



LIMURU MUNICIPALITY

**INTEGRATED DEVELOPMENT PLAN(IDEP)
2023-2028**



Prepared for the

**COUNTY GOVERNMENT OF KIAMBU
2023**

PREFACE	3
FORWARD.....	4
CHAPTER ONE: THE BASIS OF THE INTEGRATED DEVELOPMENT PLAN (IDEP) ...	5
1.1. Background	5
1.2 Overview	6
1.3 Economy	7
1.4 Strategic Focus/Agenda for our People.....	7
CHAPTER 2: CHAPTER TWO: POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK	8
2.1 Overview	8
2.2 Linkage with the Kiambu County Integrated Development Plan.....	8
2.3 Linkage with the Kenya Vision 2030 and its medium-term plans	8
2.4. Linkage to Sustainable Development Goals (SDGS).....	9
2.5 Urban Areas and Cities Act. – 2011 amended 2019	9
CHAPTER 3: SITUATION ANALYSIS	10
3.1 . Population	10
3.2. Physical Infrastructure and Access.....	10
3.2.1 Roads, parking facilities, and public transport	10
3.2.2 Storm Water Facilities	12
3.2.3 Electricity, Reticulation and Street Lighting.....	13
3.2.4 Fire-fighting and Disaster Management.	15
3.2.5 Water and Sewer Facilities.....	17
4.0 SWOT Analysis	19
CHAPTER 4: DEVELOPMENT PROPOSALS, STRATEGIES AND MEASURES	21
4.1 Overview	21
4.2 Development Goals.....	21
4.3 Guiding principles	22
4.3.1 Sustainability	22
4.3.2 Resilience.....	22
4.3.3 Equity	22
4.3.4 Integration.....	22

4.3.5 Accessibility.....	23
4.3.6 Safety	23
4.3.7 Sense of place	23
4.3.8 Spatial development concept	23
4.3.9 Land Use and Management Policies.....	24
4.4 Development Strategies	26
4.5 Transportation Strategy	26
4.6 Environmental Strategy.....	29
4.7 Economic and Social Infrastructure Strategy	35
4.8 Housing Strategy	38
4.9 Revenue Enhancement Strategy	40
5.0 Disaster Management.....	42
CHAPTER 5: PLAN IMPLEMENTATION, MONITORING AND EVALUATION	44
5.1 Overview.....	44
5.2 Plan Implementation	44
5.3 Implementation and Capital Investment Matrix.....	45
5.4 PLAN MONITORING AND EVALUATION	59
References	62

PREFACE

The Constitution of Kenya (2010) establishes two levels of government: the National Government and the County Governments. The Urban Areas and Cities Act (2011, amended, 2019) provides the framework for classifying urban areas. Limuru Municipality was gazetted in 1997, after meeting the criteria for this classification. The municipality has taken steps to develop instruments to guide its operations, with one key initiative being the preparation of the Integrated Development Plan (IDeP).

The IDeP for Limuru Municipality addresses significant urban challenges, including rapid urbanization, inadequate housing, informal settlements, lack of infrastructure, and absence of a cohesive growth framework. This plan is a crucial step in ensuring coordinated urban development and provides a model that other municipalities in the county can follow. The preparation process was participatory, involving the public, the County Government, and stakeholders from all wards of the Municipality.

The IDeP aims to guide the municipality's economic, infrastructural, and socio-economic development, aligning with the vision for the County Government of Kiambu's transformation.

The Municipal leadership is committed to securing funding for its implementation and encourages all stakeholders to support the plan, which is expected to revitalize the municipality by spearheading for sustainable development initiatives.

C.E.C.M- Lands, Housing, Physical Planning, Municipal Administration and Urban Development

FORWARD

The preparation of the Integrated Development Plan for the Municipality of Limuru has been the top agenda of the Board as the IDeP will guide the Municipality Board in discharging its mandate. The IDeP is the blueprint that the board will use to ensure that services are provided to the residents of the municipality.

The process of preparation of the IDeP was participatory with the involvement of representation from the public, the County Government and stakeholders from all wards within the Municipality. I share my sincere appreciation to the Board members and all other stakeholders who ensured the successful preparation of the Plan. I urge all the residents of the municipality to join hands with the board for the successful implementation of programs and projects proposed in the Integrated Development Plan.

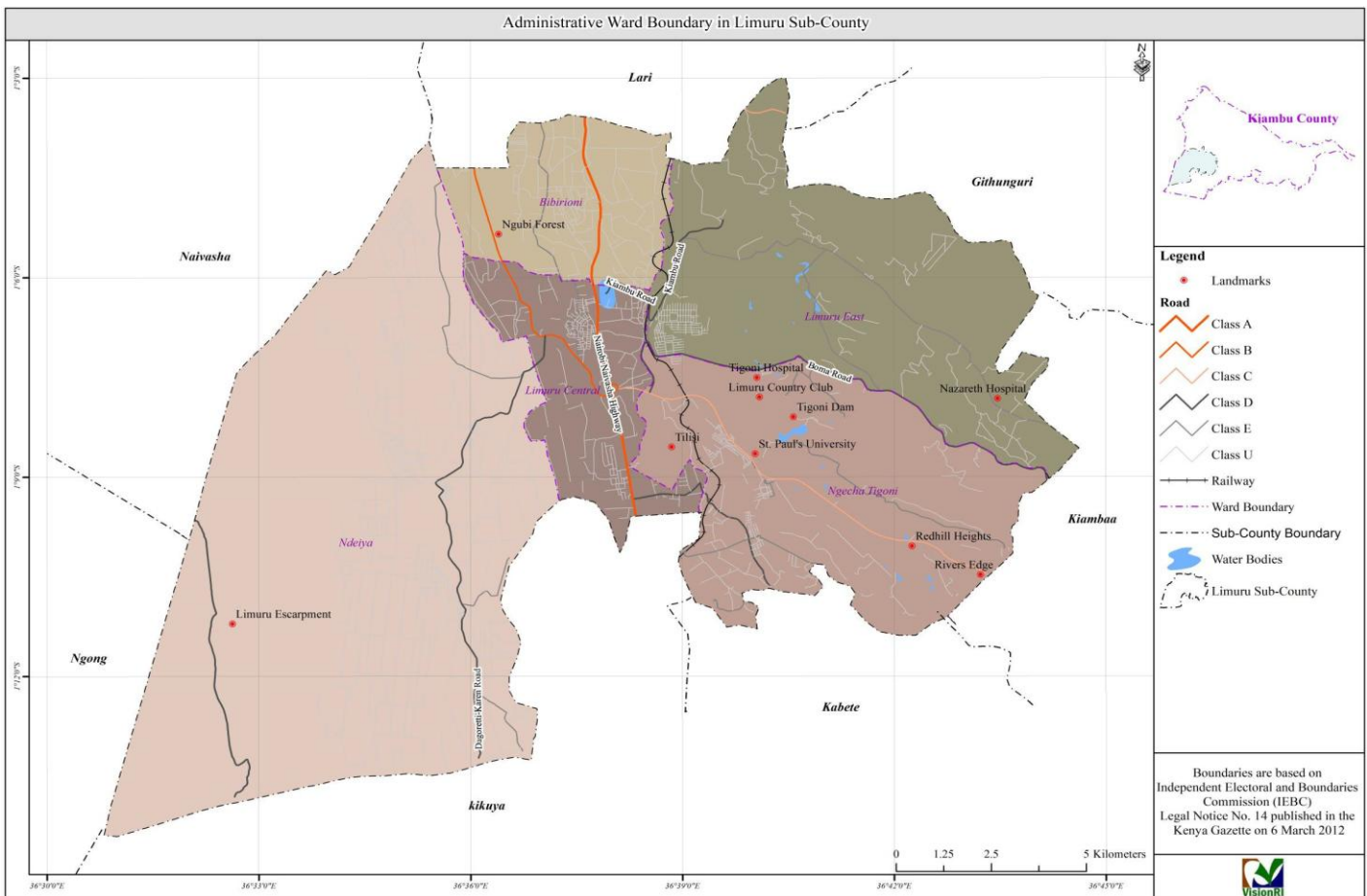
Chairperson, The Municipality Board of Limuru

CHAPTER ONE: THE BASIS OF THE INTEGRATED DEVELOPMENT PLAN (IDEP)

1.1. Background

The Municipality covers an area of 28,466 hectares (285 km²) and is located at the south-western side of Kiambu County and on the eastern slopes of the Aberdare Range at an altitude of about 2,237 metres above sea level. It is also part of the Nairobi Metropolitan Region's (NMR) and is about 35 kms northwest of Nairobi along the Nairobi-Nakuru Highway.

The Municipality borders Lari Sub-County to the north, Githunguri and Kiambaa Sub-Counties to the east, Kikuyu and Kabete to the south, and Naivasha and Ngong Sub-Counties of Nakuru and Kajiado Counties respectively, to the west. It encompasses various administrative wards including Bibirioni, Limuru Central, Limuru East, Ndeiya, and Ngecha/Tigoni. Map 2 below shows the location of the municipality as defined by the neighbouring Counties/Sub Counties.



Source: County Government of Kiambu Land Survey Department, 2023

Vision

To be the leading green –agro industrial, commercial, most connected, research oriented, cultural hub, tourism destination with a focus on sustainable development.

Mission

To stimulate a sustainable agro-based economy for the development of the urban area.

Core Values

Integrity
Inclusivity
Innovativeness
Unity of purpose
Professionalism
Trust

1.2 Overview

The Integrated Development Plan (IDEP) outlines the Limuru Municipality’s direction and priorities. The mission, vision, values, and goals are laid out to serve and cater for Limuru residents, visitors, businesses and neighborhoods. The plan sets goals to maintain those aspects of the community that residents, businesses, and employees are most proud of and strives to achieve the new goals articulated by residents and Municipality leaders.

Limuru Municipality is continually faced with demands of growth on budgets, infrastructure, and staffing and the need for a comprehensive and clear Integrated Development Plan (IDEP). This plan must reconcile the needs of a community with a diverse service offering, as it is challenging to focus on citizens, leaders, and staff in one direction.

Therefore, this Integrated Development Plan (IDEP) aims to facilitate the successful growth of the urban area, and provide a platform to purposefully advance the Municipality as an organization.

1.3 Economy

It's almost considered a suburb of Nairobi with most middle class residing in Limuru while they make daily commutes to Nairobi for work. The town is witnessing rapid growth with major road infrastructure and complex real estate developments taking place around and neighboring environs.

1.4 Strategic Focus/Agenda for our People

A world class municipality with a stable, progressive, resilient and self-sufficient community with empowered citizenry living in a sustainable environment governed by a competent and dynamic work force.

