

REPUBLIC OF KENYA



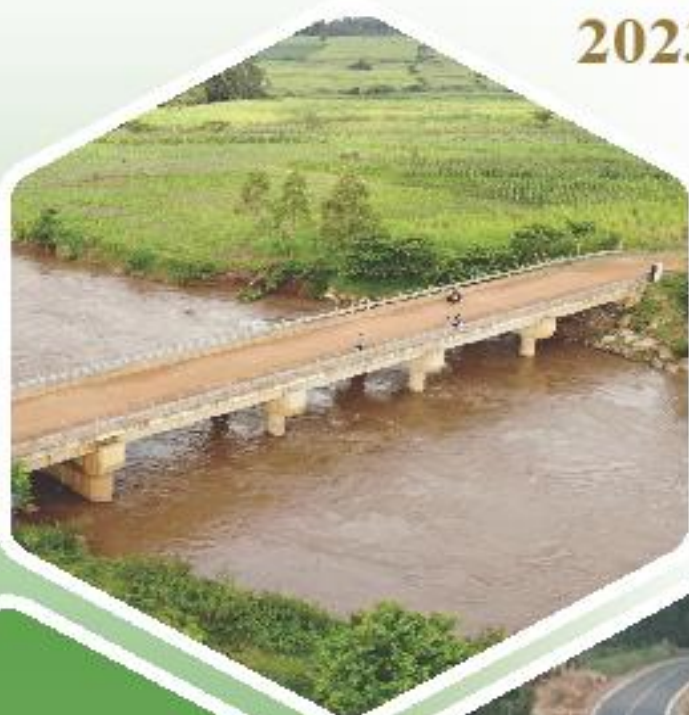
REPUBLIC OF KENYA



COUNTY GOVERNMENT OF KAKAMEGA

**COUNTY GOVERNMENT OF KAKAMEGA**

**SECTOR PLAN FOR  
ROADS, PUBLIC WORKS  
AND ENERGY  
2023-2032**



**Deploying world class infrastrucutre**



Prepared by:

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## **Vision and Mission Statements**

### **Vision**

A world class provider of modern infrastructure.

### **Mission**

To provide efficient, affordable and reliable Infrastructure, Public works and Energy for sustainable Economic growth and development through construction, modernization, rehabilitation and effective Management of all infrastructure facilities

## **STATEMENT FROM THE COUNTY EXECUTIVE COMMITTEE MEMBER OF FINANCE, ECONOMIC PLANNING AND ICT.**

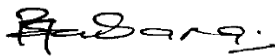
The Kenyan Government adopted Kenya vision 2030 as the long term development blue print in 2008 which is being implemented through a Five year Medium Term Plans (MTPs). With the inception of the two tier governments under the constitution of Kenya 2010, the development framework for the county government required the implementation of the projects and programmes through the County Integrated Development Plans (CIDPs) implemented through the Annual Development Plans (ADPs). The County Government of Kakamega has so far implemented the First and Second generation County Integrated Development Plans with the Third generation being implemented between 2023-2027. Equally the County Government Act, 2012 Section 109 requires the development of a ten year County Sectoral Plan as component part of the County Integrated Development Plan which shall be revised every five years but updated annually. The County Government developed Ten Sector plans by the established Ten Sector Working Groups which provide the background information for the third generation CIDP.

The Sector Plans provide in greater detail the outline of specific plans to be implemented in each sector during the 2023-2032 Plan period with provision for revision every Five years as provided by Section 109 of the County Government Act, 2012. The Sector Plans have been prepared through a participatory and inclusive process which involved representatives from both the National as well as the County Government Departments, Private Sector, NGOs, Civil Society Organizations, Faith Based Organizations, Academia and Research Organizations, Professional Organizations as well as the Organizations representing Women, Youth and Differently Abled Persons among other stakeholders. All the sector priorities have incorporated views from the Community areas, Ward, Sub-County and County forums which captured the views and priorities of the residents of Kakamega in different levels. The Sector Plans have also taken into consideration the broad priorities outlined in the National and County policies including the Governors Manifesto.

The Third generation CIDP, the Spatial Plans, Departmental and Agencies Strategic Plans 2023-2027 as well as future plans will be aligned to the Sector Plans. In addition, the implementation of the plans will be linked to the Result Based Management Framework through the Performance Contract, Staff Performance Appraisal System and other performance management tools for effective service delivery. To ensure tracking of progress, my

Department will put in place a robust Monitoring, Evaluation and Reporting Framework constituting the County Integrated Monitoring and Evaluation System (CIMES) and the electronic Project Monitoring Information System (e-CIPMIS). These will be fully integrated in the County Government Financial System that will boost public investment and confidence.

Finally, I take this opportunity to sincerely thank H. E the Governor and Deputy Governor for their visionary leadership, guidance and direction that enabled this process to be undertaken. I also appreciate the County staff who formed part of the Ten Sector Working Groups for their valuable inputs. In addition, I commend the Department of Economic Planning and Investments staff led by the Chief Officer Planning for the effective co-ordination of the Sector plan preparation process.



Dr. Beatrice A. Sabana, Ph.D.  
**County Executive Committee Member,  
Finance, Economic Planning and ICT.**

## FOREWORD

The County government Act, 2012 section 109 identifies Sector plan as part of the integrated planning documents to be developed to guide the county planning framework for 10 years. It is on this basis that the sector developed this sector plan with the guidance of the National government and County department of planning. The County Government has been implementing its projects and Programmes through successive County Integrated Development Plans (CIDPs) aligned to the Kenya Vision 2030 which is the country's long term development blueprint being implemented through 5 year successive Medium Term Plans (MTPs).

The sector plan identifies key programs and projects to be implemented over the 10 year period and aligned to key development plans; SDGs, Kenya Vision 2030, The Governor's Manifesto and the Big four initiatives. In addition, the planned programs and projects will aim at achieving the realization of the Sustainable Development Goals (SDGs), the aspirations of the Africa Union Agenda 2063 on infrastructure development as well as addressing challenges of climate change. The key programmes identified include; Road infrastructure development and safety, energy reticulation and public works improvement.

This plan is a product of concerted efforts by the Transport and Energy Sector Working group with inputs from Ministries, County Governments Departments, National Government departments and Agencies, development partners, the private sector and other stakeholders. Its implementation including Monitoring, Evaluation and Reporting will be coordinated by the respective county planning unit and disseminated to all stakeholders.

For successful implementation of this plan, we call upon our development partners, the private sector and our citizens to collaborate with the Government to ensure efficient, affordable and reliable Road infrastructure, transport services and energy.

Mr. Kulati Wangia,  
**County Executive Committee Member,**  
**COUNTY GOVERNMENT OF KAKAMEGA.**

## PREFACE

Transport and Energy Sector Plan 2023-2032 is a plan solidly founded on the transformational aspirations and desires that the County citizens aspire to have. This plan is a result of a rigorous planning, consultations with the stakeholders and development partners. It is a document that seeks to guarantee accountability, transparency and ensure efficiency and effectiveness in resource allocation and service delivery.

The sector is faced with challenges that affect achievement of the sector goals. To overcome these challenges, we need to become and remain competitive and vibrant focusing on best practices and continue to partner with our communities and other stakeholders to deliver sustainable and prosperous infrastructural development.

The plan outlines strategies to achieve socio-economic transformation in the next ten years. We realize that this will require substantial resource outlay. Luckily, the plan has analyzed the resource envelope over the period and done a gap analysis. This gap will be filled by our development partners and other national government agencies in the sector. The County planning unit shall ensure that adequate resources are allocated to the planned projects and programmes identified under the plan.

The plan will offer us the chance to reach investors both locally and internationally to venture into our rich, wide and vast array of investment opportunities and help us to implement the many flagship projects outlined therein. Implementation of these programmes and projects in the plan will be tracked by the Sector Monitoring and Evaluation Committee in conjunction with the Directorate of Economic Planning. The Committee will carry out annual, mid-term and end-term review of the progress of implementation of planned projects and prepare reports for submission to relevant personnel for action.

It is my sincere hope and desire that this plan will enable the Sector achieve it's set objectives of enabling economic growth and development through deploying a world class infrastructure facilities and services.



Mr. Dan Borter  
**Chief Officer**  
**Economic Planning**





## ACKNOWLEDGEMENT

It is with great honor that I present this sector Plan for the period 2023 – 2032. The plan will guide the Sector's operations to implement its mandate and contribute towards achieving the goals of the development blueprint echoed in Kenya Vision 2030. As the sector of Transport and Energy, we are committed to achieving, quality roads network leading to high level of connectivity and access to affordable clean energy for all and improved public works for sustainable economic growth.

First, I acknowledge the valuable leadership and guidance from The Governor, H.E Wycliffe Ambetsa Oparanya, His guidance and general goodwill enabled the process to be completed in good time. Special thanks goes to the County Executive Committee members for; Financed Economic Planning & ICT, Dr. Beatrice Sabana and Roads Public Works and Energy, Mr. Kulati Wangia for the support, guidance and commitment they offered during the entire process of the development of this sector plan. Secondly sincere gratitude goes to Economic planning department headed by Chief Officer Mr. Dan Borter, the Director Mr. Cyrus Ondari for their continued guidance and direction at every stage of the preparation of the plan.

This sector plan could not have been developed had it not been for the dedication, commitment and self-sacrifices made by the heads of subsectors lead by the competent planning officer Mr. Kelvin Okile, Engineers; Geroge Aseka, Innocent Ombeki, Milly Lumumba, Hillary Shikuba & Innocent Ombeki; Madam Josephine Adhiambo and the stakeholders across the entire county. I appreciate the department of Finance, Economic Planning and ICT for organizing public participation workshops and giving professional guidelines towards generating this document.

I thus look forward towards the implementation of this sector plan, since the sector is an enabler in economic growth and development thus deploying a world class infrastructure facilities and services.

**Joseph Sweta,  
Chief Officer,  
Roads Public Works and Energy.  
County Government of Kakamega**

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## ABBREVIATIONS AND ACRONYMS

|          |   |
|----------|---|
| ARR      | Annual Review Report  |
| ARUD     | Agriculture, Rural and Urban Development                          |
| CAD      | Computer Aided Design   |
| CBEF     | County Budget and Economic Forum                                  |
| CBO      | Common Based organization   |
| CCAK     | Clean Cooking Association of Kenya                                |
| CCTV     | Closed-Circuit Tele Vision  |
| CG       | County Government   |
| CGK      | County Government of Kakamega                                     |
| CIDP     | County Integrated Development Plan                                |
| CIM      | Computer Integrated Manufacturing                                 |
| COVID-19 | Corona Virus Disease 2019   |
| CSOs     | Civil Society Organization  |
| ECDE     | Early Childhood Development and Education                         |
| EFT      | Electronic Funds Transfer   |
| EII      | Energy, Infrastructure and Information Communication & Technology |
| EPPRA    | Energy and Petroleum Regulation Authority                         |
| ERR      | End-term Review Report  |
| FGDs     | Focused Group Discussions   |
| FY       | Financial Year  |
| GAA      | Gaelic Athletic Association                                       |
| GECA     | General Economic and Commercial Affairs                           |
| GHRIS    | The Government Human Resource Information System                  |
| GIS      | Geographical Information System                                   |
| GJLOS    | Governance, Justice, Law and Order Sectors                        |
| IBEC     | Intergovernmental Budget and Economic Council                     |
| ICT      | Information and Communication Technology                          |
| IFMIS    | Integrated Financial Management Information Systems               |
| KeRRA    | Kenya Rural Roads Authority                                       |
| KETRACO  | Kenya Electricity Transmission Company                            |
| KPLC     | Kenya Power and Lighting Company                                  |

|        |  |
|--------|--|
| KRB    | Kenya Roads Board                                      |
| KURA   | Kenya Urban Roads Authority                            |
| L.M    | Lower Medium   |
| LPG    | Liquid Petroleum Gas                                   |
| M & E  | Monitoring and Evaluation                              |
| MDAs   | Ministry Departments and Agencies.                     |
| MTEF   | Medium Term Expenditure Framework                      |
| MTER   | Mid-term Review Report                                 |
| NEMA   | National Environment Management Authority              |
| NGO    | Non-Governmental Organizations                         |
| NPR    | National Population Register                           |
| NTSA   | National Transport and Safety Authority                |
| PAIR   | Public Administration and International Relations      |
| PDPT   | Presidential Digital Talent Programme                  |
| PPPs   | Public-Private Partnerships                            |
| PSIP   | Public Service Internship Programme                    |
| REREC  | Rural Electrification and Renewable Energy Corporation |
| RICS   | Road Inventory and Condition Survey                    |
| RMLF   | Road Maintenance Levy Fund                             |
| SDGs   | Sustainable Development Goals                          |
| SNV    | Stichting Nederlandse vrijwilligers                    |
| SWGs   | Sector Work groups                                     |
| TE     | Transport and Energy                                   |
| U.M    | Upper Medium   |
| UNICEF | United Nations International Children's Emergency Fund |



## GLOSSARY OF COMMONLY USED TERMS

**Activities:** Actions taken through which inputs are utilized to produce outputs.

**Baseline:** A value that shows the initial state of an indicator at the start of a phase/ project/ Programme, against which progress can be assessed or comparisons made.

