



# KIAMBU MUNICIPALITY

## INTEGRATED DEVELOPMENT PLAN (IDEP)

2023-2028



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## **PREFACE**

The Constitution of Kenya 2010 provides for two levels of government, the National Government and the County Governments. The Urban Areas and Cities Act of 2011 (Revised 2022) gives the classification of Urban areas. The Kiambu Municipality was Gazetted in 2018 after meeting the requisite criteria provided in the Urban Areas and Cities Act even though it already categorised as a municipality owing to it being the county headquarters. The Municipality has made the necessary preparations to formulate instruments to guide its operations.

The Preparation of the Integrated Development Plan (IDeP) is one such effort of ensuring the Municipality's operations are well planned and coordinated. The Integrated Urban Development Plan for the Municipality of Kiambu being one of the major urban centres in the county, presents a major milestone in the operationalization of municipalities and other urban areas in the county. It comes against the backdrop of a myriad of urban challenges including rapid and uncontrolled urbanization, inadequate housing, uncontrolled informal settlements, inadequate services and infrastructure and lack of an appropriate framework to guide urban growth. The IDeP provides a clear road map which other municipalities in the County may emulate.

The process of preparation of the IDeP was participatory as per the statutory requirements. The process involved representation from the public, the County Government, and stakeholders from all wards of the Municipality. The Plan will be an important pillar in guiding economic growth, infrastructural, and social-economic development within the Municipality as it aims to achieve its Vision. I take this opportunity to rally the residents and all actors within the Kiambu Municipality to support the implementation of this Plan in line with our desired transformation agenda of our Municipality and hereby commit myself together with the municipal board to appropriate funding for its implementation. I look forward to the Plan's revitalisation of the Municipality.

CECM, Lands, Physical Planning and Urban Development

## **FORWARD**

The preparation of the Integrated Development Plan for the Municipality of Kiambu 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 of Kiambu**

## **CHAPTER ONE: THE BASIS OF THE INTERGRATED DEVELOPMENT PLAN (IDEP)**

### **1.1. Background**

Kiambu municipality is the commercial and administrative capital of Kiambu County and covers an area of 104.8 km<sup>2</sup>. Due to its proximity to the City of Nairobi (16 kilometers), the town enjoys the trickle-down effects of the City. It's almost considered a suburb of Nairobi with most middle class residing in Kiambu 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. Kiambu is within the Nairobi Metropolitan Region. It therefore has, and continues to have, close social and economic relations with the City as well as other urban centers (e.g. Ruiru, Karuri, Limuru) and these will positively or negatively affect the scale of social and economic facilities to be provided in the town itself.

The Town's historical background reveals that Kiambu became a Township with the creation of Township Ordinance in 1903 together with Nairobi, Mombasa, Nakuru, Eldoret, Naivasha and Machakos.

Most of these attained the municipality status or renowned socioeconomic development, whereas Kiambu relatively stagnated on development lines. In order to promote growth of the town, the Government elevated the town to an Urban Council status in 1903. In 1974, the town was accorded the status of Town Council, thereby attaining a higher degree of financial and managerial independence from the Kiambu County Council - its former financial and administrative manager and granted a Municipal Charter in 1981.

According to Kenya's national urbanization and rural development policy, Kiambu was designated as an urban service center with the role (among others) of developing the surrounding rural area. Similarly, Kiambu was designated along with other outlying townships (Kikuyu, Limuru, Athi River, Machakos) as an important service center according to the Nairobi Metropolitan Growth strategy. According to this strategy, these townships were officially encouraged to grow as separate towns distinct from Nairobi and local small-scale industries (possibly agro-based) to be located there so as to relieve housing and employment pressures on Nairobi. Owing to this and other overriding factors, the regional strategy for growth and expansion of Nairobi did not involve expansion of the city in the direction of Kiambu, but to the west and to the north-east along the axis of the Thika Road.

## **Vision**

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.

## **Mission**

To be the leading investment hub destination to trade, live, work and invest in

## **Core Values**

Integrity

Inclusivity

Innovativeness

Unity of purpose

Professionalism

Trust

## **Municipality Motto**

- 1. Kiswahili-Manispa yenye fursa na ustawi kwa wote**
- 2. English-Opportunity and prosperity for all**
- 3. Kikuyu-Muthufari wa mieke na utheremi**

### **1.2 Overview**

The Intergrated Development Plan (IDEP) outlines the Kiambu Municipality's direction and priorities. The mission, vision, values, and goals are laid out to serve and cater for Kiambu residents, visitors, businesses and neighbourhoods. 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.

Kiambu Municipality is continually faced with demands of growth on budgets, infrastructure, and staffing and the need for a comprehensive and clear Intergrated 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 Intergrated

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**

Kiambu Municipality is the commercial and administrative capital of Kiambu County and covers an area of 104.8 km<sup>2</sup>. Due to its proximity to the City of Nairobi (16 kilometers), the town enjoys the trickle-down effects of the City. It's almost considered a suburb of Nairobi with most middle class residing in Kiambu 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.

