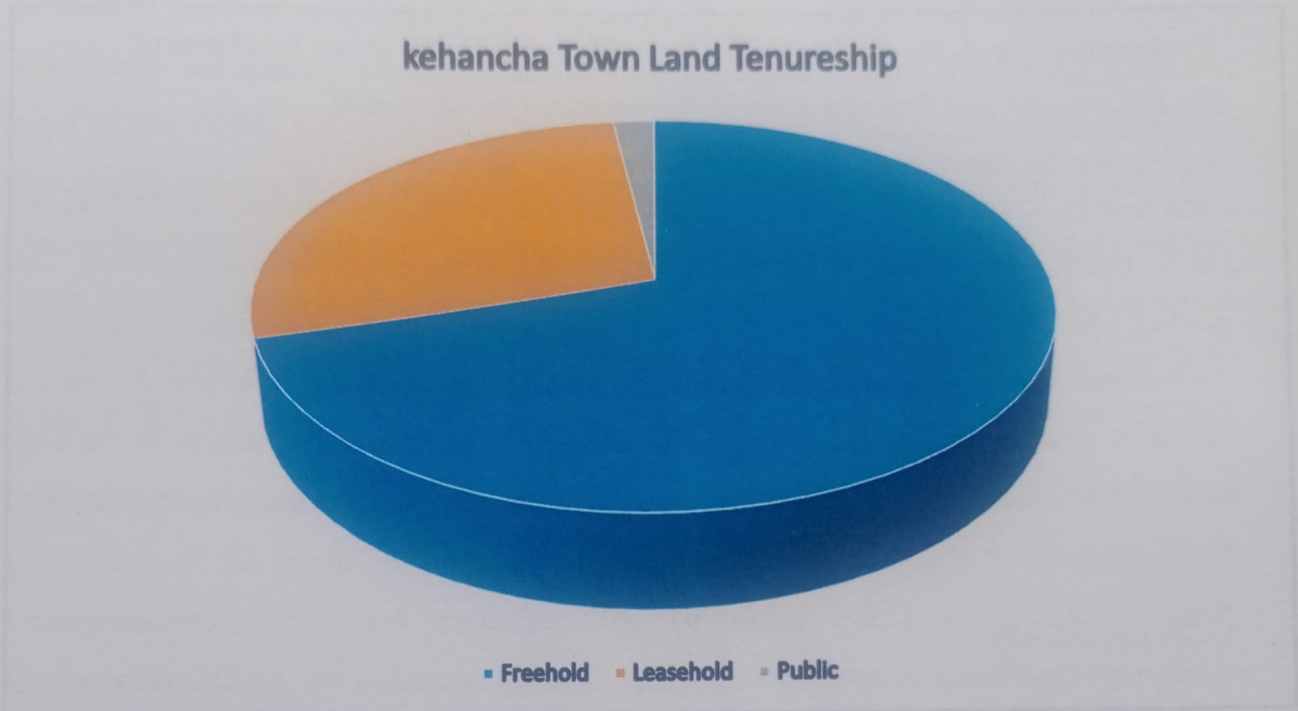


Figure 1: Tenure Systems in Kehancha Town

Source: Field Survey, January 2023.

The study also found out that majority of the respondents own land sizes ranging from less than 0.125 acres to 3 acres and only 9% own land more than 3 acres. It was revealed that 82% of these lands are developed while 17% is lying fallow (not developed). Majority of these developments are semi- permanent and permanent because of the predominant freehold tenure system. Temporary and semi-permanent developments account for 30% especially in the informal areas and those who have maintained traditional residential houses which are built with mud smeared walls and floors and grass-thatched roofs.

With a bigger rural area and under freehold, development approval by the county government is still low. This is the major cause for the spread of informal settlements in the town. The county government is also not able to sufficiently levy property tax in these areas.

Land Tenure

There exist two types of land tenure systems in Kehancha Town namely;

- ❖ Public Land: It accounts for five percent of the total area. There is 1% vacant Government land for alienation.
- ❖ Freehold land: It is the dominant tenure system in the town and accounts for 95% of the total area.

Weakness: It is only freehold land that is readily available for urban development.

The Government and Trust Land are fully committed for alienation.

3.2.2 Land Use Classification and Allocation.

Land uses in Kehancha town can be classified as Residential, Commercial, Public Purpose, Public Utility, Educational, Recreational, Industrial, Transportation and Agricultural. The existing Land Use Allocation Percentages in Kehancha showed a wide variation compared to the National average (Table 4.1). The variation indicates that there is need to plan for various land uses considering the rate of population increase in the town. The results in the table further shows that Agricultural and residential land uses cater for the greater percentages of 44.9% and

33.3% respectively.

Table 1: Land Use Classification and Allocation in Kehancha

| Classification | Area (Km ²) | % of total area | %National Average* | Variation |
|------------------|-------------------------|-----------------|--------------------|-----------|
| Residential | | | 54.64 | 21.34 |
| Industrial | | | 8.7 | 8.48 |
| Educational | | | 9.4 | 5.0 |
| Recreational | | | 5.1 | 2.9 |
| Public Purpose | | | 12.2 | 7.3 |
| Commercial | | | 6.8 | 3.5 |
| Public Utilities | | | 3.8 | 1.6 |
| Transportation | | | - | - |
| Agricultural | | | - | - |

Source: National average generated from the Physical Planning Handbook 2002

The distribution of residential and commercial land uses in Kehancha have adopted the ribbon development pattern along the main C13 or Migori - Kehancha road and major roads within the town like Kehancha- Ikerege -Isebania road, Kehancha-Taranganya - Isebania road and Kehancha

However, there is no formal zoning of residential land uses into low, medium or high density or planned mixed development. The only neighbourhoods exhibiting some form of order of low density and high-density developments are areas within Masaba and Ikerege wards and areas of and around Kehancha township centre respectively. Weak development control has also contributed to emergence of informal settlements as Kehancha Chini. Commercial land use is concentrated within the CBD and such markets as Stalls, Kehancha Open Air market. There are also other unplanned small commercial centres that are emerging within the estates as corner shops. Currently, the county government does not have adequate land set aside for commercial zones outside the CBD that might attract investors or help to decongest the CBD.

Public purpose land use is concentrated around the CBD and Kehancha Chini compared as to other parts of the town. It hosts all the government offices to wit the Deputy County Commissioners' office and residence, The Divisional Police Headquarters, County Government Offices, the Kehancha Level IV Hospital, the Kenya medical Training Institute, the Kehancha Stadium, Kehancha Law Courts and other public institutions. However, the existing public purpose land is inadequate considering the fact that the town has been elevated to the status of a county headquarters. There will be a need to identify suitable land for future public purpose use. Kehancha town has no well-developed industrial sector hence no major spaces are earmarked for industrial land use including the Jua Kali sites. Lack of suitably zoned industrial areas has led to the sprouting of unplanned industrial land uses in the commercial zones and residential areas. This therefore calls for need to identify suitable sites for industrial use.

Educational land uses in the town is fairly low since inadequate spaces were not reserved for schools and institutions. The most affected are the public primary and secondary schools which are few in number and are over populated. Most of the colleges are also concentrated within the CBD area a part from few like Kenya Medical Training College- Kehancha. Considering the fact that Kehancha town will continue to grow and attract more population, there is need to plan for adequate educational facilities. Recreational land uses in a town are

important for income generation, social interaction, tourist attraction, as breathers, preservation of socio-cultural values and environmental conservation among others.

Kehancha town has only two designated parks located within Kehancha CBD. These include the Nature Park near the forest offices and County Government Offices. The town also has a social hall and stadium that are considered inadequate and in poor condition. The provision of open spaces is a challenge due to lack of proper road designs and poor development control. Currently, there is only one social hall in the town against a population of over 82,914 persons implying a deficit of 2 more social halls. The over development of plots in Kehancha to more than 70% coverage denies the children spaces for play areas. The existing green area in the town falls below the required standard of 1-2 hectares per 10,000 populations. These shows that the town is in dire need of recreational facilities.

There are no existing public utility land uses in Kehancha town. The town also does not have adequate landfill collection points hence the deposit of wastes at non-designated places. The town also lack fire station and fire engines. Agricultural land use is spread all over the town but more pronounced areas of Masaba and Ikerege wards and beyond 500m-1km from the major roads as the Migori-Kehancha road and Kehancha- Taranganya- Isebania road. However, the rising land subdivision for residential purposes in reducing the percentage of agricultural land use in the town.

3.2.2 Land Use Status in the Town

The major land uses within the town include residential, commercial, institutional, recreational, industrial, public purpose, transportation, agricultural and public utilities. The residential land user takes the largest share (69.5%) of land within the town with no proper distinction of classes due to lack of zoning. It takes the form of unplanned mixed development. Commercial land use activities account for 7.8%. However, well established modern commercial enterprises are mainly found along the highway thus forming a linear pattern due to enhanced accessibility and include hotels/restaurants, and retail outlets among others. However, unplanned pockets of commercial nodes are emerging within some of the centres. There are no large-scale industrial establishments within the planning area. However, Kehancha town has potential for agricultural processing plant mainly for maize and other grains. Small scale industries especially the Jua Kali industries are however flourishing in the town with some having no specific sites demarcated for their operations while the existing site for Jua Kali industry is insufficient. As shown in Figure 2.3, agriculture accounts for

33.7% of land use in the town. Agriculture is practiced mostly in the peri-urban and rural areas of the town which account for approximately 70% of the area.

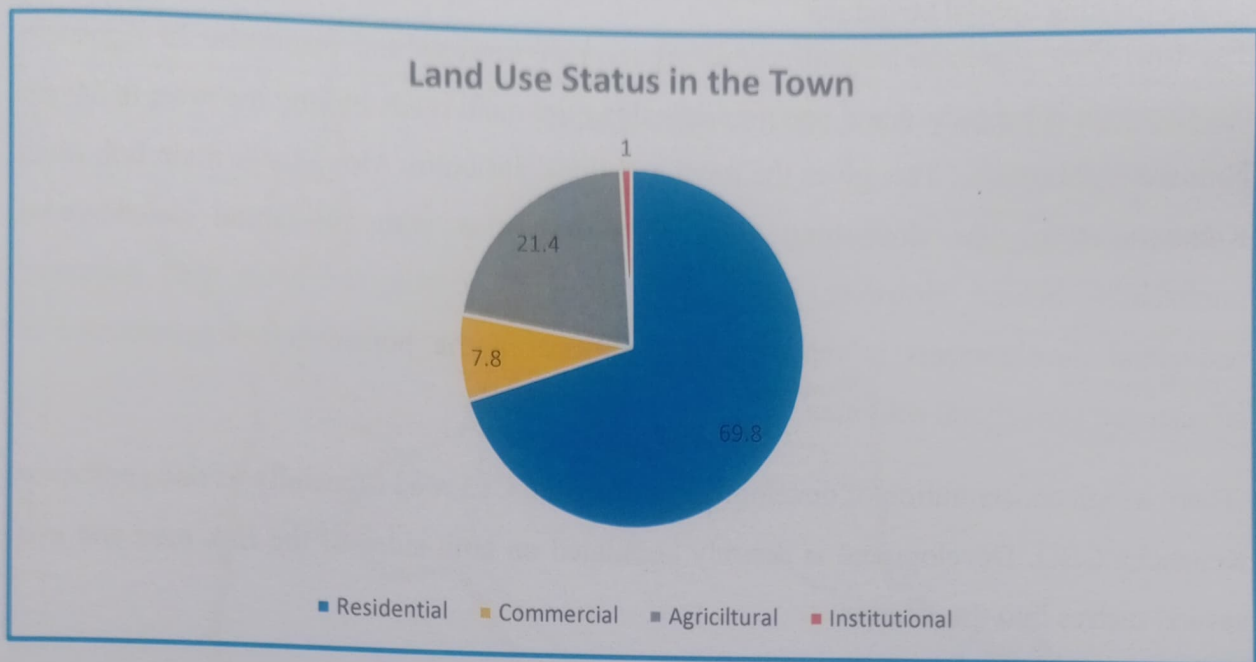


Figure 2: Land use in Kehancha Town
Source: Field Survey, January 2023

The town hosts all the administrative offices including both the county and national government offices since it is the Kuria West subcounty headquarters. The administrative offices available in the town include the, the Municipal Hall, County Commissioner office, Kehancha police station, and several government departments. These offer various services to the inhabitants of the town and its neighborhoods thereby increasing the functionality of the town as an administrative and service centre.

It is imperative to note that the town is devoid of major recreational facilities that are vital for social, physical and mental relaxation among the residents. The town has a stadium in poor condition, a small abandoned nature park and other illegal open grounds in residential areas that have been used for recreational purposes but are inadequate and inconvenient for most of the town residents. Open grounds within the existing institutions such as schools and religious compounds are also used to supplement the few available facilities. Agricultural land use is more pronounced beyond the built-up areas of the town's and with kitchen gardening the residential areas. Limited space is available for public utilities due to violation of planning standards and lack of land banking by the County Government thus leading to the consumption of space that would have otherwise been used in the location of such facilities.

For example, there is prevalence of blockage and encroachment into the road reserves in the town.

3.2.3 Existing Spatial Structure

The town has a general centralized distribution of services and resources. In Kehancha, development is haphazard and uncontrolled along the main roads linking the town to Migori, Ntimaru and Isebania. This gives the town and lineal structure. Along these main link roads, Kehancha town has flourishing commercial activities with residential developments immediately behind. However, just a few metres away from the main road permanent residential developments is replaced by traditional Kuria homesteads supplemented by subsistence agricultural activities.

There a high concentration of developments along the C13 road especially as one approaches Kehancha CBD. Development is densely populated on both sides of the link road and even several metres into the interior.