STRATEGIC FOCUS AREA	STRATEGIC PRIORITY AREAS / OBJECTIVES
Promote a stable, progressive, resilient and self-sufficient community	<ol style="list-style-type: none">1. Infrastructure2. Economic Growth3. Revenue Generation
Facilitate an empowered citizenry	<ol style="list-style-type: none">1. Public Participation2. Appropriate Policy and Legal Framework
Build a sustainable Environment	<ol style="list-style-type: none">1. Sustainable Land use Planning2. Solid and Liquid Waste Management3. Strong and vibrant neighbourhoods
Create and maintain a competent and Dynamic Workforce	<ol style="list-style-type: none">1 Well-managed government2. Corruption Free Municipality3. Diversity and Inclusivity

CHAPTER 2: CHAPTER TWO: POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

2.1 Overview

This Integrated Development Plan (IDEP) is linked with other Plans namely: The Kiambu County Integrated Development Plan, the CIDP III, the Kenya Vision 2030 and its medium-term Plans. The plan also aims to eliminate duplication of efforts and promotion of further integrations of the mentioned plans.

2.2 Linkage with the Kiambu County Integrated Development Plan

Kiambu County CIDP 2023-2027 has programs that are geared towards achieving urban development and urban area management.

Urban Areas and Cities Act (2011) puts emphasis on the need for integrated development planning and the need to align annual budgeting to the plan. In Section 36 (2), it states that “an integrated urban or city development plan shall bind, guide, and inform all planning for development and decision-making and ensure comprehensive inclusion of functions.” These plans should be aligned to the development plans and strategies of the county government (section 37(1)).

The sector plans, urban areas plans are therefore an integral part of the CIDP, and it is in view of this that the CIDP has taken into consideration inputs from the sector plans put in place by the various county departments and the urban areas plans. The CIDP linkage with the sector plans will thus facilitate the implementation of the projects and programmes as planned in those plans.

2.3 Linkage with the Kenya Vision 2030 and its medium-term plans

The Kenya Vision 2030 is the national long-term development policy that aims to transform Kenya into a globally competitive nation with a high quality of life to all its citizens by the year 2030 in a clean and secure environment. The Vision is anchored on three key pillars: economic; social; and political. The Kenya Vision 2030 is phased to be implemented in successive five-year Medium-Term Plans.

The first, second and third plans covered the period 2008-2012, 2013- 2017 & 2023-2022 respectively and was in a series of successive 5-year plans under which the Kenya Vision 2030

is to be implemented. Like its three predecessors, the fourth medium term plan (MTP 2023-2027) will be guided by Kenya Vision 2030 and the constitution of Kenya and incorporate the priorities outlined in the Manifesto of the incoming government.

2.4. Linkage to Sustainable Development Goals (SDGS)

The Sustainable Development Goals (SDGs) are a set of 17 goals, the world will use over the next 15 years to end extreme poverty, fight inequality and injustice, and fix climate change. Formed through extensive consultation with all levels of society, the SDGs are a comprehensive development plan to leave no person behind. As the excerpt from the 2030 Agenda describes, the SDGs and targets are aspirational and global with each government called to:

- a) Decide how the SDGs should be incorporated into national/County/Municipality planning processes, policies and strategies;
- b) Set their own national/County/Municipality targets guided by the global level of ambition, but taking into account national/County/Municipality circumstances; and
- c) In the implementation of the agenda built on existing commitments and in accordance with international human rights standards for the full benefit of all.

The municipality will focus on SDG no. 11 which is to ‘make cities and human settlements inclusive, safe, resilient and sustainable urban areas which will ensure effective urban development and management.

2.5 Urban Areas and Cities Act. – 2011 amended 2019

Section 20(1)(c) of the Urban Areas and Cities Act 2011 makes it clear that, a board of a city or municipality – including a town; (section 20(2)) shall formulate and implement an Integrated Development Plan (IDEP). This is not at the discretion (or gift) of the Municipality. It is a mandatory “urban management” responsibility. Section 39 (1) then states: “A board or town committee shall, within the first year of its election, adopt a single, inclusive Integrated Development Plan (IDEP) for the development of the city or urban area for which it is responsible”.

CHAPTER 3: SITUATION ANALYSIS

3.1 Population

The municipality had an estimated population of 159,314 persons with 49,096 households according to the 2019 Census by the Kenya National Bureau of Statistics (KNBS).

This population is estimated to rise to approximately 197,447 persons by 2030 using an annual population growth rate of 3% as per the National Spatial Plan (2015-2045). However, due to the dualling of Nairobi-Nakuru Highway, the Western By-pass, Gikambura-Mutarakwa Road, among other infrastructure this may lead to a higher population increase by attracting people to settle in Limuru.

The municipality has a cosmopolitan population which has created the need for more urban services, hence the need for better planning of the urban area.

Table 1: Population Projections for Limuru Municipality

Ward	Years					
	2009	2019	2022	2025	2028	2030
Bibirioni		25,269	26,792	28,407	30,119	31,317
Limuru Central		40,491	42,931	45,519	48,263	50,183
Limuru East		33,763	35,798	37,956	40,243	41,844
Ndeiya		30,819	32,677	34,645	36,734	38,196
Ngecha/Tigoni		28,972	30,718	32,570	34,533	35,907
Total	131,132	159,314	168,916	179,097	189,892	197,447

Source: Kenya National Bureau of Statistics, 2019

3.2. Physical Infrastructure and Access

3.2.1 Roads, parking facilities, and public transport.

Limuru Sub-County is well connected and lies along the Northern transport corridor, which is the main getaway to Mombasa and Uganda, Rwanda and South Sudan. The expansion of the Nairobi-Naivasha highway which cuts across Limuru has attracted increased interest in the sub-county and region as a whole. The Nairobi-Rironi section is currently ongoing construction.

Most local roads are narrow (they are either one lane or they lack NMT provision for pedestrians and cyclist) and are in poor condition. The following table lists the main roads, types and conditions.

Notes: *ADT – Average Daily Traffic*

NMT – Non- motorised Transport

MT – Motorised Transport

Table 8-1: Main Roads in Limuru

Road Name	Link	Length	Surface Type	Condition	Average Daily Trip Volumes (Both directions)	
					NMT	MT
Kiroe-Rironi Road	Waiyaki Way to Kiroe	5	Gravel	Good	-	-
Acre 5- Ngecha Road	Waiyaki Way to Ngecha	4	Gravel	Fair	-	-
Kawango-Mahinga Road	Ngecha Road to ACK	2	Gravel	Fair	-	-
Ngecha-Wangige Road		11	Gravel	Very Poor	-	-
Ngecha-Kabuku Road	Ngeche to Kabuku	2.6	Bituminous	Very Poor	-	-
Ngecha-Chunga Mali Road	Ngecha to Chunga Mali	3.1	Gravel	Fair	-	-
Mai Mahiu Road	Kamandura to Mai Mahiu	20	Bituminous	Fair	-	-
Murengeti-Roromo Road	Waiyaki to Ngara	9	Bituminous	Fair	-	-
Mutarakwa-Thogoto-	Mutarakwa to Thogoto	50	Gravel	Fair	-	-
Ngong Road						
Ndioni Road	Mai-Mahiu Road to Ndioni	4	Gravel	Fair	-	-
Mutarakwa-Limuru Road	Mutarakwa to Limuru		Bituminous	Good	-	-
Nairobi- Nakuru Road (A104)	Limuru to Uplands		Bituminous	Very Good	4,755	15,066
Ngarariga Road	Ngarariga to Bibirioni		Gravel	Fair	-	-
Bata - Murengeti Road	Murengeti to Bata		Gravel	Fair	-	-

Manguo Road-	Uplands to Limuru		Bituminous (Completely Worn Out)	Poor	-	-
Kiambu Road	Section A Nakuru Highway to Limuru Town		Bituminous	Poor	2,787	8,940
Kahuho Road	Kiambu Road to Offices		Bituminous	Good	-	-
Market Road	Railway Station		Bituminous up to the market (600 m), after which it is under construction	Good	-	-
Kiambu Road (D409)	Limuru to Kiambu		Bituminous	Very Good	3,452	6,023
E427 Road	D409 to Nazareth Hospital		Bituminous	Very Good	-	-
Misri slum Road	D409 to Misri		Gravel	Poor	-	-
Tigoni - Kabuku Road	Tigoni to Kabuku		Bituminous	Poor	-	-
Limuru Road	A104 to Nairobi via Ruaka		Bituminous	Fair	-	-

Source: Kiambu County Road Department

The main modes of road transport include public, private, and cycling, NMT. Public transport vehicles in Limuru mainly consist of 14-seater matatus, minibuses, buses, motorcycle taxis and rickshaws. Public service vehicles (PSV) operate under Savings and Credit Cooperatives (SACCO) such as Likana, Ndikana, and Lina, amongst others. The main routes are Limuru-Nairobi (via A104); Limuru-Nairobi (via Limuru road); Limuru-Mutarakwa; Limuru- Kiambu; and Limuru-Naivasha/Nakuru, amongst others. There is only one bus terminus within the town with 207 parking spaces which are fairly adequate for now because the highest utilisation percentage is about 96%. Motorcycle taxis are the main intermediate means of transport, catering for flexible door-to-door transport. However, their operations are un-regulated and without appropriate infrastructures such as pick-and-drop bays and waiting sheds.

There are many freight vehicles to and from the industries located in the town (such as Bata Shoe factory, and Proctor and Allan industry, amongst others). Limuru is also an agricultural town and many trucks ferry farm produce such as milk, tea, and grocery. In addition, many trucks ferry construction materials from quarries along the Mai Mahiu Road. In addition, A104 road traverses through the town and has many trucks to/from Mombasa and Nairobi to other

parts of Kenya and the rest of East Africa.

3.2.2. Storm Water Facilities

In the Fourth schedule, Part 2 of the Constitution of Kenya 2010, the County Government is mandated to provide County public works and services including water and sanitation services, and storm water drainage. Urban storm water management is becoming increasingly important for towns especially in developing countries. The extent of the issue becomes particularly apparent when there is heavy rainfall that floods the settlements situated in the lowest parts of towns and the large number of urban development issues. Storm water is all the water that runs off the land after a rainfall or snowmelt incident. This is a natural process but in urban areas, proper infrastructure needs to be put in place.

Figure 1: Storm Water Drainage in Limuru Municipality



Source: Field survey, May 2023

Limuru Municipality has capacity to provide storm water drainage for its township. The County Government through the Department of Roads, Transport and Public Works has outlined the areas that need investment in storm water management in built-up areas. So far, Limuru has a sewer network of approximately 8.3km sewers varying in diameters. The existing sewerage network comprises of trunk mains of DN 300 concrete pipes and DN 160 uPVC laterals. The WSP connects households to inspection chambers which serve several households before connecting to the trunk mains. LIWASCO estimates that nearly 612 m³/day influents are received by the WWTW. The WWTW system is mechanised and installed equipment is not working properly. It was reported that several types of equipment such as motors for the aerators get damaged due to frequent fluctuations in the electrical power supply. The existing sewerage network covers only Limuru Central, therefore, most of the developing areas are not served by the sewer system.