<b>STRATEGIC FOCUS AREA</b>	<b>STRATEGIC PRIORITY AREAS / OBJECTIVES</b>
<b>Promote a stable, progressive, resilient and self-sufficient community</b>	<ul style="list-style-type: none"> <li>1. Infrastructure</li> <li>2. Economic Growth</li> <li>3. Revenue Generation</li> </ul>
<b>Facilitate an empowered citizenry</b>	<ul style="list-style-type: none"> <li>1. Public Participation</li> <li>2. Appropriate Policy and Legal Framework</li> </ul>
<b>Build a sustainable Environment</b>	<ul style="list-style-type: none"> <li>1. Sustainable Land use Planning</li> <li>2. Solid and Liquid Waste Management</li> <li>3. Strong and vibrant neighbourhoods</li> </ul>
<b>Create and maintain a competent and Dynamic Workforce</b>	<ul style="list-style-type: none"> <li>1. Well-managed government</li> <li>2. Corruption Free Municipality</li> <li>3. Diversity and Inclusivity</li> </ul>

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

### **2.1 Overview**

This Intergrated Development Plan (IDEP) is linked with other Plans namely: The Kiambu Municipality 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 a Intergrated 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 Intergrated 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 has an estimated a population of 145,903 and is estimated to have a population of 180,919 by the year 2030 as shown in table below using a growth rate of 7 percent from 2009-2019 as stipulated in the National Spatial Plan (NSP). The municipality has a cosmopolitan population which has created the need for more urban services the need for better planning of the urban area.

**Table 1: Population Projections for Kiambu Municipality**

Ward	2019 Census	2030 (Projections)
Riabai	26,854	33,298
Township	60,973	75,606
Ndumberi	31,359	38,885
Ting'ang'a	26,717	33,129
Total	145,903	180,918

*Source: Kenya National Bureau of Statistics*

### 3.2. Physical Infrastructure and Access

#### 3.2.1 Roads, parking facilities, and public transport.

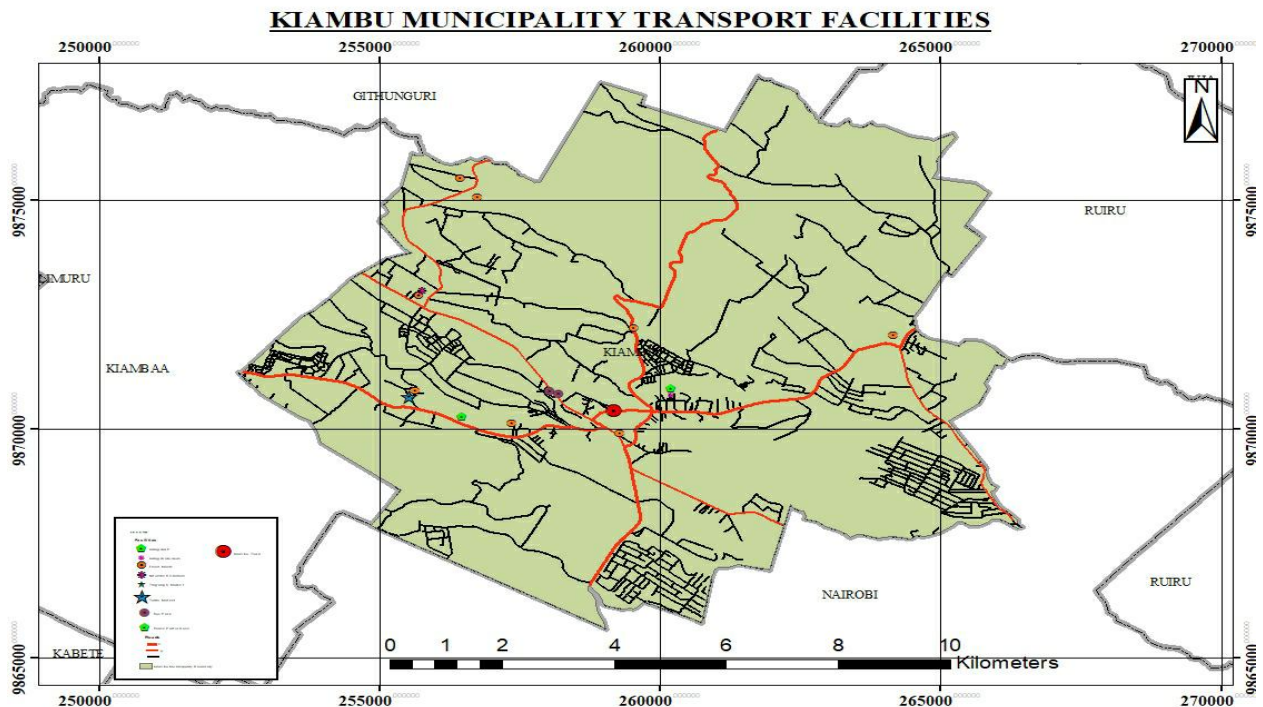
Kiambu town is the administrative seat of the Kiambu County Government. It is located approximately 16km from the center of Nairobi in the southern-central part of Kiambu County. There is availability of major roads both class C and D. There are also connectors/ feeder roads. The municipality lies at the intersection of Roads C63, C64 and Kiambu Road (D409). There has been a continuous improvement of the road network in a bid to enhance accessibility and connectivity. The County Government of Kiambu has recently completed the construction of Githunguri-Ndumberi road (D404), starting from Ndumberi trading center off-Kiambu-Limuru road, and ends at Ruiru-Githunguri Road (C65) junction. Surrounding towns and settlements includes:

**Table 2 : Surrounding towns and settlements**

Town/Settlement	Distance from Kiambu CBD	Direction from Kiambu CBD
Kanunga	5 km	West
Muchatha	6.5 km	South-West
Ruaka	6.5 km	South-West
New Tatu City Development	8 km	East
Kahawa	9.5 km	East
Kimathi	7.5 km	North
Tinganga	6 km	North

*Source: Department of Roads, Transport, Public Works and Utility Services, Kiambu County*

The municipality has 56 km of paved roads, 314km of gravel road and 91km of earth roads.