**Development Issue:** The key constraint/emerging concern in a sector that needs to be addressed or tapped into through various interventions and programmes.

**Emerging Issues:** Recent occurrences/events/phenomena which might impact a sector negatively or positively. They range from environmental, policy, legal, technological, economic, political, social and cultural.

**Flagship/Transformative Projects:** Projects with high impact in terms of employment creation and increasing county competitiveness and revenue generation, among others.

**Green Economy:** An economy that aims at reducing environmental risks and ecological scarcities, and that aims at sustainable development without degrading the environment.

**Inclusivity:** The practice of ensuring all stakeholders are involved at all stages of the plan preparation, implementation, monitoring and evaluation processes.

**Inputs:** The financial, human, material and information resources used to undertake activities to produce outputs.

**Mainstreaming:** Integration of cross cutting actions into various stages of decision making (design, implementation, monitoring and evaluation of development policies and programmes).

**Outcome Indicator:** This is a specific, observable, and measurable characteristic or change that will represent achievement of the outcome. Outcome indicators include quantitative and qualitative measures. Examples: Enrolment rates, transition rates, mortality rates, customer satisfaction levels, etc.

**Outcome:** The intermediate results generated relative to the objective of a Programme or intervention.

**Output:** The immediate tangible or intangible result (products, services etc.) achieved directly

from the implementation of an activity.

**Participatory:** Ensuring engagement of stakeholders in decision making at various stages of the plan preparation, implementation, monitoring and evaluation processes.

**Performance indicator:** A measurable variable that assesses the progress of a particular project/ Programme.

**Programme:** A grouping of related projects and/or services performed by a Ministry, Department or Agencies to achieve a common objective. The Programmes must be mapped to strategic objectives.

**Project:** A set of coordinated activities implemented to meet specific objectives within defined time, cost and performance parameters/deliverables.

**Result:** A measurable change in state expected to be achieved from implementation of an intervention. Results are at three levels: outputs, outcomes and impact.

**Sector Plan:** A framework for identification of development issues, challenges and opportunities in a given sector with the aim of setting policy initiatives and strategies towards achievement of the set goals.

**Sector:** A composition of departments, agencies and organizations that are grouped together according to services and products they provide. They produce or offer similar or related products and services, and share common operating characteristics.

**Sub-sector:** An individual department, agency or organization that provide specific service/product.

**Sustainable Development:** Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

**Synergy:** The benefit that results when two or more sectors work together to achieve set targets, they could not have achieved at individual sector level.

**Target:** A level of result desired to be achieved within a given time frame.

## EXECUTIVE SUMMARY

Kakamega County faces a huge infrastructure gap which constrains both growth and development. It is estimated that the county is likely to improve its per capita growth rate by three (3) percent if there is sustained investment to reduce the infrastructure gap. In the light of the constrained fiscal space mainly due to COVID-19 pandemic and limited own source revenues, this infrastructure gap cannot be fully addressed in the medium term. This calls for prioritization to ensure Sector projects that can create jobs, enhance wealth creation, increase efficiency and make the County nationally competitive are adequately funded within the transport and Energy Sector ceilings. The Sector comprises of three sub-sectors namely: Transport; Energy and Public Works.

Over the ten years the Sector had an approved expenditure of Kshs 16,778,680,125 out of which Kshs. 833,557,821.00 being recurrent and Kshs. 15,945,122,304 being development expenditures. Over the period the sector had an actual expenditure of Kshs 12,664,389,879.00 which represented an average absorption of 76.77%. The allocation to the sector over the period represented 13.3% of the total county allocations.

Notable key outputs resulting from the utilization of the funds include; Upgrading to Bitumen standards, installation of high mast lights in various markets, improving access to the National Grid of 1150 households through supply of 66 transformers in collaboration with Rural Electrification and Renewable Energy Corporation (REREC). The implementation and delivery of the envisioned infrastructure were constrained by the high cost of construction material and resettlement of persons who have encroached on public land causing delays and increasing project costs. Vandalism of infrastructure facilities was also rampant which escalated the cost of maintenance and restoration. In addition, lack of integrated infrastructure master plan resulted in the uncoordinated implementation of the infrastructure projects with some underutilized infrastructures in place. The development resources are also being crowded out by huge pending bills which form the first charge on the allocations to the Sector.

The sector plan is outline in five sections; Chapter one mainly covers over view of the county and background information about the county. Section two of the documents mainly talks about sector situational analysis, policy and legal framework, sector performance and sector development needs. Additionally the section covers cross cutting & merging issues and lastly stakeholder analysis.

Chapter three covers sector development strategies and programmes, outlining the sector objectives, goal, objectives, Mission and Vision. This chapter also covers flagship projects and cross linkages with other sectors.

Fourth section of the plan covers implementation framework, highlighting the institutions and their roles, the coordination framework giving specific sector organogram. Additionally it also highlights how the plan shall be financed, capacity development and lastly risk management.

The last part of the plan covers monitoring, evaluation and reporting, outlining the frequency of reporting and the indicator matrix

From the allocation, the Sector intends to upgrade 3,000Km of gravel roads to Bitumen standards, construct 4,000km of gravel roads, open up 2,000km of new roads and construct bridges and culverts; in addition with collaboration with REREC install more transformers and connect more household to the nation grid. The Sector will also acquire new machines and road construction equipment and repair the existing ones. The sector will complete the all ongoing projects and infrastructure.

To overcome some of the implementation challenges experienced in previous financial years, the Sector will first track the review of the Land value index to provide a comprehensive framework for land valuation and compensation. The sector will also put mechanisms in place for surveillance and deterrence of vandalism of critical infrastructures as well as advocate for the reclassification of the vandalism to a criminal offense from a petty crime. The effective implementation of the public investment guidelines and ensuing regulations will ensure there is objective project identification, conceptualization, appraisal and prioritization within the Sector. Further, the Sector in collaboration with all its stakeholders will develop an integrated infrastructure master plan that will enhance resource pooling and synergies.

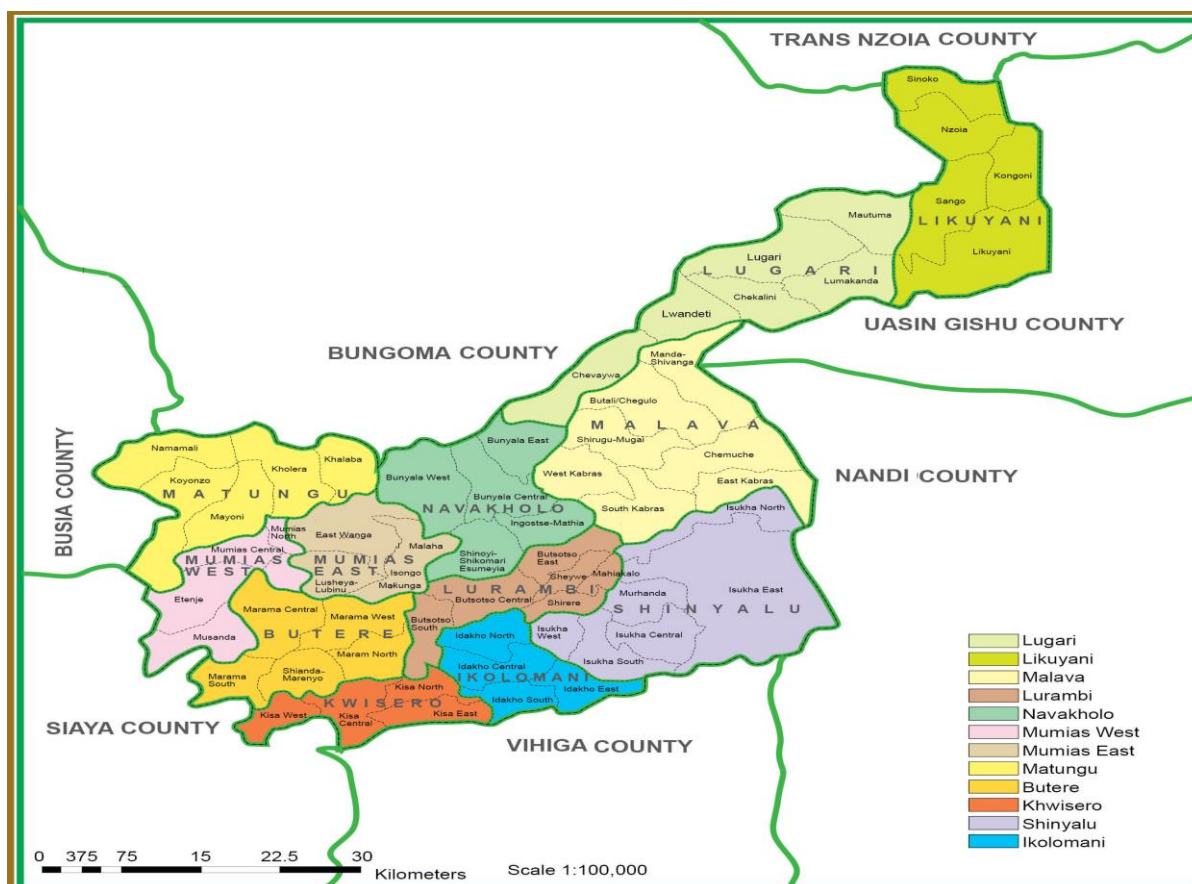
# CHAPTER ONE: INTRODUCTION

## 1.1 Overview of the County

### 1.1.1 Location and size

The Constitution of Kenya, 2010 created a decentralized system of government; the national government and forty-seven (47) county governments, as provided for under Article 6 and specified in the First Schedule. Kakamega County is located in the Western part of Kenya bordering Vihiga County to the South, Siaya County to the West, Bungoma and Trans Nzoia Counties to the North and Nandi and Uasin Gishu Counties to the East. The County covers an area of 3,051.3 Km<sup>2</sup> and is the fourth populous county after Nairobi, Kiambu and Nakuru with the largest rural population. Map 1 below shows the County administrative units and their boundaries.

**Map 1:** Map of Kakamega County Showing the Administrative Units



**Source:** Kakamega County Administrative Boundaries Committee, 2017

### 1.1.2 Administrative units

The County administrative unit comprises of 12 Sub-counties, 60 wards, 187 Village Units and 400 Community Areas. This information is provided in Table 1.

