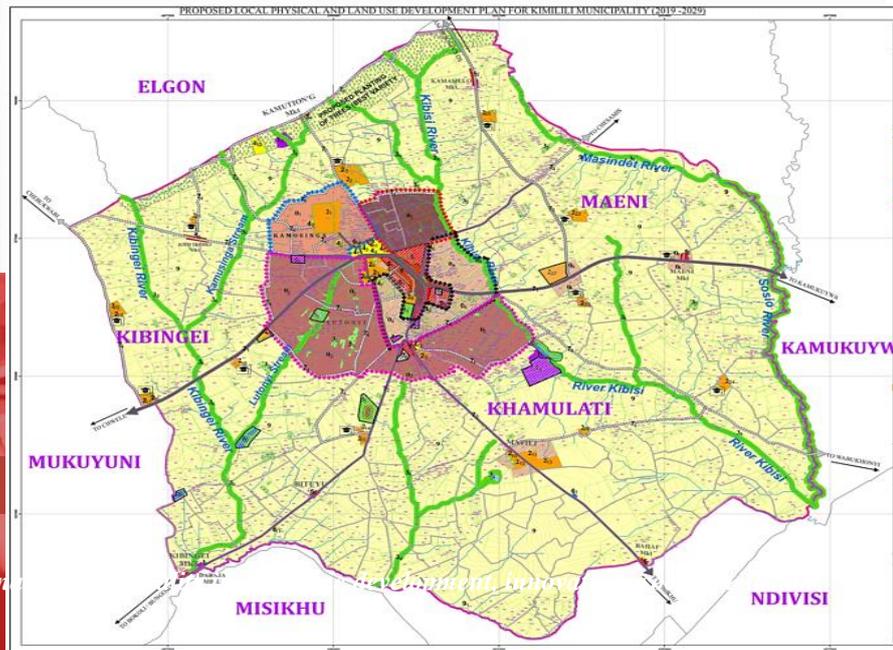


LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLAN FOR KIMILILI MUNICIPALITY (2023-2033)



Bungoma County Government,
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Bungoma



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MAY, 2023

PLAN APPROVAL AND CERTIFICATION

The Local Physical and Land Use Plan for Kimilili Municipality (2033-2033) has been prepared and published as per the requirements of the Constitution of Kenya (2010), the Physical and Land Use Planning Act (2019), the Urban Areas and Cities Act (2011), the County Government Act (2012) and the Planning Standards and Guidelines.

Certified By:

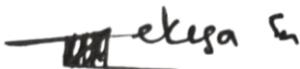
I certify that this plan has been prepared in accordance with procedural and substantive provisions of the relevant planning statutes and in observance of all requisite procedures and standards.



Date: [29/07/2024](#)

County Director of Physical and Land Use Planning, Bungoma County.

Recommended By:



Date: [29/07/2024](#)

County Executive Committee Member in Charge of Physical and Land Use Planning, Bungoma County.

Approved By:

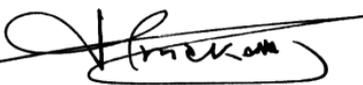
This plan is certified by the County Executive Committee pursuant to Section 110 (3) of the County Governments Act (2012) and hereby adopted and recommended for approval by the County Assembly of Bungoma.



Date: [29/07/2024](#)

County Assembly of Bungoma

Endorsed By:



Date: [29/07/2024](#)

H.E The Governor.

FOREWORD



Kimilili Local Physical and land use Development Plan 2023-2033 has been prepared fully funded by the County Government of Bungoma through the department of Lands, Urban/Physical Planning, Housing and Municipalities. The completion of this LPLUDP constitutes a major milestone for the County Government of Bungoma in realizing its mandate with respect to land use planning as a concurrent function. The land resource, as we all know, is finite, yet land has many competing uses, with various actors and stakeholders staking out their respective claims on the little space available. Land in Kimilili Town and its surrounding areas has not been optimally utilized, with the planning area

characterized by sprawling developments, haphazard built fabric and informal settlements devoid of infrastructure and municipal services.

Kimilili Local Physical and land use Development Plan, 2023-2033 provides a spatial framework for the efficient, productive and sustainable use of land within the planning area in accordance with the provisions of the Constitution, the National Spatial Plan, the National Land Policy, the National Land Use Policy, County Spatial Plan - 2018-2028 and other national/county-level policies and strategies for spatial development and management. The Plan further provides specific strategies, priorities, programmes and projects to facilitate the domestication of the national/county-level policies in order to facilitate the sustainable exploitation of the huge potentials. Kimilili has administrative, residential, food production and environmental conservation. In this respect, the Plan provides a clear goal towards the pursuit of Kenya Vision 2030 and more specifically the ‘Big Four Agenda’, as the government’s strategic agenda over the third Medium Term Plan (MTP3) of 2018-2022 is popularly known. The Plan is essential at this point when devolution is taking shape, with Kimilili being a municipality. The Plan will provide a guide for development planning and management within Kimilili by constituting the backbone of the local development control framework. In this respect, the Plan will play a critical role in aiding Kimilili generate the requisite employment opportunities while also ensuring the protection of rich agricultural land, conservation of identified environmentally-sensitive areas, facilitating urban containment, and promoting environmentally-aware social development, among other milestones.

The approach adopted during the preparation of the Plan was highly participatory, collaborative and consultative. The process brought on board participants and stakeholders from diverse backgrounds, including national government ministries, departments and agencies; various departments of the County Government of Bungoma; professionals of varied backgrounds; civil society actors; non-state actors, among others. This is not only in conformity with the constitutional requirements on public participation in public policy making, it is also hoped that this will provide a solid basis for the implementation of the proposals and strategies contained in the Plan.

With the Plan complete, I now urge the municipal board, departments within the county among other various agencies, to faithfully implement the proposals contained in this document. It is only then that the inhabitants of Kimilili and other stakeholders in the town’s development process can meaningfully benefit from the strategies, programmes and projects that have been painstakingly put together by the various stakeholders during the planning process.

I really hope that we shall realize, over the plan period (2023-2033), Kimilili’s vision of becoming ‘a liveable and sustainable Municipality in urban development, innovations, environmental protection and social inclusion’.

A handwritten signature in black ink, appearing to read 'H. Makelo', with a long horizontal line extending to the left.

H.E Kenneth Makelo Lusaka, EGH, CBS
GOVERNOR – BUNGOMA COUNTY

PREFACE

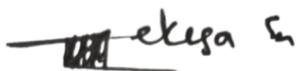
The Physical and land use Planning Act No.13 of 2019 provides for the preparation and implementation of Physical Development Plans and for connected purposes. Section 45(1) of the Act mandates the county government to prepare the Local Physical and land use Development Plans in respect of a city, municipality, town, or unclassified urban areas as the case may be. Further, Part II of the Fourth Schedule of the Constitution assigns the function of county planning to county governments and elaborated within the County Government's Act 2012.

In line with these legal provisions, The County Government of Bungoma through the department of Lands, Urban/Physical Planning, Housing and Housing, as part of their mandate to guide proper planning of urban areas within the county, undertook the process of preparation of Local Physical and Land Use Development Plan for Kimilili municipality (2023-2033). Kimilili municipality was selected following an in-depth Planning Needs Assessment Study undertaken by department, exiting municipality, administrative functions as a Sub County headquarter with commercial, knowledge, service and transportation functions.

The study however noted that Kimilili municipality lacked a land use plan and was overwhelmed with challenges of uncontrolled urban sprawl, encroachment on public infrastructure, environmental degradation, a stagnated local economy, slum proliferation, prevalence of freehold land ownership that limit effecting of planning regulations, and urban governance challenges, among others.

A Local Physical and Land use Development Plan is aimed at guiding and coordinating the development of infrastructure and public services within a given urban area. It is also used as a tool to control and guide, allocate land use development for land in the specified area for public purposes. Kimilili Local Physical and Land use Development Plan is expected to provide a tool for urban management, promote investment and interpret the County Spatial Plan 2028-2028.

It is hoped that implementation of this Local Physical and land use Development Plan for Kimilili municipality will result into well-planned and coordinated development within the municipality. It is expected to transform and improve the living environment, conserve the natural environment, enhance the performance of the local economy, optimize the use of local resources including land as well as reduce land use conflicts. It is also hoped that this plan will stem urban sprawl and ensure that the rich agricultural land is protected from the threat of unguided urban expansion.



Arch. Douglas Sasita Wekesa

CECM for Lands, Urban/Physical Planning, Housing & Municipalities

ACKNOWLEDGEMENT

In the course of preparing this Local Physical and Land Use Plan for Kimilili Municipality (2023-2033), we received numerous and invaluable assistance and feedback from various stakeholders. Constraints of time and space do not allow us to mention them all: hence we take this opportunity to thank them all for their contribution.

Sincere appreciation goes to the County Assembly Sector Committee and the County executive for the allocation and approval of funds to undertake our mandate as a department. We are especially indebted to Bramuel Murgor S. the then CECM for Land, Housing, Physical Planning & Urban Development as well as the current Arch. Douglas Wekesa Sasita, Aruput Juma the then Chief Officer, Physical Planning & Urban Development, Plan. Wellington Sindani (County Director of Physical Planning), Plan. Winston Sakwa (Physical Planner), Carolyn Chepkorir (Physical Planner), Hasting Simiyu (Physical Planner) Metrine Masika (Physical Planner), Andrew Keya (Physical Planner) and Benson Wangila (Physical Planner) who were fully involved in the planning process.

Much gratitude is due to the staff at Simuplan for their tireless effort in preparing this plan. These was led by Prof. Leonard Simiyu Mulongo Plan. Wasike Nalyanya (Project Physical Planner), Boniface Wanyama (Project Surveyor), Plan. Emmily Bakhita (Physical Planner), Plan. Purity Mideva (Physical Planner), Dr. Pacifica Mining (Project Sociologist), Jimmy Sichangi (Project GIS Expert), Patrick Kubowon (Project Economist), Elijah Kandie (Assistant GIS Expert), Dr. Patrick Kerre (Project Environmental Expert & Disaster Management Specialist) and Emerald Awuor (Assistant Surveyor).

Special thanks to the residents of Kimilili Municipality for the useful comments that provided valuable input for the plan.

Last but not least, sincere gratitude to the Municipal Manager CS. John Ndombi, the entire municipal Board led by Mr. Mulama and our Almighty the giver of all life for making us robust individuals to undertake this task.



George W. Kombo

Chief Officer – Lands, Urban and Physical Planning

EXECUTIVE SUMMARY

Urbanization has created various developmental challenges throughout the world. In Kenya like any other developing country, rapid urbanization has raised a lot of concern due to the challenges it imposes on the future development of the towns, municipalities and cities. The urban areas development trend coupled with ever increasing population, inadequate infrastructure, urban sprawl, encroachment of environmentally fragile areas and inadequate industries to generate employment. This calls for an efficient and responsive mechanism to address the above problems.

In order to address the above-mentioned problems, the County Government of Bungoma thought it wise to prepare a Physical and Land Use Development Plan for Kimilili Municipality to serve as a blue print for the development of the Municipality for ten (10) Years from 2023-2033. The preparation of this plan is in line with the provisions of the Constitution of Kenya 2010, the Physical and Land Use Planning Act, 2019 the County Governments Act, 2012, the Urban Areas Act 2011 among many others. The plan is also anchored on various policies including but not limited to the Vision 2030, Agenda Four and the Sustainable Development Goals.

The planning team adopted a participatory approach in the development of the plan. The planning process commenced with the preparation and presentation of the inception report which detailed a road map on how the assignment was to be carried out. Benchmarking through reconnaissance survey and comprehensive desktop research provided a general understanding of the area and also enabled drawing of useful lessons from various local and international case studies. Stakeholders drawn from Maeni, Kimilili and Kibingei wards presented their views which have been incorporated in this document. The preparation for this plan was also guided by the Municipality's vision and the smart growth models.

Chapter One of the report highlights the Concept of Spatial Planning, linkages that exists among other spatial plans, land use planning reference frame, Problem Statement, Justification of the plan, Project Scope, Objectives, Guiding Planning Principles, Methodology and Deliverables. Chapter Two describes the Policy, Legal and Institutional framework relevant to the exercise while Chapter Three highlights the Background information of the study area. Chapter Four details the Situational Analysis, Chapter Five highlights the Zoning Standards and Regulations while Chapter Six details the Zoning Proposals. Chapters Seven, Eight and Nine highlights the Implementation Framework, The Capital Investment Framework and the Monitoring and Evaluation Framework respectively. The final chapter of the report provides Conclusion and Recommendations.

The Municipality's vision is: a liveable and sustainable Municipality in urban development, innovations, environmental protection and social inclusion. This plan therefore comprehensively describes the Municipality in terms of the physical setting and socio-economic characteristics as well as highlighting the planning problems facing the area. It concludes by proposing various sectoral interventions in terms of strategies and guidelines to fix the issues related to housing, physical and social infrastructure, environment and economic development.



Plan. B.W.Sindani

Ag. Director - County Physical and Land Use Planning

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LIST OF ACRONYMS

CGB	County Government of Bungoma
GOK	Government of Kenya
CBD	Central Business District
RIM	Registry Index Map
SPSS	Statistical Package for the Social Sciences
GIS	Geographic Information System
LPLUDP	Local Physical and Land Use Development Plan
DEM	Digital Elevation Model
UNDP	United Nations Development Programme
MDG	Millennium Development Goals
SDG	Sustainable Development Goals
UN	United Nations
NEMA	National Environment Management Authority
KeRRA	Kenya Rural Roads Authority
KURA	Kenya Urban Roads Authority
KeNHA	Kenya National Highways Authority
KCB	Kenya Commercial Bank
ECDE	Early Childhood Development and Education
TTI	Technical Training Institute
ICT	Information and Communication Technology
KIE	Kenya Industrial Estate
WARMA	Water Resources Management Authority
KFS	Kenya Forest service

1 CHAPTER ONE: INTRODUCTION

1.1 OVERVIEW

This chapter examines the concept of spatial planning, problem statement, and justifications for the spatial planning, purpose and objectives, planning methodology, and expected deliverables.

1.2 CONCEPT OF LAND USE PLANNING

Keeble (1969) defined land use planning as ‘the art and science of ordering the use of land and siting of buildings and communication routes so as to secure maximum practicable degree of economy, convenience and beauty. The Physical and Land Use Planning Act (2019) defines land use planning as the methodology and approach used to influence the distribution of people and activities to achieve optimal utilization of physical, economic and socio-cultural resources.

Land use planning aims to create a more rational territorial organization of land uses and the linkages between them, to balance demands for development with the need to protect the environment, and to achieve social and economic objectives. It tries to coordinate and improve the impacts of other sectoral policies on land use, in order to achieve a more even distribution of economic development within a given territory than would otherwise be created by market forces. It is therefore an important lever for promoting sustainable development and improving the quality of life.

The Physical and Land Use Planning Act (2019) makes provision for the preparation and implementation of physical development plans for urban areas, rural areas and even regions in order to regulate development and other land use activities in the country through the National, Inter-County Joint, County and Local Physical and Land Use Development Plans as well as Special Planning Area Plans. Local Physical and Land Use Development plans can be prepared in respect of a city, municipality, town or unclassified urban area as the case may be.

After the promulgation of the Kenyan Constitution on 27th August 2010, the planning system became decentralized with the devolved system of governance. Section 46 of the Physical Planning and Land Use Act enforces this mandate by bestowing to the County Governments the responsibility of preparing Local Physical and Land Use Development plans. These plans are prepared for the purpose of: zoning, urban renewal, or redevelopment; guiding and coordinating the development of infrastructure; regulating the land use and land development; providing a framework for coordinating various sectoral agencies; and 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 LINKAGES WITH OTHER SPATIAL PLANS

Since planning system in Kenya today is divided into two levels, namely National and County, this Local Physical and Land Use Development Plan therefore has been prepared in cognizance of the various plans existing at the respective levels as clearly illustrated below.

National level plans comprise of:-

- Medium-Term Plans (MTPs)
- The National Physical and Land Use Development Plan (NPLUDP) and
- Sectoral policies.

Although MTPs are a series of successive five year economic plan meant for implementing the Flagship Projects identified under Vision 2030 as well as other key policies and programmes at the national level, this plan has synchronized the various MTPs whose implementation positively impacts on Kimilili Municipality (Infrastructure development, food security, housing and industrialization).

Equally, while National Physical and Land Use Development Plan outlines strategies and policies relating to the use of land at the national scale including grounding of the flagship projects of vision 2030 and the coordination of sectoral policies and plans, this plan has integrated various policies conceived at the national level.

At the County level, instrumental plans comprise:-

- County Integrated Development Plan (CIDP),
- County Physical and Land Use Development Plan and
- County specific sectoral policies and plans

The CIDP is a counterpart plan of the MTP at the County level. It is meant to implement projects identified in the County. The projects may be identified in the County Physical and Land Use Development Plan and County sectoral plans. In relation to the undertaking of the physical planning exercise for Kimilili Municipality, the CIDP (2013-2018) and CIDP (2018-2022) for Bungoma County laid a foundation especially in articulating key areas required for the growth of the county.

With the existence of a County Physical and Land Use Development Plan for Bungoma, preparations of lower level plans are grounded. These plans include Local Physical and Land Use Development Plans, Urban Physical and Land Use Development Plans and Urban Renewal/Regeneration Plans.

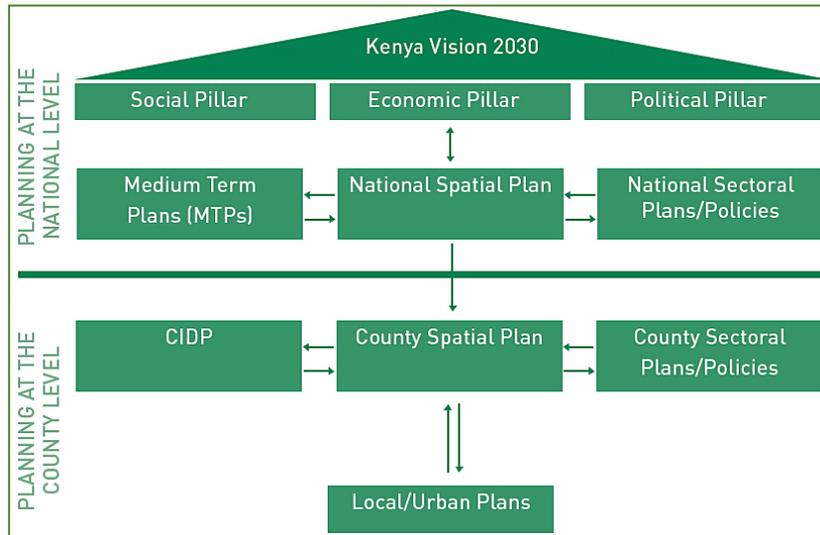


Figure 1.1: Linkage with other plans

(Source: County Spatial Planning Guidelines, 2018)

1.4 PROBLEM STATEMENT

The recent conferment of Kimilili town to Municipality status has led to the exposure of a number of spatial problems currently plaguing the town. Majority of these problems emanate from poor planning and rapid urbanization rate. These spatial problems are manifested in terms of:-

- Urban sprawl
- Severe environmental degradation
- Uncontrolled developments
- Proliferation of informal markets
- Poor social and physical infrastructure
- Weak industrial base
- Inadequate data and records to facilitate development control
- Poor solid waste management techniques
- High unemployment levels

These above problems indicate that the Municipality is in dire need of planning interventions that will ensure proper enforcement of relevant developments laws and regulations at the same time facilitate sustainable development of the Municipality.

1.5 PURPOSE OF THE PLAN

As stated in the TOR, the main purpose of the plan is to provide a ten (10) year spatial framework to guide growth and development of Kimilili Municipality. Upon implementation, the plan will:

- i. Enhance circulation between functional units within the planning area and its neighborhoods.
- ii. Enhance the compatibility of land uses within the planning area and its neighborhoods.
- iii. Regulate the densities of buildings and building heights within Kimilili town and entire planning area
- iv. Enhance the aesthetic value and promote sustainable development within the planning area.

1.6 OBJECTIVES OF THE PLAN

This is undertaken with the following objectives in mind:

- To depict the spatial dimension of the social and economic development programmes of the town as articulated in the County Integrated Development Plan and County Spatial Plan
- To present a clear statement of how the Integrated Strategic Urban Development Plan is linked to the County Spatial Plan, National and other county plans
- To give effect to the principles and objects contained in section 102 and 103 County Government Act 2012, The Physical and Land Use Planning Act, No.13 of 2019 and third schedule of the Urban Areas and Cites Act of 2011.
- To set out objectives that reflects the desired spatial form of Kimilili Municipality.
- To formulate strategies and policies indicating desired patterns of land use, addressing the spatial construction or reconstruction, providing strategic guidance in respect of the location and nature of development and setting out basic guidelines for a land use management system within the town
- To contain a strategic assessment of the environmental impact of the spatial development framework
- To identify programs and projects for the development of the town as well as action areas for further planning

1.7 SCOPE OF THE ASSIGNMENT

In terms of the geographical space and extent; the plan is confined within a 5Km radius from the Center of Kimilili Municipality. The area covers parts of Kimilili, Kibingei and Maeni wards. The radius of the plan was determined using the major structuring elements of the Municipality such as the Kimilili-Mt. Elgon Sub County boundary and Sosio River which formed the boundaries on the northern and Eastern side of the project area respectively. The Consultant then measure 5Km from the centre of the town along Kimilili-Bungoma road, Kimilili-Misikhu Road, Kimilili-Chwele Road, Kimilili-Kamukuywa, Kimilili-Chesamis and Kimilili- Chebukwabi road to get the planning extend on the western and southern sides. The planning area extends to Kimilili FYM in the Western side, Daraja Mbili market on the south western side and Bahai market to the south. The total area of the planning area of interest is approximately 80.08Km².

The planning period is a ten year (2023-2033) blue print meant to guide growth and development of the Municipality. The plan is expected to have five year mid-term reviews to take into account any arising issues and is therefore not a static document.

1.8 DELIVERABLES

The key output of this process was a comprehensive Local Physical and Land Use Development Plan framework comprising of:

- Structure Plan,
- Outline of Development Strategies along the following areas-human settlement, economic development, transportation, infrastructure and environment,
- Projects and Programmes,
- Capital Investment Framework,
- Implementation Mechanism and Monitoring and Evaluation Framework.

The outputs shall be presented in the form of a written statement, maps, diagrams and graphical illustrations of policies and development strategies and actions and measures.

1.9 JUSTIFICATION FOR THE LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLAN FOR KIMILILI MUNICIPALITY

The preparation of the Local and Land Use Physical Development Plan for Kimilili Municipality plan is anchored on the Constitution of Kenya, the Urban Areas and Cities Act 2011, the Physical and Land Use planning Act, No. 13 of 2019 and the County Government

Act 2012. These Acts provide for the establishment of devolved system of planning and also preparation of Local Physical and Land Use Development Plans.

The preparation of this plan was also motivated by the need to meet the strengthen Municipality status of Kimilili and address the spatial problems plaguing the Municipality

1.10 APPROACH AND METHODOLOGY

1.10.1 Planning Approach

The Plan preparation process was participatory and it adopted the bottom up approach supplemented by GIS. The process involved experts from different disciplines and representatives from key sectors of development. Consultative meetings were held at various intervals in compliance with constitutional, statutory and regulatory requirements on public participation.

1.11 PLANNING PROCESS

This section outlines the stages in the planning process and methods applied in data collection, analysis and presentation. The process was based on existent legal, policy and institutional frameworks and comprised of both planning and surveying mapping components. The planning phases comprised of specific activities as highlighted in the figure below:

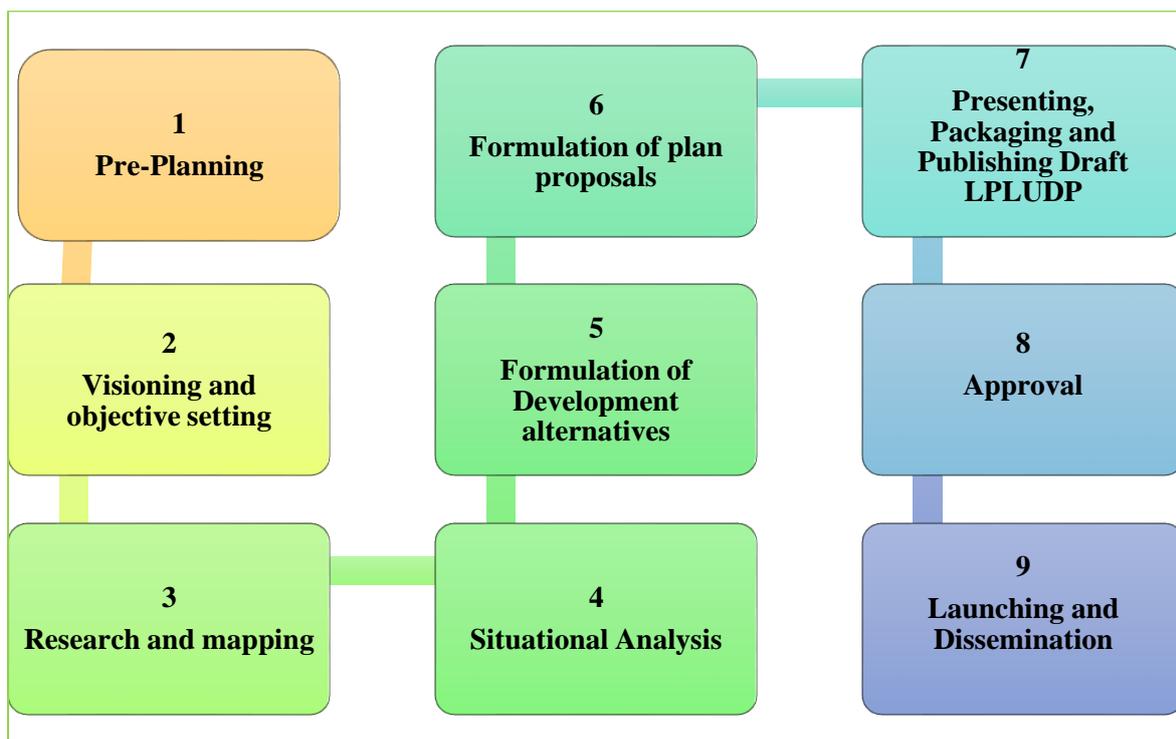


Figure 1.2: Planning Process

Source: *County spatial planning and monitoring oversight, 2015*

I. Step 1: Pre-planning

This step entailed defining the scope of works, interpreting the terms of reference and developing resource mobilization strategies. The following activities were undertaken at this stage;

a. Scoping

Scoping involved collecting and analysing the information that the planning team used for the planning process. It involved conceptualizing the whole planning process through a rapid appraisal of the planning issues facing Kimilili Municipality. Key aspects in this stage entailed: identification of fundamental issues, opportunities for participation, stakeholders, data needs, drafting a preliminary work plan and a preliminary design for stakeholder participation.

b. Needs Assessment

The process involved identifying the information gaps between the current situation of the Municipality and the desired future for the same. This was done through initial investigations that involved review of existent literature, observations, transect surveys and interviews with key stakeholders like the Municipal Manager, ward administrators, Sub-County Planner and the area chiefs among many others.



Plate 1: Needs Assessment -14/11/2019

Source: **Simuplan fieldwork, 2019**

c. Reconnaissance survey

This was carried out to gather initial information about Kimilili Municipality. The survey provided insight of the planning needs of the Municipality.



Plate 2: Reconnaissance Survey

Source: Simuplan fieldwork, 2019

d. Developing a data needs matrix

The consultant prepared a checklist of data that was required for the exercise. It involved the identification of data sources, methods of data collection and analysis.

Data sources

Primary data was sourced from Focus Group Discussions (FGD), interviews with key informants in Kimilili Municipality, field observations & photography, field surveys and issuance of semi-structured questionnaires to residents to collect their views on the plan. Aerial imaging also served as a vital source for primary spatial data.

The planning team held a stakeholder consultation meeting with relevant/key stakeholders to develop consensus and sensitize them on the process of preparing the Local Physical and Land Use Development Plan. The issues that were considered included; household characteristics, socio-economic patterns, land uses, transport and infrastructural provisions, essential amenities, the challenges and emerging issues.

On the other hand, secondary data was obtained by reviewing existing literature and documents such as; County Integrated Development Plan, existing plans, and any other relevant published and unpublished material related to Kimilili Municipality.

Data collection Techniques

Data was collected using observations, photography, and administration of questionnaires and focus group discussions with Kimilili residents.

Sampling method was used to determine the representative group from the Kimilili, Maeni and Kibingei. The ward administrators used stratified and random sampling techniques to select individuals to participate in the planning process. The respondents contributed their views in the exercise by providing specific information about the developmental aspects within their areas. These views collected from the proportionate population were assumed to represent the views of the entire town.

e. Issuing notices-Intention to Plan

This is a statutory requirement that aids in sensitization and involvement of the in the planning process. It is intended to inform the public of the start of the preparation of the Local Physical Development Plan for Kimilili Municipality. The Notice was printed in Standard Newspaper and it outlined the type of plan, objectives, and timeframe and expected out puts of the exercise.

f. Stakeholder mapping

At this stage, the consultant identified and documented expected participants in the process. The process identified those who were to be affected directly or indirectly by the exercise.

At the end of the pre-planning phase, the consultant prepared an inception report which was presented and submitted to the client. It basically outlined a summary of the pre-planning phase as detailed above.



Plate 3: Inception report presentation

Source: Simuplan fieldwork, 2019

II. Step Two: Visioning and objective setting

The plan preparation process adopted a participatory approach that allowed various stakeholders to give their views and suggestions. Residents of Kimilili Municipality envisioned a town that is a ***liveable and sustainable Municipality in urban development, innovations, environmental protection and social inclusion***. They also envisioned a town that is well planned with adequate infrastructural amenities that enhance liveability.

The Kimilili Municipality Local Physical and Land Use Development Planning process revolved around answer four planning questions as depicted in the figure below:



Figure 1.3: Strategic Planning Process

(Simuplan: Consultant, 2019)

III. Step Three: Research and Mapping

At this stage, both spatial and socio-economic data were collected and analyzed with the aim of identifying the key planning issues affecting the Municipality. The analyzed data was presented in the form of photo-plates, graphs, pie-charts, reports and maps.

Primary data collection

The ward administrators and other local leaders were some of the identified key informants. They briefed the consulting team on planning matters in the Municipality and also participated in the focus group discussions organized by the consulting team. Other methods used to collect primary data include: Field observation, photography, measurements and administration of household questionnaires.



Plate 4: Socio-economic survey

Source: Simuplan fieldwork, 2019

Primary spatial data was acquired through aerial photography which entailed mounting of high resolution camera into the aircraft and flying over the planning area i.e. Kapsokwony town. A

series of raw aerial photos were taken using the flight lines prepared. The aerial photos were then ortho-rectified to produce 15cm (GSD) resolution imagery which was mosaicked to produce the final Imagery of the town.



Plate 5: Aerial image acquisition

Source: Simuplan fieldwork, 2019



Plate 6: Digital mapping process

Source: Simuplan fieldwork, 2020

Secondary data

Secondary data was collected through review of literatures and documents. This involved analysis of experts' opinions on the subject matter through materials sourced from books and the internet. The use of legislation and other planning guidelines, for example the Physical Planning Handbook, Physical and Land Use Planning Act, No. 13 of 2019, The County Government Act 2012 were also served as basis for the preparation of the Local Physical and Land Use Development Plan for Kimilili Municipality.

Secondary survey data was collected through digitization of existing RIM maps and PDPs that were obtained from the client.

IV. Step Four: Situational Analysis

This is the comprehensive assessment of the current constitutions of Kimilili Municipality. This stage involved data processing, analysis, interpretation and presentation.

Both qualitative and quantitative data were analyzed appropriately. Qualitative data gotten from interviews, Focused Group Discussions, field notes and reports were thematically transcribed, coded, categorized and summarized. It also entailed sorting and editing of photographs.

Quantitative data was managed through SPSS Version 21.0 and Excel spreadsheets (Office 2013). The analysis was majorly descriptive involving representing data through counts and percentages; with the results presented in the form of graphs, charts and tables.

Spatial Data analysis was done using GIS software version 10.5. This entailed digitization of the Kimilili aerial image to extract spatial data such as roads, forests, water bodies, agricultural lands among many other spatial features. It also involved entry of attributes in the attributes data and finally production of thematic maps representing various aspects of the Municipality such as the existing land use, roads, industries, market centres etc. Outputs from spatial data analysis were presented in form of thematic maps.

At the end of this stage, the consultant prepared and presented a situational analysis report to the residents of Kimilili Municipality i.e. residents from Maeni, Kibingei and Kimilili wards and a team from the Bungoma County Government. The report informed the residents in detail of the current conditions of the Municipality and highlighted the problems to be dealt with and opportunities to be exploited for betterment of the Municipality. At the end of the session, the residents presented their views on how to solve the problems highlighted in the report and also provided a tentative suggestions on locations of some of the development proposals.



Plate 7: Situational analysis presentation

Source: Simuplan, 2019

V. Step Five: Formulation of development scenarios/alternatives

This involved developing of scenarios of possible future development alternatives for the town based on the findings and conclusions from the situational analysis and the visioning phase. The outputs from this stage were presented in a spatial context and the desired outcomes, strategies and programs outlined.

VI. Step Six: Formulating Plan Proposals

Formulating the plan proposals comprised of the following: - developing strategies, policies and measures to address the identified challenges and exploit opportunities in order to achieve the stated plan objectives and vision of the town; representing the proposals i.e. strategies, policies and projects on maps and text describing the desired spatial structure; and preparing the Draft Physical and Land Use Development Plan for Kimilili Municipality.

VII. Step Seven: Packaging, presenting and publishing the draft Local Physical and Land Use Development Plan.

The draft plan was formatted in PowerPoint and word format then presented to the residents of Kimilili Municipality and a team from Bungoma County Government for validation. Their comments and views have been considered and incorporated in this report.



Plate 8: Plan Validation meeting - Kimilili Municipal Board

Source: Simuplan, 2020



Plate 9: Plan Validation Meeting- Kimilili Residents

Source: Simuplan, 2020

A notice of Plan Completion was published to call for submission of comments and views on the Draft Local Physical and Land Use Development Plan ; specification of the place where the plan can be viewed; where to submit the comments; and period allocated for submission of views and comments. The notices were published on **January 5th 2023** in **Taifa Leo** and **Daily Nation Newspaper**. The mandatory 60 days elapsed and the comments and views from the public have been incorporated in this report.

FOMU PLUPA L-2 (r.10)



**SERIKALI YA KAUNTIYA BUNGOMA
IDARA YA ARDHI, MIPANGO YA MIJI,
NYUMBA NA MANISIPAA
SHERIA YA MPANGO WA MIJI NA
MATUMIZI YA ARDHI
(Nambari 13 ya 2019)**

**NOTISIYA KUKAMILISHWA KWA
MPANGO WA MIJI NA MATUMIZI
YA ARDHI**

Kichwa cha mpango wa ustawishaji: Mipango ya Miji na Matumizi ya Ardhi ya Manisipaa ya miji ya Kimilili, Kapsokwony na Naitiri ya 2022-2032.

Kwa mujibu wa hitaji la sehemu ya 49 (1) ya Sheria ya Mpango wa Miji na Matumizi ya Ardhi, 2019, NOTISI inatolewa kwamba utayarishaji wa mipango iliyotajwa hapo juu ilikamilika mnamo Decemba 1, 2022.

Nakala ya mpango huo iliyotayarisha imehifadhiwa kwa ukaguzi wa umma, bila malipo, katika Afisi za Afisa wa Kaunti anayesimamia Idara ya Ardhi, Mipango ya Miji, Nyumba na Manisipaa, Wasimamizi wa Kaunti Ndogo husika na Meneja wa Manisipaa ya Kimilili.

Mtu yeyote ambaye angetaka kutoa kauli yoyote au pingamizi kuhusu mipango ya ustawishaji iliyotajwa hapo juu anaweza kufanya hivyo ndani ya siku Sitini (60) sna kutuma kauli au pingamizi hizo kwa Waziri wa Kaunti anayesimamia Idara ya Ardhi, Mipango ya Miji, Nyumba na Manisipaa S.L.P 437-50200 Bungoma.

Maoni, kauli au pingamizi sharti yaandamanishwe na sababu zilizosababisha kutolewa kwazo.

Tarehe: Januari 3, 2023
Douglas Sasita Wekesa
**WAZIRI WA KAUNTI ANAYESIMAMIA
IDARA YA ARDHI, MIPANGO YA MIJI,
NYUMBA NA MIJI**

FORM PLUPA L-2 (r.10)



**COUNTY GOVERNMENT OF
BUNGOMA
DEPARTMENT FOR LANDS, URBAN/
PHYSICAL PLANNING, HOUSING &
MUNICIPALITIES
THE PHYSICAL AND LAND USE
PLANNING ACT
(No. 13 of 2019)**

**NOTICE OF COMPLETION OF LOCAL
PHYSICAL AND LAND USE
DEVELOPMENT PLAN**

Title of development plans: Local Physical and Land Use Development Plans for **Kimilili Municipality, Kapsokwony and Naitiri Towns 2022-2032.**

Pursuant to the provisions of section 49(1) of the Physical and Land Use Planning Act, 2019, **NOTICE** is hereby given that the preparation of the above Plans were on the **1st day of December, 2022 completed.** A copy of the plan as prepared has been deposited for public inspection free of charge at the Offices of the County Chief Officer for the Department of Lands, Urban/Physical Planning, Housing and Municipalities, respective Sub-county Administrators and Kimilili Municipal Manager. Any interested person who wishes to make any representation in connection with or objection to the above plans may within Sixty days send the same to CEC Member for the Department of Lands, Urban/Physical Planning, Housing and Municipalities of P.O. Box 437-50200 Bungoma and such representations or comments shall state the grounds upon which they are made.

Dated this 3rd day of January 2023

**Arch. Douglas Sasita Wekesa
COUNTY EXECUTIVE COMMITTEE
MEMBER, DEPARTMENT OF LANDS,
URBAN/PHYSICAL PLANNING
HOUSING & MUNICIPALITIES**

Figure 1.4: Notice of Plan Completion

Source: Taifa Leo & Daily Nation Newspaper, 5th January 2023;

1.12 STAKEHOLDER INVOLVEMENT AND CONSULTATION

The Constitution of Kenya (2010) in article 10, 27, 33 and 69 provides for mandatory public participation in all public affairs. Section 115 of the County Government Act states that public participation in the county planning processes shall be mandatory and be facilitated through provision to the public of clear and unambiguous information on any matter under consideration in the planning process, including: Clear strategic environmental assessments; Expected development outcomes; Development options and their cost implications.

Stakeholder participation in physical planning provides a platform for identifying insights and information about the community needs enhances public understanding of the project and builds consensus among the key stakeholders in the project.

Stakeholder meetings were held in each phase of the planning process. The first stakeholder meeting involved the county officials together with the planning team at the onset of the project where the consultant presented the project inception report. This meeting was meant to inform the client i.e. Bungoma County government on how the consultant intended to carry out the assignment provide a clear understanding of the terms of reference and also expound on the expected project deliverables.



Plate 10: 1st Stakeholder Meeting – Inception

Source: Simuplan, 2019

The second stakeholder meeting was held on 27/11/2019 in Kimilili Friends Church to engage the residents and raise awareness of the planning process. The meeting provided the residents with an opportunity to identify planning issues in their respective areas. The meetings were organized in collaboration with the ward administrator from Kimilili, Maeni and Kibingei wards, the Kimilili Municipal manager and the area chiefs with support from the county physical planning officers.



Plate 11: 2nd Stakeholder meeting - Sensitization & data collection

Source: Simuplan fieldwork 2019

The third public participation / stakeholder involvement was held on 07-02-2020 at the same venue. The consultant presented the situational analysis report and comments and views from the meeting provided valuable insights in filling in information gaps as well as enriching and supporting the spatial planning process.