There is ongoing maintenance of all storm water drains within the municipality. The prevalent flooding causes extensive damage to housing and other infrastructure such as roads, water pipe lines and underground electric cables, which generally disrupts both residential and commercial activities in the town. It also creates social effects like population displacement and makes the

environment unpleasant. The lack of public awareness, improper demarcation and protection of storm water drains/ditches and their proximity to residential / informal settlements has led to several negative impacts on the bio-physical and social environment.

Global climate change has affected weather events including rainfall patterns so that there are unpredictable seasons and rainfall intensity which cause flooding and their ultimate effects. This calls for investigation into effective storm water management practices which are resilient and adaptive to changing climate especially in dealing with urban storm water runoffs. More investment in storm water management in built up areas is needed in Limuru.

3.2.3 Electricity, Reticulation and Street Lighting.

According to Kenya Power 2023 report, KPLC supplies electricity within the town and has a power sub-station located along Lion’s Street (Kiambu Road). The Directorate of Public Works and Utility services had, by the FY2016/2017, installed flood masts in Limuru municipality: 5 masts of 30M high, and 16 masts of 15M high. They are located at Kaspat near chiefs office, Kiamba shopping center, Kanga’au market, Muchatha bodaboda shed and Mugaca stage.

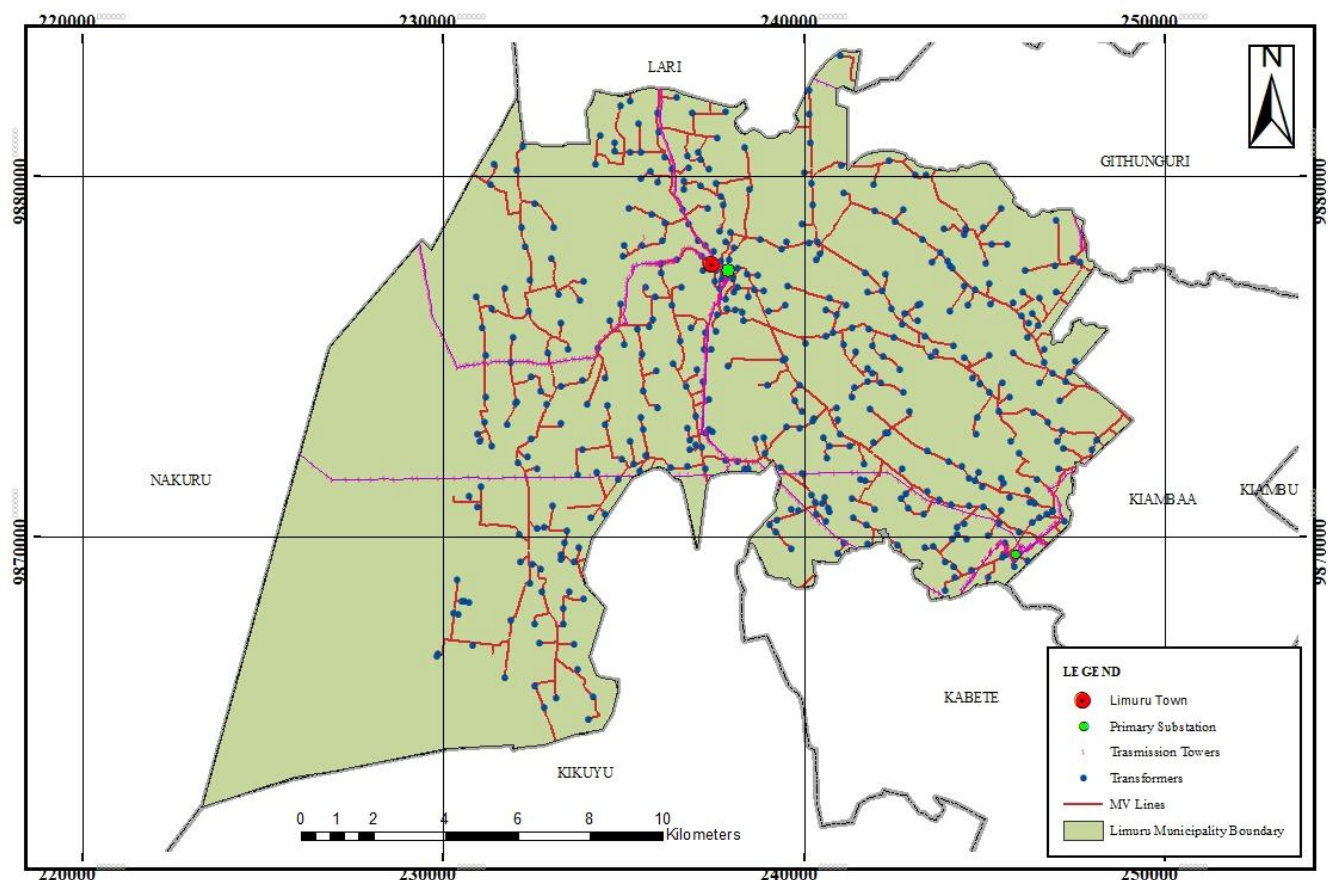
Kenya Power has also played a key role in providing 5 other street lighting masts which are 30M high. A wind power plant is planned to be set up in Limuru by local investors. The project will be undertaken on a 210-acre parcel of land at Mwanyawa, Ruhuhu, Nguirubi and Thiongo area and is expected to generate 50 Megawatts (MW) renewable. Electricity reticulation within the proposed municipality is shown in map 4 below.

Figure 2: Electricity, Reticulation and Street Lighting in Limuru Municipality



Source: Field Survey, 2023

LIMURU MUNICIPALITY POWER CONECTION



Source: Department of Roads, Transport, Public Works and Utility Services, 2023.

3.2.4 Fire-fighting and Disaster Management.

Fourth schedule, Part 2 of the Constitution of Kenya, stipulates that the County Government should provide for Firefighting and disaster management services to its residents. Further the Kiambu County Emergency Fund Act 2013 was enacted in December 2013. In each financial year, monies contained in the fund are 0.5% of the Counties budget. The purpose of the fund is to enable payments to be made in respect of a County when an urgent and unforeseen need for expenditure arises for which there is no specific legislative authority and it is for public interest. This payment may be necessary to alleviate the damage, loss, hardship or suffering which may be directly caused by unforeseen event.

Figure 1: Firefighting facilities/equipment in Limuru Municipality.



Source: Field Survey, May 2023

The Directorate of Public Works and Utilities has put in place measures for emergency fires and accident in the fire and rescue section. There are plans underway to build capacity within the township to ensure timely fire response. There is one fire station in the township with a capacity of 4,500litre which is operational throughout; it is supported by 10 firefighters.

Other achievements of the fire and rescue department include: reduction of emergency response time, fire safety and audit, training of fire officers and installation of fire hydrants.

3.2.5 Water and Sewer Facilities

The County Government through the Water and Sanitation Services Act 2015 (Amended in 2018) provides for development, regulation and management of county public works related to Water and Sanitation Services, Storm Water Management Systems and Water Conservation. The objects of the Act provide for a legal framework for implementation of Sections 10 (a) and 11 of Part 2 of the Fourth Schedule of the Constitution of Kenya 2010 and Article 43 (1) (b) and (d) in a bid to; ensure equitable and continuous access to clean water, promote water conservation, provide for the development and management of County water services and public works, provide for regulation of County Water and Sanitation, ensure effective and efficient provision of Water and Sanitation Services, promote effective and efficient management of storm water in built up areas, enhance sustainable management of water resources and promote water and soil conservation.

The main sources of water in Limuru sub-county are:

- a. Ground water from boreholes at the rate of 1,776 m³ per day;
- b. Piped water provided by Limuru Water and Sewerage Company and accessed by the community at designated water points;
- c. Rain water harvesting; and,
- d. Tigoni Dam.

Other sources of water are through Community Water Projects, private boreholes and water vendors. According to the county department of water and sanitation, the Limuru municipality has a rural population of 241,265 of which only a population of 109,632 is served by the Kiambu Water and Sewerage Company. There are 7,908 water connections of which only 7,557 are active. The total production capacity of the present sources is 1,287 M³/day.

Figure 4: Limuru Sewerage Treatment Works



Source: Field survey, 2023

The altitude of Limuru Town is too high compared to the available surface water sources and therefore supply from groundwater/boreholes is more economical. According to hydrogeology studies carried out in the area, there is adequate groundwater potential within the town and the surrounding areas to meet the forecast demand (*Feasibility Study and Master Plan for Developing New Water Sources for Nairobi and Satellite Towns – Master Plan Report*)

The ongoing projects are:

- a. Establishment of Tigoni Dam water treatment plant is underway to supply 2,000m³ of water per day;
- b. Rehabilitation of the sewage treatment plant in Limuru Town
- c. Construction of a pipeline from Loromo boreholes to Limuru town and
- d. Drilling of boreholes along Manguo road.

There is an old sewer system that was constructed in 1980. However, it was designed to handle waste water from 4000 households. Population has increased more than tenfold and is expected to grow. Most developers construct own septic tanks and soak pits for waste water disposal while low-income households use common pit latrines. There is a need to provide a sewer system which will serve Limuru and its satellite centres of Karanjee, Kwambira, Bibirioni.

Table 1: Analyses the water demand and sewerage flows in Limuru.

Parameter	Year 2016	Year 2018	Year 2028	Year 2038
Water Demand	5,888 m ³ /day	6,190 m ³ /day	7,705 m ³ /day	9,492 m ³ /day
Sewerage flows	3,071 m ³ /day	3,309 m ³ /day	4,502 m ³ /day	5,912 m ³ /day

Source: *Limuru Sewerage Project by Arthi Water Services Board, July 2016.*

Works to rehabilitate the sewerage treatment plant is currently ongoing. Once the rehabilitation is complete, the plant capacity is expected to increase.

4.0 SWOT Analysis

The table below illustrates a SWOT Analysis to determine the strengths, weaknesses, opportunities and threats in Limuru Municipality, Kiambu County.