**Table 1:** Administrative units in the County

| S/No. | Sub-county   | No. of Wards | No. of Village Units | No. of Community Areas |
|-------|--------------|--------------|----------------------|------------------------|
| 1.    | Likuyani     | 5            | 14                   | 31                     |
| 2.    | Lugari       | 6            | 20                   | 43                     |
| 3.    | Malava       | 7            | 23                   | 49                     |
| 4.    | Navakholo    | 5            | 14                   | 32                     |
| 5.    | Lurambi      | 6            | 17                   | 35                     |
| 6.    | Ikolomani    | 4            | 12                   | 26                     |
| 7.    | Shinyalu     | 6            | 19                   | 38                     |
| 8.    | Khwisero     | 4            | 11                   | 25                     |
| 9.    | Butere       | 5            | 17                   | 38                     |
| 10.   | Mumias West  | 4            | 13                   | 26                     |
| 11.   | Mumias East  | 3            | 11                   | 23                     |
| 12.   | Matungu      | 5            | 16                   | 34                     |
|       | <b>Total</b> | <b>60</b>    | <b>187</b>           | <b>400</b>             |

**Source:** Kakamega County Integrated Development Plan, 2018-2022

### 1.1.3 Physiographic and Natural Conditions

The county altitude ranges from 1240 metres above sea level. The southern part of the county is hilly and is made up of rugged granites rising in places to 1950 metres above sea level. The Nandi Escarpment forms a prominent feature on the county's eastern border, with its main scarp rising from the general elevation of 1700 metres to 2000 metres. There are also several hills in the county as such Misango, Imanga, Eregi, Butieri, Sikhokhochole, Mawe Tatu, Lirhanda, Kiming`ini among others. There are several rivers in the county namely; Nzoia, Yala, Lusumu, Isiukhu, Sasala, Viratsi, Nambilima, Kipkaren, Kamehero, Lukusitsi and Sivilie.

There are two main ecological zones in the county namely; the Upper Medium (UM) and the Lower Medium (LM). The Upper Medium covers the Central and Northern parts of the county such as Ikolomani, Lurambi, Malava, Navakholo and Shinyalu that practice intense maize, tea, beans and horticultural production mainly on small-scale; and Lugari and Likuyani where maize and dairy farming is done on large scale. The second ecological zone, the Lower Medium (LM), covers Mumias West and Matungu. In this zone, the main economic activity is sugarcane

production with some farmers practicing maize, sweet potatoes, tea, ground nuts and cassava production.

The annual county rainfall ranges from 1280.1mm to 2214.1mm per year. The rainfall pattern is evenly distributed all year round with March and October receiving heavy rains while on December and February receives light rains. The temperatures ranges from 18°C to 29°C. The temperatures in January and February are relatively high compared to other months except for July and August which have relatively cold spells. The county has an average humidity of 67 percent.

#### **1.1.4 Demographic Features**

There are two main ecological zones in the county namely; the Upper Medium (UM) and the Lower Medium (LM). The Upper Medium covers the Central and Northern parts of the county such as Ikolomani, Lurambi, Malava, Navakholo and Shinyalu that practise intensive maize, tea, beans and horticultural production mainly on small scale; and Lugari and Likuyani where large scale farming is practised. The second ecological zone, the Lower Medium (LM), covers a major portion of the southern part of the county which includes Butere, Khwisero, Mumias East, Mumias West and Matungu. In this zone, the main economic activity is sugarcane production with some farmers practising maize, sweet potatoes, tea, ground nuts and cassava production.

##### **1.1.4.1 Size and Composition**

Knowledge of the population and its distinct features is an important aspect while planning. Based on 2019 Population and Housing Census, the County population was 1,867,579 consisting of 897,133 males and 970,406 females with a population distribution of 48.04% and 51.96% for male and female respectively. The county population is growing at a rate of 1.1% and is projected to increase to 2,107,751 by the end of the year 2032. The population below 4 years represents 12.1% of the total population, indicating the need to provide child care facilities, healthcare, investment in ECDE and provision of other social amenities. Another important statistic is the school going population aged between 5 and 19 years who make up 42.81% of the population.

The youthful population aged between 15 and 34 years comprises 33.16% of the total population. The rapid increase of the youth population calls for quick government intervention

in terms of job creation to minimize unemployment, increased establishment of training institutions such as youth polytechnics to equip the youth with necessary life skills and help reduce dependency ratio and vices such as drug use, alcoholism and crime. The labor force, aged between 15 and 64 years comprises of 53.28% of the total population. The high labor force implies that the government should put appropriate policies in place to create employment and encourage setting up of private enterprises to absorb this labor force.

The elderly population above 65 years comprises of 4.5%. There is need to collaborate with the national government to enhance the social protection initiatives through construction of a home for the vulnerable elderly and enhance the shelter improvement Programme among others. The analysis of County population by age group is presented in Table 2.

**Table 2: County Population by Age Group**

| Age Group    | 2019 Census    |                |                  | 2022           |                  |                  | 2027           |                  |                  | 2032             |                  |                  |
|--------------|----------------|----------------|------------------|----------------|------------------|------------------|----------------|------------------|------------------|------------------|------------------|------------------|
|              | Male           | Female         | Total            | Male           | Female           | Total            | Male           | Female           | Total            | Male             | Female           | Total            |
| <b>Total</b> | <b>897,133</b> | <b>970,406</b> | <b>1,867,539</b> | <b>927,232</b> | <b>1,002,964</b> | <b>1,930,196</b> | <b>968,941</b> | <b>1,048,080</b> | <b>2,017,021</b> | <b>1,012,526</b> | <b>1,095,225</b> | <b>2,107,751</b> |
| 0 - 4        | 112,360        | 113,559        | 225,919          | 116,130        | 117,369          | 233,499          | 121,354        | 122,649          | 244,002          | 126,813          | 128,166          | 254,978          |
| 05-09        | 134,230        | 134,555        | 268,785          | 138,733        | 139,069          | 277,803          | 144,974        | 145,325          | 290,299          | 151,495          | 151,862          | 303,358          |
| 10-14        | 144,975        | 147,002        | 291,977          | 149,839        | 151,934          | 301,773          | 156,579        | 158,768          | 315,347          | 163,622          | 165,910          | 329,533          |
| 15-19        | 120,265        | 118,406        | 238,671          | 124,300        | 122,379          | 246,679          | 129,891        | 127,884          | 257,775          | 135,734          | 133,636          | 269,371          |
| 20-24        | 70,440         | 79,144         | 149,584          | 72,803         | 81,799           | 154,603          | 76,078         | 85,479           | 161,557          | 79,500           | 89,324           | 168,825          |
| 25-29        | 50,363         | 63,950         | 114,313          | 52,053         | 66,096           | 118,148          | 54,394         | 69,069           | 123,463          | 56,841           | 72,176           | 129,016          |
| 30-34        | 50,695         | 66,096         | 116,791          | 52,396         | 68,314           | 120,709          | 54,753         | 71,387           | 126,139          | 57,216           | 74,598           | 131,813          |
| 35-39        | 41,408         | 43,063         | 84,471           | 42,797         | 44,508           | 87,305           | 44,722         | 46,510           | 91,232           | 46,734           | 48,602           | 95,336           |
| 40-44        | 38,070         | 42,651         | 80,721           | 39,347         | 44,082           | 83,429           | 41,117         | 46,065           | 87,182           | 42,966           | 48,137           | 91,103           |
| 45-49        | 30,545         | 33,453         | 63,998           | 31,570         | 34,575           | 66,145           | 32,990         | 36,130           | 69,120           | 34,474           | 37,755           | 72,230           |
| 50-54        | 24,415         | 29,797         | 54,212           | 25,234         | 30,797           | 56,031           | 26,369         | 32,182           | 58,551           | 27,555           | 33,630           | 61,185           |
| 55-59        | 22,399         | 27,417         | 49,816           | 23,150         | 28,337           | 51,487           | 24,191         | 29,612           | 53,803           | 25,280           | 30,944           | 56,223           |
| 60-64        | 19,330         | 23,048         | 42,378           | 19,979         | 23,821           | 43,800           | 20,878         | 24,893           | 45,770           | 21,817           | 26,012           | 47,829           |
| 65-69        | 14,387         | 17,267         | 31,654           | 14,870         | 17,846           | 32,716           | 15,539         | 18,649           | 34,188           | 16,238           | 19,488           | 35,725           |
| 70-74        | 10,503         | 12,321         | 22,824           | 10,855         | 12,734           | 23,590           | 11,343         | 13,307           | 24,651           | 11,854           | 13,905           | 25,760           |
| 75-79        | 5,649          | 8,419          | 14,068           | 5,839          | 8,701            | 14,540           | 6,102          | 9,092            | 15,194           | 6,376            | 9,501            | 15,878           |
| 80-84        | 3,879          | 5,278          | 9,157            | 4,009          | 5,455            | 9,464            | 4,189          | 5,700            | 9,890            | 4,378            | 5,957            | 10,335           |
| 85-89        | 2,105          | 3,276          | 5,381            | 2,176          | 3,386            | 5,562            | 2,274          | 3,538            | 5,812            | 2,376            | 3,697            | 6,074            |
| 90-94        | 746            | 979            | 1,725            | 771            | 1,012            | 1,783            | 806            | 1,058            | 1,863            | 842              | 1,105            | 1,947            |
| 95-99        | 306            | 554            | 860              | 316            | 573              | 889              | 330            | 599              | 929              | 345              | 626              | 971              |
| 100+         | 47             | 156            | 203              | 49             | 161              | 210              | 51             | 168              | 219              | 54               | 176              | 229              |

**Source:** KNBS National Population and Housing Census Report, 2019



### 1.1.4.2 Population Density and Distribution

The County population density is 612 persons per square kilometer, which is projected to increase to 691 persons per square kilometer by 2032. The population distribution per administrative unit is indicated in Table 3. From the table, Lurambi Sub-county is the most densely populated with a population density of 1,164 people per square kilometer. This high population density can be attributed to urbanization and several higher learning institutions within Lurambi which hosts Kakamega town.

On the other hand, Shinyalu Sub-county has the lowest population density of 376 people per square kilometer. The low population density can be attributed to the presence of Kakamega Forest that covers a large part of the Sub-county. Population density is an important parameter while planning for services to be provided in different localities. The high population density in Lurambi and other urban areas like Mumias, Malava, Butere, Lumakanda, Moi's Bridge and Matunda has led to sub-division of parcels of land into uneconomical sizes that have reduced agricultural productivity, leading to high levels of unemployment and pressure on the available infrastructural and social facilities.

**Table 3:** Population Distribution by Sub-County

| S/No. | Sub-County   | (Km <sup>2</sup> ) | 2019 (Census)    |                                       |
|-------|--------------|--------------------|------------------|---------------------------------------|
|       |              |                    | Population       | Population Density (Km <sup>2</sup> ) |
| 1.    | Lurambi      | 161.7              | 188,206          | 1,164                                 |
| 2.    | Navakholo    | 258                | 153,970          | 597                                   |
| 3.    | Ikolomani    | 143.6              | 111,743          | 778                                   |
| 4.    | Shinyalu     | 445.5              | 167,637          | 376                                   |
| 5.    | Malava       | 427.2              | 238,325          | 558                                   |
| 6.    | Butere       | 210.4              | 154,097          | 732                                   |
| 7.    | Khwisero     | 145.6              | 113,473          | 779                                   |
| 8.    | Mumias West  | 165.3              | 115,353          | 698                                   |
| 9.    | Mumias East  | 149.2              | 116,848          | 783                                   |
| 10.   | Matungu      | 275.8              | 166,936          | 605                                   |
| 11.   | Likuyani     | 302                | 152,051          | 503                                   |
| 12.   | Lugari       | 367                | 188,900          | 515                                   |
|       | <b>Total</b> | <b>3,051.30</b>    | <b>1,867,539</b> | <b>612</b>                            |

**Source:** KNBS National Population and Housing Census Report, 2019

## 1.2 Background information

Transport and Energy sector has three sub-sectors namely: Transport; Public works and

Energy. The Sector aims at providing efficient, affordable and reliable infrastructure which are critical for socio-economic transformation as articulated in the Kenya Vision 2030, AU Agenda 63, and the Post Covid19 Recovery Strategy. The specific objective of this report is to analyze the budget performance of the sector for the period 2013-2021 and give an overview of the project and its corresponding financial implications for the period 2022-2032. The report is also intended to guide the allocation of resources in the Medium Term in line with the sector resource requirements.

The key projects being implemented are upgrading to bitumen standards, construction and maintenance of gravel roads, county connectivity and high mast installation. Under County connectivity the county will install more transformers in collaboration with REREC to increase connectivity to the national grid. These projects require huge capital outlay and if little funding trend continues then they will not be completed.