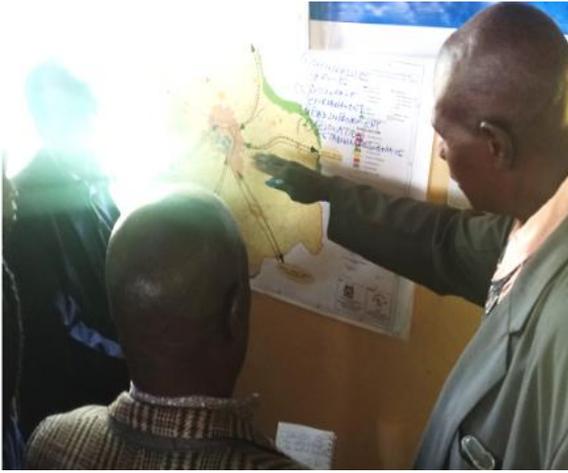


Plate 12: 3rd Stakeholder meeting - Situational analysis presentation

Source: Simuplan fieldwork, 2020

The fourth and final stakeholder meeting occurred on 25th August 2020 in the same venue where the consultant presented the draft Local Physical Development Plan. The residents were given an opportunity to provide their views on the land use proposals and their comments have been included in this report. The meeting ended with the residents endorsing the draft plan with few amendments.



Plate 13: 4th Stakeholder meeting-Validation workshop

Source: Simuplan, 2020

2 CHAPTER TWO: LEGAL POLICY AND INSTITUTIONAL FRAMEWORKS

2.1 OVERVIEW

This Local Physical and Land Use Development Plan for Kimilili Municipality has been prepared in harmony with the prevailing legal, policy and institutional frameworks as well as contemporary best practices and concepts as discussed below.

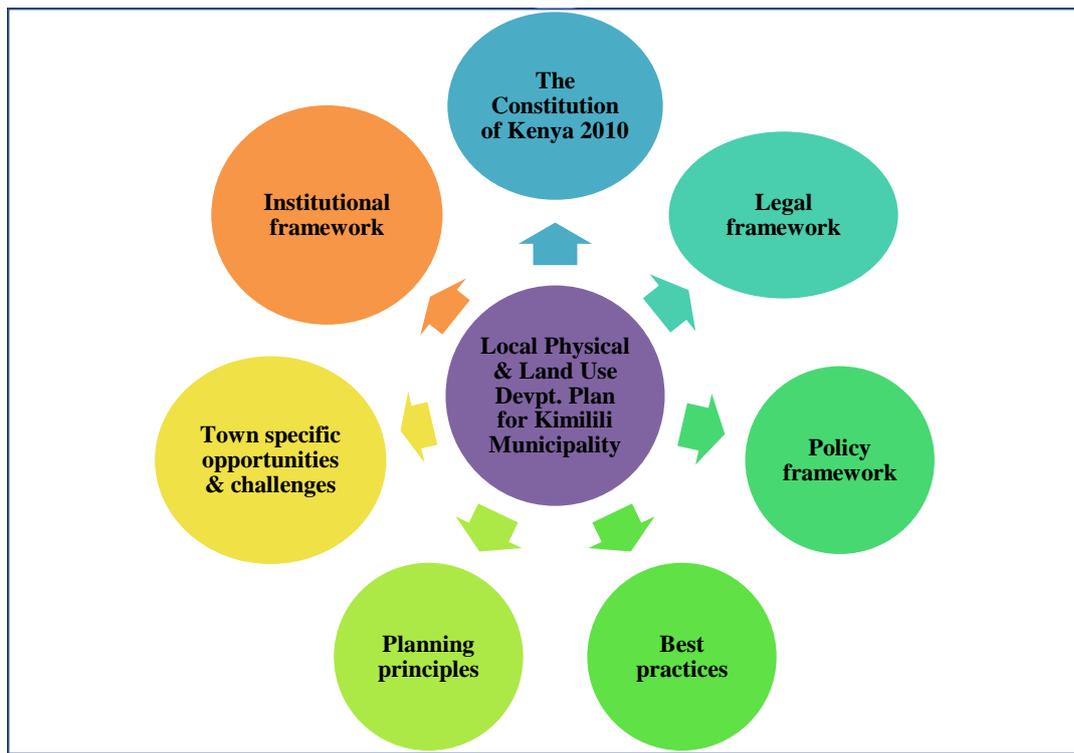


Figure 2.1 : Reference framework

Source: Simuplan, 2020

2.2 LEGAL CONTEXT

2.2.1 The Constitution of Kenya, 2010

The Constitution of Kenya 2010 is the supreme rule of law in Kenya and guarantees fundamental rights and freedoms for the citizens. This right among others includes the right to clean and healthy environment, adequate and decent housing, and right to participate in decision making on issues affecting them. Chapter five of the constitution provides for use and management of land in a manner that is equitable, efficient, productive and sustainable.

Article 66 provides for regulation of land use and property and thus a basis for town and country planning practices in Kenya in the interest of defense, public safety, public order, public morality, public health or land use planning. Article 67 provides for the establishment of the

National Land Commission whose function is to have oversight responsibilities over land use planning throughout the country. Article 69 provides for the management and protection of the environment. The constitution also gives planning responsibilities to the County Governments as provided for under Chapter 11 on devolved government.

2.2.2 The Physical and Land Use Planning Act No. 13 of 2019

This is an Act of Parliament to make for provision for the planning, use regulation and development of land and for connected purposes. The Act assigns the responsibility of preparing the Local Physical and Land Use Development Plans to the County Government.

The Act identifies various types of Development Plans namely; the National Physical and Land Use Development Plan, the Inter-County Physical and Land Use Development Plan, the County Physical and Land Use Development Plan, Local Physical and Land Use Development Plan and Special Area Plan. This plan falls under the Local Physical and Land Use Development Plan category. Part III of the Act gives a detailed description of the types of physical land use development plans in relation to their contents, geographical space coverage and approvals.

Section 45(1, 2 & 3) states that the county government shall prepare a Local Physical Development Plan in respect of a city, Municipality, Town or unclassified urban area. The plan may be for long term or short term physical and land use development. The plan shall be consistent shall be consistent with an Integrated City or Urban Development Plan as contemplated under Part V of the Urban Areas and Cities Act, 2011

Section 46 of the Act details the purposes of a Local Physical and Land Use Development Plan as follows:

- ✓ Zoning, urban renewal, or redevelopment;
- ✓ Guiding and coordinating the development of infrastructure;
- ✓ regulating the land use and land development;
- ✓ providing a framework for coordinating various sectoral agencies; and
- ✓ Providing a framework and guidelines on building and works development in the city, municipality, urban area, or other smaller urban centers including local centers, and market centers.

Section 47 states that the preparation of a Local Physical and Land Use Development Plan may be initiated by a county executive member while section 48 gives details about the contents of the plan.

Section 49 gives a step by step procedure on how to handle and launch objections and approvals to a Local and Physical Land Use Development Plan,

Section 51 provides for amendments or revisions that may be made to a Local Physical and Land Use Development Plan. It states that a County Executive member may initiate revision of the plan after a period of three years after the plan has been approved in accordance with section 51 of this Act.

Part IV of the Act deals with Development Control. Under section 55, The Act states that the objectives of development control include to:

- i. ensure orderly physical and land use development
- ii. ensure optimal land use
- iii. ensure the proper execution and implementation of approved physical and land use development plans;
- iv. protect and conserve the environment
- v. promote public safety and health
- vi. promote public participation in physical and land use development decision-making
- vii. ensure orderly and planned building development, planning, design, construction, operation and maintenance
- viii. promote the safeguarding of national security

Subject to Provisions of the Urban Areas Act of 2011, and the County Governments Act of 2012, Section 56 of the Act confers the County Governments the power within their areas of jurisdiction to:

- i. prohibit or control the use and development of land and buildings in the interests of proper and orderly development of its area
- ii. control or prohibit the subdivision of land
- iii. consider and approve all development applications and grant all development permissions
- iv. ensure the proper execution and implementation of approved physical and land use development plans
- v. formulate by-laws to regulate zoning in respect of use and density of development
- vi. reserve and maintain all the land planned for open spaces, parks, urban forests and green belts in accordance with the approved physical and land use development plans

- vii. Consider and determine development planning applications made in respect of land adjoining or within reasonable vicinity of safeguarding areas.

Section 57 of the Act states that a person shall not carry out development within a county without a development permission granted by the respective county executive committee member.

2.2.3 The County Government Act 2012

A County Government shall be responsible for any function assigned to it under the Constitution or by an Act of Parliament.

A County Government shall be responsible for planning and development of its county in accordance with the principles and objectives set out in Part XI of this Act. Objectives include: facilitation of the development of a well-balanced system of settlements and ensuring productive use of scarce land, water and other resources for economic, social, ecological and other functions across a county; and the achievement and maintenance of a tree cover of at least ten per cent of the land. The County Government Act provides for the decentralization of services to both urban and non-urban areas created by Urban Areas and Cities Act.

Part XI of the Act covers the section under County Planning. In Sub section 110 (2e and j), the county spatial plan shall indicate desired or undesired utilization of space in a particular area and also indicate the areas designated for conservation and recreation.

2.2.4 Urban Areas and Cities Act 2011

This Act gives effect to Article 184 of the Constitution; to provide for the classification, governance and management of urban areas and cities; to provide for the criteria of establishing urban areas, to provide for the principle of governance and participation of residents and for connected purpose.

In subsection 20 (1), Subject to the provisions of the Act, a board of a city or municipality shall control land use, land sub-division, land development and zoning by public and private sectors for any purpose, including industry, commerce, markets, shopping and other employment centers, residential areas, recreational areas, parks, entertainment, passenger transport, agriculture, and freight and transit stations within the framework of the spatial and master plans for the centre or municipality as may be delegated by the County Government.

In subsection 21 (1), Subject to the Constitution and any other written law, the board of a city or town, within its area of jurisdiction shall ensure the implementation and compliance with policies formulated by both the National and County Government.

2.2.5 Land Act No.6 of 2012

The Land Act gives effect to Article 68 of the Constitution: revise, consolidate and rationalize land laws; provide for the sustainable administration and management of land and land-based resources and for connected purposes. The Land Act is the substantive law governing land in Kenya. It provides for the legal regime that governs; the administration and management of public land and private land; contracts over land, leases, charges, compulsory acquisition, easements and related rights.

Section 4 of the Act provides the values and principles that guide any land transactions which include: equitable access to land, sustainable and productive management of land resources, participation, accountability and democratic decision making within communities, the public and the Government among others.

Section 5 highlights the types of land tenure which are in consistent with the new constitution. Further, *section 7* of LA explains the process of land and title acquisition. *Section 8* explains the responsibilities of National Land Commission in the management of land which are as follows:

- i. Identify public land, prepare and keep a database of all public land, which shall be Geo-referenced and authenticated by the statutory body responsible for survey;
- ii. Evaluate all parcels of public land based on land capability classification, land resources mapping consideration, overall potential for use, and resource evaluation data for land use planning; and
- iii. Share data with the public and relevant institutions in order to discharge their respective functions and powers under this Act; or
- iv. Require the land to be used for specified purposes and subject to such conditions, covenants, encumbrances or reservations as are specified in the relevant order or other instrument

Section 9 of the LA provides that any land may be converted from one category to another for example from public land to private land. Any substantial transaction involving the conversion of public land to private land shall require the approval of the National Assembly or county assembly as the case may be.

2.2.6 Environmental Management and Co-ordination Act (Amendment 2015)

Environmental Management and Coordination Act (EMCA) Amendment, 2015, provides a legal and institutional framework for the management of environmental related issues. It is the framework law on environment.

To manage the environment in holistic manner, the Act establishes two administrative bodies; the National Environmental Council (NEC) which has the responsibility of formulating policies, setting national goals and promoting cooperation among stakeholders; the National Environmental Management Authority (NEMA) which supervises and coordinates overall matters relating to the environment and is the principal instrument for implementation of all policies relating to the environment.

Part VI section 58 (1) and (2), of the act states that;

Notwithstanding any approval, permit or license granted under the Act or any other law in force in Kenya, any person, being the proponent of a project, shall, before financing, commencing, proceeding with, carrying out, executed or conducted by another person any undertaking specified in the Second Schedule to this Act, submit a project report to the authority in the prescribed form, giving the prescribed information and which shall be accompanied by the prescribed fee.

The proponent of the project shall undertake or cause to be undertaken at his own expense an Environmental Impact Assessment study and prepare a report thereof where the Authority, being satisfied after studying the report submitted under Subsection (1), that the intended project may or is likely to or will have significant impact on the environment so directs.

This act is concerned with establishment of an appropriate legal and institutional framework for the management of the environment. It is concerned with issues of environmental planning, environmental quality standards and environmental impact assessment. It requires that developments do not interfere with the environment and therefore calls for an environmental impact assessment (EIA) to be done before commencement of projects listed in the second schedule.

2.2.7 The Occupational Safety and Health Act (2007)

The Act makes provision for the health, safety and welfare of persons employed in factories and other places of work. The provisions require that all practicable measures be taken to

protect employees from dust fumes or impurities originating from any hazardous and non-hazardous wastes, which may arise at a project site.

The Act advocates for:

- i. Provision of personal protective equipment (PPE), fire safety, electrical safety, and other precautions essential for safe construction work.
- ii. Provision of physical barriers and solid separators (dust barriers, hazard barriers, temporary walkways, among others, as explained in the extract of the act.)

Under section 6 of this act, every occupier is obliged to ensure safety, health and welfare of all persons working in his workplace. The occupier shall achieve this objective by preparing and as often as may be appropriate, revising a written statement of his general policy with respect to the safety and health at work of his employees and the organization and arrangements for the time being in force for carrying out that policy (Section 7). He is also required to establish a safety and health committee at the workplace in a situation where the number of employees exceeds twenty (Section 9) and to cause a thorough safety and health audit of his workplace to be carried out at least once in every period of twelve months by a registered safety and health Advisor (Section 11). In addition, any accident, dangerous occurrence, or occupational poisoning which has occurred at the workplace needs to be reported to the occupational safety and health officer of the respective area by an employer or self-employed person (Section 21).

2.2.8 The Penal Code (Cap 63)

The chapter on “Offences against Health and Convenience” contained in the Penal Code enacted in 1930 strictly prohibits the release of foul air into the environment, which affects the health of the other person. Any person who voluntarily violates the atmosphere at any place, to make it noxious to the health of persons in general dwelling or carrying on business in the neighborhood or passing along public ways is guilty of a misdemeanor liable to imprisonment not exceeding two years with no option of fine. Under this code any person who, for the purpose of trade or otherwise, makes loud noise or offensive or awful smells in such places and circumstances as to annoy any considerable number of persons in the exercise of their rights, commits an offence and is liable to be punished for a common nuisance, i.e. imprisonment not exceeding one year with no option of a fine.

2.2.9 National Land Commission Act (2012)

The Act gives effect to the objectives and principles of devolved government in land management and administration. The main purpose of the Act is to provide for the management

and administration of land in accordance with the principles of land policy set out in Article 60 of the Constitution and the National Land Policy and also act as a linkage between the Commission, County Governments and other institutions dealing with land and land related resources.

2.2.10 Forest conservation and Management Act, 2016

An Act of Parliament to give effect to Article 69 of the Constitution with regard to forest resources; to provide for the development and sustainable management, including conservation and rational utilization of all forest resources for the socioeconomic development of the country and for connected purposes.

This Act makes provision for the conservation and management of public, community and private forests and areas of forest land that require special protection, defines the rights in forests and prescribes rules for the use of forest land. It also makes provision for community participation of forest lands by community forest association, the trade in forest products, the protection of indigenous forests and the protection of water resources.

2.2.11 Water Act, 2016

This is an Act of Parliament to provide for the regulation, management and development of water resources, water and sewerage services; and for other connected purposes.

The main purpose of the Act is to align the water sector with the Constitution's primary objective of devolution. The act recognizes that water related functions are a shared responsibility between the national government and the county government. It also gives priority to use of abstracted water for domestic purposes over irrigation and other uses.

2.2.12 Physical Planning Handbook

This handbook provides guidelines for the preparation and implementation of physical development plans. It is meant for use by physical planners, land administrators, County and other relevant personnel and institutions responsible for guiding and controlling the use and development of land in Kenya.

The handbook should be treated largely as a reference text in the preparation of local and regional physical development plans; guidance on the use and development of land; and administration procedures involved thereto. The handbook provides the various planning standards that should be adhered to when planning for a specific area

The handbook defines zoning as the legal regulation of the use of land. It involves segregation of parcels of land or acres of towns in a physical development plan and ascribes to them broad classifications of appropriate use for example, residential, industrial, educational, commercial, etc. The regulation aims at protection of public health, welfare needs and safety; include provisions for the use of property and limitations upon the shape and bulk of the building that occupy the land. The zoning plan serves as a comprehensive guide for urban and regional development and is adopted and rendered effective as a legal ordinance.

The planning handbook shall be used as reference point for implementation of the Local Physical and Land Use Development Plan with regards to plot sizes, building lines, plot coverage and ratios etc.

2.3 POLICY CONTEXT

The preparation of the Local Physical and Land Use Development Plan for Kimilili Municipality is within the context of national, regional and local policies, strategies and guidelines as stipulated in the following policy documents

2.3.1 Vision 2030

The Kenyan government developed Vision 2030 as a national long-term development blueprint for the country. The blueprint visualizes Kenya as “a globally competitive and prosperous country with a high quality of life by 2030” by transforming the country from a third world country into an industrialized, middle income country. In order to improve the overall livelihoods of Kenyans, the country aims at providing an efficient integrated and high quality affordable health care system.

On land reforms, Vision 2030 emphasizes on respect for property rights to land, whether owned by communities, individuals or companies; as an important driver of rapid economic transformation everywhere. The transformation expected under Vision 2030 is dependent on the national land use policy. The policy facilitates the process of land administration, the computerization of land registries, and the establishment of a National Spatial Data Infrastructure in order to track land use patterns, and the introduction of an enhanced legal framework for faster resolution of land disputes

Under the social pillar, on Environment, the country aims to be a nation that has a clean, secure and sustainable environment by 2030. This will be achieved through:

- promoting environmental conservation to better support the economic pillar’s aspirations;

- improving waste management through the application of the right economic incentives;
- and commissioning of public-private partnerships (PPPs) for improved efficiency in water and sanitation delivery.

On housing and urbanization, with the current demographics, Kenya must plan for high quality livelihoods. The 2030 vision for housing and urbanization is “an adequately and decently-housed nation in a sustainable environment.” This will be attained through:

- better development of and access to affordable and adequate housing;
- enhanced access to adequate finance for developers and buyers;
- pursuit of targeted key reforms to unlock the potential of the housing sector;
- Initiation of a nationwide urban planning and development campaign, starting with Kenya’s major cities and towns.

2.3.2 Sustainable Development Goals (UNDP 2015)

In 2000, the UN agreed on eight Millennium Development Goals with the aim of addressing some of the most pressing issues of the time. The MDGs galvanized unprecedented efforts to address global development challenges and shaped the tone and direction of development over the last decade. There is a lot to celebrate, but more effort still needs to be done.

In 2015, the world agreed on a new set of global goals to eradicate extreme poverty and achieve sustainable development by building on the Millennium Development Goals. The SDGs identifies seventeen areas of keen interest as depicted below:

The SDG’s are universal; meaning they are equally applicable to all countries with challenging targets for rich countries as well as poor ones. They can be used to advocate for more equitable development based on tackling the root causes of poverty and unsustainable development.

The SDG’s have also adopted an integrated approach that includes: physical, social, economic, environmental, ecological, technological, legal and political dimensions. They attempt to balance the eight dimensions across such a broad range of issues. The effort to move beyond single issues is not perfect and there are contradictions between some of the goals and targets.

The goals were arrived at by adopting a participatory approach. The process to create the SDGs has been much more open, with national dialogues and thematic consultations involving many people around the world with every government at the UN signing up to implement them. This

stronger sense of ownership should make them a more effective tool for change over the next 15 years.

2.3.3 Big Four Agenda

President Uhuru's policy agenda (2017-2022) include: manufacturing, universal healthcare; affordable housing and food security aimed at accelerated socio-economic transformation, increased job creation and improved quality of life for all Kenyans

The Big Four agenda is projected to result into an economic growth of at least seven per cent per year. To achieve affordable housing, the government will give private sectors incentives to construct low cost housing as well as reduce corporate tax rates to 15 per cent for developers who construct at least 100 units per year.

The Agenda proposes the establishing of leather parks and textile industries and reviving industries such as the blue economy and manufacturing of construction materials. The Textile and footwear industry has been closing down due to second-hand clothing and shoes. The Agenda also proposes the establishment of specific areas with tailor-made incentives. It is hoped that by having a spatial framework to guide growth and development, policies like the Big Four Agenda will be easily realized.



Figure 2.2: The Big Four Agenda Framework

Source: Government of Kenya (2017)

2.3.4 The National Land Policy

The policy identifies key issues that should be dealt with in land use planning. These include;

- Preparation of physical development plans on the basis of predetermined goals and integration of rural and urban development.
- Realization of spatial frameworks for orderly management of natural resources and human activities on land taking into consideration the economy, safety, environmental sustainability, aesthetic and harmonious & optimal use of land
- Analysis of strategies for human settlements in relation to service centers, transport and communication environmental conservation and rural development.
- Efficient and sustainable utilization and management of land and land based resources;
- Establishment of an appropriate framework for public participation in the development of land use and spatial plans
- Establishment of an effective framework for coordination of land use plans to ensure implementation of the planning proposals and regulations.

2.3.5 National Housing policy-Sessional paper No. 3 of 2004

This housing policy was drawn from a range of formal documents in the form of legal statutes, written policies, and international agreements relevant to the housing sector. Article 43 (1) of the Constitution of Kenya states that every Kenyan has the right to *accessible and adequate housing and to reasonable standards of sanitation*. One of the objectives of Vision 2030 is to provide for adequate and decent housing for all Kenyans. This documents formed the basis for the need for the housing policy.

The National Housing Policy contained in Sessional Paper no. 3 of 2004 established the goals that were reflected in both the Vision 2030 and the constitution by emphasizing the need for decent and affordable housing for all Kenyans.

It also confirmed the existence of housing policy institutions such as the national Housing Corporation, the Ministry of lands and settlement the implementation of Kenya's Housing Policy culminated in the formation of the Housing Development Fund to be funded through budget allocation and which is managed under the National Housing Corporation (NHC).

The policy identifies poverty and low levels of income as the main obstacle to access to affordable and quality housing for the Kenyan citizens. The main purpose of the policy is to achieve a state where all Kenyan households live in decent shelters whether privately or publicly owned. It also recognizes the deficit especially in urban areas in the number of housing units required to cater to the needs of the public.

In general, the policy acknowledge inadequacy of decent housing units and inaccessibility as the main challenges. Therefor the primary focus of the policy is to expand the availability of housing and ensure that Kenya have decent dwelling units.

2.3.6 Urban Development Policy.

The policy objectives include:

- a. Ensuring the legal personality of cities to recognize cities as legitimate and legally empowered entities with independent organizational and self-administration status. The policy will for the first time, provide clear criteria of classifying municipality and of bestowing city and metropolitan status to urban centres and regions.
- b. Ensuring planned, inclusive and sustainable urban development that implies the recognition of urban centres as entities that strive to harmonize physical planning with economic development planning and are sensitive to stakeholders' participation and environment.
- c. Ensuring plan based administration of urban land under various land tenure arrangements and systems thereby recognizing urban centres as entities that strive towards achieving effective urban land management and administration.
- d. Enhancing sustained improvement in the quality and coverage of infrastructure facilities along with government's key role, cities should strive to maximize the participation and contribution of the private sector and the community sector in infrastructure provision
- e. Ensuring a sustained improvement in the quality and coverage of service provision through a partnership framework that acknowledges the key roles of all key actors.
- f. Facilitating production and access to decent and affordable housing for all and eradicating slums
- g. Alleviating urban poverty through employment generation by maximizing local economic development (LED) and adopting pro-growth policies and strategies
- h. Ensuring sustainable environmental management, which entails the recognition of cities as entities that strive to work towards the reduction of poverty and promotion of a sustainable urban environment.
- i. Ensuring the promotion of an effective financial management system.

- j. Ensuring effective rural-urban and urban-urban linkages thereby promoting of the development of urban centres as loci for enhancing sustainable development with linkages to their rural counterparts.
- k. Ensuring the creation of effective coordination mechanisms for the roles and mandates of different actors in urban development

2.3.7 Integrated National Transport Policy of 2009

The policy promotes the development and maintain ace of an integrated and coordinated transport system to:

- ✓ Foster national and regional economic integration and trade facilitation.
- ✓ Integrate transport and land use planning and management systems.
- ✓ Enhance investment in the transport system.
- ✓ Incorporate environmental protection and resource conservation issues in transport sector activities.

2.4 INSTITUTIONAL FRAMEWORK

The Constitution of Kenya 2010 assigns the planning function to both the county and National governments. The National Government is responsible for monitoring and oversight of land use planning throughout the country, general principles of land planning and the coordination of planning by the counties. The County governments are responsible for county planning and development.

2.4.1 County Government of Bungoma

According to the County Governments Act 2012, the county planning unit within each county government is responsible for;

- co-ordinating integrated development planning within the county;
- ensuring integrated planning within the county;
- ensuring linkages between county plans and the national planning framework;
- and ensuring meaningful engagement of citizens in the planning process;

The designated planning authority in the county is responsible for organization and effective implementation of any development within the county.

2.4.2 Physical Planning Department

Under Part II of the Physical Planning and Land Use Planning Act, No.13 of 2019 establishes various institutions that deal with physical planning in the Country. Section 14 of the Act deal

with the establishment of the County Physical and Land Use Planning Consultative Forum.

The form comprises of:-

- a. The respective County Executive Committee Member responsible for matters related to physical and land use planning, who shall be the chairperson and shall provide the secretariat;
- b. The County Director of physical and land use Planning;
- c. The Chairperson of the committee responsible for matters related to physical and land use planning in the respective county assembly;
- d. The County Executive Committee Member for economic planning; Environment; Roads and infrastructure; social and community development;
- e. person residing and working or conducting business in the respective county nominated by the National Land Commission; Director of Physical Planning; Kenya Institute of Planners; Institution of Surveyors of Kenya; Architectural Association of Kenya; Kenya Private Sector Alliance; registered associations representing residents in the County; National Council for Persons with Disability;

The main functions of the forum include:-

- Provide a forum for consultation on Land Use Development Plans;
- Promote effective coordination and integration of physical and land use development and sector planning; and
- Advise on the mobilization of adequate resources for the preparation and implementation of physical and land use development plans and strategies

Section 20 of the Act states that the responsibilities of the County Director for Physical Planning shall include advising the county on physical planning matters, formulating county land use policies, standards and guidelines; preparation of Local Physical and Land Use Development Plans; Undertaking research on matters pertaining to county land use development planning; establishment of county planning units and issuance of development control permits.

The county director played an instrumental role in providing the manpower necessary for the preparation of the plan.

2.4.3 National Environment Management Authority (NEMA)

It was established in 2002 as the supreme regulatory and advisory body on environmental management in Kenya. NEMA is required to coordinate and supervise the various

environmental management activities being undertaken by statutory organs with a view to promoting their integration into development policies, programmes, plans and projects that provide sustainable development and a safe and healthy environment to all Kenyans. The key functions of NEMA through the National Environment Council include: responsibility for policy formulation and direction for the purposes of the Act;

- Setting national goals and objectives and determining policies and priorities for the protection of the environment;
- Promotion of cooperation among public departments, local authorities, private sector, non-governmental organizations and such other organizations engaged in environmental protection programmes; and perform such other functions as are assigned by the Act.

NEMA will remain in charge of co-ordinating all activities related to environmental management in the project area, such as enforcement of environmental impact assessments, as well as environmental audits.

2.4.4 National Land Commission

The National Land Commission of Kenya is an independent government commission whose establishment was provided for by the Constitution of Kenya 2010 Chapter 5, section 67. It was officially established under The National Land Commission Act, 2012. The Commission derives its mandate from the Constitution of Kenya 2010, the National Land Policy (2009) and acts of Parliament, namely the National Land Commission (NLC) Act, the Land Act and the Land Registration Act, all of 2012.

The Commission is charged amongst other things to manage public land on behalf of the national and county governments, initiate investigations into present or historical land injustices and recommend appropriate redress, and monitor and have oversight responsibilities over land use planning throughout the country.

2.4.5 Kenya Rural Roads Authority

KeRRA is a State Corporation within the State Department of Infrastructure under the Ministry of Transport, Infrastructure, and Housing and Urban Development and established through the Kenya Roads Act, 2007. The Authority's main mandate is to develop, construct and maintain the rural road network in the country as per the Kenya Roads Act, 2007.

The main functions and duties of KeRRA include:

- Constructing, upgrading, rehabilitating and maintaining rural roads.
- Controlling reserves for rural roads and access to roadside developments.
- Implementing road policies in relation to rural roads.
- Ensuring adherence by motorists to the rules and guidelines on axle load control prescribed under the Traffic Act or any other existing regulations.
- Ensuring that the quality of road works is in accordance with such standards as may be defined by the Ministry responsible for Transport and Infrastructure, overseeing the management of traffic on rural roads and issues related to road safety.
- Collecting and collating data related to the use of rural roads as may be necessary for efficient forward planning.
- Monitoring and evaluating the use of rural roads, planning the development and maintenance of rural roads, liaising and co-coordinating with other Authorities in planning and operations in respect of roads, preparing road work programs for all rural roads, advising the Cabinet Secretary on all issues relating to rural roads; and performing other functions related to rural roads as may be directed by the Cabinet Secretary.

2.5 PLANNING PRINCIPLES

The guiding principles for the development of the Local Physical and Land Use Development Plan for Kimilili Municipality include;

- Environmental sustainability;
- Balanced County development
- Sustainable development
- Liveability and promotion of ecological integrity;
- Effective public participation;
- Urban containment/compact towns;
- Smart and green urban growth;
- Promotion of integrated transportation network;

2.6 BEST PRACTICES

The preparation of the Local Physical and Land Use Development Plan for Kimilili Municipality takes into consideration contemporary best practices, concepts and aspirations including:

- Natural capital assessment which is an analysis of direct and indirect benefits that the natural environment provides to the economy and human beings mainly focusing on

the links between ecosystems, the services they provide and their contribution to the economic progress and human well-being and prosperity.

- Sustainable development goals which seek to build on millennium development goals and complete those that were not achieved. They are universal Goals which balance three dimensions of economic, social and environmental development.
- Sustainable human settlements is the subject of Chapter 7 of Agenda 21, which calls for 1) providing adequate shelter for all; 2) improving human settlements management; 3) promoting sustainable land-use planning and management; 4) promoting the integrated provision of environmental infrastructure: water, sanitation, drainage and solid waste management; 5) promoting sustainable energy and transport systems in human settlements; 6) promoting human settlements planning and management in disaster-prone areas; 7) promoting sustainable construction industry activities; and 8) promoting human resource development and capacity-building for human settlements development.
- Sustainable urban centers; Towns are hubs for ideas, commerce, culture, science, productivity, social development and much more. They can promote economically, socially and environmentally sustainable societies if we adopt a holistic approach to urban development that ensure equitable access to basic services, housing and mobility.

3 CHAPTER THREE: BACKGROUND OF THE PLANNING AREA

3.1 OVERVIEW

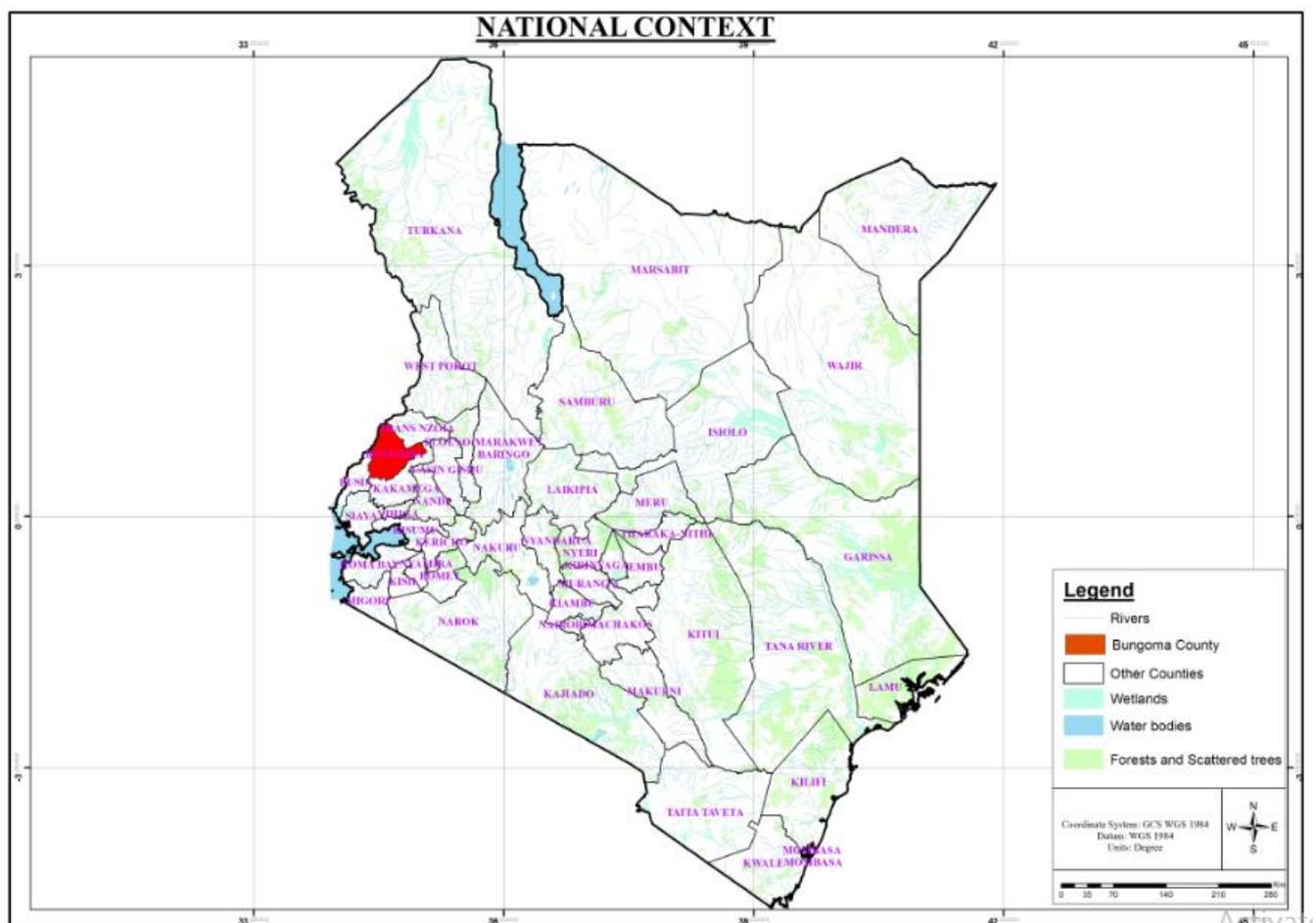
This chapter provides a detailed description of the study area in terms of its location, physiographic and demographic characteristics.

3.2 PHYSICAL SETTING

3.2.1 National Context

Kimilili Municipality is situated in Western Kenya in Bungoma County on Latitude are 0° 47' 0" North of Equator and 34° 43' 0" East of Greenwich Meridian on the slopes of Mt. Elgon.

The Municipality is approximately 327Km North West of Nairobi City, the capital of Kenya. The presence of A1 international trunk traversing the centre links the area to other regional towns and the rest of the world.



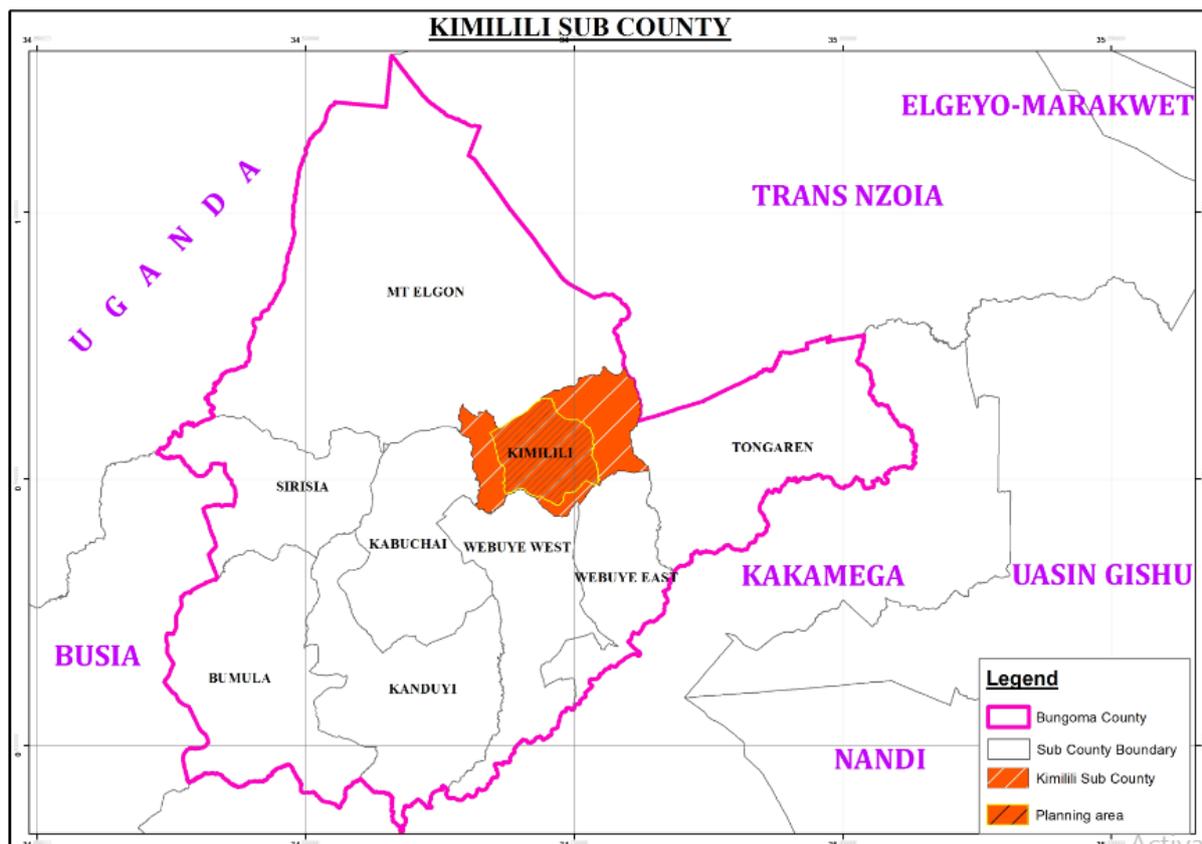
Map 1: National Context

Source: Simuplan, 2019

3.2.2 Regional Context

Kimilili Municipality is located in Kimilili Sub-County which is one of the nine sub-counties in Bungoma County. The sub-county borders Mt. Elgon, Tongaren, Webuye East, Webuye West and Kabuchai Sub counties.

Regionally, the town is linked to Bungoma Kitale, Kapenguria, Eldoret, Nakuru and Kisumu towns via a vast interconnected transport networks mainly A1 Road.