Strength, Weaknesses, Opportunities & Threats	
Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Its proximity to Nairobi City hence serving as a gate/exit to Nairobi. 2. Has a reliable transport connectivity network to the city and other municipalities 3. Good arable land 4. Agro-industrial base 5. Historical education support and healthcare funding. 6. Sufficient labour force from its high youthful population. 7. Well-developed housing and real estate Sector 7. Close proximity to international agencies i.e UN and Embassy's 8. Initial municipal structures 	<ol style="list-style-type: none"> 1. Poor urban planning and enforcement leading to congestion, poor sanitation, & land mismanagement. 2. Insufficient budget, budget plans and development plans. 3. Few staff and personnel to run all function (secretariat). 4. Unskilled work force; high unemployment 5. Death of data for planning and decision making 6. Poor housing, insufficient schools, and weak health facilities. 7. Absence of management systems and technology 8. Lack of defined roles and functions to govern the municipality 8. Insufficient urban amenities such as sewer, water, roads, internet and recreational centres 9. High Value of Land
Opportunities	Threats
<ol style="list-style-type: none"> 1. Inclusivity to the Nairobi Metropolitan 2. Availability of land for Real estate investment 3. Agro-industry and manufacturing growth 4. Existing suitable locations for dams construction 5. Cultural tourism growth and support for heritage preservation 6. Ability to increase Revenue collection (building approvals, parking fees, market levies, licenses fees, encroachment etc) 7. Creation of public private partnerships 	<ol style="list-style-type: none"> 1. High rate of unemployment leading to increased insecurity/crime 2. Generation of high volume of solid /liquid waste; pollution; climate change 3. Narrow road corridors due to poor land demarcations 4. Lack of PDPs and other 5. Political Interference; poor governance 6. Informal settlements; healthcare funding gaps

- | | |
|---|--|
| <ol style="list-style-type: none">8. Grow public ownership and confidence through public participation forums9. More areas opening up for investment due to the ongoing road network expansion10. Existing development plans at county and national level | |
|---|--|

CHAPTER 4: DEVELOPMENT PROPOSALS, STRATEGIES AND MEASURES

4.1 Overview

From analysis and synthesis of the primary and secondary data, the various problems and opportunities are identified. In order to bring sustainability among other desired aspects, the plan proposes the following interventions to improve, rectify, and prevent the occurrence of undesirable growth and development in the town. An addendum of the concepts, strategies and proposals together with their remarks.

The main objectives of this plan are to:

- Provide a basis for infrastructure and service provision for present and projected population over the plan period,
- Tackle environmental issues and concerns affecting the towns.
- Propose development potentials of the planning area (social, economic).
- Provide a basis for development control and investment decisions.
- Allocate sufficient space for various land uses to ensure efficient function and convenience of users and accommodate future growth.
- Uphold innovative civic and urban design that enhances the character and form of the town.

4.2 Development Goals

The main goal is to achieve the objectives of this plan through strategies that will give guidelines and policies which if implement result in the attainment of Limuru Municipality Vision.

The main goal can be broken down and related to the Nairobi Metro 2030 Strategy as seen in the table below.

Key Result Areas Nairobi Metro 2030 Strategy	Local Development Goals
	Protect the integrity and sustainability of the natural environment. Protect productive agricultural land
Building an internationally competitive and inclusive economy for prosperity	Support economic and social development and growth and the creation of employment opportunities
Deploying world class infrastructure and utilities	Provide efficient infrastructure networks and services

for the region	
Optimizing mobility and accessibility	Improve movement and connectivity
Enhancing the quality of life and inclusiveness in the region	Create an efficient and integrated urban environment
Delivering a unique image and identity through effective place branding	Create a recognizable identity for the town
Ensuring a safe and secure region	Create an attractive and safe town
Building world class governance systems	Strengthen the capacity of the land management System

4.3 Guiding principles

This section sets out the overarching guiding development principles that inform the Integrated Development Plan for Limuru Town. Principles are the fundamental norms, rules, or values that represent what is desirable and positive for the development of the planning area, and act as yardsticks for determining what is right and what is wrong.

4.3.1 Sustainability

Sustainability refers to the preservation of renewable and non-renewable environmental resources, while at the same time promoting economic and social sustainability. A sustainable town reduces the impact on the environment through reducing the use of resources and the production of waste while improving the livability of the settlement.

4.3.2 Resilience

Resilience is about the town's capacity to withstand shocks and disturbances such as climate change or economic crises, and to use such events to catalyse renewal and innovation. Resilient towns are those places that are able to quickly adapt to changing circumstances, albeit economic, climate or social conditions. Resilience is about the protection of natural infrastructure (rivers, wetlands etc.) but also about how we design and build the man-made environment to allow for (i) protection against outside shocks as far as possible, but also (ii) flexibility and addictiveness in the face of change.

4.3.3 Equity

A town that is equitable is one where all residents enjoy (i) fair access to livelihood, education, and resources, (ii) full participation in the political and cultural life of the community, and (iii) self-determination in meeting fundamental needs.

4.3.4 Integration

Integration, whether spatial, sectoral or socio-economic, is fundamental to sustainable development, i.e.

- Spatial integration refers to the proximities and functional relationships between different functions and elements within a particular area, with the aim of creating the greatest degree of synergy.
- Socio-economic integration refers to the proximity of different socio-economic groups so as to create a socially cohesive community.
- Sectoral integration refers to the vertical and horizontal integration among the various levels of government and agencies involved in spatial governance.

Development proposals need to ensure integration of all development issues including transport, planning, economic development etc.

4.3.5 Accessibility

Accessibility can be defined as the ease with which a building, place, facility or service can be reached by people. An accessible town is one where there is equitable physical and functional access to services, facilities, employment, training and recreation, including a choice of safe and efficient transport modes (e.g. public transport, private vehicle, bicycle, walking and wheelchair). Accessibility also comprises of convenient and dignified access to private and public spaces.

4.3.6 Safety

Residents, businesses and visitors must feel safe and secure in the area. Active policing and surveillance is important, but the spatial structure and functionality of the town should also allow for passive security measures. Safety is supported when people can see potential threats, judge risks, escape if a threat is perceived, seek assistance and give aid if needed. This is supported by views into and through spaces; by multiple access routes into and out of spaces; by mixed land uses that mean other people are around all the time; and by windows and activities in buildings located to overlook streets and other public spaces.

4.3.7 Sense of place

Sense of place refers to an appreciation for the distinct character of a town. This distinct character is a result of a combination of all aspects of a place that together makes this place distinct from anywhere else. Places are valued because of the individual qualities that make them distinctive from other places, i.e. because of their character and identity.

4.3.8 Spatial development concept

The spatial development concept indicates the development approach (or model) that will be followed in the development of the town and provides a spatial interpretation of the development vision and goals by means of a high-level desired spatial structure for the planning area comprising the major structuring elements.

4.3.9 Land Use and Management Policies

Coming up with effective zoning policies and regulations to safeguard the agricultural hinterland and manage urbanization of the planning area. The overall land management policies will include:

Proposed land use and management policies

SECTOR	PROPOSED POLICIES
ENVIRONMENT	<p>Restriction of development around rivers and wetlands.</p> <p>Restriction of development to approved uses only along immediate boundaries of fragile site buffers</p> <p>Control of development on steep slopes to reduce soil erosion</p> <p>Increase in forest cover</p>
TRANSPORTATION	<p>Appropriate transportation networks provision per zone as per the structure plan.</p> <p>Non-approval of encroachment/ encroaching use on transportation way</p> <p>leaves.</p>
INFRASTRUCTURE	<p>Non-approval of encroachment/ encroaching use on infrastructure way leaves.</p> <p>Restriction of development to approved uses within the vicinity of social infrastructure facilities. Widening of the narrow roads</p>
AGRICULTURE	<p>Curbing land fragmentation through restrictions on uneconomical sub- division of agricultural land. Non-approval of encroachment/ encroaching urban settlements use of the highly capable agricultural land areas.</p> <p>Promotion of intensive agriculture</p>
TRADE AND INDUSTRY	<p>Development of a designated agro-industrial zone</p> <p>Restrictions on location of industries near densely populated zones. Encouraging compact market development</p>
TOURISM	<p>Restriction of development around scenic sites to eco- tourism developments only.</p>
URBANIZATION	<p>Compacting of the urban core to prevent urban sprawl and town convergence.</p> <p>Development control measure on minimum floors. Enforcement of the urban fringe/ edge using agricultural belts.</p>

PUBLIC LAND

Immediate inventorying and periodical review of the state all public land in Limuru Town.

Retention of all public lands under the respective government ownership

unless their disposal will serve an overarching County/ national interest.

4.4 Development Strategies

This section deals with the development strategies and interventions that will be used to achieve the development objectives for this Limuru Town IDEP. These strategies include transportation, environmental, economic & social infrastructure, housing and revenue enhancement strategies.

4.5 Transportation Strategy

4.5.1 Regional Connectivity and Integration

Regional connectivity and integration refer to how well the town is integrated with and linked to surrounding areas. The goal is to create physical and functional networks that will ensure mutual interactions between the town and surrounding areas. The intention is therefore to address the town as part of a larger region, “since both the problems of the area and the desired improvements result, to some extent, from conditions in other parts of the region. “Since spatial integration is predominantly dependent on linkages, the development objectives and interventions will focus on improving movement linkages.

Objective

- To improve regional connectivity, in particular with Nairobi and other major centers and markets.

Development proposals and interventions

The following interventions should be implemented:

- Upgrade Nairobi-Nakuru Road A104 to improve movement to and from Nairobi;
- Open missing link roads in Limuru East
- Upgrading and expanding all roads in Limuru to bitumen and gravel standards (9 meters wide) placing priority on roads that lead to important facilities e.g., hospitals, fire stations, industries, education facilities and into residential areas in case of emergencies;
- Improve linkages between Ndeiya, Limuru Central, Bibirioni and Limuru East;
- Improve public transport services between Limuru and surrounding towns as indicated above.

4.5.2 Improved Accessibility and Connectivity

While the planning area has a small footprint, accessibility between different areas is weak. Neighborhoods are isolated by poorly maintained and unsafe open spaces with inadequate linkages between them. The mono-functional character intensifies this poor accessibility and increases levels of spatial inequity in the town. While there is a functioning road network, the streets of the town have been designed and planned with cars and not people in mind. Great towns have great streets and great street spaces attract private sector investment and convey a

sense of dignity and pride to residents. They are the most public and visible face of the town and their quality, cleanliness and levels of activity can inspire confidence and investment or detract from these. This strategy deals with the location, design and function of a proposed movement network, which includes the upgrading of existing streets and linkages, as well as the development of new linkages where necessary.

Objectives

The following are the development objectives from a movement and connectivity perspective:

- To ensure a clear hierarchy of roads that connect all the different parts of town;
- To improve local movement networks through additional linkages;
- To improve public transport facilities and networks;
- To improve movement for pedestrians and cyclists;
- To improve the condition of roads; and
- To transform the street network into attractive, safe, vibrant, comfortable, landscaped spaces.

Development proposals, interventions and guidelines

The following are the development interventions required to improve accessibility and connectivity in Limuru Town:

- There must be a clear hierarchy of roads. The primary and secondary roads should be upgraded in terms of width, surfacing and street scaping to (i) clearly distinguish them from local roads and (ii) accommodate the level of traffic and nature of functions that are associated with these roads in terms of the spatial development concept.
- To improve accessibility and connectivity in the planning area, a number of new secondary and local link roads are proposed. The intention is to allow residents greater convenience in terms of movement through the study area, but in particular towards existing and proposed nodes and corridors.
- A104 Nairobi-Limuru and Limuru Road must be upgraded to facilitate greater ease of regional movement to and from the planning area, which will have a positive impact from an economic perspective.
- All Primary and Secondary Routes must be developed as pedestrian and cycling priority routes. This requires the development of dedicated paved sidewalks and/or cycling paths of sufficient width along these routes.