In the implementation of the Vision 2030, the Sector will continue to focus on the following key result areas; strengthening policy, legal and institutional framework, enhancing quality service delivery and improving the quality of infrastructure. The Sector will continue to partner with the private sector through Public-Private Partnerships (PPPs) and other stakeholders to fast-track the implementation of planned projects. In the long run, the Sector will provide sustainable infrastructure facilities which will support the reduction of the cost of doing business leading to increased investments and competitiveness. The Transport and Energy Sector has been faced with the issue of inadequate funding which has resulted in the non-completion of earmarked projects on time, which would have otherwise contributed to the growth of the economy.

The report is organized in five (5) chapters; Chapter one (1) outlines the background of the sector providing the methodology, rationale. Chapter two (2) provides the situational analysis outlining the review of financing gap, performance trends and achievements, sector development issues, emerging issues, stakeholder and analysis, while Chapter three (3) outlines the sector development strategies and program which includes sector vision, mission, goals, development objectives and strategic, programmes and interventions, flagship projects and cross-sectoral linkages for the period 2022-2032 Implementation mechanisms are outlined in Chapter four (4). Chapter five (5) provides summary of monitoring and evaluation framework of the sector.

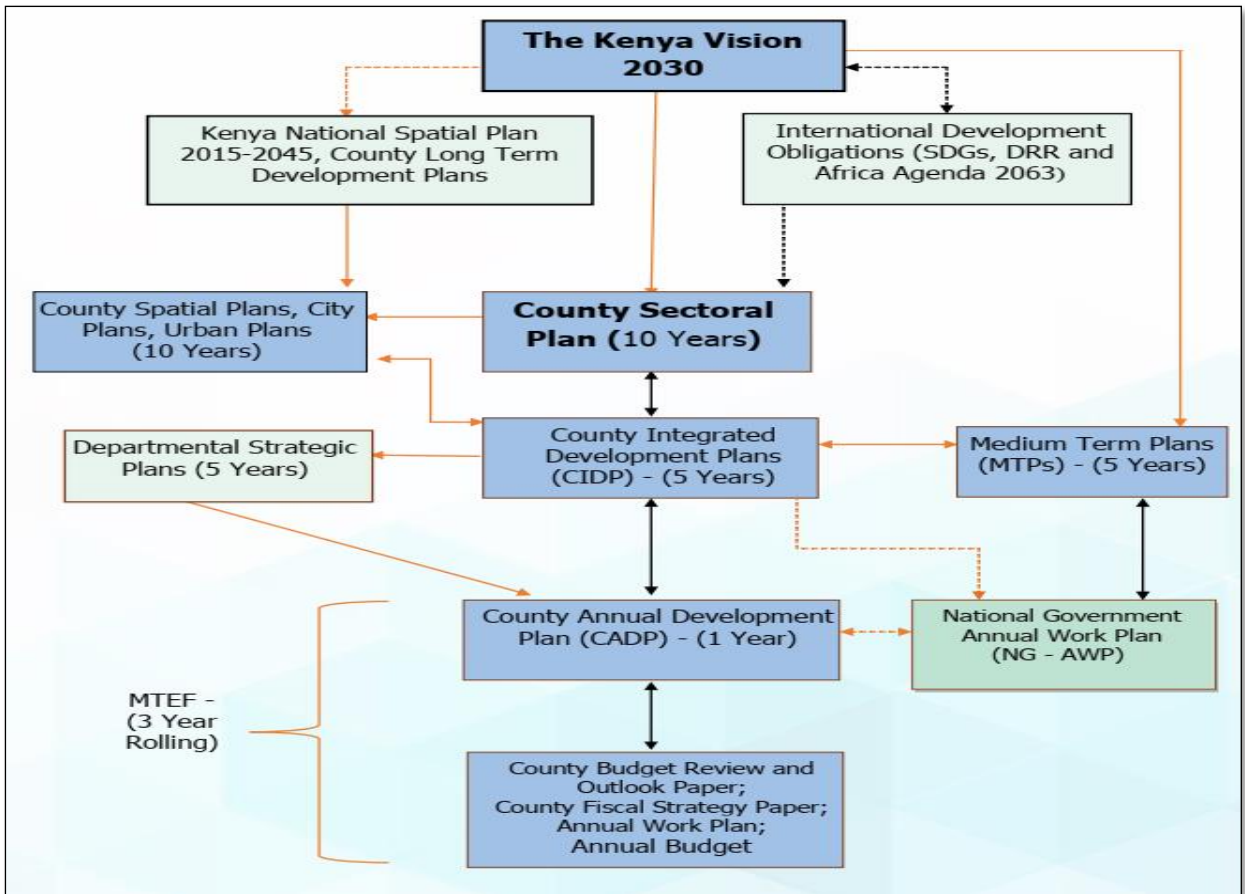
### **1.3 Rationale**

The Constitution of Kenya, 2010 is the basis for the process of devolution in Kenya. To implement devolution and realize its objectives, the National Assembly enacted the County Government Act, 2012 and the Public Finance Management Act, 2012. Part XI of the County Governments Act, 2012 requires County governments to prepare development plans which include County Spatial Plans, Sector Plans, County Integrated Development Plan (CIDP), and Cities and urban areas plans. These plans form the basis for all budgeting and spending in the County. This plan therefore set priorities and define indicators that measure progress in line with its mandate and is developed to align to new emerging issues, the CIDP 2023-2027, Manifesto and the Big four Agenda.

### **1.4 Linkage of the Sector Plan with other Plans**

The Kenya Vision 2030 is the national blueprint that forms the national development agenda that is being implemented through a series of 5-year Medium Term Plans (MTPs) at the National level. At the County level, the Kenya Vision 2030 is implemented through 10-year long-term plans (Sector Plan). The Sector Plan identifies programmes for implementation over the ten-year period which are then presented in the CIDP for a 5-year period and then an Annual Development Plan prepared to implement projects and programmes identified in the CIDP.

Figure 1 provides a diagrammatic presentation of the link between the Sector plan, the CIDP, the ADP, the Budget and other plans.



**Figure 1:** Linkage of the Sector Plan with other Plans

## 1.5 Methodology

This sector plan was developed through a consultative process as provided for in Article 201 of the Constitution of Kenya, 2010, Section 115 of the County Government Act, 2012 and in line with the Kakamega County Public Participation Act, 2015. Consultations were done with all stakeholders and their submissions were compiled, analysed and used in developing this plan.

The preparation of the plan was initiated after training of the County Executive that culminated in preparation of the roadmap. This was followed by selection of sector champions who sensitized the department on the structure and purpose of the plan. The department of Finance and Economic Planning later carried out public participation at the sub-county levels and later at sector stakeholders' level. The draft Sector plan was then prepared by a team comprising of the planning officers and the sector's technical persons at Broad-park Hotel.

A Sector Working Group (SWG) was then established to provide secretariat services and

direction to the whole preparation process. A workshop was held to build consensus on the contents and address any gaps. The SWG consolidated, revised and fine-tuned the information from each session to populate the document better. A validation meeting was held with all the stakeholders and thereafter, the plan was tabled to the Cabinet and later forwarded to the County Assembly for approval.

## **CHAPTER TWO: SITUATION ANALYSIS**

### **2.1 Sector Context Analysis**

This sector comprises of the following sub-sectors: Transport, public works and energy. It is responsible for designs, preparation of bills of quantities, and supervision of construction works which include building and civil engineering works.

The sector is committed to the development and maintenance of infrastructure and buildings within the County Government of Kakamega for economic and social growth.

#### **Transport**

The mandate of the sub-sector is to formulate Transport Policy Management for Rail, Marine Management and Infrastructure Development for; County Roads Development Policy, road construction and Maintenance.

#### **Road network**

According to the Kenya Roads Board (KRB), Road inventory and Condition survey (RICS)-2015 report and the Kakamega county infrastructure status report 2011, the total inventory of roads in the County is at 4,451.3Km. This includes 2,236.17 Km for gravel, 1,308.90 Km for earth surface and 939.32 Km for narrow unpaved roads. The bitumen and gravel standard roads in the County stands at 307.5 Kilometres and 2,792.25 Kilometres respectively.

#### **Rail network**

The county has 35 km of railway line with two railway stations namely: Lugari and Butere. The railway line is currently undergoing renovation to improve its utilization. There is need for collaboration with the Kenya Railways and other stakeholders to fully operationalize the railway station with both cargo and passenger trains to boost the county's economy.

#### **Air transport**

The county has two air strips, one in Kakamega and the other in Mumias. The strategic position of the county being proximity to the Kisumu and Eldoret International airports which are 60 kilometers and 120 Kilometers respectively presents an opportunity for trade. Kakamega air strip is currently being upgraded, this will boost trade and tourism in the County.

## **Public works**

The Public Works sub-sector is mandated to provide policy direction and coordinate all matters related to buildings and other public works. These include: Public Works Policy and Planning, County Building Inspection Services, Registration and Regulation of Contractors, Consultants, Civil Works and Material Suppliers, Standardization and Maintenance of Plant, Equipment and Vehicles.

## **Energy**

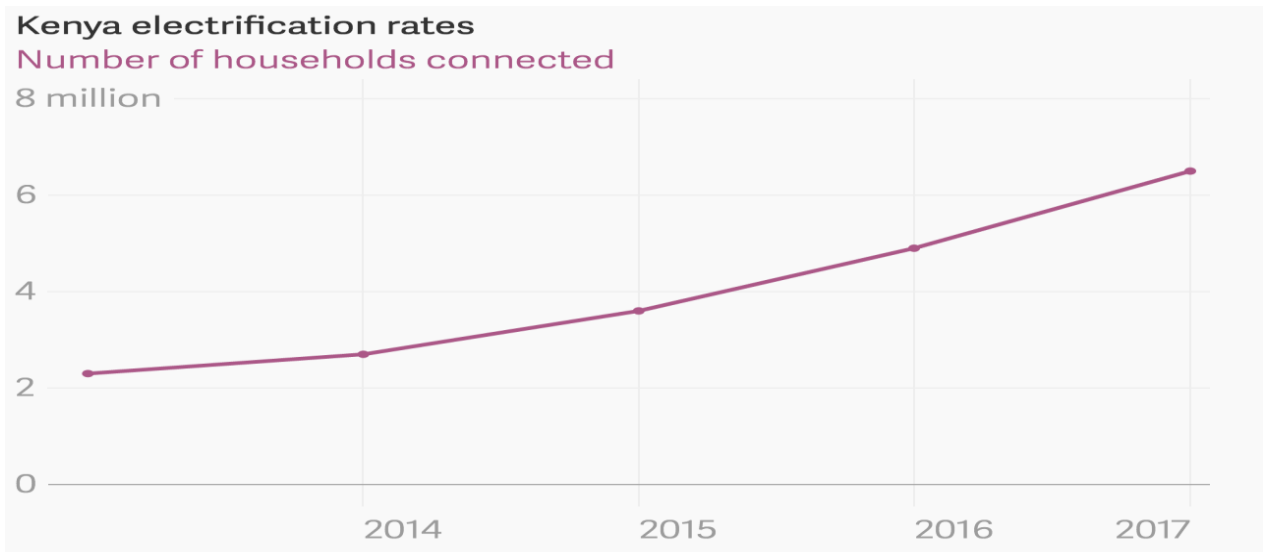
The sub sector is mandated to provide policy direction in Energy Development and Management; Thermal Power Development, Rural Electrification Programme, Energy Regulation, Security and Conservation, Hydropower Development, Geothermal Exploration and Development, Promotion of Renewable Energy.

Wood is the main source of solid fuel for cooking in the county. According to the Kakamega Multiple Indicator Cluster Survey report 2013/14, 79.2 % of the county population use wood as their main source of energy, 1.1 % use liquid petroleum gas (LPG), 0.6 % use biogas, 13.8 % use charcoal and 1.2 % use grass/shrub while cooking as alternative sources of solid fuel.

The Kakamega Statistical Abstract (2015) indicates that a paltry 5.6 % of the county's population use electricity for cooking compared to the country's 22.7 % while a 92.4 % use paraffin for lighting compared to the Country's 69.5 %. In overall, 95.8 % of the household population in the county use solid fuels for cooking against a national figure of 82.5 %.

