



**REPUBLIC OF KENYA**  
**COUNTY GOVERNMENT OF NYANDARUA**



**INFRASTRUCTURE SECTOR PLAN**

**2023 – 2032**

**THEME:** *Shaping Sustainable Infrastructure*

*November 2023*

# INFRASTRUCTURE SECTOR PLAN 2023-2032

ZERO DRAFT - For comments

## **VISION**

Achieve sustainable socio-economic growth and development through efficient and sustainable public utility infrastructure facilities and services

## **MISSION**

To facilitate provision of efficient, affordable and reliable public utility infrastructure for sustainable socio-economic growth and development through construction, connectivity, modernization, rehabilitation and effective management of all infrastructure facilities

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## **ABBREVIATIONS AND ACRONYMS**

<b>ABTs</b>	Alternative Building Technologies
<b>ADR</b>	Alternative Dispute Resolution
<b>AIDS</b>	Acquired Immuno-Deficiency Syndrome
<b>BETA</b>	Bottom-Up Economic Transformative Agenda
<b>BORAQS</b>	Board of Registration of Architects and Quantity Surveyors
<b>CADP</b>	County Annual Development Plan
<b>CALC</b>	County Assets and Liabilities Committee
<b>CAPR</b>	County Annual Progress Report
<b>CBEF</b>	County Budget and Economic Forum
<b>CEC</b>	County Environment Committee
<b>CECN</b>	County Executive committee Member
<b>CEP</b>	County Energy Plan
<b>CeREB</b>	Central Region Economic Block
<b>CESA</b>	critically ecologically sensitive areas
<b>CGA</b>	County Government Act
<b>CGN</b>	County Government of Nyandara
<b>CIDP</b>	County Integrated Development Plan
<b>CIMES</b>	County Integrated Monitoring and Evaluation System
<b>CoG</b>	Council of Governors
<b>COVID 19</b>	Coronavirus disease 2019



<b>CPR</b>	Comprehensive Project Reports
<b>CSOs</b>	Civil Society Organizations
<b>CSP</b>	County Sectoral Plan
<b>DRR</b>	Disaster Risk Reduction
<b>EBK</b>	Engineers Board of Kenya
<b>ECDE</b>	Early Childhood Development Education
<b>EEC</b>	Energy efficiency and conservation
<b>EPRA</b>	Energy and Petroleum Regulatory Authority
<b>ERR</b>	End-Term Review Report
<b>GDP</b>	Gross domestic product
<b>GIS</b>	Geographic information system
<b>GNSS</b>	Global navigation satellite system
<b>GVCU</b>	Government Vehicle Check Unit
<b>HIV</b>	Human Immunodeficiency Virus
<b>IBEC</b>	Intergovernmental Budget and Economic Council
<b>ICT</b>	Information Communication Technology
<b>IFMIS</b>	Integrated Financial Management Information System
<b>IGRTC</b>	Intergovernmental Technical Relations Committee
<b>INEP</b>	Integrated National Energy Plan
<b>KENHA</b>	Kenya National Highways Authority
<b>KERRA</b>	Kenya Rural Roads Authority
<b>KETRB</b>	Kenya Engineering Technology Registration Board
<b>KIBHIT</b>	Kenya institute of Housing and Building Technology
<b>KRB</b>	Kenya Roads Board

<b>MOU</b>	Memorandum of Understanding
<b>NCA</b>	National Construction Authority
<b>NTSA</b>	National Transport and Safety Authority
<b>PPP</b>	Public Private Part
<b>SDPW</b>	State Department for Public Works
<b>SETA</b>	Sustainable Energy Technical Assistance
<b>UNDP</b>	United Nation Development Program
<b>VTC</b>	Vocational Training Centre

# **1. CHAPTER ONE: INTRODUCTION**

## **1.1 Introduction**

This chapter provides the geographical location and area of Nyandarua County. It further gives the socio-economic mainstay of the county in terms of the main economic activities being carried out. The ecological and climatic conditions in the county also have also been described. In addition, the demographics for the county have also been provided depicting the population classified per sex as well as sub counties covering the period 2019 to 2027 which coincides with mid-point of the setoral plan. Lastly, this chapter has provided the mandates of each subsector, the methodology employed in preparing the governance sectoral plan, how this plan is linked to the existing policy and legal framework as well as the rationale for its preparation.

## **1.2 Overview of the County**

### **1.2.1 Position and size**

Nyandarua is located in the central region of Kenya and lies between latitude 0°8' North, and 0°50' South and between Longitude 35° 13' East and 36°42' West. It borders Kiambu to the South, Murang'a to the South East, Nyeri to the East, Laikipia to the North, and Nakuru to the West. The county is privileged to have the equator passing through two points in O1'Joro Orok (Gatimu) and Ndaragwa (Gwa Kungu) sub-counties.

The County is located in the Mt. Kenya and Aberdare belt of central Kenya. Its headquarters are in Ol Kalou town which is approximately 150 Kilometres North West of Nairobi.

The County is also a member of the Central Region Economic Block (CeREB) comprising nine other member Counties namely Nakuru, Laikipia, Nyeri, Muranga, Kiambu, Embu, Tharaka Nithi, Kirinyaga and Meru. These counties are relatively homogeneous in terms of economic activities with all of them engaging heavily in agriculture. Further, the inhabitants are predominantly Eastern Bantus.

The area of the County is approximately 3,286 Square Kilometres, part of which is covered by the Aberdare Ranges.

The County map is as shown in figure 1-1.

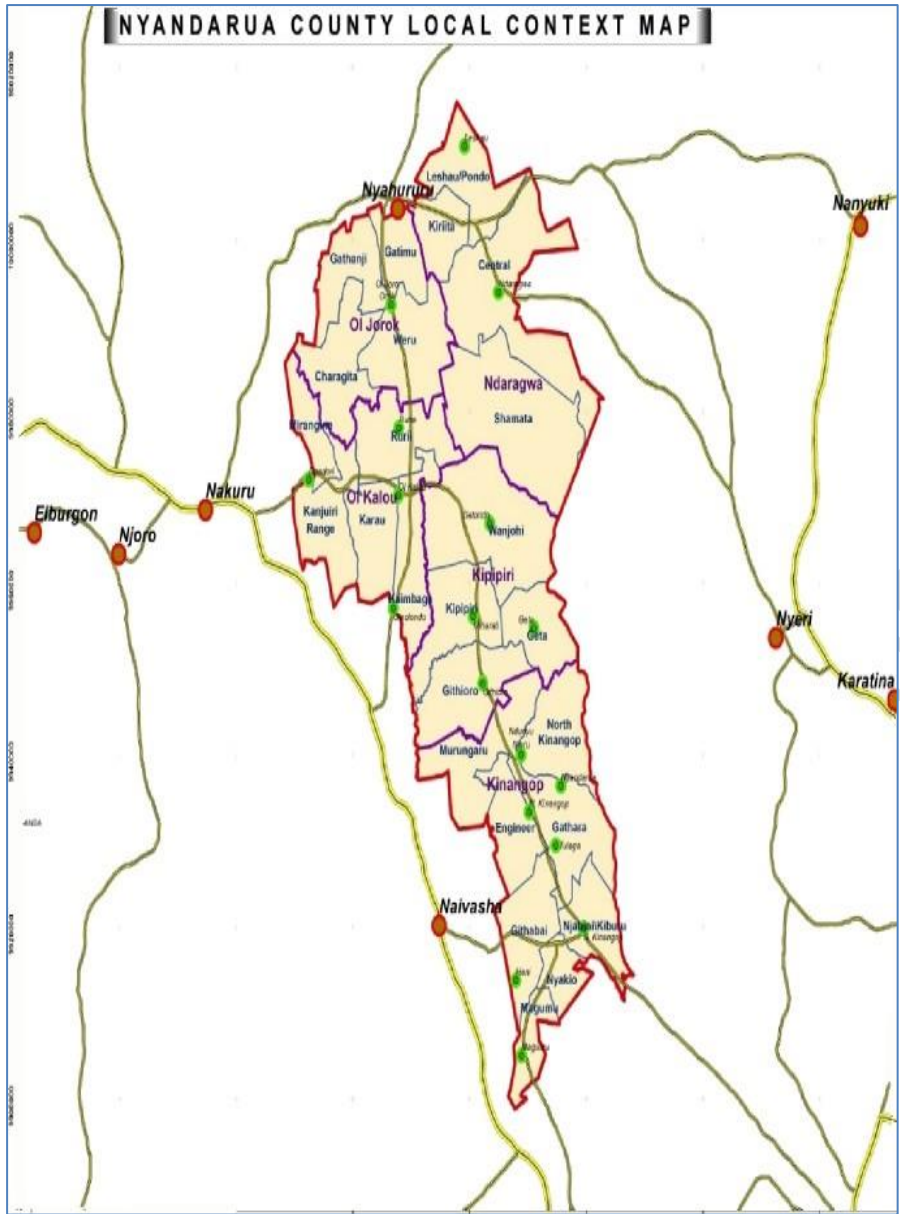


Figure 1-1: Nyandarua County Map

### Socio-economic mainstay of the county

The socio-economic mainstay in Nyandarua is Agriculture and related industries. The main agricultural produce includes Irish potatoes, cabbages, carrots, peas, floriculture, pyrethrum, sugar beet, cereals, poultry and dairy. This is due to the favourable climate and natural resources such as fertile soils. The high agricultural production has made Nyandarua County

a top producer of Irish Potatoes accounting for over a third of the national production and the second top producer nationally of Milk in turn becoming a food basket and a strategic county in national food security. The sector employs about 69% of the population and contributes approximately 73% of household incomes. Other significant contributors to the county economy are general commerce including wholesaling and retailing as well as the lumbering sector all which have created significant employment opportunities. The County is also blessed with numerous tourism assets which includes Lake Ol bolosat, Mau Mau caves, happy valley homes, equatorial sites, and Arberdare ranges which if well tapped into would be major contributors to the County and national economic growth.

### **1.2.2 Physical and topographic features**

The formation of the County was greatly influenced by volcanism and faulting that created the major landforms namely: The Great Rift Valley to the west and the Aberdare ranges to the east. The County's topography is characterized by a mix of plateaus and hilly areas.

At 3,999 metres above sea level, the Aberdare Ranges is the highest point in the county while the lowest parts include Lake Ol'Bolossat, Leshau and the northern part of Ndaragwa Central Ward, lower Kaimbaga, and the western parts of Kipipiri, Githioro and Murungaru Wards. The flat areas include Kinangop and Ol'Kalou/Ol'Joro Orok plateaus.

Over time, rock weathering has transformed the Aberdare ranges, which dissects the slopes into shallow valleys and the gorges with deep and well-drained soils. As they approach Ol'Kalou and Kinangop plateaus, these valleys flatten with only a few gorges draining river water down the escarpment and onto the floor of the Rift Valley. Ol'Kaou Salient Plateau in the north and Kinangop Plateau to the south stretch north-south between the Aberdare ranges and a system of fault scarps which form the escarpment. Dundori Hills represent a high weathering resistant block of the scarp. The two plateaus extend to about 80 km from north to south and about 40 km wide north of Ol'Kalou town. Gentle slopes intermitted by low hills flatten into marshlands and swamps. The rest of the land is well-drained and has fertile soils of volcanic origin. Soils in the Kinangop and Ol'Kalou plateaus are poorly drained clay loam. However, Ndaragwa, the northern part of Ol'Joro Orok and Ol'Kalou have well-drained clay loam with different crop production potential. The plateaus have the key settlement zones.

There are eight permanent rivers; Malewa, Ewaso Narok, Pesi, Turasha, Chania, Kiburu, Mkungi, and Kitiri. Lake Ol'Bo1osat which is the largest water mass in the County is fed by streams and underground water seepage from the Aberdare and Dundori hills. Human activities

and clearing of the catchment areas for settlement have affected its natural refilling system and its existence is threatened.

The Aberdare Ranges is one of the country's major water towers. Moreover, the Aberdare ecosystem constitutes a dense forest with several animal species including elephants, baboons, Columbus monkeys, tree and ground squirrels, porcupines, and many bird species. On the slopes of the Aberdare ranges are also the Mau Mau caves in Geta and Kimathi. The ranges offer great potential for local and foreign tourism in the County as they border the Aberdare National Park to the east and can be developed as nature trails and for mountain climbing.

### **1.2.3 Climatic and Ecological conditions**

#### **1.2.4.1 Climatic conditions**

The temperature in the County ranges between 12<sup>0</sup>C in July to 25<sup>0</sup>C in December. The County can therefore be considered to have a moderate temperature. High temperatures, which are low by the national average, are experienced between December and March with the lowest temperatures occurring in July. The highest temperature in December has a mean average of 25<sup>0</sup> C while the lowest in July has a mean average of 12<sup>0</sup> C. Variation of the temperature has adverse effects, especially on crop cultivation; when cold air during clear nights on the moorlands of the Aberdare Ranges flows down the Kinangop and Ol'Kalou Plateaus it causes night frost almost monthly.

Maximum rainfall of about 1700 mm is received during March and May which coincide with the wet season, (also known as the second season) and maximum rainfall of about 700 mm during September-December (coinciding with the dry season, also known as the first season). The rainfall decreases from East to West. Nyandarua County has had reliable rainfall which is generally well distributed throughout the year but is starting to be erratic due to climate change. The Aberdare Ranges and the Dundori Hills influence rainfall distribution in the area, with areas like Njabini and South Kinangop receiving higher amounts of rainfall while areas of Ndaragwa and Ol'Kalou receive comparatively low rainfall. In a typical year, the County experiences two rainy seasons: long rains from March to May with a maximum rainfall of 1,700 mm and short rains from September to December with a maximum rainfall of 700 mm. The average annual rainfall of the County is 1,500 mm. Nyandarua County has an average relative humidity of 71.5%.

### **1.1.4.2 Ecological Conditions**

Some areas in the County are in the highland savannah zone, characterized by scattered trees with expansive grass cover. In elevated areas, tree cover increases forming thick forests with thick undergrowth. However, most of the natural vegetation has been cleared leading to environmental hazards such as environmental degradation which has claimed large portions of arable land. This has had some negative effects such as reduced rainfall, soil erosion, reduced soil fertility, poor health and reduced food production.

The County has been greatly affected by climate change. This has led to emergent weather patterns which were hitherto unprecedented. Incidences of unpredictable weather patterns have become common in the last decade affecting negatively agriculture production as well as increasing health challenges associated with weather changes. Floods and droughts have become common occurrences lately.

The Climate has been observed to change in Nyandarua. Since 1981, the first wet season has experienced a moderate (1 °C) increase in mean temperature and associated reduction in the crop cycle, and a slight tendency for increasing precipitation. The second wet season experienced a mild (~0.5 °C) increase in temperature and no change in precipitation. Looking to the future in the years 2021-2065, prolonged moisture stress is projected to occur across both seasons of the year analysed, whereas intense precipitation looks to change little.

### **1.3 County Demographics**

The County has five administrative sub-counties under the County Government jurisdiction. They include; Kinangop, Kipipiri, Ol Kalou, Ol Joro Orok and Ndaragwa. Each sub-county is further divided into wards with the County having a total of twenty-five (25) wards. Kinangop is the biggest Sub-County with eight Wards followed by Ol Kalou with five Wards while Kipipiri, Ndaragwa and Ol'Joro Orok have four Wards each. Kinangop being the largest Sub-County covers 939 km<sup>2</sup> while Ol'Joro Orok Sub-County covering 439 Km<sup>2</sup> is the smallest.

Sub County	No. of Wards	Area (Km <sup>2</sup> )
Kinangop	8	939
Kipipiri	4	544
Ol'Kalou	5	670
Ol'Joro Orok	4	439
Ndaragwa	4	654
Aberdare ranges		40
<b>Total</b>	<b>25</b>	<b>3,286</b>

Table 1-1: County Government Administrative Wards by Constituency

Source: County Statistical Abstract and Kenya National Population and Housing Census

The Kenya National Population and Housing Census, 2019, stated that the county had a population of 638,289 persons of whom 315,022 (49.3 per cent) were male and 323,247 (50.6 per cent) were female. The County had a total number of 179,686 households with an average household size of 3.5 persons. The population density at the time was 194 persons per km<sup>2</sup>.

The population was projected to be 682,740 in 2022, and further extrapolated to be 721,112 in 2025 and 746,009 in 2027.

In 2019, Kinangop Sub-County had the highest number of households with a population of 205,280 persons whereas Ol'Joro Orok had the least number, with 97,965 persons. This implies that 32.16 per cent of the entire county population resides in Kinangop while 15.34 per cent reside in Ol'Joro Orok. Table 4 provides the population at the time of the census in 2019 and its projections for the periods; 2022, 2025 and 2027 segregated by sex. The projections have factored in key demographic considerations such as fertility, mortality, birth and immigration rates.

County/ Sub-County	2019			2022			2025			2027		
	Male	Femal e	Total	Male	Femal e	Total	Male	Femal e	Total	Male	Femal e	Total
Nyandarua	315,022	323,247	638,269	335,847	346,893	682,740	354,096	367,016	721,112	365,883	380,126	746,009
Kinangop	100,884	104,387	205,271	107,553	112,023	219,576	113,397	118,521	231,917	117,172	122,755	239,924
Kipipiri	46,113	47,740	93,853	49,161	51,232	100,391	51,833	54,204	106,033	53,558	56,140	109,694
Ol'Kalou	70,776	71,697	142,473	75,455	76,942	152,397	79,555	81,405	160,960	82,203	84,313	166,516



<b>Ol'Joro</b>	48,75	49,20	97,96	51,97	52,80	104,7	54,79	55,87	110,6	56,62	57,86	114,4
<b>Orok</b>	2	9	5	5	9	87	9	2	77	3	8	98
<b>Ndaragwa</b>	48,49	50,21	98,71	51,70	53,88	105,5	54,51	57,01	111,5	56,32	59,05	115,3
	7	4	3	3	7	87	2	3	22	7	0	72

Table 1-2: County Demographics by Subcounties

Source: County Statistical Abstract and Kenya National Population and Housing Census

## 1.4 Sector Background Information.

The Infrastructure sector comprises of two sub-sectors namely: Roads, Transport, Public Works, Housing and Energy; Lands, Housing and Physical Planning

**Public Works, Roads, Transport, Housing and Energy** sub-sector has four sections/directorates: Roads Development and Transport, Public Works, Energy Development, Emergency Response and Preparedness and Housing Development.

**The Lands, Physical Planning and urban development** sub sector comprises of four directorates, and three municipalities namely; Land management, survey, physical planning, urban development, Ol'kalou municipality, Mairo-Inya municipality, and Engineer Municipality.

### Sub-Sectors and their Mandates

#### 1.4.1 Public Works, Roads, Transport, Housing and Energy

By aligning with Vision 2030, Africa Union Agenda 2063, and various national and regional initiatives, the Directorate contributes to overarching development goals, fostering socio-economic advancement in the County.

The Fourth Schedule of the Constitution of Kenya 2010, the County Governments Act 2012 and the organization of the County Government via Executive Order No. 1 of 2022 confer the following mandates and functions to the sub sectors.

##### 1.4.1.1 Roads and Transport

**The directorate is responsible for:**

1. Develop a County Transport Master Plan.

2. Review and approve county communications related to traffic, including parking, traffic signals, speed zones, and signage.
3. Inspect vehicles and equipment to ensure compliance with rules and regulations.
4. Test vehicle components for wear, damage, or improper adjustment.
5. Establish standard operating procedures for the repair, maintenance, and servicing of County Government vehicles.
6. Maintain a comprehensive preventive maintenance schedule.
7. Undertake the development and maintenance of County infrastructure.
8. Oversee the management of traffic.
9. Generate revenue from county-owned sources.
10. Collect and organize data related to transportation and roads.
11. Develop, rehabilitate, and manage county roads.
12. Control reserves for county roads and access to roadside development.
13. Develop and implement road policies for county roads.
14. Ensure motorist adherence to rules and guidelines related to axle weight.
15. Ensure the quality of roads meets established standards.
16. Collect and collate data to support efficient planning for county roads.
17. Monitor and evaluate the use of county roads.
18. Coordinate and liaise with other authorities in planning and operations related to roads.
19. Prepare a road work program for all county roads.

By fulfilling these fundamental responsibilities, the directorate is dedicated to delivering a dependable and cost-effective infrastructure that not only bolsters our agriculture sector but also ensures accessibility throughout all seasons. This, in turn, enhances our position as a preferred market source for traders, both locally and from neighboring counties.

In the realm of socioeconomic impact, our department actively generates employment opportunities for the local youth, primarily through initiatives like the County In-House Machinery Program, which involves gravel spreading.

### **1.4.1.2 Public Works**

**The directorate is responsible for:**

1. Development and management of Public Buildings
2. Provision of Mechanical and Electrical Building Services
3. Provision of access in areas with difficult terrain
4. Development and management of other Public Works
5. Management of building and construction standards and codes
6. Implementation of National Public Works Policy
7. Implementation of policies and guidelines in the construction and rehabilitation of Government/Public buildings and associated Civil Works
8. Building inspection services
9. Building research services
10. Maintaining an inventory of Government property in liaison with Department of Finance

The Directorate of Public Works plays a crucial role in promoting socio-economic development by improving infrastructure, ensuring safety and quality in construction, facilitating access to services, and adhering to legal and policy frameworks that create a conducive environment to investment and economic growth.

### **1.4.1.3 Energy**

**The directorate of Energy has the following mandates;**

1. The directorate draws its mandate from the Constitution of Kenya 2010 schedule 4, the County Government Act 2012, the first executive order, and the Energy Act 2019.
2. Mapping of various sources of power in the county.
3. Develop strategies to increase the percentage of households connected to electricity and to the national grid.
4. Develop strategies to promote green/renewable energy in the county.
5. Install renewable and alternative sources of energy in the county.
6. Generate energy statistics.
7. Mobilize financial resources for County-specific energy projects.
8. Promote Energy Efficiency and Conservation (EEC).

9. Undertake energy audits in public buildings, industry, commercial buildings and institutions.
10. Ensure compliance to National government legislation.
11. Installation and maintenance of county streetlights and floodlights.
12. Undertake feasibility studies for county-based Energy projects
13. Review and implementation of county energy policies and plans.
14. Collect and collate data

Energy development contributes to socio-economic development by improving energy access, efficiency, and sustainability thus attracting investments, creating job opportunities, and fostering environmentally friendly practices that benefit the community and local economy. This not only fosters economic growth but also contributes to improved security conditions, subsequently extending business operating hours .