Guidelines

In order to establish a multimodal transportation system to efficiently, effectively, and safely move people, goods and services, the following should be considered.

- The design and layout of internal movement in the town should promote an open, permeable and legible movement network that allows for ease of vehicular and pedestrian movement.
- Well-located and well-managed road based public transport facilities, linked to the business and employment areas, must be available and accessible throughout town
- Development of linkage roads between residential areas to enhance integration and accessibility
- As far as possible avoid dead-end streets and roads
- Limit block sizes to a maximum length of 150m for ease of pedestrian movement
- Maintain a road hierarchy that readily distinguishes between routes of local and regional importance

Further for the planning area to be more walkable and bicycle friendly, in particular, improving and extending pedestrian and bikeway amenities to better connect residential areas, activity centres, and employment zones, the following guidelines should apply

- Improve and expand facilities for pedestrians and cyclists, initially focusing investment in urban corridors and activity streets.
- Make streets safe by providing enhanced crosswalks, sufficiently wide sidewalks, shade trees, and other street furniture (e.g., benches and pedestrian-scale light fixtures) throughout the community, most importantly along proposed urban corridors and activity streets.
- Introduce a network of off-street pathways and routes, encompassing shared use paths that are integrated with the study area's green network.
- Require bicycle parking in conjunction with public amenities and commercial development projects that will attract a significant number of users, including the provision of bicycle lockers at major transit hubs.
- Ensure that a minimum sidewalk width of 1.5m is provided on all identified pedestrian and cycling priority routes
- Ensure that safe pedestrian crossing points are provided at a minimum of 75m intervals within the street network

4.6 Environmental Strategy

The development strategy for the environment deals with the designation, protection and management of biodiversity and important ecosystems. This is done in part by creating a natural open space system. This generally comprises rivers, dams, riparian zones, wetlands, ridges and other environmentally sensitive areas. Sensitive ecological environments on the one hand pose a constraint to development as these parcels of land must remain free of development. In addition, movement linkages across these areas are limited (due to cost and the need to minimise any form of intrusion into these areas) which in turn limits the urban structuring possibilities. Ecologically sensitive areas however provide immense opportunities and value from an ecological, identity, place- making, attractiveness and property value perspective. Wetlands in particular perform a number of critical ecological functions. They moderate impacts from flooding, control erosion, purify water and provide habitat for fish and wildlife. The IDEP therefore aims to safeguard the functionality of the planning area's life-supporting ecosystem services and to ensure development around natural open spaces is appropriate and sensitive.

Objectives

The following are the objectives for protecting the environment:

- To establish a continuous ecological and open space system;
- To introduce policies that will restrict degradation and promote the preservation of the environment;
- To improve water quality in rivers and water courses through the management of solid waste, waste water and industrial effluent; and
- To prevent illegal dumping in open spaces and rivers.

Development proposals, interventions and guidelines

There are three main types of sensitive natural environments in Limuru Town that must be protected as natural systems with sensitive ecological characteristics, namely (i) watercourses, (ii) wetlands and (iii) ridges.

- Watercourses and the wetland must be rehabilitated to restore the ecological integrity of these natural environments.
- Watercourses must be protected from pollution resulting from development through the creation of open space buffers along watercourses. These buffers can be utilized for public green open spaces such as public parks.
- A wetland on the southern boundary of the planning area to the west of C64 that must be protected from development through the introduction of a buffer around the wetland. The

acceptable minimum standard is a 30 meters buffer along the edge of the wetlands which will provide additional habitat for indigenous fauna and flora.

- Steep slope areas that exceed 25 degrees should be protected as ridges in accordance with the prescriptions of the Kenya Planning Handbook.
- The issues of focus in developing the environmental protection strategies included; storm water drainage, soil erosion, riparian reserves, ecosystems, water sources, solid waste management, sewerage systems, proposed buffers and forests.

Measures

Rivers and Riparian Reserves

- Natural flow of rivers and tributaries should be preserved and conserved. River reserves should become green networks (buffer zones to control pollution, surface erosion, squatters' intrusion)
- Sanitation services must be provided to settlements located within the catchments of water sources to avoid pollution due to surface run-off and groundwater seepage of sewerage and other harmful effluents
- Development along the Riparian Reserve should only be considered if strict measures for riverbank protection, wastewater treatment plants, storm water control and erosion control are put in place and enforced. No development shall take place directly adjacent to the Riparian Reserve without an Environmental Management Framework indicating measures for the conservation of the ecological integrity of the shoreline as well as measures to repair damage to the shoreline and its vegetation caused by construction.
- The natural drainage channels and banks of rivers must be protected up to the 100-year flood line. No development may be permitted within the 100-year flood line from rivers, streams and wetlands without the written consent of the relevant environmental and water authorities.

Steep slopes

- Development in hill areas requires several conditions that must be observed not to endanger stability, balance and the harmony of the natural environment
- Between 5 degrees to 15 degrees are considered as medium slopes and could be developed with the implementation of slope control measures
- Between 15 degrees to 25 degrees could be developed with the implementation of control measures
- Areas with slopes that exceed 25 degrees are not allowed any development from a safety perspective

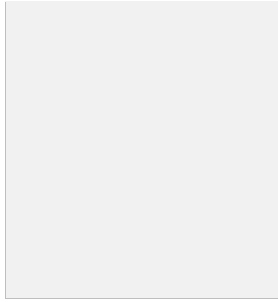
- Natural vegetation should be preserved on steep slopes to prevent soil erosion
- All scenic vistas should be protected from development Natural open spaces.
- All-natural open spaces should as far as possible be linked to form a continuous system of green open space through the demarcation of green corridors throughout the urban environment, which are then linked to public open spaces
- The natural open space system must be kept visible and “public” and not be privatized in development enclaves. This is important from both a social equity perspective (i.e. that members of the community and visitors can have the visual enjoyment of the open spaces) and from a safety perspective (i.e. that these areas which could potentially become dangerous areas can always be monitored by the public)
- All land uses along green open spaces must face onto the open space with active facades including windows and/or balconies and visually permeable fencing. No high walls may be permitted.
- Pedestrian and cycling paths should as far as possible be incorporated into linear open space systems to increase the recreational value of the open space system and also to enhance safety through increased activity in or along the open space system

Development and Design Guidelines for the Environment

Environmental Feature	Definition	Guidelines
Riparian (River) Reserve	Land on each side of a watercourse as defined. Has a minimum of 3m, or equal to the full width of the river as measured between the banks of the river course up to a maximum of 30m for seasonal and perennial rivers	Every development must provide 3%-5% of the area for water retention reservoir
		Natural flow of rivers and tributaries should be preserved and conserved. River reserves should become green networks (buffer zones to control pollution, surface erosion, squatters’ intrusion)
		Sanitation services must be provided to settlements located within the catchments of water sources to avoid pollution due to surface run-off and groundwater seepage of sewerage and other harmful effluents

			<p>Development along the Riparian Reserve should only be considered if strict measures for riverbank protection, wastewater treatment plants, storm water control and erosion control are put in place and enforced. No development shall take place directly adjacent to the Riparian Reserve without an Environmental Management Framework indicating measures for the conservation of the ecological integrity of the shoreline as well as measures to repair damage to the shoreline and its vegetation caused by construction.</p> <p>The natural drainage channels and banks of rivers must be protected up to the 100-year flood line. No development may be permitted within the 100-year flood line from rivers, streams and wetlands without the written consent of the relevant environmental and water authorities.</p>
Slope	0 to 2%	Area where slope does not constrain development	Development in hill areas requires several conditions that must be observed not to endanger stability, balance and the harmony of the natural environment
	2 to 9%	Medium slopes which are developable although slope should be considered in site development plan and storm water management	<p>Between 5 degrees to 15 degrees are considered as medium slopes and could be developed with the implementation of slope control measures</p> <p>Between 15 degrees to 25 degrees could be developed with the implementation of control measures</p> <p>Areas with slopes that exceed 25</p>
	9 to 21%	Maximum slopes for motor vehicle access provided that all	

		weather paved surfaces are available	degrees are not allowed any development from a safety perspective Natural vegetation should be preserved on steep slopes to prevent soil erosion A slope analysis should be conducted on all ridges and mountains in order to determine development restriction areas All scenic vistas should be protected from development
	21 to 27%	Urban development is seriously constrained, and slopes of more than 21% do not allow for motor vehicle access	
	27 - 45%	No development allowed	
Natural Open Space System	The natural open space system comprises rivers, dams, riparian zones, wetlands, ridges and environmentally sensitive areas		All-natural open spaces should as far as possible be linked to form a continuous system of green open space through the demarcation of green corridors throughout the urban environment, which are then linked to public open Spaces
			The natural open space system must be kept visible and “public” and not be privatised in development enclaves. This is important from both a social equity perspective (i.e. that members of the community and visitors can have the visual enjoyment of the open spaces) and from a safety perspective (i.e. that these areas which could potentially become dangerous areas can always be monitored by the public)
			All land uses along green open spaces must face onto the open space with active facades including windows and/or balconies and visually permeable fencing. No high walls may be permitted.
			Pedestrian and cycling paths should as



far as possible be incorporated into linear open space systems to increase the recreational value of the open space system and also to enhance safety through increased activity in or along the open space system

4.7 Economic and Social Infrastructure Strategy

The economic and social infrastructure strategy will be achieved through the economic and social network. This network refers to those areas where economic activity and community facilities are or should be concentrated in town. In Limuru Town the spatial structure includes nodes and linear activity areas such as:

- Regional Node (or Central Business District) (CBD);
- Neighborhood Nodes;
- Urban Corridors;
- Activity Streets;
- Clusters of civic and community facilities;
- Designated industrial areas; and
- Agricultural focus areas.

Nodes and linear activity zones serve as the main structuring elements for the town, and the location of the activity network must be such that everyone can access an activity node within a comfortable walking distance of 800 meters (equal to 10 minutes walking time). These nodes are located at the most accessible points within an integrated network of connecting routes and provide a hierarchical framework or logic for locating public facilities, community facilities and economic opportunity as well as access to transport services over time.

The grouping of facilities (including social, education, economic, recreational and transport facilities) ensures convenience for users, reduces trip numbers, creates focal points for development and infrastructure provision and enables the sharing of resources and management capacity. These clusters in turn generate higher flows of foot-traffic that generate the thresholds of support required for successful business activities including retail, personal services and small-scale production of goods for sale. They are good places for entrepreneurial development hubs.

Objectives

The following are the objectives for the development of an economic and social network:

- To channel development into a system of nodes and development corridors supporting the development concept;
- To consolidate and strengthen mixed-use economic nodes;
- To consolidate and strengthen neighborhood nodes;
- To protect and regenerate the Regional Node (CBD) as the primary business development area;
- To optimize the location of social and community facilities by clustering them together in neighborhood nodes;

- To create and/or improve opportunities for the informal sector within the designated activity network; and
- To consolidate and strengthen industrial areas.

Development proposals, interventions and guidelines

The proposed hierarchy and distribution of the network of nodes, urban corridors and activity streets in the planning area is shown on the map in the ISUDP.