About 18 percent of the households have electricity (29 % urban and 6 % rural areas). Renewable energy is gaining prominence and is being used by some sectors in their solar powered projects. There is need for the prioritization of electricity reticulation and use of solar energy. This will reduce production costs and improve the livelihoods of the people.

## Map 2: Kenya Electrification Rates



**Table 4:** Number of Households Connected to Electricity

| Year   | 2013 | 2014 | 2015 | 2016 | 2017 |
|--|------|------|------|------|------|
| Number of households connected to electricity (Millions) | 6.5  | 4.9  | 3.6  | 2.7  | 2.3  |

## 2.2 Sector Policy and Legal Framework

The sector operates under strong policy and legal framework mostly customized from the national government Ministry of Transport and relevant agencies. To improve service delivery the sector needs to review its policies and legal framework, some of the existing policies and legal framework under the sector include: Boda boda policy, Cess fees management policy, Roads Act of 2007, Energy Act of 2019 and Traffic Act of 2019.

### Policy Reforms

- Establishment of boda boda management policy
- Review land acquisition framework.
- Establish a framework for supporting private investments in maritime support services; Strengthen compliance for submission through single window platform of genuine, fraud-proof and verifiable local.
- Finalize the Public Works Policy.
- Finalize the National Energy and Petroleum Policy, 2015.



- Enact the Toll funding Policy/establish dedicated road fund (Toll Fund) to finance road expansion.
- Develop National and County Energy Planning Framework.
- Develop the National Lightning Protection Policy.
- Develop the National Construction Policy.

### **Legal Reforms**

- Develop legal framework to protect and manage critical infrastructure.
- Harmonize the Traffic and NTSA Acts for ease of coordination.
- Review of Motor Vehicle Inspection Regulations.
- Enact the Kenya Roads Bill.
- Ratify the Lomé charter on maritime safety and security.
- Develop legal regulatory framework for Kenya Railways.
- Enact the Energy Bill 2017.
- Develop energy regulations for Energy Bill 2015.
- Develop legal regulatory framework for Kenya Railways to separate operations and regulations within the rail subsector.
- Repeal the Architects and Quantity Surveyors Act Cap 525.

### **2.3 Institutional Reforms**

- Establish a transport institute within the existing universities for management course.
- Develop and review standards for public service vehicles and body builders.
- Review the Road Annuity Programme to fast track construction of roads.
- Develop local content capacity for infrastructure development through joint ventures or sub-contracting.
- Develop workable PPP models for infrastructure financing.
- Review institutional framework of KNSL.
- Domestic Regional and International Obligations such as Convention on Nuclear Safety, the COP 21 and the Agenda 2063.

## 2.4 Review of sector Financing

This section discusses the trends on how the sector has been previously allocated resources to finance its programmes for the previous ten (10) years. The sector was majorly funded by the county government through exchequer releases and through the Road Levy Maintenance Fuel Fund (RLMF) being a conditional grant. The sector requires huge capital investment for it to realize impacts across the economy, but due to limited funding there was need to prioritize projects that could create jobs, enhance wealth creation, increase efficiency and make the County nationally competitive. Over the ten years the sector received a total allocation of Kshs. 16,778,680,125 which representing 13.3% of total budget. Out of the total allocation Kshs. 833,557,821.00 being recurrent and Kshs. 15,945,122,304 being development expenditures. The sectors huge budget is in development, with over 80% budget being in development expenditure as shown in Table 5 and 6.

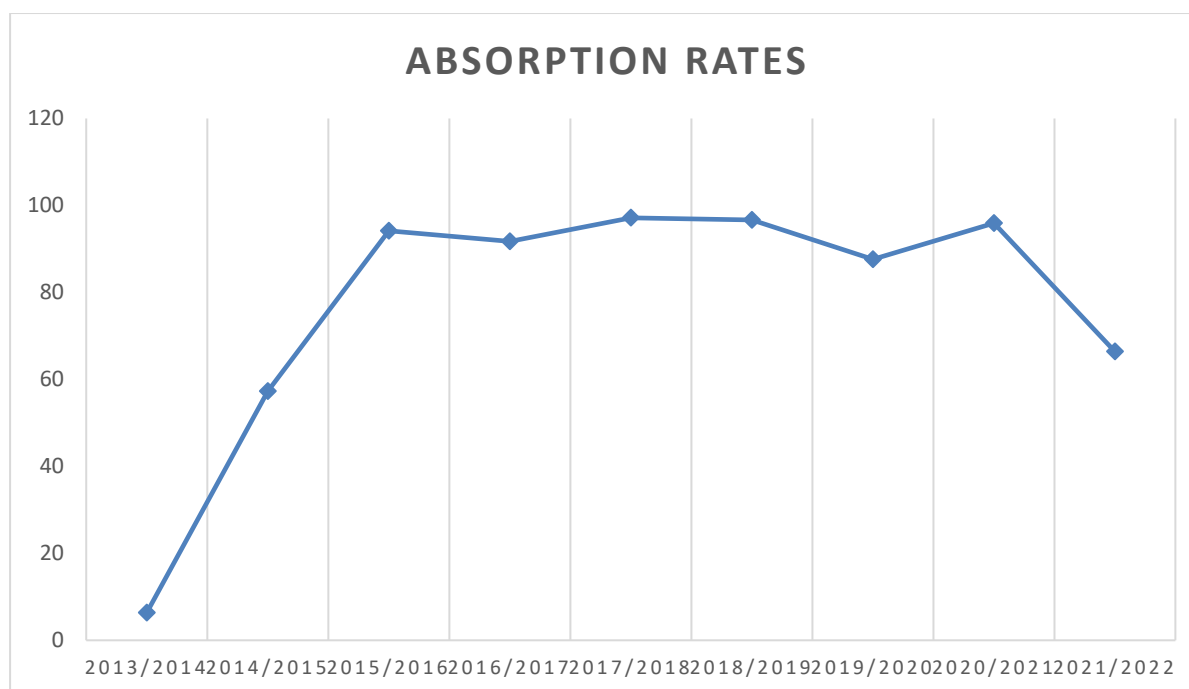
**Table 5:** Source of Sector Budget Financing

| Source of Financing   | 2013/2014     | 2014/2015     | 2015/2016     | 2016/2017     | 2017/2018     | 2018/2019     | 2019/2020     | 2020/2021     | 2021/2022     |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| County Government (equitable share, and own source revenue) | 2,416,881,694 | 1,397,854,711 | 1,927,125,249 | 2,117,823,991 | 1,471,921,213 | 1,716,946,813 | 1,410,827,049 | 1,363,339,480 | 1,670,703,320 |
| National Government (conditional grants) RMLF               | 0             | 0             | 0             | 147,689,748   | 379,552,259   | 280,651,560   | 295,575,655   | 181,787,383   | 0             |
| Total sector Allocation                                     | 2,416,881,694 | 1,397,854,711 | 1,927,125,249 | 2,265,513,739 | 1,851,473,472 | 1,997,598,373 | 1,706,402,704 | 1,545,126,863 | 1,670,703,320 |
| Actual Expenditures   | 153,277,669   | 801,035,527   | 1,815,129,443 | 2,078,127,400 | 1,798,666,578 | 1,930,585,953 | 1,495,237,376 | 1,482,615,926 | 1,109,714,007 |

**Table 6: Analysis of Budget by Sub-sector**

| <b>Sub-sector</b>   | <b>2013/2014</b> | <b>2014/2015</b> | <b>2015/2016</b> | <b>2016/2017</b> | <b>2017/2018</b> | <b>2018/2019</b> | <b>2019/2020</b> | <b>2020/2021</b> | <b>2021/2022</b> |
|---------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Roads               | 2,301,141,804    | 1,220,256,051    | 1,735,689,359    | 2,074,077,849    | 1,094,547,036    | 1,853,870,328    | 1,600,304,250    | 1,433,255,092    | 1,536,105,992    |
| Public works        | 115,739,890      | 177,598,660      | 158,781,801      | 158,781,809      | 603,084,326      | 13,728,045       | 36,098,454       | 11,871,771       | 54,597,328       |
| Energy              | -                |                  | 32,654,089       | 32,654,081       | 153,842,110      | 130,000,000      | 70,000,000       | 100,000,000      | 80,000,000       |
| Total Sector Budget | 2,416,881,694    | 1,397,854,711    | 1,927,125,249    | 2,265,513,739    | 1,851,473,472    | 1,997,598,373    | 1,706,402,704    | 1,545,126,863    | 1,670,703,320    |
| Total County Budget | 7,156,086,781    | 8,532,742,034    | 10,095,720,459   | 11,347,358,859   | 11,640,760,649   | 12,963,808,740   | 12,416,574,234   | 14,018,966,126   | 15,465,211,254   |

**Map 3: Trends in Absorption Rates over the Ten Years**



## 2.5 Sector Performance Trends and Achievements

This chapter presents the performance review of the sector programmes and sub-programmes during the period 2013-2022 with emphasis on achievements, outcomes, key outputs and performance indicators. It also highlight the key achievements of the sector within the last plan period as well as lessons learnt.

Works and Energy implementation of all the planned programmes and projects continued in accordance with the successive work plans and budgetary provision throughout the period under review. The work plans are annual and derived from the governors Manifesto, County integrated development plans, Big Four Agenda and Vison 2030, as outlined under the subsector below.

### 2.5.1 Key achievements

- A total of 133Km of gravel roads were upgraded to bitumen standards and 1.9 Km of bitumen road maintained.
- A total of 2987 Km of gravel roads were constructed and 2746 Km of gravel road maintained.
- A total of 35 bridges and 36 box culverts were constructed across the County.
- A total of 90 high mast floodlights erected in various trading centers across the

County.

- The county in collaboration Rural Electrification and Renewable Energy Corporation (REREC) has installed 66 transformers and connected 1150 households across the county.



**Picture 1:** Lumakanda Junction -Lumakanda Township Road





**Picture 2:** Khaunga Bridge



**Picture 3:** Khayega - Shinyalu Road





**Picture 4:** High mast at Khayega Market



**Picture 5:** Road Equipment

## 2.5.2 Challenges

- High capital investment.
- Inadequate harmonization of annual plan between KeRRA and County government leading to duplication.
- Political interference in road selection, leaving other roads unattended.
- Encroachment on roads reserves.
- Vandalism of road infrastructure.
- Adverse weather leading to damages on road network leading to unplanned costs.
- Inadequate collaboration between government agencies in implementing projects.

## 2.5.3 Lessons learnt

- Stakeholder consultation/engagements and public participation is very important during project planning and implementation.
- Involvement of government administration and security agencies at all levels, is important during planning, implementation and operationalization.
- Contract management, monitoring and supervision should be improved to ensure successful and timely project implementation.
- Optimal institutional capacity is necessary for successful planning, implementation, monitoring and operation of programmes and projects.
- Innovative resource mobilization is important for successfully implementation of transport and energy projects.
- Human capital capacity building should be inbuilt in annual plans.
- Staff retention and development strategy should be developed in order to attract and retain staff to avoid high rate of technical staff turnover.

## 2.6 Sector Development Issues

This section present the development issues and their causes, highlight available opportunities and the possible challenges that hinder achievement of the development objectives concerning each development issue as shown in Table 7.