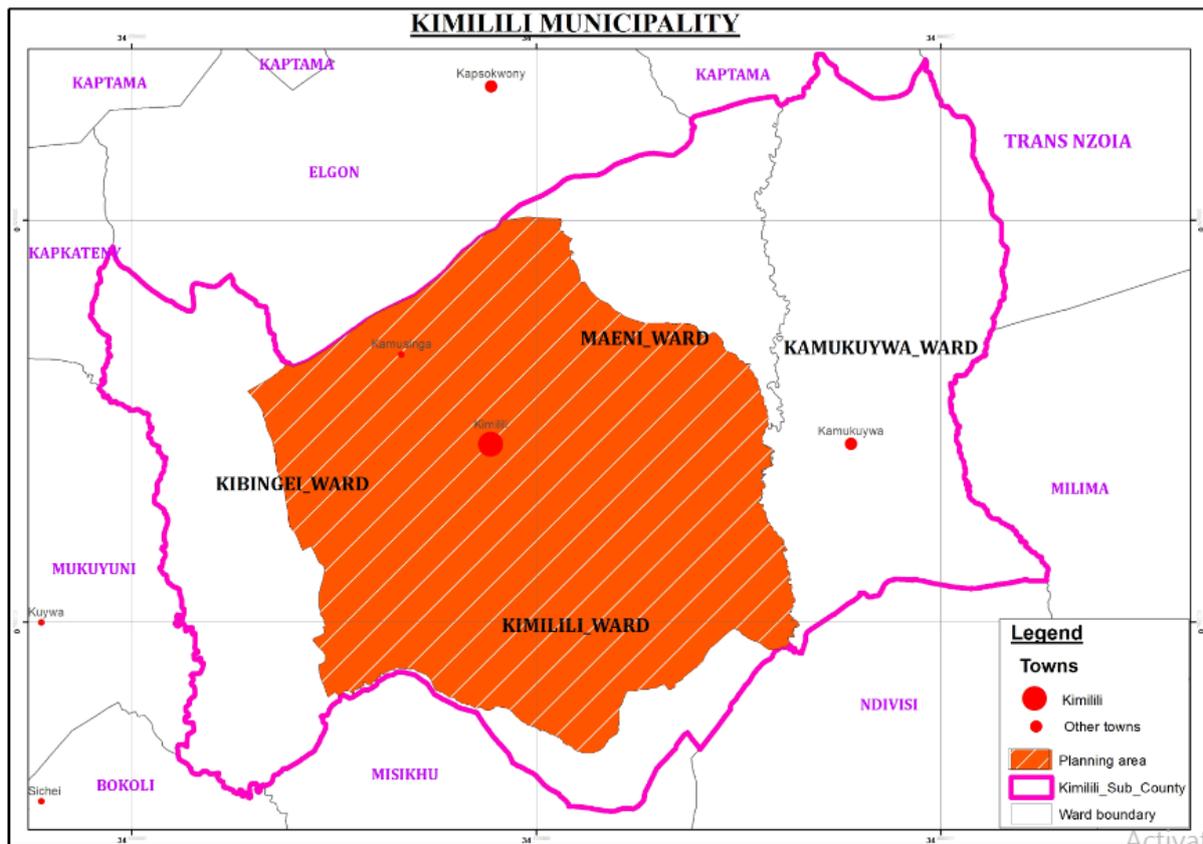


Map 2: Regional Context

Source: Simuplan, 2020

3.2.3 Locational Context

Kimilili Municipality is located along the Chwele – Kamukuywa transport corridor. The town serves as the sub-county headquarters for Kimilili Sub-County. The sub-county has four wards namely Kamukuywa, Maeni, Kimilili and Kibingei wards. The planning area covers parts of Maeni Kibingei and Kimilili wards as shown in the map below,



Map 3: Local context

Source: Simuplan fieldwork, 2020

3.3 POLITICAL AND ADMINISTRATIVE UNITS

Kimilili Municipality is under the jurisdiction of Bungoma County, Kimilili Sub County. The planning area covers parts of three (3) electoral wards in the sub-county namely Kibingei, Maeni and Kimilili. At a lower level, Kibingei ward is divided into two Sub locations i.e. Chebukwabi and Kibingei, Maeni ward into Nasusi and Sikhendu Sub locations and Kimilili ward into township and Kimilili Sub location.

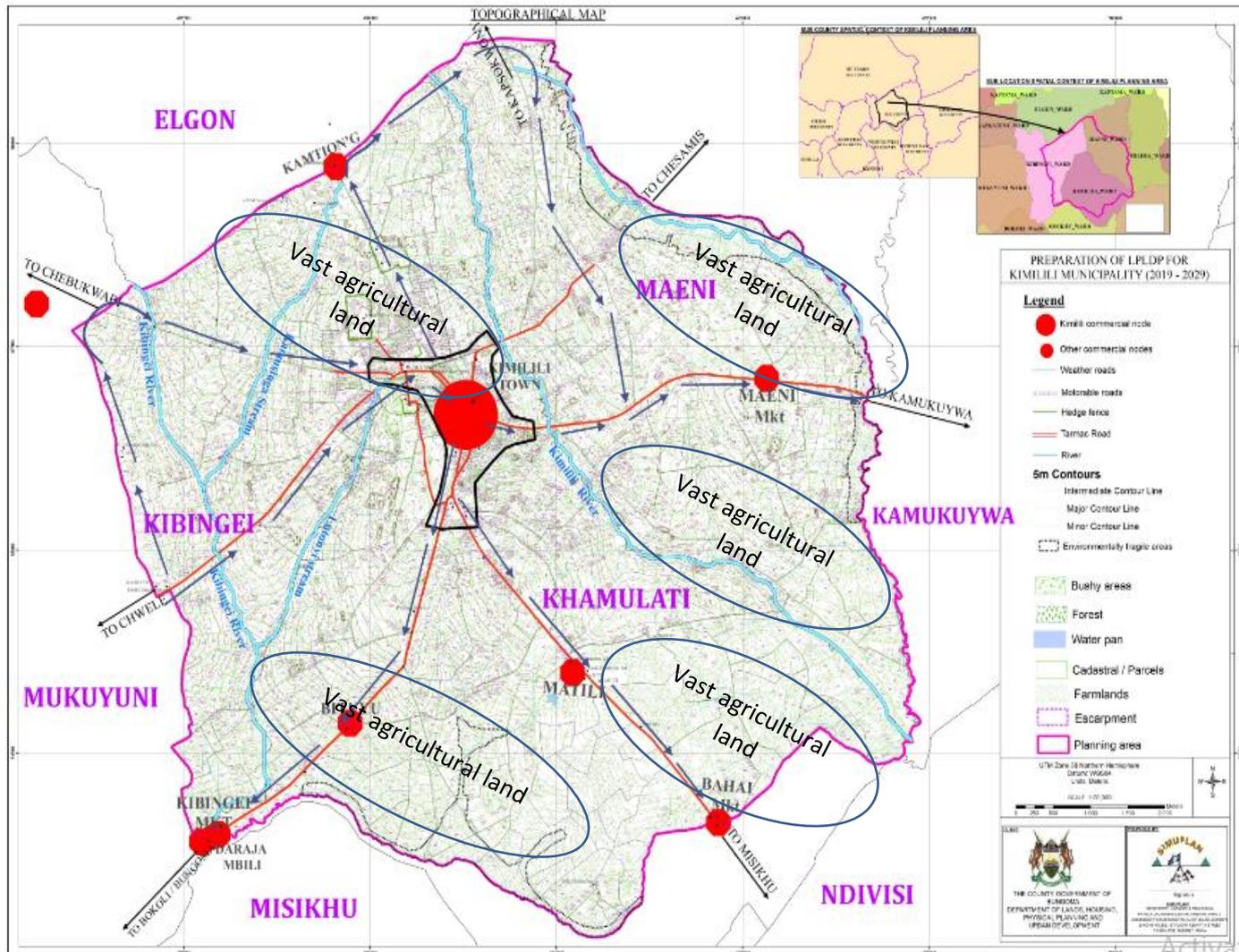
Table 1: Administrative units

Ward	Sub locations	Area Sq. Km
Kibingei	Chebukwabi	51.64
	Kibingei	
Maeni	Nasusi	40.81
	Sikhendu	
Kimilili	Township	41.95
	Kimilili	

Source: IEBC Boundary delineation report 2013

3.4 STRUCTURING ELEMENTS

The key structuring elements in Kimilili include: - main transport routes such as Kimilili - Chwele-Kamukuywa –Kitale and Kimilili-Bungoma roads; Rivers Sosio, Kibisi and Kibingei and rich agricultural lands.



Map 4: Structuring elements

Source: Simuplan, 2020

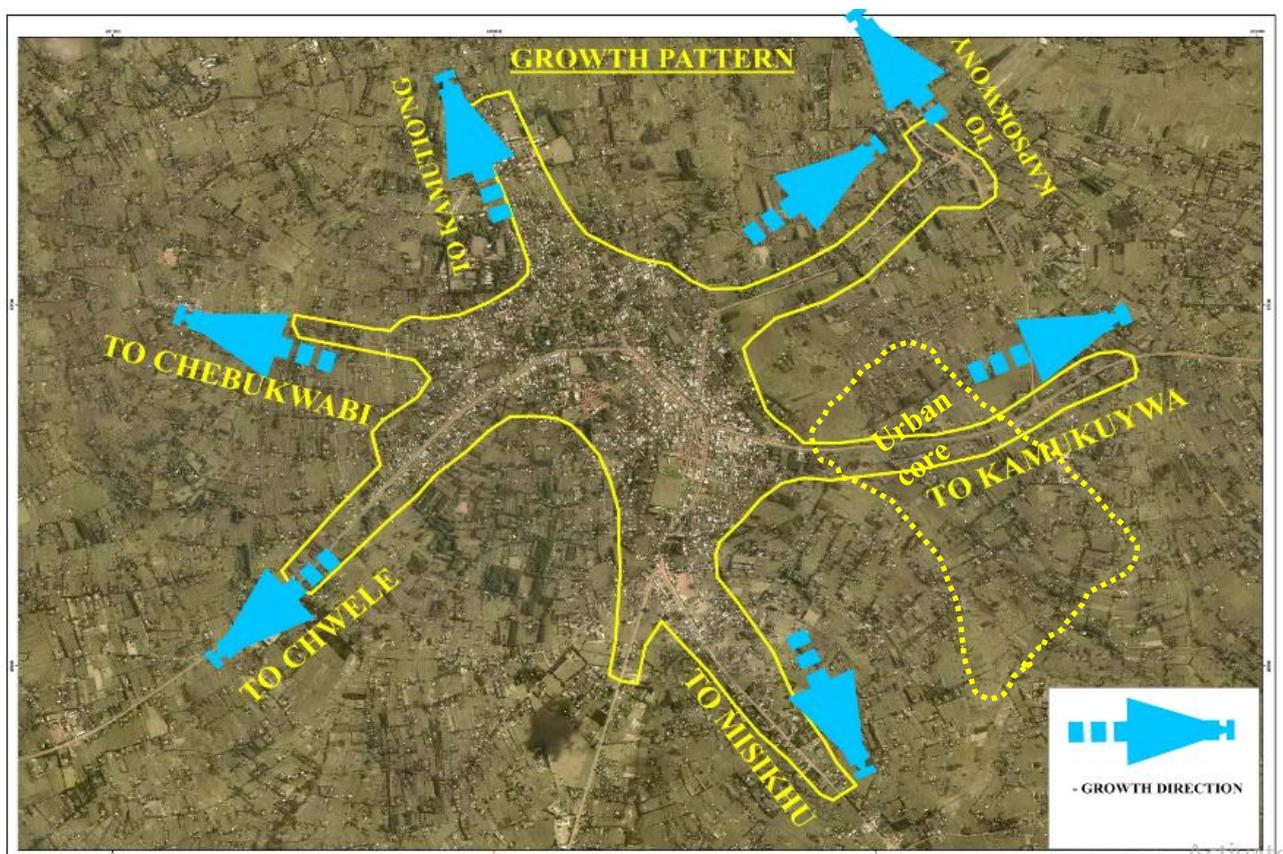
3.5 URBAN FORM

The Municipality forms a six finger-like shape with the centre (CBD) at the core. It has six growth directions following the main transport routes as shown in the map below.

Developments along these roads take a linear pattern. Some of the spatial problems that have arose due to this current developing trend include:-

- Decreasing agricultural land
- Urban sprawl
- Skewed development of the urban areas
- Shrinking agricultural land
- Emergence of new urban areas that lack basic services
- Concentration of developments along major transport routes

The map below depicts urban structure of the Municipality.



Map 5: Urban form

Source: Simuplan, 2020

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3.6 PHYSIOGRAPHIC CHARACTERISTICS

Kimilili is vested with unique physical characteristics that influence the land uses and also act as natural capital for growth and development of the Municipality.

3.6.1 Climate

3.6.1.1 Rainfall

The Municipality experiences comprising of the long rains and the short rains. The long rains occur between the months of April and May whereas the short rains are normally experienced during the months of December to February. The annual rainfall in the area ranges from 400mm (lowest) to 1,800mm (highest).

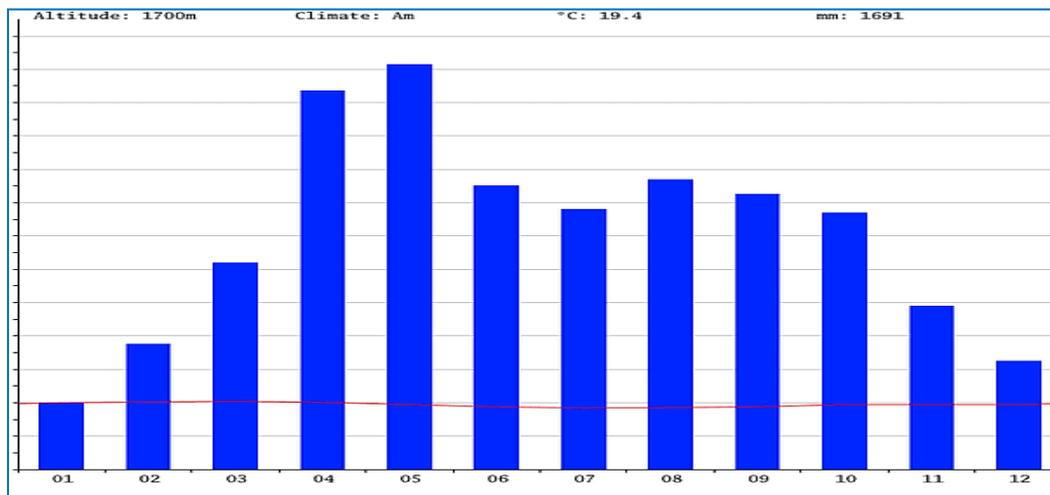


Figure 3.1 : Annual Rainfall distribution

Source: climate-data.org

3.6.1.2 Temperatures

The temperatures in Kimilili range between a maximum of 26°C-28°C and a minimum of 11°C. The wind blows from East to West over the planning area.

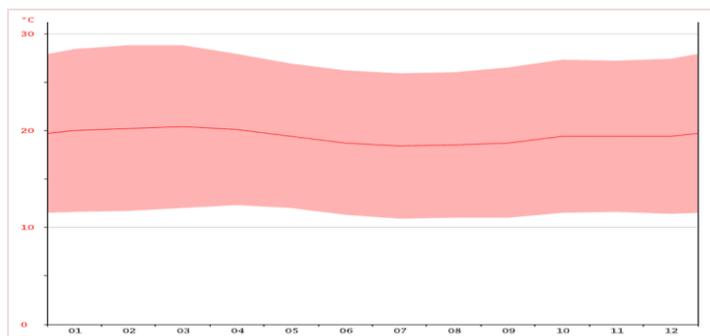
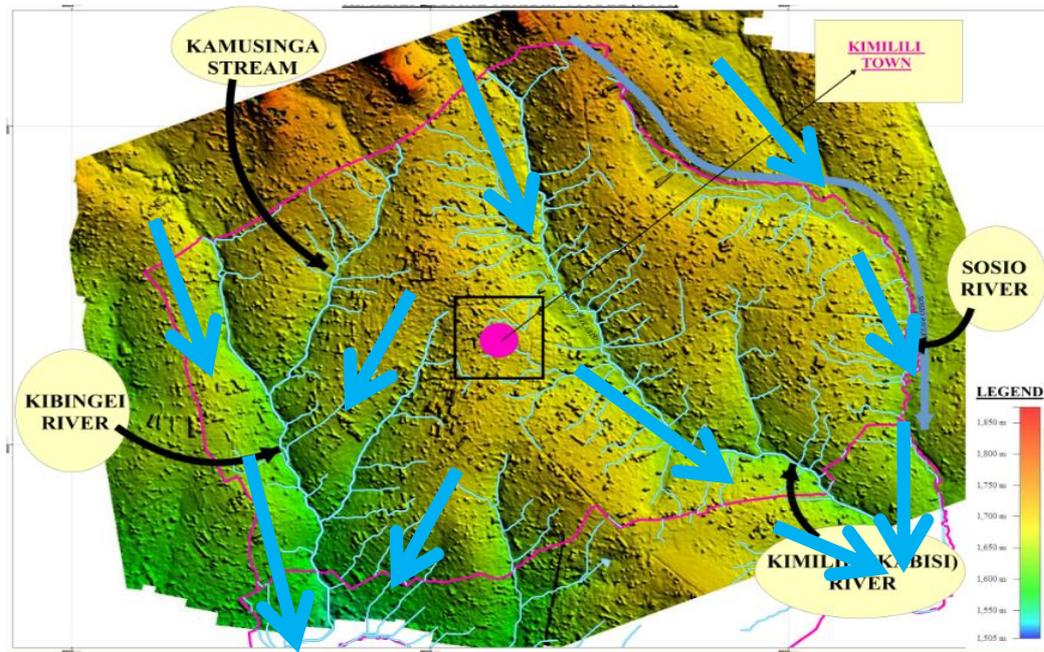


Figure 3.2: Temperature

Source: climate-data.org

3.6.2 Drainage system

The rivers within the planning area originate from Mt. Elgon Forest. These rivers include: - Kimilili, Kibingei, and Sosio. Small streams such as Kamusinga and Lutonyi also traverse the area.



Map 6: Drainage system

Source: Simuplan, 2020

3.6.3 Topography and Terrain

The Municipality lies at an altitude of 1690m above sea level. The planning area is characterized by gentle undulating slopes. Higher and lower grounds are found at Kamutiong while Kamulati respectively. The slope analysis played a major role in determining the locations of various land use proposals.

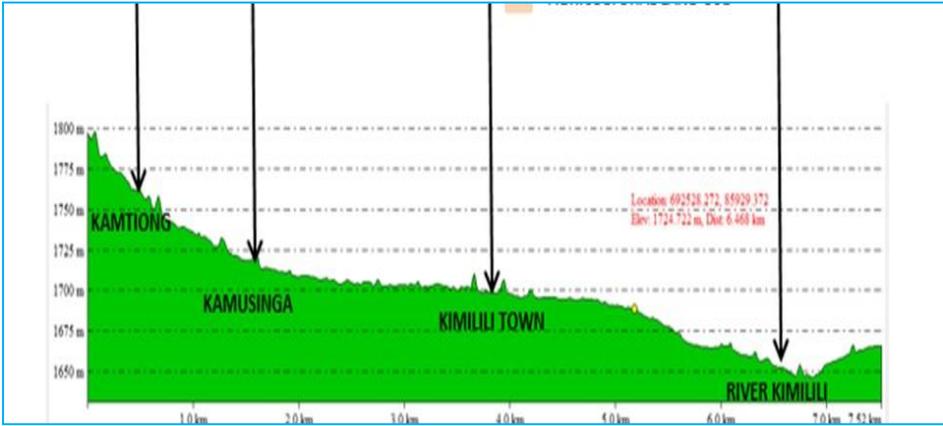
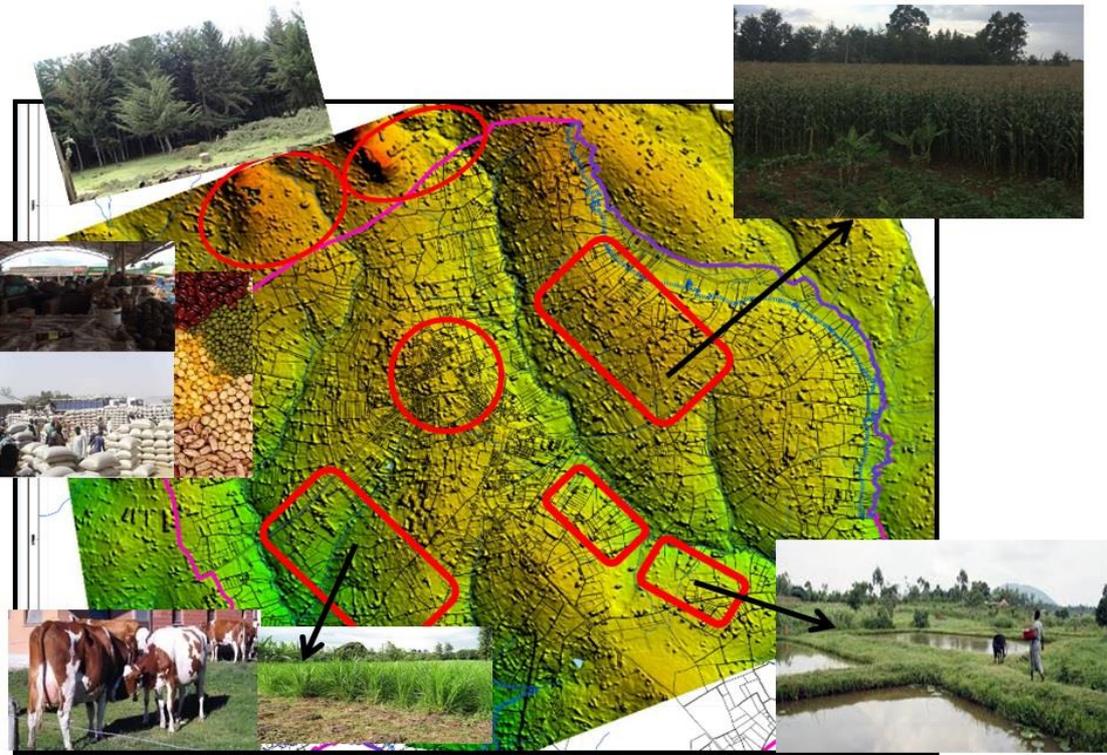


Figure 3.3: DTM Cross-section

Source: Simuplan, 2020

a. Terrain analysis model 1:

This model describes each land use area in respect to terrain characteristics. The low lying areas of Kimilili river is characterized by fish ponds while relatively flat areas are characterized by buildings and agricultural activities due to terrain stability. Kamusinga area is characterized residential developments due to the gentle sloping of the area as depicted in the DTM below.

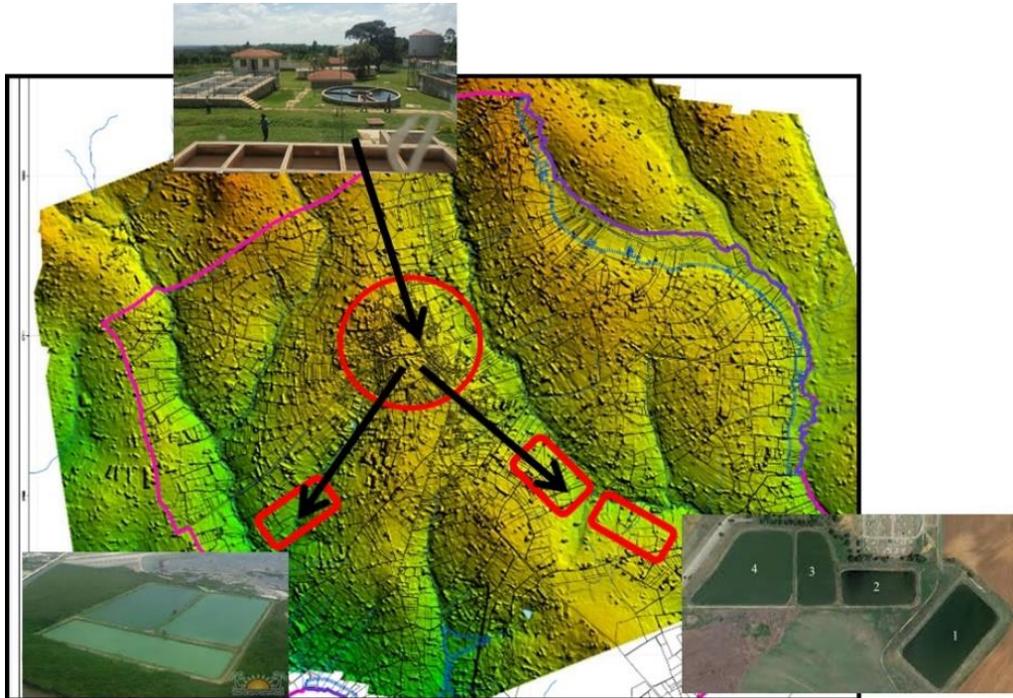


Map 7: Model 1- Land uses in relation to terrain

Source: Simuplan, 2020

b. Terrain analysis model 2:

This model depicts the direction of flow of surface water in the municipality. Kamutiong Water Treatment Plan is located on the Northern part of the planning area at the slopes of Mt. Elgon. The plant is located on higher ground to facilitate the supply of water to the Municipality via gravity scheme.



Map 8: Model 2 - Land uses in relation to terrain – Source: Simuplan, 2020

c. Slope Cross- Section analysis

The cross section of the planning area depicts how the various land uses has been influenced by the terrain. The gentle slopes in the CBD and Kamusinga areas are characterized by commercial, residential, educational and agricultural land uses due to terrain stability as shown in

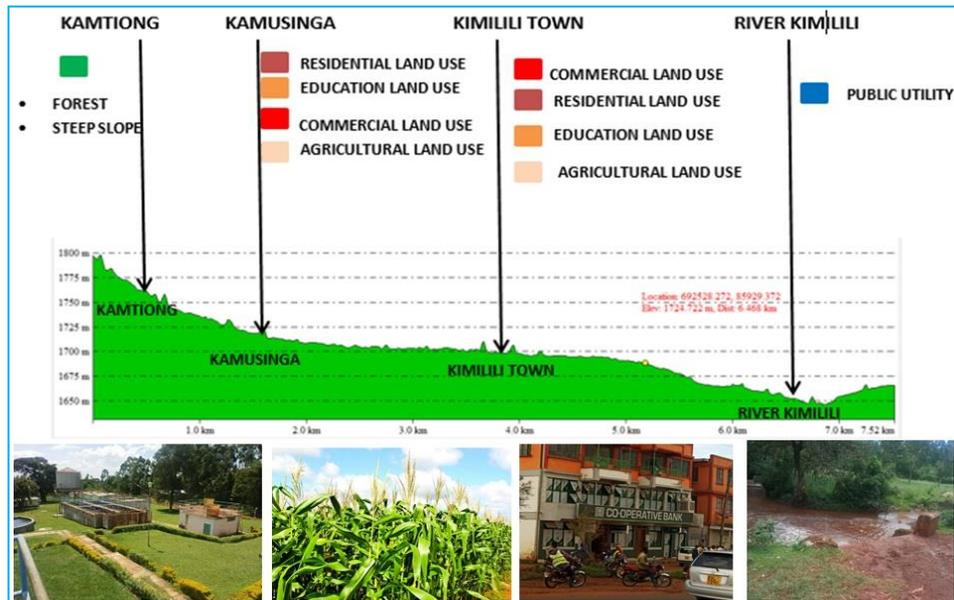


Figure 3.4: Cross Section profile

Source Simuplan, 2020

3.6.4 Geology and soils

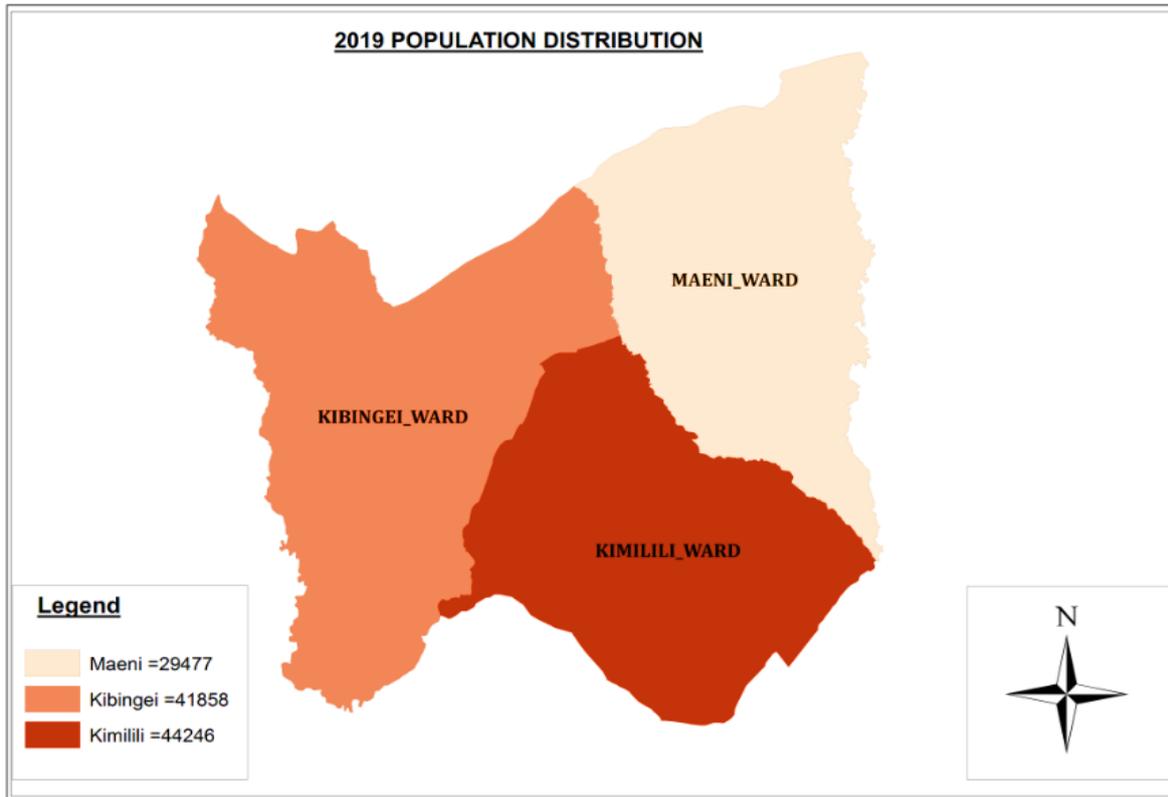
The area consists of volcanic and alluvial soils on the slopes of Mount Elgon which support a number of crops, namely coffee, bananas, sugar cane, maize, potatoes, groundnuts, onions, tomatoes, fruits, beans, and sunflower.

3.7 POPULATION AND DEMOGRAPHY

The Urban areas and Cities amendment Bill 2017 provides for a population of 50,000 for Municipality. By the year 2018 Kimilili (Kibingei, Maeni and Kimilili areas) had surpassed the recommended figure thus the County government put in place measures for the gradual transformation of Kimilili town to municipality.

3.7.1 Population distribution

As per the 2019 Population Census, Kimilili ward had the highest population as shown in the map below.



Map 9: Population distribution per ward

Source: KNBS 2019 population and Housing Census

The 2019 Kenya's Population and Housing Census shows that, Kibingei, Maeni and Kimilili wards had a population of 41,858, 29,477 and 44,246 people respectively. This population is projected to increase at an inter censual growth rate of 2.2% p.a as shown in the table below:

Table 2: Population projection

Ward	Sub locations	2019	2023	2033 (Projection)
Kibingei	Chebukwabi	41,858	45,665	56,767
	Kibingei			
Maeni	Nasusi	29,477	32,158	39,976
	Sikhendu			
Kimilili	Township	44,246	42,270	55,032
	Kimilili			
Total		115,551	120,093	151,775

Source: KNBS 2019 population and Housing Census

According to the 2019 population, Kimilili town has a population of 56,060 persons of which 27,225 were male and 28,824 were female. Currently the town has a population of 61,158. The population of the town is projected to increase to 76,026 persons at inter-censual growth rate of 2.2% p.a. by the year 2033.

3.7.2 Population Structure

According to the 2019 Kenya Population and Housing Census, the young population is still the largest with the largest cohort group being individuals between the ages of 0-19 years. This indicates that the Municipality has adequate labour force but there's also the need to provide more educational infrastructure.

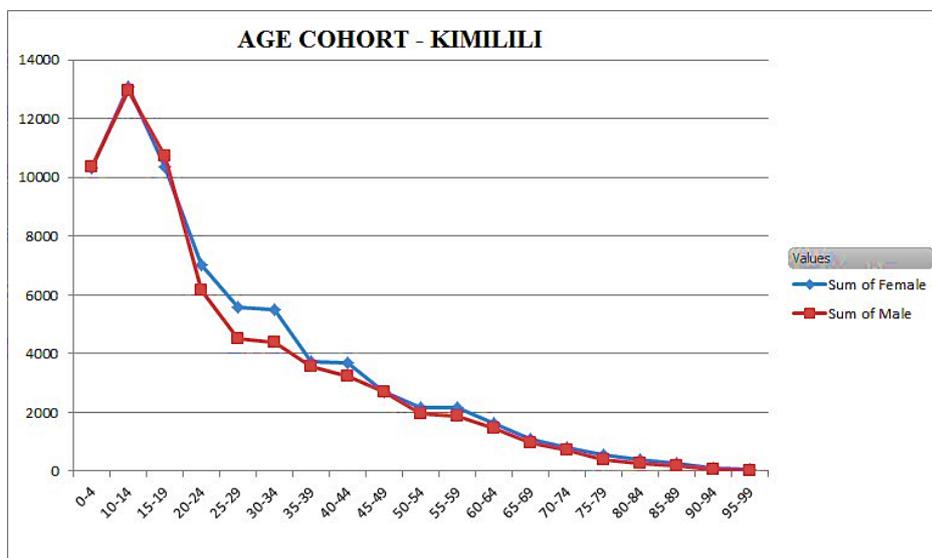


Figure 2.3.5: Population structure

Source: Source: KNBS 2019 population and Housing Census

3.7.3 Population Density

Kimilili ward has the highest population density at 1054 persons per Kilometre square as shown in the table below. High population density is mainly found within the town area while the hinterlands have low density. This is because most of the developments are concentrated within the Kimilili CBD area.

Table 3: Population density

Ward	Sub locations	Population	Area Sqkm	Density
Kibingei	Chebukwabi	41858	51.64	810
	Kibingei			
Maeni	Nasusi	29477	40.81	722

	Sikhendu			
Kimilili	Township	44246	41.95	1054
	Kimilili			

Source: Source: KNBS 2019 population and Housing Census

3.7.4 Socio-cultural characteristics

The Municipality is mainly cosmopolitan but majority of the population from the Luhya Community consisting of the Bukusu. Few Teso and Sabaot communities are also present in the area.

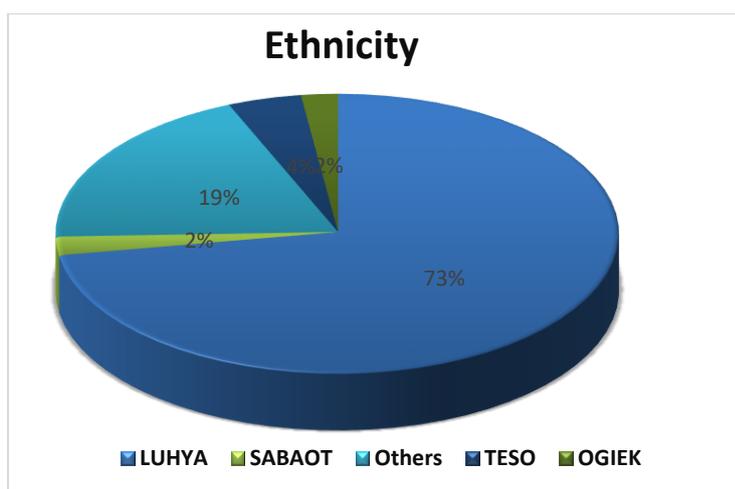


Figure 3.6: Ethnic composition

Source: Simuplan, 2019

The Municipality is also home to Dini ya Musambwa headquarters at Maeni which is an independent church movement related to the decolonization process in Kenya under the leadership of Elijah Masinde, an enigmatic and renegade leader. The area is also has the ancestral homes of, the late Masinde Muliro and Wamalwa Kijana and Pascal Nabwana who are well known enigmatic African leaders.

4 CHAPTER FOUR: SITUATIONAL ANALYSIS

4.1 OVERVIEW

This chapter outlines an existing situation of the municipality with the aim of ascertaining the key aspects that highlights the strength, weaknesses, opportunities as well threats to be considered in the development proposals. Areas of focus include: - land and land use, housing & human settlement, economy & livelihoods, transport & communication, infrastructure & utilities, social infrastructure and Environment.

4.2 LAND AND LAND USE ANALYSIS

4.2.1 Land tenure

Most of the residents in the Municipality are land owners. Land is predominantly held under freehold tenure as shown in the figures below.

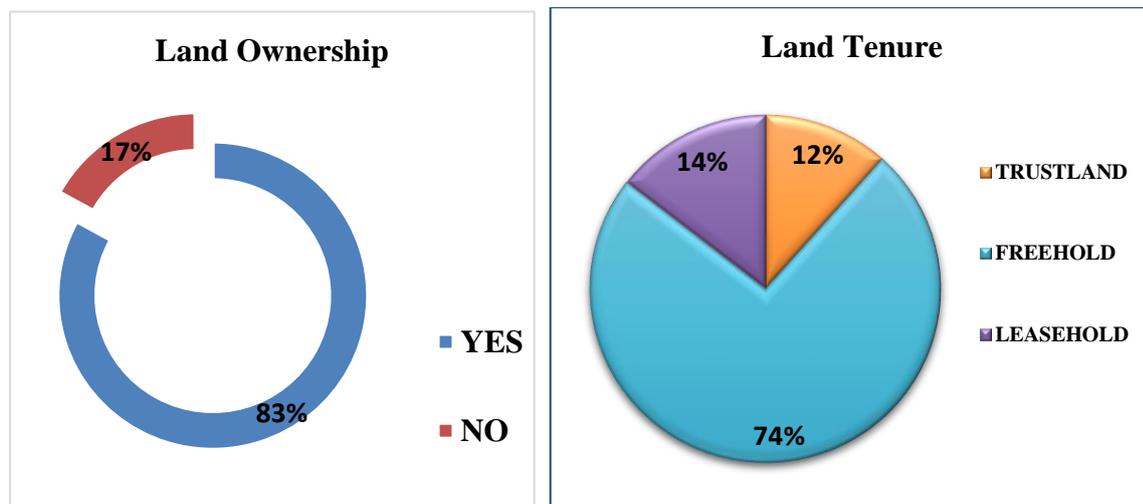


Figure 4.1: Land Ownership and Tenure

Source: Simuplan fieldwork 2019

With Freehold land tenure system comes challenges of implementation of plan proposals. Registered land owners claim to have absolute right over the use of their property hence development trends and projects seem to be based on the whims of property owners. This has led to uncoordinated development, encroachment into road reserves and deterioration in service provision.

The above calls for civic education for the residents to bring to light the extent of government involvement when it comes to regulating land use and activities thereon while at the same time safeguarding the rights of land owners.

4.2.2 Land holding sizes

From field survey, it was noted that land sizes in the Municipality range from 0.1 - 5 acres. It was also observed land subdivisions in the area are uncontrolled with land under freehold tenure mostly affected. This trend of uncontrolled land subdivision has made it difficult for the town to efficiently provide basic infrastructure and services. This is further exacerbated by the increasing land value especially on land located along the roads.