3.3 Transportation

3.3.1 Introduction

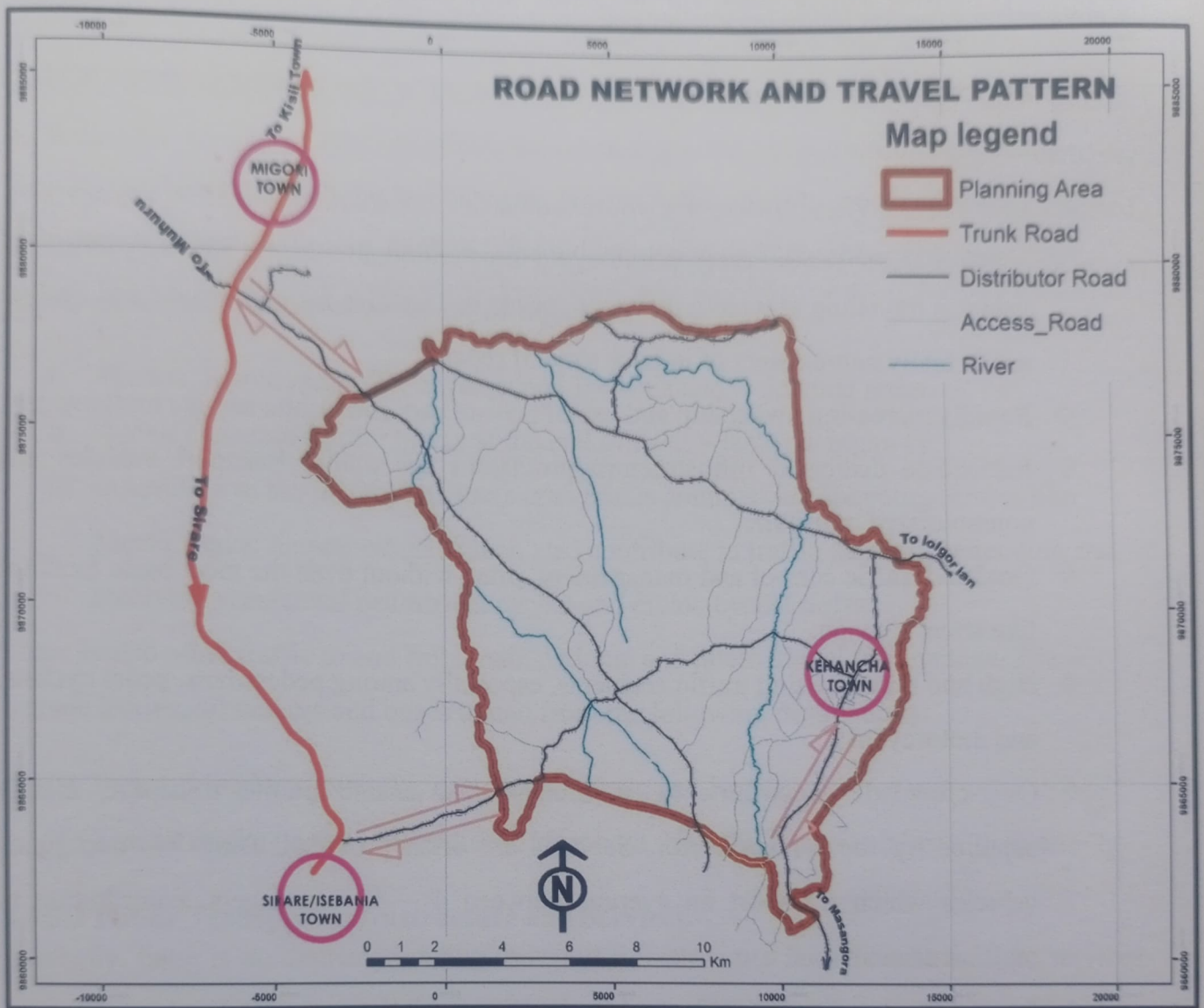
This section analyses the existing transport situation in urban areas in Kenya and in Kehancha town. It highlights various pertinent challenges that should be addressed to improve the quality and extent of the transport system in Kehancha town. The proposed recommendations focus on the broad objective of improving access and mobility in addition to integrating other elements of a good transport system such as, comfort, reduced travel time, convenience, efficiency and low transport costs.

3.3.2 Overall Situation of Urban Transport in Kenya

Major urban areas in Kenya like Nairobi, Mombasa, Kisumu, Nakuru, and Eldoret have several factors in common that contribute to the severity of their transport problems. Overall population growth and increasing urbanization have led to the especially rapid growth of towns in Kenya, which have contributed to the sudden surge in urban travel demand. The supply of transport infrastructure and services, by comparison, has lagged behind the travel demand.

Public sector finances, in general, are limited that funding for transport improvements is often not a top priority within urban areas compared to water supply, provision of health services and payment of staff salaries. Funding for transport infrastructure improvements is therefore often inadequate compared to the demand. This has resulted into a situation where

most transport facilities are in use far beyond their design capacity and life. Moreover, the concentration of wealth and decision-making among economic and political elite has distorted transport policies in Kenya, in the same way as other developing countries.



Map 7: Kehancha Municipality Road and Transport Network.
Source: Department of Physical Planning, 2023

While the poor suffer the most from severe and worsening transport problems in cities, government policies generally focus on serving the needs of an elite minority, often below 10% of the travel demand. For example, a disproportionate share of Government funds is spent facilitating the ownership and use of private cars through road infrastructure investments, while the transport needs of mostly low-income pedestrians and cyclists are ignored. Similarly, public transport infrastructure does not get the funding it needs because its role in the transport supply market is not appreciated, while provision of transport services is left to the private sector with ineffective regulation.

Rapid growth, low incomes, and extreme inequality are among the main underlying causes of transport problems in developing countries. Although the nature and extent of transport problems obviously vary from one city/town to another, virtually all major urban areas in Kenya suffer from the following challenges:

- ❖ Unplanned and disorganized land development at the sub-urban fringe without adequate infrastructure, transport, and other public services.
- ❖ Limited network of roads, often narrow, unpaved and poorly maintained.
- ❖ Congested roads with an incompatible mix of both motorized and non-motorized vehicles travelling at widely different speeds as facilities for pedestrians and cyclists are virtually non-existent or in poor state of repair.
- ❖ Rapidly increasing ownership and use of private cars and public service motorcycles.
- ❖ Inadequate dedicated infrastructure provisions for public transport vehicles and nonmotorized transport.
- ❖ Outdated traffic control and management, often without even the most basic facilities like street signage.
- ❖ High and rapidly rising traffic accidents, especially among pedestrians, pedal cyclists, and motorcyclists.
- ❖ Over-crowded, uncomfortable, inefficient, and unsafe public transport, mainly supplied by the private sector. Services are often provided using low-occupancy vehicles which transport on average between 4 – 30 passengers, contributing to inefficiencies in road use.
- ❖ Poor institutional coordination and inadequate regulations governing urban transport.
- ❖ High levels of transport-related pollution, noise and other environmental impacts, especially in the medium and large cities.
- ❖ Poor/Lack of effective enforcement of the traffic laws and regulations contributing to high accident rates and congestion.
- ❖ The skill levels of planning and regulatory personnel are inadequate or non-existent in many towns.

As documented in this report, Kehancha town experiences most of these challenges like many other towns in Kenya. Compounded by the position of Kehancha as a dormitory town, the challenges of transport become all the more apparent.

3.3.3 Current Transport Situation in Kehancha

3.3.3.1 Travel demand

Much of local traffic originates from and ends in the various residential clusters within the town and in the immediate hinterland. Much of the local traffic consist of matatus, motorcycles, bicycles (*boda boda*) transporting passengers from the outlying residential estates to Kehancha Town, Isebania town and Lorgorian Town. The rapid population growth in Kehancha town has generated a correspondingly rapid growth in travel demand, overwhelming the limited transport infrastructure, which unfortunately has not been focused on more facilities to accommodate both bicycle and motor-cycles *boda boda*. Traffic is mainly generated at/attracted to the following areas:

- i Masaba, Kurutiyange, Taranganya and Isebania and residential areas.
- ii Kenya/Tanzania Border towns at the end of Kisii – Isebania highway.
- iii In addition to the institutions there are various commercial/ shopping centres like Maeta, Senta, among others, which also contribute to traffic demand, generating and receiving substantial pedestrian, cyclist and motor-cyclist traffic.

There is also other traffic to and from main national and international destinations. These include lorries, oil tankers and buses to and from the following destinations:

- (i) Buses: Mombasa, Nairobi, Kisumu, Kampala and Kigali;
- (ii) Transit trucks (mainly oil tankers): Mombasa, Nairobi, Kisumu, Migori, Isebania

3.3.3.2 Public Transport Infrastructure and Services.

Currently, there is no dedicated public transport infrastructure in Kehancha and the services are provided on the same roads used by the general traffic. There is one terminal for public transport at Kehancha CBD. Its condition and management are poor as it is not well designed. Informal bus stops and stages are located mainly along C13 road and the many access points. These include: Masaba, Nyamagagana, Kurutiyange, Ikerege, Senta and Kubinto. Kehancha town being a small town, most travel is made by walking, cycling and motor cycles.

The sharp increase in the number of motor-cycle *bodaboda*, and its use in public transport in particular, have resulted in increasing levels of congestion, traffic accidents, and air and noise pollution in Kehancha town.

The *boda boda* transport also pose some opportunities, which include:

- (i) Being a source of income to the operators;
- (ii) being convenient, and flexible means of transport offering door-to-door service; and

(iii) providing competition with the few matatus operating town services.

3.3.3.3 Road Networks and Travel Patterns

The layout of Kehancha main road system is fairly well planned, but still not developed in a systematic manner. The development of the road system is lagging behind population growth and road travel demand. The orientation remains largely linear, with the main link road Migori–Kehancha- Kilgoris (C13) road being the backbone of the network. The C13 Migori – Kehancha- Kilgoris road serves conflicting functions of a primary distributor, a secondary distributor and in some cases an access road, all at the same time. The dual function of C13 as a road for both local and through traffic has presented the town with challenges of congestion and traffic accidents/conflicts.

Other important all-weather roads in Kehancha town include:

- i The Kehancha – Ikerege - Isebania Road, which is to gravel standards and serves many residential and institutional areas in the town
- ii The Kehancha – Taranganya - Isebania Road (partly to bitumen standards)
- iii The Kehancha – Kegonga – Ntimaru road.
- iv Several access roads/tracks around the central parts of the town all join the C13 road at several points.

The condition of the road network is a major challenge in the town. The main characteristics of the road transport network is summarized below:

- i. Absence of pedestrian walkways/ cycle tracks, hence conflict of use with the vehicular traffic.
- ii. Inadequate intersection designs, especially at the many T-junctions of smaller access roads that join the Migori-Kilgoris road at right—angles.

3.3.3.4 Air Transport

Kehancha Town has a single airstrip, which is situated within a very limited space neighbouring other incompatible uses such residential houses and other public purposes. The Kendege Airstrip in Kehancha has not been in use since allocation. This has been attributed due to lack of an approved plan of the town for operationalization of the project.

3.3.4 Key Transport Challenges and Opportunities

From the discussion above, the following is a summary of the main transport challenges in Kehancha town:

- 1) The only transport system available in the town is road-based. However, almost all the roads forming the urban road network are not classified and developed to proper engineering standards that can appropriately serve and respond to the growing travel demand. The supply of transport services is dominated by motor cycles and bicycles, which may not be sustainable in the future.
- 2) The roads within the town are in poor condition, leaving only the C13 road from Migori to Narok via Kilgoris, Kehancha – Ikerege - Isebania and Kehancha – Taranganya- Isebania as the main primary roads serving the town. Due to the traffic mix along these roads, there are problems of congestion, traffic safety, and disorganized non-motorized traffic (NMT) movements.
- 3) Transport and land use planning and development have not been synchronized. Without intervention, this will ultimately result into the undesired urban sprawl, increasing motorized travel demand and making the provision of public transport ineffective because of scattered development.
- 4) There is lack of professional approach to urban transport in the town as the problems are just emerging and have not reached levels where they are apparent. Institutional arrangements and human resource capacity should be put in place now to start addressing the issues before they become critical.
- 5) The operation of the border towns of Isebania and Ntimaru has a great impact on the current and future transport situation in Kehancha in terms of the need for parking for transit vehicles, storage of transit goods, security of the transit passengers and freight, and the integration of transit and local traffic within the town.

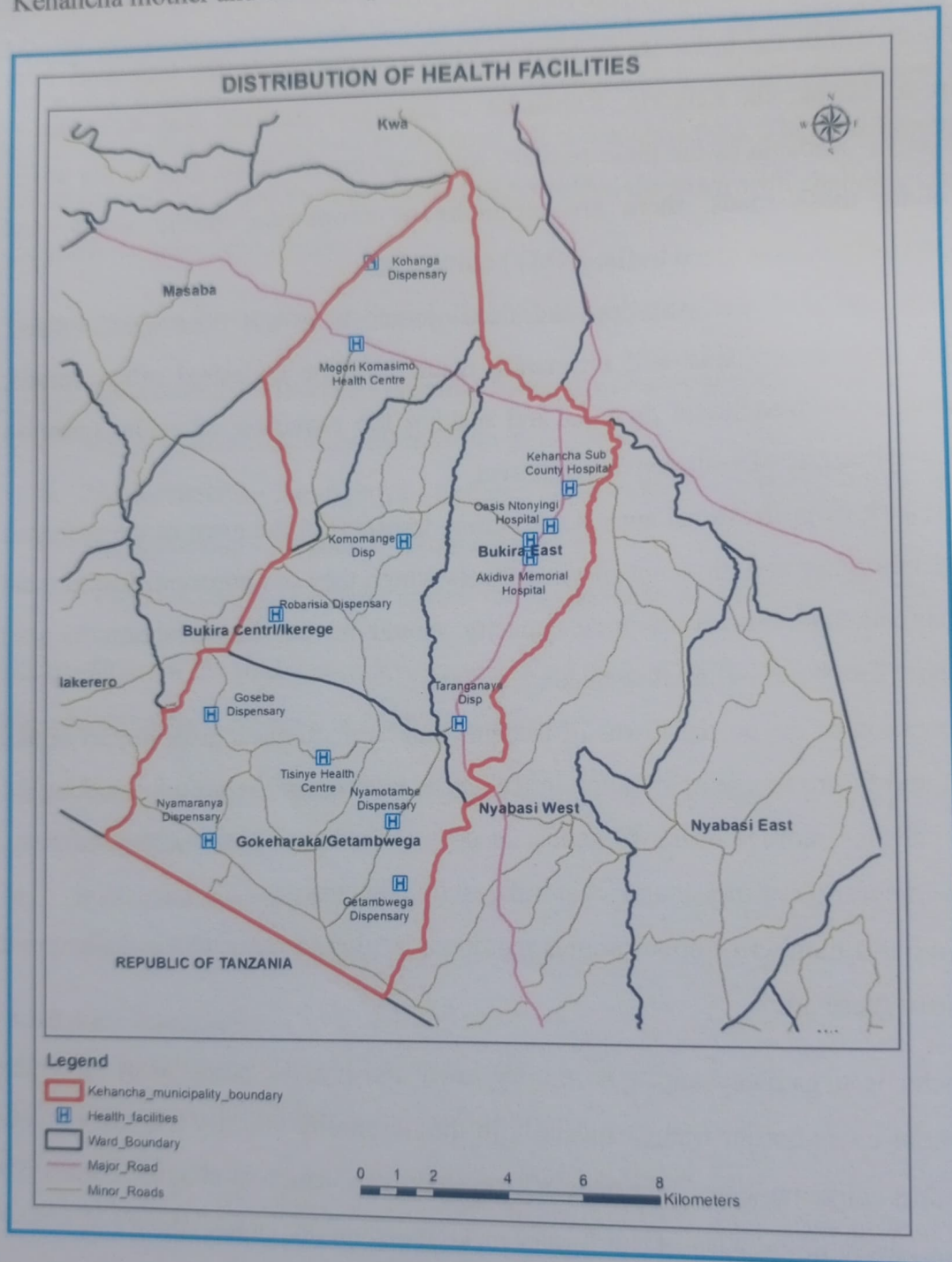
Kehancha town has a number of opportunities that it can exploit to mitigate the challenges it is facing. Some of these are:

- 1) Kehancha is a gateway and a dormitory town and has the potential of attracting substantial cross-border trade, especially in the hospitality industry if it can provide safety and convenience of international travelers. Its location at about 156 km from Kisumu International Airport can further make it exploit that potential.
- 2) The town can develop to the preferred border crossing to Tanzania due to its proximity to main Kisii – Isebania trunk road and major growth poles in Kenya's western region including Isebania, Migori, Kisumu, Siaya and Bungoma.
- 3) The town has important institutions such as KMTC – Kehancha, Kendege Technical Training Institute and can attract many more with better town planning.

3.4 Social Infrastructure Analysis

3.4.1 Health

There are adequate health facilities in the town which are spatially distributed and cover even the farthest parts of the town such as Kehancha Level IV hospital, Ladorpharma, Akidiva, Kehancha mother and child hospital among other hospitals.



Map 8: Kehancha Town Health Facilities Map
Source: Department of Physical Planning, 2023

Kehancha town has thirteen (13) health facilities, a bed capacity of 144 beds, 4 doctors and 50 nurses. This is currently adequate and spatially distributed to cover even the farthest parts of the town.

Kehancha Hospital (the only Level 4 hospital in the town) is the only referral hospital in Kehancha town and come the year 2030, it will be under pressure as the county's population increases. The hospital will also be treating patients from neighbouring Tanzania and those plying major routes including the C13 as it has always done.