#### **1.4.1.4 Emergency Preparedness**

Mandates of the Disaster Management Directorate are;

1. Disaster and emergency response coordination
2. Coordination and management of county fire station
3. Establishment of county disaster risk management units and command center
4. Formulate county risk disaster management plan, policy and bill for county assembly
5. Promote civic education and public awareness training on disaster risk management and mitigation
6. Repository of information on damage and loss from disasters and impending disasters
7. Preparation and submission of the annual report to the county assembly on disasters
8. Counties peer review mechanisms on disaster management
9. Collect and collate data on disasters

These mandates contribute significantly to socio-economic benefits by reducing economic losses from disasters, promoting resilience, and ensuring a more efficient response to emergencies, ultimately safeguarding the local economy and livelihoods.

#### **1.4.1.5 Housing**

The directorate of housing has the following mandates;

1. Development of a Housing Policy for the County.
2. Development and Management of affordable housing.
3. Management of employees Housing needs.
4. Provision of technical advice on estate management to County government agencies.
5. Facilitating leasing of offices and residential accommodation to public servants
6. Generation of county own source revenue
7. Conducting regular County housing survey and statistics.
8. Developing and maintaining an inventory of government owned and leased office and residential accommodation.
9. County own source revenue generation
10. Collect and collate data related to housing development

These mandates contribute to socio-economic development by providing affordable housing, managing real estate resources efficiently, generating revenue, and improving living conditions and overall quality of life in the county, which, in turn, attracts investment and supports economic growth.

#### **1.4.2 Lands, physical planning and Urban Development Sub-Sector**

##### **1.4.2.1 Land Management**

**The mandates of Land management directorate are;**

1. Formulation of land administration and management policies, laws, guidelines, and standards.
2. Administration of Plots, Kiosks, and land including but not limited to approval of transfers and confirmation of ownership status,
3. Management of public land and landed property, including processing of leases, licenses and tenancy agreements,
4. Liaise with Settlement Trust Fund (STF) to Convert Land Under them to County Public Land.
5. Titling of Public Land as a Way of Protecting It.
6. Implementation of alternative dispute resolution mechanism for management of disputes on plots, kiosks, and public land,
7. Acquisition of land for public use of behalf of the County Government,
8. Establishing and regularly updating the County Valuation Rolls,

9. Develop and maintain an inventory of Land owned by the County Government of Nyandarua in form of a County Land Bank,
10. Spearheading the establishment of the Nyandarua County Land Information Management systems.
11. Offer technical advice and support in Land administration matters and in the formulation of land related policies, laws, guidelines, and standards to the County government.

Land administration and management significantly contribute to socio-economic development by providing secure property rights, enabling strategic land use planning, supporting infrastructure development, attracting investments, generating revenue through taxes and fees, resolving conflicts, fostering rural development, and promoting environmental sustainability.

#### **1.4.2.2 Physical planning**

**The mandates of physical planning directorate are;**

1. Preparation of Physical and land use Development Plans
2. Formulation of policy frameworks to guide County development including County Spatial plan among others
3. Automate a county data on Lands and physical planning information
4. Initiate A County Address System Where Streets Are Named, Given Numbers And Buildings Have Street Address.
5. Plan and revise plans for all Squatter Villages in the County.
6. Preparation of Municipal and Town physical and land use Plans.
7. Generation of County Own Source Revenue
8. Resolving Conflicts Arising from Physical Planning Processes.
9. Collect and Collate Data
10. Development control and ensuring compliance.
11. Vetting and approving building plans applications as outlined in the PLUPA,2019
12. Receive, vet and circulate development control applications including change of users, extension of user, renewal and extension of lease, subdivision and amalgamation proposals,
13. Formulating County Physical and Land Use planning polices, guidelines and standards.

14. Supervising the periodic audits and inspection of all buildings in the County in liaison with all the relevant departments.
15. Classification of urban centers into various categories and conferment of status in line with UACA
16. Development of a physical planning data bank

Physical planning significantly contributes to socio-economic development by optimizing resource utilization, guiding infrastructure development, attracting investments through predictability, fostering community engagement and inclusivity, promoting environmental sustainability, enhancing quality of life, and ensuring regulatory compliance for a secure and well-structured environment.

#### **1.4.2.3 Survey**

**The directorate is responsible for;**

1. Re-establishment of boundaries for public utility
2. Execution and control for cadastral surveys
3. Survey and production of small scale topographic maps
4. Operationalization of GIS lab
5. Quality control and assurance of Geospatial data generated by other organizations
6. Surveying and mapping of public land in the county.
7. Generation and provision of geospatial data for use by other department and agencies.
8. Resolving boundary disputes involving public land
9. Provide guidelines on boundaries and fencing.
10. Establishment and maintenance of GIS (Geographical Information System) based database.
11. Establishing, updating and maintaining adequate survey controls.
12. Creation and administration of survey data bank to ease access to survey information and records
13. Approval of land development proposals

The Directorate in Nyandarua County is pivotal for socio-economic advancement, establishing a well-informed land management framework for economic growth. It supports strategic infrastructure development and overall socio-economic progress. Diligent surveying, mapping, and geospatial data provision optimize decision-making and resource allocation. Resolving boundary disputes and offering land-use guidelines contribute to a secure development landscape.

#### **1.4.2.4 Urban Development**

**The directorate is responsible for;**

1. Development and maintenance of urban traffic management systems and parking facilities,
2. Development and maintenance of bus parks and terminals
3. Development and maintenance of street lighting
4. Preparation of County Urban Integrated development strategy
5. Initiate promotion of urban areas to special municipal status
6. Construction of walkways, parking lots, and drainage channels in urban centers
7. Formulating urban development policies, guidelines and standards
8. Oversee the governance and management of urban areas.
9. County Own Source Revenue Generation.

Urban development drives socio-economic progress by creating job opportunities, enhancing infrastructure, and fostering a vibrant economic environment. The concentration of businesses and services in urban areas attracts investment, stimulates economic activities, and increases the tax base for local governments. Access to improved services, education, and cultural amenities contributes to the overall well-being of the population. Additionally, urban development promotes innovation, attracting skilled human resources and supporting technological advancements.

#### **Municipalities**

**The municipalities are responsible for;**

1. Development/maintenance of basic physical infrastructure including; roads, bus stands, parking lots storm drainage system, walkways, floodlights and streetlights.
2. Sanitation and solid waste management



3. Construction/Maintenance of markets
4. Development of recreational and social facilities
5. Sanitation and Solid waste management
6. Climate change and environmental management
7. Construction/maintenance of slaughterhouses
8. Provision of animal health services
9. Construction and operationalization of cottage industries
10. Water infrastructure development
11. Disaster Risk Management
12. Regulation of outdoor advertising

Municipal services are vital for urban development, contributing to improved infrastructure, public health, and safety. They play a key role in urban planning, housing, and community development, creating sustainable and well-designed urban spaces. Municipalities manage transportation systems, promote environmental sustainability, and provide cultural amenities, enhancing the overall quality of life. Economic development initiatives, educational services, and community engagement further contribute to the dynamic growth of urban areas.

### **Rationale/justification for preparing County Sectoral Plan**

Section 109 of the County Governments Act, provides that a County department shall develop a ten-year county sectoral plan as component parts of the county integrated development plan. The County sectoral plans shall be the basis for budgeting and performance management. These plans are to be reviewed after every five years by the County Executive and approved by the County Assembly, but updated annually.

Management of the County affairs through the sectoral approach through grouping of similar subsectors together helps organize and manage the scarce public resources. This results to promotion of efficiency, effectiveness, and accountability in the following manner;

**Expertise:** By dividing responsibilities into sectors, experts can focus on specific areas, making sure they are well-informed and skilled at what they do. This specialization generally leads to better outcomes.

**Effectiveness:** specialization helps reduce waste and redundancy.

**Accountability:** Having separate sectors allows for clear lines of responsibility and accountability. This transparency encourages public officials and organizations to do their jobs diligently.

**Varying Needs:** Different parts of society have diverse needs and priorities. By having separate sectors, the government can address these unique challenges more effectively.

**Checks and Balances:** This helps protect against abuse of power and ensures that decisions are made in the best interests of the people.

**Flexibility:** Societal needs change over time. Having separate sectors allows for flexibility in adapting to these changes.

**Innovation:** Specialized sectors attract experts in their respective fields who can bring innovation and best practices to the table. This leads to advancements in technology, healthcare, education, and other essential areas.

## **1.5 County sectoral plans linkages with the existing legal and policy framework**

To ensure synergies and prudent management of the sector, the Governance sectoral plan shall be linked to the following plans;

Long-term plans covering more than 10 years; these include the Kenya Vision 2030, Kenya National Spatial Plan 2015-2045, County Long Term Development Plans, International Development Obligations (SDGs, DRR and Africa Agenda 2063),

Long-term plans covering 10 years; these include the County Spatial Plans, City Plans, Urban Plans (10 Years), other Sectoral plans in the country and county, and Central Region Economic Bloc Blueprint. The sectoral plans will in turn inform the preparation of the following medium- and short-term plans;

Departmental Strategic Plans (5 Years), County Integrated Development Plans (CIDP) - (5 Years),

County Annual Development Plan (CADP) - (1 Year) County Budget Review and Outlook Paper; County Fiscal Strategy Paper and Annual Work Plan.

## **1.6 Methodology**

Preparation of this sectoral plan underwent a rigorous and structured approach during its development. The steps were in full conformity with the provided guidelines by the state department for economic planning as detailed; herein;

- a) **Organization of sectors in the County;** The County Executive Order 1 of August 2022 and other supportive instruments organized the county government into departments, directorates and agencies each with assigned functions. Further, all the departments and agencies were clustered into four sectors namely; Governance, productive, human resource and infrastructure.
- b) **County sectoral plans preparation concept approval and Constitution of the County Sectoral Plans secretariat;** the County Executive Committee paper on approval of the process was tabled and approved paving way for the exercise to start. A secretariat was constituted with membership from diverse background forming its membership under the leadership of the Economic Planning Directorate. This secretariat oversaw and coordinated preparation process for all the plans. A circular was sent to all the sectoral CECMs and Chief officers notifying them of the task at hand as approved by the County Executive Committee.
- c) **Constitution of the sector working groups (SWGs);** The CEC members responsible for each sector were instructed to constitute respective Sector Working Group (SWG) which were responsible for spearheading the process. The Chair of the SWG was appointed as well as members drawn from national and county government departments/ agencies, representatives of Non-State Actors and County Economic Planning Unit representative(s). The SWG had the following members;
  - a) Chairperson
  - b) Sector Economists- Convenor,
  - c) Representatives from the sector departments and agencies (National and County Government),
  - d) Private Sector stakeholders,
  - e) Development Partners stakeholders.
- d) **SWG Secretariat;** a SWG secretariat was further constituted under the leadership of sector economists. They acted as SWG rapporteur and were responsible for capturing the deliberations of the SWG.

e) **Mandate of the SWGs;** the SWGs were given the following as their terms of reference;

- a) Develop specific programme/roadmap for the sector,
- b) Undertake stakeholder mapping who included relevant Ministry, Departments and Agencies (MDAs) at the county and national levels, County Budget and Economic Forum and other forums as articulated in the various legislations, Development Partners, the private sector, Public Benefit Organizations, Academia and County citizens,
- c) Review the first generation, 2014-2023, sector plans,
- d) Identify challenges and lessons learnt in implementation of the first generation sectoral plans,
- e) Drafting the second generation sectoral plans as per the provided guidelines.
- f) Data collection and analysis; The SWG undertook a comprehensive review of relevant policies, laws and development strategies to inform the CSP preparation process which included: the Kenya Vision 2030; County Long-term Vision; sector related policies and laws; and the National and County Spatial Plans among others.
- g) The SWGs reviewed sector performance to determine the level of achievement, programmes implementation, challenges and lessons learnt.
- h) The SWG collected relevant information and inputs from the stakeholders through various established modalities including consultation forums and citizens' inputs when preparing the County Sectoral Plans.
- i) They SWGs consolidated and analysed the collected data and information, and drafted the CSP as per the guidelines.
- j) Validation; The Draft Sectoral Plans were then subjected to stakeholders for inputs and comments. The draft was shared with State Department for Economic Planning for review and advice before finalization.
- k) The preparation also entailed alignment of the sectoral priorities with MTP4 and BETA,
- l) Approval; The sectoral plan was presented to the County Executive Committee for consideration and approval.

m) Thereafter, the plan was submitted to the County Assembly for approval.

n) Finally, it was published.

**Deliverables;** the SWG deliverables were Stakeholders consultation report, and final sectoral plan for 2023-2032.

**Overall, the Technical backstopping was offered by** the County Economic Planning Unit as well as the State Department for Economic Planning.

ZERO DRAFT - For comments

## **2 CHAPTER TWO: SITUATION ANALYSIS**

### **2.1 Sector Context Analysis**

This section highlights the environment within which the sector operates. This includes macro-economic, political (administration), socio-cultural, demographics, environmental, technological issues among others. It also highlights the intra-county data variations and key factors influencing the performance of the sector.

The infrastructure sector plays a vital role in the County by contributing to its economy by creating jobs, attracting investments, improving productivity, and enhancing the overall quality of life. A well-developed infrastructure network is a fundamental driver of economic growth and prosperity.

#### **2.1.1 Public Works, Roads, Transport, Housing and Energy**

##### **Sub-sector composition:**

The sub-sector has five (5) directorates namely; Public Works, Roads and Transport, Emergency Response and Preparedness, Housing and Energy Development

##### **Roads and Transport**

Situational Analysis:

A robust transportation system is essential for economic development, enabling the movement of goods, labor, and services. In Nyandarua County, road, railway, and air transport are the primary modes, with roads being the dominant choice. The county's growth depends on an efficient road network, jointly managed by the national and county governments, emphasizing collaboration. Recent road projects by the National government have notably improved transportation and infrastructure development, crucial for progress.

Within Nyandarua County, road transport takes precedence as the primary mode, with an extensive road network spanning approximately 3,400 kilometers. Notably, earth roads constitute a substantial 78% of this network, while bitumen roads make up just around 7%, underscoring mobility challenges in the county.

These roads are further categorized based on their surface condition, as depicted in the table below.

**\*\*Table 1.12: Road Length by Surface Condition\*\***

<b>Road Type</b>	<b>Length (Km)</b>	<b>% of Total Length</b>
Bitumen	224	7
Gravel	525	15
Earth	2,651	78
<b>Total Length</b>	<b>3,400</b>	<b>100</b>

*Table 2-1: Road Length by Surface Condition*

*Source; Kenya Roads Board*

Nyandarua's connectivity index is reasonably robust. Ongoing projects, such as the bitumen upgrade of the B20 Njabini–Dundori road and related maintenance work, the resurfacing of the Gilgil-Nyahururu road, and the completion of the Boiman-Nyahururu road, along with progress on the Mairo-inya–Subuku road, Dundori–Ol’Joro Orok road, and Gilgil-Tumaini roads, have substantially improved transportation and communication within the county. The existing road network largely aligns with human settlement patterns and internal and external growth nodes.

Notably, Nyandarua County faces a shortage of designated parking spaces in major urban centers. In rural areas and smaller urban centers, parking in undesignated areas is commonplace. While most urban centers have terminal facilities, their utilization remains low due to limited demand for transportation services. The following table offers a concise summary of the existing terminal facilities.

Significantly, the county features seven major bus parks located in Ndaragwa, Mairo-inya, Ol’Kalou, Miharati, Engineer, Njabini, and Flyover, acting as pivotal hubs for transportation and communication, benefiting both the population and the movement of goods. These hubs exert a substantial positive influence on the region's development and connectivity.

There is a 60 kms long metre gauge rail connecting Gilgil to Nyahururu that passes through the Nyandarua County with stations in Ol’Kalou and Ol’Joro Orok. The ongoing revitalization of the Gilgil-Nyahururu meter-gauge railway stands as a matter of utmost significance. Swift completion of this project is essential to bolster connections within the central region and amplify transportation and trade links.

Regarding air transport, the County boasts an airstrip in Gatimu, Oljoro Orok, although its potential has remained largely untapped. There lies a substantial opportunity to expand this airstrip to accommodate small to medium-sized aircraft, potentially transforming it into a county airport through collaboration with the Kenya Civil Aviation Authority. Situated less than 30 kilometers from Ol'Kalou, the County's headquarters, this expansion could forge new pathways for transportation and stimulate economic development within the region.

However, the County grapples with the absence of a comprehensive road maintenance program, a crucial element for conducting regular inspections, repairs, and maintenance, ultimately enhancing road longevity and safety. Simultaneously, persistent encroachment on road reserves remains a formidable obstacle, impeding road expansion, maintenance, and the construction of essential drainage systems and structures.

### **Public Works**

Insufficient institutional buildings, office space, and county transport amenities persist as significant impediments to efficient service delivery. While the County Headquarters are nearing completion, a pressing demand for additional office spaces for county government services and public institution buildings remains evident. A crucial aspect of the sector's responsibility is to facilitate the construction and provision of buildings for public institutions, installations, and government departments. This is achieved through the provision of technical assistance by the Public Works directorate.

### **Energy**

The County has access to both sustainable and non-sustainable energy sources. Sustainable energy sources comprise solar energy, biomass resources like firewood and charcoal, wind energy for electricity generation, and biogas. The County possesses the capacity to produce electricity from wind energy in regions like Kinangop and Kipipiri, particularly in the vicinity of Mount Miharati. Other viable energy sources that can be harnessed include waterfalls, like Karuru, and solar power in areas such as Ndogino and Mbuyu in the Ndaragwa region.

The Energy directorate of Nyandarua County has focused on several critical areas over the past decade. These areas include rural electrification, lighting of markets, towns, streets, and promoting clean and sustainable energy solutions. They have successfully installed 295 floodlights across the county, with a significant number in various sub-counties. These



floodlights have improved security, extended operational hours for businesses, and transformed the county into a 24/7 economy. Moreover, the installation of floodlights has led to the emergence of new businesses and town centers, creating job opportunities, enhancing personal incomes, and increasing revenue.

In line with the UNDP sustainable development goal 7 (Affordable and Clean Energy), the Energy directorate is committed to adopting more renewable and alternative energy sources. They are partnering with the Sustainable Energy Technical Assistance (SETA) organization to develop the County Energy Plan (CEP), which will guide the county toward a cleaner and greener economy. Additionally, the directorate has initiated a pilot project by installing two solar-powered floodlights in Kipipiri ward, with plans to solarize over 100 more in the coming decade. Household connectivity in the county is currently at 40%, with a target of reaching 80% connectivity in the next ten years through collaborative efforts with REREC and the County Matching fund program. This program has already led to an increase in connectivity, stimulating investment and job creation, ultimately improving the quality of life for the citizens.

The Energy directorate operates within the influence of various factors. In the political realm, resource allocation is guided by political decisions, even though there's a shortage of plant resources. Economically, the directorate grapples with a limited revenue base in comparison to its extensive workload, resulting in a heavy reliance on a few revenue sources. Socially, community participation in project identification is a key focus, and the directorate actively promotes business opportunities for the youth.

On the technological front, the directorate emphasizes research and innovation in developing sustainable energy plans and is integrating technology into the repair and maintenance of floodlights. Environmentally, unpredictable weather patterns can disrupt floodlight upkeep, but the directorate is addressing this by transitioning to energy-efficient LED floodlights and exploring solar-powered alternatives. Legally, concerns arise from the public's misunderstanding of laws, prompting the directorate to develop a County Energy Plan that will offer clear legal guidance on energy-related matters. These diverse factors collectively shape the directorate's operations and guide its future endeavours.

### **Disaster Management and Preparedness**

This situational analysis highlights a range of challenges and factors that impact disaster management in the county, encompassing political, economic, technological, environmental,

social-cultural, and demographic dimensions. Addressing these issues will be crucial for improving disaster preparedness and response capabilities.

In the political sphere, the dedication of elected officials has a direct impact on the allocation of funds for disaster management. However, the county grapples with difficulties in coordinating various agencies, resulting in delayed disaster responses, and it also lacks well-defined disaster management policies.

On the economic front, a scarcity of human resources hampers the county's capacity to effectively address disasters. Inadequate infrastructure and budget limitations further complicate the county's ability to respond to disasters. Furthermore, the existing workforce often lacks the necessary skills for proficient disaster management.

These combined challenges underscore the county's struggles in both preparing for and responding to disasters, underscoring the importance of concerted efforts to enhance disaster management capabilities.

There are no existing legal policies and frameworks governing disaster mitigation and response in county structures, however, we rely on national government policies. The national disaster management Act of 2017 calls for strengthening and establishing relevant disaster management institutions and partnerships, mainstreaming disaster reduction, and strengthening the resilience of vulnerable groups.

### **Housing**

Like the rest of Kenya, Nyandarua County grapples with a growing housing crisis, necessitating more than 20000 low-income homes annually, as indicated by the World Bank. The housing shortage in The County has reached a critical point, with a deficit of 5000 units, increasing by around 500 units each year. This shortage has given rise to the proliferation of slums and informal settlements in and around the County's towns, resulting in health hazards and hindrances to the delivery of essential services.

Key challenges contributing to this housing deficit include limited access to land, meager incomes, and inadequate housing financing, particularly affecting low-income families. Furthermore, factors such as rapid urbanization, financial constraints, and diminishing rainfall have compounded the housing crisis in Kenya, compelling many residents in Nyandarua County to endure substandard living conditions in slums due to a lack of affordable and available housing options.

### **2.1.2 The Lands Physical Planning and urban development**

The sub sector composition comprises of four directorates, and three municipalities namely; Land management, survey, physical planning, urban development, Ol'kalou municipality, Mairo-Inya municipality, and Engineer Municipality.

Land serves as a crucial factor in development, providing both space and raw materials for production. In Nyandarua County, with a vast area of approximately 3,286 KM <sup>2</sup>, land is primarily classified into agricultural, conservation, and built-up land.

#### **Land administration and management**

Land management and administration remains a challenge as all the land related services are not all decentralized. The concentration of land-related services is in Nyahururu Town, posing logistical challenges for residents, as they need to access essential services from a town located approximately 40 kilometers north of Ol Kalou Town. Recognizing the need for improved accessibility and decentralization, plans are underway to relocate the land registry to Ol Kalou Town. This strategic move aims to bring crucial land-related services closer to the heart of the county, aligning with Ol Kalou's designation as the County Headquarters.

Nyandarua County is in the early stages of urbanization, and the market-driven demand for urban land is already impacting land prices and exerting pressure on the transformation of agricultural lands. Recognizing this, there is a critical need to formulate a policy framework to guide this process. Furthermore, the subsector lacks policy frameworks for various operations, including kiosk transfers and the establishment of Alternative Dispute Resolution mechanisms, highlighting the urgency for the development of comprehensive policies in these areas as well.