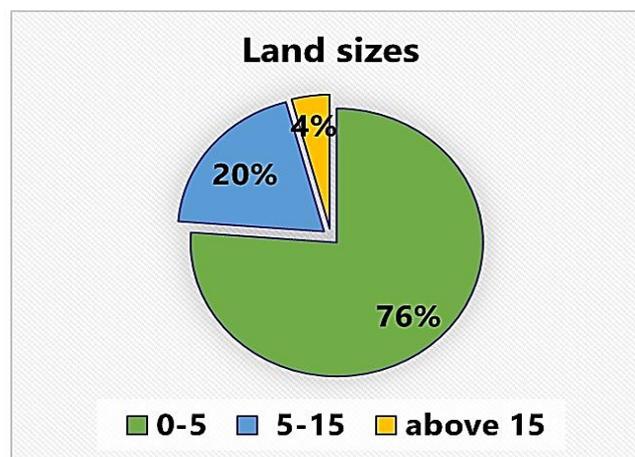


Figure 4.2: Land sizes

Source: Simuplan fieldwork 2019

4.3 LAND USE PATTERN ANALYSIS

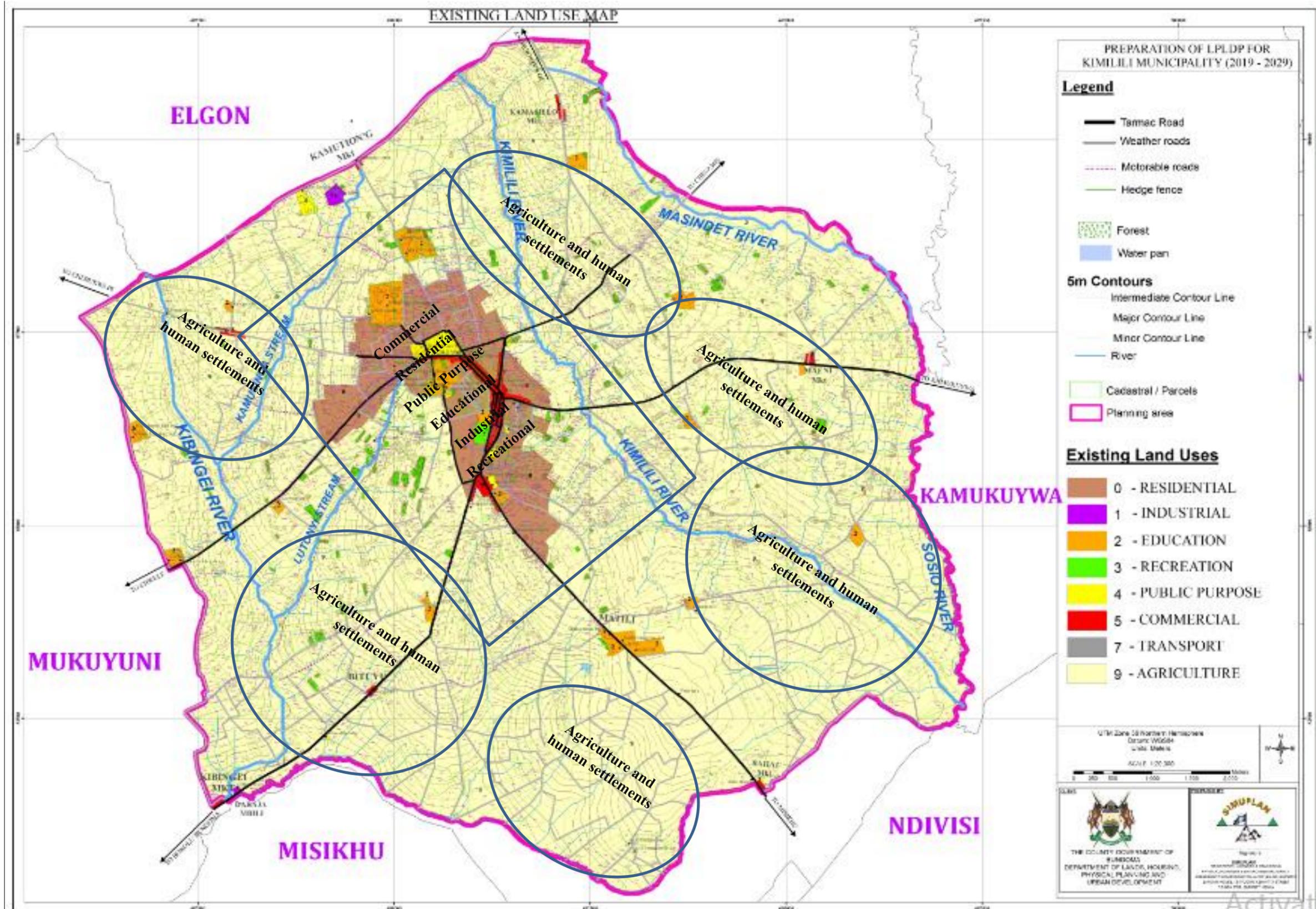
Land use in the planning area can be categorized into major categories such as forested areas, industrial land, and commercial, residential (settlements), recreational, public purpose, educational, infrastructure and utilities, transport and agriculture (farm lands). Agriculture is the dominant land use within the planning area. The existing land uses within the planning area are as depicted in the table and map below.

Table 4: Existing Land Uses Proportions

EXISTING LAND USE	APPROX. AREA (Ha)	%ACREAGE
Residential	401.78	5.02%
Industrial	5.76	0.07%
Education	116.4	1.45%

Recreation	62.39	0.78%
Public Purpose	30.64	0.38%
Commercial (CBD)	47.87	0.60%
Agriculture	7242.24	90.43%
Transport And Utilities	101.34	1.27%

Source: Simuplan 2020



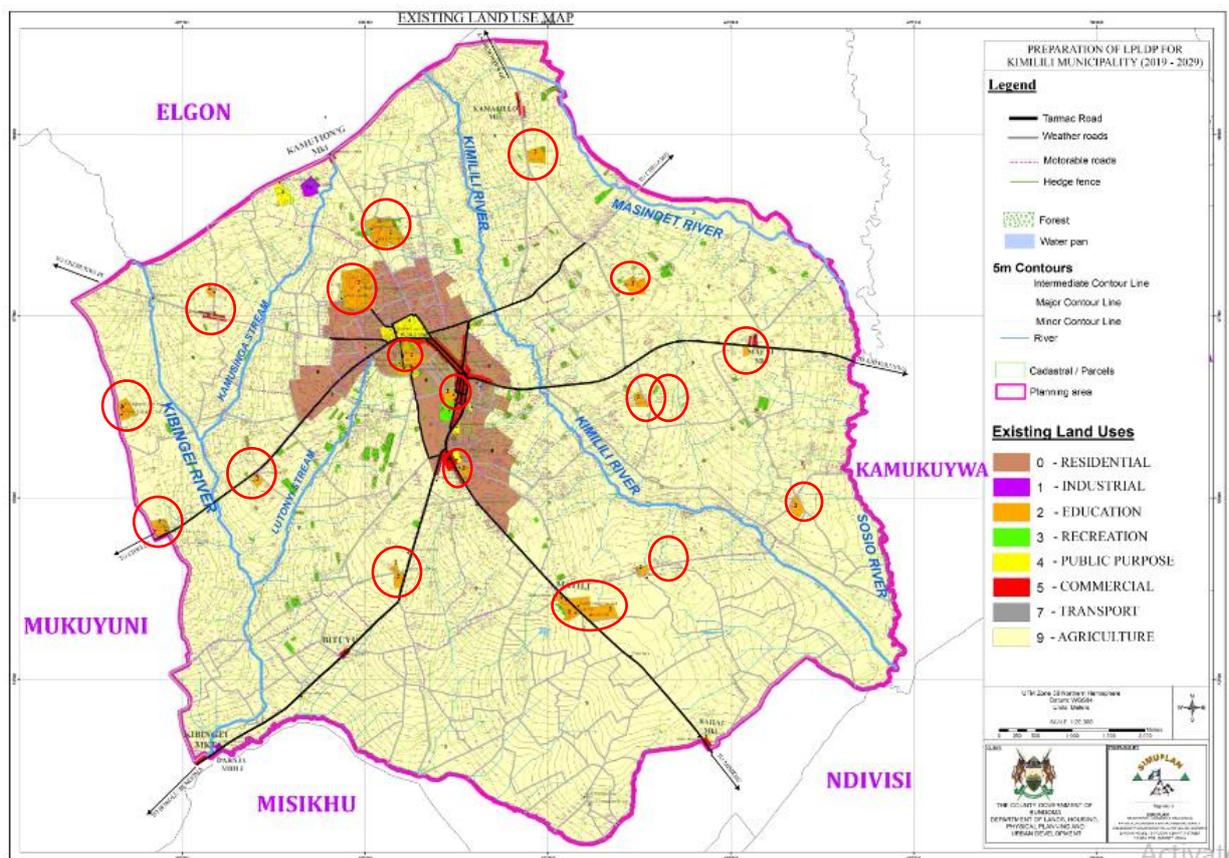
Map 10: Existing land use

Source: Simuplan fieldwork, 2019

Residential land Use- Residential land use covers approximately 5% (401.78 Ha) of the total land within the planning area. Majority of these residential developments are concentrated within the CBD area. High residential density is observed in the CBD area. The density of settlements reduces as one moves away from the CBD area. The hinterland is characterized by scattered residential settlements with very low density. There is no formal zoning of residential land uses into low, medium or high density or planned mixed development.

Industrial land use- Industrial developments occupy about 0.07% (5.76) of the total area within the planning area. Industrial developments consist of both light and Heavy industries consisting of maize millers the slaughter house coffee factory among many others.

Educational land use - Kimilili Municipality is known as an educational hub within the western region. This is mainly due to presence of some of best performing schools in the country such as Friends School Kamusinga. The educational facilities are evenly distributed within the planning area and majority of the residents have adequate access to these facilities. In relation to the other land uses educational land use covers approximately 1.45% (116.4Ha) of the total planning area.



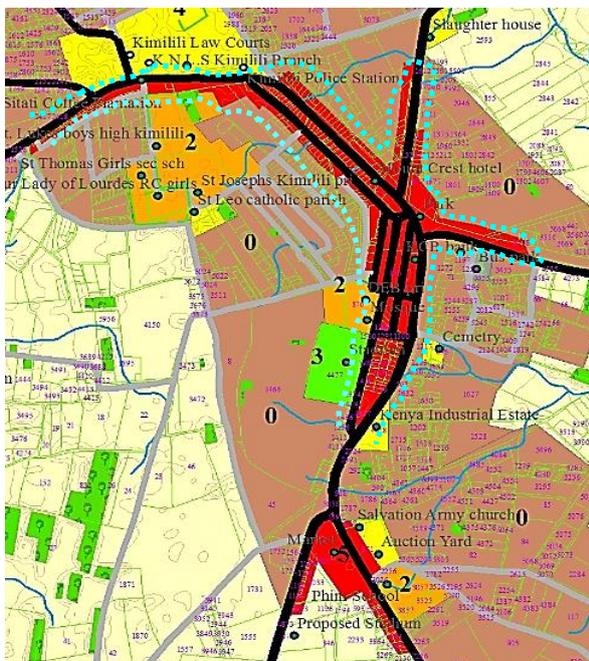
Map 11: Distribution of Education facilities

Source: Simuplan fieldwork, 2019

Recreational land Use - These include Open spaces include Gardens, playgrounds, social halls, cultural centre and stadium. Recreational facilities in the area are inadequate and are mainly found within the CBD area. Majority of the residents rely on playing fields found within educational facilities. Recreational land use covers approximately 0.78% (62.39 Ha) of the total planning area. More land needs to be acquired for more recreational facilities within the area.

Public purpose land use- These are the areas that offer services to the general public of Kimilili. It includes health, cemetery, Library, Churches, Courts, Police station and administrative offices. Public purpose is concentrated within the CBD area. The centralization of public purpose facilities is mainly to facilitate easier access by the residents hence facilitating efficient service to a wider population margin. Public purpose land use covers a total of 30.64Ha which is equivalent to 0.38 % of the total land in planning area.

Commercial land use – Commercial land uses are concentrated along major roads forming a linear pattern as shown in the map below. Majority of the commercial land uses are found in the CBD area. The planning area also has a designated open air market characterized by county stalls. Commercial land use covers a total of 47.87 Ha which is equivalent to 0.60% of the total land in the planning area.



Map 12: Commercial Land Use

Source: Simuplan fieldwork, 2019

Transport and Utilities Land Use covers approximately 1.27 % (101.34 Ha) of the total land within the planning area. The Municipality has an expansive transport network that ensures high accessibility within are areas. Utilities in the area are however limited mainly due to lack of sewer system and a proper dumping site.

Agriculture Land Use is the dominant land use in the planning area covering approximately 90% of the total land within the planning area. This is mainly because agriculture is the backbone of the Municipality's economy hence the need to safeguard agricultural land. During fieldwork it was observed that most agricultural activities are practiced at homestead level where individuals build houses small part of their farms while the rest is used for agricultural activities. Land under agriculture in the area is gradually getting fragmented due to unregulated sub-division of land and also the increasing population which has rate of conversion of agricultural land.

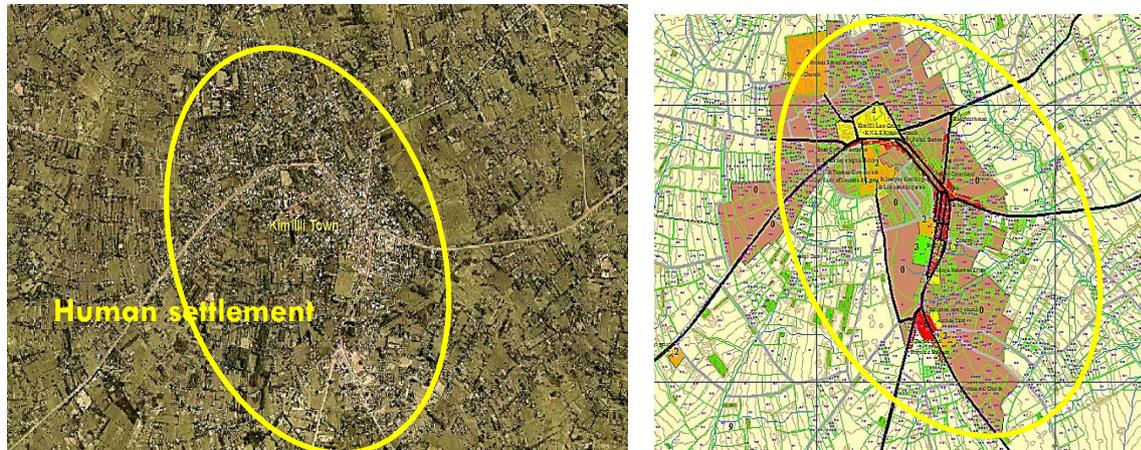
4.4 HOUSING AND HUMAN SETTLEMENT

The planning area depicts both rural and urban settlements. Urban settlements are found within the Kimilili CBD are rural settlements are found in the hinterlands. Settlements in Kimilili Municipality have been shaped by road networks, access to facilities and services. There are three types of human settlement patterns depicted in the planning area: Linear and dispersed and nucleated human settlement patterns.

Dispersed/Scattered settlements occur when several types of buildings are spaced far apart such that they don't really follow a certain pattern. Such settlements are most common in agricultural areas where farmlands dominate the landscape. This type of human settlement is evident in the rural hinterlands of the planning the area. The settlement is characterized by farm lands with few residential houses scattered within the area. However, with the ever increasing population in the area, more houses are bound to be developed in the area which will eventually lead to a clustered settlement pattern.

Linear settlement pattern on the on other hand occur when people settle and build a long line which may be a transportation route, river, or canal. Settlements within the planning area follow major roads emanating from the CBD area. During field survey it was noted that residents tend to put more significance on the land fronting the roads. This is the main cause of the linear form of human settlements observed in the planning area.

Nucleated/Clustered settlement pattern occur when developments are laid out closely together in a within are area in a clustered manner. Clustered settlement pattern is more evident in the CBD area where there is a high concentration of mixed use developments.



Map 13: Clustered human settlement pattern

Source: Simuplan, 2020

4.4.1 Housing

From the 2019 Population and Housing Census (GOK 2020),, it was determined that the population of the Municipality will continue to increase hence the need to provide adequate housing and reasonable standards of sanitation as provided for under economic and social rights in Kenya Constitution 2010.

Housing stands as the most prominent problem in the planning area that requires immediate intervention. This fact is evidenced by a number of housing problems facing the Municipality which include: - poor housing quality and standards, lack of basic infrastructure and limited development control measures resulting to construction of substandard housing. The housing structures in the Municipality are characterized by mud walls, rusty iron sheets roofing, small houses with poor waste management infrastructure.



Plate 14: The housing Structures at the outskirts of Kimilili town

Source: Simuplan, 2019

House ownership

According to field survey, most of the houses in the planning area are owner occupied with few residential units. This is mainly due to availability and affordability of locally produced construction materials.

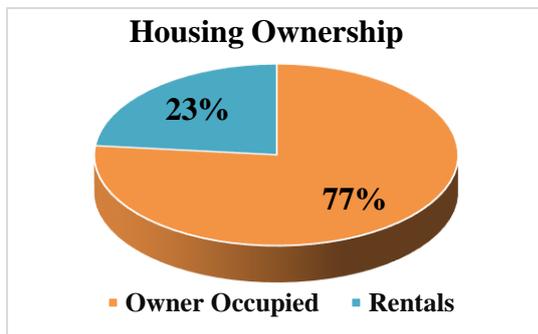


Figure 4.3: House ownership

Source: Simuplan fieldwork 2019

Housing type

The planning area manifests various types of housing ranging from permanent to temporary types of housing. Majority of the residents live in permanent structures as shown in the figure below. Permanent structures are concentrated in the urban core while temporary structures are located in the outskirts of the CBD area.

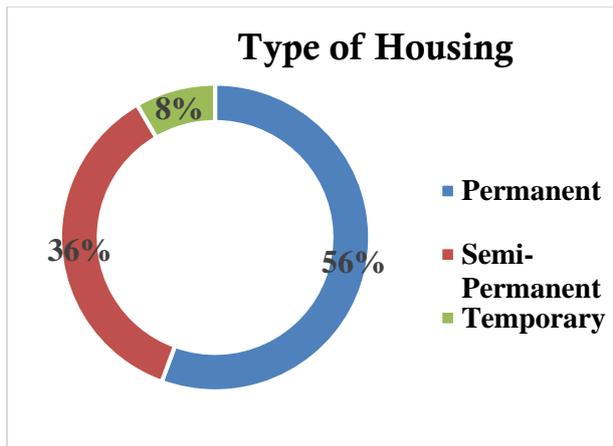


Figure 4.4: Types of Housing

Source: Simuplan fieldwork 2019

Housing Typologies

Bungalows are the most common housing typologies in the planning area. Other housing typologies include flats, single rooms, and maisonettes among many others. Some parts in the municipality especially the CBD area are characterized by conflicting housing typologies hence the need for proper development control measures.

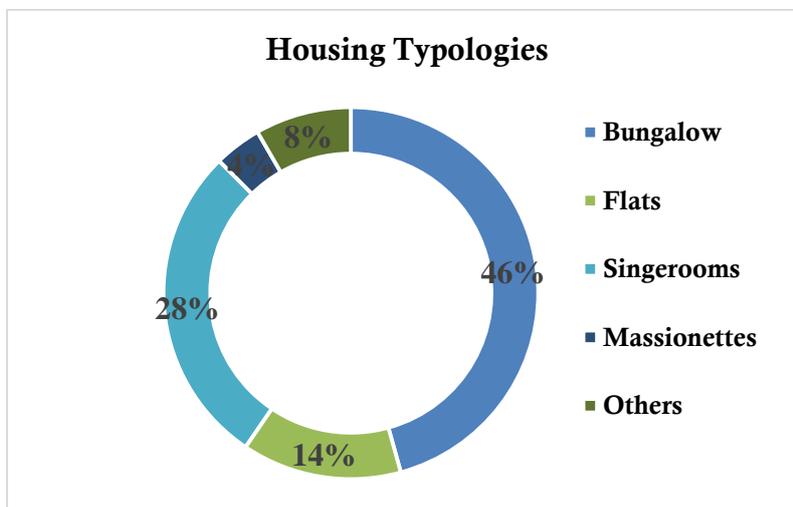


Figure 4.5: Housing typologies

Source: Simuplan fieldwork 2019



Plate 15: Conflicting Housing Typologies

Source: Simuplan fieldwork 2020

Construction Materials

During field survey, it was noted that residents use Mud/cow dung as main wall material at approximately 62.7% while 13.8% and 7.4% of the residence have their house made of bricks and Concrete blocks respectively.

4.5 ECONOMY AND LIVELIHOODS

4.5.1 Livelihoods

4.5.1.1 Source of Income

Accordinging field survey, majority of the respondents depend on agriculture for their livelihoods. A large number of the residents are engaged in formal and informal employments while others engage in businesses. It is worth noting that majority of the employment opportunities and businesses are agro-based.

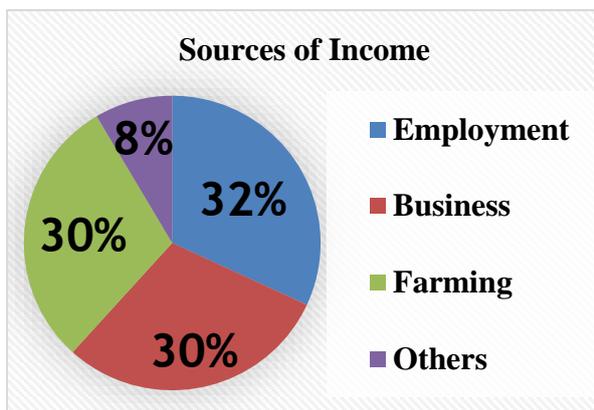


Figure 4.6: Sources of livelihood

Source: Simuplan Fieldwork, 2020



Plate 16: Sources of livelihood

Source: Simuplan, 2019

4.5.1.2 Income Levels

Field survey established that majority of the residents earned above Kshs, 20000 in a month as shown in the figure below. The residents also stated that a large part of the income generated is from selling their agricultural products locally and outside the planning area.

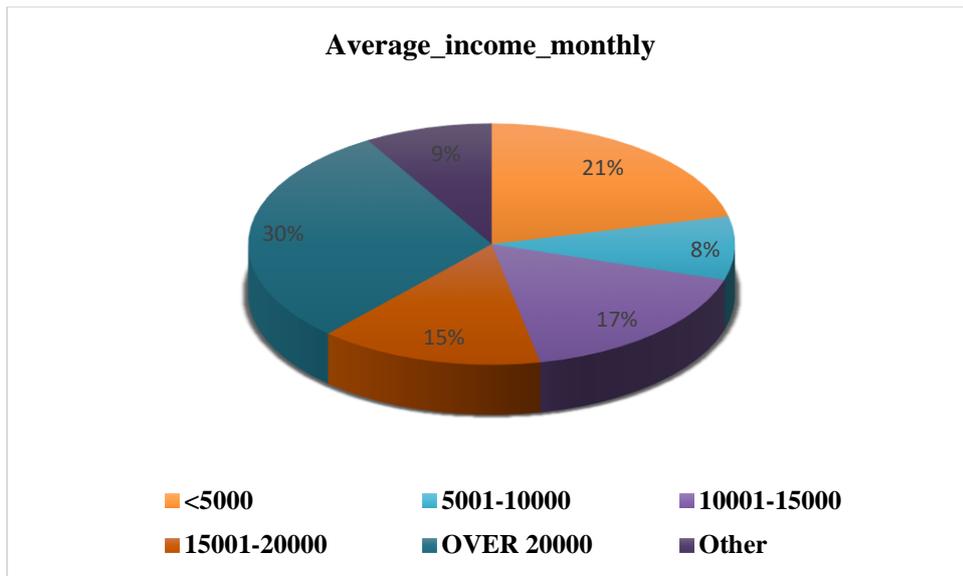


Figure 4.7: Percentage range in Monthly income

Source: Simuplan fieldwork, 2019

4.5.2 Economy

The main economic activities include agriculture, industry, services and general retail. The economy of the Municipality is mainly agricultural focusing on maize farming.

4.5.2.1 Agriculture

Agriculture is the backbone of the Municipality's economy as most families rely on crop production and animal rearing. The main crops grown include: - maize, beans, finger millet, sweet potatoes, Irish potatoes and assorted vegetables. These are grown mainly for subsistence consumption with the excess sold in the local market.





Plate 17: Crop farming

Source: Simuplan, 2019

The main livestock kept in the area include:-cattle, sheep, goats, donkeys, poultry and pigs. Most of the livestock farming is practiced on small scale but some farmers also produce milk poultry products for commercial use.



Plate 18: Livestock farming

Source: Simuplan, 2019

Agricultural activities in the municipality are undiversified with majority of the residents focusing on subsistence maize farming. Uncontrolled subdivision and conversion of rich agricultural land is one of the major reasons for the reduction of agricultural yields in the Municipality.

4.5.2.2 Industry

The Municipality lacks a strong industrial base with very few small formal industries such as Khamulati Coffee Factory, Sifted Maize Miller and Kimilili Tomato Factory. The Municipality also has other small light industries comprising of petrol stations, maize millers, carpentry, and cottage industries among many others.



Plate 19: Kimilili Tomato factory

Source: Simuplan fieldwork, 2020

Sand harvesting along Rivers Kimilili, Sosio and Kibingei is also a major industrial activity in the area. However, there's need to come up with suitable measures to enable sustainable sand harvesting.

The **Jua Kali Sector** dominates the industrial developments in the planning area. Some of the Jua Kali activities carried out in the area include: carpentry, motor vehicle mechanics, service petrol stations, saloon/hair dressing, Boda boda, Matatus, selling of second hand clothes, charcoal and firewood selling, welding among many others.





Plate 20: Jua Kali industry

Source: Simuplan fieldwork, 2020

4.5.2.3 Trade and Commerce

Kimilili Municipality has a vibrant retail sector that has been expanding over time. Several retail shops characterize the CBD area. The shops are located along the major roads in the town. These shops deal mainly with domestic items and agro-based products. The retail services include among others: bars and restaurants, hotels, cyber cafes, laundry, salons/barber shops, shoe repairing, bicycle repairing, garages and electrical shops while those in the trade sector included among others: wholesale, general retail, cereals shops, butcheries, tire dealers hardware shops, electronics shops, auto spare parts, video libraries, mobile phone and phone accessories shops, chemists and Pharmacies.



Kimili market

Source: Simuplan, 2019

The Municipality has two market days in a week. The open air market is usually very congested especially during market days hence some of the trader opt to sale their products along the roads resulting in encroachment on the road reserves.



Plate 21: Kimilili town market day

Source Simuplan fieldwork 2020



Plate 22: Encroachment on road reserve

Source Simuplan fieldwork 2020

4.5.2.4 Service sector

The Municipality has three major banking institutions i.e. Cooperative, Equity and KCB banks and few micro-finance institutions such as Faulu and ECLOF. Several Mpesa and Airtel money shops are scattered throughout the planning area. The area is served by one post office and major mobile telephone operators in Kenya including Safaricom, Airtel, and Telkom. Some of these service providers, such as Safaricom, employ hundreds of youths in the area through their services such as Mpesa.



Plate 23: Financial institutions

Source: Simuplan fieldwork, 2020

4.5.3 Linkages

4.5.3.1 Internal Linkages

Different areas within the same locality are normally arranged in hierarchical manner. Each area is placed at a different hierarchy level and offers a different order of goods and services. Those high in the hierarchy offer higher order goods than those below them. There are also areas that act as production points while other forms the consumer group. These areas interrelate to each other forming the internal linkages. These linkages are as follows:

a. Internal flow of Goods

During field survey, it was established that most of the residents buy consumer goods from the local market. It was also noted that the residents however prefer to sell their produce near their homes with a few engaging brokers in getting markets for their produce especially maize.

b. Internal Flow of Services

Most of the residents get most of the public services such as primary schools, secondary schools, dispensaries and police posts within the planning area.

4.5.3.2 External Linkages

External linkages link the Municipality to those other areas outside its boundary.

External Flow of services

The results from field survey indicated that the residents seek high order services such as medical and higher education from high order towns such as Kitale, Bungoma, Eldoret, Nakuru and Nairobi .One of the main reasons for youth migration away from the Municipality is the search for higher education and employment opportunities.

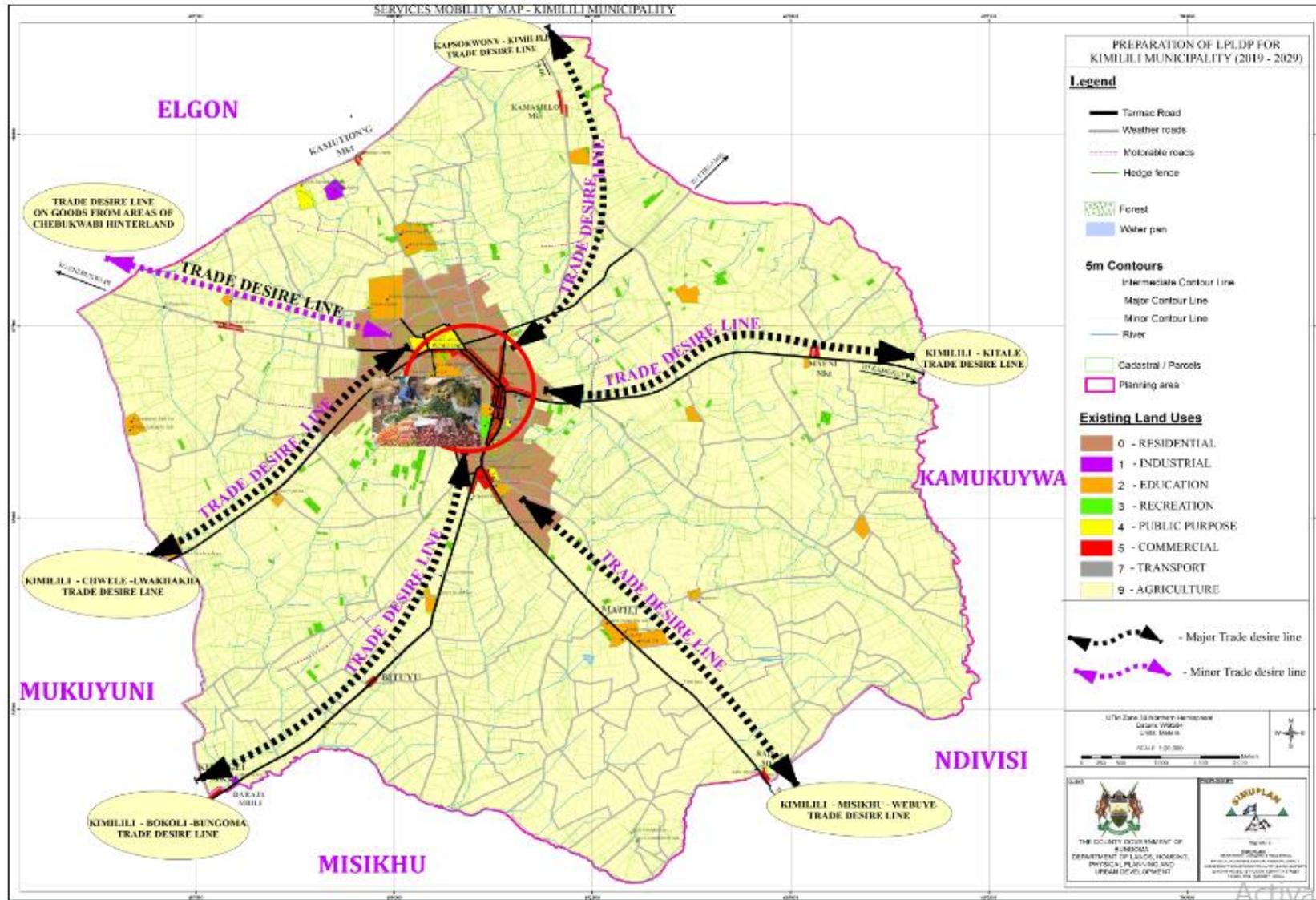
a. External Flow of Goods

Most of the high order goods such as farm machinery are not found in within Kimilili thus the residents source them from other towns such as Bungoma and Kitale. The good transport network in the area facilitates this flow of goods from the planning area.

During field survey, it was established that majority of business owners get their stock outside the planning area. The town is well linked with neighbouring towns facilitating easier transfer of goods and services to and from the area.

4.5.4 Service Mobility and Trade Corridors

The strategic location of the Municipality gives it's a big advantage over other neighbouring towns. The trade and service mobility corridors enhance this advantage by providing the various routes required for flow of goods and services both internally and externally. These trade and service mobility corridors are shown in the map below.



Map 14: Service Mobility Corridors

Source: Simuplan, 2020

4.6 TRANSPORTATION AND COMMUNICATION

4.6.1 Mode of transport

According to field survey, road is the main mode of transport within the Municipality. There are no water, rail or air transport networks within the planning area.

Although some of the roads within the Municipality are being tarmacked, 77% of the residents termed the road conditions as moderate while the remaining 23 % t stated that the roads in poor conditions.

4.6.2 Road Network

The Municipality has an extensive road network comprising of tarmac, murram and earth roads consisting of class C, D and E Roads. Major roads include: - Chwele-Kimilili-Kamukuywa Road, Kimilili-Kapsokwony-Road, Kimilili-Bokoli-Kanduyi Road and Kimilili Misikhu Road. With the exception of the Kimilili-Kapsokwony Road, all these roads are tarmacked. Most of the internal access roads are untarmacked.



Plate 24: Tarmac road -Kimilili to Misikhu



Plate 25: Untarmacked Kimilili Kapsokwony Road

Source: Simuplan fieldwork, 2020

One of main objectives of this plan is to enhance circulation between functional units within the planning area and its neighbourhoods. However, there are numerous challenges in the road network that are a hindrance to the realization of this objective. These challenges include:-

- i. Poor surface road conditions evidenced by pot hole on some roads, Untarmacked roads, impassability of some roads during rainy seasons;
- ii. Narrow roads especially the internal access roads some of which have been encroached
- iii. Encroachment on road reserves by traders;
- iv. Inadequate Non-motorized transport infrastructure
- v. Poor drainage infrastructure
- vi. Structurally unsound bridges such as Daraja mbili

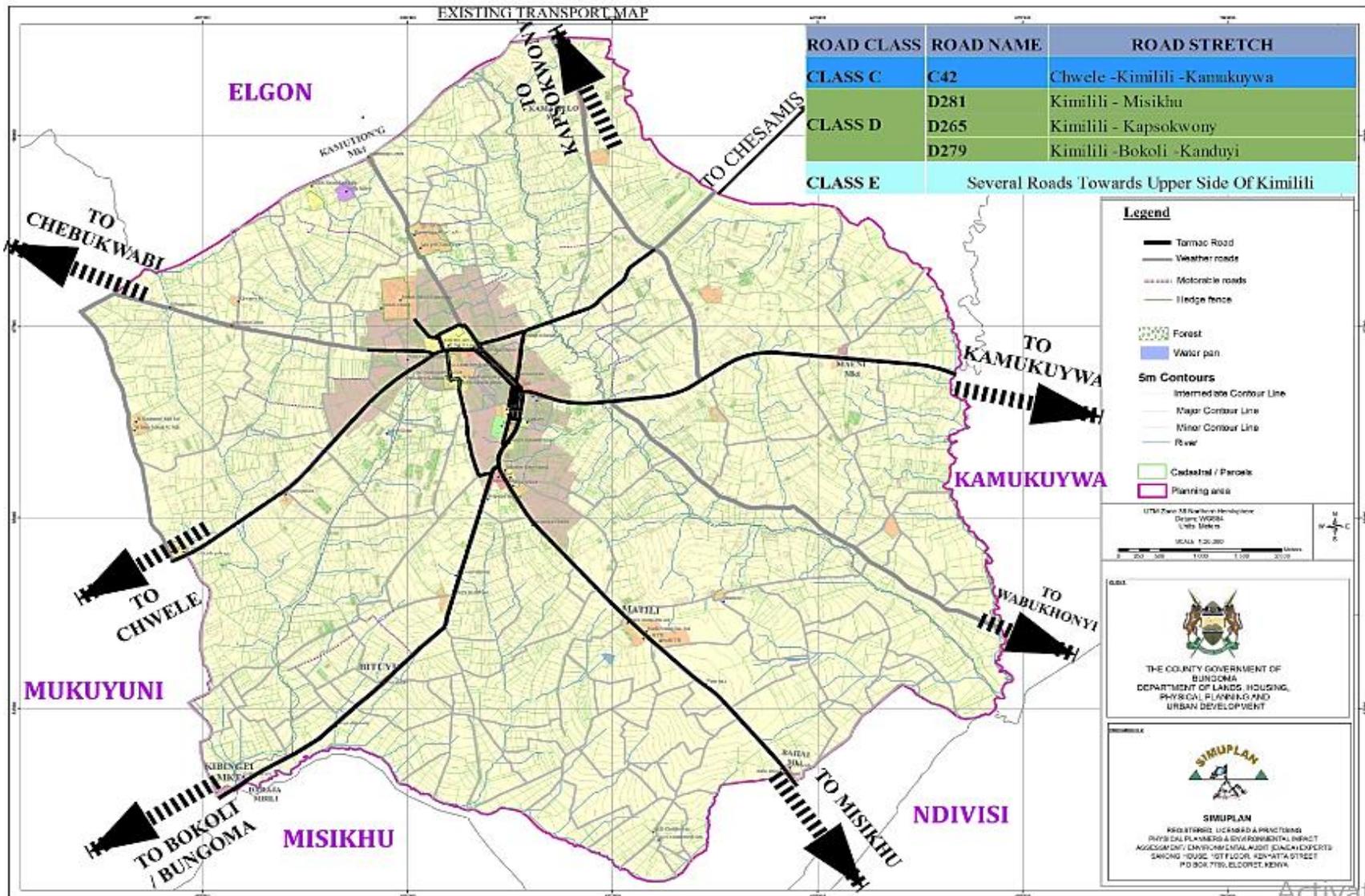
- vii. Inadequate road bumps and signs resulting in accidents. Most of the accidents in the town are caused by Boda Boda riders

The photos below depict some of the above stated challenges.



Plate 26: Road conditions

Source: Simuplan fieldwork, 2020



Map 15: Road Network
Source: Simuplan, 2020

4.6.3 Means of transport

The means of transport in the Municipality comprises of Matatus, motorcycles, bicycles, private vehicles and animal driven carts. From the field survey, it was noted that motorcycles are the most common means of transport for short distances while Matatu and Private Vehicles are used for long distance travelling.



Plate 27: Means of transport in Kimilili

Source: Simuplan fieldwork, 2020

Some of the problems stated by the residents concerning the various means of transport in the Municipality include:-

- Frequent accidents
- Untarmacked bus park
- Lack of Non-Motorized Transport Infrastructure
- Inadequate parking space
- High Fare/Expensive
- Unreliability
- Inadequate Boda Boda sheds
- Poor roads
- Untrained drivers(Especially motorcycle drivers)



Plate 28: Inadequate parking

Source: Simuplan fieldwork, 2020



Plate 29: Undeveloped Bus Park

Source: Simuplan fieldwork, 2020

4.6.4 Non-motorized transport

The Municipality lacks pedestrian infrastructure despite the heavy presence of pedestrian and cyclists in the town. Security for the non-motorized transport users is also very poor as the poor as some parts of the area lack street lighting facilities. There are no designated footpaths within

the planning area and residents tend to traverse the area based on the available short route available and walking along the main roads despite the speeding vehicles.



Plate 30: Lack of NMT infrastructure

Source: Simuplan fieldwork, 2020

4.6.5 Telecommunication

According to the household survey carried out, the main type of telephone communication is the mobile telephone and its coverage for households is above 90 Percent. The town is fairly covered by the three main mobile service providers namely Safaricom, Airtel and Telkom. On the other hand, radio and television are commonly used for mass media.