**Table 7:** Sectoral Development Issues, Causes, Opportunities and Challenges

| Sub-Sector | Development Issues                | Causes                                     | Opportunities  |
|------------|-----------------------------------|--|--|
| Transport  | Poor and inadequate road network. | Overloading especially by the cane trucks. | Collaboration between the County and National government with sugar millers in regulation. |
|            |                                   | Inadequate maintenance.                    | Availability of donor funding or conditional grants to do roads.                           |
|            |                                   | Adverse weather condition                  | Public private partnership in funding  |



| Sub-Sector               | Development Issues  | Causes  | Opportunities  |  |
|--------------------------|---|---|--|--|
|                          |   |   | of road network damaged by adverse weather   |  |
|                          |   | Depletion of road construction material for example murrum.                               | Investment in other technologies in construction of roads.   |  |
|                          |   | High cost of road construction and maintenance.   | Exploitation regional blocs or joint investment between counties on intercounty roads.   |  |
|                          |   | High cost of road construction materials  | High cost of road construction materials   | Availability of alternative construction materials, technics and technologies.           |
|                          |   | Political interference  | Political interference   | Involvement of the political class in public participation, political good will.         |
|                          |   | Poor terrain  | Poor terrain   | Existing advanced technology.  |
|                          |   | Encroachment on roads reserves.   | Encroachment on roads reserves.  | Public participation to create awareness   |
| Inadequate connectivity. | High cost of bridge construction.   | High cost of bridge construction.   | Partnership with other stakeholders in construction.   |  |
| Energy(Electricity)      | Inadequate road construction equipment.                                   | High cost of acquisition and maintenance.   | Availability of PPs.   |  |
|                          | Traffic congestion within municipalities.                                 | Encroachment by traders.  | Already designated trading areas.  |  |
|                          |   | Inadequate designated areas for given business.   | Inadequate designated areas for given business.  | Existing trading areas.  |
|                          |   | Inadequate designated parking areas.  | Inadequate designated parking areas.   | Demarcated parking areas.  |
|                          |   | Inadequate enforcement of the traffic laws.   | Inadequate enforcement of the traffic laws.  | Existing legal framework on traffic enforcement.   |
|                          |   | Corruption.   | Corruption.  | Existing structure on how to fight corruption.   |
|                          | Poor implementation of policy and legal framework in the motorist sector. | Inadequate implementation of legal framework.   | Poor implementation of policy and legal framework in the motorist sector.  | Existence of legal framework.  |
| Energy(Electricity)      | Low access rate to electricity.   | High cost of accessing electricity.   | Availability of alternative sources of energy i.e. Solar, Collaboration with other relevant government agencies like, REREC, County government |  |
|                          |   | Inadequate acquisition of right of way foe power lines.                                   | Partnership with roads department.   |  |
|                          | Unstable and unreliable power supply.                                     | Power supply infrastructure is not robust enough to transmit the required power quantity. | Power supply infrastructure is not robust enough to transmit the required power quantity.  | Availability of donor funding and PPP  |
|                          |   | Vandalism of power supply infrastructure.   | Vandalism of power supply infrastructure.  | Existence security agencies and structures from national government ministry of interior |
| Other forms of energy    | Low adoption of clean energy  | High Initial cost of clean energy.  | Alternatives sources of energy e.g solar, electric cooking   |  |
|                          |   | Lack of awareness on clean  | Existing programmes in learning  |  |

| Sub-Sector | Development Issues | Causes  | Opportunities   |
|------------|--------------------|---|---|
|            |                    | energy  | institution for example Bukura<br>Existing energy centers |
|            |                    | Socio cultural issues on energy generation using waste. | Exiting new technological e.g briquette, ethanol          |
|            |                    | Inadequate research and development.                    | Donor funding in clean energy.                            |

## 2.7 Cross Cutting Issues

This section should briefly discuss crosscutting issues as shown in Table 8.

**Table 8:** Analysis of Sector Crosscutting Issues

| Cross-cutting Issue          | Current Situation | Effects of the Issue on the sector  | Gaps (policy, legal and institutional)  | Measures for addressing the gaps   | Recommendations   |
|------------------------------|-------------------|---|---|--|---|
| Corruption                   |                   | Incomplete /delayed projects, Misallocation of resources Compromised quality of works.                            | EACC lacks prosecutorial powers<br>Lack of anticorruption champion<br>Compromised justice system. | Collaborate with EACC<br>Deploy Anticorruption champion                                  | Collaborate with EACC<br>Decentralize EACC<br>Punitive measure on individuals found to be corrupt<br>Awareness on change of culture |
| Drug and substance abuse     |                   | Reduced man power productivity and effectiveness among the workforce<br>Increased accidents                       | Inadequate awareness<br>Inadequate guiding and counselling services at departmental level         | Collaborate with NACADA to create awareness on alcohol control ,drug and substance abuse | Second staff to all departments<br>Create awareness on drug and substance abuse during project implementation                       |
| Environmental sustainability |                   | Degradation on the riparian land<br>Soil erosion<br>Increased cost of maintenance<br>Health hazard to neighboring | NEMA should be involved in all projects being implemented<br>Inadequate policy and                | Rehabilitation of degraded fields<br>Encourage communities to use clean energy           | Mainstream environmental social impact on all roads project   |

| Cross-cutting Issue         | Current Situation                                    | Effects of the Issue on the sector   | Gaps (policy, legal and institutional)   | Measures for addressing the gaps                             | Recommendations   |
|-----------------------------|--|--|--|--|---|
|                             |  | communities for the unrehabilitated quarries. Deforestation while cutting down trees for cooking   | legal framework Inadequate collaboration between NEMA and project implementers | Reforestation  |   |
| Vandalism of infrastructure |  | Interrupted power supply<br>Loss of incomes and revenues<br>Increased cost of maintenance<br>Vulnerability to accidents<br>Risk of death | Lack of awareness<br>Inadequate surveillance on power supply equipment         | KPLC has collaborated with NGAO in the security of equipment | Enhance surveillance and adopt the modern technology<br>Create awareness          |
| HIV&AIDS                    | Prevalence rate is 8.1%. High prevalence among youth | Reduce budgetary allocation to productive Sectors<br>Reduced manpower  | HIV&AIDS policy does not cover all sub-sectors                                 | National Policy on HIV &AIDS                                 | Domestication of the National Policy to county specific<br><br>Awareness creation |

## 2.8 Emerging issues

This section should provide emerging issues and how they are affecting the performance of the sector. It should also give the interventions in place or proposed to mitigate the negative effects or harness the positive effects. These issues may include: disease pandemics, disasters, proposed amendments to constitution, and Regional Economic Blocs, among others.

**Table 9:** Analysis of Sector Emerging Issues

| S/No | Emerging issues             | Proposed Measures to Mitigate the Negative Effects or Harness the Positive Effects                         |
|------|-----------------------------|--|
| 1.   | Covid-19                    | Ongoing vaccinations, masking then mainstreaming of Covid-19 recovery strategies in our plans              |
| 2.   | Road safety                 | Considering of the speed calming measures, public awareness, and provision of non-motorized traffic lanes. |
| 3.   | Depletion road construction | Use of other alternatives technologies in roads  |

| S/No | Emerging issues | Proposed Measures to Mitigate the Negative Effects or Harness the Positive Effects |
|------|-----------------|--|
|      | material        | construction   |
| 4.   | Climate change  | Adaptation of climatic mitigation measures   |

## 2.9 Stakeholder Analysis

This section should highlight the different stakeholders relevant to the sector and their roles and possible areas of collaboration.

**Table 10:** Analysis of Sector Stakeholders, Roles and Collaboration Areas

| S/No. | Stakeholder                            | Roles   | Possible areas of Collaboration  |
|-------|--|---|--|
| 1.    | World bank                             | Financial support<br>Technical support            | Funding Construction of roads, walk ways in municipalities, last mile in electricity         |
| 2.    | Ministry of Interior                   | Provision of security                             | To secure Assets and equipment's in the energy and transport sector from vandalism and theft |
| 3.    | Ministry of energy national Government | Technical support, and policy and legal framework | Financial support to REREC , KPLC and regulation and dispute resolution and energy sector    |
| 4.    | Ministry of roads national government  | Technical support, and policy and legal framework | Funding of major projects  |
| 5.    | Kenya roads Board                      | Technical support                                 | Classification of roads funding through RMLF   |
| 6.    | EPPRA                                  | Regulation in the energy sector                   | To avoid consumer protection   |

## CHAPTER THREE: SECTOR DEVELOPMENT STRATEGIES AND PROGRAMMES

### 3.1 Sector Vision, Mission and Goal

During the period 2022-2032, the Sector has prioritized Programmes and Sub programmes to stimulate inclusive growth in line with the development agenda as espoused in the Vision 2030, Fourth Medium Term Plan and the Big Four Plan.

#### Vision

To be a world class provider of modern infrastructure.

#### Mission

To provide efficient, affordable and reliable Infrastructure, Public works and Energy for sustainable economic growth and development through construction, modernization, rehabilitation and effective management of all infrastructure facilities.

#### Goal

The Department of Roads, Infrastructure, Public Works and Energy is committed to the development and maintenance of infrastructure and buildings within the County Government of Kakamega for economic and social growth.

### 3.2 Development Objectives and Strategies

This section should present the sector objectives and strategies in relation to development issues as shown in Table 11.

**Table 11 : Sector Developmental Issues, Objectives and Strategies**

| Sub-sector        | Development Issue                | Development Objectives       | Strategies  |
|-------------------|----------------------------------|------------------------------|---|
| Transport (Roads) | Poor and inadequate road network | To improve road connectivity | Improve Road infrastructure Programme<br>Bridge and box culvert infrastructure<br>Upgrading of roads to bitumen and gravel roads and opening of new roads |
|                   |                                  | Enhance efficiency and       | Routine maintenance and upgrading of road infrastructure  |

| Sub-sector            | Development Issue   | Development Objectives                      | Strategies  |
|-----------------------|---|---|---|
|                       |   | safety of the existing road network         |   |
|                       | Inadequate road construction equipment  | To improve road quality and connectivity    | Acquisition of road equipment and machines  |
| Transport(traffic)    | Traffic congestion within municipalities                                      | To ensure smooth traffic flow               | Expansion of existing road infrastructure   |
| Energy(Electricity)   | Low access rate to national grid which is 45% against national average of 65% | To improve access to electricity            | Enhance collaboration with development partners.<br>Enhance accessibility to energy |
|                       | Unstable and unreliable power supply  | To improve power supply                     | Expansion of power supply infrastructure  |
| Other forms of energy | Low adoption of clean energy  | To Promote uptake of green and clean energy | Promotion of clean energy   |

### 3.3 Sector Programmes and Interventions

This section should provide the programmes, their objectives and the key interventions.

Table 12: Implementation Matrix.

**Table 12: Implementation Matrix**

| Programme                       | Objectives                   | Strategies/<br>Interventions          | Implementing<br>Agency(s)                       | Time<br>Frame | Funding                                  |                    |
|---------------------------------|------------------------------|---------------------------------------|---|---------------|--|--------------------|
|                                 |                              |                                       |   |               | Total<br>Budget<br>(Kshs in<br>millions) | Source (s)         |
| Road Infrastructure Development | To improve road connectivity | Improve Road infrastructure Programme | County Department of Roads/ KeRRA,/ KURA/ KeNHA | 2023-2032     | 3,000                                    | CG GoK; Donor – WB |
|                                 |                              | Upgrading of roads to                 | County Department of Roads/ KeRRA,/             | 2023-2032     | 11,000                                   | CGK; KURA,         |

| Programme           | Objectives                               | Strategies/<br>Interventions                                 | Implementing<br>Agency(s)                       | Time<br>Frame | Funding                                  |                             |
|---------------------|--|--|---|---------------|--|-----------------------------|
|                     |  |  |   |               | Total<br>Budget<br>(Kshs in<br>millions) | Source (s)                  |
|                     |  | bitumen and gravel roads and opening of new roads            | KURA/ KeNHA                                     |               |  | KeRRA                       |
|                     |  | Bridge and box culvert infrastructure                        | County Department of Roads/ KeRRA,/ KURA/ KeNHA | 2023-2032     | 500                                      | CGK; KURA, KeRRA, KeNHA     |
|                     |  | Acquisition of road equipment and machines                   | CGK, KeRRA/ KURA, KeNHA                         | 2023-2032     | 350                                      | CGK                         |
| Traffic management  | Traffic congestion within municipalities | Construction of bypasses                                     | NTSA/KURA/ KeRRA/ KeNHA/ Municipalities         | 2023-2032     | 4,000                                    | NTSA, KeNHA, CGK            |
|                     |  | Expansion of existing roads                                  | County Department of Roads/ KeRRA,/ KURA/ KeNHA | 2023-2032     | 250                                      | CGK, KURA, KeNHA, KeRRA     |
|                     |  | Public participation and capacity building                   | NTSA, Traffic police, Department of Trade       | 2023-2032     | 10                                       | CGK, NTSA, KeNHA            |
|                     |  | Construction of footbridges in strategic location            | County Department of Roads/ KeRRA,/ KURA/ KeNHA | 2023-2032     | 300                                      | CGK, KURA, KeRRA            |
|                     |  | Construction of walk ways                                    | County Department of Roads/ KeRRA,/ KURA/ KeNHA | 2023-2032     | 300                                      | CGK, KURA, KeRRA            |
| Energy(Electricity) | To improve access of electricity         | Installation of transformers and more power lines            | KPLC/ REREC                                     | 2023-2032     | 5,000                                    | KPLC/ REREC/ World Bank/ NG |
|                     |  | Leveraging on renewable energy resources,                    | CGK/EPPRA                                       | 2023-2032     | 1,000                                    | CGK/ EPPRA                  |
|                     |  | Installation of surveillance on power equipment's, and lines | KPLC/ KETRACO/ Ministry of Interiors            | 2023-2032     | 500                                      | KPLC/ NG                    |
| Clean Energy        | Promote                                  | Awareness  | SNV/ Practical                                  | 2023-         | 500                                      | SNV/                        |