Land disputes continue to be a nightmare for many urban residents in the county. While successful interventions have been implemented in the past to address the issue, there persist unresolved land-related disputes that impede development in the region. This challenge is attributed to a lack of awareness among county residents regarding land-related issues. Consequently, there is a pressing need for more land clinics to be conducted, aiming to enhance awareness and understanding of these matters among the residents

Public land management poses a significant challenge for the County Government, primarily due to the absence of a county database for public land. This deficiency has resulted in a surge

in grabbing cases and suboptimal utilization of this crucial resource. However, interventions are currently in place to address and rectify these issues.

The lands sub-sector faces a deficiency in land information management, lacking a centralized system to store all land records, including allotment letters. In response to this challenge, interventions are underway to digitize land records and streamline land-related services through digitalization efforts

The lands sector faces a challenge with the absence of an updated valuation roll, impacting the performance of rates collection. Currently, land rates within Olkalou municipality stand at Ksh 1000 per annum, while in satellite towns within the county, it is Ksh 500 per annum. This results in an annual revenue of Ksh 12,000,000 for the county. However, with the preparation of a valuation roll, the county has the potential to raise Ksh 60,000,000. Recognizing this, there is a pressing need to initiate the preparation of a valuation roll.

The examination of human settlement patterns in the county unveils distinct characteristics, with urban centers primarily exhibiting linear developments along major trunk roads. In contrast, rural areas showcase clustering, while agricultural farmlands experience a sparse distribution of human settlements. This intricate pattern highlights the need for a comprehensive assessment and intervention in the planning and development of these areas.

One notable challenge arises from the observation that many urban centers operate without proper planning or rely on outdated plans. This lack of structured planning can lead to haphazard growth, inefficient land use, and inadequate provision of essential services in these urban areas. As a consequence, residents may face difficulties in accessing basic amenities, and the overall quality of life may be compromised.

Insufficient infrastructure facilities further compound these issues, affecting the efficiency and sustainability of urban centers. The pressing need to address these shortcomings is evident, as improved planning and infrastructure are vital for enhancing the living conditions of county residents.

The emphasis on planning and surveying all urban centers is crucial for several reasons. First and foremost, it allows for the identification and rectification of existing deficiencies in urban planning. Updating outdated plans and implementing new, comprehensive ones can help

streamline development, ensuring that infrastructure meets the current and future needs of the population.

This emphasis extends to the detailed planning of newly established municipalities. By approaching the development of these areas with meticulous planning, the county can achieve balanced growth. This is particularly important in safeguarding the agricultural hinterland, which serves as the primary economic activity. Balancing urban development with the preservation of agricultural areas ensures the sustainability of the county's economic backbone and promotes a harmonious coexistence between urban and rural sectors.

### **Survey and mapping**

Land encroachment is a pressing challenge that significantly affects the integrity of land use and ownership within the county. It refers to the unauthorized occupation, use, or development of land, often infringing upon the legal rights of the legitimate landowners. This issue can arise due to various factors, including population growth, inadequate land-use planning, and sometimes, a lack of effective enforcement of land regulations.

In the context of the Survey Directorate, the challenge of land encroachment becomes particularly problematic. The directorate plays a crucial role in accurately mapping and documenting land boundaries, ensuring that land is used in accordance with legal and regulatory frameworks. However, when unauthorized individuals or entities encroach upon land, it can lead to inaccurate land data, disputes, and potential legal conflicts.

The existence of geospatial data in the form of a Geographic Information System (GIS) is a valuable resource in tackling land encroachment. A well-developed GIS allows for the visualization, analysis, and monitoring of land-related information. This includes identifying encroached areas, assessing the extent of the encroachment, and facilitating informed decision-making for corrective measures.

The challenge intensifies due to the incomplete development of the GIS system within the Survey Directorate. A fully functional GIS system is essential for integrating various layers of spatial data, enabling a comprehensive understanding of the land's status. Without a robust GIS, detecting and addressing land encroachment becomes a more arduous task.

Moreover, the shortage of sufficient Global Navigation Satellite Systems (GNSS) equipment adds another layer to the challenge. GNSS technology is vital for accurate positioning in

surveying activities. Insufficient equipment may result in imprecise measurements, leading to errors in land data and potentially exacerbating land encroachment issues.

Effectively addressing land encroachment requires a multi-faceted approach. This includes investing in technology and equipment, completing the development of the GIS system, and providing adequate training and resources for the surveying staff. Collaborative efforts with relevant stakeholders, such as legal authorities and local communities, are also crucial to developing and implementing effective strategies for preventing and mitigating land encroachment.

## **Urban development**

**The following aspects depicts the urban centers in Nyandarua county**

### **Human settlement**

Nyandarua County has a total of 125 urban settlements. These settlements have emerged from the service and the growing need of the population. The distribution of potential urban settlements is relatively even. Urban areas are unevenly distributed in the regions that are naturally or policy constrained. These areas include the Aberdares Range, Ndaragwa, Kipipiri, Ol'bolossat, Geta, Ndaragwa, North Kinangop, and South Kinangop forests. The distribution of the human settlement in the potential Urban Centers is as presented in Map.

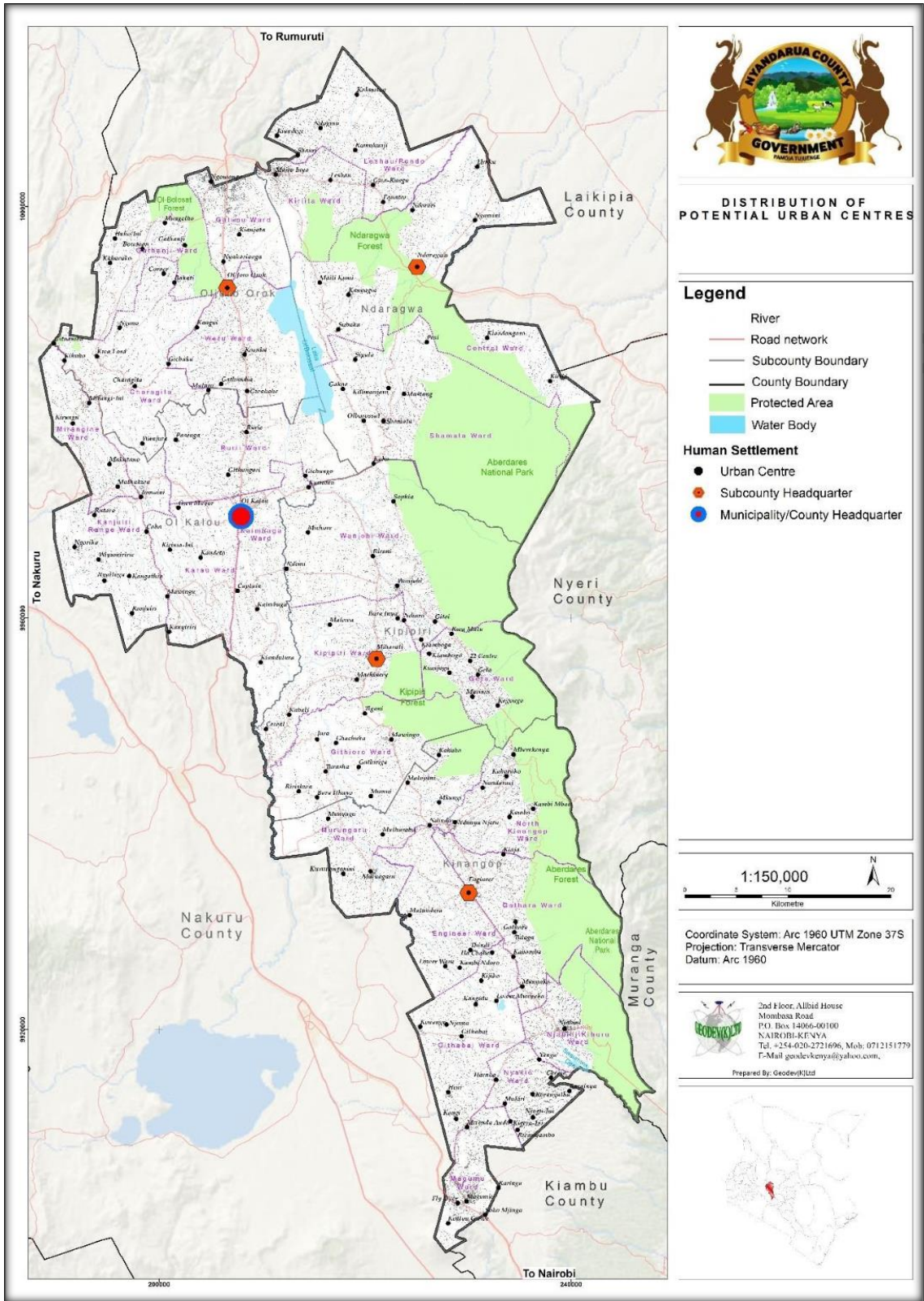


Figure 2-1: Distribution of Human Settlement

## Infrastructure Development

Most of the centres in the County lack basic facilities, infrastructure, and services. Partly, this has been blamed on inadequate human and financial resources as well as institutional capacity. Notably, all lack sewerage networks, thus posing substantial health risks to residents in these urban centres. In Olkalou, the county headquarters, sewage is transported from the source by exhausters for treatment at the Decentralized Treatment Facility in Olkalou. However, there is a proposed sewerage system in Olkalou Township whose catchment will be about 30,000 households.

Olkalou Water and Sewerage Company (OLWASCO) supplies about 620 m<sup>3</sup> of water per day against over 2,500 cubic meters' daily demand. Other urban centres such as Engineer, Miharati, Njabini, Mairo-Inya, and Oljoro Orok also lack the requisite facilities and infrastructure such as non-motorized transport systems and cemeteries.

Lack of appropriate infrastructure is more severe in the hinterlands of urban centres, and in some cases, the hinterlands are inaccessible to the designated service centres.

Level of Centre	Name of Centre
<b>Urban Centre</b>	Ol Kalou
<b>Rural Centre</b>	Oljoro-Orok, N. Kinangop, Njabini, Mairo Inya, Engineer, Miharati, Ndaragwa, Kaheho, Rurii, Ngorika and Ngano
<b>Market Centre</b>	Ndunyu Njeru, Murungaru, Magumu, Mirangine, Geta, Githioro, Rironi, Karati (Koinange), Heni, Gichungo, Igwamiti, Mawingo Machinery and Sabugo
<b>Local Centre</b>	Wanjohi, Weru, Gathanji, Kimathi, Kiriko, Gathundia, Mukeu, Munyaka, Ndemi, Kariamau, Passenga (Nyairoko), Pondo (Kanyagia), Pesi (Kambaa), Tulaga, Malewa, Tigoni, Gwa Kung'u and Turasha

Table 2-2: Possible Categories of Urban Settlements based on population and level of Service Function

## Data on Centers and Hinterlands

Lack of explicit selection criteria makes it difficult to identify centers with the best growth potential. Other considerations, such as political expedience, may result in wrong centres and inappropriate investment packages in the absence of objective selection criteria. Further, the



haphazard change of boundaries of urban centres makes it difficult to establish a stable database.

### **Rural-Urban Migration**

People are moving to towns in search of employment opportunities, education, health, among others. This influx of people, coupled with the existing urban population, exerts pressure on the existing amenities such as schools, houses, water, and health facilities in these centres.

#### **Informal Settlements**

Informal settlements occur due to insufficient affordable and adequate housing in towns, as provided under article 43 of the Constitution on social and economic rights. Rural-urban migration, especially by the low-income class category, has resulted in the development of informal settlements such as Huruma in Olkalou. High population densities combined with rapid, uncontrolled growth in informal settlements are likely to pose a problem for future town administrators. Their capacity to keep pace in providing infrastructure and public services to residents will be severely strained.

#### **High Housing Demand that Outstrips Supply**

There are 31 housing units in two estates (Bahati and Huruma Estates, both in Olkalou) managed by the county government. The units house the county public servants. With a mean household size of the urban households in Nyandarua are expected to be close to 40,265 by 2030. The influx of people in towns and highly dilapidated public houses has culminated in higher demand for affordable housing. Housing demand outstrips the supply. Housing in urban areas is characterized by inadequate facilities, e.g., sanitation, water supply, and waste disposal.

#### **Solid waste management**

Waste management infrastructure within the urban settlements is underdeveloped with limited investment. Dumping of waste is a common phenomenon across all the assessed urban settlements. The waste management system is disconnected as attributed by a limited number of waste receptacles in terms of bins, skips, transfer stations, and sanitary landfills as the recommended conventional waste management infrastructure channel. There are five (5) solid waste disposal sites in Nyandarua though only one is operational. They are: Mahinga (Olkalou), Mahinga (Malewa), Kaharu (Kinangop), Tulaga (Kinangop) and Mbuyu

(Ndaragwa). Only the Mahinga disposal site in Olkalou is operational. All wastes are disposed at the site without segregation i.e., both biodegradable and non-biodegradable. This hinders reuse and recycling of solid waste.

Ineffective implementation of the waste management regulations and guidelines given by the National Environment Management Authority (NEMA) at the County level is a potential threat to Nyandarua County's environment. Improper waste management in urban areas compromises environmental quality and the livability of the urban settlements.

## **Policies, Legal and Institutional Settings**

### **Public Works, Roads, Transport, Housing and Energy**

In executing its mandate, the sub-sector operates within a comprehensive legal and policy framework, including;

**The Constitution of Kenya 2010**; The Fourth Schedule of the Constitution of Kenya 2010, the County Governments Act 2012 and the organization of the County Government

**National Construction Authority Act 2011**; by registering different categories of contractors

**Sessional Paper No.2 on National Transport Policy**; by setting guidelines and regulations on transport

**Architects and Quantity Surveyors Act (Cap 525)**; by guiding on quantification of work items

**Engineers Act 2011**; by registering of Road Engineers

**National Transport and Safety Act 2012**; by setting guidelines and regulations on transport

**Environmental and Management Coordination Act 1999**;

**Public Procurement and Disposal Act 2005**; by setting guidelines on contract procurement

**Engineers Board of Kenya – Cap 530**; by registering of Road Engineers

**Public Procurement and Asset Disposal Act 2015;** by setting guidelines on contract procurement

**Energy Act 2019 and its subsidiary legislation :** The Energy Act is the main act regulating all energy activities in Kenya through EPRA. The Energy Act consolidates various laws relating to energy. It amended the Energy Act 2006, the Kenya Nuclear Electricity Board Order 2013, and the Geothermal Resources Act 1982.

The Energy Act regulates;

- The establishment of energy sector entities
- The promotion of renewable energy
- The production, supply, and use of geothermal energy
- Midstream and downstream petroleum and coal activities and other energy sources

**Disaster Risk Management Act 2012:** This is a legal policy framework governing disaster management in Kenya. This act stipulates the establishment of the national disaster management authority and defines its responsibilities and mandates. In the emergency response and preparedness unit, this policy serves as guideline for the county government to establish a disaster command center to efficiently respond to disasters.

**The National Disaster Risk Reduction and Management Policy 2011:** stipulates the need to focus on resilience, reducing disaster vulnerabilities, and mainstreaming disaster risk reduction into development planning. This policy is in line with the Nyandarua County government policy to integrate disaster risk reduction initiatives in the development of the county-integrated development plan.

**The National Disaster Management Policy 2013:** Provides guidance on how disaster risk reduction and management should be approached in Kenya.

**The Kenya National Climate Change Action Plan:** The plan outlines the strategies for climate change and mitigation to reduce impact of climate related disasters.

**The Kenya Meteorological Department Act:** This act governs the meteorological department and its role in monitoring and providing early warning signs.

**The National Disaster Response Plan:** It provides guidelines for coordination, resource mobilization and response operations during disasters.

;

## **Lands, physical planning and urban development**

### **Legal and policy frameworks**

The subsector operates within the following legal and policy frameworks;

#### **Legal framework**

##### **The Constitution of Kenya 2010:**

It outlines the principles on equitable, efficient, productive, and sustainable use of land provided for by Article 60, the right of the state to regulate the use of land in the interest of land use planning (Article 66), and the management and protection of the environment (Article 69) among others.

##### **The County Governments Act, 2012**

Section 102 of the CGA describes the principles to facilitate planning and development in counties. Further, section 103 of the document outlines the general planning objectives of planning in the county. The County Governments Act provides for the obligation of the County to plan (Section 104), public participation in county planning (Section 115), content, and approval process of county spatial plans (Section 110).

##### **Urban Areas and Cities Act (UACA), 2011 (Amended 2019)**

The Urban Areas and Cities Act provides for the classification of urban areas and cities (Part II, Section 4), the criteria for establishing urban areas, and governance and management (Part III, Section 11). Additionally, the Act states that every city and municipality established under this Act shall operate within integrated development planning (Part V).

##### **The Land Act No 6 of 2012**

This Act provides for sustainable administration and management of land and land-based resources. It provides regulations and standards for development control, equitable access to land, security of land rights, sustainable and productive management of the land resource, transparent and cost effective administration of land, conservation and protection of ecologically sensitive areas, elimination of gender discrimination in law, customs and practices related to land and property inland.

##### **The Physical Planning and Land Use Act**

The act outlines the objectives of development control to include ensuring optimal land use, orderly physical and land use development and ensuring proper execution and implementation of approved physical and land use development plans.

It identifies a wide range of activities, which are subject to development control processes and procedures including: Change of user, Extension of user, Extension of lease among others

### **Nyandarua County Rating Act,2017**

Nyandarua County Rating Act ,2017 was established to provide for a legal framework to:

- Provide the County Government with powers to set, assess and collect rates pursuant to Article 209(3) of the constitution;
- Ensure efficiency, accountability and transparency in administration of rating of land;
- Ensure fairness in land rating system;
- Ensure compliance with payment of rates related to land, and
- To establish clarity, certainty and sustainability in rating matters.

### **Policy framework**

#### **The Sessional Paper Number 3 of 2009 on the National Land Policy:**

The National Land Policy guides the country towards sustainable and equitable use of land for prosperity and posterity. It provides for an overall framework that defines the key measures required to address the critical issues of land administration, access to land, land use planning, restitution of historical injustices, environmental degradation, conflicts, unplanned proliferation of informal urban settlements, the legal framework, institutional framework and information management.

#### **The Sessional Paper, No. 1 of 2017on National Land Use Policy:**

The policy outlines the legal, administrative, institutional and technological framework for optimal utilization and productivity of land related resources in a sustainable and desirable manner at national, County and community levels.

### **Sustainable Development Goals**

Sustainable Development Goal 11 (SDG 11) is one of the 17 global goals established by the United Nations as part of the 2030 Agenda for Sustainable Development. SDG 11 is focused on making cities and human settlements inclusive, safe, resilient, and sustainable.

## National Spatial Plan

The National Spatial Plan provides a framework for efficient, productive, and sustainable land use as advocated for in both the Constitution and the National Land Policy. Further, it provides strategies and policies to facilitate the sustainable exploitation of the country's massive potential in agriculture, tourism, energy, water, fishing, and forestry. It is expected to reduce regional inequalities by ensuring that these regions are no longer perceived as low potential but differently endowed.

## County spatial plan

A county spatial plan is a strategic document outlining the development framework for a specific region. It addresses land use, infrastructure, environmental conservation, housing, economic development, social services, transportation, and disaster risk reduction. With community participation, the plan aims to guide organized and sustainable development, ensuring balanced growth, and enhancing the overall well-being of the residents.

## Other Existing policies and laws include:

1. Sessional paper No.4 on National Housing policy
2. Land Registration Act 2012;
3. Environmental and land court Act 2012;
4. Survey Act;
5. Housing Act cap 117; and
6. Building Code 1968.
7. Kenya roads act (2 of 2007)
8. National land commission act (5 of 2012)
9. Water act (43 of 2016)
10. Public health act cap 242
11. Traffic act
12. Survey act cap 299
13. Valuation for rating act (cap 266)

Areas/Laws	Gaps	Recommended Action
Emergency preparedness and response	Lack of a framework/structure for disaster management and response	Development and implementation of an elaborate risk

		assessment/management and emergency response policy
<b>Regulation of construction standards</b>	Lack of a framework to promote enforcement of/monitor adherence to construction standards	Development and implementation of a policy to guide approval of building/construction plans and subsequent supervision/inspection of all construction projects
<b>Institutional structure</b>	Lack of an organizational framework for the department	Develop and implement an elaborate structure for the department complete with staff establishment/requirements, roles and clear reporting lines
<b>Roads and Transport</b>	Lack of a policy at county level to manage county government vehicles, plant and machinery Lack of a policy to guide provision of county transport services	Adopt from National government
<b>Housing</b>	Lack of a county housing policy and housing development plan	Develop a county housing policy and establish a county housing scheme fund
<b>Minimum Land Sizes</b>	Uneconomical land sub-divisions	Develop a policy on minimum size of agricultural land and subsequent change of user
<b>Development control and surveying</b>	Uncontrolled urban development	<ul style="list-style-type: none"> <li>● Develop a policy and regulations to guide development control, enforcement and enhance compliance.</li> <li>● Review and domesticate the physical planning Act Cap 286</li> <li>● Review survey Act to operationalize survey function at the county</li> <li>● Establishment of survey, housing and physical planning units</li> <li>● Public participation in land management matters</li> <li>● Automation of land information systems</li> <li>● Streamlining development application and approval processes</li> </ul>

<b>Kiosk allocations</b>	Un-coordinated kiosk construction and allocations	Develop a policy to guide the design, provision, allocation, operation and transfer of kiosks
<b>Inadequate infrastructure</b>	Poorly developed and maintained infrastructure	Develop policy to enable levying of capital contribution towards infrastructure development and maintenance
<b>Conflict of interests</b>	Numerous litigations	Develop a policy on dispute resolution mechanisms
<b>Destruction of riparian reserves</b>	Encroachment of riparian reserves	Policy on the setting of standards, reservation and management of riparian reserves.
<b>Land Grabbing</b>	Irregular land allocation and alienation	Policy on repossession of grabbed public land to be developed – update all land use plans and land records to facilitate decision making
<b>Land speculation</b>	Inadequate land development	Policy on administration and management of vacant and undeveloped plots
<b>Poor housing standards</b>	Use of inappropriate building materials	<ul style="list-style-type: none"> <li>• Building standards policy to regulate the use of highly inflammable building materials.</li> <li>• Create and adopt county housing laws to regulate the housing sector</li> <li>• Decentralization and operationalization of the National Housing Corporation at the county level will address housing issues locally</li> </ul>
<b>Minimum Land Sizes</b>	Uneconomical land sub-divisions	Develop a policy on minimum size of agricultural land and subsequent change of user
<b>Development control and surveying</b>	Uncontrolled urban development	<ul style="list-style-type: none"> <li>• Develop a policy and regulations to guide development control, enforcement and enhance compliance.</li> <li>• Review and domesticate the physical planning Act Cap 286</li> <li>• Review survey Act to operationalize survey function at the county</li> <li>• Establishment of survey, housing and physical planning units</li> </ul>



		<ul style="list-style-type: none"> <li>• Public participation in land management matters</li> <li>• Automation of land information systems</li> <li>• Streamlining development application and approval processes</li> </ul>
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Table 2-3: Proposed legal, institutional and policy reforms

## 2.2 Review of Sector Financing

Table 2-4 presents the trends on how the sector has been previously allocated resources to finance its programmes for the previous ten (10) years. It also highlights budgets financed by County Government, National Government and non-state actors

Source of Financing	2013-14 Kshs. (Millions )	2014-15 Kshs. (Millions )	2015-16 Kshs. (Millions )	2016-17 Kshs. (Millions )	2017-18 Kshs. (Millions )	2018-19 Kshs. (Millions )	2019-20 Kshs. (Millions )	2020-21 Kshs. (Millions )	2021-22 Kshs. (Millions )	2022-23 Kshs. (Millions )
County Government (equitable share, and own source revenue)	95.4	800.6	1,200	1,130	719.7	1,130	1,298	903.3	952.5	733.2
National Government (conditional grants)	-	-	-	71.4	304.5	283.4	283.4	146.2	75	90.8
Development Partners (conditional grants)	-	-	-	-	-	176.7	174.3	-	34.1	27.3
A.I.A (CSOs)	-	-	-	-	-	-	-	-	-	-
<b>Total Sector Budget</b>	<b>95.4</b>	<b>800.6</b>	<b>1,200</b>	<b>1,200</b>	<b>1,020</b>	<b>1,600</b>	<b>1,700</b>	<b>1,050</b>	<b>1,030</b>	<b>824</b>

Table 2-4: Review of Sector Financing

Table 2-5 below compares the sub-sector budget against the total Sector budget, and sector budget against the total county budget.