Plate 31: Communication mast

Source: Simuplan fieldwork, 2020

4.7 INFRASTRUCTURE AND UTILITIES

4.7.1 Water

The water sources in the Municipality comprise of rivers, streams, boreholes, shallow wells, piped water and rain water harvesting. Piped water connectivity in the Municipality is relatively fair with 50% of the residents having piped water connectivity.

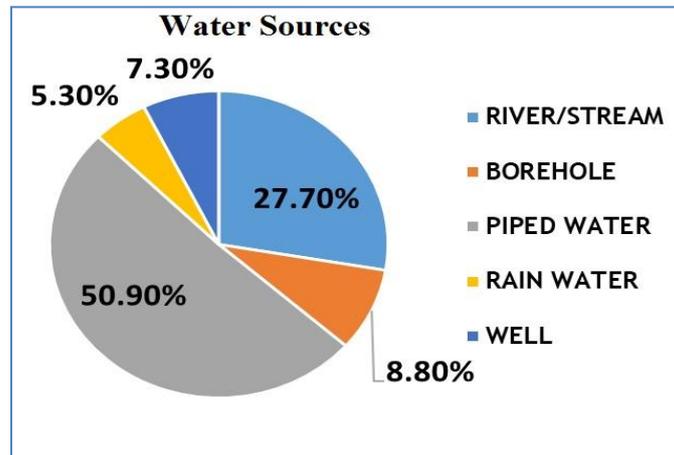


Figure 4.8: Water sources

Source: Simuplan fieldwork



Plate 32: Water sources

Source: Simuplan fieldwork

The Kimilili Water Treatment Plant located at Kamtio'ng supplies piped water to the Municipality through gravity. The location of the treatment plant at the highest point in the Municipality enables the flow of water to town by gravity.



Plate 33: Water treatment plant at Kamutio'ng'

Source: Simuplan fieldwork,2019

The Kimilili water supply scheme is managed by Nzoia Water Services Company (NZOWASCO). The piped water coverage is approximately 51% of the Municipality's population. The water is abstracted from Kibisi River via intake works located approximately 7.5km from Kimilili Town. The raw water is then gravitated to Kamutio'ng Water Treatment Plant located at the foot of Mt. Elgon through three 150mm, 3.2km long each parallel UPVC class 'D' pipelines. The treatment Plant has a design capacity of 5000m³/d and treated water is stored in a 2500m³ ground reinforced concrete clear water reservoir then gravitated to Kimilili town via 250mm and 200mm uPVC parallel pipelines. The distribution network amounts to about 87 km in length, the pipes are a mixture of AC (1.8%), GI (10.2%) and uPVC (88%).

Although the scheme serves majority of the Municipality's population, it is characterized by aged water distribution network that experiences high pressure variations that are attributed to the steep terrain, inadequate and defective system pressure control devices and increased water demand. This has led to: - huge water losses (68% Non-Revenue Water) due to pipeline bursts and leakages; intermittent water supply in the scheme; compromised quality of water supplied and self-financial unsustainability (82% cost coverage) of the scheme.

4.7.2 Waste Management

4.7.2.1 Liquid waste Disposal

From field survey, the Liquid waste is largely disposed through Pit latrines and Septic tanks. This is mainly due to lack of a proper sewer system in the Municipality. On the other hand waste water is discarded through open drains. The Municipality is characterized by poor drainage infrastructure couple with dumping of solid waste in the open drains.

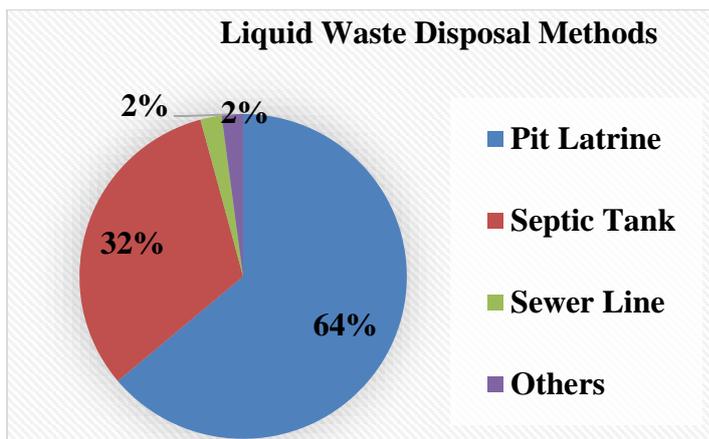


Figure 4.9: Liquid waste disposal methods

Source: Simuplan fieldwork, 2019

The poor drainage infrastructures coupled with undesignated dumping of litters in town have led to poor sanitation in many areas.



Plate 34: Poor drainage infrastructure

Source: Simuplan fieldwork, 2020

4.7.2.2 Solid waste Disposal

Solid waste generated daily within the Municipality especially in the CBD are is generally very high. The waste produced comprises of domestic waste, refuse from commercial enterprises, waste from the farms etc. The main method of solid waste disposal presently in the area is use of compost pits and collection by the county government. Other methods include open grounds and burning as shown in the figure below.

The Municipality does not have a designated dumpsite therefore waste collected is transported to Bungoma County for further processing. The area also has inadequate waste collection bins that are unevenly distributed within the CBD area. A large percentage of the residents indicated that while in the CBD area, they usually lack areas to dump their

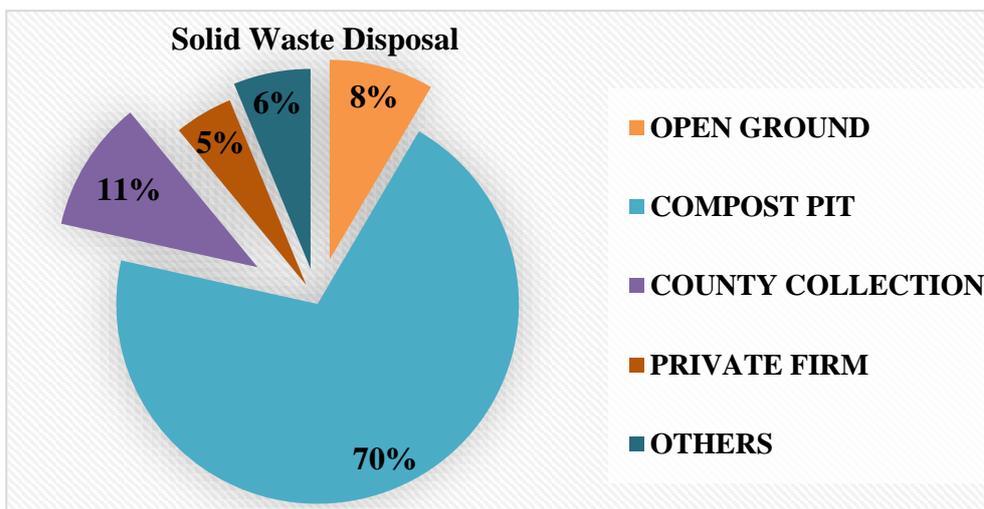


Figure 4.10: Solid and Liquid waste disposal in Kimilili

Source: Simuplan fieldwork 2020

The bigger percentage of the residents lack where to dump their generated wastes. This has resulted into dumping of wastes in undesignated areas within the the CBD area as well as in the residential estates.



Plate 35: Poor solid waste management

Source: Simuplan fieldwork 2020

4.7.3 Energy

The main sources of energy within the municipality are firewood, charcoal and electricity. During field survey, 91% of the respondents stated that they are connected to electricity which indicates that access to electricity is relatively good in the Municipality.

Despite the government issued ban on cutting of trees, firewood is still the most energy source used for cooking.



Plate 36: Energy sources

Source Simuplan field work, 2020

From the field survey, it was noted that there is limited use of renewable energy such as solar and biogas. Other notable challenges include:

- Expensive and unreliable energy sources;
- Limited use of green energy sources;
- Limited electricity connectivity especially in the rural areas
- Increased health risks associated with burning wood and petroleum products
- Existing ban on use of charcoal and firewood

4.8 SOCIAL INFRASTRUCTURE

4.8.1 Health

The planning area has adequate health facilities that are evenly distributed. Some of the health facilities in the noted include: Kimilili Sub County hospital, Bahai Memorial hospital and IcFEM Dreamland Hospital. The Municipality also has private clinics, Chemists and Pharmacies that are evenly distributed majority of which are centrally located in the CBD area. All the residents stated that they have adequate access to health facilities.



Plate 37: Existing health facilities

Source Simuplan field work, 2020

Some of the challenges being experienced in the health sector include;-Lack of medical supplies and equipment, understaffing and unaffordable medical services.

4.8.1.1 Cemetery

The municipality has only one cemetery which is not ideally located and also it is also small in size. The Cemetery is not protected it is being intruded by grazing animals which portrays improper use of the facility.



Plate 38: Public cemetery

Source: Simuplan fieldwork, 2020

4.8.1.2 Public Library

The Municipality has one community library located in the CBD area under the management Kenya Library Services. This is an important facility for the public as it enables them get information on national matters, daily newspapers and research papers.



Plate 39: Public library

Source: Simuplan fieldwork, 2020

4.8.1.3 Religious Institutions

There are adequate places of worship within the Municipality representing various denominations including Catholic churches, SDA, Friends church and mosques. Majority of the residents stated that they have adequate access to these facilities.





Plate 40: Religious facilities

Source: Simuplan fieldwork, 2020

4.8.1.4 Law Courts

This is where the general public can be served with judicial services and handling of criminal offences, land cases amongst many other offences are handled by the law court. The Municipality has one judicial law court that serves the Municipality with other neighbouring regions.



Plate 41: Kimilili Law Courts

Source Simuplan fieldwork 2020

4.8.1.5 Administrative offices

The town is the headquarters for Kimilili Sub County thus there are various administrative offices including Ministry of interior and coordination of National government, deputy County commissioners', Kimilili municipal office among many other offices.



Plate 42: Kimilili Sub County Offices

Source: Simuplan fieldwork, 2020

4.8.2 Education

Kimilili Municipality boasts of being the home of best schools in western region. This reputation is evidenced by the performance of the secondary and primary schools located in the Municipality such as Friends School Kamusinga.

The number of ECDs, Primary, secondary Schools and TTI is fairly adequate and they are evenly distributed with all the respondents interviewed stating that they have adequate access to these facilities. However, there is need to provide a university in the Municipality to cement its identity as an educational hub and also increase the transition rate from the secondary school to universities.

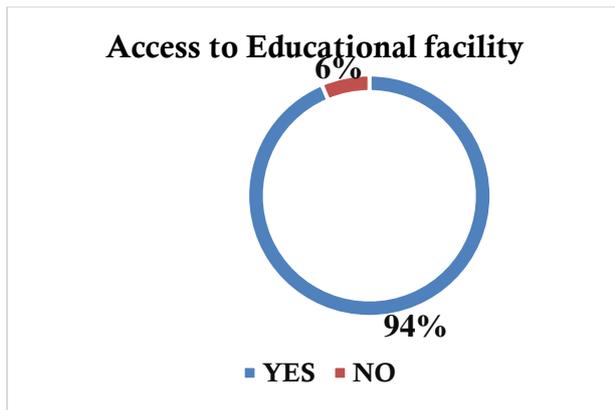


Figure 4.11: Access to educational facilities

Source: Simuplan fieldwork, 2020

Some of the schools found in the Municipality include: - Friends School Kamusinga, Moi Girls Kamusinga, Kamusinga AC, Kimilili FYM primary school, Friends Girls secondary school, St. Emmanuel high school & primary school, St. Lukes boys Kimilili, St. Joseph Kimilili primary school, Our lady of Lourdes RC Girls, Bituyu primary and Secondary, Phim School, Matili friends Primary and secondary, Matilili TTI among others.





Plate 43: Educational facilities

Source: Simuplan fieldwork, 2020

4.8.3 Recreational Facilities

The Municipality has only stadium known as Amutalla Stadium located close to St. James ACK Church. It was observed during field survey that the Stadium is in very poor condition. This is evidenced by: lack of perimeter wall, worn-out track lines, very small undeveloped podium and lack of indoor games infrastructure and equipment.

The Municipality also has various playfields in the Municipality most of which are found within the existing learning institutions.



Map 16: Amutalla Stadium -Source: Simuplan, 2020

Source: Simuplan, 2019

Kimilili Municipality has one green garden along C42 road within the CBD. The space is very small and there is no beautifications have been done on the park. The space has currently been encroached by hawkers and traders



Map 17: Green Garden Park

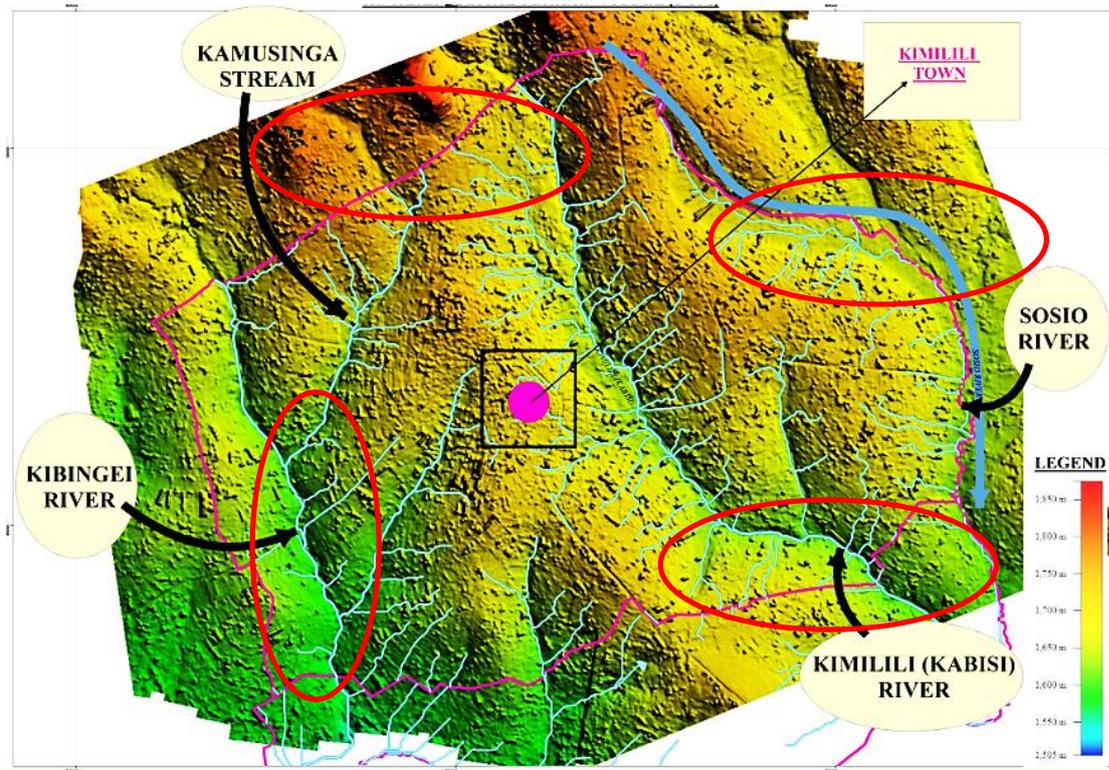
Source: Simuplan, 2020

4.9 ENVIRONMENTALLY FRAGILE AREAS

4.9.1 Rivers

The Municipality has three major rivers namely: - Kibisi, Kibingei, and Sosio. These rivers ensure adequate water supply in the Municipality. However, the rivers face numerous challenges including: Encroachment into river riparian; excessive diversion of water for

agricultural purposes; water pollution; severe climatic conditions such as drought and siltation and sedimentation of rivers.



Map 18: Environmentally Sensitive areas

Source: Simuplan, 2020



Plate 44: Encroachment into riparian reserve



Plate 45: Excess water abstraction

Source: Simuplan fieldwork, 2020



Plate 46: Siltation and sedimentation in rivers

Source: Simuplan fieldwork, 2020

4.9.2 Marshy Areas

The planning area is also characterized by marshy areas which emerge as a result of physiographic, geological and human related characteristics which make water accumulate and stagnate in certain areas. It has been noted that most of these areas seem to experience increased human activity and influence that threatens their existence.

Most of the marshy areas are under agricultural land use and residential (settlement) land uses. Some are used as grazing grounds for livestock, brick making rounds, water abstraction as well as recreation purposes.

Such areas are unsuitable for building sites hence the need for intervention by the concerned authorities to prevent further deterioration of these ecosystems. It also calls for intensive community education on importance of such ecosystems in sustaining human function.

5 CHAPTER FIVE:EMERGING ISSUES

This chapter provides a summary of sectoral emerging issues as obtained from the situational analysis of the planning area. It analyses the issues that will be considered in the development of an all-inclusive Local Physical and Land Use Development Plan for Kimilili Municipality.

5.1 SECTORAL EMERGING ISSUES

Below are some of the emerging issues within each sector

5.1.1 Land and Land use

- Agriculture is the main land use
- Massive land subdivisions caused by high level of speculation, rapid population increase & land inheritance have taken place within the municipality resulting to uneconomical land sizes.
- Enforcement of development control regulation on freehold land is challenging since most of the land in the municipality is held under freehold tenure
- Public purposes land mainly concentrated in the CBD area. There's limited space for expansion of public purpose facilities.

5.1.2 Housing and Human Settlement

- Presence of conflicting housing typologies mainly in CBD area
- Temporary structures with poor basic infrastructure are found in the outskirts of CBD area;
- Uncontrolled expansion of the town into rich agricultural lands
- Uncontrolled human activities are a threat to environmental sustainability
- Poor basic infrastructure in the housing settlements-lack of sewer, inadequate water supply, poor access roads etc.
- There's a growing demand for housing in the Municipality

5.1.3 Trade, Economy and Livelihoods

- Undiversified economy
- Overreliance on rain fed agriculture
- Encroachment by traders on road reserves especially during market days.
- Diminishing agricultural lands
- Poor road conditions that hinder movement of goods and services especially from hinterland to market area leading to low returns to traders.

- Competitive market as many Kenyans prefer importing cheap goods from Uganda via Lwakhakha to neighbourhood market centres like Chwele.
- Poor market infrastructure like refrigerators and marketing skills thus affect perishable goods and traders make losses in the long run.
- Exploitation by middlemen
- Fluctuating market prices
- Middlemen business disorient the proper market channel of Farmer/producer – buyer chain of business hence affect the commodity prices
- Traders uncomfortable of high taxes levied by the county government
- Limited access to capital

5.1.4 Transportation

- Major transport routes within the town have no Non-Motorized Tracks (NMT) infrastructure thus posing more risk to pedestrians.
- Unpaved Kimilili Bus Park
- Poor drainage facilities along major roads
- Pot-holes on some of the major roads especially Kimilili – Bokoli road
- Narrow roads due to encroachment by human activities
- Impassability of some roads during rainy season
- Structurally unsound bridge-Daraja mbili

5.1.5 Utilities and Infrastructure

- Water rationing
- Poor water quality unsafe for drinking especially during rainy season. This is mostly experienced by people using river as their main sources of water.
- Undesignated dumping of generated solid waste resulting from irregular collection of garbage, far inadequate dumpsite facility.
- No sewer system and oxidation pond (Majority of the residents use septic tanks and pit-latrines)
- Draining of waste water into open grounds due to lack of sewer system
- Inadequate designated waste collection bins
- Limited use of energy saving technologies
- Expensive energy sources (Gas) and it is mostly attribute by the existing ban on use of charcoal and firewood
- High internet charges

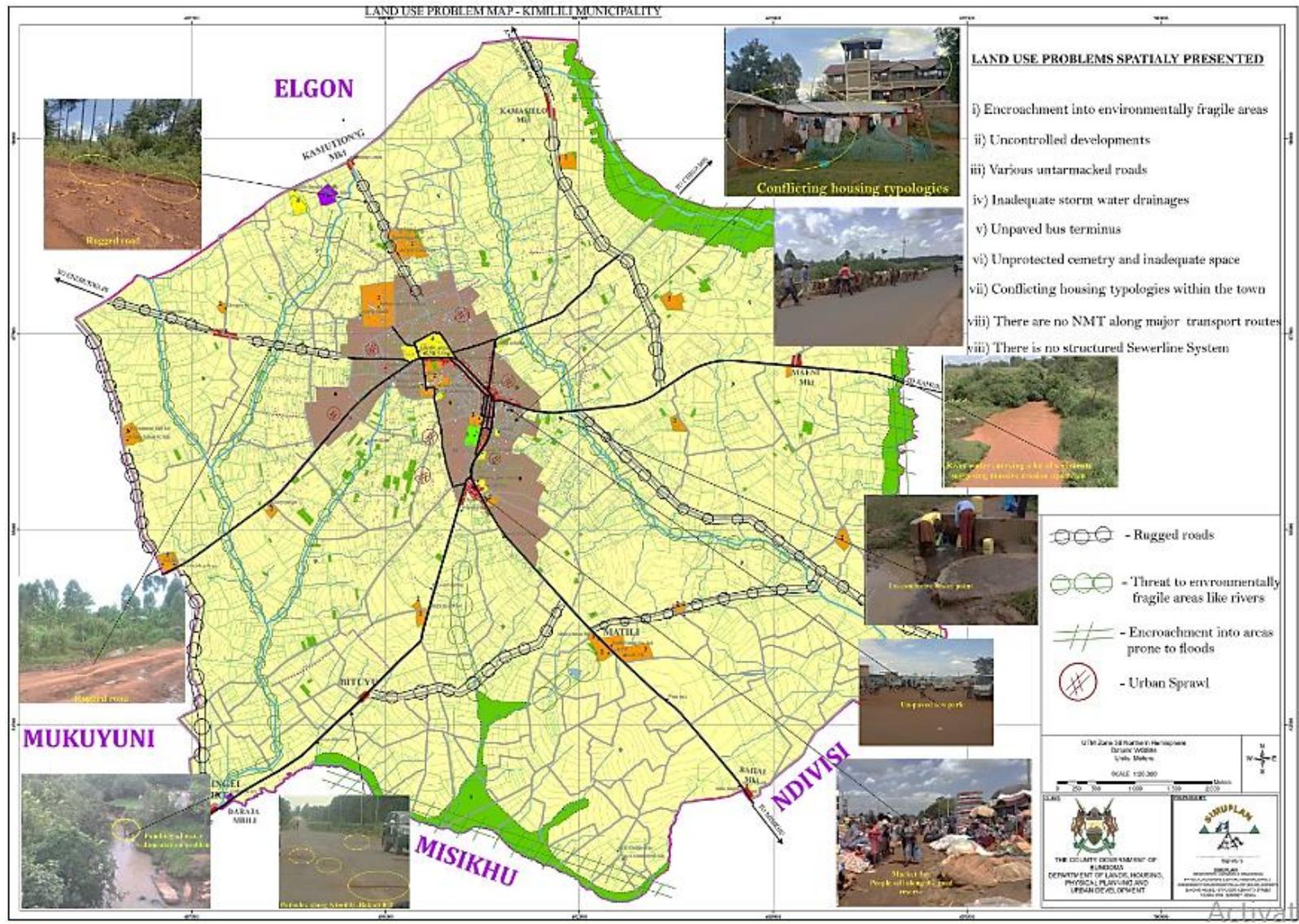
- Power interruptions in some areas
- Poor telecommunication network coverage in some areas

5.1.6 Social Infrastructure

- Poorly located Cemetery with inadequate space to serve the Municipality
- Lack of a Social hall
- Majority health facilities have inadequate infrastructure and inadequate staff
- Amutalla stadium is undeveloped and the space is inadequate compared to standards of an ideal stadium
- Open green space i.e. Katiba garden is small and aesthetic beautification have not been done
- Overcrowding and congestion in existing educational facilities
- There's a growing demand for a tertiary/college in the Municipality
- High charges on school fees especially for the private schools
- Some Public primary schools are poorly staffed
- Poorly equipped schools in terms of structures and facilities

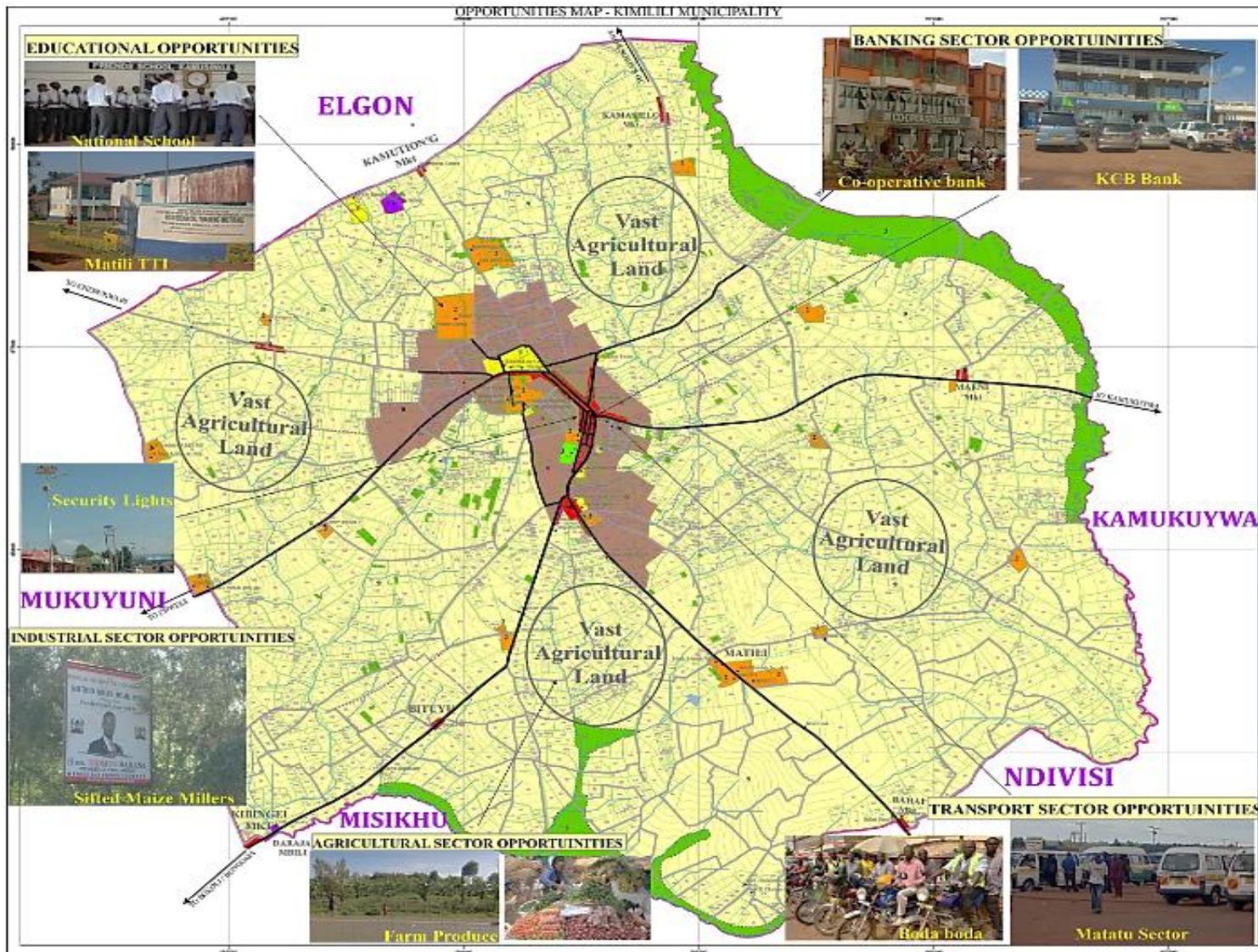
5.1.7 Environment

- Poor waste management both liquid and solid wastes within the municipality
- Encroachment into riparian reserves.
- There is no complete treatment of effluents from the existing coffee factories which are then discharged into the aquatic environment.
- Soil erosion due to poor land use practices as evidenced by dirty water in most rivers in the area.
- Flooding in some areas of Kibingei, Nasusi whereby there is confluence of two rivers.
- Contamination of water sources by the practices of liquid waste disposal like use of pit latrines and substandard septic tanks.
- No waste recycling mechanism approaches initiated
- Separation of wastes at source is still a major challenge



Map 19: Spatial planning problems analysis

Source: Simuplan, 2020



Map 20: Opportunities map

Source: Simuplan, 2020

Some of the opportunities observed include;

- ❖ Banking sector opportunities i.e. existence of Kenya's top banks for instance KCB and Cooperative and various micro-finances.
- ❖ Good schools - Existence of Kenya's top performing schools for instance Friends school Kamusinga.
- ❖ Vast agricultural land which is the major source of livelihood to larger population can be a great opportunity with best farming practices.
- ❖ Matatu and Boda boda sector is another opportunity when handled with existing transport guidelines.
- ❖ The strategic location of Kimilili town on the Lwakhakha – Chwele – Kitale corridor is a great opportunity for the growth of town.

6 CHAPTER SIX: ZONING POLICIES & GUIDELINES

Overview

Having identified the various emerging issues in the previous section, various approaches were recommended to mitigate them. Therefore, this chapter presents the proposed zoning policies for the Municipality that will steer the development of the Municipality in the right direction.

Zoning policies

According to the Physical Planning Handbook, zoning refers to the designation and control of the use of land. It involves segregation of parcels of land or acres of an area in a physical development plan and ascribes to them broad classifications of appropriate use for example, residential, industrial, educational, commercial, etc.

From the situational analysis, it was established that physical planning in the Municipality has been adversely affected by weak enforcement of development control measures and lack of up to data spatial plans. Therefore proper zoning guidelines are required to help steer the growth of the Municipality in the right direction. These zoning guidelines provided the necessary standards and guidelines for the different development proposals.

6.1 ZONE CLASSIFICATION AND PLANNING COLOURS

According to the Physical Planning Handbook, 2007, all land uses are classified into ten groups, each of which is represented by a use class code number and colours as follows:

Table 5: Zoning classification and planning colours

No.	User	Colour
0	Residential	Brown
1	Industrial	Purple
2	Education	Orange
3	Recreation	Green
4	Public Purpose	Yellow
5	Commercial	Red
6	Public Utility	Blue
7	Transport	Grey
8	Deffered / Undeveloped land	Pale yellow
9	Agriculture	Pale yellow

Source: Physical Planning Handbook, 2007

The land use zone which relates to a land use class is therefore identified by the land use class number and colour and if necessary a sub reference number to differentiate it from other separate land use zones with the same land use class number.

The proposed plan for Kimilili Municipality aims to:

- Minimize development within areas of the best agricultural lands to preserve critical masses of farmland
- Locate higher-density development near CBD area.
- Encourage the development of sufficient commercial, office, and residential space to meet the needs of the existing and projected population.
- Provide incentives for increasing the use of the existing mixed-use & mixed density regulations to promote more efficient, compact nodes of development.
- Promote the provision of recreational opportunities within walking distance of all housing developments.
- Encourage the development and implementation of an aggressive program to preserve agricultural uses in those areas identified for permanent agricultural zones.
- Discourage subdivision of land and maintain the minimum of 2.5 acres in rural area and minimum of 0.045 ha in urban centres
- Conserve areas with scenic interest, marshy areas etc so that they are considered in the development of parks and open space areas.
- Promote open space connectivity by establishing standards for the provision of recreational amenities servicing commercial, industrial, and office projects.
- Encourage Bungoma County Government to facilitate adequate and economical administration/implementation of development codes and zoning ordinances proposed in the plan.
- Explore the Public Private partnerships to share the costs and benefits of new developments in the area.

6.2 APPLICABLE ZONING POLICIES

The following zoning policies were applied when coming up with the land use proposals for the Municipality:-

6.2.1 Residential Development Policy Proposals

Table 6: Residential Zoning policies

Type of residential development	Detached	Semi-detached	Row
	Minimum frontage % in Meters		
Informal settlement rehabilitation	70	75	75
Low cost housing	70	75	75
Normal housing	60	60	70
Minimum Plot size			
Informal settlement rehabilitation	223.2m ²	148.8m ²	111.6m ²
Low cost housing	334.8m ²	223.2m ²	167.4m ²
Normal housing	465m ²	309.7m ²	232.5m ²
Maximum plot coverage in % Meters			
Informal settlement rehabilitation	50	65	65
Low cost housing	50	60	65
Normal housing	40	50	60
Minimum plot set-back in Meters			
	Front	Side	Rear
Informal settlement rehabilitation	2.5	1.5	3
Low cost housing	3	1.5	4.5
Normal housing	6	3	4.5

Source: Physical Planning Handbook, 2007

6.2.2 Commercial Development Zone Policy Proposals

- ♣ Zone the area and create space for open air market at an appropriate location
- ♣ For commercial developments along the major roads, building lines should be observed where roads range between 6-18 meters wide the building line shall be 6 m. for any roads above 18m the building line shall 9m.
- ♣ Commercial plots should be at least 4 – sided: allocate 0.025 hectares plot size

- ♣ Plot length versus the width should not be more than 1:3
- ♣ Allow 25% plot coverage
- ♣ Designate sites suitable for Kiosks to cater for hawkers and small scale trader's e.g. adjacent bus parks, open air markets institutions –: Minimum size of a kiosk to be 3m by 3m.
- ♣ Creation of parking for buses/matatus, lorries, motorcycles: For every 100m² of land in the commercial zone a minimum of 1 1/2 parking space
- ♣ Get rid of old and dilapidated sheds and provide new ones in the markets
- ♣ Hotels and restaurants: allocate a minimum of 0.2 Ha and provide tourist class services

Commercial Zone Outdoor Advertising Policy

Types of advertisements covered under the outdoor advertising policy include:

Facilities covered under the outdoor advertising policy include

- ♣ Billboards/ Wall wraps/ Sky signs/ City clocks/ Sign boards/ Suburb signs/ Banners/ Posters / Hand bills/Fliers
- ♣ Branded umbrella / Street displays/ Multi motion neon signs /LED screen advertisement
- ♣ Advertisements on canvas/ canopy/Signs above /sitting on canopy (Illuminated /Non Illuminated)
- ♣ Sky signs/ Wall wrap 20 Ft above the ground and over properties
- ♣ Advertisement by loudspeaker (P. A system) per day
- ♣ Advertisement on hoarding/Street light pole advertising
- ♣ Business encroachment within street pavement/ shop corridors (Canopies).
- ♣ Wall painting adverts on temporary premises (Kiosks, litter bins.

Commercial zone advertising policy proposal

Table 7: Commercial Zone advertising proposal

Advert Type	Requirements
Billboards	<ul style="list-style-type: none"> • Billboards are not allowed on road reserves. • A distance of 150 m to be maintained between billboards. • Colors of billboards to conform to those of adjacent areas. • Billboards to have a height of 5 M above ground.

	<ul style="list-style-type: none"> • Standard billboards to have a size of 12 x 10 M • Big billboards (20 x 10 m and 10 x 30 m) to be put up in the outskirts of the town. • Billboards not to hang on road reserves • Billboard applications be accompanied by structural drawings
Sky signs	<ul style="list-style-type: none"> • To be 12 ft above the ground. • Structural integrity report of buildings to be mounted with the structures to be submitted by registered engineers. • Structural drawings for the proposed advert be submitted to the county government
Wall wraps	<ul style="list-style-type: none"> • To be affixed on a wall. • Not to exceed the height of the wall. • Colors of advert to conform with color of the building on which structure is mounted.
Hoarding	<ul style="list-style-type: none"> • To be undertaken along the perimeter fence of construction sites. • Advertising agencies to submit copies of approved building plans for construction on site.
Others	<ul style="list-style-type: none"> • To be presented to the county government for approval.
Penalties	<ul style="list-style-type: none"> • To be determined by the County government • Charges for collection of illegal signboards and other displays per item • Penalty for non-payment advertisement fees

Source: Physical Planning Handbook, 2007

6.2.3 Heavy Industries Policy Proposals

- ♣ Minimum land size of 20 Ha for a catchment population of over 1 million
- ♣ Fencing off the areas and create a buffer zone around the industrial parks 0.045 Ha within commercial zone.
- ♣ Zoning and allocate them in an area away from Residential areas
- ♣ 15 m setback from the roads
- ♣ Building line of 6m
- ♣ Roads Access-18m
- ♣ Acceleration and deceleration lanes-100m stretch
- ♣ No direct entry to property
- ♣ The percentage allocation of land in an industrial area/estate may be as suggested below, depending upon the type of industries and the extent of the industrial area/estate.

(a) Workshops50-55%

- (b) Organized open space 10-15%
- (c) Utilities, services of facilities20-25%
- (d) Roads, parking lots15-20%
- (e) Others5-10%

6.2.4 Light Industries Policy Proposals

- ♣ Minimum land size of 0.05 Ha for a catchment population of 30,000 persons
- ♣ Fencing off the areas
- ♣ Create a 15-30 m buffer zone around the industrial
- ♣ Provide space for Jua Kali industries in the proposed sites
- ♣ 9 m setback from the roads
- ♣ Building line of 6m
- ♣ Roads Access-12m
- ♣ Acceleration and deceleration lanes-100m stretch
- ♣ No direct entry to property

6.2.5 Educational Zone Policy Proposals

Table 8: Educational Zone Policy Proposals

INSTITUTIONS TYPE	LAND REQUIREMENTS	PLOT COVERAGE	OTHER REQUIREMENTS
Early Childhood Development Centers	Minimum 0.1 ha	35%	<ul style="list-style-type: none"> ♣ Locate within residential neighbourhoods ♣ Not to be accessed from a major road exceeding 15m ♣ Not on high rise buildings exceeding two levels ♣ Not within a commercial and industrial area/premises
Nursery schools	Minimum of 0.1 ha Single stream(0.1 ha) Double stream(0.15 ha) Triple stream(0.25 ha)	15%	<ul style="list-style-type: none"> ♣ Locate within residential neighbourhoods ♣ Not to be accessed from a major road exceeding 18m ♣ Not to be accessed from a public transport road route ♣ Not in a designated commercial area ♣ Not on high rise buildings exceeding one floor
Primary schools	Min 3.25 ha (combined with a nursery)	10%	<ul style="list-style-type: none"> ♣ Within a residential neighbourhood ♣ Have an access road of a minimum of 12m

	Single stream(1.2 ha) Double stream(2.0 ha) Triple stream(3.0 ha)		<ul style="list-style-type: none"> ♣ tuition blocks building height not exceeding 3 levels ♣ Not within 100 m of a liquor outlet ♣ Accommodation for subordinate and key staff for boarding schools ♣ Co sharing of facilities is allowed ♣ Vertical development is encouraged for optimal land use
Secondary schools	Single stream(3.5 ha) Double stream(4.0ha) Triple stream(4.8ha)	10%	<ul style="list-style-type: none"> ♣ Fronting a minimum of 15 m road ♣ Not within 100 m of a liquor outlet ♣ Tuition blocks building height not exceeding 3 levels ♣ Co-sharing of facilities is allowed ♣ Accommodation for subordinate and key staff for boarding schools
Tuition centers	0.045 ha	50%	<ul style="list-style-type: none"> ♣ Within residential areas
Special institutions	Minimum of 0.1 ha	10%	<ul style="list-style-type: none"> ♣ Within major primary schools in the area ♣ Fronting a minimum of 12 m road

Source: Physical Planning Handbook, 2007

6.2.6 Recreational Zone and Environment Conservation Policy Proposals

- ♣ Minimum of 10% of agricultural land to be under trees;
- ♣ Plant street trees along all roads in the in intervals of 6, 9, 12 or 15m;
- ♣ Minimum of 30m riparian reserve on rivers and water bodies;
- ♣ 30m Buffer and fence around all public forests;
- ♣ Restrict settlement and development on environment fragile areas;
- ♣ A waste receptacle bin in every 100m along the roads in the market centres;
- ♣ A waste collection point in every neighborhood;
- ♣ Plant ornamental indigenous trees on the riparian reserves;
- ♣ Restrict planting of eucalyptus trees;
- ♣ A waste receptacle bin for 2 shops in the commercial zone;
- ♣ 1.5m wide covered storm water drains in the commercial zone;
- ♣ Paved roads and streets in the commercial zone;
- ♣ Enforce NEMA standards on noise pollution;
- ♣

6.2.7 4.2.8 Transportation Policy Proposals

- ♣ Restrict illegal stops along the main corridors;
- ♣ Restrict developments on way leaves and road reserves;
- ♣ Roads reserves:
 - International trunk roads and highways; Class A: 60m;
 - National trunk roads; Class B: 40m;
 - Primary roads; Class C: 25m;
 - Secondary roads; Class D: 20m;
 - Access and minor roads; Class E: 12-18m;
 - Foot paths 7m-9m;
- ♣ Provision of parking:

Table 9: Provision for parking proposals

Land use/development	No. of Parking
Residential	
3-4 b/rm flats	1 Parking bay for each flat
2 b/rm flats	1 parking bay for each 2 units
1 b/rm flats	1 Parking bay for each 4 units
Town houses	1 Parking bays for each unit
3-4 b/rm bungalow/maisonnette	1 parking bay per unit
2 b/rm bungalow/maisonnette	1 parking bay for 2 units
1 b/rm bungalow	1 Parking bay for 4 units
Industrial	1 Parking for every 10 workers
Hospital	1 Parking bay for 5-10 beds
Hotels/ guest houses	1 Parking bay for 5-8 beds
Commercial plots > 0.1ha /Office space	1 Parking bay per 1000 sq. ft
Commercial plots < 0.1ha	1.5 parking space for 100m ²

♣ Non-Motorized Transport facilities:

- A minimum width for sidewalks is 1.5m on local streets and 2m for Major roads
- A minimum width for cycle path is 1.5m
- Vertical clearance must be a minimum of 2.1m.
- A cross slope must not be greater than 2% but must allow for adequate drainage.