| Programme | Objectives  | Strategies/<br>Interventions                                      | Implementing<br>Agency(s)               | Time<br>Frame | Funding                                  |                                  |
|-----------|---|---|---|---------------|--|----------------------------------|
|           |   |   |   |               | Total<br>Budget<br>(Kshs in<br>millions) | Source (s)                       |
| Promotion | transition from reliance on traditional biomass for cooking to clean cooking technologies | creation on clean energy  | Action/ CCAK/ CGK/ Department of gender | 2031          |  | Practical Action/ CCAK/ CGK      |
|           |   | Technological transfer  | SNV/ Practical Action/ CCAK/ CGK        | 2022-2031     | 50                                       | SNV/ Practical Action/ CCAK/ CGK |
|           |   | Provision of incentives on entrepreneurs who promote clean energy | CGK                                     | 2022-2031     | 100                                      | CGK                              |

### 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 co-existence 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 to be implemented together with national government and development partners.

The information should be captured as provided in Table 13.

**Table 13:** Flagship Projects

| Project Name:<br>(Location) | Outcome                           | Description of Key Activities                                   | Time Frame | Beneficiaries (No.)   | Estimated Cost (Millions) | Source of Funds | Implementing Agency |
|-----------------------------|-----------------------------------|---|------------|---|---------------------------|-----------------|---------------------|
| Ibokolo-Nambacha(28)        | A safe and efficient road network | Site clearance<br>Sub base and base laying<br>Bitumen surfacing | 2022-2024  | Traders, schools, hospitals, motorists, local community             | 1,400                     | KeRRA           | KeRRA               |
| Larambi-Musikoma (45km)     | A safe and efficient road network | Culvert installations<br>Road furniture installation            | 2022-2024  | Traders, residents of each side of the bridge<br>Hospitals, schools | 1,700                     | KeRRA           | KeRRA               |
| Malava-                     | A safe and                        |   | 2024-      | Traders, residents  | 1,800                     | CGK             | CGK                 |



| Project Name: (Location)   | Outcome                                | Description of Key Activities  | Time Frame | Beneficiaries (No.)   | Estimated Cost (Millions) | Source of Funds               | Implementing Agency           |
|--|--|--|------------|---|---------------------------|-------------------------------|-------------------------------|
| Samitsi-Navakholo (36KM)   | efficient road network                 |  | 2027       | of each side of the bridge<br>Hospitals, schools                    |                           |                               |                               |
| Kakamega-Chepsonoi (30KM)  | A safe and efficient road network      |  | 2022-2031  | Traders, residents of each side of the bridge<br>Hospitals, schools | 1,800                     | KeNHA                         | KeNHA                         |
| Malava-Ikoli-Kambiri (18KM)  | A safe and efficient road network      |  | 2022-2024  | Traders, residents of each side of the bridge<br>Hospitals, schools | 900                       | KeRRA                         | KeRRA                         |
| Mumias-Indangalasia-Ogalo (21km)   | A safe and efficient road network      |  | 2023-2027  | Traders, residents of each side of the bridge<br>Hospitals, schools | 1,050                     | CGK                           | CGK                           |
| Ikonyero-Akatsa, Lunza-Khukolomani, Khwisero-Eshibinga, Manyulia-Dudi 36KM | A safe and efficient road network      |  |            | Traders, residents of each side of the bridge<br>Hospitals, schools | 1,600                     | KeRRA                         | KeRRA                         |
| Last mile electricity connection   | Improved access to energy              | Electricity connection to the households   | 2022-2031  | 180,00HH  | 1,800                     | NG/ADB/WAORLD BANK            | KPLC/REREC                    |
| Solarization of street lights  | More economic hours, improved security | Ducting, wiring, Fittings  | 2023-2028  | Traders, general population   | 20M per KM                | CGK                           | CGK                           |
| Briquettes/stoves production plant   | Increased adoption of clean energy     | Fabrication, production of Briquettes  | 2022-2031  | Households, Institutions, CGK                                       | 100                       | SNV/Practical Action/CCAK/CGK | SNV/Practical Action/CCAK/CGK |
| Mukomari-shiamakhubu road and bridge                                       | A safe and efficient road network      | Excavations for structures<br>Sub structure construction<br>Super structure backfilling<br>Bridge furniture construction | 2022-2031  | Traders, residents of each side of the bridge<br>Hospitals, schools | 530                       | CGK                           | CGK                           |
| 40meter Etangale bridge  | A safe and efficient road network      |  | 2022-2031  | Traders, residents of each side of the bridge<br>Hospitals, schools | 75                        | CGK                           | CGK                           |
| Acquisition of road construction equipment                                 | A safe and efficient road network      | Purchase of the road construction equipment  | 2022-2032  | County department of roads  | 350                       | CGK                           | CGK                           |

### 3.5 Cross-Sectoral Linkages

Transport and Energy is both a driver and enabler under the Kenya Vision 2030 and “The Big Four Agenda” which is geared at spurring economic growth and development across all other sectors of the economy. For effective implementation of its various mandates, the sector has linkages with nine other sectors namely; Trade industrialization and Tourism; Agriculture, Rural and Urban Development; Health; Education; Governance, Public Administration and International Relations; Social Protection, Culture; Environmental Protection, Water and Natural Resources and National Security. Table 14 illustrates linkages of the transport and Energy Sector to other Sectors.

**Table 14:** Cross-Sectoral Linkages

| Programme Name       | Linked Sector | Cross-sector Linkages   |   | Measures to Harness or Mitigate the Effects   |
|----------------------|---------------|---|---|---|
|                      |               | Synergies   | Adverse Effects   |   |
| Roads Infrastructure | Trade         | Connection to market centers  | Demolitions of shopping Centre  | Establishment of market centers and parking bays along the roads; Develop a resettlement plan.  |
|                      | Environment   | Sourcing for road construction materials from quarries                      | Pollution Deforestation/ falling of trees along road corridors                  | Enforce policy and NEMA guidelines on environment sustainability  |
|                      | Education     | Connection to educational centers   | Noise pollution   | Enforce policy and NEMA guidelines on noise regulation  |
|                      | Health        | Connection to health centers<br>Movement of health services e.g. ambulances | Increased road accidents<br>Noise and air pollution                             | Designs to consider non-motorized traffic lanes<br>Implement routine road maintenance programs<br>Enforce policy on noise regulation  |
|                      | Agriculture   | Connection of farmlands to markets  | Diversion of storm water from road corridors to farmland                        | Define drainage channels during road construction   |
|                      | Energy        | Corridor for power line services and related infrastructure                 | Increased fatal accidents due to poor power line infrastructure along the roads | Collaboration with relevant agencies to locate power line infrastructure at safe distances.   |
| Energy               | Trade         | Increased business hours  |   |   |
|                      | Environment   | Improved adoption of clean energy   | Deforestation/ felling of trees   | Collaboration with relevant agencies to ensure adequate adoption of clean energy and restoration of depleted sources of clean energy. |
|                      | Agriculture   | Mechanization of agricultural activities                                    | Loss of income due to replaced human labor                                      | Incorporate more value addition processes for agricultural produce so as to provide employment for lost labor                         |

| Programme Name | Linked Sector            | Cross-sector Linkages   |  | Measures to Harness or Mitigate the Effects  |
|----------------|--------------------------|---|--|--|
|                |                          | Synergies   | Adverse Effects  |  |
|                | Health                   | Electrification of health facilities and equipment<br>Clean cooking energy reduces patient load |  |  |
|                | Roads and Infrastructure | Street lighting enhances security along the roads   | Increased fatal accidents due to power line infrastructure along the roads | Collaboration with relevant agencies to locate power line infrastructure at safe distances |
|                | Education                | Electrification of educational centers thus promoting e-learning                                |  |  |

## CHAPTER FOUR: IMPLEMENTATION MECHANISMS.

### 4.1 Institutional and Coordination Framework.

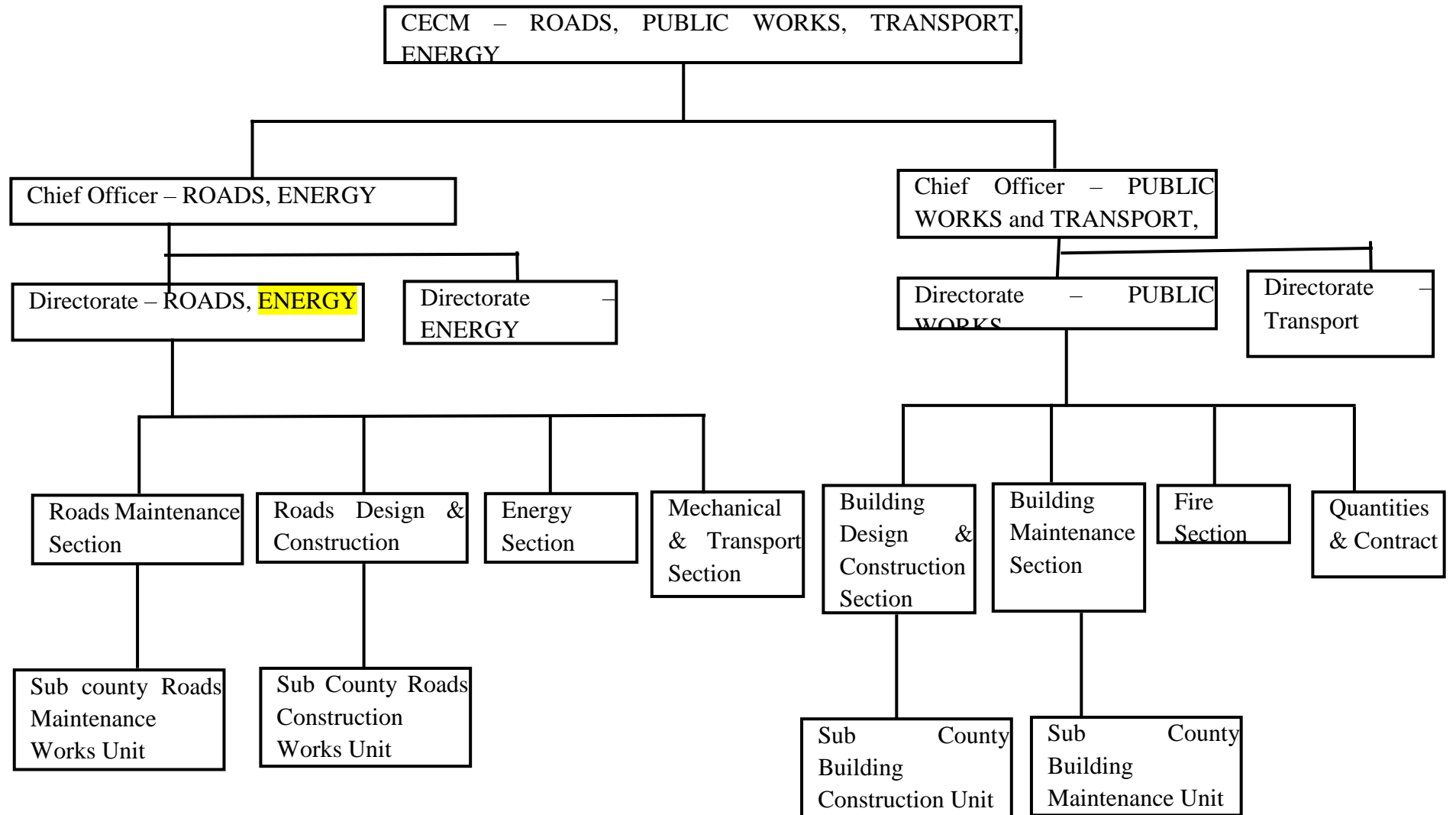
#### 4.1.1 Institutional Arrangement

This section highlight 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.