Currently there is a health gap of 2 level 2 hospitals in Bukira East ward. By 2030, there will be health gap of 3 and 1 in Bukira East and Ikerege ward respectively. The field survey found out that 60% of health facilities are located within a distance of 1-4 Km. Majority of these facilities are provided by the private sector (75%) and government (25%).

There is no public cemetery in Kehancha town as residents bury their kins on their individual residential plots. The Muslim community also lacks a designated burial site for the Muslim Community forcing them to bury the departed as far as Migori town where there are privately owned cemeteries.

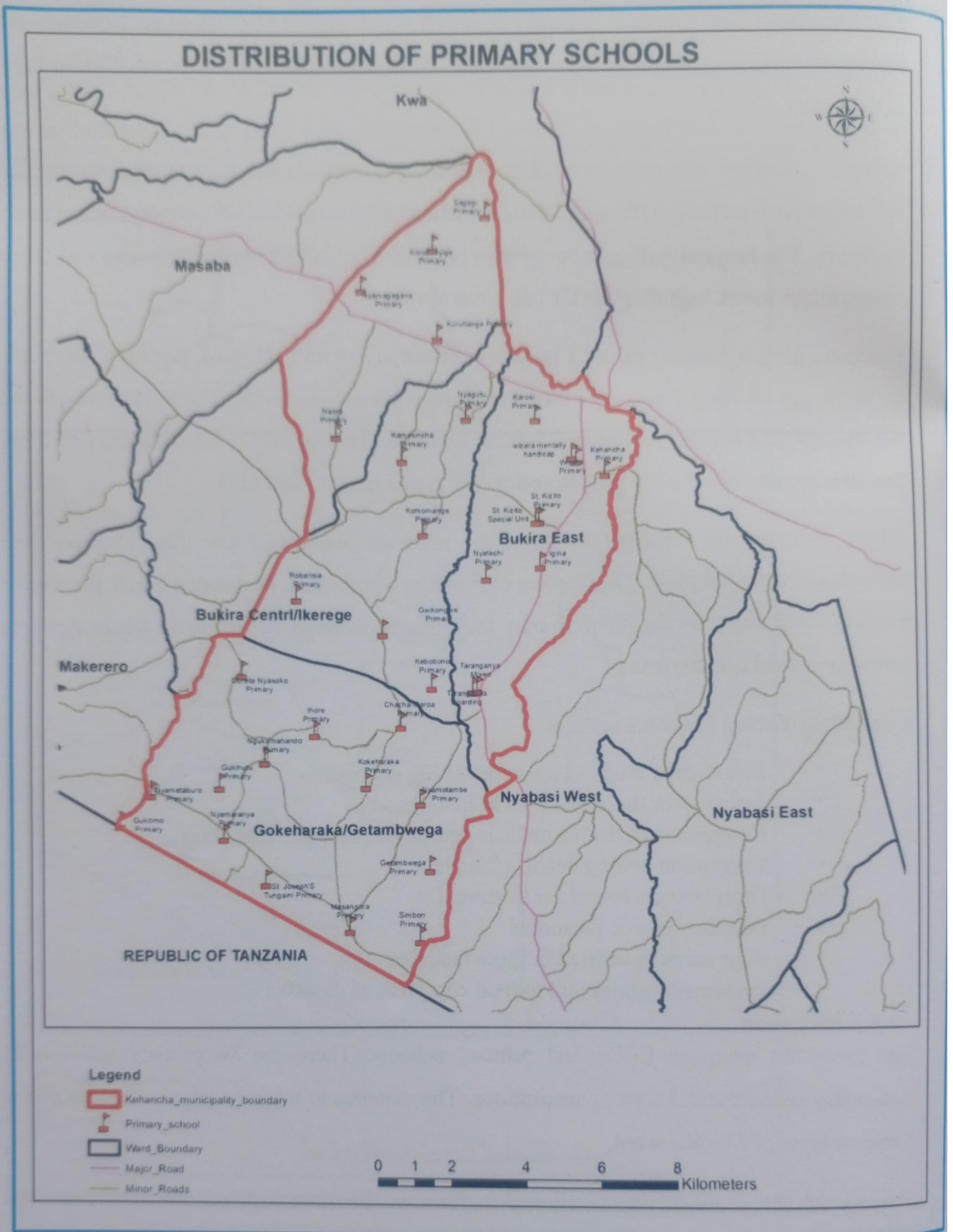
Challenges Facing Health Facilities

- Insufficient drugs to cater for the big population
- Location of these facilities in far distances
- Congestion in the hospitals to few/inadequate bed capacities
- Corruption among health officials
- High charges levied for treatment
- Few/Inadequate personnel
- Poor services offered in these facilities
- Inadequate equipment to treat complicated diseases

3.4.2 Education

The town has adequate ECDs and primary schools. There are 36 primary schools, 21 Secondary schools and 3 tertiary institutions. The distance to school analysis shows a gap in some sections of Masaba ward.

Primary schools are spatially distributed in favor of the most populous zones of the town; mainly urban centres of Kehancha CBD, Ikerege and Masaba urban centres.



Map 9: Kehancha Primary Schools Map
Source: Department of Physical Planning, 2023

The field survey found that 48.5% of nursery schools are located within a distance of less than 100m to 500m; 36.8% of primary schools are located within the same distance while

19.5% of secondary schools are located within 500m. From Table 2.14, respondents think that most secondary schools are located within a distance of 1-2km. It is clear from the table that students walk long distances in search of secondary education especially in Masaba ward.

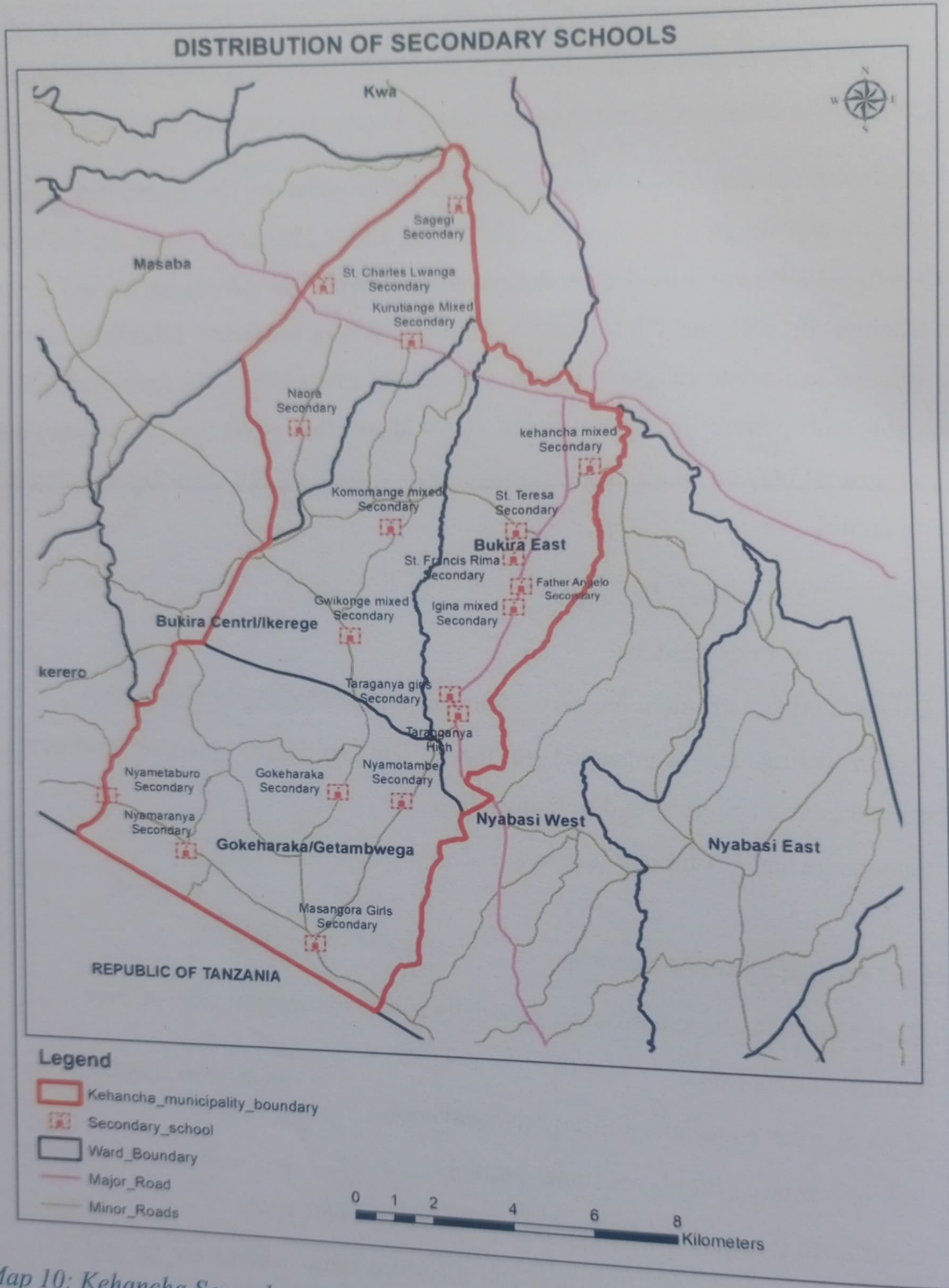
The study found out that 52% of nursery schools are provided by the government while the private sector and religious bodies provide 39.7% and 4.1% respectively. In the case of primary schools 89% are provided by the government while the private sector and religious bodies account for 10% and 1% respectively. About 92% of secondary schools are provided by the government while religious bodies and private sector share the remaining 8%. The government and private individuals/institutions share the provision of colleges/higher education institutions on a 30/70 percentage ratio. Some of the challenges facing these education facilities include;

Challenges Facing Nursery Schools

- Provision of Poor services
- Dilapidated Government Nursery Schools and poor learning infrastructure.
- Overcrowding and congestion in these facilities hence reducing the education standards as teachers attend to many pupils.
- Inadequate and Un-trained teachers

Challenges Facing Primary Schools

- Congestion in the classrooms especially since the introduction of Free Primary Education.
- High charges especially for the private schools.
- Public primary schools are under-staffed
- Un-trained teachers especially in the rural areas of the town.
- The municipality is mostly rural and therefore some schools are far and pupils are forced to trek long distance.



Map 10: Kehancha Secondary School Map
Source: Department of Physical Planning, 2023

Challenges Facing Secondary Schools

- Majority of secondary schools are far
- Higher fees charged
- Overcrowding in classrooms

- Few/Inadequate schools
- Poorly equipped schools
- Few/Poor teaching staffed

3.4.3 Recreational Facilities

These include open spaces including Gardens, playgrounds, riparian reserves, social halls, cultural centre and stadium.

Parks

There is one nature parks in Kehancha town though not operational. These are provided by the County Government of Migori; Department of forest and the National Environment management Authority (NEMA). The proposed nature park is within the Kehancha town and can only be accessed by the people in the town. In the estates, there are no parks and only a few play grounds and open spaces which are used for recreational purposes. According to the study, 25.7% of the respondents said that playgrounds are located within a distance of 0-1km, 1-2km (13.2%), 2.1 to over 4km (26.8%) while 34.3% believe that there are no playgrounds provided in the town.

The proposed nature park is next to Kuria west Subcounty Government of Offices, the social hall and stadium are 1km away from one another though the stadium is not developed and it has a worn-out fence. The ground is currently used only as a political meeting ground during campaign periods.

3.4.4 Communication.

Communication is dominated by the use of telephone (mobile). The mobile industry fuels communication within the town with the sole communication service providers being Safaricom, Zain, Orange and Yu networks. The town also has access to courier services. Public Service Vehicles (PSV) Bus companies, security companies and Kenya Postal Corporation are the main competitors providing this service in the town.

3.5 Water, Sanitation and Environment.

3.5.1 Water.

Water resources in Kenya are increasingly being polluted by organic, inorganic and microbial matter. The impact of pollution on water resources is manifested by water of poor quality which gives rise to water toxicity to mammals and aquatic life loss of aesthetic value by becoming unsuitable for recreational activities, high cost of water supply as polluted water is expensive to manage

Types of water sources

The main water sources for the town are surface water, ground water and run-off water. Other sources include protected springs, and dug wells.

Access to Water

The survey revealed that 87% of Kehancha town residents have access to water. Piped water in the town is provided by the Department of water – Migori county. There are also individual initiatives to provide water for domestic purpose through shallow wells and roof catchments. Water kiosks and shallow wells are the dominant sources of water in the town.

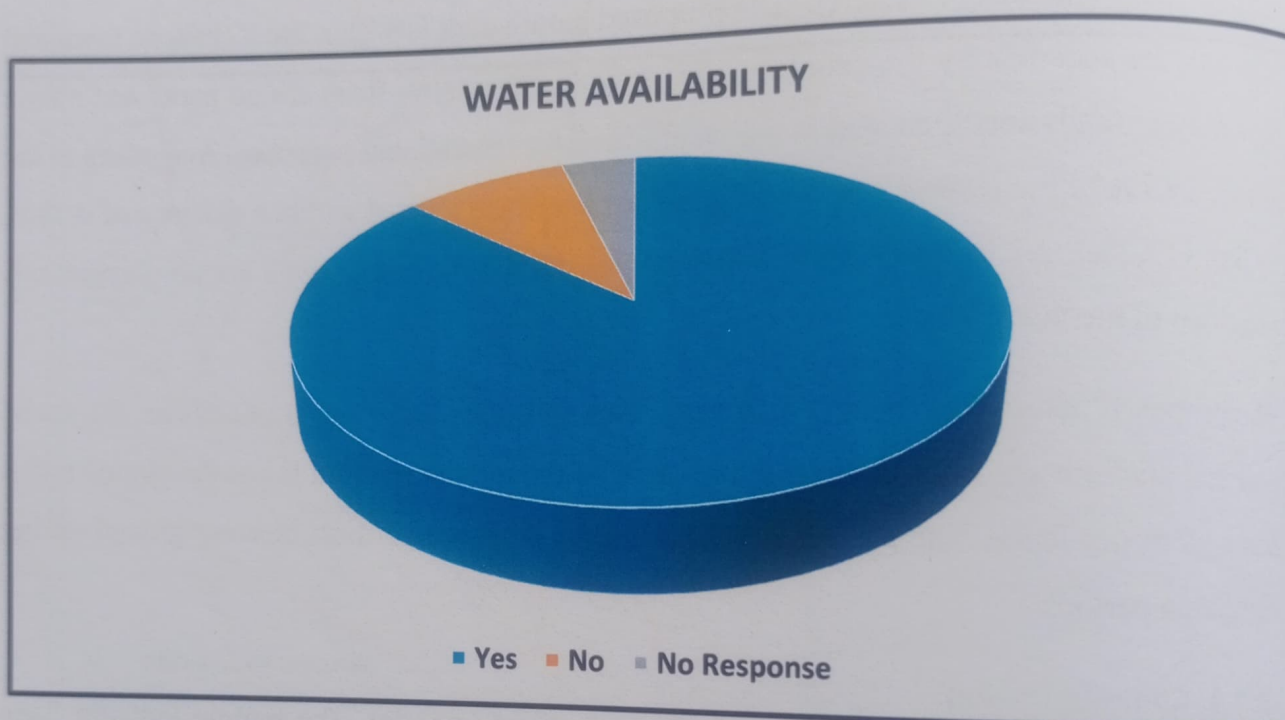


Figure 4: Access to Water

Source: Field Survey, January 2023

Status and Trends of Water Sources

The occurrence of groundwater in the Kehancha is mainly from 1,200mm annual local precipitation and the subsequent infiltration into the sub-surface. Shallow ground water levels lie between 1.0m and 7.0m. The surface water of Kehancha is generally good. The quality however decreases during the rainy season with an increase in colour, turbidity and conductivity mainly due to the sediments and suspended matter transported by the river.