Sub-Sector Name	FINANCING									
	Year 2013-14	Year 2014-15	Year 2015-16	Year 2016-17	Year 2017-18	Year 2018-19	Year 2019-20	Year 2020-21	Year 2021-22	Year 2022-23
Public Works, Roads, Transport, Housing and Energy	58.0	743.6	1,155.4	1,027.4	841.5	1,214.2	1,404.6	941.0	948.7	714.3

Lands, physical planning and urban development	37.4	57.0	58.7	173.4	182.7	377.3	318.8	108.5	78.7	109.7
<b>Total Sector Budget Financing</b>	<b>95.4</b>	<b>800.6</b>	<b>1,214.1</b>	<b>1,200.8</b>	<b>1,024.2</b>	<b>1,591.4</b>	<b>1,723.3</b>	<b>1,049.5</b>	<b>1,027.5</b>	<b>824.0</b>
Total county Financing	16,917,546,009	6,282,798,327	5,597,056,814	5,668,123,647	6,105,382,733	7,669,536,086	8,117,661,037	7,815,571,528	8,032,514,327	7,582,066,351

Table 2-5: Analysis of Sector Budget by Sub-Sector

## 2.3 Sector Performance Trends and Achievements

This section provides an analysis of the sector performance trends based on the key sector statistics (outcomes) and where possible, making comparison with the situation at national level. It also highlights the key achievements of the sector within the last plan period as well as lessons learnt.

### Public Works, Roads, Transport, Housing and Energy

During the Plan period under review, the subsector's objective was to develop transport infrastructure, to improve efficiency in connectivity and access with the expected outcome being improved road infrastructure for socio-economic development and poverty reduction.

#### Roads and Transport.

At the beginning of the Plan period, there were only 200 kilometers of road which was graveled. At the end of the Plan period, with the target being to increase motorable roads to enhance socio-economic activities, the directorate was able to achieve a total of 1,872.36 kilometers. In the plan under review, 3,934.54 kilometers of the road were graded as compared to 200 kilometers at the beginning of the plan period. This achievement can be attributed to heavy investment in the County machinery programme and the recruitment of dedicated and qualified technical staff, drivers, and machine operators. Under collaboration with the national government, 625 kilometers of roads were upgraded to bitumen standards. 146 Kilometers of these roads contributed to road network connectivity in the Central Kenya Regional Bloc. During the Plan period under review, the sub-sector did not upgrade the road network in all Sub County headquarters or develop an Operational GIS Road Management System due to a lack of funding. 460 kilometers of roads had been reclaimed at the beginning of the Plan period. At the end of the Plan period, a Draft Drainage and Roads Reserve Policy to guide implementation was prepared now awaiting approval. In the five years under review, the road

Sector targeted to Establish a Research and Development Unit (lab), but the target was not realized. At the beginning of the Plan period, no targets were set in relation to the opening of new County roads. However, the sector was able to achieve 41 Kilometers throughout the five years. To improve drainage, the target was to construct 2500 m length culverts and 5 interconnecting bridges. At the end of the planning period, 2270 m culverts and 11 interconnecting bridges (box culverts) had been constructed. Strategy employed to achieve this was phased implementation thereby easing the payment burden (phase financing). The sub-sector was also able to develop and strengthen skills in the local communities by provision of local labour. Quarry materials for the County machinery programme were sourced locally and the spreading of gravel was done by local labour exclusively.

Approximately 35,000 Locals were empowered directly or indirectly. Transport and Mechanical In the financial year 2016–2017, eight bus parks were upgraded. The goal was to construct at least 25 bus parks throughout the County by the end of the Plan period, but due to inadequacy of funds, only 6 bus parks were upgraded. 201 boda-boda sheds were constructed in the period under review. The County government's proper support of the bodaboda projects made it possible to meet the goal.

Rehabilitation of the 71 km railway is underway. The railway provides a route to market the County's Agricultural goods and products. It is set to lower the cost of transportation and promote tourism in the County. Ol-Joro-Orok airstrip should be commercialized i.e., explore alternative use.

### **Public Works**

At the inception of the devolved units there was not official office space for the County Executive and this necessitated leasing of space in Ol Kalou town for the same. The Directorate managed to develop an office block for the executive which they currently operate from.

In the period under review, the construction of the County Headquarter office complex commenced with a target of 100% completion at the end of the planning period, however, only 55% was realized. Inadequate funding and the erratic flow of funds from the national and County governments were the major causes of the variance between the targeted output and the one realized. Contractual agreements and poor performance of the contractor assigned in the initial years of the planning period also acted as a major hindrance to realizing the set target.

There being no official housing for the County leadership, during the Plan period, the department targeted the construction of residences for the Governor, Deputy Governor and Speaker. At the end of the planning period, the Governor's residence was at the preliminary design stage, while the Speaker's residence was 60% complete. Work on the Deputy Governor's residence is yet to start. The variation between the target and realized output was largely attributed to inadequate funding to execute the projects as planned. Changes in the County administration also contributed to delays in the implementation of the projects due to differences in design preferences in the different County administrations.

An office block for the Department of Public Works, Roads, Transport, Housing and Energy was envisioned to improve service delivery. This development remains at the design stage.

At the beginning of the planning period, the directorate intended to provide project designs and documentation for all buildings and structures constructed by the County government. It was also mandated with construction supervision of all County construction projects. To that effect, the directorate provided designs, documentation, construction supervision and contract administration for over 600 buildings and structures proposed by user departments across the County. This resulted in modern and quality public buildings and infrastructure, fit-for-purpose and compliant to set construction standards as per prevailing building and statutory bodies' codes. The directorate's efforts also led to cost-effective public buildings and infrastructure delivered within budget. This improved service delivery among departments.

### **Energy development**

The directorate had initially set a goal to install more than 300 floodlights at the outset of the planning period. However, by the end of the period, they had successfully installed a total of 342 floodlights across the County. This widespread installation of floodlights in various wards not only enhanced security but also extended operating hours for businesses, promoting economic activity and community well-being. In addition, the new installations led to the emergence of new businesses and trading centres, such as Mairo in Karau ward and Muthaiga and Mwireri centres in Kaimbaga ward. On alternative sources of energy, the directorate has installed two solar-powered floodlights in Kipipiri ward as a pilot project, which has been a success.

The County planned to install 200 transformers around the County. However, through a collaboration with REREC, 29 transformers were procured. At the end of the Plan period, 14

transformers are awaiting metering by Kenya Power while 15 transformers have already been installed. As a result, household connectivity has increased by 0.6% Countywide.

The purchase of an Aerial Man-lift Truck, which has tremendously transformed county lighting through repair and maintenance of 7m and 13m floodlights. Within a month of the truck's purchase, the Energy directorate has repaired 63 floodlights.

At the beginning of the planning period, the Energy directorate had zero plans/policies. The Energy directorate is in the process of formulating and developing the County Energy Plan (CEP), with significant contribution from SETA (Sustainable Energy Technical Assistance) and SCODE. The plan is 90% complete and expected to be launched by April 2024.

### **Emergency Response and Preparedness**

Although there have been intermittent mélange of disasters such as flooding, drought, and accidents, fire has been the most prevalent disaster in Nyandarua County disrupting the normal functioning of society.

At the beginning of the plan period, there existed no strategic disaster response plans. One fire engine was purchased at the start of the Plan period, however, it lacked an inbuilt water tank. A fire engine was purchased in FY2018/2019 which enhanced emergency response. However, in FY 2021/22 the fire engine was involved in an accident, and the disaster management unit responded by hiring a fire engine from the National Youth Service and other emergency service providers. The fire engine has been operational at the main fire station being dispatched to deal with fires all over the county. A modified fire engine which was financed by the county government is under completion and will be delivered at the main fire station unit at Ol Kalou on October 2023.

At the beginning of the Plan period, the Directorate planned to train 118 fire marshals. Due to inadequate infrastructural capacity, few staff were trained, and currently, only 6 fire marshals are at our disposal. Additionally, the frequency of fire accidents has proliferated and there is a need for at least 36 fire-trained personnel to effectively respond to disasters within the five sub-counties. Due to a lack of financing from the County government, building fire stations with base station communication technology in each sub-county has not been feasible.

## **Lands, physical planning and urban development**

At the commencement of the planning period, Nyandarua County embarked on a transformative journey that reshaped the dynamics of land administration, survey, physical planning, and urban development. This pivotal undertaking, conducted in collaboration with diverse stakeholders such as the Ministry of Lands and the National Land Commission, resulted in noteworthy milestones;

## **Lands, physical planning and urban development**

During the period under review, the sub-sector accomplished the following;

### **Land management**

- Acquisition of 128 parcels of public land. This surge has not only bolstered road connectivity but has also paved the way for improved market accessibility and the establishment of vital social amenities, ranging from ECDE classes and health centers to watering points and playgrounds.
- Development of a county land data bank, and a zero draft is already in existence. The initiative, involving active involvement from entities such as the Settlement Trustee Fund, National Land Commission among others aims at improving security as well as ensuring optimal utilization and management of public land.
- Titling of colonial villages: During the period under review, the sub-sector facilitated the processing of leases for various colonial villages as shown below;

<b>S/No.</b>	<b>Colonial Village</b>	<b>Total no of plots</b>	<b>Leases Processed</b>	<b>balance</b>
1	MUKEU	185	102	83
2	NYAIROKO	142	34	108
3	SOFIA	83	13	70
4	WANJOHI	296	39	257
5	KOINANGE	335	141	194
6	KIRIKO	212	177	35
7	KAHEHO	17	15	2
8	NGORIKA	214	159	55

9	MURUNGARU	311	253	58
10	RURII	168	95	73
11	MAGUMU	32	17	15
12	NDUNYU NJERU	91	76	15
13	HENI	279	69	210
14	NGANO	105	55	50
15	GATHANJI	50	26	24
16	OL KALOU - HURUMA	703	600	103
17	KAMBAA	140	15	125
18	GITHIORO	163	163	0
19	TURKANA	33	33	0
20	MIHARATI	252	86	166
21	NJABINI	64	54	10
<b>TOTAL</b>		<b>3875</b>	<b>2222</b>	<b>1653</b>

Table 7: Titling of colonial villages

By issuing leases, the authorities are not only recognizing the historical significance of these colonial villages but also addressing long-standing issues related to land tenure. This move brings about a sense of stability for the residents, enabling them to invest in and develop their properties with confidence.

- Resolution of land related disputes: The resolution of ownership disputes in Ol'Kalou, which had persisted since 2013, became possible through the establishment of a task force during the planning period. This task force successfully cleared 2,440 disputed plots, signaling a significant breakthrough in overcoming obstacles to development. However, there exists 400 disputes in Ol'kalou as well as other towns, calling for a dire need to establish a dispute resolution mechanism to handle the same.

### Physical planning

- Preparation of County Spatial Plan: The county government is in the final stages of completing its Spatial Plan; however, there is a dire need to deepen the understanding of urban transformation and opportunities. This understanding is crucial for taking proactive steps at the city, country, and global levels to address urban problems effectively. The sub-sector has faced challenges during the preparation, notably inadequate allocation, highlighting the necessity for updating data in the County Spatial Plan

- The sub sector has successfully completed the preparation of 21 physical development plans for colonial villages, such as Mukeu, Nyairoko, Sofia, among others, within the specified period. This achievement has facilitated the survey process and subsequently led to the issuance of leases, promoting the development of these colonial villages
- Preparation of physical development plans for Towns: During the period under review, the sub-sector has undertaken the planning of five towns, namely Mirangine, Ol'Kalou (Huruma), Sofia, Heni, and Igwamiti. This achievement has facilitated the survey process and subsequently led to the issuance of leases, promoting the development of these towns.

### **Survey and mapping**

- Survey of towns survey has been conducted in several towns, including Mirangine, Captein, Ndaragwa, Sofia, Heni, and Igwamiti. This surveying effort is a crucial step towards gathering accurate and detailed information about the geographical, infrastructural, and environmental aspects of these towns. The survey outcomes will likely serve as valuable data for informed decision-making, urban planning, and development initiatives within these areas. This proactive approach demonstrates a commitment to a well-informed and strategic development process in the surveyed towns.
- In the period under review, the sub-sector has acquired three Global Navigation Satellite System (GNSS) receiver survey equipment. This acquisition is a significant investment in advanced technology for precise geospatial data collection. The use of GNSS receivers enhances the sub-sector's surveying capabilities, contributing to accurate location information through satellite signals. This proactive step reflects a commitment to modernizing surveying processes, ultimately improving the efficiency and precision of data collection for various purposes, such as land management and infrastructure development.
- Over the past decade, the sector has achieved a significant milestone by successfully re-establishing boundaries for key institutions such as Kiandege Primary, Nyakambi, Dumpsite (Ol'Kalou), and Kanuho ECDE. The re-establishment of boundaries over this period has played a pivotal role in preventing land disputes and conflicts, providing clear and unambiguous definitions of property limits. This has contributed to



maintaining a harmonious and orderly environment, especially in areas with high land utilization.

- The sub-sector has accomplished survey of various dams, namely Githunguri, Kirima, Ndemi Salient/1249, Munoru, Khanji, Olkalou S/156, Mutamaiyo, Githima among others. This extensive survey marks a substantial accomplishment in water resource management and infrastructure planning.
- Survey of land acquired by the county: The sub-sector has successfully conducted surveys on the land acquired by the county for various developmental projects, including Early Childhood Development Education (ECDE) centers, 43 access roads, social amenities, and water projects. This has enhanced security of public land through marking and beaconing.
- Topographical surveys: The sub-sector has accomplished completion of topographical surveys in Mutanga, Mawingo, and Ol'Bolossat townships, as well as Manunga, Chamuka health centers among others. This has enhanced informed decision making in construction of public utility as well as paving way for preparation of physical and land use plans.

### **Urban Development**

At the beginning of the Plan period, only cabro works were done at Ol'Kalou town. To support and enhance urban growth in the County, 13 urban centres were upgraded through gravelling and drainage works, while in others, walkways and parking lots were constructed. Flood masts were installed in various market areas while refuse bins and soak pits were constructed at Soko-Mpya and Ndunyu Njeru markets.

### **Municipalities**

In the outset of the planned period, no municipalities existed. Subsequently, three municipalities have been established: Olkalou, Engineer, and Mairo Inya municipalities. Olkalou municipality, in particular, has achieved significant milestones, including:

- Upgrading 7.2km of roads to bitumen
- Construction of a 3.66 km public walkway
- Construction of 7000sqm parking lots
- Construction of 69 Candy shops

- Construction of 129 market stalls
- Procurement and distribution of a Skip loader Garbage Truck and 4 skip bins
- Tree planting and beautification
- Construction of a modern Cemetery
- Construction of a paving block plant
- Fabrication of trash cans
- Fabrication of 4 open kiosks
- Ongoing construction of Olkalou multi-purpose hall
- Construction of a 10KM drainage system

### **Lessons Learnt**

1. Emphasizing the importance of Own Source Revenue mobilization to support County development needs and encouraging innovation within County departments to boost revenue.
2. Stressing the need for collaboration and synergy between various departments in project implementation for efficient planning, budgeting, and execution.
3. Highlighting the significance of accountability, transparency, and integrity in the administration of public funds, especially when accessing donor grants with specific targets and timelines.
4. Advocating for the creation of a legal and regulatory framework to address governance and service delivery gaps.
5. Promoting continuous staff training and welfare for the improvement of public service.
6. Leveraging the complaints and compliments system for data collection and public awareness.
7. Prioritizing the protection of the County's natural resources to address climate change, with potential benefits in tourism and carbon credits.
8. Recognizing the importance of public-private partnerships to expedite County programs and service delivery.
9. Stressing the importance of political stability for good governance and effective service delivery.
10. Addressing staff recruitment and work environment improvements for optimal County operations.
11. Encouraging the adoption of technology for efficient E-Government services and data collection.

12. Emphasizing cooperation with other counties and regional blocs for disaster and emergency management.
13. Suggesting a phased approach to project implementation, completion, and sustainability.
14. Advocating for a comprehensive civic education program for the public and employees to enhance understanding of the roles in the devolved system.
15. Prioritizing community involvement in all stages of the project cycle to ensure ownership and sustainability.
16. Emphasizing the need to operationalize a Monitoring and Evaluation framework for effective project oversight.
17. Recommending a thorough assessment of the capacity to complete and sustain projects, ensuring they meet timelines, specifications, and budget constraints.
18. Balancing political interests with the County's strategic direction as outlined in development plans.
19. Advocating for adequate funding for departments to enable service provision.
20. Recognizing the importance of proper emergency preparedness, as demonstrated by lessons learned from the COVID-19 pandemic.

## 2.4 Sectoral Development Issues

This section presents the development issues and their causes. The section further highlights available opportunities and the possible challenges that hinder achievement of the development objective in relation to each development issue.

Program	Development Issue	Causes	Constrains	Proposed Mitigation	Possible Challenges
<b>Public Works, Roads, Transport, Housing and Energy</b>					
<b>Roads and Transport</b>	Road accessibility	<ul style="list-style-type: none"> <li>. Poor Terrain</li> <li>Heavy Rainfall</li> <li>• Lack of County weighbridges</li> <li>• Roads constructed with insufficient Carriage Width</li> <li>• Insufficient/unreliable</li> </ul>	<ul style="list-style-type: none"> <li>Political interference.</li> <li>• Inadequate Funds</li> <li>• Road Reserves encroachment</li> <li>• Untimely issuance of Tenders</li> <li>• Poor soil conditions</li> <li>• Difficult Terrains</li> </ul>	<ul style="list-style-type: none"> <li>• Allocation of more funds for roads Improvement</li> <li>. Enforcement of laws governing road reserves</li> <li>• Early Issuance of Tenders to avoid Weather Interference.</li> </ul>	<ul style="list-style-type: none"> <li>. Unpredictable weather conditions.</li> <li>. Budgeting constrains</li> <li>. unstable fuel prices</li> <li>. lengthy court cases</li> </ul>

		<p>source of gravel materials</p> <ul style="list-style-type: none"> <li>• Destruction of County Access Roads and Drainage Structures by National Government Contractors and Private developers e.g., Heavy L</li> </ul>	<ul style="list-style-type: none"> <li>• Depletion of existing borrow pits</li> <li>• Overpricing of gravel materials by suppliers</li> <li>• Substandard materials</li> <li>• High Maintenance cost of Machinery</li> <li>• Poor/no road linkages</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a Road and Drainage Policy</li> <li>• Introduction of Road Levy Charges in the County Revenue Bill</li> <li>• Mapping and Demarcation of County Roads</li> <li>• Enforcement of Laws guiding Land Sub Division.</li> <li>• Establishment of material testing lab</li> <li>• Adopt/establish a County quarry management policy</li> <li>• Mapping/leasing County quarries</li> <li>• Funds mobilization to construct bridges</li> </ul>	
<b>Public Works</b>	<ul style="list-style-type: none"> <li>• Provision of government assets in the built environment and infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Historical marginalization of the County</li> <li>• Historical land adjudication malpractices</li> <li>• De-alienation of Nyahururu Town</li> </ul>	<ul style="list-style-type: none"> <li>• Poor soil conditions within the County</li> <li>• Inadequate funds</li> <li>• Lack of synergy with implementing departments and stakeholder consultations on designs and budgeting</li> <li>• Lack of clear guidelines on the development of National Government projects and programs</li> <li>• Inadequate staff and technical skills gaps</li> <li>• Lack of specialized tools, equipment and design software</li> <li>• Lack of synergy with</li> </ul>	<p>Drawing from the equalization fund</p> <p>Revision of boundaries through the IEBC</p> <p>Full implementation of the IGRTC report</p> <p>MOU with the State Department for Public Works on technical cooperation</p> <p>Adoption and operationalization of the Public Works policy at the County Level</p> <p>Clear framework for the development of National Government projects and programs</p> <p>Staff training and recruitment to fill critical skills gaps</p>	<p><b>High construction costs due to poor soil conditions</b></p> <p><b>Inadequate funding</b></p> <p><b>Unpredictable weather conditions</b></p>

			implementing and stakeholder departments on project management and contract administration	Acquisition of specialized tools, equipment and design software  Adoption of Alternative Building Technologies (ABTs)  Partnership with the National Government on capital intensive projects	
	<ul style="list-style-type: none"> <li>access in areas with difficult terrain</li> </ul>	<ul style="list-style-type: none"> <li>Hilly terrain in the County</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> <li>Difficult terrain and poor soil conditions within the County</li> </ul>		<ul style="list-style-type: none"> <li>Inadequate funds</li> <li>Difficult terrain and poor soil conditions within the County</li> </ul>
	<ul style="list-style-type: none"> <li>implementation of projects</li> </ul>	<ul style="list-style-type: none"> <li>Delays in the provision of funds by the national government</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funding</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of consultation and cooperation between the county and national government to fast-track provision of funds</li> </ul>	<ul style="list-style-type: none"> <li>Insufficient own source revenue to finance large projects</li> </ul>
<b>Energy</b>	<ul style="list-style-type: none"> <li>Electricity connectivity</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate transformers</li> <li>Poor terrain</li> <li>Sparse population</li> <li>Lack of transformer maximization</li> </ul>	<ul style="list-style-type: none"> <li>Lack of Political goodwill</li> <li>Denial of way leaves</li> <li>Inadequate budget</li> <li>Energy is not a fully devolved function.</li> </ul>	<ul style="list-style-type: none"> <li>Increased budget for transformers.</li> <li>Lobby for political goodwill.</li> <li>Open encroached roads</li> <li>Maximum utilization of available transformers.</li> <li>Consider alternative energy sources and renewable sources.</li> <li>Greater collaboration with the National Government.</li> <li>County Matching Fund programme with REREC</li> </ul>	<ul style="list-style-type: none"> <li>Delayed action by other players like Kenya Power. For instance, a significant number of transformers are installed but are non functional as they are pending metering by Kenya Power.</li> </ul>
	Floodlights maintenance	<ul style="list-style-type: none"> <li>Inadequate infrastructure</li> <li>Faulty floodlights (30%)</li> </ul>	<ul style="list-style-type: none"> <li>High electricity cost</li> <li>Critical Staff gaps</li> <li>Insufficient budget allocations for repair and maintenance of floodlights</li> </ul>	<ul style="list-style-type: none"> <li>Migration to LED bulbs as opposed to Sodium Halogen Bulbs hence increasing Energy efficiency</li> <li>Additional funding of the programme</li> </ul>	<ul style="list-style-type: none"> <li>Delayed action from external players like Kenya Power. For instance, delayed metering of new floodlights results in disconnection despite the completion of the project.</li> <li>Increased vandalism of</li> </ul>