- The highest order node is the present Limuru Town which functions as a commercial and administrative center. This node has a regional function and should therefore comprise the highest order business, civic and social activities and services. This node also presents an opportunity of Transit Oriented Development.
- The Primary Routes should be developed as Urban Corridors comprising higher order business development for a depth of approximately 50m directly adjacent to the road.
- Routes indicated on the map above should be developed as local Activity Streets, comprising lower order business opportunities that are more focused on serving local neighborhoods. Similar to the urban corridor, the depth of the Activity Street zone extends approximately 50m from the road reserve boundary.
- Demarcated Neighborhood Nodes are predominantly located at intersections on the primary and secondary road network, in order to ensure the highest degree of accessibility for surrounding communities.
- Industrial development is restricted to existing industrial areas that should be consolidated and strengthened rather than creating new industrial areas.
- Large-scale agricultural activities in the eastern part of the study area should be protected from development for as long as these activities remain economically viable. In the long term however, this land can be utilized for infill residential development.
- The development of new social and community facilities such as education and health should be restricted to existing neighborhood nodes or existing Civic and Community clusters.
- To improve the housing development in the township; various strategies were developed. The focus of these strategies was; uneven building lines and setbacks, urban informality, urban decay,

housing conditions, land tenure, persons with disability friendly urban designs and social facilities adequacy.

- The Highest residential densities are restricted to parts of Limuru CBD, Karanjee, Mutarakwa, Kamirithu, parts of Bibirioni, Kabuku, Manjiri (and other high-density zones within the Limuru Highlands), parts of Ngecha, parts of Nderu, and Mungetho, amongst others. The rationale is that these nodes have the highest concentration of employment activities or close to Nairobi.
- Medium density residential development such as Kamandura, Rironi, parts of Ngecha, and parts of Thigio, amongst others, should be supported along the Urban Corridors.
- Low density residential development comprises the areas in between at the locations furthest away from the major nodes and urban corridors. These are mainly within Limuru Highlands which include RedHill, Tigoni, Kentmere and Nazareth/Riara.
- Low density residential development also includes small-scale farming activities as are currently found on the majority of residential properties in the planning area. The concept of low-density residential development (and the associated densities) is relevant in the case of redevelopment and formalization of properties from small-scale agriculture to urban development.
- The existing large-scale agricultural activities in the eastern part of the planning area can be utilized for infill residential development if it is no longer required for agricultural activities. Should these land parcels be developed, it should be done in accordance with a proper Master Plan as opposed to haphazard subdivision into smaller properties.

Guidelines

Attract and accommodate high order and regional land uses to the Regional Node (CBD)

- Accommodate land uses that attract large numbers of people and that will extend the activity of the area.
- Higher order and regional land uses should be located, as far as possible, in the Regional Node (CBD).
- The Regional Node (CBD) must comprise high quality public environments, and all developments should interact with and relate to adjacent public environments (e.g. streets, squares, parks etc.) to ensure a vibrant, attractive, convenient and safe environment.
- Informal trading must be accommodated in well-designed and well-located market areas where the necessary facilities such as trading stalls, ablution facilities and refuse bins are available to the traders.
- Development is typically fine grained, multi-storied and mixed use and must comprise the highest architectural standards.
- Reduce visual blight, encouraging rehabilitation of deteriorating structures, demolition of severely dilapidated buildings, and removal of demonstrably non-

conforming uses and structures.

- Encourage infill development to activate commercial sites and promote the highest and best use of land
- Protect the Central Business District by not approving out of town, mono-functional shopping malls that will draw large retailers out of the town centre

Develop vibrant and community-oriented neighborhood nodes that serve all the needs of the local population

- The majority of social and community facilities and local businesses should be clustered together in neighborhood nodes or streets (as opposed to being dispersed throughout a neighborhood).
- The general character of the neighborhood node should be public, extroverted environments, with an open street pattern, relatively short street block lengths (to facilitate pedestrian movement), on-street parking, public spaces and the clustering of compatible land uses in a compact manner.
- All neighborhood nodes must be pedestrian- and cycling-friendly environments with safe, convenient and quality movement infrastructure to, from and within the node
- Neighborhood nodes should preferably be developed around a public open space that can serve as a meeting and recreational space for the community
- Informal trading must be accommodated in well-designed and well-located market areas, where the necessary facilities such as trading stalls, ablution facilities and refuse bins are available to the traders.
- Neighborhood nodes should comprise a public transport stop, where a public transport service exists
- Neighborhood nodes should where possible be located in such a way that all residents have access to a node within a maximum walking distance of 800m

4.8 Housing Strategy

This development strategy deals with residential development and comprises two parts, namely;

i. The development of good quality residential neighborhoods that promote residential densification in appropriate locations. Residential development is an opportunity to restructure the form of the settlement as a whole, by creating high-quality, integrated sustainable living environments that provide equitable access to opportunities, amenity and services, and are diverse, locally appropriate, compact and efficient.

A diversity of dwelling options is required to accommodate the varied need for housing over a lifetime, and to meet varied income levels and circumstances. A variety of housing types enables

different types of people to live together in the same neighborhood, and it helps people to find housing that suits their circumstances and means.

Objectives

The following are the objectives for residential development:

- To encourage densification in strategic locations;
- To identify priority areas for new housing development;
- To introduce different housing typologies to provide in the needs of different residents;
- To promote infill development over development on the periphery of the town; and
- To create convenient, safe and attractive residential neighborhoods.

Development proposals, interventions and guidelines

The spatial development proposals for Limuru Town make provision for three categories of residential development, namely

- i. Low Density Residential,
- ii. Medium Density Residential,
- iii. High Density Residential.

Densities are linked to distance to employment opportunities, social and community services and public transport services. The closer a particular property is situated to the above and the higher the order of services and facilities provided in that location, the higher the densities that should be promoted and allowed on that particular property.

- The Highest residential densities are restricted to the identified Nodes
- Medium density residential development should be supported along the Urban Corridors.
- Low density residential development comprises the areas in between at the locations furthest away from the major nodes and urban corridors.
- Low density residential development also includes small-scale farming activities as are currently found on the majority of residential properties in the planning area. The concept of low-density residential development (and the associated densities) is relevant in the case of redevelopment and formalization of properties from small-scale agriculture to urban development.
- The existing large-scale agricultural activities in the eastern part of the study area can be utilized for infill residential development if it is no longer required for agricultural activities Should these

land parcels be developed; it should be done in accordance with a proper Master Plan as opposed to haphazard subdivision into smaller properties.

The following development and design guidelines shall apply to residential neighborhoods and densification:

Ensure sustainable residential growth

- A range of housing typologies and densities must be developed, catering for different income groups, lifestyles and life stages within each settlement
- New settlement development must occur contiguous to existing urban or settlement development. Leapfrog development should not be permitted
- Residential development should as far as possible focus primarily on infill development and densification rather than continuous outward expansion of residential areas beyond the boundaries of the precinct.
- Higher densities should be provided closer to the town centers/community clusters and/or public transport stops.

Promote the development of sustainable, convenient and livable residential neighborhoods

- All land uses must contribute to the creation of pleasant, safe, convenient and sustainable neighborhoods.
- All development must support safe and convenient pedestrian movement, especially for children.
- Residential development must comprise the bulk of land uses, complemented by community and social facilities (community and social facilities should ideally be developed as part of demarcated neighborhood nodes) and recreation areas such as parks, sports fields and playgrounds.
- Regional community facilities (i.e. hospitals, large regional church congregations, universities, colleges etc.) should not be provided within residential neighborhoods but as part of the Regional Node (Central Business District)
- Businesses in the neighborhood should be restricted to home businesses and local convenience businesses
- No land uses that attract large volumes of foreign traffic to the area or generate excessive activity and noise should be permitted.
- In higher density residential neighborhoods, emphasis should be placed on the public realm and the interface between private development and the public space.
- Improve the attractiveness of residential neighborhoods by taking measures to eliminate nuisances and redevelop problem properties, as well as to enforce standards of maintenance.
- Fencing that is visually penetrable should be promoted. This includes palisades or palisades with walled sections.

4.9 Revenue Enhancement Strategy

For Kiambu County Government to function effectively and provide service to its residents

and clients, it needs enough revenue. The revenue collected by the County can be from:

- The National Government
- Fees from services provided
- Land rent/rates from Kiambu Government Land
- Money (cess fees) collected from mining activities

Limuru Town, like the rest of the County has revenue collection challenges. These are addressed in table 36 by the actions in the adjacent columns:

Revenue Collection Challenges with Actions for Solutions

ISSUE	ACTION
Build adequate human resources capacity and systems;	<ul style="list-style-type: none"> a) Asses current human resource in relation to job description, qualification and job performance b) Replace/train staff to build capacity
Introduce a more productive property tax regime;	Perform a land valuation exercise and attach the correct taxes after the exercise
Automate all accounting and finance activities;	<ul style="list-style-type: none"> a) All revenue collection exercises should be cashless, apps can be used to collect revenue for fees such as parking, market stalls, cess
Digitize land records;	A GIS based program should be used to keep a record of all the land. This should have the land valuation roll attached to it for land tax and land rents purpose.
Strategically and comprehensively address integrity issues;	Do random audits at revenue collection points and take disciplinary action on officers found to have integrity issues.
Expand revenue base.	<ul style="list-style-type: none"> a) Create/increase parking spaces for private vehicles, trucks, public services vehicles. b) Process land documents for areas that are commercial and industrial so as to collect land rates

5.0 Disaster Management

A disaster is defined as a serious disruption of the functioning of a community or a society. Disasters involve widespread human, material, economic or environmental impacts, which exceed the ability of the affected community or society to cope using its own resources.

Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters

Disasters are generally classified into 2 major categories: Natural and human made as follows:

1. Natural: Bush fires, epidemics on human beings and animals, pests on crops, forests and livestock; geologic and climatic disasters (e.g droughts, floods, landslides, cyclones, storm surges, coastal erosions, earthquakes, invasive plants.)
2. Human-made: Terrorism, Industrial accidents, fires, transport accidents, civil, resource-based and political conflicts, collapsed infrastructure, food poisoning, invasive plants, drug and substance abuse, human trafficking, industrial sabotage, environmental degradation and other emerging disasters.

There is the National Disaster Management Authority Bill, 2019 that established the National Disaster Management Authority and gave it functions and powers.

According to this bill, the following shall be the way in which disaster management shall be implemented in Kenya as a whole and in county governments (Kiambu County in this case.)

5. This National Disaster Management Authority shall in liaison with the county governments, perform the following functions

- a) Co-ordinate and control response to and management of disasters
- b) Build capacity at both levels of government in crisis response and disaster resilience
- c) Serve as a command centre for all communication and information relating to response operations
- d) Co-ordinate disaster management efforts between various government agencies to ensure there is a seamless response to disasters
- e) Undertake public awareness on disaster preparedness and response
- f) Establish and operate an effective and efficient National Early Warning Disaster Monitoring Information System
- g) Facilitate disaster management contingency process that will result in the formulation of contingency plans to be updated regularly

- h) Document, publish and disseminate all relevant disaster management data and information to all stakeholders
- i) Operate a functional and effective monitoring and evaluation system for programming and management of activities in disaster management
- j) Perform such other functions as may be necessary for the exercise of its powers and functions under this act.