Currently the water production is mainly done through pumping systems; there are surface sources and ground water sources from borehole equipped with submersible pumps. Due to high sediments and micro-organisms presence in surface water treatment is mainly done

using Aluminium sulphate as a coagulant for aesthetic value and clarity improvement and chlorine in the form of HTH is used for disinfection.

3.5.2 Sewage and Sanitation

Sewerage involves the mechanisms for handling domestic and industrial liquid wastes. In Kehancha town, the disposal of domestic (human waste) is done through the septic tanks and pit latrines. Kehancha town has no sewerage system and sewer treatment plant. This calls for urgent intervention in waste management.

3.5.3 Wetlands

Kehancha town has a number of wetlands which receive surface runoff and its sediment load from the adjacent sloping areas. These support the wetland vegetation. The vegetation cover of papyrus and phragmites tend to be the most dominant along the river channel increasing in density downstream. Other vegetation types include *vossia*, *sesbania spp.*, *typha*, *duom* palm, sedges and other grasses. Most of these wetlands are permanent in nature though currently facing deterioration.

3.5.4 Dumpsite

Throughout history, mankind has used dumps to solve solid waste problems. In the past, when waste streams were simple and land constraint was not a challenge, open dumping was used as an inexpensive and often appropriate solution. It served the purpose of keeping waste separated from the populace, hence limiting exposure to disease vectors, as well as odour and other direct effects. However, the introduction of more and more complex products into the waste stream (complicating disposal), increasing urbanization and population growth have all resulted in a huge increase in the impacts of open dumps in many situations.

Kehancha town lacks a designated waste disposal site. Town residents deposit their solid wastes on undesignated zones. Residents of the town in the rural areas of the town dig waste pits and eventually bury or burn them once full.

3.5.5 Household Solid waste Management

The household survey revealed that only 5% of the residents of Kehancha town have access to town garbage collection service by the county government, department of environment. The bigger percentage of the residents lack where to dump their wastes. This has resulted into indiscriminate dumping of wastes within the estates. That is, through household's disposal methods such as burning, burying or just throwing away. Migori County Government accounts for 25% of garbage collection services. This is mostly undertaken in the markets, bus parks, government offices, and the CBD.

3.5.6 Environmental Hazards and Disasters

Natural and human induced hazards pose a threat to human life, property and environment. Natural hazards include dry spells, soil erosion, drying-up of water sources, lightening and hailstorms, among others. Disasters occur when natural hazards interact with vulnerable people, property, and livelihoods causing varying damage depending on the level of vulnerability of the individual, group, property or livelihoods.

3.5.7 Extend and Trends of Environmental Hazards and Disasters

According to the occurrences in the towns recent past, main frequent recurrent forms of disasters in the town is collapse of gold mines attributes to use of ancient methods in exploration of minerals especially gold.

Accidents

Most of the accidents in Kehancha town are as a result of numerous cyclists sharing the same roads with motorists. Motorcycle (Bodaboda) are the main mode of transport in Kehancha district. Due to congestion on the roads, accidents do occur frequently.

Key Environmental Challenges

- Poor environmental sanitation
- Low public awareness on sanitation and hygiene
- Poor waste management
- Inadequate coverage of the sewerage system within the municipality
- The existing sewerage system is ineffective since there is no complete treatment of effluents which are then discharged into the aquatic environment
- Encroachment of wetlands
- Waste water from municipal sewerage treatment system.
- Soil erosion due to poor land use practices
- Contamination of water sources
- Poor waste disposal
- Littering of polythene wastes
- No waste recycling
- No separation of wastes at source
- Flooding
- Loss of biodiversity

- Soil erosion
- Lack of equipment and early warning systems
- Low awareness on disaster preparedness
- Outbreak of diseases
- Land degradation
- Disruption of household routine and social functions

3.6 Housing and Informal Settlements

3.6.1 Existing Housing Situation

According to 2009 population and Housing Census (GOK, 2010), Kehancha town had a population of 82,914 with a growth rate of 2.54%. Thus, projected population will be 127,140 in the year 2030. The population density was 560 persons per square kilometer in 2009, and this will rise to 1476 persons in the year 2030. This high population growth will require adequate housing and reasonable standards of sanitation as provided for under economic and social rights in Kenya Constitution 2010.

The 2009 census showed that housing condition in Kehancha town is unsatisfactory. For instance, in terms of construction materials only 52% of the houses had permanent floors, 55% has permanent walls and 35% had grass thatched roofs.

Housing within the town stands as the most prominent problem that requires immediate attention. This implies not only to the housing quality but on the development trend as well. Absolute land ownership in the town has led to difficulties in controlling the development trend and the type of housing required in the town. This has led to construction of substandard housing and encroachment into road reserves. The housing conditions are characterized by mud walled, rusty mabati roofing and small houses with poor drainage and careless disposal of household wastes. This exposes the people living in these areas to inhuman conditions prone to diseases. The housing structures in Kehancha town are not only poor, but lack of planning has led to poor environmental conditions. As a result, most of Kehancha town is largely occupied by informal settlements and unplanned developments.

The major informal settlements in Kehancha town includes Kehancha Chini and areas within Kehancha CBD. Kehancha Chini estate is the largest slum in the town and has approximately 500 households exhibiting both a nucleated and linear type of settlement. It has a mixture of housing topologies ranging from temporary, semi-permanent to permanent structures but the

dominant is the semi-permanent ones in which most of the houses are predominantly single room and the building materials included mud walls, iron sheets and earthen and /or cemented floors. These structures are built in such a way that there is virtually no space between them. Clusters of shelters are just separated by a corridor or verandah. In this type of housing, a single room acts as a bedroom, sitting room, store and so on. Pathetically, four people and in some circumstances more than four may share a single room. The foundation of the dwelling units is poor, leading to many houses assuming slanting postures, without ventilators and characterized by breaking walls and wearing away.

This housing shortfall places heavy responsibility on Kehancha town requiring co-ordination of efforts from all concerned in the public and private sector. It requires definite housing development strategies incorporating the principles of the Constitution, Vision 2030, Millennium Development Goals and the National Housing Policy.

Challenges facing Kehancha slum dwellers

- The ever-increasing population and increasing demand for shelter, against a back drop of poor or lack of urban planning, diminishing resources, high house rents and insecure land tenure system.
- Technical difficulties of infrastructure extension and specifically physical conditions of the settlements, which are marked by a random and haphazard development pattern and overcrowding.
- Poor governance in the management of slum areas and inadequate capacity by the municipal
- Unemployment and underemployment in the slums.
- Insufficient health facilities
- Poor state of roads, most of the roads were narrow, muddy and have poor drainage channels.
- Increased rates of urban poverty and social upheavals.
- Inadequate infrastructure (sewerage services, water drains e.t.c)

3.7 Economy

3.7.1 Introduction

Kehancha town does not have major industries. It is a transit town. This being the case, many economic activities in the town and county revolves around the transportation sector. Transportation activities such as bodaboda, truck driving, and bus and matatu operations dominate the economic sector. These activities have thrust into limelight other supporting

economic activities such as hotel, bars and lodging activities and middlemen/women assisting the residents and the business persons. Hotel and lodging activities has been growing tremendously and is rivalling the transport sector in creation of job opportunities in the town.

3.7.2 Commerce

Other major commercial activities in the manufacturing, service and trade sectors were: manufacturing sector included among others, posho mills, carpentry, tins/black smith, welding, saw mill, tailoring, shoe making. The service sector included among others: bars and restaurants, hotels, cyber cafes, surveyors, laundry, salons/barber shops, shoe repairing, bicycle repairing, garages, slaughter houses, clearing and forwarding, telephone bureaus and electrical shops while those in the trade sector included among others: wholesale, general retail, cereal; dealers. Dairy mild shops, butcheries, tire dealers' hardware shops, electronics shops, auto spare parts, video, mobile phone and phone accessories shops, computer accessory shops, chemists Pharmacies.

Emerging opportunities for investment, development and value-adding exist in trade, manufacturing, ICT, transportation, real estate and food-related industries.

The field survey found out that trading/business contributes 38.5% of job opportunities available in the town and this is due to the rampant cross-border trading that has been made possible by the free movement of people allowed by the East African Community. Other job opportunities include service industry/hotel/food industry (12.5%) and this is also due to the high demand for these services by the high number of business persons, local and international tourist travelling to other parts of the county and within counties of Kenya and beyond; *Bodaboda* (15%); Jua Kali (12.3%) among others.

3.7.3 Financial Institutions

Various financial institutions including micro finances operate in the town and the business community utilizes them for both business financing and savings. Ever since Kenya Commercial Bank established its branch in Kehancha, it has raised the level of financial and banking services availability for the town residents and beyond. However, the stringent conditions of the available banking and financial institutions limit people' access to them.

3.8 Revenue base

3.8.1 Introduction

The fiscal management of the town comprises revenue mobilization and expenditure administration/transactions. This depends on the revenue generated either locally or from external sources. The current devolved process calls on county governments to be responsible for their financial management. This is a challenge to all the local authorities within the county to improve their revenue generation mechanisms for smooth development of the county government.

The major sources of revenue available to Kehancha town can be grouped into two:

- Internally Generated Fund (IGF)
- Grants / allocation from the National Government

The main sources of the internally generated funds (in a descending order) comprise of:

- Highways and Bus Park Fees,
- Single Business Permits,
- Produce Cess
- Market Fees
- Penalties from matatus dropping and picking passengers at undesignated zones.

The town parking provisions is inadequate for almost 600 vehicles passing and operating through the town weekly and which usually park along the road as drivers rest before proceeding to the Kenya-Tanzania Border, picking or off-loading goods at commercial enterprises and even service providers within the town. The county government can increase its revenue if land can be allocated for a new bus park to avoid PSVs that pick and drop passengers along the road and making it impossible for the council to collect fees from them.

3.8.2 Challenges facing investors in the municipality include;

- High taxes levied by the council
- Inadequate trading spaces and inadequate government land that can attract big investments
- Low Profit returns due to low purchasing power and high cost of living
- Limited capital due to high interest rates
- Harassment by council askaris
- Poor road conditions hinder movement of goods and services
- Competitive market as many Kenyans prefers importing cheap goods from Tanzania.
- Insecurity created by free border movement and a porous border.

- Black market/brokers/Illegal business along the border and connected towns.
- High rents necessitated since the municipality lacks land and therefore cannot provide these facilities and have left them to private individuals who are profit oriented
- Poor markets and marketing skills to attract investors to the town.

3.8.3 Markets (Permanent and Temporary)

Kehancha town has three markets (Kehancha, Kubinto and Ikerege) which generates approximately Ksh. 560,000 annually. The town has three 1 permanent (Kehancha) and three 2 temporary markets spatially distributed in favor of the town due to its proximity to major towns and to the border. The following are the markets found in Kehancha and their status: - Stall market (1 permanent) and an Open-Air market (permanent and temporary)

The study revealed that 56% of the respondents feel that the markets are located between 1-4 Km, while 19.5% felt that the markets are located between 0-1 Km and over 4 Km (24.5%).

Challenges facing the markets in the town include;

- Long distance since they are spatially distributed in the town.
- Most markets lack shades and are in bad state.
- The markets are few and are inadequate to cover the whole town.
- Dumping of waste from the markets pollutes the environment.
- Insecurity which hinders increased investment

CHAPTER FOUR: INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KEHANCHA TOWN

4.1 Spatial Planning for Kehancha Town

The main objective of the spatial planning exercise was to prepare an integrated strategic urban development plan for Kehancha Town for the years 2010-2030. Considering the planning challenges in Kehancha and the community's vision, the following concepts guided the spatial planning for the town;

- The need for minimizing urban sprawl due to inadequate public facilities, land tenure, high segregation, diminished aesthetic appeal and environmental management.
- Promoting neighborhood livability-sense of a community, safety, convenience, attraction and affordability
- Better access and less traffic-through clustered development
- Concentrating development on built up areas-with adequate access to public services
- Preserving natural areas-open spaces
- Kenyan New Constitution- The section on the Bill of Rights that advocates for housing and clean environment; Vision 2030's goal-ensuring high quality of life: National Land Policy 2009- ensuring sustainable use of resources.

In order to achieve this, smart growth model was found to be the most appropriate for Kehancha since it incorporates communities' integration, improvement on service provision and minimization of costs on plan implementation. The model promotes more compact, mixed, multi-modal land use that minimizes sprawl. The main model's benchmarks considered relevant to Kehancha town's spatial plan included its support for;

Self-contained, distinctive and attractive communities with strong sense of place.

A planned mix of land uses and housing types

Transportation diversity and transit-oriented development, including non-motorized travel conditions, maximization of connectivity and street design that efficiently accommodate all modes of transport.

- Preservation of green-spaces and environmentally sensitive zones
- Incorporation of green and brown agenda-in terms of energy use

Kehancha town is an economic center serving as growth engine that would continue to absorb population, generate employment and provide necessary services to its people and the region.

Planning for its future was therefore guided by the community's vision and the smart growth model's benchmarks. The community's vision for Kehancha town was: *To be an economically secure, vibrant and sustainable town with access to basic utilities, infrastructure, security and access to opportunities*. In order to plan according to this vision, it was imperative to first examine the different types of land use models that could guide the growth of Kehancha town. The factors considered included the existing spatial structure, institutional framework and the key sectoral strategies. The three alternative models examined were:

- Kehancha as an agricultural town.
- Kehancha as a Service town
- Kehancha as a Commercial town

These alternative models are discussed below:

4.1.1 Kehancha as Agricultural Town

Kehancha can develop as an agricultural town considering its fertile land, topography and good climatic conditions. Most of the food crops can be grown in Kehancha and perform well. The town also has large tracts of land that is not fully cultivated but is suitable for agriculture. The stakeholders also revealed that the town imports food from other regions including Isebania, Migori and Ntimaru.

The town has a potential for agriculture that can be practiced along the wetlands, streams and rivers within Kehancha town. Agriculture can also be practiced in the rural zones where there is abundance of water with undeveloped parcels in between the developed areas which can be used for kitchen gardening. The existence of agricultural training and research institutions can also be beneficial to urban farming. There are also adequate wetlands that are suitable for fish farming in the town.

The existence of electricity and class C13 and other major link roads can also promote the location of agro-based industries. This implies that the town will have potential for attracting investors interested in agro-based industries and intensive farming. Promotion of the dairy farming sector can also provide products for related agro based industries to be set up within the town.

In order to plan Kehancha as an agricultural town, the following should be undertaken;

- Delineate agricultural land uses in the town
- Stop urban sprawl and restrict development within the currently built-up areas between the CBD, Kehancha Chini, Kurutiyange, Kubinto and Ikerege. Improve access to farm implements, on infrastructure and farming methods.
- Provide adequate space for agricultural produce and livestock market in rural areas.
- Improve on development control in the usage of the land particularly residential developments that are encroaching into agriculturally potential areas.

4.1.2 Kehancha as a Service Town

This model considers Kehancha as a linkage to the Kenya – Tanzania border and other towns attracting people from different parts of Kenya and the neighbouring county – Tanzania and counties of Kisii and Narok. As a service centre, the town can attract tourist and an array of activities and services that is presumed to ignite its growth. Service enterprises are considered as key components in the development of sustainable communities and can increasingly contribute to their success, employment and skill levels and in improvement of the quality of life of the residents.