				<ul style="list-style-type: none"> <li>Adoption of solar powered floodlights</li> <li>Embracing technology in floodlight control</li> </ul>	<p>floodlights. 20% of floodlights within the county are non-functional as a result of vandalism</p> <ul style="list-style-type: none"> <li>Installation of streetlights by Kenya Power without involving the directorate, which leads to duplication of projects and unnecessary increased bills.</li> </ul>
	Alternative sources of Energy/ Sustainable energy sources	<ul style="list-style-type: none"> <li>Availability of fossil fuel</li> <li>Ignorance</li> <li>Green energy is expensive at the initial stage of installation</li> <li>Lack of policies/plans to provide guidelines on renewable energy solutions</li> <li>Lack of a county energy map</li> </ul>	<ul style="list-style-type: none"> <li>Poor sensitization</li> <li>Sparsely placed homesteads</li> <li>Low individual financial capacity</li> <li>Lack of a County Energy plan/policy</li> </ul>	<ul style="list-style-type: none"> <li>Create more employment avenues.</li> <li>PPP Programmes.</li> <li>Formulation and implementation of the County Energy Policy (currently in draft)</li> <li>Development of the County Energy Plan (ongoing)</li> <li>Sensitization</li> <li>Capacity building</li> <li>Mapping of energy resources in the county</li> </ul>	
	Security	<ul style="list-style-type: none"> <li>Poor lighting at night</li> <li>County Rural Set Up</li> <li>Unemployment</li> </ul>		<ul style="list-style-type: none"> <li>Good electricity connectivity</li> <li>Alternative energy sources</li> <li>Adoption of solar street lights for sustainability</li> <li>County road reserves and town centers</li> </ul>	
<b>Emergency Response and Preparedness</b>	<ul style="list-style-type: none"> <li>Emergency response</li> </ul>	<ul style="list-style-type: none"> <li>Lack of disaster command center</li> <li>Inadequate physical and human resources</li> <li>Lack of relevant expertise</li> <li>Uninformed citizenry</li> <li>Inadequate infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Founding a command center</li> <li>Increased funding</li> <li>Proper interdepartmental synergy</li> <li>Training</li> <li>Invest in response infrastructure</li> </ul>		<ul style="list-style-type: none"> <li>Lack of clear policy frameworks</li> <li>Inadequate funding</li> </ul>

<b>Housing development</b>	<ul style="list-style-type: none"> <li>• Housing and home ownership</li> </ul>	<ul style="list-style-type: none"> <li>• Unaffordable housing financing option</li> <li>• high cost of land</li> <li>• lack of housing incentives</li> </ul>	<ul style="list-style-type: none"> <li>• Increased investment in housing</li> <li>• Private public partnerships in housing development</li> <li>• Increased funding for housing</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of incentives and affordable housing acquisition funds</li> <li>• Adoption of alternative building technology</li> </ul> <p>Development of affordable housing projects</p>	lack of land for housing development
<b>Land, Physical Planning and urban Development</b>					
Land management and administration	Land administration and management	<ul style="list-style-type: none"> <li>• Grabbing of public land and encroachment</li> <li>• Poor record keeping</li> <li>• Historical injustices</li> <li>• Intra and inter county land disputes</li> <li>• Double allocation of land</li> <li>• Corruption</li> </ul>	<ul style="list-style-type: none"> <li>• Political goodwill</li> <li>• Sensitization of community on protection of public land</li> <li>• Development of Land Use and Management Policy</li> <li>• Development of County land databank</li> <li>• Adequate use of technology-automation</li> <li>• Technical expertise</li> <li>• Collaboration with relevant stakeholders in the National government</li> <li>• Existence of professional bodies</li> <li>• Collaboration with learning institutions</li> <li>• ICT experts who can develop a land information management system</li> </ul>		<ul style="list-style-type: none"> <li>• Lack of a County public land register</li> <li>• Limited budgetary allocations</li> <li>• Hostility from the Community when re- establishing boundaries</li> <li>• Land disputes</li> <li>• Weak legal frameworks</li> <li>• Inadequate land records</li> <li>• Weak collaboration between government agencies</li> </ul>
Physical planning	Controlled development	<ul style="list-style-type: none"> <li>• Minimal enforcement</li> <li>• Lack of structured enforcement strategy</li> <li>• Lack of proper zoning</li> <li>• Urban sprawl challenges</li> </ul>	<ul style="list-style-type: none"> <li>• Increased human resource capacity</li> <li>• Political goodwill</li> <li>• Availability of Legal frameworks (Physical and land use planning act, Urban areas and cities act)</li> <li>• Elaborate</li> </ul>		<ul style="list-style-type: none"> <li>• Logistical challenges</li> <li>• Inadequate Funds</li> <li>• Natural disaster vulnerability</li> <li>• Social inequalities</li> <li>• Land use conflicts</li> <li>• Infrastructure strain</li> <li>• Environmental degradation</li> </ul>

			<ul style="list-style-type: none"> <li>Public participation framework</li> <li>Willing development partners</li> <li>Existence of county spatial plan</li> </ul>		<ul style="list-style-type: none"> <li>Inadequate human resource capacity</li> </ul>
Urban development /municipal services	urban development	<ul style="list-style-type: none"> <li>Lack of proper maintenance infrastructure within townships</li> <li>Poor solid waste disposal mechanism.</li> <li>Poor sanitation in the county townships</li> <li>Poor drainage of storm water</li> <li>Rural-urban migration</li> <li>Underdeveloped physical infrastructure</li> <li>Inadequate zoning regulation</li> </ul>	<ul style="list-style-type: none"> <li>Integrated Development plan for Ol'kalou Municipality</li> <li>Casual workers</li> <li>Town cleaning days programme</li> <li>Infrastructure maintenance programme</li> <li>Fixed litter bins in the urban areas</li> <li>Existence of parcels of land identified for garbage dumping within the sub-counties</li> <li>Partial existence of the infrastructure</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Limited budgetary allocations</li> <li>Unavailability of physical development plans for the county townships</li> <li>Unavailability of land for adequate infrastructure</li> <li>Inadequate human resource capacity for waste collection</li> </ul>
Survey and mapping	land survey and mapping	<ul style="list-style-type: none"> <li>Population growth</li> <li>Land scarcity</li> <li>Lack of secure land tenure</li> <li>Poverty and livelihood pressures</li> <li>Inadequate housing and urban planning</li> <li>Weak law enforcement</li> <li>Unplanned development</li> <li>Lack of public awareness</li> <li>Conflict and displacement</li> <li>Insufficient Geospatial data</li> </ul>	<ul style="list-style-type: none"> <li>Land clinic programmes</li> <li>Technical expertise</li> <li>Available survey equipment</li> <li>Titling programme in collaboration with the national government</li> <li>County Land bank programme</li> <li>Geographic information system</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Limited budgetary allocations</li> <li>Weak policies</li> <li>Lack of an equipped GIS lab</li> <li>Substandard GIS software</li> </ul>

Table 2-6: Sectoral Development Issues

## 2.5 Crosscutting Issues

This section discusses the crosscutting issues. For each issue, indicate: the current situation, how it is affecting the sector, the existing gaps (policy, legal and institutional), measures and recommendations for addressing the gaps.



<b>Cross Cutting Issues</b>	<b>Current Situation</b>	<b>How Issues affects the sector</b>	<b>Gaps (Policy Legal or Institutional )</b>	<b>Measures to address existing gaps</b>	<b>Recommendation s</b>
HIV & AIDS	Prevalence rate is 8.0%	Reduce budgetary allocation to productive sectors	HIV&AIDS policy does not cover all sub-sectors	National Policy on HIV &AIDS	Domestication of the National Policy to county specific Awareness creation
Disability	Most government and public infrastructure are not friendly to persons with disability	Persons with disability are unable to access government services offered	The County has not fully adopted the Persons with Disabilities Act, 2003	Ensure all existing and new government infrastructure are accessible to persons with disabilities.  Disability mainstreaming in the Directorates core functions	Adoption and implementation of the Persons with Disabilities Act, 2003
Alcohol and drug abuse	High alcohol and drug abuse rates	Inadequate labour force in execution of construction projects  Increased cases of vandalism of government assets	Alcohol and drug abuse policy does not cover all sub sectors	Encourage use of local labour where possible in the execution of construction projects	Rehabilitation of addicts
Disaster risk management	Most government and public infrastructure do not have	Government infrastructure remains unsound incase of disasters	The County has not fully implemented Legal Notice No. 86 on Delineation	Ensure all existing and new government infrastructures have	Disaster and risk audit for all government infrastructure

	functional equipment to mitigate against disasters		of Disaster Management Function	functional disaster response and mitigation equipment  Ensure all existing and new government infrastructures have functional emergency exits	Prevention, mitigation, preparedness, response and recovery measures need to be planned for and implemented
Climate change	Erratic weather patterns	Severity and iterativeness of disasters	Lack of institutions to deal with climate change at the county level	Relying on the national government structures on climate change	Creating an institution to deal with climate change

Table 2-7: Crosscutting Issues

## 2.6 Emerging issues

This section should provide emerging issues and how they are affecting the performance of the sector. It also gives the interventions in place /proposed to mitigate the negative effects or harness the positive effects. This may include; disease pandemics, proposed amendment to the constitution, and regional Economic Bloc. (Technology issue)

Emerging Issues	How the Issue affects performance of Sector	Interventions in place to address Issue	Proposed Mitigation measures
<b>Novel COVID 19 Pandemic</b>	<ul style="list-style-type: none"> <li>Delays in projects execution and completion</li> <li>Increased costs in project execution</li> <li>Disruption of supply chains for construction material</li> </ul>	<ul style="list-style-type: none"> <li>Provision of Personal Protective Equipment (PPEs) for workers</li> <li>Provision of sanitary facilities in construction sites</li> </ul>	<ul style="list-style-type: none"> <li>Adherence to safety standards</li> <li>Enhanced monitoring and surveillance in construction sites</li> <li>Periodic testing of workers where necessary</li> </ul>
<b>Climate change</b>	<ul style="list-style-type: none"> <li>Increased costs in project execution due to increased demand for climate resilient infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Switch to energy-efficient construction designs</li> </ul>	<ul style="list-style-type: none"> <li>Implement policies that bend the emissions curve and improve livelihoods</li> </ul>

	<ul style="list-style-type: none"> <li>• Disruption of supply chains due to scarcity of construction material</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage sustainable water and waste water management practices</li> </ul>	<ul style="list-style-type: none"> <li>• Switch to energy-efficient construction designs</li> <li>• Encourage green building practices</li> <li>• Encourage sustainable water and waste water management practices</li> </ul>
High Electricity Costs	<ul style="list-style-type: none"> <li>• Multiple power disconnections which hinder service delivery</li> <li>• Exhaustion of budget allocations</li> </ul>	<ul style="list-style-type: none"> <li>• Solarization of floodlights</li> <li>• Migration from Sodium Halogen floodlights to LED</li> </ul>	<ul style="list-style-type: none"> <li>• Improve energy efficiency through adopting energy efficient appliances, lighting, and floodlights</li> <li>• Adopt renewable energy sources such as solar</li> </ul>
<b>High Inflation</b>	<ul style="list-style-type: none"> <li>• Increased projects' costs as a result affected the targeted outputs</li> <li>• Delays in projects execution and completion</li> </ul>	<ul style="list-style-type: none"> <li>• Capture contingency allocations in budgets to cater for unplanned occurrences.</li> <li>• Risk allocation and management through effective contract administration</li> </ul>	<ul style="list-style-type: none"> <li>• Forecasting</li> <li>• Long-term financial planning</li> <li>• Adoption of sustainable practices</li> </ul>

Table 2-8: Emerging Issues

## 2.7 Stakeholder analysis

Stakeholder	Roles	Possible areas of Collaboration
<b>Roads and Transport</b>		
KENYA RURAL ROADS AUTHORITY (KeRRA )	<ul style="list-style-type: none"> <li>Management, development, rehabilitation and maintenance of rural roads</li> </ul>	Technical Support to the roads department
KENYA ROADS BOARD (KRB)	<ul style="list-style-type: none"> <li>Manage the entire road network in Kenya and to specifically coordinate the maintenance, rehabilitation and development of roads funded by the Kenya Roads Board Fund.</li> </ul>	Classification of roads
KENYA URBAN ROADS AUTHORITY (KURA)	<ul style="list-style-type: none"> <li>Manage the entire road network in Kenya and to specifically coordinate the maintenance, rehabilitation and development of roads funded by the Kenya Roads Board Fund.</li> </ul>	Capacity building
KENYA INSTITUTE OF HIGHWAYS AND BUILDING TECHNOLOGY (KIHBT)	<ul style="list-style-type: none"> <li>Management, development, rehabilitation and maintenance of rural roads</li> </ul>	Materials testing
KENHA	<ul style="list-style-type: none"> <li>Development of Human Resource capacity in the infrastructure sector, especially the Roads</li> </ul>	Capacity building
Kenya Police Service - GVCU	<ul style="list-style-type: none"> <li>Manage, develop, rehabilitate and maintain national roads. Constructing, upgrading, rehabilitating and maintaining roads Class A, B, C roads.</li> </ul>	Weighbridge
NATIONAL TRANSPORT AND SAFETY AUTHORITY (NTSA)	<ul style="list-style-type: none"> <li>Traffic department in the Kenya Police Service that cracks down on the misuse of government vehicles</li> </ul>	GVCU
NATIONAL CONSTRUCTION AUTHORITY (NCA)	<ul style="list-style-type: none"> <li>Register and licence motor vehicles,</li> <li>Conduct motor vehicle inspection and certification,</li> <li>Regulate public service vehicles,</li> </ul>	Inspection
KENYA RURAL ROADS AUTHORITY (KeRRA )	<ul style="list-style-type: none"> <li>Advise the Government on national policy with regard to road transport sector,</li> <li>Develop and implement road safety strategies,</li> </ul>	Compliance
<b>Public Works</b>		
State Department for Public Works, SDPW	<ul style="list-style-type: none"> <li>Public Works policy formulation.</li> <li>Setting and management of building and construction standards and codes.</li> <li>National building inspection services.</li> <li>Building research services.</li> </ul>	Technical cooperation on design and documentation; construction supervision; contract administration; training; filling staff gaps; implementation of policies and enforcement of standards
National Construction Authority, NCA	<ul style="list-style-type: none"> <li>Registration of contractors.</li> <li>Accreditation of construction workers.</li> </ul>	Technical cooperation on regulation of the construction industry
Engineers Board of Kenya, EBK	Registration of professional in the built environment	<ul style="list-style-type: none"> <li>Facilitate registration of professionals.</li> <li>Continuous professional development.</li> </ul>
Board of Registration of Architects and Quantity Surveyors, BORAQS		
Kenya Engineering Technology Registration Board KETRB		

Architectural Association of Kenya	Welfare of professional in the built environment	<ul style="list-style-type: none"> <li>• Advocacy for professionals in the sector.</li> <li>• Facilitate professional growth.</li> <li>• Continuous professional development.</li> </ul>
Institute of Quantity Surveyors of Kenya		
Institute of Engineers of Kenya		
Contractors	<ul style="list-style-type: none"> <li>• Project implementation/delivery</li> </ul>	<ul style="list-style-type: none"> <li>• Execution of contracted construction projects</li> </ul>
<b>Energy</b>		
<b>RRECC ( Rural Electrification and Renewable Energy Corporation)</b>	<ul style="list-style-type: none"> <li>• Spearheading Kenya’s renewable energy drive</li> <li>• Implementing rural electrification projects</li> <li>• Electrification of public facilities</li> <li>• Provide quality and sustainable energy solutions to all</li> <li>• Develop and update rural electrification master plans in consultation with the County government</li> </ul>	<ul style="list-style-type: none"> <li>• Transformer installation and maximization through the County Matching Fund program and last mile connectivity</li> <li>• Renewable energy projects including solar-powered floodlights and biogas installation</li> </ul>
<b>SETA (Sustainable Energy Technical Assistance)</b>	<ul style="list-style-type: none"> <li>• Provide institutional and other support to public and private stakeholders of the Kenyan energy sector in the identification, planning, and implementation of renewable energy, and energy efficient projects</li> </ul>	<ul style="list-style-type: none"> <li>• Formulation of County Energy Plan (CEP) and INEP (Integrated National Energy Plan)</li> <li>• Implementation of CEP and INEP</li> <li>• Community engagement on Clean energy solutions</li> </ul>
<b>KENYA POWER</b>	<ul style="list-style-type: none"> <li>• Transmits, distributes, and retails electricity to customers throughout Kenya</li> <li>• Managing electric metering licensing</li> <li>• Billing</li> <li>• Emergency electricity services</li> <li>• Customer relations</li> </ul>	<ul style="list-style-type: none"> <li>• Household connectivity</li> <li>• Access to electricity and National grid</li> <li>• Installation and maintenance of streetlights</li> <li>• Electrification of floodlights</li> </ul>
<b>Contractors</b>	<ul style="list-style-type: none"> <li>• Oversee and manage projects</li> <li>• Implementation of plans</li> </ul>	<ul style="list-style-type: none"> <li>• Project implementation</li> <li>• Supply of electrical equipment</li> </ul>
<b>Elected and nominated Political leaders</b>	<ul style="list-style-type: none"> <li>• Legislation, representation, and oversight</li> </ul>	<ul style="list-style-type: none"> <li>• Budgetary allocations</li> <li>• Political goodwill</li> </ul>
<b>Mirangine Energy Center</b>	<ul style="list-style-type: none"> <li>• Runs energy efficiency and conservation programs designed to help the community identify energy wastage, determine saving potential, and give recommendations on measures to be implemented</li> </ul>	<ul style="list-style-type: none"> <li>• Clean cooking (Biogas, improved cook stoves, improved efficiency charcoal)</li> <li>• Alternative sources of energy</li> <li>• Technical assistance and training on renewable energy</li> </ul>
<b>Community</b>	<ul style="list-style-type: none"> <li>• Community participation helps rethink issues facing the county and expand networks</li> <li>• Provide adequate information and cooperation</li> </ul>	<ul style="list-style-type: none"> <li>• Community engagement</li> <li>• Public participation</li> </ul>
<b>RRECC (Rural Electrification and Renewable Energy Corporation)</b>	<ul style="list-style-type: none"> <li>• Spearheading Kenya’s renewable energy drive</li> <li>• Implementing rural electrification projects</li> <li>• Electrification of public facilities</li> <li>• Provide quality and sustainable energy solutions to all</li> <li>• Develop and update rural electrification master plans in consultation with the County government</li> </ul>	<ul style="list-style-type: none"> <li>• Transformer installation and maximization through the County Matching Fund program and last mile connectivity</li> <li>• Renewable energy projects including solar-powered floodlights and biogas installation</li> </ul>
<b>Emergency Response and Preparedness</b>		

National Disaster Management Authority	<ul style="list-style-type: none"> <li>• Formulation of policies to guide disaster mitigation and response</li> </ul>	<ul style="list-style-type: none"> <li>• Assisting in the development of Nyandarua disaster management policies</li> </ul>
Kenya meteorological department	<ul style="list-style-type: none"> <li>• Provision of early warning systems</li> </ul>	<ul style="list-style-type: none"> <li>• Timely provision of early warning systems and mitigation measures</li> </ul>
National Youth Service	<ul style="list-style-type: none"> <li>• Provision of emergency response services</li> </ul>	<ul style="list-style-type: none"> <li>• Providing support for emergency services</li> </ul>
Nakuru & Laikipia County Governments	<ul style="list-style-type: none"> <li>• Provision of emergency services in areas of close proximity</li> </ul>	<ul style="list-style-type: none"> <li>• Properly coordinated emergency response</li> </ul>
<b>Housing</b>		
National Housing Corporation (NHC)	<ul style="list-style-type: none"> <li>• Development of affordable housing</li> </ul>	
State department of Housing and Urban Development	<ul style="list-style-type: none"> <li>• Affordable housing development</li> </ul>	
Private sector	<ul style="list-style-type: none"> <li>• Development of housing and alternative building technology</li> </ul>	
Tertiary institutions	<ul style="list-style-type: none"> <li>• Research and development in housing sector</li> </ul>	
Community	<ul style="list-style-type: none"> <li>• Community participation helps rethink issues facing the county and expand networks</li> <li>• Provide adequate information and cooperation</li> </ul>	
Housing Development		
National Housing Corporation (NHC)	Development of affordable housing	Funding of affordable houses
State department of Housing and Urban Development	Affordable housing development	<ul style="list-style-type: none"> <li>• Funding of affordable houses</li> <li>• Development of drawings</li> <li>• Acquisition of prime land for housing</li> </ul>
Private sector	Development of housing and alternative building technology	
Tertiary institutions	Research and development in housing sector	<ul style="list-style-type: none"> <li>• Train personnel to be used in construction</li> <li>• Develop plans for modern houses</li> </ul>
Community	<ul style="list-style-type: none"> <li>• Community participation helps rethink issues facing the county and expand networks</li> <li>• Provide adequate information and cooperation</li> </ul>	
Lands, physical planning and urban development		
County Line Departments	Cooperation and collaboration; Submission of land acquisition requests on time;	Acquisition of land for public utility
County Assembly	Timely approval of budgets and bills; Goodwill	Preparation of budgets and other planning frameworks
Land and Environment court	Timely resolution of cases	Accurate and timely information; Submission of suit papers and reports; Timely investigations
Land Registry	Registration of land transaction and other legal documents	Resolution of land disputes
NEMA	Regulation of waste management practices in urban areas	Waste management
	Providing guidelines on environmental management	Controlling development
NCA	Regulates, streamlines and builds capacity in the construction industries	Controlling development

Kenya Institute of surveying and mapping	Registration and training of land professionals	Capacity building
Private sector	provide input on various matters through public forums, town hall meetings, and community feedback sessions	Public participation
Lands boards	Consent for subdivision and transfer of land	Land acquisition for public utility
National Lands Commission	Administration and management of public land	Issuance of allotment letters
Survey of Kenya	They are the custodian of Survey data Quality control of tittle surveys	Survey of public land
Private surveyors	Survey of private land	Survey of common boundaries
Institution of surveyors of Kenya	Registration and training of land professionals	Capacity building
Land owners	Convey information regarding the boundaries	Maintenance of common boundaries
Urban residents	provide input on various matters through public forums, town hall meetings, and community feedback sessions	Public participation
County Citizens	provide input on various matters through public forums, town hall meetings, and community feedback sessions	Public participation
KURA	Offers technical services for standardization	planning, construction, and management of urban roads
KERRA	Offers technical services for standardization	planning, construction, and management of rural roads
DONOR-KUSP, KISIP	Capacity building Upgrade of urban informal settlements Upgrade of urban centers within the municipality	Funding of county projects

Table 2-9: Stakeholder Analysis

### 3 CHAPTER THREE: SECTOR DEVELOPMENT STRATEGIES AND PROGRAMMES

#### 3.1 Sector Vision and Mission,

##### Vision

Achieve sustainable socio-economic growth and development through efficient and sustainable public utility infrastructure facilities and services

##### Mission

To facilitate provision of efficient, affordable and reliable public utility infrastructure for sustainable socio-economic growth and development through construction, connectivity, modernization, rehabilitation and effective management of all infrastructure facilities

#### 3.2 Sector development objectives and strategies

This section presents the sector objectives and strategies in relation to development issues as identified in the previous sector.