*Source: Department of Municipal Administration & Urban Development*

### 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 Kiambu Municipality**



*Source: Field survey dated May 2023*

Kiambu 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, Kiambu has 5 km of main-lined drains, and 56 Km of main excavated earth drains. 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 Kiambu.

### **3.2.3 Electricity, Reticulation and Street Lighting.**

According to Kenya Power 2023 report, Kiambu county had electricity coverage of 66 percent. The total number of households connected to electricity within the proposed municipality is 70 percent and this number is expected to rise to 100 percent by the year 2022. Solar energy has less than 5percent coverage, while Biogas use is at 25percent especially by farmers practicing urban agriculture within the municipality.

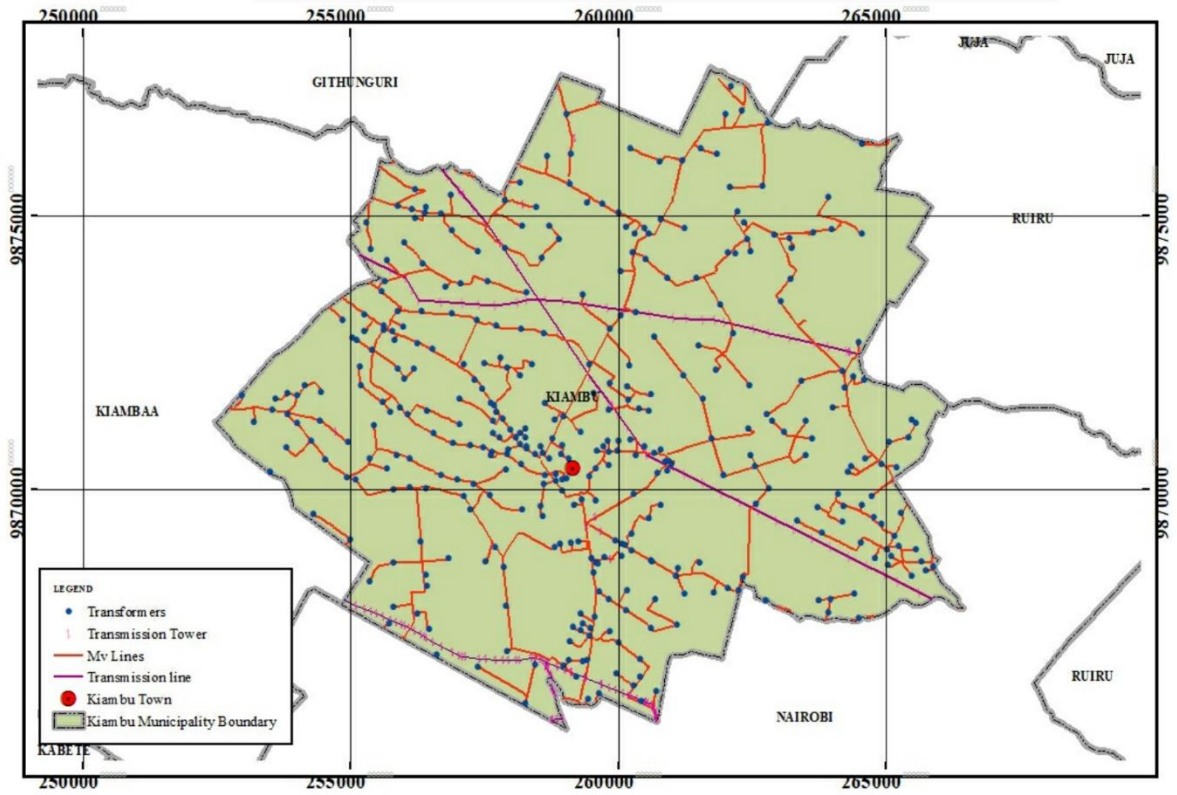
**Figure 2: Electricity, Reticulation and Street Lighting in Kiambu Municipality**



*Source: Field Survey, May 2023*

Kenya Power has also played a key role in providing 11 other street lighting masts which are 30M high. Flood masts in Kiambu are installed in Ruturo Village, Karunga Village, Mary Immaculate-Riabai junction and at Makiu-Mugumo Road junction in Kiamumbi. Electricity reticulation within the proposed municipality is shown in map 4 below.

### ELECTRICITY CONNECTION IN KIAMBU MUNICIPALITY



Source: Department of Municipal Administration & Urban Development

### 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.

The Directorate of Public Works and Utilities has put in place measures for emergency fires and accident in 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 located at the Indian Bazaar which is operational throughout; it is supported by 11 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.

**Figure 3: Firefighting Engine and Equipments in Kiambu Fire station.**



*Source: Field survey, May 2023*

### Status of Fire engines in Kiambu Municipality

Fire Engine/ Vehicles	Status	Comments
1 No. 10,000L FE	Functional	
1 No. RIV	Functional	
1 No. Fire Engine (No water capacity)	Functional	Second hand Donation from Japan
1 No. All-terrain vehicle (ATV)	Functional	
1 No. 1400L FE/ Ambulance	Functional	
Utility Vehicle-Toyota Hilux	Functional	

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

### 3.2.5 Water and Sewer 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. Kiambu Water and Sewerage Company is responsible for water connections and supply throughout the county. The proposed municipality has a total of 6,925 connections that serve a population of approximately 37,773 residents. The total quantity of water supplied is approximately 1,629M<sup>3</sup> per day. Kiambu Sewer Treatment Works was constructed in 1974 with a design capacity of 1,000M<sup>3</sup> per day. It's currently receiving 2,200M<sup>3</sup> per day. Kiamumbi water and sewerage company also provides services to the residents of Kiambu municipality. A substantial number of the developments within the municipality are not served by the sewer system. The urban and peri-urban areas which are not served by the sewerage network use septic tanks as an alternative mode of sanitation. There are 5 public sanitation facilities in Kiambu Township. Newer facilities are coming up in imminent urban centres and markets.