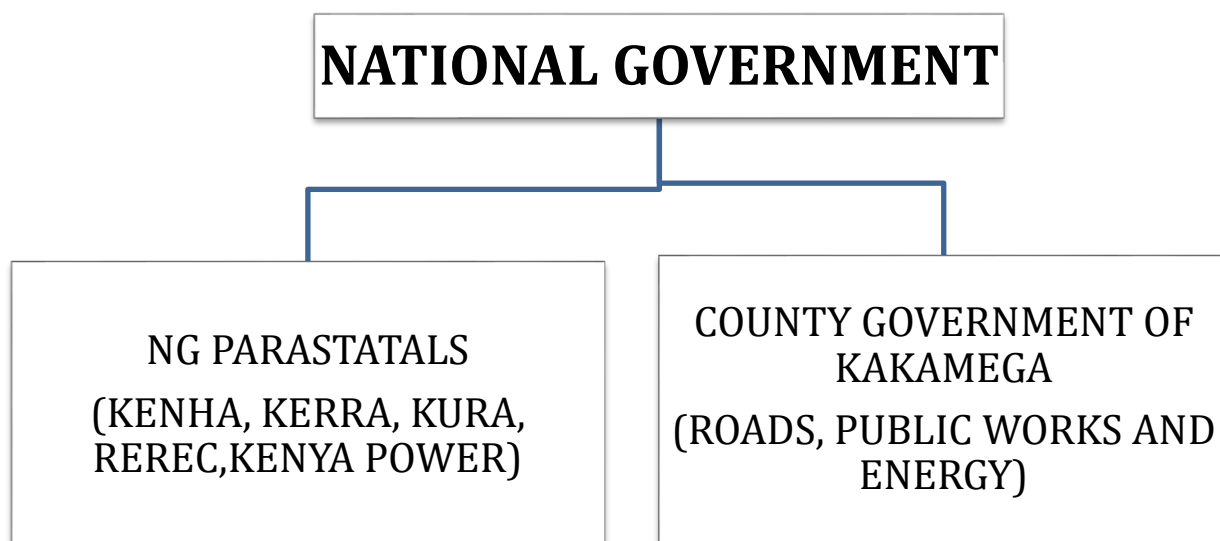
**Table 15: Sector Institutions and their Role**

| S/No. | Name of Institution                                       | Role   |
|-------|---|--|
|       | County Assembly   | Legislation, budget allocation and oversight                         |
|       | EPPRA   | Regulation and licensing, arbitration of the energy sector           |
|       | Ministry of Energy and Petroleum                          | Policy and legal framework, Financing of projects, Technical support |
|       | Ministry of transport and infrastructure                  | Policy and legal framework, Financing, Technical support             |
|       | Parliament  | Legislation, budget allocation and oversight                         |
|       | Ministry of interior and coordination national government | Security   |
|       | Kenya Roads Board   | Classification of roads, Financing                                   |
|       | KeRRA   | Construction of roads in Rural areas                                 |
|       | KURA  | Construction of roads in Urban areas                                 |
|       | KeNHA   | Construction of major High ways                                      |
|       | KPLC  | Supply of electricity  |
|       | NTSA  | Policy, regulation and enforcement of traffic laws                   |
|       | EACC  | Investigation of corruption allegation issues, promote integrity     |
|       | CCAK  | Promotion of clean cooking initiatives                               |
|       | Lake Region Economic Bloc                                 | Carry out joint investment, Economies of scale                       |
|       | World bank  | Funding of projects, Technical capacity support                      |

#### 4.1.2 Coordination Framework



**Figure 2:** Coordination Framework



**Figure 3:** Sector Organogram

## 4.2 Financing Mechanism

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

The funding sources may include county government budgets, national budgets, Public- Private Partnerships, development partners, private sector, among others. For the already determined Development Partners' funded programmes, the section should specify whether the funding is a grant or a loan.

**Table 16: Sector Financing Mechanisms**

| S/No. | Subsector    | Budget (KES Millions) | Source of Funds |                  |
|-------|--------------|-----------------------|-----------------|------------------|
|       |              |                       | CGK             | Others (Explain) |
|       | Transport    | 19,660                | CGK             | KeRRA, KURA      |
|       | Public works | 500                   | CGK             |                  |
|       | Energy       | 7,150                 | CGK             | REREC, KPLC      |

### 4.3 Capacity Development

This section should provide measures to address capacity gaps that may hinder efficient and effective implementation of the initiatives in the sectoral plan. The capacity gaps to be addressed will include those related to: skills and knowledge; systems and processes as well as tools and equipment.

**Table 17: Sector Capacity Gaps**

| S/No. | Capacity Gap                              | Measures to address the gap  |
|-------|---|--|
|       | Technical capacity                        | Hire more technical staff<br>Train staff, create awareness, second of staff                            |
|       | Resources ( Financial)                    | Development partners<br>Prudent allocation and appropriate of limited resources                        |
|       | Collaboration between government agencies | Integrated planning, harmonization of work plans, and strengthen collaborations between these agencies |
|       | Political goodwill                        | Public participation, sensitization of the political class   |

### 4.4 Risk Management

This section should provide possible risks that may hinder implementation of the sectoral plan and discuss proposed mitigation measures, as indicated in Table 18.

**Table 18: Risks, Levels, Owners and Mitigation Measures**

| <b>Risk</b>  | <b>Risk Level (High, Moderate, Low)</b> | <b>Risk Owner (s)/ Source of Risk</b> | <b>Mitigation Measures</b>                                   |
|--|---|---------------------------------------|--|
| Political interference                               | High                                    | Political class                       | Public participation, sensitization of the political class   |
| Natural disasters                                    | High                                    | nature                                | Disaster management plan                                     |
| Pandemic   | High                                    | Human/Nature                          | Risk management plan   |
| Theft and Vandalism of road and power infrastructure | High                                    | Human                                 | Enhance surveillance and security                            |
| Corruption   | High                                    | Human                                 | Strengthen the justice system. Promote the change of culture |



## **CHAPTER FIVE: MONITORING AND EVALUATION FRAMEWORK AND LEARNING**

### **5.1 Introduction**

Monitoring and Evaluation framework is critical to enable tracking the implementation of the programmes identified in the sector plan. This section presents the Monitoring and Evaluation framework that will be put in place and reporting mechanisms that promotes knowledge sharing and learning.

Monitoring of the sector programmes and projects will be a continuous process based on the performance indicators set out in the implementation matrix. Evaluation mechanisms will entail measuring actual performance against set target levels and establishing size of gap or variance if any, identifying the casual factors for the variance, identifying and recommending appropriate remedial measures including a review of the objectives and/ or strategies.

### **5.2 M & E Reporting Structures**

Monitoring and Evaluation will take place at National and County levels. The sector will work with the private sector, NGOs and other stakeholders to ensure there is effective monitoring and evaluation of the implementation of this sector plan. The implementation of this plan will be reviewed continuously guided by progress reports.

Monitoring of the entire process from planning, designing and implementation is important as it keeps the planned activities in check, reduces duplication, allows for remedial measures to be taken and ensures the projects/programmes results delivery on time. The Sector M& E Committee comprising the sectional heads and chaired by the Chief Officer together with the Monitoring and Evaluation Unit in the Directorate of Economic Planning will monitor progress of implementation of projects and programmes. The Committee will carry out annual, mid-term and end-term review of the progress of implementation of planned projects and prepare reports for submission to relevant personnel for action. The Sector has put in place a Monitoring and Evaluation System that is in line with and will complement the County Integrated Monitoring and Evaluation System. To maximize learning and to ensure wider accountability, it will be necessary to share key information with partners, programme beneficiaries and the wider public.

### **5.3 Data Sources and Collection Method**

The monitoring and evaluation framework will comprise technical officers from the sector, Public Works, Quality Assurance Officers and representation from the Directorate of Economic Planning. Data collection will be by physical observation of the projects and programmes being implemented, actual verification of items delivered where applicable and survey of stakeholders to ascertain the impact of the projects/programmes

### **5.4 Types of Reports to be Produced and their Frequency, and Consumers**

Reporting is important as it provides feedback to establish the challenges, successes and weaknesses in the implementation of various projects and programmes, and whether the set objectives have been met or are on course. The Plan will be evaluated annually, after five years and at the end of the plan period. The reports prepared will outline the achievements in comparison to targets, facilitating factors, challenges faced and lessons learnt. The 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 shall be stored manually in the manual files, also electronically and will be posted on the official County website.

The following reports will be prepared and disseminated;

- i) **Annual Review Report (ARR)** – 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 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.

## 5.5 Dissemination and Feedback Mechanisms and Citizens Engagement

After preparation of the reports, there shall be review meetings to assess the report and map a way forward. This will keep the plans' activities and outputs on track during implementation, and enable the relevant personnel to identify and take necessary actions to address any emerging issues. The reports will be disseminated to stakeholders including the County Assembly and shared on County digital platforms where citizens will be given an opportunity to provide feedback.

## 5.6 Mechanism for Reviewing and Updating the Sectoral Plan

The Monitoring and Evaluation data will be analysed and reports prepared for submission to the Governor for his information and appropriate action. These reports will outline in summary the period achievements, shortcomings, challenges faced and recommendations. Based on these reports, a decision to review or update the Sectoral plan will be made.

The monitoring and evaluation Matrix presented in Table 19 will be used to effectively monitor the progress of implementation of programmes in the plan and eventually evaluate them.

**Table 19:** Monitoring and Evaluation Matrix

| Programme                       | Outcome                           | Key Performance Indicator(s)     | Baseline |       | Targets              |                     |
|---------------------------------|-----------------------------------|----------------------------------|----------|-------|----------------------|---------------------|
|                                 |                                   |                                  | Year     | Value | Five Year Target (s) | Ten Year Target (s) |
|                                 |                                   |                                  |          |       |                      |                     |
| Road Infrastructure Development | A safe and efficient road network | No of Km of roads tarmacked      | 2022     | 450   | 1,000                | 2,000               |
|                                 |                                   | No of Km road network maintained | 2022     | 5,000 | 5,000                | 10,000              |
|                                 |                                   | No Kms of road network graveled  | 2022     | 5,000 | 5,000                | 10,000              |
|                                 |                                   | No Km of roads opened            | 2022     | 5,000 | 2,000                | 4,000               |
|                                 |                                   | No of bridges constructed        | 2022     | 71    | 100                  | 150                 |
|                                 |                                   | No of Km of NMT constructed      | 2022     |       | 1,000                | 2,000               |

| Programme                 | Outcome                         | Key Performance Indicator(s)                | Baseline |         | Targets              |                     |
|---------------------------|---------------------------------|---|----------|---------|----------------------|---------------------|
|                           |                                 |   | Year     | Value   | Five Year Target (s) | Ten Year Target (s) |
|                           |                                 |   |          |         |                      |                     |
|                           |                                 | No of machines acquired                     | 2022     | 1       | 3                    | 3                   |
| Promotion of clean Energy | Access to clean and safe energy | No of people connected to the National grid | 2022     | 760,000 | 900,000              | 1,500,000           |
|                           |                                 | No of households using clean energy         | 2022     | 760,000 | 1,000,000            | 1,000,000           |
|                           |                                 | No of transformers installed                | 2022     | 1,786   | 1,900                | 2,000               |
|                           |                                 | %level of access to energy                  | 2022     | 38      | 50                   | 80                  |

\* Baseline year and value should be based on the most current survey or research/review reports/progress reports.