Programme	Development Issues	Development Objectives	Strategies
Public Works, Roads, Transport, Housing and Energy			
Roads and Transport	Road accessibility	An efficient roads network for a prosperous County	<ul style="list-style-type: none"> <li>● Establishment of a County roads board;</li> <li>● Survey, mapping and repossession of road reserves;</li> <li>● Acquisition and opening of feeder roads;</li> <li>● Grading, murraming, gravelling and Routine maintenance of roads;</li> </ul>



			<ul style="list-style-type: none"> <li>● Improve on road design and drainage structures;</li> <li>● Develop a policy on roads and drainage bill;</li> <li>● Adopt modern road construction technologies.</li> <li>● Tarmacking of roads</li> </ul>
	Provision of transport amenities.	Modern and efficient transport amenities	<ul style="list-style-type: none"> <li>● Construction of Bus parks and boda boda sheds.</li> <li>● Road markings and signages.</li> <li>● Enforcement of the County Transport Act</li> </ul>
Public Works	<ul style="list-style-type: none"> <li>● Provision of government assets in the built environment and infrastructure</li> <li>● Access in areas with difficult terrain</li> <li>● Project Implementation</li> </ul>	Modern and sound government infrastructure	<ul style="list-style-type: none"> <li>● Design, documentation, and construction supervision for government buildings and other public works.</li> <li>● Partnership with the National Government and other development partners for capital-intensive projects</li> <li>● Operationalization of the Public Works policy at the County Level</li> <li>● Capacity development</li> </ul>
Energy	<ul style="list-style-type: none"> <li>● Electricity connectivity</li> <li>● Floodlights maintenance</li> <li>● Alternative/Sustainable energy sources</li> <li>● Security</li> </ul>	<ul style="list-style-type: none"> <li>● Reliable, affordable and sustainable energy to spur Social economic development</li> </ul>	<ul style="list-style-type: none"> <li>● Support on alternative energy sources, e.g biogas units and energy saving jikos.</li> <li>● Adoption of sustainable energy solutions in County lighting.</li> <li>● Energy efficiency audits.</li> <li>● Policy and legal framework</li> <li>● Enhance on-grid electricity access</li> <li>● Partnership with the national government and other partners on the purchase of transformers in strategic locations;</li> <li>● Installation and maintenance of street/flood lights</li> </ul>

Disaster Management and Preparedness	Emergency response	Efficient and effective disaster mitigation and response	<ul style="list-style-type: none"> <li>• Establish and equip emergency units in strategic locations.</li> <li>• Train residents on first aid and other emergency responses.</li> <li>• Linkage of Community to insurance companies.</li> <li>• Establish an emergency response and command centre;</li> <li>• Enforcement of safety measures and regulations.</li> </ul>
<b>Housing</b>	Housing and home ownership	Increased access to housing for all	<ul style="list-style-type: none"> <li>• Formulation of County Housing Policy</li> <li>• Rehabilitation /development of existing county houses</li> <li>• Partnering with private developers and partners in developing affordable houses</li> </ul>
Land administration and management	Land administration and management	To administer and manage land	<ul style="list-style-type: none"> <li>• Titling of public utilities, Urban areas and colonial villages</li> <li>• Resolve land disputes on allotted land in urban areas</li> <li>• Civic education and land clinics</li> <li>• Creation of a Land database for all public land</li> <li>• Implementation of the IGTRC and CALC Report on the transfer of land assets from the defunct local authorities and the national government</li> <li>• Acquisition of land for social amenities and access road</li> <li>• Digitalization of land-related processes</li> </ul>

			<ul style="list-style-type: none"> <li>• Preparation of valuation roll</li> </ul>
Physical planning	Controlled development	To promote sustainable development planning	<ul style="list-style-type: none"> <li>• Preparation of physical and land use development plan</li> <li>• Development control and ensuring compliance.</li> <li>• Development of street and buildings address systems in urban areas</li> <li>• Approval, updating and implementation of CSP</li> <li>• Resolution of development control disputes</li> <li>• Classification of urban centres into various categories and conferment of status in line with UACA</li> </ul>
Survey and mapping	Land survey and mapping	To protect public land through survey and mapping	<ul style="list-style-type: none"> <li>• survey and mark all public land vested under the county government</li> <li>• Survey of squatter villages</li> <li>• Survey of towns and urban areas</li> </ul>
			<ul style="list-style-type: none"> <li>• Re-establishment of boundaries</li> </ul>
			<p>Development and Operationalization of Geospatial Information system lab</p> <p>Carrying out detailed topographical surveys of towns</p>
<ul style="list-style-type: none"> <li>• Urban development/municipal services</li> </ul>	<ul style="list-style-type: none"> <li>• Urban development</li> </ul>	To enhance provision of services in urban areas	<ul style="list-style-type: none"> <li>• Urban areas infrastructural development</li> <li>• Urban areas infrastructural maintenance</li> <li>• Improvement of urban area services</li> <li>• Formulation of municipal plans and policies</li> </ul>

Table 3-1: Sector development objectives and strategies

### 3.3 Sector programmes and interventions

This section provides the programmes, objectives and key interventions. The programmes should be in line with the interventions stated above. Consideration of the projects within the programmes should be in line with the public investment management guidelines.

Programme	Objectives	Strategies/Interventions	Implementing Agency(s)	Time Frame	Funding	
					Total Budget (Ksh in millions)	Source(s)
Roads and Transport	Improve access roads	Survey, mapping and repossession of road reserves;	Directorate of Roads and Transport.	2023-2032	50	CG
		Acquisition and opening of feeder roads;		2023-2032	100	CG
		Grading, gravelling and Routine maintenance of roads by contractual works		2023-2032	3,750	CG
		Grading, gravelling and Routine maintenance of roads by the County Machinery		2023-2032	2,000	CG
		Construction and operationalization of a County Materials Lab		2023-2032	60	CG
		Improve on road design and drainage structures;		2023-2032	300	CG
		Develop a Roads and Drainage Policy;		2023-2024	2	CG
		Develop a County Transport Policy		2023-2024	2	CG
		Adopt modern road construction technologies.		2027-2032	10	CG
		Tarmacking of roads		2027-2032	2,000	CG
Upgrade and replacement of County Machinery	2027-2032	500	CG			
Public Works	Improved service delivery	Proposed Construction of the County Headquarter Office Block at OI Kalou	Directorate of Public Works	2023 - 2027	450	CG
		Proposed Residences for the County Executive (Governor & Deputy Governor)		2023-2032	80	CG

		Proposed Office Block for the Department of Public Works, Roads, Transport, Housing and Energy		2023-2032	100	CG
		Project design, documentation, construction supervision and contract administration of government and public buildings for various county user departments		2023-2032	As per budgetary provisions	CG
		Providing access in areas with difficult terrain		2023 - 2033	As per budgetary provisions	CG
Energy Development	To Increase electricity access and connectivity in line with the Country target	Provision of transformers	Directorate of Energy	2023-2032	250	CG, GOK, REREC
	To develop and enhance the use of alternative energy sources	Introduce clean cooking solutions in county learning institutions (biogas units)	Directorate of Energy	2023-2032	25	CG, GOK. and donors
		Training and capacity building on renewable energy technologies		2023-2032	10	CG and GOK
		Development of the County Energy Plan (CEP)		2023-2024	2	CG and SETA
		To develop a County Energy Map	Directorate of Energy	2023-2028	5	CG
		To develop Integrated National Energy Plan (INEP)	Directorate of Energy	2023-2032	20	CG
	To increase the number of operational floodlights	Community policy to safeguard lighting infrastructure in the county	Directorate of Energy	2023-2032	10	CG
		Improve routine maintenance of existing floodlights including payment of electricity bills		2023-2032	400	CG
	To increase lighting in markets, streets, schools, healthcare	To adopt solar street lights and floodlights for sustainability	Directorate of Energy	2023-2032	325	CG, GOK. and donors

	facilities, inhabited locations, among other areas.					
Emergency Response and Preparedness	To provide civil education and awareness	Train residents on disaster risk and mitigation measures	Disaster management unit	2023-2032	12.5	CGN
	Quick and timely response	Acquisition of fire tools and equipment ( Fire engines, stations, fire hydrants, service vehicles)	Department of Public works, roads, transport, housing and energy	2023-2032	300	CGN
	to provide relief after disasters	to provide reparations for damages caused by disasters	department of education	2023-2032	10	CGN
	Developing a well-equipped disaster management unit.	Establish an emergency response and command centre		2023-2032	50	CGN
	Trained and adequate personnel	Recruitment of qualified personnel and in-service training of staff		2023-2032	3.6	CGN
	To develop policies that govern disaster mitigation	Drafting, approval by cabinet and enacting by the county assembly		2023-2032	2	CGN

	and response					
	To provide civil education and awareness	Train residents on disaster risk and mitigation measures	Disaster management unit	2023-2032	12.5	CGN
<b>Housing Development</b>	To provide affordable housing as a catalyst for socio-economic growth	Developing a county housing master plan	Housing Directorate/N HC	2023-2024	5	CGN
		Developing Offsite Infrastructure for Affordable Housing	Housing Directorate/N HC	2023-2032	50	CGN
		Lobbying for Informal Settlement Upgrading	Housing Directorate	2023-2032	100	CGN & Development Partners
		Construction of Staff Houses	Housing Directorate	2023-2032	150	CGN
		Rehabilitation of County Houses and Buildings	Housing Directorate	2023-2032	100	CGN
		Developing of Housing Database and Inventory	Housing Directorate	2023-2032	10	CGN
		Developing County Housing Policy	Housing Directorate	2023-2024	2	CGN
		Training Forum for ABT	Housing Directorate	2023-2032	10	CGN
Land administration and management	To administer and manage land	Titling of public utilities, Urban areas and colonial villages	Land management directoratent	2023-2032	25	CG
		Resolve land disputes on allotted land in urban areas	Land management directoratent	2023 - 2032	25	CG
		Civic education and land clinics	Land management directoratent	2023 - 2032	15	CG
		Creation of a Land database for all public land	Land management directoratent	2023 - 2027	10	CG
		Implementation of the IGTRC and CALC Report on the transfer of land assets from the defunct local	Land management directoratent	2023 - 2027	7	CG

		authorities and the national government				
		Acquisition of land for social amenities and access road	Land management directoratent	2023 - 2032	150	CG
		Digitalization of land-related processes	Land management directoratent	2023 - 2027	50	CG
		Formulation of policy, legal and institutional	Land management directoratent	2023 - 2032	10	CG
		Updating of valuation roll	Land management directoratent	2023 - 2027	70	CG
Physical planning	To promote sustainable development planning	Preparation of physical and land use development plan	physical planning directorate	2023 - 2032	70	CG
		Approval, updating and implementation of CSP	physical planning directorate	2023 - 2032	20	CG
		Review of CSP and other Physical and land use plans	physical planning directorate	2023 - 2032	100	CG
		Classification of urban centres into various categories and conferment of status in line with UACA	physical planning directorate	2023 - 2032	20	CG
		Preparation of action area plans (rehabilitation and restoration of degraded site, environmental conservation)	physical planning directorate	2023 - 2032	65	CG
		Digitization of planning records	physical planning directorate	2023 - 2032	10	CG
		Development control and ensuring compliance.	physical planning directorate	2023 - 2032	50	CG
		Development of street and buildings address systems in urban areas	physical planning directorate	2023 - 2032	15	CG
		Resolution of development control disputes	physical planning directorate	2023 - 2032	20	CG



		Develop land use policies	physical planning directorate	2023 - 2032	6	CG
Survey and planning	<b>To protect public land through survey and mapping</b>	survey and mark all public land vested under the county government	Survey directorate	2023 - 2032	20	CG
		Develop survey policies	Survey directorate	2023 - 2032	6	
		Survey of squatter villages	Survey directorate	2023 - 2027	15	CG
		Survey of towns and urban areas	Survey directorate	2023 - 2032	60	
		Reestablishment of boundaries	Survey directorate	2023 - 2032	20	
		Development and Operationalization of Geospatial Information system lab	Survey directorate	2023 - 2032	60	CG
		Carrying out detailed topographical surveys of towns	Survey directorate	2023 - 2032	15	
		Acquiring an Unmanned Aerial Vehicle (Drone) for purposes of mapping.	Survey directorate	2023 - 2032	20	
Urban development	To enhance provision of services in urban areas	Development/maintenance of drainage systems	urban development directorate	2023 - 2032	30	CG
		Development and upgrade of urban road networks(grading & gravel)	urban development directorate	2023 - 2032	60	CG
		Upgrade of informal settlements	urban development directorate	2023 - 2032	200	CG & Donor
		Establishment of Public spaces/ green parks in urban areas.	urban development directorate	2023 - 2032	30	CG
		Development of sanitation facilities.	urban development directorate	2023 - 2032	15	CG
		Construction of walkways	urban development directorate	2023 - 2032	90	CG
		Develop urban development policies	urban development directorate	2023 - 2032	4.5	

		Development of street furniture	urban development directorate	2023 - 2032	30	CG
		Development of bus parks	urban development directorate	2023 - 2032	50	CG
		Development of parking lots	urban development directorate	2023 - 2032	50	CG
Olkalou Municipal services	To provide a high standard of social services in a cost effective manner to the inhabitants of the municipality	Preparation of Municipal integrated development plan	Olkalou Municipality	2026 - 2032	15	CG
		Formulation of municipal policies and by-laws	Olkalou Municipality	2024 - 2032	6	CG
		maintenance of basic physical infrastructure including ;roads, storm drainage system,walkways,floodlights, slaughterhouses markets, and streetlights.	Olkalou Municipality	2023 - 2032	125	CG
		Rehabilitation of all-weather roads(grading and gravelling)	Olkalou Municipality	2024 - 2032	60	CG
		Construction of drainage systems	Olkalou Municipality	2024 - 2032	180	CG
		Construction of walkways	Olkalou Municipality	2024 - 2032	225	CG
		Construction of parking lots	Olkalou Municipality	2024 - 2032	90	CG
		Development of taxi stand/bus stand	Mairo-Inya Municipality	2024 - 2032	45	CG
		Installation of floodlights	Olkalou Municipality	2024 - 2032	22.5	CG
		Installation of streetlights	Olkalou Municipality	2024 - 2032	232.5	CG
		Establishment of Municipal Offices	Olkalou Municipality	2024- 2032	100	CG
		Construction of markets	Olkalou Municipality	2024 - 2032	520	CG
		Construction of slaughterhouses	Olkalou Municipality	2023 - 2032	25	CG
Construction and operationalization	Olkalou	2023 -	70	CG		

		of cottage industries	Municipality	2032		
		Solid waste management(fencing of existing dumpsites, recycling of solid waste,	Olkalou Municipality	2023 - 2032	130	CG
		Construction of sanitation facilities	Ol'kalou Municipality	2023 - 2032	25	CG
		Climate change and environmental management(beautification, tree planting, & preservation of riparian land)	Olkalou Municipality	2023 - 2032	150	CG
		Development of recreational and social facilities(social halls,studios,ICT hubs)	Olkalou Municipality	2023 - 2032	120	CG
		Disaster Risk Management(fire station &fire engine)	Olkalou Municipality	2023 - 2032	150	CG
		Human resource development(trainings, capacity building & subscription to professional bodies)	Olkalou Municipality	2023 - 2032	20	CG
<b>Engineer municipality</b>						
Engineer Municipal sevrices	To provide a high standard of social services in a cost effective manner to the inhabitants of the municipality	Preparation of Municipal Strategic Urban Development plan	Engineer Municipality	2023 - 2032	10	CG
		Preparation of Municipal integrated development plan	Engineer Municipality	2023 - 2032	15	CG
		Formulation of municipal policies and by-laws	Engineer Municipality	2023 - 2032	6	CG
		maintenance of basic physical infrastructure including ;roads, storm drainage system,walkways,floodlights, slaughterhouses markets, and streetlights.	Engineer Municipality	2023 - 2032	125	CG
		Rehabilitation of all-weather roads(grading and gravelling)	Engineer Municipality	2024 - 2032	60	CG
		Construction of drainage systems	Engineer Municipality	2024 - 2032	180	CG
		Construction of walkways	Engineer Municipality	2024 - 2032	225	CG

		Installation of floodlights	Engineer Municipality	2024 - 2032	22.5	CG
		Installation of streetlights	Engineer Municipality	2024 - 2032	232.5	CG
		Establishment of Engineer Municipal Offices	Engineer Municipality	2024-2032	100	CG
		Construction of markets	Engineer Municipality	2024 - 2032	120	CG
		Construction of parking lots	Engineer Municipality	2024 - 2032	90	CG
		Development of taxi stand/bus stand	Mairo-Inya Municipality	2024 - 2032	45	CG
		Construction of slaughterhouses	Engineer Municipality	2023 - 2032	75	CG
		Construction and operationalization of cottage industries	Engineer Municipality	2023 - 2032	35	CG
		Solid waste management(fencing of existing dumpsites, recycling of solid waste,	Engineer Municipality	2023 - 2032	30	CG
		Construction of sanitation facilities	Engineer Municipality	2023 - 2032	15	CG
		Climate change and environmental management(beautification, tree planting, & preservation of riparian land)	Engineer Municipality	2023 - 2032	50	CG
		Development of recreational and social facilities(social halls,studios,ICT hubs)	Engineer Municipality	2023 - 2032	90	CG
		Disaster Risk Management(fire station &fire engine)	Engineer Municipality	2023 - 2032	150	CG
		Human resource development(trainings, capacity building & subscription to professional bodies)	Engineer Municipality	2023 - 2032	20	CG
<b>Mairo-Inya municipality</b>						
Mairo-Inya Municipal services	To provide a high standard of social services in a cost	Preparation of Municipal Strategic Urban Development plan	Mairo-Inya Municipality	2023 - 2032	10	CG
		Preparation of Municipal integrated development plan	Mairo-Inya Municipality	2023 - 2032	15	CG

effective manner to the inhabitants of the municipality	Formulation of municipal policies and by-laws	Mairo-Inya Municipality	2023 - 2032	6	CG
	maintenance of basic physical infrastructure including ;roads, storm drainage system,walkways,floodlights, slaughterhouses markets, and streetlights.	Mairo-Inya Municipality	2023 - 2032	125	CG
	Rehabilitation of all-weather roads(grading and gravelling)	Mairo-Inya Municipality	2024 - 2032	60	CG
	Construction of drainage systems	Mairo-Inya Municipality	2024 - 2032	180	CG
	Construction of walkways	Mairo-Inya Municipality	2024 - 2032	225	CG
	Construction of parking lots	Mairo-Inya Municipality	2024 - 2032	90	CG
	Development of taxi stand/bus stand	Mairo-Inya Municipality	2024 - 2032	45	CG
	Installation of floodlights	Mairo-Inya Municipality	2024 - 2032	22.5	CG
	Installation of streetlights	Mairo-Inya Municipality	2024 - 2032	232.5	CG
	Establishment of Mairo-Inya Municipal Offices	Mairo-Inya Municipality	2024- 2032	100	CG
	Construction of markets	Mairo-Inya Municipality	2024 - 2032	120	CG
	Construction of slaughterhouses	Mairo-Inya Municipality	2023 - 2032	75	CG
	Construction and operationalization of cottage industries	Mairo-Inya Municipality	2023 - 2032	35	CG
	Solid waste management(fencing of existing dumpsites, recycling of solid waste,	Mairo-Inya Municipality	2023 - 2032	30	CG
	Construction of sanitation facilities	Mairo-Inya Municipality	2023 - 2032	15	CG
Climate change and environmental management(beautification, tree planting, & preservation of riparian land)	Mairo-Inya Municipality	2023 - 2032	50	CG	
Development of recreational and social facilities(social halls,studios,ICT hubs)	Mairo-Inya Municipality	2023 - 2032	90	CG	

		Disaster Risk Management(fire station &fire engine)	Mairo-Inya Municipality	2023 - 2032	150	CG
		Human resource development(trainings, capacity building & subscription to professional bodies)	Mairo-Inya Municipality	2023 - 2032	20	CG

Table 3-2: Sector programmes and interventions

### 3.4 Sector Flagship projects

This section should capture major projects /large scale initiatives with high socio economic impact in terms of creating employment, enhancing competitiveness, revenue generation and ability to deliver services including promoting peace and coexistence across the county. The impact should generate rapid and widely shared growth that is felt beyond the locality where it is being implemented. These may include projects that are area based, county wide, inter county, and those implemented together with the national government.