**Figure 4: Kiambu Sewerage Treatment Works**



*Source: Field survey, May 2023*

#### 4.0 SWOT Analysis

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

<b>Strength, Weaknesses, Opportunities &amp; Threats</b>	
<b>Strengths</b>	<b>Weaknesses</b>
<ol style="list-style-type: none"> <li>1. Its proximity to Nairobi City hence serving as a gate/exist to Nairobi.</li> <li>2. Has a reliable transport connectivity network to the city and other municipalities</li> <li>3. Good arable land</li> <li>4. Well-developed institutions such as schools and hospitals and tertiary.</li> <li>5. Sufficient labour force from its high youthful population.</li> <li>6. Well-developed housing and real estate sector</li> </ol>	<ol style="list-style-type: none"> <li>1. Poor urban planning and enforcement</li> <li>2. Insufficient budget, budget plans and development plans.</li> <li>3. Few staff and personnel to run all function (secretariat).</li> <li>4. Unskilled work force</li> <li>5. Death of data for planning and decision making</li> <li>6. Absence of management systems and technology</li> <li>7. Lack of defined roles and functions to govern the municipality</li> </ol>

<ul style="list-style-type: none"> <li>7. Close proximity to international agencies i.e UN and Embassy's</li> <li>8. Initial municipal structures</li> </ul>	<ul style="list-style-type: none"> <li>8. Insufficient urban amenities such as sewer, water, roads, internet and recreational centres</li> <li>9. High Value of Land</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>1. Inclusivity to the Nairobi Metropolitan</li> <li>2. Availability of land for Real estate investment</li> <li>3. Existing suitable locations for dams construction</li> <li>4. Ability to increase Revenue collection (building approvals, parking fees, market levies, licenses fees, encroachment etc)</li> <li>5. Creation of public private partnerships</li> <li>6. Grow public ownership and confidence through public participation forums</li> <li>7. More areas opening up for investment due to the ongoing road network expansion</li> <li>8. Existing development plans at county and national level</li> </ul>	<ul style="list-style-type: none"> <li>1. Presence of By-passes lead to social barriers to kins' mates</li> <li>2. High rate of unemployment leading to increased insecurity</li> <li>3. Generation of high volume of solid /liquid waste</li> <li>4. Narrow road corridors due poor land demarcations</li> <li>5. Lack of PDPs and other</li> <li>6. Political Interference</li> </ul>

## 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 Kiambu municipality Vision.

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

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

<b>Enhancing the quality of life and inclusiveness in the region</b>	Create an efficient and integrated urban environment
<b>Delivering a unique image and identity through effective place branding</b>	Create a recognizable identity for the town
<b>Ensuring a safe and secure region</b>	Create an attractive and safe town
<b>Building world class governance systems</b>	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 Kiambu 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 liveability 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.
- Need to plan for informal settlements and provide them with security of tenure, infrastructure and access to basic services such as water, housing, sanitation and education.
- Integrate a gender-responsive approach by assessing how municipal activities affect men, women, youth, and vulnerable groups differently, and by proposing inclusive strategies that enhance equal participation, economic empowerment, and equitable access to services within Kiambu Municipality.

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
<b>ENVIRONMENT</b>	<p>Restriction of development around rivers and wetlands.</p> <p>Restriction of development to approved uses only along immediate boundaries of fragile site buffers Control of development on steep slopes to reduce soil erosion</p> <p>Increase in forest cover</p>
<b>TRANSPORTATION</b>	<p>Appropriate transportation networks provision per zone as per the structure plan.</p> <p>Non-approval of encroachment/ encroaching use on transportation way leaves.</p>
<b>INFRASTRUCTURE</b>	<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>
<b>AGRICULTURE</b>	<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>
<b>TRADE AND INDUSTRY</b>	<p>Development of a designated agro-industrial zone</p> <p>Restrictions on location of industries near densely populated zones.</p> <p>Encouraging compact market development</p>
<b>TOURISM</b>	<p>Restriction of development around scenic sites to eco- tourism developments only.</p>
<b>URBANIZATION</b>	<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 Kiambu 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 Kiambu 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 Road C64 to improve movement to and from Nairobi;
- Create a direct movement linkage between Kiambu and Githunguri;
- Improve east-west linkages between Kiambu, Limuru, Wangige and Ruiru;
- Investigate the feasibility of developing a north-south link from Maragua through Kandara, Gatundu, Kiambu and onto Nairobi;
- Improve public transport services between Kiambu 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 Kiambu 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.
- C64 between the Northern Bypass and the centre of Kiambu Town 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 idea 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 Kiambu 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	Between 5 degrees to 15 degrees are considered as medium slopes and could be developed with the implementation of slope control measures
	9 to 21%	Maximum slopes for motor vehicle access provided that all	Between 15 degrees to 25 degrees could be developed with the implementation of control measures Areas with slopes that exceed 25

		weather paved surfaces are available	degrees are not allowed any development from a safety perspective
	21 to 27%	Urban development is seriously constrained, and slopes of more than 21% do not allow for motor vehicle access	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
	27 - 45%	No development allowed	All scenic vistas should be protected from development
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
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#### 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 Kiambu 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 Kiambu Township Node (CBD) situated directly west of the golf course along Kiambu Road. 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 Kirigiti, Riabai, Thindigua, Ndumberi Node and partly in the Central Business District and the. The rationale is that these nodes are the have highest concentration of employment activities or close to Nairobi.
  - 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 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 neighbourhood 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 neighbourhoods 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 neighbourhood, 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 Kiambu 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 liveable residential neighbourhoods