The existing spatial structure of Kehancha town, Hotels and lodges, surrounding centres, services rendered and demand, possible opportunities from the region will be beneficial to the town as a service hub. However, this does not hinder the growth of other sectoral development since they boost the growth of these sectors which are envisaged to act as key development drivers for the town.

The following will have to be considered;

Conserve and develop wetlands that are almost surrounding the town as golf courses, interspersed with planting of indigenous trees, constructing fish ponds aimed at bringing sports tourism.

Develop Kehancha town into a service centre by relocating key institutions to the CBD and major urban centres of Ikerege and Kurutiyange. This will attract development since many

investors will be interested either in the form of real estate or general merchandise to serve the town dwellers and the general public passing through or providing services to the town.

- Allow the town to form part of service and transit centre in the greater western region at large.
- Provide necessary infrastructure including sewerage treatment works particularly towards the eastern side of the shopping centre.
- Delineate and preserve the wetlands.
- Improve on the conditions of the existing road networks linking various activity zones in the town including C13 and other major link roads.
- Improve on the street lighting and the overall cleanliness of the town.
- Improve all other roads to all weather standards.
- Provide better hospitality facilities with adequate security and parking areas by both the public sector and the PPPs.

4.1.3 Kehancha as a Commercial Town

This was the preferred model and it postulates Kehancha as a leading commercial Centre in the subcounty. The model considers the commercial role of the town considering that it is the major commercial hub of the region and the gateway to Kenya from Tanzania and other major urban centres to Kuria East and Kuria West sub counties. The other supportive factors considered include:

- Adequate land for investment.
- Existing financial institutions and other relevant agencies making loans available to suitable entrepreneurs.
- Potential in agricultural activities which forms the basis for basic commercial goods.

This model will function best if the following are undertaken;

- Control urban sprawl by enforcing strict development controls as per the zoning regulations proposed and zone land uses according to the set standards
- Improve any of the classified roads within the town to bitumen standards including opening all the blocked roads.
- Provide spaces for Business Park within the CBD.

- Provide spaces for markets and commercial nodes within the planned zones.
- Improve class C13 road to dual carriage way with adequate road furniture.
- The County Government to adopt Public Private Partnerships approach to keep the town clean and attract investors.
- Improve the financial sector by attraction banks and financial institutions by providing adequate security suitable sites for their location and the financial institutions to be encouraged to provide loans to potential entrepreneurs.

4.2 Kehancha Strategic Structure Plan

The ISUDP presents the long-term development framework for Kehancha town. It indicates broad land use classifications, transportation corridors in relation to land uses, location of utilities and services. The plan in total shows the form, shape, urban development limits, trends and pattern in developments that Kehancha town will take.

Structure plan contains broad land use proposal covering environmental, social and economic considerations for the planning period (2023-2033). However, it is characterized by intersectoral coordination. Key Issues include:

- Controlled Development-Land Use-Structure Plan
- Residential Development – Planned Mixed use
- Promotion of Investment-Education, commerce, housing
- Improved infrastructure

4.3 Land Use Proposals.

4.3.1 Residential

Density of Development

In recommending gross residential densities care has been taken to ensure a spatial and functional system of the built-up services, recreation and communication network. For the purpose of controlling the intensity of development, the range of densities that can be adopted may be varied depending of the type of waste disposal, availability of piped water, and the level of building technology to be applied.

Site Planning.

i High Density Residential

Areas earmarked for high density housing include: Taranganya, Namba, Igena, Komange and Karosi areas. These are the areas already densely populated and are expected to house the bulk of the population. This will consist of low-cost housing developments that will house the relatively low-income households. This will consist of mainly multiple residential developments. The total area earmarked for high density residential neighbourhoods is 1475Ha.

ii Medium Density Residential

Areas proposed for medium density housing include Nyamagagana and Ikerege. The total area earmarked for medium density residential neighbourhoods is 1445 ha. These areas are projected to have a combination of single and multiple dwelling units but with the latter being more dominant.

iii Low Density Residential

Proposed low density residential areas include areas such as Masaba and Naora areas. The total area earmarked for low density residential neighbourhoods is 3100 ha. The delineation of parts of these areas into low housing areas was significantly influenced by the current low population levels. Low density residential areas have been proposed for the larger rural hinterland in order to encourage agriculture. Urban agriculture is expected to take place given the large plot sizes.

4.3.2 Industrial

▪ *Light Industrial Areas/Jua Kali shed*

Currently, there is no place within the town which has been earmarked for Juakali development. The Juakali sector currently undesignated zones within the town. Also, furniture workshops with adequate infrastructure and services have not been provided to address the needs of town carpenters. The activities expected are often non-offensive and can easily coexist harmoniously within or adjacent to commercial and residential neighborhoods.

▪ *Industrial Area*

By the year 2030, it is anticipated that Kehancha town will take advantage of its status as gateway to Kenya and Tanzania have at least two heavy industries. An area for heavy industry should be proposed outside the town in Kubinto. It is proposed that by the years 2030 the boundary of Kehancha town will have reached Masangora. The location of the

industrial area is to take advantage of the airstrip which has been proposed to be located in Kendege and the C13 road.

4.3.3 Educational

This plan has proposed establishment of Kehancha Education and Research Institute located in areas around Kendege Technical Training College covering approximately 170 Hectares. Currently the area houses several a technical training institutes along other education institutions like Kendege Primary and secondary. It has been proposed that the Farmers Training College located in Taranganya to educate the town residents on the proper farming method for commercialization of agriculture within the town. Other universities and research institutions are to be attracted to this area through offer of free land. With a projected population of 1127140 people by the year 2030, approximately 8 primary schools will be required (an additional 2school) and 13 secondary schools will be required (an additional 9 schools). The plan proposes the development of a secondary school in Masaba ward and a primary school in Bukira East ward. The plan also proposes development of vocational training facilities to absorb primary school drop outs.

4.3.4 Recreational

There should be four (4) additional recreational parks a small area of recreational space within walking distance of all areas with a residential density above 50 persons per hectare. It is recommended that 1-2 hectares of land is provided for open spaces per 10,000 populations in areas with a population density of above 50 persons per hectare (Physical Planning Handbook, 2008). Therefore, Kehancha town and its environs are required to have approximately 26 Ha if 1Ha of land is taken to be the minimum land requirement. One of the proposals is to reclaim the border line and river and stream banks (security buffer) as a recreational area. Other proposals include a recreational area in Kendege for the Education Park serving also the catchment around the airstrip, another in Ikerege and Masaba areas (including the riparian reserves if river Nyangoto and Hibwa) to cater for increased residential areas. The existing proposed nature park and Kehancha stadium needs to be improved.

4.3.5 Public Purpose

The development of land for public purposes is generally expected to be entangled within the residential and commercial developments. As result no broad zones for public purposes are expected. Existing administrative centers at Kehancha town are to be maintained. However, it is proposed that 16 Ha of the land reserved for Kehancha divisional Headquarters be zoned

for the county functions. These include the County offices and the county commissioner's residence, national government offices, low courts, police station and other public entities. The town requires 5 Police posts by the years 2030 (an additional of 2 police posts).

4.3.6 Commercial

The plan proposes that the maximum number of 2 floors in Kehancha town especially at the CBD area and its environment due to the recently ongoing cases of artisanal mining and quarrying which has probably interfered with the stability of the ground levels in Kehancha town. In the rest of the town, the floor can go up to 4 and above that for those who will be installing electric elevators. The plan stipulates that buildings will have to provide for underground parking or subsequent floors. Also, other commercial nodes are to be created within market centers in order to ease congestion in the CBD. Kurutiyange, Masaba and Kubinto nodes should be developed and expanded to discourage linear growth in Kehancha town.

4.3.7 Public Utilities

a) Cemetery

Kehancha town lacks a designated zone for cemetery. The plan seeks to address this problem by proposing a cemetery at Ikerege.

b) Fire Station

It is proposed that the site for the fire station be developed at Kendege.

c) Dumpsite/ Sanitary Land Fill

It is proposed that the town's dumpsite/ land fill at Nyamagagana in Masaba ward be fenced to reduce pollution.

d) Sewer Pond

It is proposed that a new sewer pond will be developed at Namba area to cater for the hospital and the urban dwellers since it is the lowest zone of the town. This will also enable the public offices and the proposed developments at Kendege connect into the sewer line.

4.3.8 Transportation

The plan proposes changing the existing transport facilities. In order to Kehancha town and especially the CBD area, there is a proposal to relocate the bus park to areas around Taranganya. Two bypasses have proposed as: the Northern bypass; at Taranganya centre connecting to Isebania Senta and Ntimaru and the southern being at Ikerege connecting back

to Kehancha, Ntimaru and Masaba the C13 (Migori- Kehancha - Narok) be expanded and upgraded to class A road (international standard). Kendege Airstrip will be operationalized to serve as a major transport node for agricultural produces. The plan proposes that approximately 12% of the planning area will be used for transportation.

4.3.9 Urban, Peri-Urban and Rural Agriculture

Practice of agriculture should be in harmony with aesthetics of the town and should not be allowed to be a nuisance. In order to promote urban agriculture in the area, there should be adequate provision of infrastructural services to enhance easy access to the markets among other related factors. The agricultural potential that exists within the peri-urban and areas of the town must be exploited to the benefit of the residents.

4.4 Action Area Plan

Action area plan was prepared in order to give different land use priorities set for different sections of the planning area. It was undertaken by considering specific land use characteristics and limitations within the planning area, including sections' suitability for certain uses, sensitivities or vulnerabilities.

The key benchmarks of area action plan considered for Kehancha town included:

- National priorities, policies and strategies the Vision 2030, Planning standards, sustainable development strategies, and other sectoral strategies like Environmental management strategy, housing policy and energy policy among others.
- Identification "immovables" those uses that require a very specific area and cannot be moved to alternative locations e.g., the fixed infrastructure such as bus parks, major routes and sewerage treatment works. They helped in delineating the planning space for other uses.
- Allocation of space in such a way that they are as suitable as possible for the proposed use with less negative impact during the planning period.

Spatial categories as:

- Priority areas which are reserved for a specific form of use.
- Reserved areas where certain uses are given priority over others.
- Areas suitable for particular uses, available to defined uses which are then excluded from all other areas e.g., sewerage treatment works.

Four Action Plans were identified in based on the development trends. However, each action area had different spatial categories or land use proposals based on the land use suitability

assessment made. The action area plans had interventions (actions) to be implemented in different periods. The interventions were categorized into:

1. Short-term Intervention (2023-2024)
2. Medium-term Intervention (2024-2027)
3. Long-term Intervention (2027-2033)

Short-Term Interventions.

- Zone the areas for residential and other compatible land uses.
- Grade the link roads within Bukira East and Bukira central to all weather status.
- Provide street lights along the Kehancha- Ikerege – Isebania Road, Kehancha –Taranganya – Kubinto – Isebania Road.
- Improve on the drainage and condition of the internal road network linking various activity areas in the zone.
- Provide security and revitalize the commercial node in the area.
- Provide solid waste disposal bins at the Kehancha, Ikerege, Kurutiyange and Kubinto commercial nodes
- Build market shades at the Kubinto market centre
- Encourage Public Private Sector partnership in provision of housing.
- Fence off the designated dumping site
- Fence off the Kendege Air strip land and demarcate as planned.
- Open and grade the road serving the proposed airstrip to required standards.
- Start beatification programme for the airstrip green zone.
- Start an agricultural produce market on the proposed site at the Kendege area
- Intensify development control measures like subdivision schemes, change of users, lease renewal etc.
- Open storm drains to avoid flooding
- Open registered roads and paths to required standards
- Discourage bungalow residential developments within the urban core but encourage apartments.

- Encourage well designed business cum residential developments with adequate green area around Ikerege and Kurutiyange.
- Delineate, design and start beautification of the proposed site for recreation within the stadium.

Medium-Term Interventions

- Acquire land and construct police post next to the Kubinto market centre
- Acquire land for a public cemetery

Long-Term Interventions

- Construct sewerage treatment works to serve the town population.
- Provide sites for recreation facilities

Table 2: Planning Standards and Regulations for Kehancha Shopping Centre Area

| Area | User | Minimum Land Size | Maximum Coverage | Services Required |
|------------------------------|--------------------------------------|-------------------|------------------|---|
| Kehancha Chini and KMTC area | Educational | 50 Ha | 40% | Water, Sewerage and roads (not less than 9m), Open Spaces/Recreation |
| | Public Purpose | 15Ha | 50% | Sewerage, Incinerator, Recreational site |
| Housing | Medium and Low density Residential | 0.10Ha | 65% | Sewerage, Adequate building line, Incinerator, Recreational site, |
| | High density Residential Multifamily | 0.025Ha | 50-60% | Recreation, community facilities, road/streets reserve minimum 9m, sewerage, |
| Sewerage Ponds | Public Utility | 2Ha | 85% | Buffer Zone, Security/Fence |
| Taxi Park/CBD | Transportation | 0.25Ha | 100% | <ul style="list-style-type: none"> ▪ Redesign the taxi park-flush or angle ▪ Allow registered and marked taxis only ▪ Allow international transit buses/vehicles only ▪ Beautify Taxi parks ▪ Relocate hawkers |

| | | | | |
|--------------------------------------|----------------|-------|------|--|
| Towards Taranganya and Masaba Border | Agricultural | 2.5Ha | 100% | <ul style="list-style-type: none"> ▪ Re-plan for mobile stalls, Improve on surface and drainage ▪ Install parking revenue booths <p>Adequate Access, riparian reserves</p> |
| Solid Waste Dumping site | Public Utility | 2ha | 90% | Adequate buffer, suitable collection units |
| C13-migori -Lorgorian road | Transportation | - | 40% | Adequate reserve (30m), proper drainage, planted strip, street lighting. |
| Along the Streams and rivers | Agricultural | 2.5Ha | 100% | Riparian reserves, service lanes, environmental management |

Source: Field Survey, January 2023

CHAPTER FIVE: DEVELOPMENT PROPOSALS AND STRATEGIES

The purpose of this chapter is to provide for strategies and their specific measures/actions and creating a framework for implementation.

5.1 Housing and Settlement Upgrading Strategy

This section touching on housing and settlement upgrading strategy looks at various ways of increasing housing stock in the town. This includes analysing housing demand and supply, upgrading informal settlements and then projection of housing needs up to the year 2033. The 2020 vision for housing and urbanization is "an adequately and decently housed nation in a sustainable environment". The objectives are to increase housing units supply from 35,000 to 200,000 by the year 2012 and undertaking high quality urban planning especially low-cost housing and providing mortgage finance.

5.1.1 Objectives of the Strategy

- To improve accessibility within the informal settlements
- To increase access to water within the informal settlements
- To reduce flooding incidences in the informal settlements
- To connect the informal settlements with the sewer system
- To improve solid waste management

5.1.2 Housing Strategies

Housing strategies encompass a variety of actions that include development of formal housing as well as settlement upgrading. Both aspects involve the development of infrastructure and the necessary facilities conducive to human habitation. As provided for by the United Nations under the International Covenant on Social, Economic and Cultural Rights adequate housing includes the following elements:

- Legal security of tenure
- Availability of services, materials, facilities and infrastructure
- Affordability
- Habitability
- Accessibility
- Location
- Cultural adequacy

It is therefore imperative that interpretation of the right to accessible and adequate housing in the Kenyan Constitution will have to take these elements into account. In order to provide for these, it is important that land use planning precedes housing activities. Principles for the provision of formal housing will be guided by planning standards and building regulations operating in Kenya, while slum upgrading strategies will be governed by the Kenya Informal Settlements Improvement Programme (KISIP).