6.2.8 Agricultural Zone Policy Proposals

- ♣ Feeder roads to agricultural plots: 9m, 12m or 15m;
- ♣ Practice agro-forestry
- ♣ 10% of agricultural land to be under trees;
- ♣ Plant trees that have economic value (such as fruit trees) to cater for the minimum threshold;
- ♣ Conserve soil through good husbandry;
- ♣ Minimum of 7m access road to farm lands;
- ♣ Restrict planting of eucalyptus or tree species that have similar characteristics;
- ♣ Minimum Plot size-2 acres;
- ♣ Growth of tree species with economic value such as mangoes to cater for the 10% tree cover in the farms;
- ♣ Minimum of 1 Ha subdivision of agricultural land near water bodies;

7 CHAPTER SEVEN: DEVELOPMENT ALTERNATIVES

Based on the aforementioned emerging Sectoral challenges as identified in the situational analysis and stakeholder engagement, various development scenarios emerge. These scenarios include:-

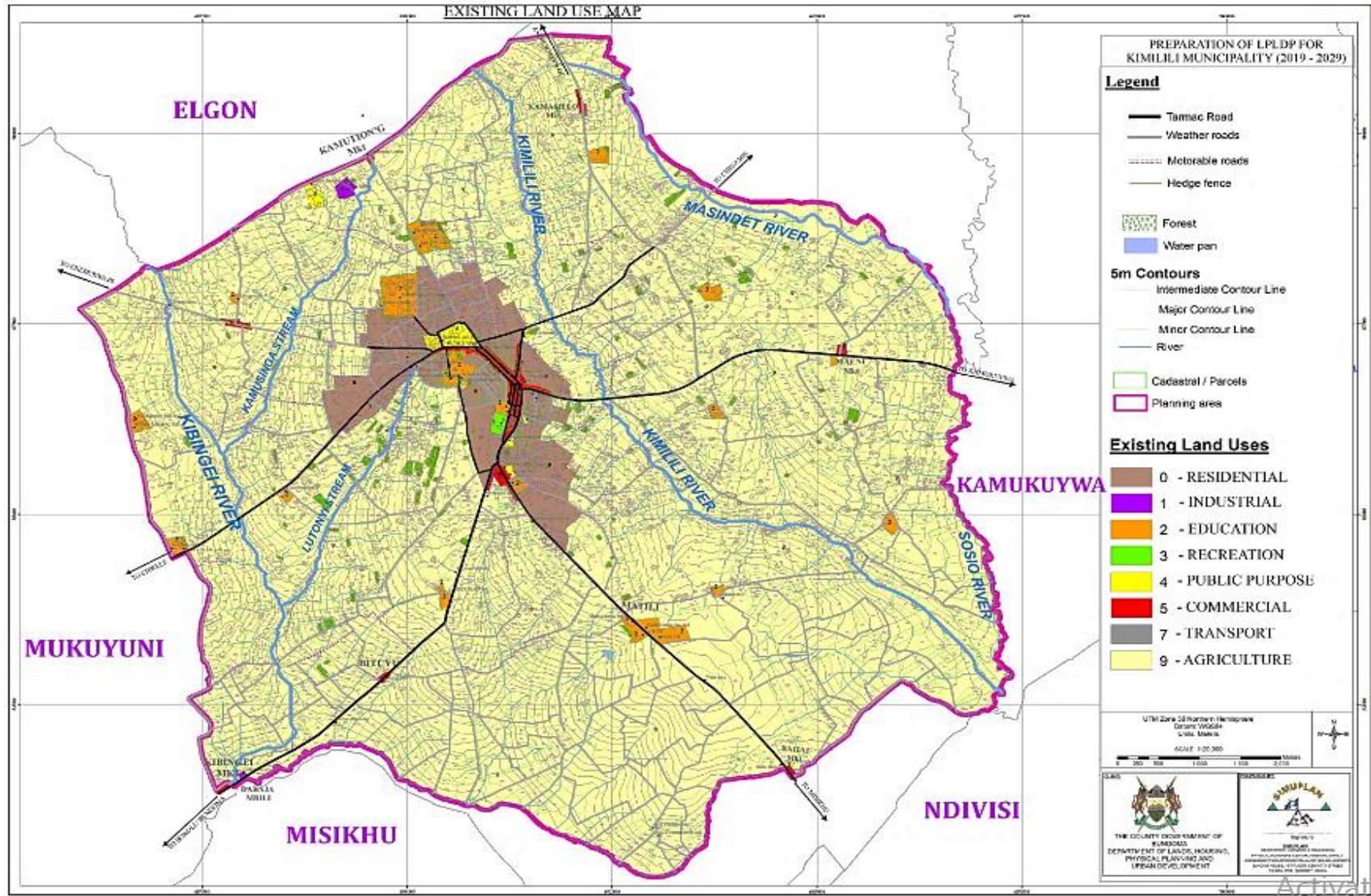
- Nil Intervention Alternative
- Full Plan Implementation Alternative.

7.1 THE NIL INTERVENTION ALTERNATIVE

This alternative maintains the status quo such that there will be no significant changes and yet the stakeholders will still achieve their development priorities during the planning period. The scenario implies Kimilili Municipality spatial structure will not undergo any major changes during the planning period. The advantage of this scenario is that there is no defined direction of growth therefore development takes a laissez-faire approach and it is also less bureaucratic.

The option however comes with a number of disadvantages which include:-

- no defined direction of growth for the Municipality;
- shrinking agricultural land;
- difficulty in service provision due to urban sprawl;
- mushrooming of urban nodes with undefined urban growth limits and functions;
- incompatibility of land uses;
- environmental sustainability;
- not easy to set as stakeholders have varying priorities
- lack of collaboration in development



Map 21: Nil Intervention

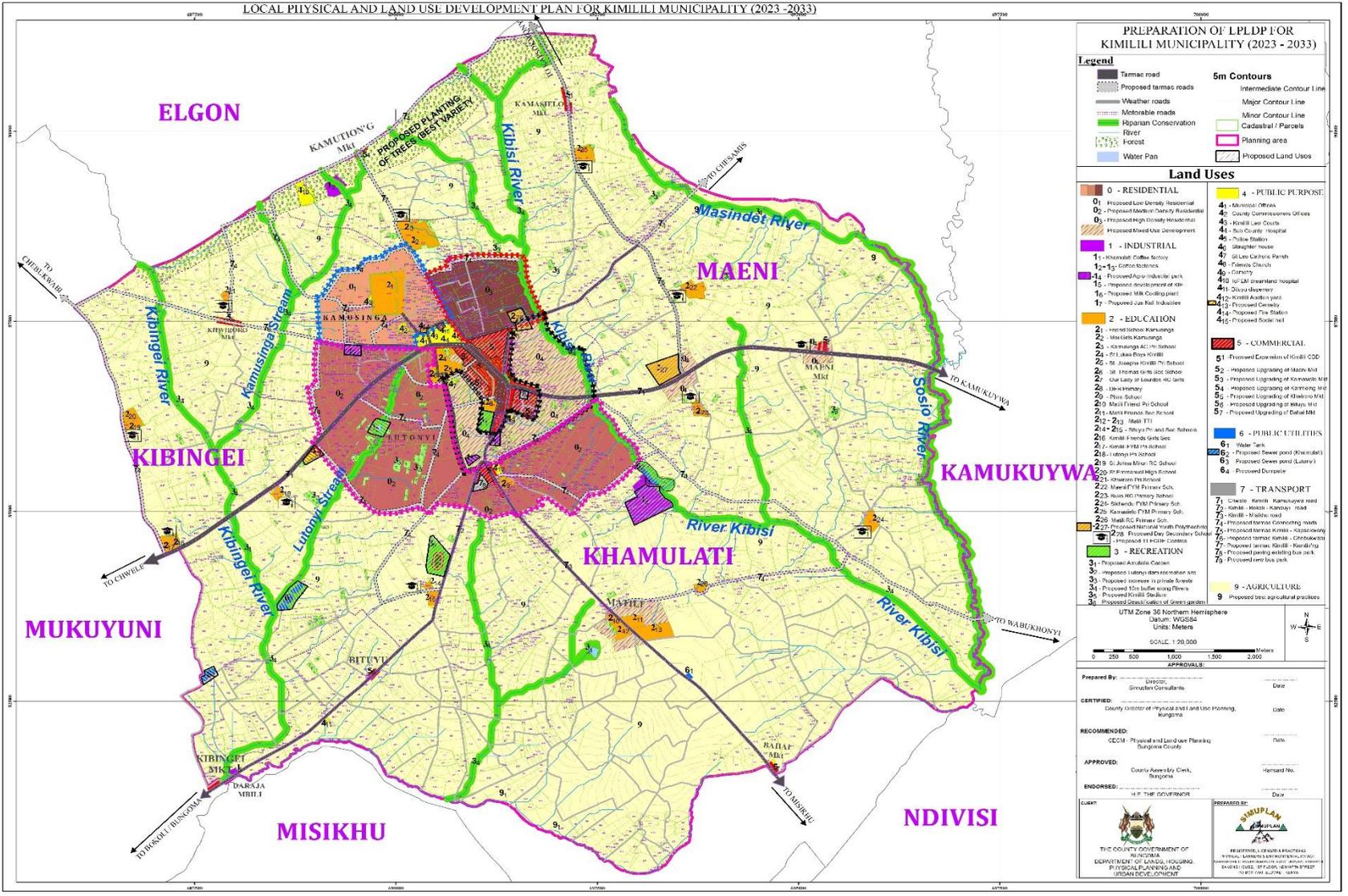
Source: Simuplan, 2019

7.2 PREFERRED DEVELOPMENT ALTERNATIVE

This alternative provides a comprehensive and sustainable Physical and Land Use Development Plan for Kimilili Municipality geared towards implementing the Municipality's sectoral needs. It adopts an integrated approach to development by prioritizing the needs of the Municipality and devising appropriate strategies for their implementation.

This alternative focuses on compact development model where developments are concentrated in the urban area leaving the hinterlands to flourish as agricultural lands. The alternative has the following benefits:-

- Protection of the rich agricultural lands
- Limits Urban sprawl
- Limits linear development along the major transportation corridor
- Improving quality of livelihood for urban residents
- Controlled development within the urban core
- Emphasis on vertical development and minimizing horizontal spread.
- Promotion of functional urban form
- Sustainable economic livelihoods
- Strong agro-industrial development
- Proper waste management and sewer system provision
- Improved infrastructure and road network circulation



Map 22: Preferred alternative

Source: Simuplan, 2023

7.3 LAND USE PROPOSALS

7.3.1 Residential Land Use

The current scenario in the Municipality indicates that there are no clear cut residential zones as evidenced by the conflicting housing typologies that have been clearly depicted in the situational analysis. Therefore, the proposed recommends that a clear zoning of residential areas with much emphasis on density, type and standards and guidelines for the developments.

The proposed residential land use covers an area of 687.94Ha. The proposed residential zones takes into account the existing residential land uses, compatibility with surrounding land uses as well as future housing demands in the Municipality. The residential zone is divided into three different zones based on the density of developments namely: - low, medium and high density residential areas.

A) Low density residential areas

The plan recommends low density residential developments around Kamusinga area on the North Western part of the CBD area. The total area earmarked for low density residential development is approximately 114.05 Ha. The plan also recommends low density residential developments on the larger rural hinterland in order to further enhance agriculture as the economic driver of the Municipality. Population density in these areas are expected to range from 10-20 dwellings per ha. Recommended housing typologies in these zone include bungalows and maissonettes.



Plate 47: Low density residential Housing typologies

Source: Simuplan, 2020

B) Medium density residential areas

The plan proposed that the southern side of Kimilili CBD area such as Lutonyi to be zoned for medium density residential. This will comprise of low cost housing developments that will

house the relatively low-income households. Housing typologies are recommended to be Maisonettes and Bungalows, High end apartments. The following standards shall apply.

Table 10: Medium Density Residential standards and housing typology

Recommended Housing Typologies	No. of Dwelling per Hectare	Space Allocation per Dwelling (m ²)
Bungalow Detached	16	500
Semi Detached And Row Housing	32	333
Multi-Family Dwellings	60	167.2

(Source: Physical Planning Handbook, 2007).

The plan proposes that residential plots to be maintained at a minimum of 0.1ha, maximum plot coverage of 50% and plot ratio of 1:3. Building setbacks is recommended to be 6m front, 2m side and 1.6 m rear. The maximum building length for multi-dwelling buildings that face the street shall be 30m. This maximum length can increase to 60m if a courtyard or other shared open space is provided in order to create a break in the building wall. This open space shall be a minimum of 10m in width and depth.



Plate 48: Medium density housing typologies

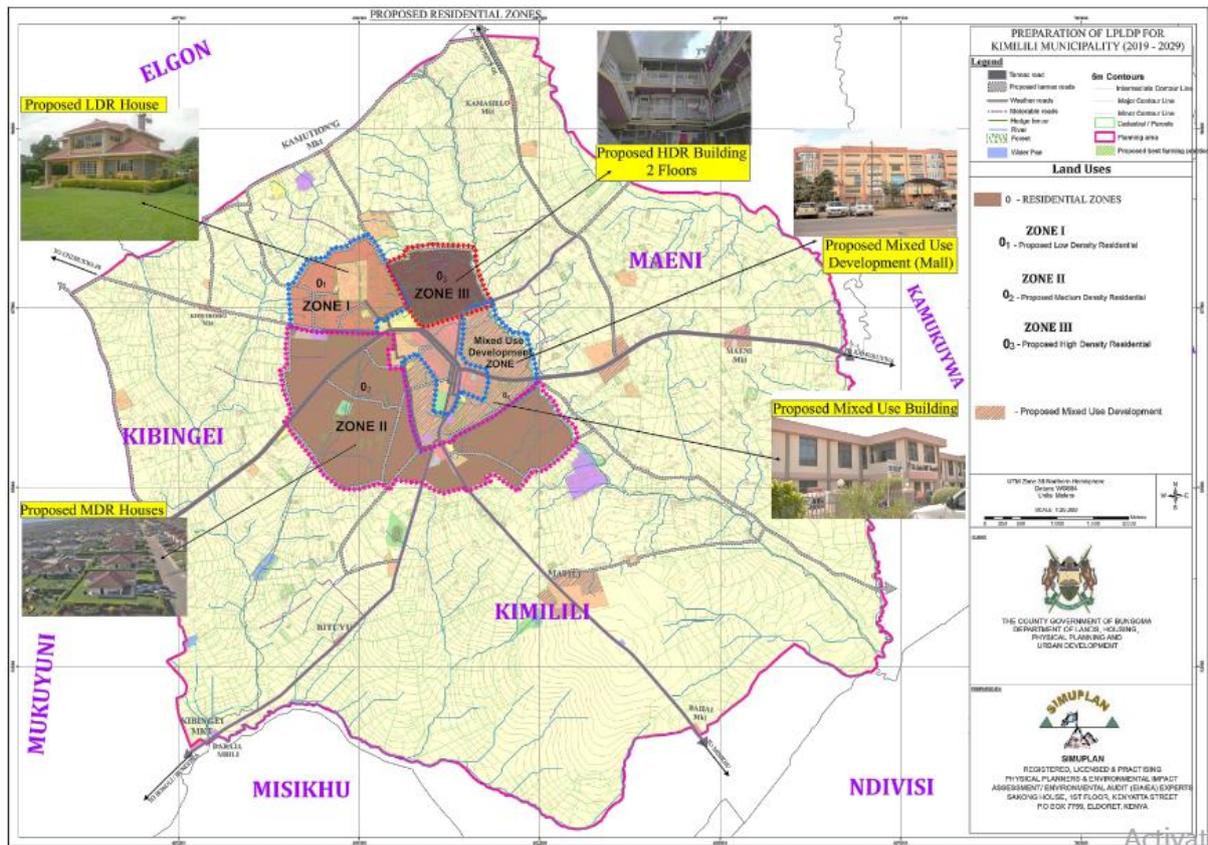
Source: <https://www.eldoretleo.com/picture-demonstration-rich-eldoret-town-better-conservationists/>

C) High density residential areas

The plan recommends that areas on the North Eastern part of the CBD area with River Kimilili forming the boundary of the zone along the Kimilili-Chesamis road. Total area proposed for high density residential developments is approximately 98.47Ha.

Minimum land size is recommended to be 0.045 Ha with 75% plot coverage and 1:4 plot ratio. 80% coverage allowable in fully serviced areas. The plan recommends that the county government regulate the building heights in this area to reduce the incidences of fragmented

landscape. It is also recommended that access roads in the estate to be improved and un-tarmacked roads to be tarmacked.



Map 23: Proposed Residential Zones

Source: Simuplan, 2019

a) Mixed Use Development

Mixed use development ensures that a parcel or structure is developed with one or more different land uses such as a combination of residential, offices, retail, and public purpose, recreation in a single or single integrated group of structures. It is characterized by complementary land uses and convenient pedestrian friendly streets. The plan recommends mixed use development in the areas immediately around Municipality’s CBD area, around Maeni market, around Matili TTI and around the proposed youth polytechnic at the junction of Kimilili-Kamukuywa road and Kimilili-Kapsokwony Road.

Although the most of the proposed mixed use are currently developed with mainly residential developments, measures can be put in place to allow for densification of other land uses in the zone. The zone is intended to:-

- Create vibrant places and increase pedestrian business activity in the Municipality;

- Promote efficient and maximum utilization of prime land;
- Encourage a variety of businesses which offer retail goods or consumer services that appeal to pedestrians and/or serve the needs of the surrounding neighborhood;
- Create a transit/pedestrian orientation which lessens traffic impacts by providing ready access to transit facilities and provides places to work and shop adjacent to living spaces, thus lessening the need to drive;
- Provide affordable housing by availing more building spaces a lower cost
- Create a pedestrian-friendly environment with well-designed streets and public open spaces;
- Foster a sense of community and place with quality community design;
- Adherence to economies of scale in provision of infrastructure utilities and services;
- Increase overall security.

Permitted land uses in the zone will include:-residential, public purposes, commercial, light industry and educational. Proper waste management facilities and recreational land uses are mandatory in this zone. Minimum plot sizes in the zone is recommended to be 0.045Ha, with 70% Plot Coverage and 250% as plot ratio. Building setbacks are recommended to be 6m front, 2m side, 1.6.rear

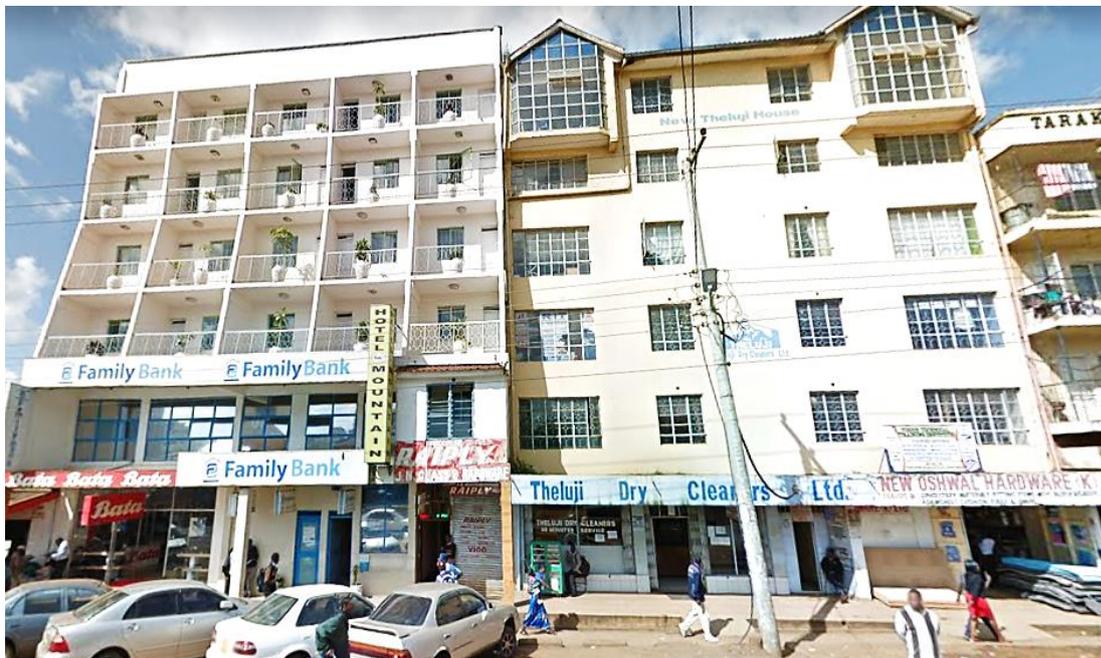


Plate 49: Mixed used development

Source: Simuplan, 2020

7.3.2 Industrial Land Use

The plan seeks to promote industrial development in Kimilili Municipality by optimizing its industrial potential. This is made possible by the availability of locally produced low material that will greatly reduce the cost of production. The total area assigned for industrial land use is approximately 22.05Ha

Light Industrial Park/Jua Kali

The plan proposes light industrial park behind Khamulati Medical Clinic in Lutonyi area. Proposed activities in the park should be compatible with residential area. Examples of such activities include: - light assemble furniture making, laundries, printing, workshops etc. The land assigned for Jua Kali industrial development is approximately 1.3Ha.

Proposed Medium Industries

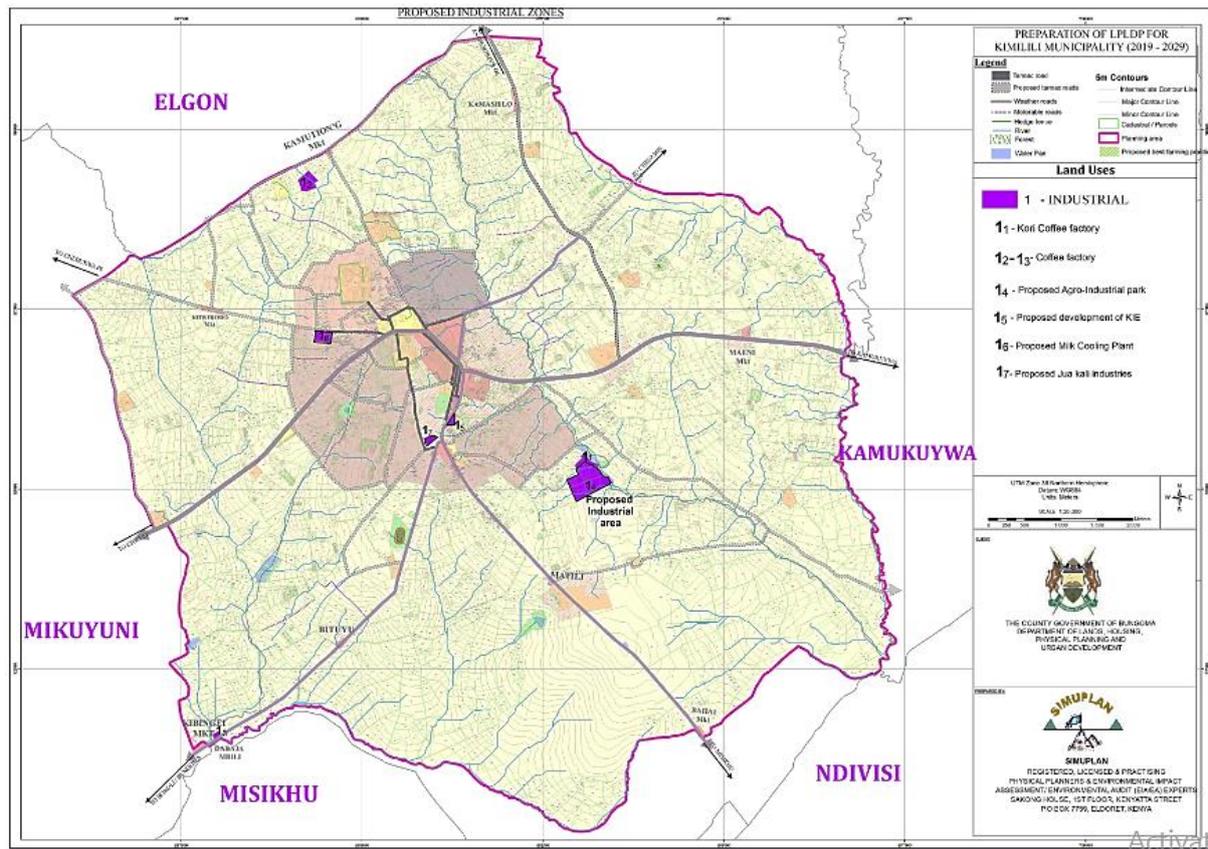
a) Milk Coolant

The plan sets aside land for a Milk Cooling Plant along Kimili-Khwiroro-Chebukwabi Road close to Farcon Academy Primary School. Land assigned for the plan measures approximately 2.5Ha. The Plant will cater for dairy farmers within and outside the Municipality.

b) Agro-industrial park

The plan identifies the need to develop an agro-industrial park next to existing Kori Cofee factory in order to boost agriculture in the Municipality. The main aim of the park will be to establish food processing plants that will add value to agricultural produce. The industrial park will target investors in maize, beans, finger millet, potatoes, fresh produce and grain value chains. Seed companies, animal feed manufacturers and other companies in the agriculture like traders outside the Municipality will also be targeted. Positive anticipated impacts of the park include: - creation of employment opportunities, better livelihoods for residents dependent on agriculture; reduction in post-harvest losses, food security and an acceleration in economic growth in the Municipality. Currently the Municipality has locally available raw materials such as coffee, maize, beans and potatoes. The agro-industrial park will ensure the surplus is processed and value added.

The plan also proposes the redevelopment of the KIE land. This will include the development of an ICT park, industrial hubs/incubation centers in the area.



Map 24: Proposed Industrial distribution

Source: Simuplan, 2019

7.3.3 Education

This is a zone set aside for provision of learning facilities. The land allocation of educational facilities depend on the age of the pupils/students and the size/number of the pupils/students. The planning area has a number of educational facilities ranging from vocational training institutes, secondary schools, primary, nursery schools and ECDE centers.

The proposed plan maintains the existing educational facilities. The facilities that don't meet the required physical planning standards will be upgraded to meet the minimum requirements. It however proposes the establishment of a day secondary school in Maeni area to provide for the needs of the underprivileged pupils who may not be able to attend the established boarding schools. The allocated space measures approximately 11 Acres.

The plan has allocated land for establishment of 11 ECDE centers. These centers will be located within existing public primary schools where those without enough space to accommodate the ECDE center will be expanded. The minimum land required for an ECDE center is 0.125 acre with standard classroom size measuring 8m x 6m accommodating a maximum of 25 children.

The further recommends the establishment of a Kimilili Youth Polytechnic to further cement the identity of Kimilili Municipality as an educational hub. The proposed location of the polytechnic is at the junction of Kimilili-Kamukuywa road and Kimilili-Kapsokwony Road. The polytechnic will cater for the learning needs of the youth within and outside the Municipality.

7.3.4 Recreational land use

The plan allocates a total of 17.45Ha for recreational use with additional land for 10m riparian reserves along the rivers and streams in the Municipality. The plan sets aside a riparian reserve of 10m along Rivers Sosio, Kimilili and Kibingei. This will be accompanied by planting of appropriate tree and shrub species to control siltation into water bodies.

The plan also recommends the establishment of open space at the former Amutalla stadium. This is because the Amutalla stadium does not meet the land size requirement for a standard sports stadium thus the conversion to an open space. The space is also strategically located within the Municipality making it ideal for the recommended use.



Plate 50: Kibarani recreational park in Mombasa

Source: <https://www.theeastafrican.co.ke/magazine/Restoring-Mombasa>

The plan further recommends the beautification, fencing and equipping of the existing open space. It recommends planting of more trees in the park. Fencing the space will prevent the current encroachment by hawkers and traders. The space will be used a relaxation point within the CBD area.

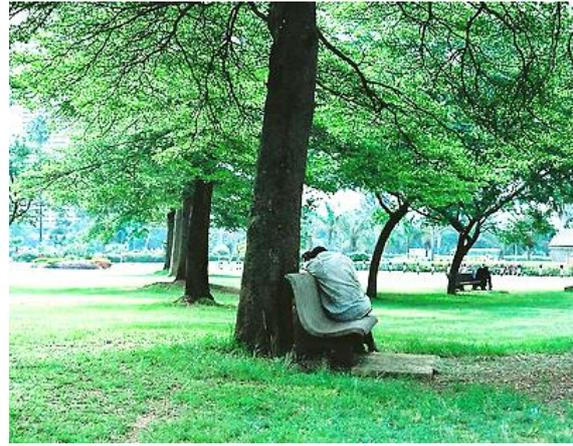


Plate 51: Open Park facilities

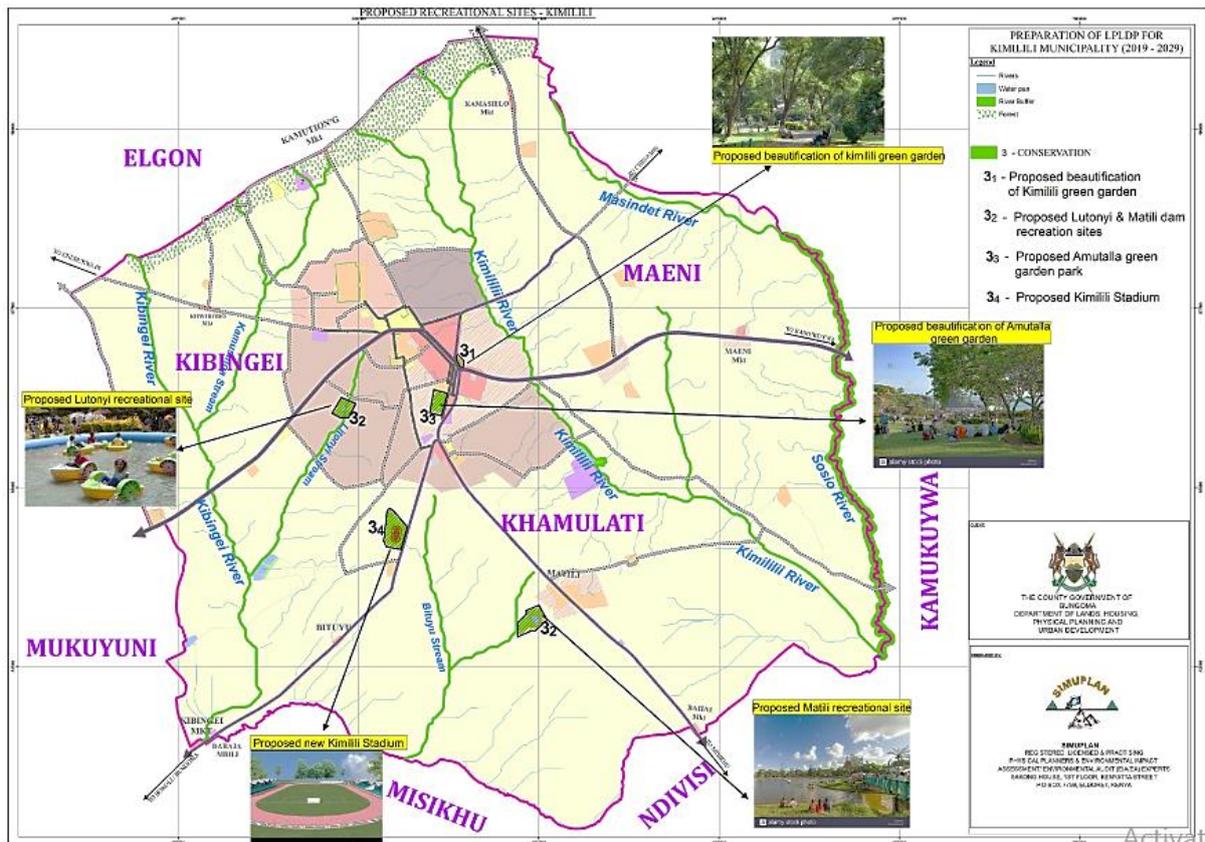
Source: <http://Sigiria-Karura-forest.jpg>.

Kimilili stadium on the other hand is proposed to be relocated to Bituyu area next to Bituyu Primary and Secondary School. This is mainly because the area has vast undeveloped land adequate for development of modern stadium. The stadium will be used to hold public events/tournaments in the Municipality as well as equipped with indoor games infrastructure among many other things.



Plate 52: Bakhungu Stadium in Kakamega

Source: [Kakamega County Government- Stadiums](#)



Map 25: Proposed Recreational Facilities

Source: Simuplan, 2019

Additionally, the plan advocates for the de-siltation of Lutonyi Dam site after which it will be used for irrigation, water supply, inland fishing and as a recreational site. The site will be anticipated to offer fun activities such as boat riding, sport fishing, zip lining, a well-equipped kids playground and gazebos. A case in example is the Dam Red Hill in Limuru.



Plate 53: Dam Red Hill in Limuru

<https://stavica.com/things-to-do-at-the-dam-redhill-resort-limuru/>

7.3.5 Public purpose

The public purpose facilities found in the Municipality comprise of Sub-county offices, health facilities, community facilities, and religious institutions, cemetery and law courts. The proposed plan maintains most of the existing public purpose facilities and has also zoned out their locations as shown in the plan proposals map. However, it recommends that future developments within and adjacent these facilities these facilities to be designed to promote the neighbourhood character of the zone and also conformed to the existing planning standards. This include building designs that emulates neighbourhood character, and a site layout with sidewalk connections to neighbourhoods. In addition, proper landscaping to be done to promote the feel of natural open space areas.

Additional, the plan sets aside land measuring 0.4Ha for the establishment of a public social hall within the Municipal land and fire station adjacent the Municipal offices and Assistant County Commissioner's office to serve the Municipality and its environs. The land set aside for the fire station measures 0.11Ha.

The existing public cemetery is small in size and it is almost full. The plan proposes the fencing off existing cemetery and acquisition of land along the Kimilili-Chwele Road at before Lutonyi Primary School measuring 3.25Ha for provision of a public cemetery.

7.3.6 Commercial land use

The proposed commercial zone is intended to encourage economic vitality in the Municipality through businesses, investment, redevelopment, and efficient use of land; Encourage safe and comfortable access for pedestrians, transit, and motorists; Encourage attractive mixed-use development, affordable housing, and a variety of commercial uses; and foster a sense of place and community and at the same time be sensitive to the surrounding land uses

The plan maintains Kimilili CBD as the main commercial centre in the Municipality. Additionally, it creates other commercial nodes within market centres that will offer low order services and ease congestion in the CBD area. These nodes include: - Kamasielo, Kamutiong', Maeni, Bituyu and Bahai markets. Preparation of Action Plans for these commercial nodes will be required to curb uncontrolled developments.

The plan recommends the expansion of the Kimilili CBD area as shown in the map below. It further proposes the redevelopment of dilapidated structures within the CBD area. Vertical development will be preferred to horizontal development to curb urban sprawl. This will reduce the cost of providing basic infrastructure and utilities in the CBD. It will also help in preserving

the rich agricultural land in the rural hinterland. The plan further requires that all new buildings in the CBD area to provide underground parking spaces to ease the problem of parking in the commercial zone.

All vacant plots in the CBD area are to be developed to multi-storey structures to meet the demand for commercial spaces/facilities in the CBD area.

In addition, the plan proposes the pedestrianization of the CBD. This will involve provision of wide, well surfaces pedestrian lanes aimed at transforming the experience of traversing th CBD area. Wide pavement will allows for adequate movement space for the pedestrians thus limiting the pushing and shoving often found in the congested CBD area. It will also allow for enough space for beatification of the town such as provision of street infrastructure and planting of trees making the experience of strolling the streets of Kimilili to be relaxing and enjoyable. It also provides opportunities for small businesses such as open air-restaurants and cafes.

7.3.7 Public Utilities

7.3.7.1 Water Supply

In order to improve the water coverage, minimize on water loses and ensure that the drinking water meets the required standards, the plan proposes the rehabilitation of the Kimilili Water Supply Scheme. This will involve upgrading and extending the existing water pipeline network to cover the Municipalities both rural and urban areas.

The upgraded water scheme will incorporate a metering and pressure monitoring mechanisms to reduce distribution loses and also provide adequate water kiosks appropriate for supply within low income areas within the Municipality.

7.3.7.2 Liquid waste disposal

The plan proposes the acquisition of land for construction of sewer ponds at Khamulati and Lutonyi. The sewer ponds will cater for the sewer demands in the CBD area. It recommends the construction of a sewerage statement to cover the CBD area.

The plan also proposes construction of ablution and exhaustible toilets in Kamutiong', Kibingei, Bituyu, Bahai, Maeni, Kamasielo and Khwiroro markets. It further recommends that the County government through Public Private Partnerships promote the construction of VIP/VVIP latrines and septic tanks in the rural areas.

The plan also proposes the construction of storm water drainage infrastructure and de-siltation of silted drainage channels along all roads in the Municipality.