- 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 Murang'a Government Land
- Money (cess fees) collected from mining activities

Kiambu 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"> <li>a) Asses current human resource in relation to job description, qualification and job performance</li> <li>b) Replace/train staff to build capacity</li> </ul>
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"> <li>a) All revenue collection exercises should be cashless, apps can be used to collect revenue for fees such as parking, market stalls, cess</li> </ul>
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"> <li>a) Create/increase parking spaces for private vehicles, trucks, public services vehicles.</li> <li>b) Process land documents for areas that are commercial and industrial so as to collect land rates</li> </ul>

## 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 implement 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 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 Kiambu Town), the police, administrative police, chiefs and Kiambu Hospital.

## 6.0 PRIORITIZATION OF PROJECTS PER WARD

Location(s)/wards	Projects
Kirigiti	Cabro/Bitumen installation, storm water management and street lighting.
Kiambu Town	Cabro/Bitumen installation, storm water management and street lighting.

Ndumberi Centre	Cabro/Bitumen installation, storm water management and street lighting.
Thindigua Centre	Cabro/Bitumen installation, storm water management and street lighting.
Ting'ang'a Town and Market	Cabro/Bitumen installation, storm water management and street lighting.
Kiambu-Banana-Kanunga Road	Cabro/Bitumen installation, storm water management and street lighting.

## **CHAPTER 5: PLAN IMPLEMENTATION, MONITORING AND EVALUATION**

### **5.1 Overview**

The integrity and impact of the idep will be determined by consistent decision-making supporting the agreed long-term urban structure and form (what growth and where?) and managed in terms of prioritizing development based on the spatial transformation agenda and approach (when and how?). The most important test of its success is the planning system's willingness to implement policies and plans. To this purpose, this chapter aims to carry out a road map for successful implementation monitoring and evaluation of proposals.

### **5.2 Plan Implementation**

The implementation of the plan should be done by following a plan implementation matrix, with the funding budgeted for in the Capital Investment Plan, and monitored to ensure that deliverables are being achieved with the monitoring and evaluation matrix. Evaluations should be carried out to also ensure that indicators that will help the County Government to achieve their visions are being attained. And in order to restructure the programme activities, it will be necessary to carry out a review after 5 years. The programme's progress should, at reasonable intervals, be reported to the stakeholder

### 5.3 Implementation Matrix

SECTOR	OBJECTIVES	STRATEGY	PROJECT/PROGRAMMES	ACTORS	OUTCOME	TIMEFRAME (YRS)		
						0-3	4 - 7	8 - 10
Physical Infrastructure	Provide a basis for transport infrastructure and service provision for present and projected population over the plan period	Transport - Improving regional connectivity and integration	Upgrade Road C64 to improve movement to and from Nairobi; By making it a dual highway.	KURA	Ease of movement			
			Create a direct movement linkage between Kiambu and Githunguri;	KURA CGK	Improved connectivity that boosts efficiency			
			Improve East-West linkages between Kiambu, Limuru, Wangigi and Ruiru	CGK KeRRA	Improve connectivity			
			Investigate the feasibility of developing a North- South link from Maragua through Kandara, Gatundu, Kiambu and onto Nairobi;	CGK KeNHA	Improve connectivity			
			Improve public transport services between Kiambu and surrounding towns	PSVs CGK	Ease of movement Enhance efficiency			
		Transport - Creating improved	Upgrading primary and secondary roads in terms of width, surfacing and street scaping	CGK KeRRA KeNHA	NMT friendly roads			

		accessibility and connectivity.	Development of dedicated paved sidewalks and/or cycling paths of sufficient width along all primary and secondary routes	CGK KeRRA KURA KeNHA	To encourage a healthy lifestyle when providing safe walking/running space			
		Opening of the proposed secondary and local link roads	CGK KeRRA	Improving accessibility				
		Widening of all 9m roads	KeRRA	To allow fire engine tracks accessibility				
		Provide access to none accessible parcels	KURA	To give accessibility				
		Provision of High-quality public environment (Walkable streets) throughout the CBD	KURA/ CGK	Address congestion				
		Provide sustainable and functional Street Furniture and street lighting design	CGK	For aesthetics, character and safety				
		Acquire the current post office land and redevelop it to have a parking silo to incorporate the post office in the 1 <sup>st</sup> floor,	CGK	Address congestion in the CBD				
		Acquire property across the post office and develop silo parking	CGK	Address congestion in the CBD				
Design and construct a modern Bus park in the existing terminus	CGK	Address congestion						