5.1.3 Residential Planning Standards for Kehancha town

Planning for residential settlements involves designation of housing estates. An estate is a spatial planning unit, which is adequately provided for in terms of basic community facilities bordered by principles through roads and has an identity. The service centre which forms the focal point of estate satisfies the maximum walking distance from the perimeter. The population of the estate should be able to support the services within the physical entity. It is recommended that an estate shall have 100 households on the average.

The principles in estate planning include the following:

- Land use distribution
- Density of development
- Site planning

5.1.4 Land Use Distribution

Residential areas are seen as integral parts of the overall built-up area (dwelling plots) together with day to day services, recreation and communication network. Table 5-1 gives the percentage allocation of land in various residential estates. They may be used as a guide in planning for residential estates and reasonable variations may be permitted depending on local conditions.

Table 1: Average Observed Land Use Allocations in Residential Neighbourhood Development.

| Number | Land use | Percentage of Developed Area | | |
|--------|----------------------|------------------------------|----------------|-------------|
| | | High Density | Medium Density | Low Density |
| 1 | Dwelling plots | 40-60 | 64-74 | 80-90 |
| 2 | Recreation | 21-29 | 7-16 | - |
| 3 | Community Facilities | 5-20 | 9-20 | 0.1-1 |
| 4 | Roads and streets | 4-15 | 6-7 | 8-8.8 |
| | | 1-7 | 3-4 | 0-2.2 |

Source: Physical Planning Handbook, 2008

5.1.5 Density of Development

In recommending gross residential densities care should be taken that they create spatial and functional meaning an independent system of the built-up services, recreation and communication network. For the purpose of controlling the density of development, Table 5-2 gives a range of densities that can be adopted. These may be varied depending on the type of waste disposal, availability of piped water, and the level of building technology to be applied.

Table 2: Recommended Densities for Residential Development.

| Type of Dwelling | No. of dwelling per Hectare | Allocation per dwelling (M ²) |
|--------------------------------------|-----------------------------|---|
| Detached Bungalows | | |
| (i) Low density | 10 | 1000 |
| (ii) Medium density | 16 | 500 |
| (iii) High density | 35 | 285 |
| Semi-detached and Row Housing | | |
| (i) Low density | 20 | 417 |
| (ii) Medium density | 32 | 333 |
| (iii) High density | 70 | 250 |
| Multi-family Dwellings | | |
| (i) Low density | 50 | 200 |
| (ii) Medium density | 60 | 168 |
| (iii) High density | 70 | 143 |
| (iv) Special density | 133 | 75 |

Source: *Physical Planning Handbook, 2008*

5.1.6 Site Planning

Table 3: Recommended minimum plot frontage by type of housing

| Type of Residential Frontage | Minimum Frontage in Metres | | |
|-------------------------------|----------------------------|---------------|-------------|
| | Detached | Semi-detached | Row housing |
| 1. Slum upgrading schemes | 70 | 75 | 75 |
| 2. High density housing | 70 | 75 | 75 |
| 3. Medium/low density housing | 60 | 60 | 70 |

Table 4: Recommended minimum Plot sizes for different housing schemes

| Type of housing | Minimum plot size in square metres | | |
|-------------------------------|------------------------------------|---------------|-------------|
| | Detached | Semi-detached | Row Housing |
| 1. Slum upgrading schemes | 223.2 | 148.8 | 111.6 |
| 2. High density housing | 334.8 | 223.2 | 167.4 |
| 3. Medium/low density housing | 465 | 309.7 | 232.5 |

Table 5: Minimum plot coverage recommended

| Type of residential development | Maximum plot coverage | | |
|---------------------------------|-----------------------|-----------------------|-------------|
| | Detached housing | Semi-detached housing | Row housing |
| 1. Slum upgrading schemes | 50 | 65 | 65 |
| 2. High density housing | 50 | 60 | 65 |
| 3. Medium/low density housing | 40 | 50 | 60 |

Table 6: Minimum setback of dwelling from plot lines

| Type of residential development | Minimum set-back in metres | | |
|---------------------------------|----------------------------|------|------|
| | Front | Side | Rear |
| 1. Slum upgrading schemes | 2.5 | 1.5 | 3 |
| 2. High density housing | 3 | 1.5 | 4.5 |
| 3. Medium/low density housing | 4.5 | 3 | 6 |

Table 7: Minimum Street width per given number of plots

| Number of plots | Street width |
|-----------------|--------------|
| 1 – 20 | 9m |
| 21 – 50 | 12m |

Source: Physical Planning Handbook, 2008

5.1.7 Slum Upgrading for Kehancha town

Slum Upgrading is a process of intervention in the physical, social and economic structure of an existing human settlement or simply defined as economic, organizational and environmental improvements undertaken cooperatively and locally among citizens, community groups, businesses and local authorities. Actions typically include; installing or improving basic

infrastructure; water reticulation, sanitation/waste collection, storm drainage and flood prevention, electricity and security lighting.

5.1.8 Objectives of Slum Upgrading

Slum Upgrading Strategy as provided for in Kenya Informal Settlements Improvement Programme (KISIP) generally entails participatory planning and implementation guided by the following principles and considerations;

- (i) Provision of land tenure security and housing tenure security to enhance investments in slum areas
- (ii) Flexible legal and institutional framework that allows local initiatives in Slum upgrading
- (iii) Availability of appropriate urban planning framework that recognizes slums and slum dwellers / residents as resources.
- (iv) It is essential that an integrated approach to slum upgrading is designed.
- (v) Mobilization and coordination of stakeholders and resources for slum upgrading initiatives locally, nationally and internationally
- (vi) Slum upgrading needs to be complemented with preventive actions that stall the emergence of new slums. Hence the need for a twin track approach towards existing and potential future slums.

5.1.9 Strategies for Slum Upgrading

To address the shortcomings within the slum settlements the following strategies need to be implemented.

- Provision of site and service plots with core units (kitchen and shower/toilet, or kitchen, shower/toilet and one room) to be incrementally upgraded as the owner completes the house.
- Provision of serviced residential plots with secure tenure and slab (infrastructure and social facilities and a foundation slab), while the owner completes the building process
- Provision of serviced residential plots with secure tenure, while the allottees carry out housing development on their own.

In order to achieve the above proposed strategies, it is necessary that the County Government of Migori undertakes the following steps:

- a) Preparation of action area plans for Kehancha Chini, Masaba, Ikerege and Kurutiyange centres.
- b) Mobilization of resources - mobilize financial resources from the public sector, development partners, private sector, civil society and beneficiary settlement communities and individuals.
- c) Institutional arrangements for slum upgrading implementation
- d) Undertaking social and economic mapping about who will be affected
- e) Preparation of digitized base maps for each informal settlement to aid planning
- f) Planning for residential estates/neighbourhoods
- g) Acquisition of land for infrastructure provision
- h) Execution of construction works

5.2 Environmental Management Strategy

Urban areas continue to grow into bigger clusters with ever increasing influx of people creating demand for support services such as water supply, transportation, drainage/sewerage, garbage collection and disposal etc. that is far exceeding the supply of these services. While taking up developmental activities, the assimilative capacities of the environmental components i.e., air, water and land pollution are rarely considered. Also, lack of proper land use control is resulting in poor land use compatibility. The haphazard and uncontrolled developmental activities leading to overuse, congestion, incompatible land use and creating high risk environment to the city residents in the form of deterioration of the natural and socio-economic living conditions which specifically includes overcrowding, congestion, lack of sufficient water supply, unhygienic living conditions, air and noise pollution etc.

However, in large urban agglomerations, the problems cannot merely be solved by pollution control measures such as control of pollution at source, providing sewage treatment facilities etc. The environmental aspects are not usually considered while preparing master plans or budget plans to produce well-co-ordinated and balanced developmental plans right at the planning stage itself. The best use of the land needs to be assessed in terms of not only the economic aspects but

also the environmental aspects. There is need therefore to integrate environmental concerns in the planning for urban development.

Strategies

- Protecting and preserving natural water courses
- Improving access to portable water
- Providing sewerage network system
- Providing solid waste management
- Providing recreational parks in Kehancha town
- Reducing environmental hazards and disasters

5.3 Transportation Strategy

5.3.1 Introduction

Transport is one of the major challenges within the planning area. This strategy is based on pertinent challenges that should be addressed to improve the quality and extent of the transport system in Kehancha. The proposed recommendations focus on the broad objective of improving access and mobility in addition to integrating other elements of a good transport system such as, comfort, reduced travel time, convenience, efficiency and low transport costs.

5.3.2 Key Transport Challenges and Opportunities

The following is a summary of the main transport challenges in Kehancha town.

The roads forming the urban road network are not developed to proper engineering standards that can appropriately serve and respond to the growing travel demand. The supply of transport services is dominated by motor cycles and bicycles, which may not be sustainable in the future.

The roads within the town are in poor condition leaving only Migori-Ntimaru Road and Kehancha-Isebania road as the main primary roads in the town. There are problems of congestion, traffic safety, and disorganized non-motorized traffic (NMT) movements in the town.

Transport and land use planning and development have not been synchronized. Without intervention, this will ultimately result into the undesired urban sprawl, increasing motorized travel demand and making the provision of public transport ineffective because of scattered development.

There is lack of professional approach to urban transport in the town as the problems are just emerging and have not reached levels where they are apparent. Institutional arrangements and human resource capacity should be put in place now to start addressing the issues before they become critical.

5.3.3 Transport Strategies for Kehancha Town

Previous sections gave the current transport challenges in Kehancha, the ideal transport situation for any urban area, and strategies Kenya has proposed to apply in its urban areas. This section draws lessons from these discussions and makes specific strategies.

Road Classification

There is need to have a functional classification of the existing roads so that adequate reserves may be acquired and preserved to allow for their development into the correct geometric layout that will ensure effective service to the town, by serving the main attraction and production of travel as described above.

The Highway Capacity Manual classifies urban streets as either Principal (Primary) or Minor (Secondary) Arterial, and specifies four design categories: High Speed; Sub-urban; Intermediate and Urban.

Principal arterials are very important for mobility and have very minor function for access. They connect important activity centres of major transport generators and relatively long trips within and through a town. Service to adjacent land is subordinate to the function of moving through traffic. Minor arterials connect and augment the principal arterial system. They are important for traffic mobility, access points along them are substantial, and serve trips of moderate length within relatively small geographical areas.

Principal/Primary Arterials

NMT facilities along the principal arterials should be separated for safety and comfort for the users. Appropriate facilities (footbridges and level crossing) should be provided at intervals not exceeding 0.5 km.

Reserves for the principal arterials should not be less than 30m wide to allow for future expansion as the traffic increases.

Minor/Secondary Arterials

These roads include all the major roads that connect to the principal arterials from the residential and commercial areas within the town. There are many more which should be identified, ideally at an average of 1 km separations.

NMT facilities should be provided along all minor arterials, either separated because of high motorized traffic volumes, or for mixed use.

Other Urban Streets

Other urban streets will be required for access to the various individual developments. Since the main function is access, adequate facilities for pedestrians and parking for non-motorised and motorised vehicles should be provided as a matter of priority. Street lighting will also be required to ensure safety at night.

5.3.4 Public Transport system.

- Provision of public transport priority measures, which include: (i) in the short term – well designed and sited bus stops which are at least 500m from the main origins and destinations; and, bus terminals with booking offices and covered passenger waiting areas, and well lit. In the medium/long term – road lanes for the exclusive use of buses; and, priority intersection controls for public transport vehicles.
- In the long term, encourage the use of higher capacity public transport modes in the central parts of the municipality for better usage of road space and increases public transport supply.
- Allow for controlled competition for routes by organized private transporters to reduce wasteful competition by operators who use very large numbers of small capacity and low-cost matatus and motor-cycles inconsistent with travel demand. In its extreme form, the wasteful competition can lead to inefficient use of the road network.

The model described above will require reforms with clear division of responsibilities between the public and private sectors. The public sector should develop and maintain the public transport network, and legislate and regulate transport services. The private sector should provide the transport services on the allocated routes. The new roles of the Council,

through the new Transportation Unit, should be responsible for overall planning and regulation, including:

- Planning the route network in the best interests of the town and passengers;
- Providing the necessary infrastructure such as bus stops, bus ways, and terminals;
- Negotiating with and sub-contracting operators for routes or route packages in a competitive bidding process, and;
- Monitoring and controlling (quality) the performance of such operators.

This model has the strongest merit as it presents a combination of transport authority planning and control of public transport services on the one hand and competition between independent operators for the operation of public transport services on the other.

Public – private partnerships (PPP) in the transport sector should be for the development, management, and maintenance of terminals and stages should be under an appropriate PPP arrangement to release public funds for other urban infrastructure development and ensure operators pay for the service offered. The town should also encourage the many small-scale operators to form associations in order to pull together their resources to purchase standard vehicles, with capacities of between 30 and 60 passengers, to reduce the overreliance on individual boda boda operators. The large operators will be easier to regulate for better public transport services.

Air Transport

The Airstrip at Kendege should be upgraded to accommodate both commercial and passenger flights.

Walking and Cycling

Since walking and cycling are essential for the use of public transport, streets must be made safe from crime, friendly to disabled, and include public amenities, such as shops and restaurants, and planned street trading. These conditions can only be fulfilled if special attention is given to

speed-reducing measures on streets where mixed traffic cannot be avoided or is allowed.

Parking

On-street parking should be provided on the minor and urban streets, but not on principal arterials. Development of off-street parking should also be encouraged by the town management as part of commercial and office space developments.

5.3.5 Action Plan and Monitoring and Evaluation Framework

In the short term, the town should:

- 1) Adopt/amend the proposed transport strategies with the participation of all key stakeholders and the Kehancha town community, prioritize investments, and mobilize funds for their development;
- 2) Establish a transportation unit within the town to plan, supervise development and operation of the urban transport system;
- 3) Enact traffic by-laws consistent with the proposed strategies and for effective use of road space, including those for on-street trading, garbage dumping, and illegal settlement on road reserves, and parking in the central area;
- 4) Acquire land for the development of the airstrip, for truck parking, public transport reserves and other proposed transport provisions;
- 5) Undertake, in cooperation with the national urban roads authority, road classification as proposed in this report, and acquire the necessary land reserves.
- 6) Liaise with the relevant national road authority in the design and development of the proposed by-passes;

In the medium/long term, the town should:

- (i) Continue the development of the principal arterials, especially the by-passes;
- (ii) Develop the minor arterials and the urban streets to all-weather roads;
- (iii) Re-structure public transport to allow for the introduction of high occupancy vehicles in the town;

- (iv) Develop frameworks for transport user charges for terminals, parking, operation of businesses within road reserves to allow for injection of private finance in transport infrastructure investment;
- (v) Encourage private finance investment for the development and maintenance of transport infrastructure – public transport terminals, parking areas, and advertisement on road reserves; and,
- (vi) Further equip and strengthen the transportation unit to effective manage travel demand.

5.3.6 Implementation Risks and Mitigation Measures

As the town embarks on the implementation of the proposed strategies, its leadership must be aware of the risks that can derail their implementation. Of all the risks to more sustainable urban transport, the lack of political commitment is particularly important. When the political will is lacking, the problems can be recognized, but may not be deemed important enough to warrant attention. Chaotic transport system is often the outcome, with the consequence of high transport costs, environmental degradation, and poor mobility. Poor urban transport system is unattractive to investors and a significant barrier to the development of other sectors of the urban and regional economy.

Other main obstacles to sustainable urban transport are:

- Lack of national policy framework prioritising financing of urban transport;
- Poor land use policy integration and co-ordination with transport development;
- Public resistance to policies, if they are not involved in their development or are not clearly explained them;
- Weak and unsupportive legal or regulatory framework;
- Poor data quality and quantity to enable informative decisions to be made;
- Unsupportive individual behaviours and choices of transport suppliers and consumers, in terms of habits and circumstances like perceptions on the mode to use, time, price, comfort and safety.