7.3.7.3 Solid waste disposals

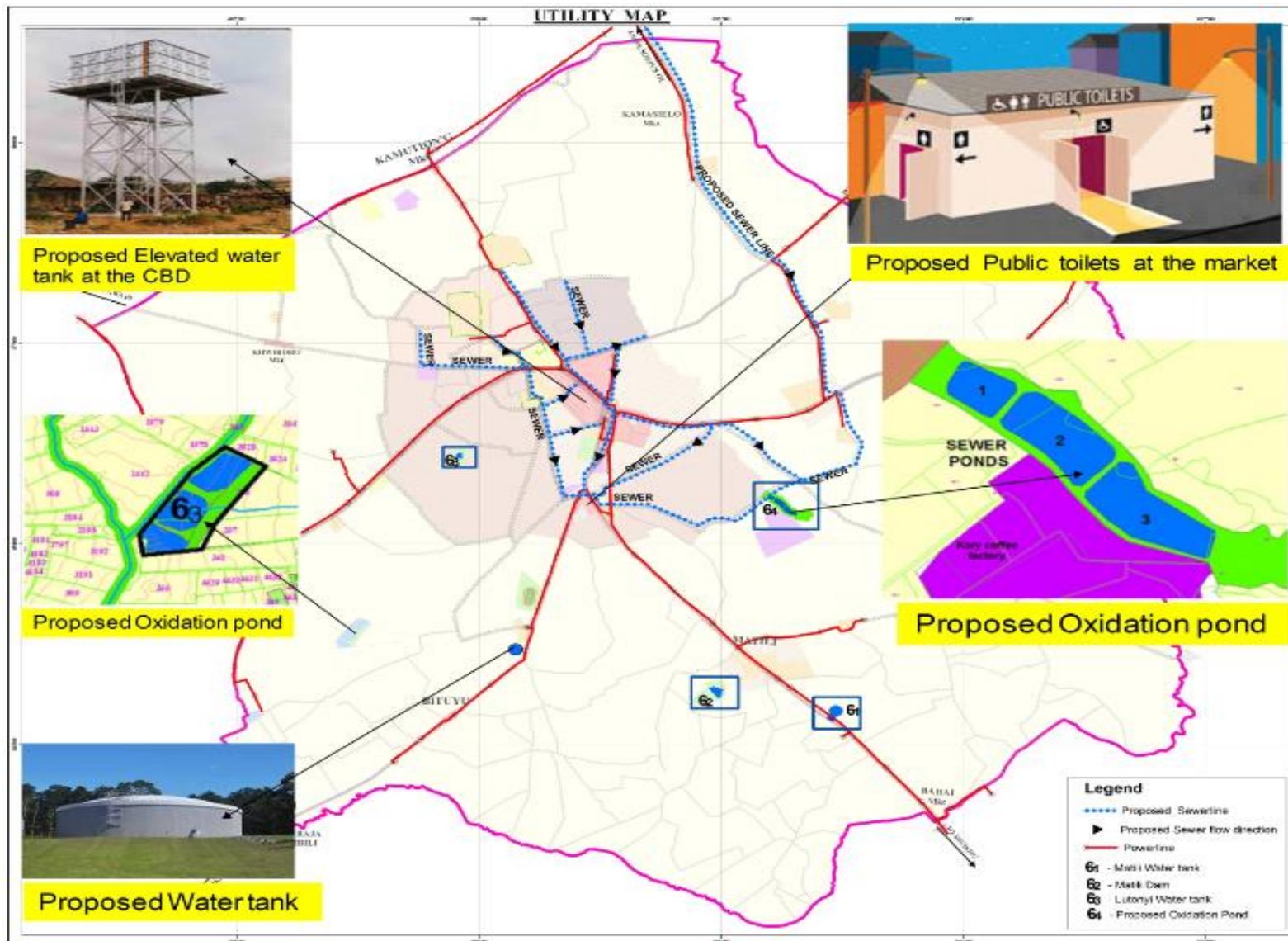
The plan proposes the acquisition of land for a solid waste management facility in Kibingei area. Adequate waste containers to be provided within the Municipality and waste segregation bins to be placed at strategic locations within the planning area. The Municipal Board should also organize monthly clean-ups for the CBD area.



Plate 54: Waste segregation at the source

(Source: NEMA, 2020)

The County Government should provide adequate transport infrastructure for transportation of waste and also employ staff for managing the waste management facility. The County government should also venture into Public Private Partnerships to ensure efficiency in the collection of the solid waste in the Municipality.



Map 26: Proposed Public Utilities

Source: Simuplan, 2019

7.3.8 Transport

The proposed transport system is intended to promote connectivity within and outside the Municipality. This will be achieved by improving the conditions of all roads through upgrading the roads, opening up of access roads, acquiring adequate road reserves for construction of new roads where necessary and for provision of utilities such as drainage infrastructure, street lights etc.

The plan proposes that a new bus park measuring 2.0Ha to be constructed behind old Kimilili market. This is because the existing bus park is small in size and will not be able to meet the anticipated future demands of a bus park in the Municipality. It also recommends the paving of the existing bus-park.

Since most of the roads in the Municipality are untarmacked, the plan proposes the following:

Tarmacking of access roads within the Municipality	36.3km
Tarmacking of Kimilili - Kapsokwony road	8.3km
Tarmacking of Kimilili- Chebukwabi road	4.0km
Tarmacking of Kimilili - Kamtio'ng road	2.5km

Parking

The plan recommends the following:-

- Tarmacking and improvement of roads within the CBD should take into considerations the on street parking spaces and have it properly marked.
- New buildings within the CBD to create underground parking or on subsequent floors. No new building approvals will be given for the high user buildings without provisions for domesticated parking.
- That proposed Bus Park be designed to create space for special parking facilities for taxis and *bodabodas* within the main activity areas.
- There is need to make by laws stipulating that for every 100m² of land in the urban areas a minimum of 1 ½ parking spaces must be provided for off-street parking except where basement parking is provided. This will mean putting strict measures and developing a proper and efficient enforcement department

Non-Motorized Transport

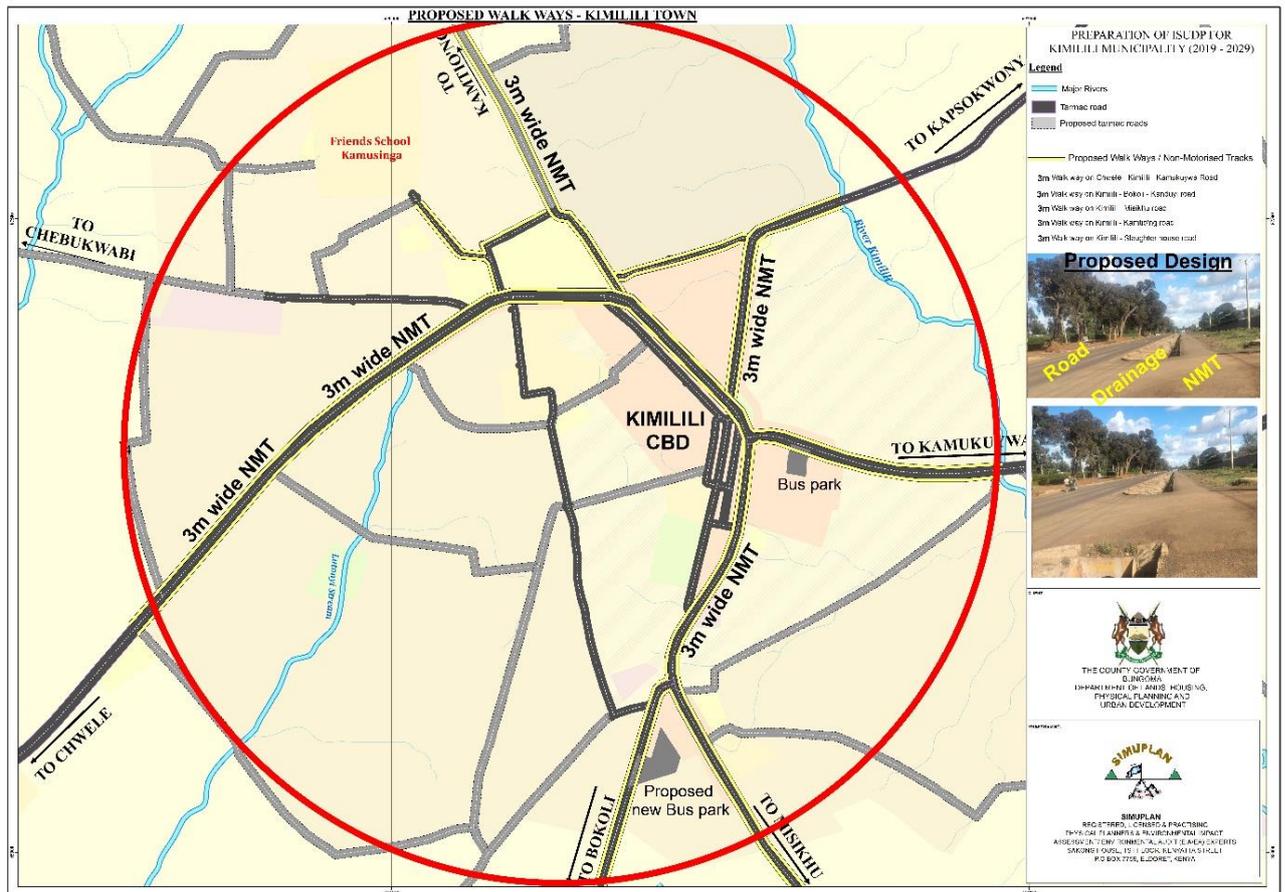
The plan also proposes the provision of Non-Motorized tracks along the major roads in the CBD. It is also recommended that drainage facilities be provided along all the roads in the Municipality. Other recommendations include:

- Provide on-street parking on major streets within the CBD area
- Provision of street furniture in all the roads
- Provision of Street lighting in all the roads
- Provision of Motorcycle designated picking and dropping points
- Planting of trees along walkways to provide shade for pedestrians to improve walkability
- Providing all roads with suitable walking lanes
- Developing street traffic calming and other traffic control measures to make street environments walkable
- Provide pedestrian crossings facilities (signal-controlled crossings, provide overhead signs, flashing lights, street lighting for illumination of the facilities)
- Proposing full pedestrian streets especially on all access roads within the proposed commercial zone. The buildings in the commercial zone should be designed in such a way that they encourage pedestrian friendly activities.



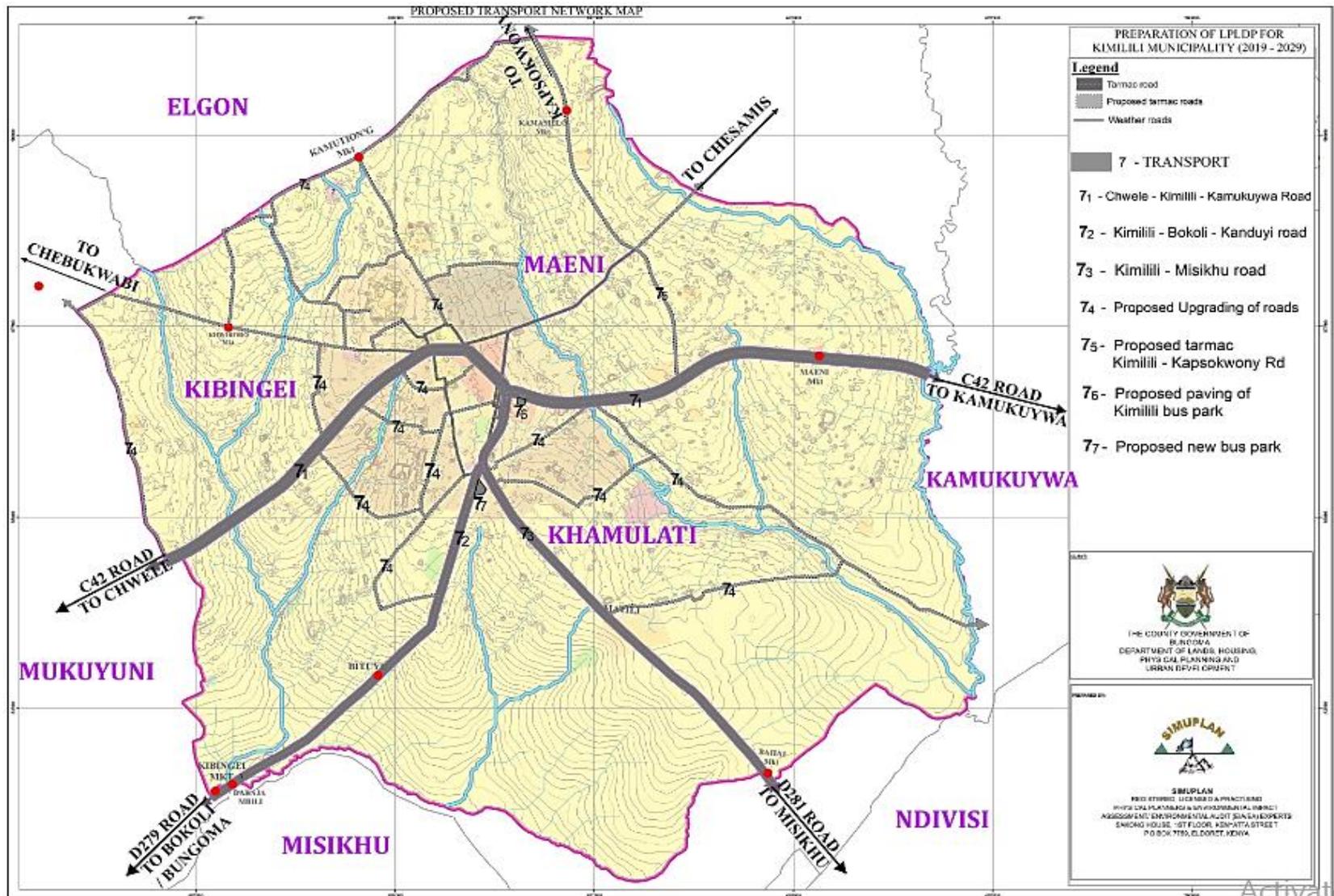
Plate 55: Non-Motorized Transport

wedocs.unep.org



Map 27: Proposed Non-Motorized Transport –NMT

Source: Simuplan, 2019



Map 28: Proposed Transport network

Source: Simuplan, 2019

7.3.9 Agriculture

The plan is in cognisance of the fact that agriculture plays a huge role in the economic development of the Municipality therefore it makes effort to conserve the available agricultural land in the area.

Although most of the lands forming the hinterlands have been proposed for agricultural use, very low density residential developments are allowed. This concept promotes household farming where a large part of the farming land is used for agriculture while the farmer occupies the least part.

In an effort to diversify agriculture, the plan proposes the construction of an irrigation schemes on River Kibisi and Sosio. This will enhance horticultural farming in the Municipality. It also proposes the construction of storage facilities in the Market to help traders store their perishable goods.

It also proposes that the County government construct fish ponds along River Kimilili and Kibingei and Sosio. This will promote fish farming in the Municipality thereby improving the economy of the area.

In regards to the problem of shrinking agricultural land in the Municipality, the plan recommends that any change of users on agricultural land to be subjected to Development Control and Regulations. Developers on agricultural lands are expected meet cost on provision of infrastructure i.e. roads, water and sewer facilities, open spaces, community facilities among others.

7.3.9.1 Urban agriculture

Urban agriculture is the practice of cultivating, processing, and distributing food in or around urban area. It encourages civic participation in food system governance and offers citizens opportunities to explore concepts of food sovereignty within an urban setting. It encompasses gardening in backyards, schools, public right-of-way and boulevards; community gardens; urban farms; rooftop and balcony gardens; aquaculture, and vertical gardening; keeping micro-livestock such as hens, rabbits, and bees; greenhouses; edible landscaping; public orchards or food forests; and agricultural parks.

The above mentioned projects aim at promoting urban agriculture in the Municipality. Other strategies that the plan recommends include:- Create awareness on best urban farming

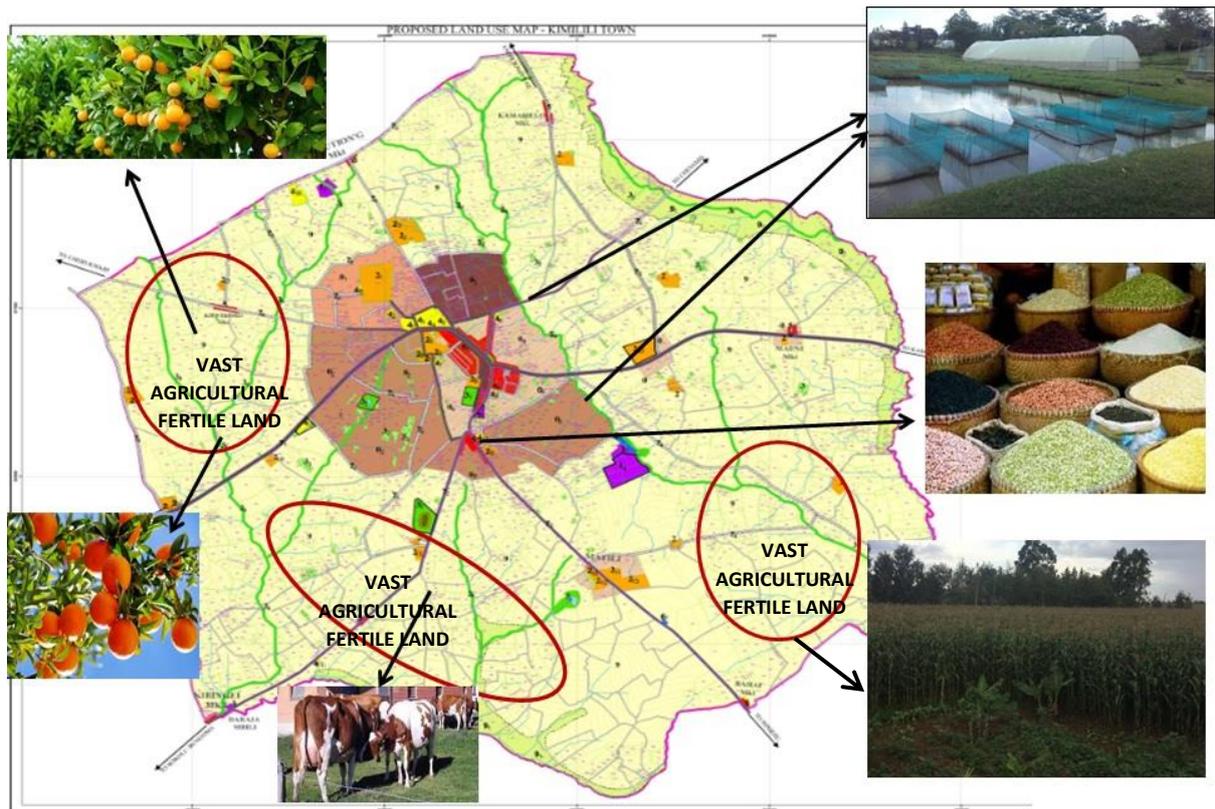
practices;, organizing educational exhibits at public events that educate and promote urban agriculture, Increasing support systems for urban agriculture within the Municipality, creating an inventory of urban agriculture pockets within the Municipality, lobbying for more land for urban agriculture and creating incentives to encourage urban agriculture



Plate 56: Urban agriculture

7.3.9.2 Land subdivision

High population growth rate in the Municipality and cultural beliefs of individual land ownership has led to massive land subdivisions in the area. This has resulted into uneconomical plots which are not viable for agricultural production. Small farms are difficult to mechanize and pose great risks of environmental degradation. Considerations should be given to how much and can support a family before the minimum acreage is determined. The proposed minimum land size recommended for the agricultural lands is 2.023Ha.



Map 29: Proposed Agricultural activities

Source: Simuplan, 2020

7.3.10 Environment and Conservation

The Municipality is well endowed with rivers and streams that supplement the water supply in the area. They include River Kibingei, River Kimilili, Masindet River, Lutonyi and Kamusinga Streams. Key problems facing these water bodies are encroachment on riparian reserves and water pollution.

The plan recommends that a 10-30m riparian reserve be observed for all the rivers and streams in the Municipality. The riparian reserve should be properly demarcated and all structures within the zone to be removed. Proper cleaning of the streams and rivers should also be done through removal of solid waste and management of effluent discharge in the water bodies.

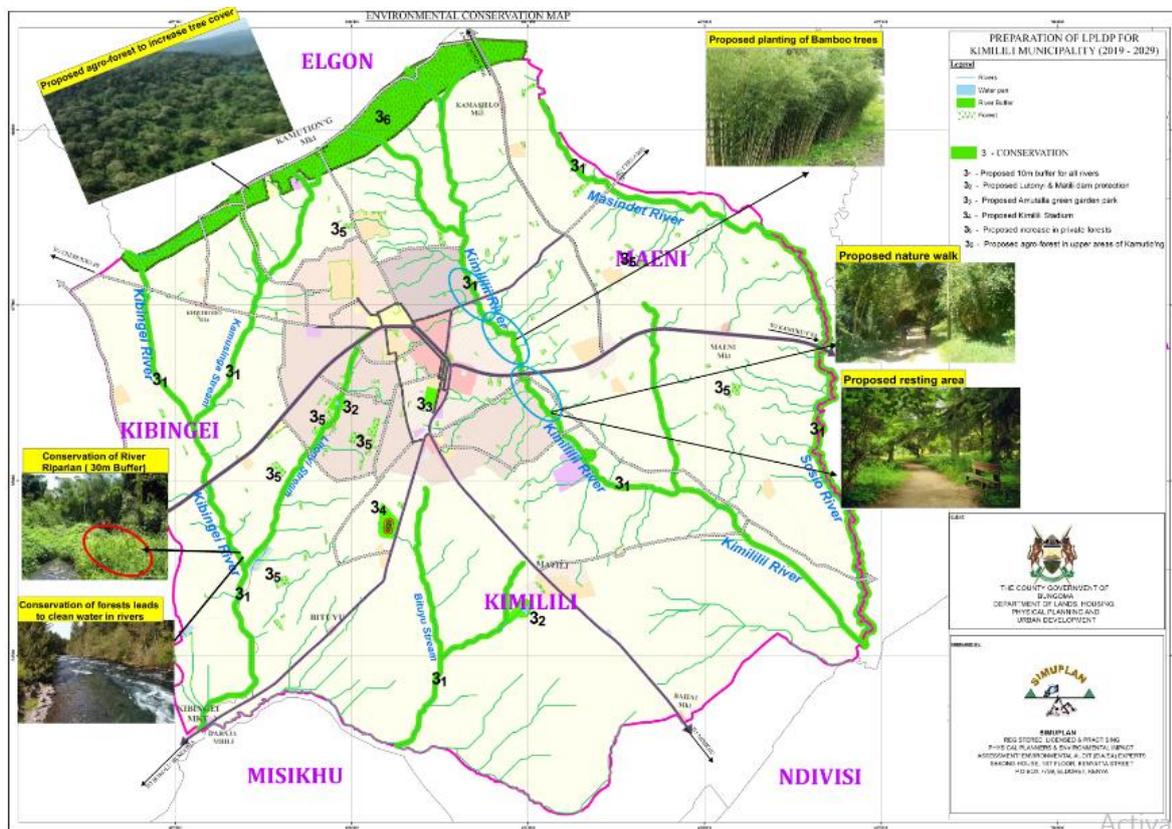
It also recommends that trees be planted along the stream to act as a buffer between the river and adjacent land uses. All activities within the riparian zone must be reviewed and approved by NEMA and WARMA. It also recommends that all land uses within the riparian be limited to limited to conservation, compatible recreation such as hiking, fishing, religious and cultural practices.

An Environmental Impact Assessment (EIA) shall be carried out for activities likely to have negative impacts on the rivers and streams.



Plate 57: Riparian land conservation

Source: <https://www.river-sosiani-rehabilitation-project>



Map 30: Proposed Environmental Conservation

Source: Simuplan, 2020

8 CHAPTER EIGHT: IMPLEMENTATION MATRIX, CAPITAL INVESTMENT PLAN, MONITORING AND EVALUATION FRAMEWORK

8.1 OVERVIEW

This plan is a long term guidance tool to assist the Bungoma County Government in making decisions regarding private development as well as budgeting for infrastructure projects. It is presented with the recognition that not all properties in the planning area will be developed or redeveloped in a manner fully consistent with the illustrated plan but that the developments will vary depending on market dynamic and, decisions made by individual private developers and owners and many other factors.

The adoption of this plan by the County Government of Bungoma is the first step in the implementation process. Working with a range of implementation partners, the Department of Physical Planning and the Kimilili Municipal Board will be the lead facilitators in implementing this plan and also coordinating consistency reviews among other county departments.

8.2 IMPLEMENTATION FRAMEWORK

The implementation framework provided identifies the different strategies and projects as well as actors needed to ensure adequate measures are taken for proper implementation of the plan. It provides a coordinating framework for the different sectors to operate without which this planning exercise may end up in futility.

SECTOR	PLANNING ISSUE	STRATEGIES	PROJECTS	TIMEFRAME	ACTORS	OUTCOME
HOUSING & HUMAN SETTLEMENTS	<ul style="list-style-type: none"> - No clear cut residential zones - Inadequate physical and social infrastructure -Conflicting housing typologies - Shortage of land for housing development -Insecurity -Poor Access 	<ul style="list-style-type: none"> -Specify residential zones /areas -Provide basic infrastructure and utilities -Provision of Standardized housing designs -Allocate sufficient land for housing development -Improve security - Provision of Access 	<ul style="list-style-type: none"> -Create clear cut residential zones / areas -Acquire land, establish and expand public utilities -Regularize residential developments -Avail and develop more building spaces a lower cost -Install street lights in all residential areas - Upgrade access roads to and within residential neighbourhoods -Increasing access to clean water -Construction of sanitary facilities; 	Short and Long term	<ul style="list-style-type: none"> -CGB -Municipal Board -National Government -NEMA -KENHA -KeRRA -KURA -Development partners 	<ul style="list-style-type: none"> -Sustainable human settlements; -Sufficient housing units; -Adequate infrastructural amenities and utilities; - Approved framework for development control; -Security of land tenure;

	-Encroachment into riparian reserves	-Promote sustainable human settlements;	-Reclaiming encroached land on riparian land; -Revoking illegally acquired land ownership documentation on riparian land	Short and Long term	-CGB -Municipal Board -National Government -NEMA -WARMA -KENHA - Development partners	Sound ecosystem;
	-Urban sprawl/ Linear concentration of settlements -Encroachment into agricultural lands;	-Urban containment -Protect rich agricultural land;	-Delineation of urban growth limit -Enforcement of development guidelines	Short and Long term	-CGB -Municipal Board -National Government -Development partners	-Food Security -Increased agricultural yields
URBAN DEVELOPMENT	-Unplanned growth nodes	-Planning of the commercial nodes; -Create an enabling environment for commercial and industrial developments;	-Preparation of action plans for the identified market centres -Develop and improve infrastructure services in the proposed growth nodes -Identify strategic economic activities to be located in these centres using the competitive advantage principle	Short and Long term	-CGB -Municipal Board -National Government -World Bank -NEMA -KENHA -KeRRA	-Planned Specialized urban areas; -Improved accessibility

					-KURA	
ENVIRONMENT	<ul style="list-style-type: none"> -Encroachment into environmentally fragile areas – Wetlands (Rivers, Swamps etc) -Pollution of water sources -Forest degradation Soil erosion and siltation 	<ul style="list-style-type: none"> -Protection of Environmentally sensitive areas -Promote best farming practices -Encourage agro-forestry activities -Adoption of suitable conservation measures 	<ul style="list-style-type: none"> -Provide 10m Riparian buffer zones by planting of bamboo trees on rivers: Kibisi, Kibingei and Sosio -Training of farmers on best farming practices -Increase private forest development through agro-forestry -Planting of trees and terracing on erosion prone steep slopes of Kamtio’ng 	Short and long term	<ul style="list-style-type: none"> -CGB -Municipal Board -LVNWSB -Ministry of Water -NEMA -WARMA -KFS -Development Partners 	<ul style="list-style-type: none"> -Protected environmental fragile areas -Clean water in Rivers, Swamps -Increased forest cover and soil protection
ECONOMY AND LIVELIHOODS						
AGRICULTURE	<ul style="list-style-type: none"> -Excessive land fragmentation; -Poor farming practices; -Undiversified farming techniques 	<ul style="list-style-type: none"> -Formulate and enforce policies to protect agricultural lands -Create awareness on best farming practices; -Promote agricultural diversification; 	<ul style="list-style-type: none"> -Enforce Land sub division regulations -Train farmers on best farming practices -Intensification of dairy and crop farming incentives across the Municipality; 	Short and long term	<ul style="list-style-type: none"> -CGB -Municipal Board -National Government -Development partners 	<ul style="list-style-type: none"> -Preservation of vast fertile agricultural land; -Regulation of land fragmentation; -Sustainable agricultural techniques;

	<p>-Over reliance on rain fed agriculture;</p> <p>-Minimal involvement in aquaculture;</p> <p>-Poor infrastructure for transportation of goods</p> <p>-Food insecurity</p>	<p>-Advancement of other farming technique like irrigation</p> <p>-Identify sites for fishponds</p> <p>-Provide and improve rural infrastructure</p> <p>-Promote sustainable urban agriculture</p>	<p>-Construction of irrigation schemes along Rivers Kibisi & Sosio to encourage scale horticultural activities;</p> <p>-Construction of fishponds along Rivers Kimilili, Sosio and Kibingei ;</p> <p>Developing and improving internal access routes, cattle dips and nurseries;</p> <p>- Create awareness on best farming practices;</p> <p>-Educational exhibits at public events</p> <p>-Increase support systems for urba agriculture</p> <p>-Create inventory of urban agriculture pockets within the Municipality</p> <p>-Lobby for more land for urban agriculture</p> <p>-Create incentives to encourage urban agriculture</p>			<p>-Food security;</p>
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INDUSTRY	<ul style="list-style-type: none"> -Inadequate agro-based industries -Lack of Value addition facilities especially for perishable goods -Low value addition – Coffee and milk -Fluctuations in market prices for agricultural goods. -No designated site for Jua kali activities 	<ul style="list-style-type: none"> -Promote agro-based industries -Promote value addition in processing of local produce; -Provide an integrated, efficient, reliable and sustainable transport system -Adopt modern technologies for value addition - Identify sites for Jua kali development 	<ul style="list-style-type: none"> -Establishment of the Agro-industrial park at Khamulati adjacent to Coffee Factory -Construction of value addition industries in the Agro-industrial park - Establishing milk cooling plant along Kimilili-Khwiroro road -Establishing Jua Kali at Khamulati -Development of industrial hubs at Kenya Industrial Estates (KIE) -Upgrading and interlinking the transportation network across the Municipality 	Short and long term	<ul style="list-style-type: none"> -CGB Municipal Board -National Government -World Bank -NEMA -WARMA -KENHA -KeRRA -KURA 	<ul style="list-style-type: none"> -Strong industrial base -Economic growth
TRADE AND COMMERCE	<ul style="list-style-type: none"> -Encroachment of traders on road reserves -Concentration of Commercial activities along the major transport routes -Low purchasing power for traders 	<ul style="list-style-type: none"> -Designate specific market areas -Containment of Commercial activities to designated areas -Provision for credit facilities 	<ul style="list-style-type: none"> -Constructing markets in Maeni, Kibingei, Khwiroro, Bahai, Kamasielo, Kamtio'ng & Bituyu; -Enforce zoning regulation on CBD area 	Short and Long term	<ul style="list-style-type: none"> -CGB Municipal Board -Kimilili Municipal Board 	<ul style="list-style-type: none"> -Enhanced access to capital; -Improved market infrastructure; -Improved road transport systems;

	<ul style="list-style-type: none"> -Unlicensed businesses -Tiring process in obtaining business permit; 	<ul style="list-style-type: none"> -Provision of business licenses -Investing in ICT 	<ul style="list-style-type: none"> -Establish micro-enterprises -Automating business licensing and promotion of E-Commerce; -Constructing an ICT park at KIE land -Development of Retail trade/ Stalls/ Exhibitions in the identified commercial nodes and in the CBD area; 		<ul style="list-style-type: none"> -National Government -NEMA -KuRA -KeRRA -Development partners 	<ul style="list-style-type: none"> -Efficiency in business operations;
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SOCIAL INFRASTRUCTURE

HEALTH	<ul style="list-style-type: none"> -Inadequate health supporting amenities- public mortuary, cemetery, crematorium -Understaffed personnel/manpower; -Ill-equipped-medical equipment and stock; -Limited awareness on importance of early ailment detection -Inadequate supporting infrastructure (roads, electricity and water 	<ul style="list-style-type: none"> - Enhance and improve access to health care facilities and services -Rehabilitate, expand and equip existing health facilities in line with the recommended health standards; -Enhance capacity of the health sector; -Strengthen outreach systems for provision of health services; 	<ul style="list-style-type: none"> -Renovating Kimilili Sub-County Hospital; -Expanding and rehabilitating rural health centres; -Establishing a public cemetery at Lutonyi -Recruiting more healthcare workers to ensure adequate service delivery; -Providing adequate resources to procure medical supplies in adequate quantities; 	Short and Long term	<ul style="list-style-type: none"> -CGB -Municipal Board -National Government -NEMA -Development partners -KENHA -KeRRA -KURA 	<ul style="list-style-type: none"> -Efficient health care system; -Increased access to health services; -Improved basic supporting infrastructure;
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		<ul style="list-style-type: none"> -Create health awareness programmes; -Provide basic infrastructure and amenities; 	<ul style="list-style-type: none"> -Establishing mobile clinics across the Municipality; -Organizing campaigns and free clinics; -Construction and improvement of all basic infrastructure and utilities across the Municipality; 			
EDUCATION	<ul style="list-style-type: none"> -Insufficient learning facilities; -Ill-equipped facilities; -Inadequate vocational and technical training facilities -Inadequate ECDE Centres -Understaffing -Inadequate basic infrastructure and utilities 	<ul style="list-style-type: none"> -Rehabilitate, expand and equip existing education facilities in line with the recommended standards; -Provide basic infrastructure and amenities; 	<ul style="list-style-type: none"> -Rehabilitating existing educational institutions; -Acquiring land for construction of Kimilili Youth Polytechnic; -Providing modern learning equipment in all educational institutions; -Acquiring land for expansion of educational facilities; - Build the human resource capacity; -Constructing and upgrading of roads; -Extending connectivity to electricity; Constructing water points to enhance access; 	<ul style="list-style-type: none"> -short term Long term 	<ul style="list-style-type: none"> -CGB -Municipal Board -National Government -NEMA -Development partners 	<ul style="list-style-type: none"> -Efficient education; -Increased access to education services; -Increased transition rates and retention levels; -Adequate human resource; -Enhanced connectivity to basic supporting infrastructure;

COMMUNITY FACILITIES	-Inadequate community facilities	-Provide adequate community facilities	<ul style="list-style-type: none"> -Expand & rehabilitate Kimilili Community Library -Construct Community Centre (resource centre, social hall/ municipality hall/ amphitheatre/ Cultural dance centre) within the Municipal land -Construct modern fire station and equip (two fire fighting trucks) within the Municipal land. -Acquire land and establishing a public cemetery at Lutonyi; -Fence the existing cemetery to curb trespassing. 	-Short term	<ul style="list-style-type: none"> - CGB -National Government -NEMA -Development partners 	<ul style="list-style-type: none"> -Preservation of cultural heritage; -Improved service delivery
RECREATION	<ul style="list-style-type: none"> -Inadequate public open spaces; -Encroachment into Katiba open space by traders; - Ill-equipped Amutalla Stadium - Lack of space for expansion of Amutalla Stadium; -Poorly maintained opens; -Silttion of Lutonyi Dam -Minimal promotion efforts of sporting activities 	<ul style="list-style-type: none"> -Protect and conserve nature-based recreational areas; -Beautification of existing nature based utilities; -Promote sporting activities in the Municipality; 	<ul style="list-style-type: none"> -Acquiring land for public Stadium in Bituyu -Convert existing Amutalla Stadium to public open space; -Fence and equip existing open space in the CBD area with facilities such as benches, waste bins etc; -De-siltation of Lutonyi & Matili Dam and creating a 	<ul style="list-style-type: none"> -Short term -Long term 	<ul style="list-style-type: none"> - CGB -National Government -NEMA -Development partners 	<ul style="list-style-type: none"> Adequate recreational facilities, infrastructure and equipment;

			recreation area within the dam; -Planting of indigenous trees in the identified open spaces -Organizing and participating in local and international tournaments			
INFRASTRUCTURE AND UTILITIES						
WATER	-Limited Access to safe clean water -Inadequate water supply -Pollution of water sources	-Improve water supply and coverage -Promote rain water harvesting -Promote hygiene at water points/sources	-Upgrading and extending existing water pipeline network in the Municipality -Constructing of Elevated and ground water tanks within the Municipality -Drill boreholes and shallow wells at strategic points -De-siltation and rehabilitation of Lutonyi and Matili dam; -Initiating community programmes and campaigns promoting rain water harvesting -Undertaking hydro-geological survey for underground water points; -Buffering rivers & wetlands in the Municipality;	-Long term -Short term	-CGB -Municipal Board -Ministry of Water -WARMA -NZOWASCO -Development Partners -NEMA -Public-Private Partnerships	-Improved access to clean water

			<ul style="list-style-type: none"> -Community mobilization and sensitization on sustainable water usage; -Develop and enforce a building code requiring all rental and commercial buildings to harvest and store rainwater. 			
SOLID WASTE	<ul style="list-style-type: none"> -Lack of designated waste collection points; -Poor waste management strategies -Inadequate waste management equipment 	<ul style="list-style-type: none"> -Provide adequate waste management infrastructure; -Create public awareness on sustainable waste management; -Enhance modern technologies for waste management i.e. waste segregation and recovery; 	<ul style="list-style-type: none"> -Organizing awareness campaigns on proper solid waste management; -Acquire land and establish dumpsite in Kibingei -Providing waste segregation bins at strategic locations within established commercial zones; -Provide adequate and accessible skips in the municipality especially the markets 	-Short term	<ul style="list-style-type: none"> -CGB -Municipal Board -NEMA -Local Community -Public-Private Partnerships 	-Efficient solid waste management

			<ul style="list-style-type: none"> -Undertaking monthly clean-ups in Kimilili CBD area; -Enhancing Private Public Partnerships in waste management; -Enforcing policies and legislations proper waste management. 			
LIQUID WASTE DISPOSAL	<ul style="list-style-type: none"> -Lack of a sewerage system -Inadequate sanitary facilities (pit latrines) in both urban and rural areas 	<ul style="list-style-type: none"> -Sensitize the community on improved liquid waste management strategies; -Improve liquid waste management infrastructure across the Municipality; --Encourage community members to do proper placement of toilets/pit latrines vis- a –vis water sources to reduce contamination 	<ul style="list-style-type: none"> -Acquire land and construct sewer ponds at Khamulati and Lutonyi -Construct a Sewerline system to cover the CBD area -Constructing ablution blocks and exhaustible toilets in Kamtiong’. Kamasielo, Kibingei, Maeni, Bituyu, Bahai and Kwhiroro markets; -Constructing septic tanks and VIP/VVIP latrines in rural areas through PPP; -Recruiting and staffing officers to enforce liquid waste disposal regulations; -Organizing campaigns on improved liquid waste management options; 	<ul style="list-style-type: none"> -Short term -Long term 	<ul style="list-style-type: none"> -NEMA -CGBGM Municipal Board -NGO.s -Private Sector -Local Community -Ministry of Transport and Public works 	<ul style="list-style-type: none"> -Improved sanitation conditions

STORM WATER DRAINAGE	Poor drainage infrastructure	<ul style="list-style-type: none"> -Construct proper drainage infrastructure -Promote harvesting of rain water to reduce surface runoff 	<ul style="list-style-type: none"> -Conduct a storm water drainage feasibility study for the municipality; -De-siltation of silted drainage channels along all roads -Provide open and covered paved storm water drains on all roads. -Provide drainage way leaves of 1– 3m on all roads -Construct storm water drainage outfalls to efficiently direct storm water from the built up areas to the rivers 	-Short term	<ul style="list-style-type: none"> -CGBGM -NGO.s -Private Sector -Local Community -Ministry of Transport and Public works 	<ul style="list-style-type: none"> -Improved drainage infrastructure -Contained surface run-offs
ENERGY	<ul style="list-style-type: none"> -Limited use of green energy sources - Expensive and unreliable energy sources; -Increased health risks associated with burning wood and petroleum products -Unreliability 	<ul style="list-style-type: none"> -Encourage use of alternative energy sources; -Prevent encroachment on way leaves meant for energy infrastructure; -Sustainable utilization of energy sources -Encouraging agro-forestry and afforestation practices. 	<ul style="list-style-type: none"> -Establish solar firm in the Municipality; -Providing incentives for installation of renewable energy sources -Providing training on installation of green energy; -Creating community awareness on sustainable energy use e.g. use of 	<ul style="list-style-type: none"> -Long-term -Short term 	<ul style="list-style-type: none"> -CGBGM -Energy providers in the Country -NGOs -Local Community 	<ul style="list-style-type: none"> -Increased utilization of green energy sources -Improved security - Enhanced 24/7 economy

			<p>improved stoves with chimneys</p> <ul style="list-style-type: none"> -Installing flood lights and street lights in urban areas; -Undertaking regular maintenance of energy infrastructure 			
COMMUNICATION & ICT	<ul style="list-style-type: none"> -Increasing disparity in access to ICT services in the rural hinterland and CBD area; -High cost of ICT services especially internet and telephone charges ; -Poor network connectivity and coverage. 	<ul style="list-style-type: none"> -Provide relevant ICT infrastructure; -Enhance mobile connectivity throughout the Municipality; -Mainstream ICT in all sectors; -Build the ICT capacity within the Municipality 	<ul style="list-style-type: none"> Developing ICT park in Kenya Industrial Estate land; -Extending fibre-optic cables to cover the whole Municipality; -Partnering with mobile service providers in providing relevant ICT infrastructure; -Identifying and installing Base Transceiver Stations in areas with poor network coverage; -Organizing ICT capacity trainings; 	<ul style="list-style-type: none"> -Short term -Long term 	<ul style="list-style-type: none"> -CGBGM -Municipal Board -National Government -Development partners 	<ul style="list-style-type: none"> -Improved access to internet -Improved network connectivity and coverage -Improved service delivery
TRANSPORT	<ul style="list-style-type: none"> -Unclassified roads -Lack of Non-Motorized transport infrastructure -Poor road conditions -Inadequate service lanes 	<ul style="list-style-type: none"> -Identify roads for Classification -Develop a pedestrian-friendly (NMT) transport network along all major roads; 	<ul style="list-style-type: none"> -Hierarchical classification of roads. -Undertaking routine road maintenance; -Tarmacking of major roads- (Kimilili – Kapsokwony, Kimilili-Chebukwabi & Kimilili-Kamtiong’ roads) 	<ul style="list-style-type: none"> -Long term -Short term 	<ul style="list-style-type: none"> -National Government Municipal Board -World Bank -KENHA, 	<ul style="list-style-type: none"> -Inventory of roads based on their classification; -Improved road conditions and network;

	<ul style="list-style-type: none"> -Encroachment on road reserves -Unpaved bus park -Limited space for buspark -Inadequate Boda Boda sheds -Inadequate bus terminals and parking facilities. 	<ul style="list-style-type: none"> -Rehabilitate identified Roads -Protect road reserves; -Identify locations for construction of bus park -Provide functional and aesthetically pleasing public furniture at bus parks 	<ul style="list-style-type: none"> -Integrate Non-Motorized Transport (NMT) in all road designs especially in the urban areas; -Street lighting in all urban roads; -Construct storm water drainages in all the roads; -Improving/ Construction of bridges particularly in the rural hinterland; -Opening up of roads within the CBD -Enforce development control regulations to curb encroachment roads and service lanes. -Mark extent of roads widths in the Municipality -Evicting those on road reserve -Renovate existing bus park; -Construct a new bus park at the Kimilili old market; 		<ul style="list-style-type: none"> -KeRRA -KURA -Development partners 	<ul style="list-style-type: none"> -Improved road transport; -Enhanced pedestrian safety;
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8.3 CAPITAL INVESTMENT PLAN

The Capital Investment Plan is based on the projects identified in the Local Physical and Land Use development Plan implementation Matrix for Kimilili Municipality which will enhance economic and social development. The CIP is important as it provides a road map for future Short, medium and long term investment funding requirements.