			Introduce landscaping and tree planting to reinforce the character of streets	CGK/ KNCB	Better air quality and aesthetics			
			Development of bus stops at all markets, and at strategic locations along the primary and secondary routes	KURA/ KERRA/ KeNHA	Reduce congestion on all roads			
			Design and construction of storm water drainage to manage surface runoff	Residents CGK	Increased vegetation cover			
<b>Environment</b>	Tackle environmental issues and concerns affecting the Kiambu Town	Environmental -Protecting the natural open space system	Rehabilitation and securing of wetlands and watercourses in the planning area	WRA	Conserve the environment			
			Protection of areas with slopes of over 25%	Residents	Increased volumes			
			Water supply to extend to all residents	KIWASC O	Conserve ground water and prevent diseases caused by consuming contaminated water			
			Extension of sewerage systems to cover proposed residential areas in the planning area	KIWASC O	Protection of riparian land  Increased Vegetation cover.			
			Provision of sanitation services to settlements located within water sources to avoid pollution	KIWASC O	Proper waste management			

			Location of skips at markets as collection points and ensure there is a budget allocated to the regular collection of solid waste	CGK / Community Youth	To prevent the littering of the environment			
			Creating a solid waste recycling manual with plans, guidelines and training	CGK	To reduce the amount of waste that ends up in the dumpsite			
			Identification and zoning of all environmentally sensitive areas	CGK NEMA	Organized spaces			
<b>Social Infrastructure</b>	Propose development potentials of the planning area (social, economic).	Social and Economic Infrastructure - Creating an economic and social spatial network	Upgrade Kirigiti Stadium infrastructure and provide supporting infrastructure	CGK	To encourage a healthy lifestyle when providing space for exercise and entertainment			
			Upgrading of Ndumberi Stadium and providing a park and community hall/library/ICT Hub	CGK	To encourage a healthy lifestyle when providing space for exercise and entertainment			
			Upgrade KIST to a University	Ministry of Education	Increase education opportunities			

			Upgrade the quality of education in all Kiambu Town public schools	Ministry of Education	Better education for low income individuals			
			The development of a school for people living with disabilities	Ministry of Education	Catering for people living with disabilities			
			Clean up and rehabilitation of the cemetery at Old Town	CGK	For the proper use of cemetery			
			Develop a fire station at Ndumberi police station	CGK	To increase capacity in fire and disaster management			
			Locate three fire hydrants, one at Kirigiti, one at Ndumberi and one at Thindigua	CGK	For adequate fire management			
			Reclaim back public land that was illegally converted to private use	CGK	To provide space for needed facilities such as markets			
			Including a physical therapy ward within the Kiambu Hospital	CGK	Take care of people living with disabilities			
			Upgrade Kiambu mortuary	CGK	Give better quality public services			

			Develop two health facilities (dispensaries), one at Thindigua and the other at Ndumberi close to Kanunga	CGK	To provide adequate public health for minor illnesses			
			Develop an old people's home in a small section of the hospital land	CGK	Take care of the elderly population			
			Organize all church leaders to discuss the issue of too many churches in one location, and push for regulation on building of churches	CGK / Religious Leaders	To regulate the church buildings			
			Do maintenance to all public office, public health buildings within the planning area	CGK	Provide services in better spaces			
			Developing a museum with government space in the CBD that will include the history and culture of Kiambu	CGK	To provide for a place to experience culture			
<b>Economic</b>			Upgrade the existing Kangangi Market by Designing and constructing a Multi-story modern market	CGK	Increase space for people wanting to engage in trade			
			Develop the markets at Kanunga, Riabai, Kirigiti, Ndumberi and Thindigua, with ablution facilities and proper drainage	CGK	Increase space for people wanting to engage in trade			
			Acquire land and opposite Kirigiti stadium and develop a 5-star 1000 capacity conference	CGK/ KNCB	Tourism and conferencing income opportunity			

			centre with 200 room capacity hotel and 200 capacity restaurants					
			Design and construct light industrial park/ hawkers square in the existing Gatiri Market	CGK	Increase space for people wanting to engage in industry			
			Protection of agricultural urban lands by prevention sprawl.	CGK	Protect food supply and income from agricultural sector			
<b>Urbanization and Human Settlements Industrial Recreation</b>	- 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	<b>Housing</b>	Promote the development of sustainable, convenient and liveable residential neighbourhoods	CGK	Development control tool			
			Create a subdivision policy that provides the minimum size of land in urban and rural areas, stating the minimum length and width of the parcels	CGK	Adequately sized and shaped plots			
			Ensure sustainable residential growth	CGK	Development control tool			
			Restrict High Residential in the identified Nodes	CGK	Development control tool			
			Restrict Low Density Residential development in areas in between the locations furthest away from the major nodes and urban corridors	CGK	Development control tool			

	accommodate future growth.  - Uphold innovative civic and urban design that enhances the character and form of the town.		Support Medium Density Residential development along the Urban Corridors	CGK	Development control tool			
			Building code should be developed to handle aesthetics of buildings, green energy to protect the health of residents, and minimum green spaces required	CGK	Prevent ugly buildings due to peeling paint, and allow for good air quality			
			Zoning plan is created for the next 10 years and should be implemented	CBK	Basis for development control			
<b>Governance</b>	Provide a basis for infrastructure and service provision for present and projected population over the plan period	Revenue Enhancement	Examining the capacity of the Kiambu Municipality Environment Department in relation to the work load, then staff accordingly	CGK	Provide better solid waste management services			
			Agricultural extension officers should engage residents who practice agriculture (agroforestry included)	CGK	To encourage agriculture			
			Engage the public on their role in development with the municipality through public meetings	CGK	Public understating on development			
			Running the Municipal Board and Municipal Management	CGK	Human resource capacity building			

#### **5.4 Capital Investment Plan**

The Kiambu Municipality Capital Investment Plan provides the numbers that the projects are expected cost, and the timeframe in which the projects will be implemented.