These risks and obstacles can be minimized, or completely eliminated, through having a common vision shared and accepted by the community. It should be a vision that will serve the values of the community. The challenge, however, is to have a cohesive community that has a common responsibility to make the town a better place to live in. The emergence of residents' and professional associations in Kenya is a positive step towards the achievement of this goal in the long-term. More work is required in the poor neighbourhoods to encourage the formation of such associations and participation in urban planning matters. Participation of all neighbourhood associations will increase the range of ideas on the table, and ownership of results.

In addition, there is need to have leaders that can accurately name the problem, see the connections between interests, and inspire the community to be better than they are currently. The future will be in coalitions between the leaders and members of the communities, and the leaders of the future will be those able to create the partnerships and collaborations needed to advance overall community values.

5.4 Social Infrastructure Strategy

Vision 2030 aspires for a country firmly interconnected through a network of roads, railways, ports, airports, water and sanitation facilities, health facilities, education, recreation, energy and telecommunications. The government therefore has given the highest priority to investment in the nation's infrastructure. The government is also determined to improve security in order to lower the cost of doing business and to provide Kenyans with a more secure living and working environment.

5.4.1 Health

Strategies

- ✓ Improving health facilities in the town
- ✓ Upgrading the Kehancha District Hospital to a Level 5 Hospital.
- ✓ Posting of adequate medical personnel to the health facilities.
- ✓ Constructing and expanding the public mortuary at the District Hospital.

5.4.2 Education

Strategies

- ✓ Improving pre-primary/ECD education in the town

- ✓ Regular monitoring and supervision to ensure education standards are maintained.
- ✓ Improving facilities for the public pre-primary facilities.
- ✓ Improving access to primary education in the planning area.
- ✓ Providing facilities for secondary education
- ✓ Expanding and increasing the number of streams in the existing secondary schools.

5.4.3 Recreational Facilities

These include Open spaces, Gardens, playgrounds, riparian reserves, social halls, cultural centre and stadium.

Parks

Areas of interventions:

- ❖ Acquire more land for recreational purposes.
- ❖ Create public conveniences such as washrooms, and solid waste disposal bins in the existing recreational facilities.
- ❖ Use money from the Ministry of Youth to develop the recreational facilities from donated lands and also reposes or surrender back the grabbed spaces for recreational facilities, especially the riparian reserve which could be used as a recreation site.
- ❖ Encourage land owners to surrender between 4%-10% of their land for recreational facilities during subdivision (should be legislated in the councils Bylaws).
- ❖ Acquire land for recreational facilities.
- ❖ Making use of recreation facilities found in the public in institutions, which can be a way of creation of revenue.

Strategies

- ❖ Improving and providing recreational facilities in the town.
- ❖ Acquire land for establishing four new green parks.

5.4.4 Communication

Communication is dominated by the use of telephone (both landline and mobile). The landline telephone lines are however not widely used due to their inefficiencies and vandalism. Most units are also not connected to this communication line. The mobile industry fuels communication within the town with the sole communication service providers being Safaricom, Zain, Orange and Yu networks. The town also has access to courier services. Public Service Vehicles (PSV) Bus companies, security companies and Kenya Postal Corporation are the main competitors providing this service in the municipality.

5.4.5 Electricity

Development projects recommended under this strategic urban development plan will definitely increase demand on Kehancha electricity supply. Currently the town experiences regular power cut which is not good for investors. Approximately 25% have access to electricity in the town. This is skewed in favour zones closer to the CBD.

Strategies

- ✓ Expand electricity distribution within the town
- ✓ Expand road reserves to accommodate electric lines
- ✓ Increase electricity network within the council

5.5 Economic and Investment Strategy

5.5.1 Vision, Objectives and Goals of the Strategy

The main objective for preparing a detailed Kehancha Economic and Investment Strategy as per the TOR is to guide actual economic and investment particularly those that were prioritized by local stakeholders and the Migori County Government. Other objectives include:

- Preparation of long- and short-term development strategies for management of wholesale markets and hawkers.
- Evolution of the industrial location policy for Kehancha town and its hinterlands by adopting complimentary policies for promoting investment and rapid industrialisation by taking advantage of the Trans-African highway and tapping opportunities across the borders.

Vision

A municipality that Promotes Sustainable Economic and Investment Development in Migori County through Diversification and Expansion of Investment Opportunities

This vision statement has been derived from various sources including stakeholder consultations, government policy documents and institutional objectives dealing with economic and investment development in the country that are currently being implemented.

Main Objectives of the Strategy

- To create a conducive economic and investment environment by alleviating major constraints.
- To enhance Regional Competitiveness of Kehancha as an economic and investment hub.

Objectives of Kehancha Economic Investment Strategy

As a result of the consultation process with business and industry representatives, key economic and investment sectors have been identified, each with strategies and actions that aim to achieve the Kehancha Economic Investment Strategy. It is expected that the town's major focus will be on these identified sectors over the next twenty (20) years.

The objectives of the Kehancha Economic Investment Strategy are to:

- ❖ Create an environment that is attractive and conducive to business and industry development.
- ❖ support existing business and industry
- ❖ build on the region's competitive advantages
- ❖ encourage sustainable and innovative practices
- ❖ ensure infrastructure meets industry needs
- ❖ Encourage partnerships, business networks and alliances
- ❖ coordinate the promotion/marketing activities of the region
- ❖ Plan and facilitate economic development.

The anticipated outcome of the implementation of the Kehancha Economic Investment Strategy will be the retention and generation of employment and investment opportunities and the further development of identified industry sectors across the region. This will be achieved through Council's leadership in guiding and resourcing the facilitation of the strategy and the

commitment to creating and sustaining strategic partnerships across the country and internationally.

5.5.2 Strategies

In order to achieve the overall objective of Kehancha Economic and Investment Strategy, Vision, mission and strategic objectives, the following goals have been developed.

- (i) Goal 1: Improve the economic and investment environment.
- (ii) Goal 2: Building Capacity of the community to spur entrepreneurship.
- (iii) Goal 3: Support entrepreneurship and indigenous

Table 8: Table 5-9: Goals and Strategies.

| Goal | Strategy |
|--|--|
| Improve the environment economic and investment | Improve infrastructure particularly roads, electricity, water and sanitation. |
| | Reduce legal, regular and bureaucratic red tape |
| | Development of Kehancha town Industrial Park. |
| | Enhance and promote Public-Private sector participation |
| | Promotion and advertisement of Kehancha as a Trade and Investment Hub |
| | Improve measures for combating crime and insecurity |
| Building Capacity of the community to spur entrepreneurship | Development of an educational park |
| | Development of education and industrial partnerships to improve the skill base of the municipality |
| Support entrepreneurship and indigenous economic development | Develop a strong support system for the retention of entrepreneurs and small businesses. |
| | Promote the development and retention of urban and peri-urban agriculture and livestock |
| | Promote tourism activities |

Source: Physical Planning Office 2023

5.5.2.1: Goal 1: Improving the economic and investment environment

The outcome of this goal will be rising economic and investor confidence, long-term planning and investment by the private sector. Investor confidence is the outcome of several factors including security of persons and property, reliable infrastructure, efficient administrative, legal and regulatory framework. The goal is supported by several strategies such as the following:

Strategy 1: Improve infrastructure particularly roads, electricity, water and sanitation

The main aim of this strategy is the improvement of basic infrastructure such as roads, electricity, water and sanitation and drainage systems. This strategy will be supported by the following actions.

- Construction of new and quality roads around the town and its satellite centres.
- Maintenance of access roads to increase mobility which is a hindrance during rain seasons.
- Increase electricity supply to the municipality including the rural and peri-urban areas. This will reduce the number of black-outs experienced in the town and its nodal centres.
- Increase of water supply to the municipality to cover areas that have inadequate water supply.
- Construction of sanitation facilities such as public toilets
- Improvement of drainage systems in the municipality which is a hazard during rainy season.
- Improve access to housing loans to improve housing development in the municipality.

Strategy 2: Reduce legal, regular and bureaucratic red tape.

The main aim of this strategy is the reduction of bureaucratic red-tape experienced by investors and the community while in search of service delivery. This strategy will be supported by the following actions.

- Review, develop and implement a regulatory framework that reduces the time taken to acquire development permits.
- Put up measures that are geared towards reducing corruption incidences.

Strategy 3: Development of Kehancha Industrial/Business Park

The aim of this strategy is to enable wholesale and retail traders/SMEs in the town have a zoned plan where they can start their business. With support from Migori County Government it is proposed that traders are facilitated to acquire workspaces through the construction of modern sheds. The current markets are located next to the border, which are congested and untidy. The target group is SME traders and other economic associations in the municipality such as the Cross-Border Trade Association. The following actions will be implemented.

- Expansion of the Jua Kali shed to accommodate small-scale industries
- Develop and supply basic infrastructure to the park
- Seek proposals from interested investors

Strategy 4: Enhance and promote Public-Private sector participation

In Kenya, the government policy is to encourage partnership between the Public and Private Sectors in policy formulation and implementation. The use of PPPs as a tool for development in Kenya is constrained by the lack of clear regulatory framework, absence of comprehensive incentive regimes for the Private Sector to participate in PPPs and a lack of harmonisation on the application of best PPPs practice in both the Public and Private Sectors. Actions to be implemented include:

- Opening dialogue between government agencies and private developers
- easy access of information on investment opportunities in the municipality

Strategy 5: Promote and market Kehancha as a trade and investment hub

The actions to be implemented include:

- ✓ Institute a transparent, trusted and effective governance and regulatory framework to support the town's business environment.
- ✓ Host financial and business roundtable meetings between the private and private sector.
- ✓ Propose to host financial and business roundtable meetings in the town for the nation and East African region.
- ✓ Improve access to financial loans from the financial banks in the town.

5.5.2.2 Goal 2: Building Capacity of the community to spur entrepreneurship

The outcome of this goal will be development and availability of young, skilled and industrial-based labour of which can attract investors to the town. Innovation and entrepreneurship tendencies through skilled labour is the outcome of several factors including development of an educational park, development of education and industrial partnership, and increased employment opportunities. The goal is supported by several strategies such as the following:

Strategy 1: Institution of educational and industrial partnerships

This strategy aims at creating industrial attachments for graduates from institutions within the planning area. The partnership will be between these educational institutions and research organizations at the larger Migori County and industries around the region such as Sony Sugar Company among others. Actions to be undertaken in support of this strategy include:

- ✓ Create dialogue between educational institutions and industries in the region.
- ✓ Organize for graduate industrial attachments in companies in the region such as Sony Sugar Company, health and other public or private institutions.
- ✓ Instituting an international student exchange programme by creating dialogue with these international education institutions.

5.2.2.3: Goal 3: Support Entrepreneurship and Indigenous Economic Activities

Strategy 1: Develop a strong support system for entrepreneurs and small businesses.

A critical aspect of building sustainable economic competitiveness is building a strong support network that will encourage entrepreneurs to create new businesses and help small businesses thrive. The stimulation of entrepreneurship through the formation and development of new commercial businesses and social enterprises can play a key role in employing underutilized resources in the region.

Entrepreneurs are the economic engines of a community, as are small businesses in general. They are employers, people who mobilize economic resources and stimulate further economic activity because of their efforts, and serve as stabilizing factors in a community. The following actions have been proposed:

- ✓ Improve access to financial loans for the SMEs.
- ✓ Establish new and permanent markets in the municipality

- ✓ Create another fresh food market at the Kendege airstrip.
- ✓ Encourage marketing groups such as co-operatives among different economic sectors.
- ✓ Gazette and expand areas to locate jua kali enterprises.
- ✓ Promote ICT related SMEs
- ✓ Organize regular capacity building workshops to strengthen SMEs in the municipality.

Strategy 2: Promote the Development and Retention of Urban and Peri-Urban Agriculture and Livestock

One of the major challenges to Urban and Peri-Urban Agriculture and Livestock (UPAL) is the non-availability of adequate land. Areas that have been gazetted urban areas have been converted to commercial plots encroaching into agricultural land. This is worsened by legislations which are not supportive to UPAL farming giving other developments an upper hand. Other specific challenges include:

- ✓ Competition between agriculture and construction of buildings for commercial purposes is on the increase due to rapid urbanization. Agricultural land is slowly diminishing and the resultant effect is less production. Urban land use planning and development does not take into consideration of agricultural activities while the exploitation of open spaces has not been assessed to determine their potentiality.
- ✓ Space for disposal of waste from UPAL activities.
- ✓ Access and use of available spaces in urban areas.

Actions/Activities

- ✓ Promote use of appropriate agricultural and livestock technologies that are suitable for reduced land for agriculture e.g. use of hydroponics, high value and land intensive crops and livestock enterprises.
- ✓ Promote the establishment of kitchen gardens and green houses.
- ✓ Promote the development of fish farming along wetland.
- ✓ Organize at least two fish farming training workshops annually for capacity building.

- ✓ Support coordination between fish farmers and financial institutions for easy access to credit.
- ✓ Integration of UPAL as a component of urban land planning by the Local Authorities and central Government. For example, land should be zoned so that irrigation activities can take place next to treatment plants to allow use of treated sewage.
- ✓ Development of a framework for improving access and use by farmers to idle/unutilized land for agricultural production.
- ✓ Strengthen crop and livestock disease surveillance and control of livestock movement.
- ✓ Modernize existing and build additional markets specifically meant for food commodities.
- ✓ Strengthen existing and promote formation of new commodity-based producer and consumer organizations.
- ✓ Review, development and implementation of regulatory framework that is supportive of UPAL by relevant public and private institutions.

5.6 Revenue Enhancement Strategy

Migori County Government faces many challenges in serving the needs of its community and citizens. The council has for a long time been facing challenges on revenue generation and ineffective fiscal management in a growing economic climate. To date, Kehancha town has funded its budget through different sources, including locally generated funds and central government funds other sources include donors and projects from individuals. The council is faced with the challenge of balancing the existing funds which outweighs services to be delivered. Working in environment with limited and traditional funding sources, Kehancha town must enhance its revenues and wisely manage its expenditures.

Revenue Enhancement Strategy will analyze 5 (five) critical areas/goals with a view of achieving its objectives. These include:

- 1) Revenue raising,
- 2) Asset Management,
- 3) Financial Management,

- 4) Capital financing, and
- 5) Operational financing

5.6.1 Objectives of the Strategy

The main objective of Revenue Enhancement Strategy is to stabilize the financial and economic base of Kehancha town. Other specific objectives of the strategy include:

- ✓ To broaden the income base and council's increase revenue.
- ✓ To reduce the proportionally high-cost expenditure to affordable levels.
- ✓ To create an environment which will enhances development, growth and service delivery

5.6.2 Strategies

The strategies developed from the objectives to assist in revenue enhancement include;

- ❖ Improve market stalls
- ❖ Construct new markets
- ❖ Improved collection of property rates
- ❖ Develop a business park
- ❖ Develop a bus park
- ❖ Promote advertisements in the town
- ❖ Introduce ICT to reduce paper work
- ❖ Promote waste management within the markets

CHAPTER SIX: IMPLEMENTATION PLAN

6.1 Communication Strategy

The rationale for formulating this communication strategy is to disseminate information, promote dialogue and generate feedback concerning the present problems and constraints that hinder the development of Kehancha town, analyze the existing as well as possibly derived potentials that can be exploited to enhance development, and identify areas/sectors for interventions. It also creates awareness on the roles and expectations of every stakeholder in assisting the plan its goals and objectives by monitoring and evaluating future development of the town through identified development themes, strategies as well as priorities.