26. The roles for disaster management for the national and county governments are:

- 1) The national government shall in accordance with Part 1 of the Fourth Schedule to the Constitution, be responsible for disaster management in the country
- 2) Each county government shall within its area of jurisdiction be responsible for disaster management in accordance with Part 2 of the Fourth Schedule to the Constitution.
- 3) The Cabinet Secretary shall, on the advice of the Authority, and in consultation with the county governments, develop a national policy on disaster management.
- 4) Each county government shall for the purpose of ensuring uniformity and national standards, through its legislation and administrative actions, implement and act in accordance with the national policy guidelines developed under subsection (3)

27. Each county government may establish a County Government Emergency Fund in accordance with the provisions of the Public Finance Management Act.

Kiambu county is in the process of developing a disaster management policy, and it will link county hospitals with the fire department so that casualties can be rescued from the scene of the disaster and taken to the nearest health facility. It is advisable for the county government to set aside funds for the purpose of implementing the policy

So far, administrative units that can be used in disaster management include the fire department (one station in Limuru Town), the police, administrative police, chiefs and Limuru Hospitals.

CHAPTER 5: PLAN IMPLEMENTATION, MONITORING AND EVALUATION

5.1 Overview

The success of the IDEP hinges on consistent decision-making aligned with its long-term vision for urban structure and growth. This involves determining not only where and what type of growth occurs but also prioritizing development in harmony with the spatial transformation agenda, addressing when and how these changes take place. A critical benchmark of success is the planning system's dedication to translating policies and proposals into tangible outcomes. To support this, a robust framework for monitoring and evaluating implementation is essential. This chapter sets out a strategic roadmap to assess progress and ensure accountability, providing a structured approach to guide the plan's execution. By aligning decisions with overarching goals and maintaining focus on spatial transformation, the IDEP aims to achieve sustainable and equitable urban development while fostering a planning culture rooted in action and measurable results.

5.2 Plan Implementation and Capital Investment Plan

The implementation of the Limuru Municipality Plan should follow a structured approach guided by an implementation matrix. Funding should be allocated through the Capital Investment Plan, with progress closely monitored using a monitoring and evaluation matrix to ensure deliverables are met. The Implementation and Capital Investment Plan outlines the projects to be undertaken, identifies responsible actors, estimates project costs, and specifies timelines for completion. Regular evaluations are essential to track progress and ensure that key indicators aligned with the County Government's vision are achieved. To maintain relevance and effectiveness, a comprehensive review of the program activities should be conducted every five years. Additionally, progress reports should be shared with stakeholders at reasonable intervals to promote transparency and accountability. This approach ensures that the plan remains on course and facilitates adjustments to meet evolving needs and priorities while fostering sustainable municipal development.

5.3 Implementation and Capital Investment Matrix

Programme	Project	Timeframe	Driving Department	Other Implementing actors	Number of Actors	Benefiting Ward/Towns/Market	Approx. Cost
Physical Infrastructure							
Water supply	Extend piped water in underserved areas including Karanjee, Kamirithu, Bibirioni, and Industrial Area.	ST	Water, Environment, Energy and Natural Resources	WRA NEMA	4	Karanjee Zone – 350 Connections Kamirithu – 200 Connections Bibirioni – 250 Connections Industrial Area – 100 connections	200M
	Construct water pans in strategic regions in Ndeiya ward.					Ndeiya	100M
	Carry out a safety audit of existing dams and water reservoirs.					All Wards	20M
	Review existing water company policy in line with pro-poor strategies i.e., affordability.						15M
	Adopt modern technology to support in monitoring unaccounted water due to illegal connection, spillage and vandalism.	MT	Water, Environment, Energy and Natural Resources	LIWASCO KIWASCO Development Partners		All Wards	150M
Sanitation and wastewater	Improve and extend sewer networks in urban and peri-urban areas.	ST	Water, Environment, Energy and	WRA NEMA Private Sector	4	Industrial Area, Kwa Mbira, Misri, Limuru Town, Karanjee	200M

	Promote affordable and sustainable sanitation technologies at both household and commercial areas e.g., bio-digesters, etc.		Natural Resources			Thigio, Rironi, Kerwa, Tigoni, Ngecha, Kabuku, Bibirioni, Kamirithu	80M
Solid Waste Management	Establish waste incinerators for hazardous waste e.g., medical and other biochemical waste.	ST MT	Water, Environment, Energy and Natural Resources Health Services	NEMA	3	Limuru Town, Tigoni, Thigio, Ngecha, Kabuku, Rironi, Bibirioni, Kamirithu and Rwambiri	200M
	Provide transfer stations in towns and market centres i.e., Limuru town, Kabuku, Kamirithu, Bibirioni, Thigio, Ngecha, Tigoni, and Rironi.						250M
	Provide waste receptacles and waste bins.						
	License small scale waste collectors in hard-to-reach areas including informal settlements.						
	Creating awareness on waste management practices.						5M
	Review and enforce environmental laws and regulations.						2M

Energy	Test and select between integrated solar PV and conventional on-grid street lighting options.	ST	Roads, Public Works & Infrastructure Land, Housing, Physical Planning & Urban Development	ERC NEMA Kenya Power PLC	4	Limuru Town – CBD Other Town Centres	5M
	Promotion of solar/biomass, wind (renewable energy) options.	ST					5M
	Domestic power last-mile connection.	ST					
	Establish 50 MW wind power plant on a 210 acres land parcel at (Mwanya wa Ruhuhu) through PPA arrangement.	MT				Ndeiya Ward	200M
						Uncovered settlements	
ICT Infrastructure	Connect all TVET Institutions to ICT infrastructure to promote innovations.	ST	Youth Affairs, Sports, ICT & Communication	Land, Housing, Physical Planning & Urban Development Roads, Public Works & Infrastructure Development Partners	5	All wards	150M

	Connect all Government facilities with ICT infrastructure to enhance service delivery and efficiency.	ST					100M
	Expand internet coverage and access using fibre optic lines across the Sub-County.	MT					300M
Roads and Transport	Prepare transportation master plan for the entire Sub-County.	MT	Land, Housing, Physical Planning & Urban Development Roads, Public Works & Infrastructure	KeRRA KeNHA KURA Police NLC	3	Limuru East	200M
	Open up missing link roads in Limuru East and Ndeiya.						2B
	Establish road reserves complete with NMT, pedestrian pathways and appropriate stormwater drains.	ST				Limuru town, Karanjee, Bibirioni, Tigoni, Kabuku, Kamandura, Nguirubi and Makutano roads	500M
	Enforcement of traffic management guidelines through Retrain Road users and enforce set traffic laws and regulations.	MT		KeRRA KURA Police	4	Limuru town and all market centres Rironi, Ngecha, Kabuku, Manjiri, Karanjee, Bibirioni,	5M

						Kamirithu	
	Construction of parking bays and spaces.	ST					60M
	Expand roads below 9 metres by reclaiming encroached roads (Estimated Kms 150).	ST					300M
	Carry out assess and enforcement of development control (Physical Planning) guidelines on all roads to reduce encroachment and to ensure subdivisions are providing adequate road reserves. Permit nothing below 9 m.	MT					50M
	Upgrade roads in Limuru to bitumen and gravel standards placing priority on roads that lead to important facilities e.g., hospitals, fire stations, education facilities and into residential areas in case of emergencies.	LT		KeRRA KeNHA KURA NLC	4	Entire Sub-County	3B
	Upgrading and maintenance of feeder roads.	ST	Roads, Public Works & Infrastructure County Gov. of Kiambu	KeRRA KPLC KURA	3	Ndeiya Ward	800M

	Streetlight key Sub-County roads and market centres.	MT					
	Construction of NMT.	MT		KURA	2		
	Revive commuter rail transport and modernise the station at Limuru.	MT		KRC	2	Limuru Town, Tilisi halt	1B
	Road expansion to 12-meter carriageway and rehabilitation.	LT	Roads, Public Works & Infrastructure	KeRRA KeNHA KURA	3	Limuru, Bibirioni, Rironi, Kabuku, Thigio, Nderu, Ngaurubi	2B
Stormwater drainage	Mass sensitisation on rainwater harvesting and storage.	ST	Roads, Public Works & Infrastructure	LIWASCO & County Government of Kiambu KURA	2	All wards	700M
Social Infrastructure							
Education	Enhancement of education facilities in the Sub-County through encouraging investment in the sector.	MT	Education, Vocational Training & ICT	National Government Development Partners	2	Entire Sub-County	200M
	Increase the number and enhance the performance of ECDEs, Primary, Secondary and Tertiary Institutions.	MT				In all Wards	500M
	Equip and establish new village Polytechnics and TVETS.	ST				Kamirithu, Ngarariga /Bibirioni, Thigio, Nderu, Karanje, Ndiuni, Rironi	800M
Housing	Develop a housing masterplan and strategy for the Sub-County.	ST	Land, Housing, Physical Planning & Urban	Roads, Public Works & Infrastructure	2	All wards Thigio, Bibirioni, Limuru CBD, Rironi, Ngecha	20M

			Development	UN-Habitat Development partners			
	Map out and establish public/social housing in the Sub-County.	ST					20M
	Promote densification in high-density residential areas.	MT					5M
	Development of social housing within Limuru and putting up 12,500 housing units under an affordable rent-to-own scheme.	LT					25B
	Adoption of appropriate and affordable building technologies.	MT					5M
	Improve the housing standards for low-income settlements.	MT					100M
	Review the housing approval process in terms of time and cost.	ST					-
	Upgrade County houses to modern residences.	MT				Ngecha, Tigoni and Limuru Central	500M
Health Services	Enhancement of Tigoni Level 4 Hospital and morgue.	MT	Health Services	KEMSA	2	Serving the entire Sub-County	20M
	Provision of extra ambulances.	ST					20M
	Construct a health centre in Limuru Eastward.	MT				Limuru East	