CAPITAL INVESTMENT PLAN								
No.	Programmes/Projects	Units	Unit Cost	Total Cost	Funding Agency	2020-2023	2024-2026	2027-2030
1.	Upgrade Road C64 to improve movement to and from Nairobi	5.2Km	20M/Km	104M	KURA	Yes		
2.	Create a direct movement linkage between Kiambu and Githunguri;	3Km	30M/Km	90M	CGK/KeRRA	Yes	Yes	
3.	Improve east-west linkages between Kiambu, Limuru, Wangige and Ruiru	8.24Km	20M/Km	164.8M	CGK/KeRRA	Yes		
4.	Investigate the feasibility of developing a north-south link from Maragua through Kandara, Gatundu, Kiambu and onto Nairobi	1	10M	10M	CGK/KeNHA		Yes	Yes
5.	Improve public transport services between Kiambu and surrounding towns				Matatu SACCOs/CGK	Yes	Yes	
6.	Upgrading primary and secondary roads in terms of width, surfacing and street scaping, and street lighting	32.617Km	10M/Km	326.17M	KeNHA/KeRRA	Yes		
7.	Upgrading of all other roads less than 9m and create roads by widening, paving and street scaping,	159.68Km	25M/KM	4B	KURA/KeRRA	Yes	Yes	Yes

	NMT and street lighting and storm water drains and opening of the proposed secondary and local link roads							
8.	Development of dedicated paved sidewalks and/or cycling paths and storm water drains of sufficient width along all primary and secondary routes	32.617Km	10M/Km	326.17M	CGK/Development Partners	Yes	Yes	Yes
9.	Rehabilitation and securing of watercourses and wetlands in the planning area			10M	CGK/WRA/National Government, NEMA	Yes		
10.	Protection of areas with slopes of over 25%			5M	CGK/Residents	Yes		
11.	Water supply extended to all residents				KIWASCO			
12.	Extension of sewerage systems to cover the proposed residential areas in the planning area				KIWASCO	Yes		
13.	Location of skips at markets as collection points and ensure there is a budget allocated to the regular collection of solid waste (Transfer		30M	30M	CGK/World Bank	Yes		

	station, skip loader, 6 skips). Put at least one skip in every market. Involve the youth.							
14.	Creating a solid waste recycling manual with plans, guidelines and training	1	0.1M	0.1M	CGK	Yes		
15.	Provision of Sanitation services to settlements located within the catchments of water sources to avoid pollution.				KIWASCO/Development Partners	Yes	Yes	
16.	Identification and zoning of all environmentally sensitive areas			5M	National Government/NEMA	Yes		
17.	Upgrading of Kirigiti Stadium infrastructure and provide supporting infrastructure	1	25M	25M	CGK/National Government		Yes	
18.	Acquiring and constructing a conference centre facility	1	1B	1B	CGK/Kenya National Convention Bureau			Yes
19.	Provision of high-quality public environment (Walkable streets) throughout the CBD	2.2Km	10M/Km	22M	CGK	Yes	Yes	Yes
20.	Acquire the current post office land and	1	200M	200M	CGK/National Government	Yes		

	redevelop it to have a parking silo to incorporate the post office in the 1 <sup>st</sup> floor,							
21.	Acquire land opposite the current post office and develop a silo type parking	1	200M	200M	CGK/National Government		Yes	
22.	Design and construct a modern Bus park in the existing terminus	1	100M	100M	CGK/Development Partners	Yes		
23.	Development of bus stops at all markets and strategic locations along primary and secondary routes (include boda boda sheds)	10	0.1M	1M	KURA/KERRA/KENHA	Yes		
24.	Upgrade the existing Kangangi Market by Designing and constructing a Multi-story modern one	1	80M	80M	CGK/Development Partners		Yes	
25.	Develop a museum at municipal office location	1	50M	50M	CGK/Kenya National Museums	Yes	Yes	
26.	Introduce landscaping and tree planting to reinforce the character of streets	212.35Km	1M/Km	212.35M	CGK	Yes	Yes	Yes
27.	Design and construct a Light industrial	1	120M	120M	CGK	Yes		

	park /hawkers square in the existing Gatiri Market							
28.	Develop markets at Riabai, Kanunga, Kirigiti, Thindigua and Ndumberi with ablution facilities and proper drainage	4	5M	20M	CGK	Yes	Yes	Yes
29.	Develop a bus park at Kirigiti with ablution facilities	1	10M	10M	CGK	Yes		
30.	Develop health centres at Thindigua and Ndumberi (close to Kanunga)	2	5M	10M	CGK	Yes		
31.	Upgrade Ndumberi stadium, add a park and provide supporting infrastructure, and develop a community hall/library/ICT hub	1	25M	25M	CGK/National Government	Yes		
32.	Develop a fire station at Ndumberi Police Station	1	10M	10M	CGK	Yes		
33.	Locate 3 fire hydrants at Ndumberi, Kirigiti and Thindigua	3	0.1M	0.3M	CGK	Yes		
34.	Upgrade KIST to a university	1	100M	100M	Ministry of Education/Donor Funds	Yes		
35.	Upgrade the quality of education in all	22	10M	220M	Ministry of Education	Yes	Yes	Yes

	schools within the planning area							
36.	Develop a school for people living with disabilities	1	50M	50M	Ministry of Education	Yes		
37.	Reclaim back public land that was illegally converted to private use and protect all public land			10M	CGK	Yes		
38.	Include a physical therapy ward within the Kiambu Hospital	1	10M	10M	CGK	Yes		
39.	Develop and old people's residence within the Kiambu Hospital's compound	1	50M	50M	CGK	Yes		
40.	Upgrade Kiambu mortuary	1	10M	10M	CGK			
41.	Organize religious leaders and come up with regulations for new church building development	2	0.1M	0.1M	Religious Institutions	Yes		
42.	Do maintenance on all public buildings within the planning area (offices/public health institutions)		100M	100M	CGK			
43.	Creation of subdivision policy book that regulates the sizes and shapes of subdivisions in rural and urban areas	1	0.5M	0.5M	CGK			