In summary the strategy intends to:

- 1) Obtain support for the implementation, monitoring and evaluation of the Kehancha ISUDP
- 2) Involve other stakeholders in the development process,
- 3) Create a sense of urgency about implementing Kehancha ISUDP 2022-2032,
- 4) Solicit feedback about the implementation, monitoring and evaluation of Kehancha ISUDP 2022-2032.

The communication strategy targets relevant government ministries, development agencies, private investors and other groups that are concerned with economic and related development activities in Migori County. It also targets community leaders and other opinion leaders to dissemination information/ programmes outlined in the plan to the community.

Key Development Messages

This Communication strategy contains key development messages that it intends to convey, these include:

- 1) The programmes/actions earmarked by the plan and how various stakeholders can contribute to the success of these programmes.
- 2) Outline projects to be carried out by the county government and location of these projects. This will help elicit needed co-operation of all stakeholders in the implementation of the project.

- 3) Creating awareness to the beneficiaries on various development projects and their rights and responsibilities.
- 4) Progress reports from various sectors to help inform the community.

6.2 Tools for Disseminating Information

Migori county government will design and utilize a mix of channels and tools as part of the communication and information sharing strategy. These include

- ❖ Electronic and print mass media
- ❖ Media briefs by the governor
- ❖ Email and network communication and information sharing
- ❖ Regular public fora, workshops and meetings
- ❖ Social media e.g., Facebook, twitter etc.

6.3 Factors supporting the Implementation of the Plan

Effective implementation of Kehancha ISUDP 2022-2032 will largely depend on various factors. These include;

- ❖ Land availability – these can be achieved through land acquisition, land pooling, developing a land revolving fund, Public-private partnerships on land, leasing of land and land banking
- ❖ Political will from the county and national government
- ❖ Availability of funds – this can be achieved through donor funding, PPPs, national government grants and improved revenue generation.
- ❖ Availability of capable human resource – this will be achieved through recruitment of skilled labour, regular training and capacity building. Clear institutional and governance structures outlining departmental mandate will also enhance the implementation of the plan.
- ❖ Zoning plan – full implementation and adherence to development control standards of the area.

6.4 Plan Implementation Matrix

The Plan Implementation Matrix highlights the individual programmes of action which need to be implemented towards achieving the proposals which have been put forward in the Plan. The area specific programmes or actions have been phased accordingly and have indicated the actors who will spearhead the implementation process. Detailed programmes are outlined in detailed sectoral plans and area action plans.

6.5 Monitoring and Evaluation

The M&E matrix draws indicators in order to measure the objectives and activities of the urban development plan period. These indicators were constructed based on the logical framework and its specific activities. The objectives as well as its indicators are classified by the correspondent development themes proposed at the national level.

The M&E matrix in the table below indicates the specific sources of the data required to monitor the indicators. The sources include governmental institutions, departments or agencies in the district, communities and information derived from field work. The frequency of monitoring is specified to follow the implementation of every activity.

The team responsible for monitoring and evaluation works in collaboration with other project staff from other departments. Additionally, target groups can be involved in the monitoring and evaluation process as a means to ensure wider participation of stakeholders which can guarantee sustainability of the projects. The comparison of the baseline, targets and the achieved result will ensure easy evaluation of the projects.

| | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--|---|---|--|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|----|--|
| Inadequate water supply | To increase access to water within the informal settlements | Increasing water network within the informal settlements | finance for housing improvements | Extend piped water to all the Estates through existing water lines or boreholes | MIWASCO/LVWSB/Community Government of Migori | 10 years | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 45 | |
| | | | | Establishing water kiosks within a radius of 50 in the town | County Government of Migori/Community/Private Sector | 6 years | 0 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 96 | |
| Poor drainage system | To reduce flooding incidences in the informal settlements | Develop proper drainage system in the town | Construct drainage system within the town | Provide solid waste collection point | KURA/County Government of Migori | 8 years | 0 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 96 | |
| Poor solid management system | To improve solid waste management | Improving solid waste disposal within Kehancha town | Provide solid waste collection point | | County Government of Migori | 1 year | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Social Infrastructure | | | | | | Time Frame | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | Total | | |

| Environmental Issues | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|--|--|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Emerging Issues | Objectives | Strategies/Proposals | Projects/Actions | Actors | Time Frame | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | Total |
| Degradation of Natural Water Courses | To protect and conserve natural water courses | Protecting and preserving natural water courses | Awareness campaigns and community sensitization; Tree planting along the water courses; Undertaking a land use plan Prosecutions of offenders; | County Government Of Migori NEMA WARMA | 10 years | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| Inadequate water supply system | To improve efficiency and effectiveness in water supply | Improving access to portable water | Protection of the spring; Construction of additional collection points; Expand water supply networks | EMC Community Voluntary Agencies | 10 years | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| Poor Sewage system | To increase the sewer coverage and management | Construct sewerage network | Construction of sewerage treatment plant and lines. | County Government of Migori LVSWWDA | 6 years | 0 | 0 | 50 | 50 | 50 | 50 | 50 | 0 | 0 | 0 | 300 |

| Poor Solid waste management | To improve on solid waste management system | Provide solid waste management | Fence off the designated site for the landfill | County Government of Migori Private sector | 1 year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
|-----------------------------|--|--------------------------------|---|--|--------|---|---|---|---|---|---|---|----|
| | To improve effectiveness and efficiency in solid | | Encourage sustainable solid waste handling techniques - Provide for essential personnel to manage solid waste equipment and vehicles Provide waste collection bins Buymore trucks for collecting wastes | County Government of Migori Private sector | 1 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| | | | | | Y | e | a | r | s | | | | |

-Sensitize the residents on proper waste disposal - Prosecution of waste polluters
-Encourage public-private partnership in waste management
- Enforce relevant regulations/ legislations

| | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|--|---|---|---------|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lack of recreational, and open spaces | To provide space for recreational purposes | Provide recreational parks in Kehancha town | Acquire land for four (4) additional recreation areas Tree planting along major streets and designated parks Enforce by-laws on subdivision Encourage greening of the town | County Government of Migori Forestry Department Community | 5 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| Environment Hazards and Disasters | To reduce environmental hazards and disasters | Reducing environmental hazards and disasters | Designing the storm water drainage system Open the blocked drains - Enforcement of biodiversity regulations Develop and implement effective early warning systems Creation of awareness and educating the community | Department of meteorology Ministry of Special Programmes WARMA County Government Of Migori KURA | 7 years | 0 | 6 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |

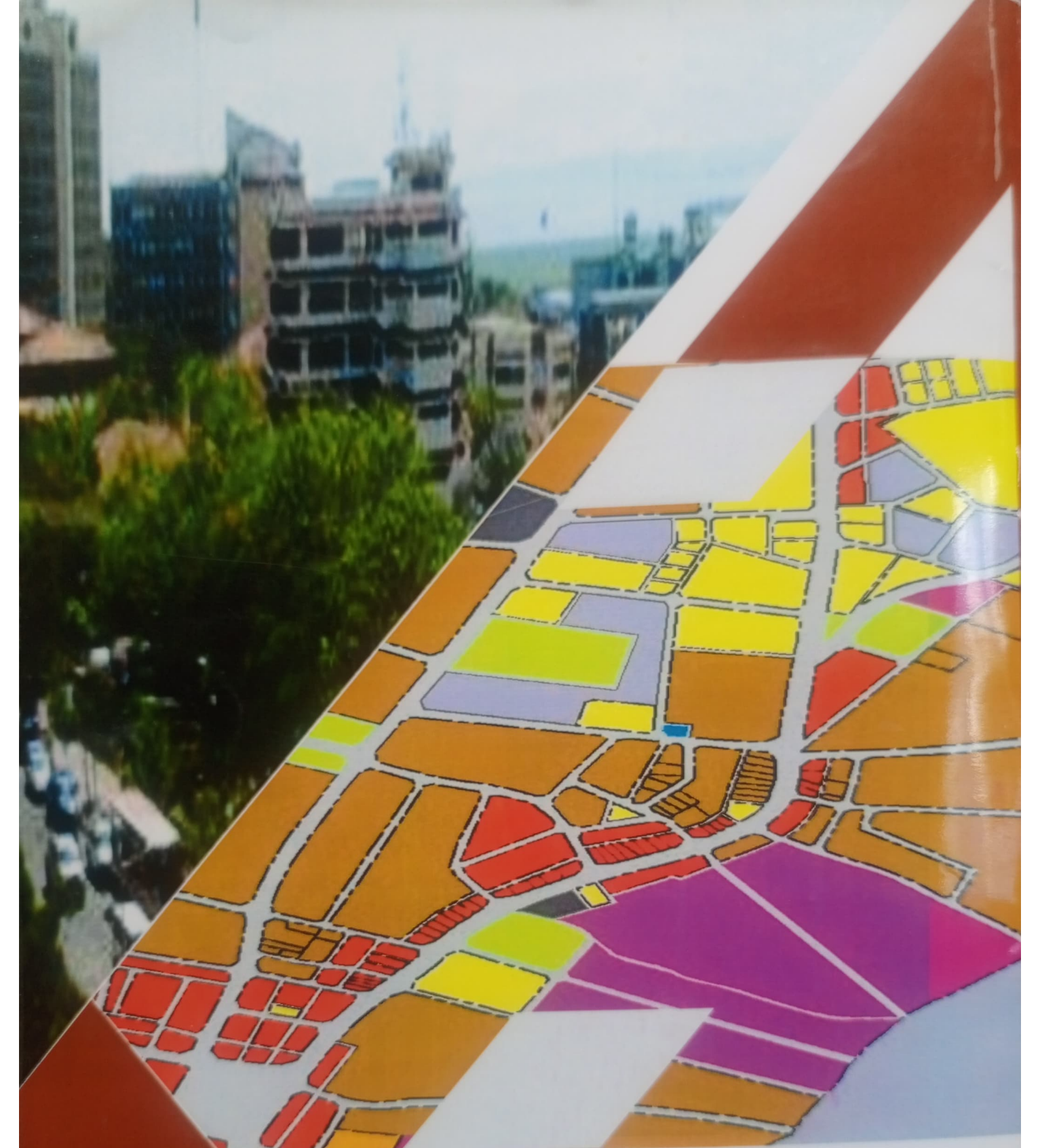
| | | | | | | | | | | | | | | | |
|--|---|--|---|--|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| <p>Poor/lack access/missing links in rural areas - Traffic jams/congestion</p> <p>Inadequate parking - <i>Bodaboda</i> menace</p> <p>Environmental hazards-air pollution, noise, dust, water (car wash) -</p> <p>Accidents prone zones - Location of industries in road reserves - disuse of the</p> | <p>Poor subdivision regimes that leave small roads for access (up to 4 metres)</p> <p>Inadequate enforcement of planning standards - poor road designs that do not accommodate other trunk infrastructure - increased competition among roads users, including the <i>bodaboda</i> menace</p> | <p>Designate appropriate locations for <i>Bodaboda</i> operators, informal traders, and Lorry Parking</p> <p>Enhancing public transport</p> <p>Integrating non-motorized transport into the transport system</p> <p>Expanding all road reserves to accommodate all trunk infrastructure and road users</p> | <p>Zoning areas appropriate for government to acquire the land-buying, eminent domain, business venture</p> <p>Sensitization for local community and leaders - Redesign existing roads and provide for non-motorized transport</p> <p>Provide exclusive pedestrian walkways and cycle-ways to accommodate NMT</p> | <p>KENHA/KUR A/KERRA County Government of Migori</p> | <p>10 years</p> | <p>10</p> | <p>10</p> | <p>10</p> | <p>10</p> | <p>10</p> | <p>10</p> | <p>10</p> | <p>10</p> | <p>10</p> | <p>100</p> |
|--|---|--|---|--|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|

| | | | | | | | | | | | | | | | |
|--|--|---|---|------------------------------------|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|
| <p>Informal commercial activities located on road reserves. - Lack of vehicular parking space - Traffic congestion</p> | <p>-Encroachment of human activities in to road reserves Lack of effectual zoning in the area - uncontrolled ribbon developments</p> | <p>Incorporate planning and zoning to: Create buffer to control ribbon development and optimize space use within CBD. - Set aside land for hawkers/informal traders -- Create parking for buses, matatus, lorries and motorcycles/<i>bodaboda</i>. - Set structures for development control minimum plot sizes, setbacks, plot density, plot ratios</p> | <p>Capacity building Awareness creation. Create space for open air markets at appropriate locations</p> | <p>County Government of Migori</p> | <p>10 years</p> | <p>0.5</p> | <p>0.5</p> | <p>0.5</p> | <p>0.5</p> | <p>0.5</p> | <p>0.5</p> | <p>0.5</p> | <p>0.5</p> | <p>0.5</p> | <p>5</p> |
|--|--|---|---|------------------------------------|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|

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| <p>-Missing links - Some roads not designed to accommodate other user cyclists, pedestrians -Bad Road conditions</p> | <p>-Lack of parking for lorries -Lack of well reticulated hierarchical roads network - Poor road management</p> | <p>-Propose hierarchy of roads connecting all major land users as required by law. The main land uses in Kehancha are residential, commercial and public purpose around which other land uses are organized. -Provide terminal facilities at appropriate locations -Joining missing links -integrate all road users in road transport</p> | <p>-Provide well reticulated road system to act as a framework for negotiations for land acquisition -Sensitization of the public -Framework for acquiring/borrowing funds - If difficult, there should be applied compulsory acquisition for land adjacent to the 4-metre roads for expansion to at least 9 metres in residential areas.</p> | <p>KENHIA/KUR A/ KERRA County Government of Migori</p> | <p>10 years</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> | <p>5</p> |
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|---|--|---|--|--|---------|---|-----|---|-----|-----|-----|---|---|---|---|---|---|----------------|-----|
| Inadequate space at the public cemetery | To improve the condition of cemetery facilities in Kehancha | Expanding cemetery facilities in Kehancha | Acquire land in Kehancha for establishment of a cemetery | County Government of Migori | 5 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| Poor preprimary and ECD facilities | To ensure appropriate standards for the provision of preprimary/ECD facilities in Kehancha | Improved standards of pre-primary/ECD education | Provide standards for building preprimary/ECD facilities | County Government of Migori | 1 years | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 |
| Inadequate tertiary education facilities; | To increase the number of skilled labour in Migori County | Promote Kehancha as an educational Hub | Improve facilities for the public pre-primary facilities | County Government of Migori | 5 years | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Inadequate skilled labour | To increase the number of skilled labour in Migori County | Promote Kehancha as an educational Hub | Zone land for establishing an Education and Research Park | County Government of Migori/Ministry of Higher Education | 5 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Few and inadequate recreational facilities; | To improve the condition of recreational facilities | Provide sustainable and aesthetic recreational facilities | Construct offices and spectator stands in Kehancha Stadium | Ministry of Sports/County Government of Migori | 3 years | 0 | 0 | 0 | 150 | 150 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 450 |
| TOTAL | | | | | | | | | | | | | | | | | | 2,079.2 | |

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|----------------------------------|---|------------------------------------|--|-----|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|---|---|
| Non-collection of property rates | To broaden the income base and increase the towns Revenue base. | Collection of property rates | Undertake valuation of properties within the council boundaries to determine appropriate property value rate Prosecute/punish/auction properties of rate defaulters Remove property rent defaulters from Municipality's properties | MCG | 2 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 25 | | |
| Inadequate/lack of ICT knowledge | | Introduce ICT to reduce paper work | Develop council website Develop an e-investment portal as part of the website | MCG | 2 years | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| SUB TOTAL | | | | | | | | | | | | | | | | | | | | | | 186.4 | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | | | 2,265.6 | | |



***A vibrant, competitive and
Sustainable Municipality***