Project Name: (Location)	Objective	Outcome	Description of Key Activities	Time Frame	Beneficiaries (No.)	Estimated Cost	Source of Funds	Implementing Agency
<b>Roads and Transport</b>								
<b>Roads Programme- (County Machinery Programme)</b>	To develop transport infrastructure to improve efficiency in connectivity and access	Efficient roads network for a prosperous county	Upgrade and routine maintenance of County road  Upgrade and replacement of County Machinery	2023 – 2027	All the 25 County wards	2,000  500	County budget	Department of Public Works, Roads, Transport, Housing and Energy
<b>County roads drainage</b>	To develop transport infrastructure to improve efficiency in connectivity and access		Construction and maintenance of all drainage infrastructure in the County		Entire County populace	300	County budget	Department of Public Works, Roads, Transport, Housing and Energy
<b>Public Works</b>								

<b>Proposed Construction of the County Headquarter Office Block at Ol Kalou (Ol Kalou Sub County)</b>	To develop quality, modern and fit-for-purpose office space for improved working conditions	Improved service delivery	Construction supervision  Contract administration	2023 – 2027	10 No. County Departments	450	National Government & County Government of Nyandarua	State Department of Public Works & Department of Public Works, Roads, Transport, Housing and Energy
<b>Proposed Office Block for the Department of Public Works, Roads, Transport, Housing and Energy (Impact)</b>  (Ol Kalou Sub County)	To develop quality, modern and fit-for-purpose office space for improved working conditions	Improved service delivery	Design and documentation  Construction supervision  Contract administration	2023 – 2033	1 No. County Department	100	County Government of Nyandarua	Department of Public Works, Roads, Transport, Housing and Energy
Energy								
<b>County lighting</b>	To enhance security and increase business working hours, hence boosting socioeconomic development	Mushrooming of new towns  Transforming the county to a 24-7 economy	Installation of solar floodlights and streetlights	2023-2032	25 wards (Amount)	325	CG, GOK. and donors	Directorate of Energy
<b>Clean cooking in all county learning institutions</b>	To adopt sustainable and environmentally friendly cooking solutions	A significant reduction in respiratory diseases  Reduced deforestation  Reduced greenhouse	Installation of clean cooking units, such as biogas  Training on clean cooking solutions	2023-2032	100 (learning institutions)	25	CG and donors	Directorate of Energy

		gas emission, hence reduced global warming						
<b>Transformer installation and maximization</b>	To increase connectivity and access to electricity	Significant increase of households connected to the national grid	Procurement of transformers  Construction of High Voltage/Tension lines	2023-2032	474 households	250	CG, GOK, RE REC	Directorate of Energy
Emergency Response and Preparedness								
<b>Disaster command centre</b>	to establish a fully equipped disaster command centre	To collect, process and analyze real-time data and disseminate early warning information	To purchase monitoring equipment, first aid kits and communication systems Hiring of relevant personnel to manage the command centre	2023-2032	5 fire stations in the 5 sub counties	100	CGN and relevant stakeholders	Department of Public works, roads, transport, housing, and energy
<b>Establishment of fire stations, fire engines, and hydrants in the five sub-counties</b>	To allow quick and effective responses of fire disasters	Reduced damage of property and loss of lives	Purchase and install fire hydrants in key municipalities - Establishment of function fire stations in each sub county	2023-2032	5 sub-counties	300	CGN	CGN
Housing Development								



<b>Affordable housing</b>	To provide affordable housing as a catalyst for socio-economic growth	Provide affordable housing as a catalyst for socio-economic growth	Developing a county housing master plan	2023-2024	County populace	5	CGN	Housing Directorate/N HC
			Developing Offsite Infrastructure for Affordable Housing	2023-2032	County Populace-Municipal ities	50	CGN	Housing Directorate/N HC
			Lobbying for Informal Settlement Upgrading	2023-2032	All Informal Settlements	100	CGN &Development Partners	Housing Directorate
			Construction of Staff Houses	2023-2032	County Essential Staff	150	CGN	Housing Directorate
<b>Housing units for county essential services staff</b>			Rehabilitation of County Houses and Buildings	2023-2032	All	100	CGN	Housing Directorate
<b>Rehabilitation/redevelopment of existing county houses</b>			Developing of Housing Database and Inventory	2023-2032	County Populace	10	CGN	Housing Directorate
<b>Legal and regulatory framework</b>			Developing County Housing Policy	2023-2024	County Populace	2	CGN	Housing Directorate
	<b>Lands, physical planning and urban development</b>							
<b>Preparation of valuation roll</b>	Revenue enhancement	Increased revenue generation from land rates	Preparation of county valuation roll	2023-2024	All the 25 wards	50	CG & Donors	Land management
<b>Land for public cemeteries</b>	Revenue enhancement	Increased revenue generation from cemeteries	Acquisition of land for cemeteries	2023-2032	All the 25 wards	60	CG	Land management

<b>Land Titling</b>	Facilitate land development	Reduced land disputes	Planning, surveying, and titling	2023-2032	All the 25 wards	50	CG	CG
<b>Mairo-inya municipality urban infrastructure development</b>	Improved accessibility to services	Sustainable urban growth	Establishment of Offices, Walkways, drainage systems, street and flood lights and green spaces, Parking Lots, among others	2023-2032	30,000 households	1000	CGN/Don or	Municipality
<b>Engineer municipality urban infrastructure development</b>	Improved accessibility to services	Sustainable urban growth	Establishment of offices, Walkways, drainage systems, street and flood lights and green spaces, Parking lots among other	2023-2032	30,000 households	1000	CGN/Don or	Municipality
<b>Ol'kalou municipality urban infrastructure development</b>	Improved accessibility to services	Sustainable urban growth	Construction of Walkways, drainage systems, street and flood lights and green spaces, Parking lots among other	2023-2032	30,000 households	1000	CGN/Don or	Municipality

Table 3-3: Sector Flagship projects

### 3.5 Cross sectoral linkages

This section should provide a mechanism /actions on how sectors will build synergies and address adverse effects that may arise from the implementation of programmes. For each programme, indicate the considerations that should be made in respect to

harnessing cross sector synergies arising from programmes, and mitigation measures that may be adopted to avoid or manage potential adverse cross sector effects.

Programme Name	Sub-Programme	Linked Sector	Cross-sector Linkages		Measures to Harness or Mitigate the Effects
			Synergies	Adverse Effects	
Roads and Transport	<ul style="list-style-type: none"> <li>Roads 10,000 programme-(County Machinery Programme)</li> <li>County roads drainage</li> </ul>	Governance	<ul style="list-style-type: none"> <li>Sensitization of public</li> <li>Formulation and enforcement of laws</li> </ul>	<ul style="list-style-type: none"> <li>Ineffective public sanitation</li> <li>Lengthy court cases</li> </ul>	<ul style="list-style-type: none"> <li>Effective public sensitization</li> <li>avoid litigation processes</li> </ul>
			Budgetary allocation	Inadequate budgetary allocation	lobby for adequate budget allocation
		Productive	Advice on NEMA requirements	Lengthy processes	Timely advice
		GOVERNANCE	Supply of trained work force	Poorly trained and inadequate graduates	Inhouse training
Public Works	Project design, documentation construction supervision and contract	Governance	Government support and adequate	Over expectations	Manage expectations from employer and public

	administration of government and public buildings		budgetary allocation  Recruitment of staff		Proper planning
		Governance Productive Infrastructure Human resource management	Facilitating provision of requisite infrastructure in the built environment  Timely communication  Technical support for planning and budgeting  Adequate budgetary allocation	Slow work due to inadequate budgets  Mis-prioritization of activities  Delayed communication and lack of integration of all departments work	Timely communication should be adopted by all  Proper planning
Energy Development	County lighting	Productive	Lighting of markets	Potential electrical hazards	Securing the area around the floodlight  Community sensitization
	Alternative/sustainable energy sources	Human Resource	Reduced cost of cooking for schools	Inadequate supply of raw materials	Source for alternative sources of raw materials/ or opt for sustainable options

			Sustainable cooking solution for schools		
		Productive	Reduced air pollution		
		Human Resource	Reduced respiratory diseases		
Transformer installation and maximization	Human Resource		Powering up of schools and health facilities	Increased bills and running cost for learning institutions	Adopt energy efficient appliances, lighting, and other measures
	Productive		Cold storage units in markets	Increased bills and running cost for markets	Adopt energy efficient appliances, lighting, and other measures
	Productive		Conservation of agricultural produce	Increased running cost for farmers	Adopt energy efficient appliances, and other measures
Solarization of floodlights	Productive		Clean and environmentally friendly solution	Lengthy processes- Advice on NEMA requirements	Timely advice
County Energy Plans/Policies	Productive, Human Resource, Governance, and Infrastructure		A framework that contains guidelines on all matters related to energy	Possible misinterpretations of the guidelines stated therein	Interdepartmental meetings and collaboration

Emergency Response and Preparedness	Emergency Response and Preparedness	All other departments	Support each other to give services	<ul style="list-style-type: none"> <li>• Underaffing</li> <li>• Inadequate budgeting</li> <li>• Slow services</li> </ul>	Employ skilled personnel
		Lands, physical planning, and urban development	Provision of services during mapping and physical planning acts	Poor spatial plans hinder movement	Proper spatial plans should be adhered to
		Department of education, children, gender affairs, culture, and social services	To provide humanitarian relief and assistance	Poor coordination	Policy to guide interagency coordination
	Emergency Response and Preparedness	All other departments	Support each other to give services	<ul style="list-style-type: none"> <li>• Underaffing</li> <li>• Inadequate budgeting</li> <li>• Slow services</li> </ul>	Employ skilled personnel
<b>Housing Development</b>	Affordable housing	All sectors	Civic education and	Resistance from the public towards	Public awareness campaigns

			awareness	the affordable housing scheme	
	Housing units for county essential services staff	Human resource sector	Provision of land for essential services	Inadequate budgetary provision	Costing to design
	Rehabilitation/redevelopment of existing county houses	Governance	Generation of county revenue	Inadequate housing units to meet demand Dilapidated houses	Construction/renovation of county houses
	Legal and regulatory framework	Governance County assembly	Cabinet approval Approval of bills	Inadequate budgetary provision	Cabinet and county assembly sensitization on the importance of the projects
<b>Lands, physical planning and urban development</b>					
Programme Name	Sub-Programme	Linked Sector	Cross-sector Linkages		Measures to Harness or Mitigate the Effects
			Synergies	Adverse Effects	
Land administration and management	Acquisition of land for social amenity	Governance	Processing court documentation and land legal processes	Conflicts and disputes, court cases	Explore alternative dispute resolution mechanism

	Acquisition of land for public utility	All county sectors	Acquisition of land for public utility	Lack of coordination between the implementing departments	Timely submission of land acquisition needs to the lands department
	Titling of public land	Governance	Consultation with relevant MDAs	Conflicts and disputes, court cases	Sensitization through land clinics
Physical planning	Development control and compliance	Governance	Improvement on Revenue collection	Over taxation of people	Sensitization through land clinics
			Development control enforcement	Court cases by aggrieved parties	Awareness through land clinics Comply and enforce Physical and Land Use Planning Act and regulations
	Preparation of physical and land use plans	Productive	Planned markets for trading activities	Demolition of structures	Stakeholder engagement and public participation.
	Preparation of physical and land use plans	Productive	Conservation and protection of ecologically sensitive areas	Pulling down of structures on riparian reserve	Comply and enforce NEMA guidelines
<b>Urban Development/Municipal services</b>	Upgrade of urban infrastructure	Productive	Conservation of ecologically sensitive areas	Pollution, loss of biodiversity	Comply and enforce NEMA guidelines



<b>Municipal services</b>	Solid waste management	Human resource	Supervisions of waste management activities	Spread of Waterborne diseases	Comply with Public Health Act
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Table 3-4: Cross sectoral linkage

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## 4 CHAPTER FOUR: IMPLEMENTATION MECHANISMS

### 4.1 Institutional and Coordination Framework

#### 4.1.1 Institutional Arrangement

This section highlights institutions and their specific roles in the implementation of the sectoral plan. The institutions will range from County Government Departments as well as other players such as the National Government Ministries, Departments and Agencies (MDAs). County Government institutions may include County Executive Committee, County Assembly, County Planning Unit, Council Sectoral Committees, County Budget and Economic Forum (CBEF), Regional Economic Blocs, Intergovernmental Sectoral Committees under Intergovernmental Budget and Economic Council (IBEC), among others.

Nos.	Institution	Role in Implementation of the County sector plans
1.	County Executive Committee	<ul style="list-style-type: none"> <li>• Provide leadership and policy direction of the County development agenda;</li> <li>• Approve County policies, plans and budgets;</li> <li>• Co-ordinate departmental functions.</li> </ul>
2.	County Executive Sectoral Committee	<ul style="list-style-type: none"> <li>• Provision of specialized advice and support to the County Executive Committee.</li> </ul>
3.	County Assembly	<ul style="list-style-type: none"> <li>• Approve County policies, plans and budgets;</li> <li>• Provide oversight over the implementation of programmes, plans and budgets</li> </ul>
4.	County Government Departments	<ul style="list-style-type: none"> <li>• Implement the Sector plans projects and programmes;</li> <li>• Report to the County executive committee, County -Assembly and other oversight agencies on the implementation progress and challenges.</li> </ul>

5	County Economic Planning Unit	<ul style="list-style-type: none"> <li>• Co-ordinate the preparation of annual development plans, sector plans and budgets;</li> <li>• Co-ordinate M&amp;E and CIMES</li> <li>• Periodical reporting on progress</li> </ul>
6	Office of the County Commissioner	<ul style="list-style-type: none"> <li>• Ensure Security, conflict management and peace building</li> <li>• Co-ordinate national government functions at the County level</li> <li>• Mobilize national government agencies for national events and programmes</li> </ul>
7	National Planning Office at the county	<ul style="list-style-type: none"> <li>• Provide guidance in linking the County development agenda to the national development agenda as envisaged in the Kenya's Vision 2030 and MTP IV</li> <li>• Co-ordinate the NIMES</li> </ul>
8	National Government Department and Agencies at the county	<ul style="list-style-type: none"> <li>• Provide support and guidance;</li> <li>• Facilitate release of fund for implementation of planned projects and programmes;</li> <li>• Capacity building;</li> </ul>
9	Development Partners	<ul style="list-style-type: none"> <li>• Provide resources and finances to supplement County government funding;</li> <li>• Capacity building</li> </ul>
10	Civil Society Organizations	<ul style="list-style-type: none"> <li>• Oversight</li> <li>• Provide resources and finances to supplement County government funding</li> </ul>
11	Private Sector	<ul style="list-style-type: none"> <li>• Partnership in implementation of sector plans projects and Programmes;</li> <li>• Participation in project implementation and M&amp;E committees</li> </ul>

Table 4-1: Institutional and Coordination Framework

#### **4.1.2 Coordination Framework**

These sectoral plan will be coordinated by various agencies among them the County Governor's office, it will also work closely with the other 3 sectors and subsectors

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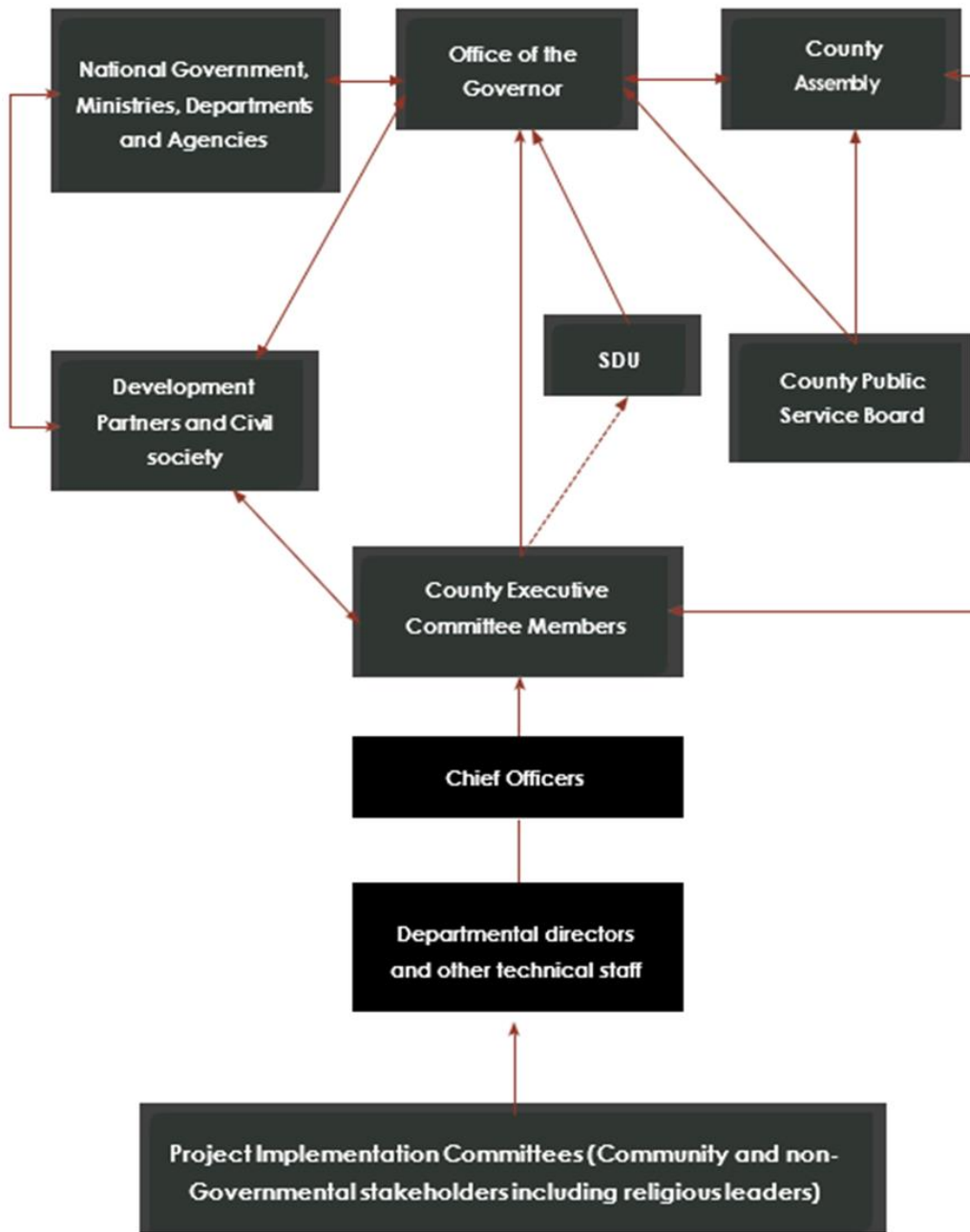


Figure 4-1: Coordination Framework

The above diagram depicts coordination structures from the National government, Ministries, all the way to the departmental directors and other technical staff.

## 4.2 Financing Mechanism

This section indicates the total cost of funding the sectoral plan disaggregated by funding sources. It also indicates the estimated total cost of implementing the specific programmes, as well as the potential financing sources. Further, it highlights the collaboration arrangements between the various agencies within the sector and other implementing agencies.

SQN	PROGRAMME	ESTIMATED BUDGET (M)	BUDGET SOURCE
Public Works, Roads, Transport, Housing and Energy			
1.	Roads and Transport	8.8 Billion	County budget and Grants (RMLF)
2.	Public Works	630 Million	County budget and Grants (RMLF)
3.	Energy	1.047 Billion	County budget, Donor and Grants.
4.	Disaster and Emergency Preparedness	368.1 Million	CGN and Donors
5.	Housing	427 Million	County budget, Donor and Grants.
6.	Land administration and management	362Million	CGN
7.	Survey and mapping	226million	CGN
8.	Physical planning	375 Million	CGN
9.	Urban development	559.5Million	CGN and Donors
10	Ol'kalou municipality	2.311 Billion	CGN and Donors
11	Engineer municipality	1.606 Billion	CGN and Donors
12	Mairo-Inya Municipality	1.606 Billion	CGN and Donors

TOTAL	18.3 Billion
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Table 4-2: Financing Mechanism

### 4.3 Capacity Development

This section provides measures to address capacity gaps that may hinder efficient and effective implementation of the initiatives in the sectoral plan;

The decentralization of services to counties has presented a challenge in aligning staff benefits and duties across different entities, including devolved staff, former local authority employees, and those under the County Public Service Board. This lack of alignment poses a risk to staff morale and productivity, necessitating the effective management of key human resource components and the automation of essential HR services.

Furthermore, existing challenges, such as limited staff promotion, inadequate tools of trade, constrained career progression, and restricted access to competitive training opportunities, have raised concerns about potential skill loss through natural attrition and retirement. This situation not only puts the county at risk of maintaining optimal staffing levels but also impedes the overall delivery of public services.

As a recommendation to address these challenges, the county is gearing up for comprehensive reforms focused on enhancing public service delivery. The key strategy involves implementing a results-based growth framework, allocating more funds, incorporating strategic measures to address staff concerns, streamline processes, and harness technology for optimal human resource management. The ultimate goal of these reforms is to cultivate a conducive work environment, facilitate career advancement, ensure the county can both retain and attract qualified personnel, thereby enhancing effective and efficient service provision.

SQN	CAPACITY GAPS	MEASURES TO ADDRESS
1	Office space,	Build a departmental headquarter building
2	enough qualified personnel	Engage adequate personnel
3	legal and policy frame work	Legislation of appropriate laws
4	motivation,	Adequate allocation for capacity building and training of staff
5	In adequate equipment/ machinery	Additional of new equipment and maintenance of existing ones

Table 4-3: Capacity Development Gaps and Measures

#### 4.4 Risk Management

This section should provide possible risks that may hinder implementation of the sectoral plan and discuss proposed mitigation measures.

Risk	Risk Level (High, Moderate, Low)	Risk Owner(s)	Mitigation Measures
<b>Inadequate budget allocations</b>	High	National Government County Government of Nyandarua	Lobbying for adequate budgetary allocations from the exchequer  Proper planning and prioritization of projects for implementation
<b>Political interference</b>	High	Nyandarua County Assembly County Government of Nyandarua	Recognition of the distinct roles of the two arms of Government  Encourage a professional working relationship between the two arms of Government
<b>Critical staff gaps and shortages</b>	High	County Government of Nyandarua County Public Service Board	Well-coordinated staff recruitment  Continuous training and skills improvement
<b>Staff turnover</b>	Moderate	County Government of Nyandarua	Proper succession planning
<b>Climate change and unpredictable weather patterns</b>	High	County Government of Nyandarua	Proper planning  Coordination with relevant Departments and Agencies for forecasting



			Set aside enough budgets for emergency and reconstruction of affected areas
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Table 4-4: Risk Management

## CHAPTER FIVE: MONITORING AND EVALUATION FRAMEWORK

### Overview

This chapter provides an analysis of how the strategic priorities for implementation during the plan period will be monitored, evaluated, and reported. The tracking of planned interventions is crucial in ensuring that implementation is on track and how to address any deviations. The findings of Monitoring and Evaluation (M&E) process are to be used to improve future programme implementation as a result of the lessons learnt. The review of this plan has also been analyzed to facilitate capture of realistic programmes which can be implemented satisfactorily and attain the desired outcomes and impacts

### 4.5 Monitoring, Evaluation, Reporting and Learning

The Kenyan constitution outlines a legal process that mandates the creation of Monitoring and Evaluation (M&E) systems for County Governments. The M&E processes, methods, and tools are guided by Section 232 of the Constitution and Section 47 of the County Government Act, 2012, which charges the County Executive Committee with designing a performance system to evaluate the county public service's performance in relation to county policies, projects, and programs.