44.	Creation of a building code book that regulates building materials and spaces for aesthetics, air quality and public health	1	0.5M	0.5M	CGK			
45.	Doing a human resource capacity audit for the Environment Department and staff according to the results	1	0.1M	0.1M	CGK			
46.	Engage the public on their role in development within the municipality	3	0.1M	0.3M	CGK			
47.	Funding for running the municipal board and the municipal management	10Yrs	13.2M	132M	CGK/World Bank			
	Total			7.84039B				

## 5.5 PLAN MONITORING AND EVALUATION

SECTOR	NATURE OF PROJECTS	MONITORING INSTITUTIONS	EXPECTED OURCOMES	SUCCESS INDICATORS
<b>TRANSPORTATION</b>	<ul style="list-style-type: none"> <li>▪ Road construction projects</li> <li>▪ Road expansion</li> <li>▪ Tarmacking projects</li> <li>▪ NMT provision</li> <li>▪ Street scaping/Street lighting</li> <li>▪ Storm water drains</li> <li>▪ Construction of modern Bus parks</li> <li>▪ Bus stops</li> <li>▪ Construction of a parking silos</li> </ul>	KeNHA/KURA/KeRRA and County Government	<ul style="list-style-type: none"> <li>▪ Improved road transport system</li> <li>▪ Enhanced movement of people and goods</li> <li>▪ improved traffic movement and road safety</li> <li>▪ Enhanced ease of movement of pedestrians</li> <li>▪ Increased parking spaces</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adequacy of road network</li> <li>▪ Ease of traffic circulation</li> <li>▪ Level of road safety</li> <li>▪ Quality of transport services</li> <li>▪ No of Streetlights</li> <li>▪ NMT infrastructure</li> </ul>
<b>HOUSING</b>	<ul style="list-style-type: none"> <li>▪ Prioritization of areas for County new housing</li> <li>▪ Development control regulations</li> </ul>	County Government	<ul style="list-style-type: none"> <li>▪ Increased housing stock in the planning area</li> <li>▪ Improved living environment</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sufficiency of housing</li> <li>▪ Adherence to development control</li> <li>▪ DC applications and approvals</li> </ul>

<b>WATER AND SANITATION</b>	<ul style="list-style-type: none"> <li>▪ Water and sewerage network projects</li> <li>▪ Solid waste management</li> </ul>	KIWASCO/AWSB	<ul style="list-style-type: none"> <li>▪ Improved water supply</li> <li>▪ Better sanitation in the planning area</li> </ul>	<ul style="list-style-type: none"> <li>▪ Level of access to water and sewerage services</li> <li>▪ Level of sanitation</li> </ul>
<b>COMMERCE AND INDUSTRY</b>	<ul style="list-style-type: none"> <li>▪ Upgrading markets</li> <li>▪ Industrial developments *</li> <li>▪ Hawkers square</li> <li>▪ Constructing a conference centre opposite Kirigiti Stadium</li> <li>▪</li> </ul>	Ministry of Industrialization & trade / County government	<ul style="list-style-type: none"> <li>▪ Increased employment opportunities</li> <li>▪ Improved household income</li> <li>▪ Improved government revenue</li> </ul>	<ul style="list-style-type: none"> <li>▪ Production levels in the industry</li> <li>▪ Employment levels in the industry</li> <li>▪ Income levels of workers</li> <li>▪ Amount of revenue</li> </ul>
<b>SOCIAL INFRASTRUCTURE</b>	<ul style="list-style-type: none"> <li>▪ Constructing a community hall and Library at Ndumberi Stadium</li> <li>▪ Constructing a museum at current municipal offices space</li> <li>▪ Construct a fire station at Ndumberi Police Station</li> </ul>			

	<ul style="list-style-type: none"> <li>▪ Construct two health facilities, one at Thindigua and the other at Ndumberi near Kanunga</li> <li>▪ Locate water hydrants at Kirigiti, Ndumberi and Thindigua</li> </ul>			
<b>RECREATION</b>	<ul style="list-style-type: none"> <li>▪ Upgrading Kirigiti stadium</li> <li>▪ Upgrading Ndumberi to stadium and recreation park</li> <li>▪ Public spaces</li> </ul>	County Government		
<b>AGRICULTURE</b>	<ul style="list-style-type: none"> <li>▪ Conservation projects</li> </ul>	Ministry of Agriculture, Livestock and Fisheries County Gov't	<ul style="list-style-type: none"> <li>▪ Enhanced agricultural productivity</li> <li>▪ Improved income farmers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Agricultural productivity levels</li> <li>▪ Farmers' income levels</li> </ul>
<b>ENVIRONMENT</b>	<ul style="list-style-type: none"> <li>▪ Green spaces projects</li> </ul>	County Government	<ul style="list-style-type: none"> <li>▪ Improve the aesthetic value of Kiambu town</li> </ul>	<ul style="list-style-type: none"> <li>▪ Extent of green areas in the town</li> </ul>

## 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).