	At least 1 ambulance in every health centre.	MT		Ministry of Health	2	All health centres	30M
	Establishment of rehabilitation centres for drugs controls at Bibirioni.	MT		NACADA	2	Bibirioni	15M
Cemeteries	Identify land set aside for cemeteries, and where necessary acquire land.	ST	Land, Housing, Physical Planning & Urban Development	Health Services KEMSA	2	At least one in Ward	5M
	Establishment of a cemetery and crematorium at Kiawaroga.	MT	Land, Housing, Physical Planning & Urban Development	Health Services NEMA	3		20M
Social amenities and facilities	Rehabilitation of Limuru stadium.	ST	Youth, Sports & Culture	Development Partners	1		300M
	Construction of community centres - Social halls, Theatre, Library.	LT	Youth, Sports & Culture	Development Partners	1	Each Ward	700M
	Establishment of a Town Library.	LT	Education, Vocational Training & ICT	Youth, Sports & Culture Development Partners	2	Limuru, Bibirioni, Kamandura, Ndeiya and Thigio	25M
	Construction of a performance Arts theatre at Kabuku.	LT	Youth, Sports & Culture	Education, Vocational Training & ICT Development Partners	1	Kabuku, Limuru Town	10M
	Construction of a Cultural Museum and a historical monument within Limuru.	LT	Youth, Sports & Culture	Education, Vocational Training & ICT Development Partners	1	Kamirithu, Limuru Town, Buxton Tunnel	10M

Local Economy							
Abattoirs	Relocate hide and skins processing (at Manguo Area).	MT	Agriculture, Livestock & Fisheries	Trade, Tourism, Industry, Cooperatives Development Partners	2		2M
	Expansion of the slaughterhouse at Limuru.	ST			1		30M
Tourism and Hospitality industry	Promote and support events grounds.	ST	Trade, Tourism, Industry, Cooperatives	Youth, Sports & Culture Development Partners	1		2M
	Promote hotels, guest houses and homestays.	LT	Trade, Tourism, Industry, Cooperatives	Private developers	2		3M
	Conference facilities.	LT	Trade, Tourism, Industry, Cooperatives		1		
	Revival of Buxton Tunnel as a tourist attraction.	ST	Trade, Tourism, Industry, Cooperatives	Roads, Public Works & Infrastructure KRC	2	Limuru Central	5M
Promote trade, commerce and cottage industries	Construct market sheds for farm produce.	ST	Trade, Tourism, Industry, Cooperatives	Agriculture, Livestock & Fisheries	2	All major markets	200M
	Construct Curios/handicraft.	ST	Trade, Tourism, Industry, Cooperatives	Agriculture, Livestock & Fisheries	2	Tigoni, Kabuku	10M
	Construct Jua-kali sheds.	ST	Trade, Tourism, Industry, Cooperatives	Youth, Sports & Culture	1		50M

	Development of agri-business cooperative societies in all wards.	ST	Trade, Tourism, Industry, Cooperatives	Agriculture, Livestock & Fisheries	2		8M
	Provision of agricultural extension services to the rural population in all wards.	ST	Agriculture, Livestock & Fisheries	Development partners	2	All wards	5M
Urban Development Management							
Urban Services	Preparing detailed urban plans markets in Limuru.	ST	Land, Housing, Physical Planning & Urban Development	Private Consultants		Bibirioni, Rironi, Kabuku, Thigio, Nderu, Nguirubi	30M
	Informal settlements upgrading through planning, surveying and titling and provision of basic infrastructure.	ST	Land, Housing, Physical Planning & Urban Development	Development partners			50M
	Data capture for Land Information Management System (land administration, valuation and development control).	ST	Land, Housing, Physical Planning & Urban Development				-
	Strengthen Municipal board structures as defined in UACA.	ST					50M
	Institutionalise urban services in Limuru Sub-County as defined in the UACA Schedule 1.	ST	Land, Housing, Physical Planning & Urban Development	Public Service & Admin			-
	Data capture for Land Valuation and Taxation.	ST	Land, Housing, Physical Planning & Urban Development				10M

	Equipping development control and enforcement section in each ward.	ST	Land, Housing, Physical Planning & Urban Development		1		5M5
	Capacity enhancement through staffing, skills training and performance management.	ST	Public Service & Admin	National Government Land, Housing, Physical Planning & Urban Development partners	4	Sub-County	5M
	Municipal buildings, furniture and equipment.	MT	Public Service & Admin Land, Housing, Physical Planning & Urban Development	Development partners	3	Sub-County	50M
Urban Design							
Urban Public Spaces and recreational grounds	Improvements of public parks, streetscape, outdoor furniture, monuments and heritage sites.	MT	Environment, Water & Sanitation	Corporate entities	1	Sub-County/Sub-County	20M
Regulation of Outdoor adverts and trade promotional activities	Develop a comprehensive policy on outdoor advertisements and signage.	ST	Land, Housing, Physical Planning & Urban Development		1	Sub-County/Sub-County	2M
Street Naming and Address	Develop guidelines on street naming and identify zones for street	MT	Public Service & Admin	Development partners	4	Sub-County	

Systems	address systems in partnerships with the neighbourhood associations.		Land, Housing, Physical Planning & Urban Development				2M
			Roads, Public Works & Infrastructure				
Environment & Conservation							
Natural Resources	Preparation of an inventory of all ecologically sensitive areas.	ST	Environment, Water & Sanitation	Development partners NEMA	3	Sub-County	3M
	Protection of environmentally sensitive areas.	ST	Environment, Water & Sanitation	NEMA KFS	2	Sub-County	
	Beautification through tree planting and shrubs.	MT	Environment, Water & Sanitation Land, Housing, Physical Planning & Urban Development	Development partners	3	Sub-County	10M
	Delineate and gazette natural forests and other key resource features e.g., dams & historical sites.						10M
	Delineate riverine systems, wetlands reserves.	ST	Environment, Water & Sanitation	WRA NEMA National Government Development partners	5	Sub-County	15M

	Identify, map and develop policy on sustainable extraction of natural resources e.g., diatomite natural construction stones, sand harvesting, forests, etc.	MT	Public Service & Admin Land, Housing, Physical Planning & Urban Development Finance & Economic planning Environment, Water & Sanitation	NEMA Development partners	6	Sub-County	10M
Disaster Risk Reduction	Carry out a safety audit of all buildings and issue a compliance certificate.	ST	Public Service & Admin		1	Sub-County	5M
	Periodic inspection of public, institutions and industrial facilities for fire and occupational safety.	ST	Public Service & Admin Trade, Tourism, Industry, Cooperatives Land, Housing, Physical Planning & Urban Development Environment, Water & Sanitation	WRA, NEMA, National Government	7	Sub-County	
	Rehabilitation of firefighting equipment (fire engines, hydrants etc.)	ST	Roads, Public Works & Infrastructure	National Government	3	Sub-County	50M
				Development partners			
	Routine inspection of dams.	ST	Roads, Public Works & Infrastructure	National Government	4	Sub-County	2M

			Environment, Water & Sanitation	Development partners			
Noise, water and air Pollution	Noise pollution control in construction sites, public places and residential neighbourhoods	ST	Public Service & Admin	NEMA	4	Sub-County	
			Environment, Water & Sanitation	Development partners			2M
	Water quality monitoring.	ST	Environment, Water & Sanitation	Water & Sanitation Utility Company, WRA, NEMA, Development partners	4	Sub-County	2M
	Air quality monitoring in public places (transport termini, industries etc.).	ST	Environment, Water & Sanitation	WRA NEMA Development partners	4	Sub-County	2M
Protection of agricultural lands	Delineation of tea plantation zones and regions within Limuru Sub-County Recognition of Neighbourhood Associations and operational zones Development of Limuru Highlands Zonal Spatial Plan.	ST	Ministry of Lands and Physical Planning	Development Partners Private Sector	4	Limuru Highlands	5M

Source: VisionRI

Note: Timing: 1-2 yrs. Short term (ST); 3-5 yrs. Medium-term (MT); and 6 -10 yrs. Long term (LT).

5.4 PLAN MONITORING AND EVALUATION

SECTOR	NATURE OF PROJECTS	MONITORING INSTITUTIONS	EXPECTED OURCOMES	SUCCESS INDICATORS
TRANSPORTATION	Road construction projects Road expansion Tarmacking projects NMT provision Street scaping/Street lighting Storm water drains Construction of modern Bus parks Bus stops Construction of a parking silos	KeNHA/KURA/KeRRA and County Government	Improved road transport system Enhanced movement of people and goods improved traffic movement and road safety Enhanced ease of movement of pedestrians Increased parking spaces	Adequacy of road network Ease of traffic circulation Level of road safety Quality of transport services No of Streetlights NMT infrastructure
HOUSING	Prioritization of areas for County new housing Development control regulations	County Government	Increased housing stock in the planning area Improved living environment	Sufficiency of housing Adherence to development control DC applications and approvals
WATER AND SANITATION	Water and sewerage network projects Solid waste management	LIWASCO/AWSB	Improved water supply Better sanitation in the planning area	Level of access to water and sewerage services Level of sanitation

COMMERCE AND INDUSTRY	Upgrading markets and construction of new ones Industrial developments Hawkers square	Ministry of Industrialization & trade / County government	Increased employment opportunities Improved household income Improved government revenue	Production levels in the industry Employment levels in the industry Income levels of workers Amount of revenue
SOCIAL INFRASTRUCTURE	Constructing social halls in all wards, theatres and a town Library/resource centre Constructing a cultural museum and historical monument within Limuru Construct new fire stations Construction of health facilities Locate water/fire hydrants	National Government County Government FBO Private Sector	Improved access to basic facilities Improved response to fire outbreaks Easy access to affordable and high-quality health facilities	
RECREATION	Construction/Rehabilitation of Limuru stadium Construction of open spaces and recreation parks Public spaces	County Government	Ensure efficient function and convenience of users Promote environmental sustainability	
AGRICULTURE	Conservation projects: sustainable agriculture, livestock, & fisheries	Ministry of Agriculture, Livestock and Fisheries County Gov't	Enhanced agricultural productivity Improved income for farmers	Agricultural productivity levels Farmers' income levels

ENVIRONMENT	Open/Green spaces projects	County Government	<ul style="list-style-type: none"> ▪ Improve the aesthetic value of Limuru town 	<ul style="list-style-type: none"> ▪ Extent of green areas in the town
--------------------	----------------------------	-------------------	--	---

References

Constitution of Kenya (CoK) 2010

EMCA 1999 (Amended 2015)

National Land Policy

Environmental Management and Coordination Act, 1999 and the amendment Act of 2015,
Legal Notice No. 31 of April 2019 on the EMCA

Environmental Management and Coordination Act (Impact Assessment and Audit, 2003) and
the Amendment Regulations, 2019

Environmental Management and Coordination Act (Waste Management) Regulations, 2006

Environmental Management and Coordination Act (Water Quality) Regulations, 2006

Environmental Management and Coordination Act (Noise and Excessive Vibrations Pollution)
(Control) Regulations, 2009

Environmental Management and Coordination Act (Air Quality) Regulations, 2014

Sustainable Waste Management Act, 2022

The Water Act (2016)

Physical and Land Use Planning Act 2019

Land Act 2012

National Climate Change Response Strategy (NCCRS), 2010

Climate Change Act (2016)

Urban Development and Management

National Urban Development Policy

Urban Areas & Cities Act (2011, revised in 2015 & 2019)

The County Government Act 2012

Intergovernmental Relations Act (IGRA), 2012

National Gender and Equality Commission Act 2012

Persons with Disability Act, 2003

Access to Information Act (No. 31 of 2016).