The Sector Plan will undergo continuous monitoring and evaluation, employing a participatory approach involving government entities, the private sector, development partners, non-state actors, and the public. The Monitoring and Evaluation Framework will guide the County Government in tracking the progress made towards achieving the desired outcomes of the sector plan.

In the monitoring phase, those responsible for program and project implementation will systematically collect both qualitative and quantitative data to track progress toward predefined targets. This data will provide implementers and stakeholders with insights into the extent to

which objectives have been met. The monitoring process will adhere to a structured framework that covers indicator identification, data collection, frequency of data collection, data custodianship, data analysis, utilization, reporting, and sharing.

To address specific questions about development interventions, evaluations will be conducted, primarily focusing on reasons for achieving or not achieving results, their relevance, effectiveness, impact, and sustainability. These evaluations may be internal or external, with stakeholders involved in all phases, from planning, data collection to analysis, reporting, feedback, dissemination, and follow-up actions.

The Monitoring and Evaluation processes, methods, and tools will align with the National Monitoring and Evaluation Policy, County M&E Policy, County Integrated Monitoring and Evaluation System (CIMES) Guidelines, Kenya Norms and Standards for Monitoring and Evaluation, and Kenya Evaluation Guidelines.

#### **4.6 County Monitoring and Evaluation Structure**

The County Government has established the necessary structures to support the M&E process for implementing the plan as guided by the County Integrated Monitoring and Evaluation System (CIMES), the Sector Plan will be subject to multi-level monitoring and evaluation. The CIMES structure includes:

- The County Executive Committee in charge of the sector,
- The County Monitoring and Evaluation Committee comprising of chief officers,
- The technical committee comprising of the County Directors,
- The Sector M&E Committees (SMEC) which will comprise of sector-specific departments' technical officers,
- The sub-county committee comprising of the sub-county heads of departments,
- The ward committee comprising of the departmental heads at the ward level, and
- The Project Management Committee (PMC).

The County M&E unit under the department responsible for economic planning will coordinate the monitoring and evaluation function and will work closely with the statistics unit. In

addition, the Service Delivery Unit (SDU) will complement the monitoring and evaluation unit in tracking the Sector Plan implementation. The Sector M&E Committees (SMEC) will be responsible for producing sector M&E reports, developing sector indicators, undertaking sector evaluations, and presenting sector M&E reports.

Capacity building and the establishment of frameworks will ensure the professional execution of the M&E function. This function will be institutionalized across all county entities to facilitate the preparation and release of necessary reports.

To streamline the M&E function, the national government and other non-state actors will be integrated into the CIMES framework. With the County Assembly sectoral committees overseeing implementation.

#### **4.7 Data sources and collection method**

Effective data management is vital for proper planning, implementation, monitoring, evaluation, and reporting of public sector programs. The county will utilize primary and secondary methods to collect quantitative and qualitative data. Data collection tools will be developed by the M&E unit in collaboration with the departments and tailored to meet specific sector needs. They will include questionnaires, structured, semi-structured, and unstructured interviews, focus group discussions, photography, videography, and observation, among others. The M&E unit will undertake capacity building on data quality issues to ensure that the data collected meets the required quality standards.

The data collected will be analyzed and reports generated to help inform decision-making.

Data analysis will actively involve various categories of programme stakeholders in the critical analysis of successes, constraints, and the formulation of strategies, conclusions and lessons learned. Data collection tools and reporting tools will be developed and supplied to all county entities. Automation of data collection and archiving will help in real-time access to development information. Quality assurance on the county statistics will be conducted to ensure authenticity. Data analysis methods are mainly through tables, graphs, pie charts, histograms, and percentages. Comparison with national baselines will continuously be carried out to ensure the county affairs are kept in sync with acceptable standards.

#### **4.8 Types of reports to be produced and their frequency, and consumers**

Collated data will be reported through various media, encompassing both physical and digital formats. Data will be analyzed and presented to meet the diverse needs of stakeholders. The Monitoring and Evaluation reports will transparently communicate the extent to which County programs address issues such as sustainable development goals, climate change, gender, and regional balance.

The following reports will be prepared and disseminated;

- i) **The County Annual Progress Report (CAPR)** is a requirement by the County Governments Act outlining the progress made by the County Government towards achieving its goals and objectives. The CAPR will provide the overall status of the Sector Plan implementation on an annual basis and should be ready within 90 days after the lapse of the previous financial year. The report will evaluate all the activities undertaken during the year, clearly showing the milestones, challenges and outlining plans for the next year.
- ii) **Mid-term Review Report (MTER)** – The report will be undertaken midway (After 5 years) in the implementation of the sector plan to assess the extent to which the implementation is meeting plan objectives and timelines.
- iii) **End-term Review Report (ERR)** – At the end of the Plan period, there will be an external evaluation carried out by an external evaluator. The task will lead to identification of achievements against performance indicators; constraints encountered during the plan period and make recommendations towards the development of the next plan.

#### **4.9 5.5 Dissemination, Feedback Mechanism and Citizen Engagement**

The County will make data and information available to stakeholders, government officials, academic researchers, policymakers, County senior management, project participants, and the public for use in making evidence-based decisions. The data/information will be disseminated

through State of County Address, oral presentations in stakeholder meetings, written reports, fact sheets, press releases, posters, flyers, social media platforms county websites and any other forum.

Assessing the effectiveness of programs in meeting the needs of beneficiaries requires their input. A robust feedback mechanism will be established to enable citizens to provide feedback on service delivery. Feedback collection methods include conducting "barazas," using automated feedback platforms through the county website, and deploying questionnaires and surveys. These mechanisms will ensure the County receives quality and timely feedback. In case of any grievance associated with service delivery, the feedback systems will support the redress of the same in an amicable manner. Through integrated feedback mechanism and open-door policy, value for money, accountability and good governance will be enhanced. Feedback received will enhance future decision-making processes.

To continuously improve service delivery programme implementation, monitoring, evaluation, reporting and feedback management in line with *gemba kaizen* principle, peer learning on best practices should be advocated. Identification of peer entities both public and private will be inevitable to ensure that the County's monitoring, evaluation, and reporting systems are strengthened and in line with enviable standards. The Council of Governors (CoG) together with some state departments have been instrumental in advocating for County peer review events of which Nyandarua was a beneficiary. Peer learning will also be encouraged across county sectors to ensure that best practices are diffused within themselves.

#### **4.10 Mechanism for reviewing and updating the sectoral plan**

The Sector Plan will undergo annual evaluation, Mid-term (after five years) and at the end of the plan period. The reviews will be critical for the county policies/programmes/projects to determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact, and sustainability. Reports generated will outline achievements in comparison to targets, factors facilitating or hindering progress, challenges faced, and lessons learned. These reports will be submitted to the Governor's office for information, use, and dissemination to stakeholders, including the County Assembly, development partners, beneficiaries, and the public. Issues requiring policy interventions will be submitted to the County Executive Committee for action. The reports will be stored manually and electronically and will be posted on the official County website.

The monitoring and evaluation Matrix presented in Table \*\* will be used to effectively monitor the progress of implementation of programmes in the plan and eventually evaluate them.

**Table \*\*: Monitoring and Evaluation Matrix**

Programme	Sub-Programme	Outcome	Key Performance Indicators	Baseline		Targets	
				Year 2023	Unit of measure	Five Year Target (2027)	Ten Year Target (2032)
Roads and Transport	Survey, mapping and repossession of road reserves;	Efficient roads network for a prosperous county	Kilometers of roads surveyed and mapped	10	KM	500	2000
	Acquisition and opening of feeder roads;		No. of kilometers of new feeder roads opened	20	KM	50	100
	Grading, gravelling and Routine maintenance of roads;		No. of KMs of roads upgraded to all weather - grading and gravelling- (contracted roadwork	200	KM	1,250 KM	2,500 KM
	County Machinery Programme		No. of kilometers of road graded and graveled using the County Machinery	250	KM	1,250 km graveled , 5,000 KM graded	2,500 km graveled , 5,000 KM graded
	Materials Lab		Materials lab constructed and operational	0	NO.	1	1
			The proportion of samples material tested	0	NO.	20	50
	Improve road design and		No. of drainage structures constructed	900	NO.	2000	3000

	drainage structures;						
	Roads and Drainage Policy;		Roads and Drainage policy	0	%	1	1
	County Transport Policy		County Transport Policy	0	%	1	1
	Adopt modern road construction technologies.		No. of kilometers of roads constructed using modern technology	0	%	3	10
	Tarmacking of roads		No. of kilometers of roads tarmacked	0	KM	3	10
	Upgrade and replacement of County Machinery		County road machinery upgraded and replaced	0	%	2	
Public Works	Project design, documentation construction supervision and contract administration of government and public buildings	Modern and sound government infrastructure	Percentage of design and documentation requests from Client Departments processed	2023-2032	387/411 No. (94%) requests from Client Departments processed		100%
			Amount of office space provided for the County Executive	2023-2027	≈1200 m <sup>2</sup>	≈8400 m <sup>2</sup>	
			Number of residences provided for the County leadership	2023-2032	1 No.		3 No.

			Amount of office space provided for the Department of Public Works, Roads, Transport, Housing & Energy	2023-2032	≈300m <sup>2</sup>		≈2100 m <sup>2</sup>
	Inventory of government assets	Effective management of County assets	<ul style="list-style-type: none"> <li>Asset register</li> <li>Ownership records and documentation</li> <li>Reports</li> </ul>	2023-2032			
	Provision of access in areas with difficult terrain	Improved access in areas with difficult terrain	Number of footbridges constructed	2023-2032	As per budgetary		
Energy Development	Provision of transformers	Increased electricity access and connectivity	Number of transformers procured	2023	29	54	79
	Clean cooking solutions in county learning institutions (biogas units)	Enhanced use of alternative energy sources	No. of biogas units constructed in learning institutions	2023	0	12	100
	Training and capacity building on renewable energy technologies	Increased awareness and proficiency on renewable energy technologies	Number of trainees trained on renewable energy technologies	2023	0	480	1000



	Solarization of floodlights	Percentage reduction in electric bills	No. of solar flood lights solarised	2023	0	56	112
	Development of the County Energy Plan (CEP)	Enhanced guidelines on all matters related to energy	No. of formulated plans/policies	2023	0	1	1
	Development of a county energy map	Mapping of all county energy resources		2023	0	1	1
	Development of an Integrated National Energy Plan (INEP)	Enhanced guidelines on all matters related to energy		2023	0	0	1
	Community policy to safeguard lighting infrastructure in the county	Significant reduction in vandalism		2023	0	0	1
	Routine maintenance of county lighting	Increase in number of operational floodlights	No. Of floodlights maintained	2023	109	295	548
	Installation of solar street lights and floodlights	Percentage reduction in electricity and	No. of solar flood lights installed	2023	3	125	253

	for sustainability	maintenance costs					
	Provision of transformers	Increased electricity access and connectivity	Number of transformers procured	2023	29	54	79
	Clean cooking solutions in county learning institutions (biogas units)	Enhanced use of alternative energy sources	No. of biogas units constructed in learning institutions	2023	0	12	100
Emergency Response and Preparedness	Timely, efficient and effective disaster mitigation and response	Timely, efficient and effective disaster mitigation and response	Reduce average response time to respond to emergencies	2023	****	80%	100%
			Fire stations and Fire hydrants	2023		3 fire stations and multiple fire hydrants	5 fire stations situated each sub county
			No of disaster victims assisted	2023		25	50
			Number of wards where residents have been trained	2023		10	25
			Number of legislations enacted	2023		5	10
			An operational command centre	2023		50%	100%

<b>Housing Development</b>	Affordable housing	Affordable housing master plan	No. of affordable Housing Master plans	2023	0	50%	100%
			No. of offsite infrastructure developed	2023	0		
			No. of informal settlements upgrading projects lobbied e.g. public toilets, storm water drainage, lighting, walkways, solid waste management	2023	0		
	Housing units for County Es- sential Services staff	Staff Houses	No. of staff houses constructed	2023	0	150	300
	Rehabilitation/ redevelopment of existing County houses	Rehabilitated County houses	No. of County staff houses and buildings renovated/ reconstructed	2023	200	100	200
	Legal and regulatory framework	Housing database	No. of housing survey reports and inventory	2023	0	100%	
		County Housing policy	A County Housing Policy	2023	0	100%	
Innovative Building technology	ABT Centre	No. of training fora on ABT	2023				
<b>Lands,physical planning and urban development</b>							
Programme	Sub-Programme	Outcome	Key Performance Indicators	Baseline	Targets	Five Year Target( s)	Ten Year Target( s)
				Year	Value		
		Controlled	No of physical and				

Physical planning	Physical and land use development plans	and sustainable development	land use development plan prepared	2023	5	25	50	
			No of Physical and land use plans reviewed including CSP	2023	0	10	20	
			No of urban centers classified into various categories and conferment of status in line with UACA	2023	0	50	100	
			No of street and buildings address systems developed in urban areas	2023	0	20	40	
	Quality and standards control		No of land use policies formulated	2023	0	2	4	
			Proportion of building plans approved	2023	70%	100%	100%	
			Proportion of Building inspected for compliance	2023	70%	100%	100%	
			Number of resolved development control disputes	2023	0	On need basis	On need basis	
	Survey and mapping	Survey and mapping	Effective governance, sustainable development, and the responsible use of natural	Proportion of survey requests for public land honored	2023	80%	100%	100%
				No of survey policies developed	2023	0	2	4
No of squatter villages surveyed				2023	23	3	7	

		resources	No of towns and urban areas Surveyed	2023	4	15	30
			% of requests honored on boundary reestablishment	2023	100%	100%	100%
			No of topographical surveys of towns done	2023	Was done	15	30
			No of survey equipment procured	2023	3	2	4
			No of Unmanned Aerial Vehicle (Drone) procured.	2023	0	1	2
	Geographical information system	Controlled and sustainable development	% of Development and Operationalization of Geospatial Information system lab	2023	5%	45%	100%
<b>Urban development</b>	Urban infrastructure development	Improved livelihoods in urban areas	No of Kms of drainage systems constructed	2023	5	10	20
			No of Kms of urban road upgraded(grading and gravel)	2023	4	10	20
			No of transportation plans prepared	2023	0	1	1
			No of Sq. meters of Public spaces/ green parks developed	2023	0	2500	5000
			No of trees planted	2023	0	500	1000

			including in riparian areas				
			No of sanitation facilities constructed.	2023	3	2	5
			No of sq. meters of walkways constructed	2023	0	10,000sq meters	20,000sq meters
			No of urban development policies developed	2023	0	2	3
			No of street furniture developed	2023	0	2	5
			No of bus stands/taxi stands developed	2023	0	7,000 sq meters	15,000 sq meters
			No of sq. meters of parking lots constructed	2023	0	7,000 sq meters	15,000 sq meters
Land administration and management	Land governance and management	Improved security of land tenure	No. of public utilities, Urban areas and colonial villages titled	2023	21	50	100
			No. of land disputes on allotted land in urban areas resolved	2023	0	3 sub-counties	5 sub-counties
			No. of land clinics conducted	2023	0	25	50
		Enhanced security for public land	No. of complete public land registers prepared	2023	0	1	1
			Extent of implementation of the IGTRC and CALC Report on the transfer of land assets from	2023	0%	50%	100%

			the defunct local authorities and the national government				
		Efficiency and effectiveness on land administration and management	Extent of Digitalization of land-related processes	2023	0	50%	100%
			No of policies, legal and institutional frameworks prepared	2023	0	2	4
		Revenue enhancement	No of valuation rolls prepared	2023	0	1	1
<b>Ol'kalou municipal services</b>	Municipal planning and development	Improved livelihood for residents in the municipality	No of Municipal integrated development plans prepared	<b>2023</b>	<b>1</b>	<b>1</b>	<b>1</b>
			No of municipal policies and by-laws	<b>2023</b>	<b>0</b>	<b>2</b>	<b>4</b>
	Urban infrastructure development and other municipal services		Well maintained basic physical infrastructure including ;roads, storm drainage system, walkways, floodlights, slaughterhouses markets, and streetlights	<b>2023</b>	<b>continuous</b>	<b>continuous</b>	<b>continuous</b>
			Construction and Establishment of municipal offices	<b>2023</b>	<b>0</b>	<b>50%</b>	<b>100%</b>
		No of Kms of all-weather road	<b>2023</b>	<b>3</b>	<b>10</b>	<b>20</b>	

			rehabilitated( graded and gravelled)				
			Kms of drainage systems constructed	2023	3	30	60
			No of sq. meters of walkways constructed	2023	6600sq meters	37,500 sq meters	75,000 sq meters
			No of sq. meters parking lots constructed	2023	2,000	15,000 sq meters	30,000 sq meters
			No of sq. meters of bus stands/taxi stands constructed	2023	1,500 sq meters	7,500sq meters	15,000 sq meters
			No of floodlights installed	2023	0	75	150
			No of streetlights installed	2023	120	387	775
			No of complete markets and in use	2023	4	2	5
			No of complete slaughter houses and in use	2023	1	1	1
			No of complete cottage industries and in use	2023	1	1	2
			No of dumpsite fences constructed	2023	0	1	1
			No of complete waste recycling plants and in use	2023	0	1	1
			Construction of sanitation facilities	2023	2	2	5
			No of trees planted including in riparian areas	2023	100	500	1000
			No of sq. meters of area beautified (ground levelling,	2023	0	7,500	15,000



			grass planting, flower gardens)				
			No of complete social halls and in use	2023	2	1	3
			No of complete social studios and in use	2023	0	1	1
			No of complete fire stations and in use	2023	0	1	1
			No of fire engines procured	2023	0	1	1
<b>Engineer municipal services</b>	Municipal planning and development	Improved livelihood for residents in the municipality	No of Municipal integrated development plans prepared	2023	0	1	1
			No of integrated strategic urban development plans prepared	2023	0	1	1
			No of municipal policies and by-laws	2023	0	2	4
	Urban infrastructure development and other municipal services		Well maintained basic physical infrastructure including ;roads, storm drainage system,walkways,floodlights, slaughterhouses markets, and streetlights	2023	continuos	continuos	continuos
			Construction and Establishment of municipal offices	2023	0	50%	100%
			No of Kms of all-weather road rehabilitated( graded and gravelled)	2023	3	10	20
			Kms of drainage	2023	3	30	60

			systems constructed				
			No of sq. meters of walkways constructed	2023	2,500sq meters	37,500 sq meters	75,000 sq meters
			No of sq. meters parking lots constructed	2023	1,000	15,000 sq meters	30,000 sq meters
			No of sq. meters of bus stands/taxi stands constructed	2023	800sq meters	7,500sq meters	15,000 sq meters
			No of floodlights installed	2023	0	75	150
			No of streetlights installed	2023	100	387	775
			No of complete markets and in use	2023	4	2	5
			No of complete slaughter houses and in use	2023	3	1	3
			No of complete cottage industries and in use	2023	0	1	1
			No of dumpsite fences constructed	2023	0	1	1
			Construction of sanitation facilities	2023	2	2	5
			No of trees planted including in riparian areas	2023	100	500	1000
			No of sq. meters of area beautified (ground levelling, grass planting, flower gardens)	2023	0	7,500	15,000
			No of complete social halls and in use	2023	2	1	3
			No of complete social studios and in use	2023	0	1	1

			No of complete fire stations and in use	2023	0	1	1
			No of fire engines procured	2023	0	1	1
<b>Mairo-Inya municipal services</b>	Municipal planning and development	Improved livelihood for residents in the municipality	No of Municipal integrated development plans prepared	2023	0	1	1
			No of integrated strategic urban development plans prepared	2023	0	1	1
			No of municipal policies and by-laws	2023	0	2	4
	Urban infrastructure development and other municipal services		Well maintained basic physical infrastructure including ;roads, storm drainage system,walkways,floodlights, slaughterhouses markets, and streetlights	2023	continuous	continuous	continuous
			Construction and Establishment of municipal offices	2023	0	50%	100%
			No of Kms of all-weather road rehabilitated( graded and gravelled)	2023	3	10	20
			Kms of drainage systems constructed	2023	1	30	60
			No of sq. meters of walkways constructed	2023	1000sq meters	37,500 sq meters	75,000 sq meters
			No of sq meters	2023	1,000	15,000	30,000

		parking lots constructed			<b>sq meters</b>	<b>sq meters</b>
		No of sq. meters of bus stands/taxi stands constructed	<b>2023</b>	<b>700sq meters</b>	<b>7,500sq meters</b>	<b>15,000 sq meters</b>
		No of floodlights installed	<b>2023</b>	<b>0</b>	<b>75</b>	<b>150</b>
		No of streetlights installed	<b>2023</b>	<b>100</b>	<b>387</b>	<b>775</b>
		No of complete markets and in use	<b>2023</b>	<b>3</b>	<b>2</b>	<b>5</b>
		No of complete slaughter houses and in use	<b>2023</b>	<b>3</b>	<b>1</b>	<b>3</b>
		No of complete cottage industries and in use	<b>2023</b>	<b>0</b>	<b>1</b>	<b>1</b>
		No of dumpsite acquired and fences constructed	<b>2023</b>	<b>0</b>	<b>1</b>	<b>1</b>
		Construction of sanitation facilities	<b>2023</b>	<b>2</b>	<b>2</b>	<b>5</b>
		No of trees planted including in riparian areas	<b>2023</b>	<b>0</b>	<b>500</b>	<b>1000</b>
		No of sq. meters of area beautified (ground levelling, grass planting, flower gardens)	<b>2023</b>	<b>0</b>	<b>7,500</b>	<b>15,000</b>
		No of complete social halls and in use	<b>2023</b>	<b>0</b>	<b>1</b>	<b>3</b>
		No of complete social studios and in use	<b>2023</b>	<b>0</b>	<b>1</b>	<b>1</b>
		No of complete fire stations and in use	<b>2023</b>	<b>0</b>	<b>1</b>	<b>1</b>
		No of fire engines procured	<b>2023</b>	<b>0</b>	<b>1</b>	<b>1</b>

Table 0-1: Monitoring and Evaluation Matrix

ZERO DRAFT - For comments