URBAN DEVELOPMENT, HOUSING AND HUMAN SETTLEMENTS

Programme/Project	Short Term (1-5)Years.	Long Term (5-10Years)	Cost (Kshs.) M- Million	ACTORS
Prepare Action plans for Maeni, Kamasielo, Khwiroro, Kamtio'ng, Bituyu, Bahai markets		✓	50M	- CGB -National Government -CoG -Business community -State Department of Survey/National Titling Centre
Procure land for more Residential spaces and develop affordable housing units	✓	✓	200M	
Create clear cut residential zones (687Ha) and Delineation of urban boundaries in the municipality	✓		10M	
Property rating and valuation for Kimilili town and Neighbouring Centres	✓		6M	

ENVIRONMENT AND NATURAL RESOURCES

Programme/Project	Short Term (1-5)Years.	Medium Term (5-10 Years)	Cost (Kshs) M-Million	Actors
Provide 10m Riparian buffer zones by planting of Bamboo trees on rivers: Kibisi, Kibingei and Sosio	✓		15M	-CGB -Beneficiary Community -National Government -NGOs/CBOs -KFS -NEMA
Provision of free tree seedlings to farmers (agro-forestry)	✓		3.2M	
Planting of trees and terracing on erosion prone steep slopes of Kamtio'ng	✓		5M	

SOCIAL INFRASTRUCTURE

HEALTH

Programme/Project	Short Term (1-5)Years.	Long Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
Renovation and equipping of Kimilili Sub-County Hospital (Mortuary)	✓		25M	-Ministry of Health -CGB
Equipping of rural health Centers and dispensaries: Bahai	✓		10M	-Municipal Board -Beneficiary
Acquire Land (3.25Ha) and establish a public cemetery at Lutonyi		✓	55M	Community -National Government -Development Partners
Providing adequate resources to procure medical supplies in adequate quantities (Drugs, PPEs, Surgical equipment)	✓		17M	
Establishing of mobile clinics across the Municipality;	✓		15M	

EDUCATION

Programme/Project	Short Term (1-5)Years.	Long Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
Set up more ECDE Centres at Maeni, Kamasielo, Buko RC, Kamusinga AC, Khwiroro, Kibingei, Kimilili FYM, Lutonyi and Bituyu	✓		12M	-Ministry of Education -CGB -Beneficiary
Acquiring land (12.22Ha) for construction of Kimilili Youth Polytechnic	✓		60M	Community -National Government -Development Partners
Expand & equip Kimilili Community Library		✓	5M	
Integration of learning facilities for the physically challenged and visually impaired within existing learning institutions	✓		75M	
Rehabilitating and expansion existing educational institutions	✓		25M	
Establishing an Educational Scholarship Fund			10M	

RECREATION

Programme/Project	Short Term (1-5)Years.	Long Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
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Acquiring land (10.05Ha) for public Stadium in Bituyu	✓		50M	-CGB
Convert existing Amutalla Stadium to public open space	✓		5M	-Kimilili Municipal Board
Fence and equip existing open space in the CBD area with facilities such as benches, waste bins etc	✓		2M	-Sports Federations
Create a recreation area within Lutonyi and matili dam areas		✓	6M	-Kenya National Sports Academy
Construct Social hall within the Municipal land near the Municipal Offices		✓	6M	-Ministry of Sports, Culture and Heritage
Construct modern fire station and equip (two fire fighting trucks) within the Municipal land	✓		18M	-NEMA
Fence the existing cemetery and planting of trees	✓		7M	

ECONOMY AND LIVELIHOODS

AGRICULTURE

Programme/Project	Short Term (1-5)Years.	Long Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
Train farmers on best farming practices	✓		5M	-KALRO -Kenya Seed Company
Construction of irrigation schemes along Rivers Kibisi & Sosio to encourage horticultural activities		✓	45M	-Financial Institutions -Agro-chemical Companies
Construction of fishponds along Rivers Kimilili, Sosio and Kibingei	✓		3M	-National Government -CGB
Improve cattle dips and tree nurseries	✓		2.5M	-Kenya Veterinary Vaccine Production Institute (KEVEVAPI) - Agricultural Society of Kenya

INDUSTRY

Programme/Project	Short Term (1-5)Years	Long Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
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Acquire land (18.25Ha) for Agro-industrial Park at Khamulati adjacent to Coffee Factory		✓	50M	- CGB -Municipal Board -National Government -Kenya Industrial Estates -Kenya Industrial Research and Development Institute -Kenya National Chamber of Commerce and Industry -Kenya Bureau of Standards -World Bank -Development Partners
Construction of go downs for value addition industries in the Agro-industrial park		✓	75M	
Acquire land (1.3Ha) and establish Jua Kali sheds at Khamulati	✓		15M	
Acquisition (2.5Ha) of land and construct milk cooling plant along Kimilili-Khwiroro road	✓		35M	
Development of industrial hubs at Kenya Industrial Estates land (KIE)	✓		10M	

TRADE AND COMMERCE

Programme/Project	Short Term (1-5)Years.	Medium Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
Constructing open air markets at Maeni, Kibingei, Kwhiroro, Bahai, Kamisielo, Kamtio'ng & Bituyu	✓		15M	-CGB -Municipal Board
Upgrading of automated business licensing and promotion of E-Commerce;	✓		2M	- Kenya National Chamber of Commerce and Industry
Establish Micro enterprises within the CBD and other Commercial nodes	✓		13M	-Kenya Investment Authority of Business -Micro and Small Enterprises Authority -Business Premises Rent Tribunal - National Government -Financial Institutions -Development Partners

TRANSPORT

Programme/Project	Short Term (1-5)Years.	Medium Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
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Tarmacking of Kimilili- Kapsokwony road 8.3km	✓		200M	-CGB -Municipal Board -National Government -KRB -KURA -KERRA -KENHA -NEMA -KPLC -Rural Electrification Authority -KIHBT
Tarmacking of Kimilili- Chebukwabi road 4.0km	✓		80M	
Tarmacking of Kimilili- Kamtiong' road 2.5km	✓		50M	
Opening up & Murraming of Access roads within the Municipality 36km		✓	100M	
Undertaking routine maintainance on all Roads in Municipality	✓		5M	
Construct NMT in all transport routes especially urban areas	✓	✓	75M	
Acquire land (2.0Ha) and Construct a bus park (behind the old market Renovate existing bus park	✓		10M	
Installation and Maintainance of high mast flood lights and street lighting infrastructure on urban roads	✓		8M	
Constructung Boda Boda sheds	✓		3M	

WATER

Programme/Project	Short Term (1-5)Years.	Medium Term (5-10 Years)	Cost (Kshs.) M-Million	ACTORS
Rehabilitation & improvement of Kimilili Water Supply Scheme (construction of elevated and underground water tanks)	✓		45M	-CGB -National Government -Ministry of water and sanitation -Ministry of environment and Forestry -Lake Victoria North water service boards -NEMA -Water resources authority (WRA)
Upgrading and extending existing water pipeline network in the Municipality hinterland	✓		50M	
De-siltation and rehabilitation of Lutonyi and Matili dams	✓		30M	
Drilling and equipping of shallow wells and boreholes in the Municipality;	✓		14M	
Undertaking hydro-geological survey and mapping for underground water points;	✓		12M	
Initiating community programmes and campaigns promoting rain water harvesting;	✓		5M	
Organizing community awareness campaigns on sustainable use of water resources	✓		2M	

WASTE MANAGEMENT

SOLID WASTE

Programme/Project	Short Term (1-5)Years.	Medium Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
Provide waste segregation bins at strategic locations within established commercial zones	✓		8M	-CGB National Government -NEMA -Development Partners
Acquire land (1.7Ha) and establish dumpsite at Kibingei		✓	20M	
Undertaking monthly clean-ups in Kimilili CBD area	✓		2.5M	
Provide adequate and accessible skips in the municipality especially the markets	✓		20M	
Organizing sensitization campaigns on sustainable waste management	✓		2M	

LIQUID WASTE

Programme/Project	Short Term (1-5)Years.	Long Term (5-10 Years)	Cost (Kshs.) M-Million	ACTORS
Acquire land (10.9Ha) and construct Sewer ponds at Khamulati and Lutonyi	✓		100M	-CGB -Municipal Board -National Government -NEMA -Development Partners
Construct a Sewer line system to cover the CBD area	✓		80M	
Constructing ablution blocks and exhaustible toilets in Kamtio'ng. Kamasielo, Kibingei, Maeni, Bituyu, Bahai and Khwiroro markets	✓		50M	
Recruiting and staffing officers to enforce liquid waste disposal regulations	✓		5M	

Acquisition of an exhauster	✓		10M	
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ENERGY

Programme/Project	Short Term (1-5)Years.	Medium Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
Provide training on installation of green energy		✓	1.5M	-Rural Electrification Authority -KPLC -CGB -National Government -Development Partners -Energy Regulatory Commission
Identify and Acquire land for establishing solar plant;		✓	60M	
Organizing sensitization campaigns on sustainable use of energy resources	✓		2M	

COMMUNICATION AND ICT

Programme/Project	Short Term (1-5)Years.	Medium Term (5-10 Years)	Cost (Kshs.) M- Million	ACTORS
Develop ICT park in Kenya Industrial Estate Land		✓	3M	-National Government -CGB -Mobile service providers -Development Partners -KPLC -NEMA
Extend fibre-optic cables to the Kimilili CBD		✓	10M	
Partner with mobile service providers in providing relevant ICT infrastructure	✓		2M	
Do feasibility study to identify and install Base Transceiver Stations in areas with poor network coverage;	✓	✓	3M	
Organize ICT capacity trainings;	✓		3M	
Establishing Information Database Management System	✓		5M	

				- Kenya Communication Authority
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STORM WATER

Programme/Project	Short Term (1-5)Years.	Medium Term (5-10 Years)	Cost (Kshs) M-Million	Actors
De-siltation of silted drainage channels along all roads	✓		7M	- CGB -NGO's -Private Sector -Local Community -Ministry of Transport and Public works
Provide open and covered paved storm water drains on all roads	✓		10M	
TOTAL			2.0557 BILLION	

8.4 MONITORING AND EVALUATION FRAMEWORK

The Monitoring and evaluation is systematically gathering of the information on the progress made on implementation of this plan. This will be the task of the coordinating Unit within the county and all the actors mandated in implementation of specific projects.

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10Years)	Actors
Urban Development Housing and Human Settlement	Prepare Action plans for Maeni, Kamasielo, Khwiroro, Kamtio'ng, Bituyu, Bahai markets	-The No. of Market Centres Planned			- CGB -National Government
	Procure land for more Residential spaces at affordable costs	-The No. of Ha of Land acquired -The No. of housing units developed			-CoG -Business community
	Create clear cut residential zones (687Ha) and Delineation of urban boundaries in the municipality	-A planned neighbourhood: Low, Medium and High Density Residential areas			-State Department of
	Property rating and valuation for Kimilili town and Neighbouring Centres	The valuation roll report			Survey/National Titling Centre

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10 Years)	Actors
Environment and Natural resources	Provide 10m Riparian buffer zones by planting of Bamboo trees on rivers: Kibisi, Kibingei and Sosio	-Stretch of land Conserved for the Riparian buffer -No. of Bamboo trees planted			-CGB -Beneficiary Community -National Government
	Provision of free tree seedlings to farmers (agro-forestry)	-No. of tree seedlings procured -Percentage increase in forest cover			- -NGOs/CBOs -KFS -NEMA
	Planting of trees and terracing on erosion prone steep slopes of Kamtio'ng	Percentage reduction of Soil erosion			

SOCIAL INFRASTRUCTURE

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10 Years)	ACTORS
Health	Renovation and equipping of Kimilili Sub-County Hospital (Mortuary)	-Level of service delivery			-Ministry of Health
	Equipping of rural health Centers and dispensaries: Bahai	-The No. of dispensaries equipped			-CGB -Municipal Board
	Acquire Land (3.25Ha) and establish a public cemetery at Lutonyi	-Operational cemetery			-Beneficiary Community
	Providing adequate resources to procure medical supplies in adequate quantities (Drugs, PPEs, Surgical equipment)	-The No. drugs (bulk), PPEs and surgical equipment supplied			-National Government - -Development Partners
	Establishing of mobile clinics across the Municipality;	-The No. of Mobile clinics established			

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10 Years)	ACTORS
Education	Set up more ECDE Centres at Maeni, Kamasielo, Buko RC, Kamusinga AC, Khwiroro, Kibingei, Kimilili FYM, Lutonyi and Bituyu	-The No. of ECDE established and operational			-Ministry of Education -CGB -Beneficiary Community -National Government - Development Partners
	Acquiring land (12.22Ha) for construction of Kimilili Youth Polytechnic	-Operational Youth polytechnic -The No. of Students enrolled -The No. of Job opportunities created			
	Expand & equip Kimilili Community Library	-Level of satisfaction for Library users			
	Integration of learning facilities for the physically challenged and visually impaired within existing learning institutions	-How many of such facilities established in the existing education centres			
	Rehabilitating and expansion existing educational institutions	-The No. of Educational facilities expanded and equipped			
	Establishing an Educational Scholarship Fund	-The No. of students benefiting from the fund			

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10 Years)	ACTORS
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Recreation	Acquiring land (10.05Ha) for public Stadium in Bituyu	-Operational Stadium			-CGB -Kimilili Municipal Board -Sports Federations -Kenya National Sports Academy -Ministry of Sports, Culture and Heritage -NEMA
	Convert existing Amutalla Stadium to public open space	-Level of satisfaction of recreation site users			
	Fence and equip existing open space in the CBD area with facilities such as benches, waste bins etc	-Level of satisfaction of recreation site users			
	Create a recreation area within Lutonyi and matili dam areas	-Level of beautification done			
	Construct Social hall within the Municipal land near the Municipal Offices	-Operational Social hall -Capacity of the hall			
	Construct modern fire station within the Municipal land	-Operational fire station			
	Fence the existing cemetery and planting of trees	-			

ECONOMY AND LIVELIHOODS

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10 Years)	ACTORS
Agriculture	Train farmers on best farming practices	-Level of awareness by farmers on best farming practices			-KALRO -Kenya Seed Company
	Construction of irrigation schemes along Rivers Kibisi & Sosio to encourage horticultural activities	-Increased level of horticultural activities			-Financial Institutions -Agro-chemical Companies
	Construction of fishponds along Rivers Kimilili, Sosio and Kibingei	-The No. of fishponds constructed along the rivers			-National Government -CGB

	Improve cattle dips and tree nurseries	-The No. of Livestock facilities (Dips) improved			-Kenya Veterinary Vaccine Production Institute (KEVEVAPI) -Agricultural Society of Kenya. (ASK)
Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10 Years)	ACTORS
Industry	Acquire land (18.25Ha) for Agro-industrial Park at Khamulati adjacent to Coffee Factory	-Operational Agro-industrial park -The No. of job opportunities created			- CGB -Municipal Board -National Government
	Construction of go downs for value addition industries in the Agro-industrial park	-The No. of go downs constructed			-Kenya Industrial Estates
	Establishing Jua Kali sheds at Khamulati	-Operational Jua kali sector -The number of jobs created through the sector			-Kenya Industrial Research and Development Institute
	Acquisition (2.5Ha) of land and construct milk cooling plant along Kimilili-Khwiroro road	-Operational Milk cooling plant -The number of litres of milk being received from farmers			-Kenya National Chamber of Commerce and Industry -Kenya Bureau of Standards
	Development of industrial hubs at Kenya Industrial Estates land (KIE)	The No. of industries developed			-World Bank

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Medium Term (5-10 Years)	ACTORS
Trade and Commerce	Constructing open air markets at Maeni, Kibingei, Kwhiroro, Bahai, Kamisielo, Kamtio'ng & Bituyu	-The number of Market stalls constructed			-CGB -Municipal Board
	Upgrading of automated business licensing and promotion of E-Commerce;	-Functional automated business licensing program			- Kenya National Chamber of Commerce and Industry
	Establish Micro enterprises within the CBD and other Commercial nodes	-The number of credit facilities established			-Kenya Investment Authority of Business -Micro and Small Enterprises Authority -Business Premises Rent Tribunal - National Government -Financial Institutions -Development Partners

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10 Years)	ACTORS
Transport	Tarmacking of Kimilili- Kapsokwony road 8.3km	The No. of km tarmacked			-CGB -Municipal Board -National Government -KRB -KURA -KERRA -KENHA -NEMA -KPLC -Rural Electrification Authority -KIHBT
	Tarmacking of Kimilili- Chebukwabi road 4.0km				
	Tarmacking of Kimilili- Kamtiong' road 2.5km				
	Opening up of Access roads within the Municipality 36km	-The number of kilometers murramed			
	Undertaking routine maintainance on all Roads in Municipality	-Road sections maintained			
	Construct NMT in all transport routes especially urban areas	-The number of kilometers of NMT constructed			
	Paving of existing bus park	-Paved operational bus park			
	Installation and Maintainance of high mast flood lights and street lighting infrastructure on urban roads	-The number of flood lights installed -The number of flood lights maintained			
Constructung Boda Boda sheds	-The number of boda boda sheds constructed				
Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Medium Term (5-10 Years)	ACTORS
Water	Rehabilitation & improvement of Kimilili Water Supply Scheme (construction of elevated and underground water tanks)	-The number of water tanks constructed			-CGB -National Government -Ministry of water and sanitation
	Upgrading and extending existing water pipeline network in the Municipality hinterland	-The percentage coverage of water pipes extended			
	De-siltation and rehabilitation of Lutonyi and Matili dams	-Surface area of the dam de-silted			

	Undertaking hydro-geological survey and mapping for underground water points;	-Feasibility study report			-Ministry of environment and Forestry -Lake Victoria North water service boards -NEMA -Water resources authority (WRA)
	Drilling and equipping of shallow wells and boreholes in the Municipality;	-The number of BH and shallow wells drilled -The number of Boreholes equipped			
	Initiating community programmes and campaigns promoting rain water harvesting;	-The level of awareness on rain water harvesting			
	Organizing community awareness campaigns on sustainable use of water resources	-The level of awareness			

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Medium Term (5-10 Years)	ACTORS
Waste management a)Solid waste	Provide waste segregation bins at strategic locations within established commercial zones	-The number of well-placed bins			-CGB National Government -NEMA -Development Partners
	Acquire land (1.7Ha) and establish dumpsite at Kibingei	-Operational dumpsite			
	Undertaking monthly clean-ups in Kimilili CBD area	-Level of cleanliness within the CBD			

	Provide adequate and accessible skips in the municipality especially the markets	-The number of Skips placed			
	Organizing sensitization campaigns on sustainable waste management	-Level of awareness for residence on sustainable waste management			

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Long Term (5-10 Years)	ACTORS
Waste management b)Liquid waste	Acquire land (10.9Ha) and construct Sewer ponds at Khamulati and Lutonyi	-Operational sewer treatment plant			-CGB -Municipal Board -National Government -NEMA -Development Partners
	Construct a Sewer line system to cover the CBD area	-percent coverage of Sewerline			
	Constructing ablution blocks and exhaustible toilets in Kamtiong'. Kamasielo, Kibingei, Maeni, Bituyu, Bahai and Kwhiroro markets	-The number of modern toilets constructed			
	Recruiting and staffing officers to enforce liquid waste disposal regulations	-Efficiency of waste management			
	Acquisition of an exhauster	-The number of exhausters procured			

Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Medium Term (5-10 Years)	ACTORS
Energy	Provide training on installation of green energy	-Level of awareness on the use green energy			-Rural Electrification Authority -KPLC -CGB -National Government -Development Partners
	Identify and Acquire land for establishing solar plant;	-Operational Solar plant -The number of megawatts injected into the grid			
	Organizing sensitization campaigns on sustainable use of energy resources	-Level of awareness on the use of sustainable energy sources			

					-Energy Regulatory Commission
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Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Medium Term (5-10 Years)	ACTORS
Communication and ICT	Develop ICT parks in Kenya Industrial Estate Land	Vibrancy of ICT within the Municipality			-National Government -CGB -Mobile service providers -Development Partners -KPLC -NEMA - Kenya Communication Authority
	Extend fibre-optic cables to the whole Municipality				
	Partner with mobile service providers in providing relevant ICT infrastructure	-The number of ICT service providers			
	Identify and install Base Transceiver Stations in areas with poor network coverage;	-Level of satisfaction by residence on network coverage			
	Organize ICT capacity trainings;	-Level of awareness by residence on ICT			
	Establishing Information Database Management System	-Operational IDMS Centre			
Sector	Programme/Project	Indicator	Short Term (1-5)Years.	Medium Term (5-10 Years)	Actors
Storm Water	De-siltation of silted drainage channels along all roads	-Efficiency of the drainage system			- CGB -NGO's -Private Sector -Local Community -Ministry of Transport and Public works
	Provide open and covered paved storm water drains on all roads	-Number of roads provided with storm water drainages			

9 CHAPTER NINE: CONCLUSION

This Local Physical and Land Use development Plan is expected to guide the urban growth and development of Kimilili Municipality over a period of ten (10) years; 2023-2033. The plan provides a wide spectrum of land use components and addresses various development needs.

The Sectoral Land use proposals, the Planning policies and various strategies elaborated in this report are to facilitate easier Plan implementation. For the realization of day to day Planning and development Control, the policies become useful tools for development regulation.

The plan identifies all the key actors with their specific mandates for the realization of smooth implementation of the Plan. The responsibility of County Government of Bungoma as one of the key actors becomes handy during the implementation of the Plan.

To achieve on the proposals made, there is need for urgent implementation of the Plan to guide growth of this fast-developing Municipality. The County Government of Bungoma to increase capacity in terms of resources and Personnel to manage the implementation process

REFERENCES

- County Government of Bungoma; Bungoma County Integrated Development Plan 2013-2017
- County Government of Bungoma; Bungoma County Integrated Development Plan 2018-2022
- GoK (2010), The constitution of Kenya 2010 Kenya Gazette; *Government Printer*, Nairobi
Kenya Vision 2030; *Government Printer*, Nairobi
- GoK (1996),The Physical and Land Use Planning Act of 2019; *Government Printer*, Nairobi
- GoK (1996),County Government Act Kenya Gazette; *Government Printer*, Nairobi
- GoK (1986), The Public Health Act Cap. 242; *Government Printer*, Nairobi
- GoK (1999), Environmental Management and Coordination Act, *Government Printer*, Nairobi
- GoK (2006), Environmental Management and Waste Management Regulations; *Government Printer*, Nairobi
- GoK (1999), The Penal Code (Cap 63); *Government Printer*, Nairobi
- GoK (2007), The Occupational Safety and Health Act; *Government Printer*, Nairobi
- GoK (2012), Wildlife Management and Conservation Act ; *Government Printer*, Nairobi
- GoK (2012), Urban Areas and Cities Act ; *Government Printer*, Nairobi
- GoK (2012), Land Act No. 6; *Government Printer*, Nairobi
- GoK (1986), The Public Health Act Cap. 242; *Government Printer*, Nairobi
- GoK (2016), Forest Conservation and Management Act; *Government Printer*, Nairobi
- GoK (2016), Water Act; *Government Printer*, Nairobi
- GoK (2013), Agriculture, Fisheries and Food Authority Act; *Government Printer*, Nairobi
- Government of the Republic of Kenya (2007a), Kenya Vision 2030.Office of the President, Nairobi.
- Human Settlements in Kenya, A Strategy for Urban and Rural Development, Physical Planning department, Ministry of Lands and Settlement, 1978

- Kenya National Bureau of Statistics (KNBS) and Society for International Development (SID). (2013). Exploring Kenya's Inequality: Pulling Apart or Pooling Together. Nairobi: KNBS and SID.
- Kenya National Bureau of Statistics (KNBS). (2020). Volume II 2019 Kenya Population and Housing Census. Nairobi: KNBS
- Kenya Water Towers Agency (KWTA) .2019, Policy Brief: Mt.Elgon Water Tower
- Martin, B. (1969). Public participation in regional planning. Place of publication not identified: Mit Press.

APPENDICES

LIST OF 1ST STAKEHOLDERS MEETING HELD ON 27TH NOVEMBER 2019

LIST OF PARTICIPANTS-COLLECTION OF BASELINE DATA FOR THE PREPARATION OF INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMILILI HELD ON 27/11/2019 IN KIMILILI

Name	Department/ Institution	Position	Contacts	Signature
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Benson Mwangi	Administration	Member	0714675728	[Signature]
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LIST OF PARTICIPANTS-COLLECTION OF BASELINE DATA FOR THE PREPARATION OF INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMILILI HELD ON 27/11/2019 IN KIMILILI

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ELIJAH LUKHE		MEMBER	0733519125	[Signature]
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LIST OF PARTICIPANTS-COLLECTION OF BASELINE DATA FOR THE PREPARATION OF INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMILILI HELD ON 27/11/2019 IN KIMILILI

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GABRIEL SISULE	MARI	MEMBER	0722824982	[Signature]
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TENCE CHRISTOPHER	KIBINGEI	MEMBER	0719313144	[Signature]
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CS JOHN W NDIRABI	KIMILILI MUNICIPALITY	MEMBER	0725753225	[Signature]
JUDITH N. WAKURUA	MARI	MEMBER	0711218540	[Signature]
JOHN W. MASINDE	KIBINGEI	MEMBER	0717273753	[Signature]
GEORGE W. SIMON	Kimilili	MEMBER	0722631846	[Signature]
DAVID S.N. WAMUNGI	KIMILILI	PHYSICIAN	0722261722	[Signature]
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EMILY BAKHIA CHERIOO	SIMULAN	PHYSICIAN	0726774262	[Signature]
EFJATH LUKOPE	MARI	SPRINKLER	0723579189	[Signature]
JANET MARIKWA	SEC. KIBINGEI	SECRETARY	0708424174	[Signature]
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Daniel Sunjha	Administration	HRM	0798521322	[Signature]
Naomy Wanjakia	Administration	Ward Admin	0723224792	[Signature]
ANTHONY OIBALI	H.D.O / ADMIN	H.D.O	0724916453	[Signature]
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LIST OF PARTICIPANTS-COLLECTION OF BASELINE DATA FOR THE PREPARATION OF INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMILILI HELD ON 27/11/2019 IN KIMILILI

Name	Department/ Institution	Position	Contacts	Signature
Lilian Juma	MUNICIPALITY	MEMBER	0715871601	[Signature]
Elton Zochson	MUNICIPALITY	MEMBER	070766527	[Signature]
SULTAN WANGILA	MUNICIPALITY	MEMBER	0726697212	[Signature]
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MARK KHAKEMBA	Kimilili	MEMBER	0710166570	[Signature]

LIST OF 2ND STAKEHOLDERS MEETING HELD ON 7TH FEBRUARY 2020

LIST OF PARTICIPANTS- PUBLIC INVOLVEMENT – PRESENTATION OF SITUATIONAL ANALYSIS REPORT FOR PREPARATION OF INTERGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMILILI MUNICIPALITY, 2ND STAKEHOLDER MEETING HELD ON 07/02/2020 IN KIMILILI

Name	Organization	Department/Position	Contacts	Signature
EVANS W. BARASA	KIRINGEI	MEMBER	0712627807	
JOHN W. MASINDI	STAKEHOLDER	MEMBER	0717273759	
DENIS J. BULIGA	KIRINGEI	MEMBER	0712466279	
JOE S. NANYONYI	KIRINGEI	MEMBER	0791325966	
MARGIE A. MURAGE	STAKEHOLDER	MEMBER	0712605248	
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ALEX B. MABONGA	Kimilili Subcounty	HOUSING	0722625307	
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ABRAHAM M. M. M. M.	Kimilili Subcounty	MEMBER	0727273355	
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LIST OF PARTICIPANTS- PUBLIC INVOLVEMENT – PRESENTATION OF SITUATIONAL ANALYSIS REPORT FOR PREPARATION OF INTERGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMILILI MUNICIPALITY, 2ND STAKEHOLDER MEETING HELD ON 07/02/2020 IN KIMILILI

Name	Organization	Department/Position	Contacts	Signature
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✓ Bonifacio Wanjala	Municipal	Works Officer	0710153432	
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LIST OF PARTICIPANTS- PUBLIC INVOLVEMENT – PRESENTATION OF SITUATIONAL ANALYSIS REPORT FOR PREPARATION OF INTERGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMILILI MUNICIPALITY. 2ND STAKEHOLDER MEETING HELD ON 07/02/2020 IN KIMILILI

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LIST OF PARTICIPANTS- PUBLIC INVOLVEMENT – PRESENTATION OF SITUATIONAL ANALYSIS REPORT FOR PREPARATION OF INTERGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMILILI MUNICIPALITY. 2ND STAKEHOLDER MEETING HELD ON 07/02/2020 IN KIMILILI

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Pamela	"			
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KIMANI OBIWARA	Business	-	0715611328	
COLLINS WANGARA		-	0718578872	
STEPHEN MUKTE				
JOHN WANGARA	BUSINESS	0719787302	0729491903	
LILIAN BARASA	BUSINESS		0789436020	
LAURA MWINDE	BUSINESS		0792964028	
DANUS WASHIE	"		0718533274	
CHARLES WAMALWA	"		0757084555	
CHRIS MAMUNGE	"	0726687550	0726687550	
GEORGE SIMON YU	"	0712700642	0712700642	
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FACILITATION

PUBLIC INVOLVEMENT – PRESENTATION OF SITUATIONAL ANALYSIS REPORT FOR PREPARATION OF INTERGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR KIMULILI MUNICIPALITY, 2ND STAKEHOLDER MEETING HELD ON 07/02/2020 IN KIMILILI

	NAME	AMOUNT	SIGNATURE
1.	EMERALD ANUOR	3000	
2.	EMILY BAKHTA	3000	
3.	PURITH MIDEVA	3000	
4.	FLIJAH KANDIE	3000	
5.	PATRICK KEREK	3000	
6.	WASIKI NALYANYA	3000	
7.	BERENK		
8.			
9.			

LIST OF 3RD STAKEHOLDERS MEETING HELD ON 25TH AUGUST 2020



REGISTERED AND LICENSED CONSULTANT PHYSICAL PLANNERS
 SAKONG HSE, 1ST FLOOR KENYATTA STREET, P.O BOX 7759, ELDORET.TEL: (053) 2030223, EMAIL: simuplan@yahoo.com, Mobile number 0733-897 301 or 0726-496 898

FINAL STAKEHOLDER MEETING FOR THE PROPOSED LOCAL PHYSICAL AND LAND USE PLAN FOR KIMILILI MUNICIPALITY (2019-2020) HELD ON 25TH AUGUST, 2020 IN KIMILILI

LIST OF PARTICIPANTS

	NAME	POSITION	CONTACT	SIGNATURE
1	LILIAN. H. SIMIU	BOARD MEMBER	0700259036	
2	JOHN MASARI TETEGETE	BOARD MEMBER	0714341703	
3	Calome Balamia	BOARD MEMBER	0722866626	
4	BELSON WANJALA	Planning officer	0727536221	
5	KENNEDY PHANIA	ADMINISTRATOR	0765188296	
6	DONNA CHESANG	FINANCE OFFICER	0714348812	
7	MULAMA JOSEPH	CHAIR	0722575501	
8				
9				
10				



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STAKEHOLDER MEETING FOR THE PROPOSED LOCAL PHYSICAL AND LAND USE PLAN FOR KIMILILI MUNICIPALITY (2019-2020) HELD ON 25TH AUGUST, 2020 IN KIMILILI

LIST OF PARTICIPANTS

	Name	Area/Locality	Position	Contact	Signature
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2	DANIEL SIMIU	KIMILILI	KIMILILI	070654259	
3	DENNIS WAKOLI	KIMILILI	KIMILILI	0769337116	
4	REBERTS N. WAKESA	MAENI	TEACHER REP.	0712112753	
5	SAMUEL KITUI	KIRINGEI	PASTOR	0724431417	
6	John Simiu	MAENI	youth rep	070210921	
7	DANIEL WAKESA	Kimilili	-	0719149071	
8	NANCY KIMACITAS	Kimilili	Snr Office Admin	0726506796	
9	Donna Chesang	Kimilili	Finance officer	0714348812	
10	ANTONY OBIAT	KIMILILI	HQ/ W	0724916452	
11	Judith Muliya	Kimilili	HQ/ W	0727791692	
12	JUDITH N. WAKESANA	MAENI	Treasurer Stakeholder	0711218540	
13	JOHN WANJALA	KIMILILI	OFFICE ASSISTANT	0726657855	
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15	ELIZABETH MASINDO	KIMILILI	SOCIAL SERV	0726107281	
16	EVERLYNE MUNDIESA	KIMILILI	SURVEY ASST.	0719253253	

NOTICES OF PLAN COMPLETION

FORM PLUPA L-2

(r.10)



**COUNTY GOVERNMENT OF
BUNGOMA
DEPARTMENT FOR LANDS, URBAN/
PHYSICAL PLANNING, HOUSING &
MUNICIPALITIES
THE PHYSICAL AND LAND USE
PLANNING ACT
(No. 13 of 2019)**

NOTICE OF COMPLETION OF LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLAN

Title of development plans: Local Physical and Land Use Development Plans for Kimilili Municipality, Kapsokwony and Naitiri Towns 2022-2032.

Pursuant to the provisions of section 49(1) of the Physical and Land Use Planning Act, 2019, **NOTICE** is hereby given that the preparation of the above Plans were on the 1st day of **December, 2022 completed**. A copy of the plan as prepared has been deposited for public inspection free of charge at the Offices of the County Chief Officer for the Department of Lands, Urban/Physical Planning, Housing and Municipalities, respective Sub-county Administrators and Kimilili Municipal Manager. Any interested person who wishes to make any representation in connection with or objection to the above plans may within Sixty days send the same to CEC Member for the Department of Lands, Urban/Physical Planning, Housing and Municipalities of P.O. Box 437-50200 Bungoma and such representations or comments shall state the grounds upon which they are made.

Dated this 3rd day of January 2023

**Arch. Douglas Sasita Wekesa
COUNTY EXECUTIVE COMMITTEE
MEMBER, DEPARTMENT OF LANDS,
URBAN/PHYSICAL PLANNING
HOUSING & MUNICIPALITIES**

FOMU PLUPA L-2

(r.10)



**SERIKALIYA KAUNTIYA BUNGOMA
IDARA YA ARDHI, MIPANGO YA MIJI,
NYUMBA NA MANISIPAA
SHERIA YA MPANGO WA MIJI NA
MATUMIZI YA ARDHI
(Nambari 13 ya 2019)**

NOTISI YA KUKAMILISHWA KWA MPANGO WA MIJI NA MATUMIZI YA ARDHI

Kichwa cha mpango wa ustawishaji: Mipango ya Miji na Matumizi ya Ardhi ya Manisipaa ya miji ya Kimilili, Kapsokwony na Naitiri ya 2022-2032.

Kwa mujibu wa hitaji la sehemu ya 49 (1) ya Sheria ya Mpango wa Miji na Matumizi ya Ardhi, 2019, **NOTISI** inatolewa kwamba utayarishaji wa mipango iliyotajwa hapo juu ilikamilika mnamo **Decemba 1, 2022**.

Nakala ya mpango huo iliyotayarisha imehifadhiwa kwa ukaguzi wa umma, bila malipo, katika Afisi za Afisa wa Kaunti anayesimamia Idara ya Ardhi, Mipango ya Miji, Nyumba na Manisipaa, Wasimamizi wa Kaunti Ndogo husika na Meneja wa Manisipaa ya Kimilili.

Mtu yeyote ambaye angecaka kutoa kauli yoyote au pingamizi kuhusu mipango ya ustawishaji iliyotajwa hapo juu anaweza kufanya hivyo ndani ya siku Sitini (30) sika kutuma kauli au pingamizi hizo kwa Waziri wa Kaunti anayesimamia Idara ya Ardhi, Mipango ya Miji, Nyumba na Manisipaa S.L.P 437-50200 Bungoma.

Maoni, kauli au pingamizi sharti yaandamanishwe na sababu zilizosababisha kutolewa kwazo.

Tarehe: Januari 3, 2023

**Douglas Sasita Wekesa
WAZIRI WA KAUNTI ANAYESIMAMIA
IDARA YA ARDHI, MIPANGO YA MIJI,
NYUMBA NA MIJI**