



REPUBLIC OF KENYA

PHYSICAL INFRASTRUCTURE SECTOR MTEF REPORT

2011/12 – 2013/14



4th January 2011

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ACRONYMS

| | | |
|---------|---|---|
| ABTs | - | Appropriate Building Technologies |
| ASAL | - | Arid and Semi Arid Lands |
| BOPA | - | Budget Outlook Paper |
| CAO | - | Civil Aviation Organization |
| CBD | - | Central Business District |
| CILOR | - | Contribution in lieu of rates |
| CSHS | - | Civil Servants Housing Scheme |
| GDC | - | Geothermal Development Company |
| DFID | - | Department of International Development |
| ERB | - | Engineer Registration Board |
| ERC | - | Energy Regulatory Commission |
| ERS | - | Economic Recovery Strategy |
| FAA | - | Federal Aviation Administration |
| FY | - | Financial Year |
| GOK | - | Government of Kenya |
| GIS | - | Geographical Information System |
| HABRI | - | Housing and Research Institute |
| HID | - | Housing Infrastructure Development |
| IMO | - | International Maritime Organization |
| IPO | - | Initial Public Offering |
| IPP | - | Independent Power Producer |
| JKIA | - | Jomo Kenyatta International Airport |
| KBRC | - | Kenya Building Research Centre |
| KBRC | - | Kenya Building Research Centre |
| KAA | - | Kenya Airports Authority |
| KCAA | - | Kenya Civil Aviation Authority |
| KENGEN | - | Kenya Electricity Generating Company |
| KENHA | - | Kenya National Highways Authority |
| KENSUP | - | Kenya Slum Upgrading Programme |
| KERRA | - | Kenya Rural Roads Authority |
| KETRACO | - | Kenya Electricity Transmission Company |
| KFS | - | Kenya Ferry Services |
| KIHBT | - | Kenya Institute of Highways and Building Technology |
| KMA | - | Kenya Maritime Authority |
| KPA | - | Kenya Ports Authority |
| KPC | - | Kenya Pipeline Company |
| KPLC | - | Kenya Power and Lighting Company Limited |
| KPRL | - | Kenya Petroleum Refineries Ltd |
| KRC | - | Kenya Railways Corporation |
| KURA | - | Kenya Urban Roads Authority |
| KUTIP | - | Kenya Urban Transport Infrastructural Programme |
| KWS | - | Kenya Wildlife Service |
| LAHRMIS | - | Local Authority Human Resource Management Integrated System |
| LAIFOM | - | Local Authority Integrated Financial Operations Management System |
| LAAs | - | Local Authorities |
| LASDAP | - | Local Authority Service Delivery Action Plan |
| LAPF | - | Local Authority Provident Fund |
| LATF | - | Local Authority Transfer Fund |
| LGLA | - | Local Government Loan Authority |
| LPG | - | Local Petroleum Gas |
| MDGs | - | Millennium Development Goals |

| | | |
|-----------|---|--|
| ODPM&MOLG | - | Office of the Deputy Prime Minister and Ministry of Local Government |
| MOE | - | Ministry of Energy |
| MOH | - | Ministry of Housing |
| MONMED | - | Ministry of Nairobi Metropolitan Development |
| MOPW | - | Ministry of Public Works |
| MOT | - | Ministry of Transport |
| MOR | - | Ministry of Roads |
| MTD | - | Materials and Transport Department |
| MTEF | - | Medium Term Expenditure Framework |
| MTP | - | Medium Term Plan |
| MW | - | Mega Watts |
| NHC | - | National Housing Corporation |
| NOCK | - | National Oil Corporation of Kenya |
| NWCPC | - | National Water Conservation and Pipeline Corporation |
| PPP | - | Public Private Partnership |
| RBM | - | Result Based Management |
| REA | - | Rural Electrification Authority |
| RRI | - | Rapid Result Initiative |
| RRT | - | Rent Restriction Tribunal |
| SAGAs | - | Semi Autonomous Government Agencies |
| UNGA | - | United Nations General Assembly |

EXECUTIVE SUMMARY

The Physical Infrastructure Sector consists of Roads; Public Works; Transport; Energy; Local Government; Nairobi Metropolitan Development and Housing Sub-Sectors. In the new long term development blue print for the country “The Kenya Vision 2030”, infrastructure development has been recognized as an enabler for sustained development of the economy and particularly for the six key sectors namely; Tourism, Business Process Outsourcing (BPO), Wholesale and Retail, Manufacturing, Financial Services and Agriculture and Livestock identified under the economic pillar.

The Kenya Vision 2030 recognizes the importance of development infrastructure as critical for socio-economic transformation. The Infrastructure Sector aspires for a country with modern metropolitan cities, municipalities and towns with infrastructural facilities that meet international standards to make Kenya a globally competitive and prosperous country. The strategies and measures to be pursued in the medium term include; supporting the development of infrastructure initiatives around flagship projects, strengthening the institutional framework for infrastructure development, raising the efficiency and quality of infrastructure as well as increasing the pace of infrastructure projects so that they are completed as envisaged, protecting the environment as a national asset and conserving it for the benefit of the future generations and the wider international community. Other measures include encouraging Private Sector participation in the provision of infrastructure services through the Public-Private-Partnerships (PPPs) framework.

The Government has continued to commit more financial resources for infrastructural development in the last three years for both Recurrent and Development expenditures. The approved Recurrent expenditure budget on Physical Infrastructure Sector increased from Kshs. 32,348 million in 2007/08 financial year to Kshs. 40,844 million in 2009/10 FY. The total actual recurrent expenditure increased from 75.7 per cent in 2007/08 to 95.5 per cent in 2009/10. The upward trend in recurrent expenditure has been due to the increase in the Road Maintenance Fuel Levy Fund levied on petroleum products. Expenditure on roads constituted 54 per cent and 53.8 per cent of the total approved and actual recurrent physical infrastructure expenditure respectively for the FY 2009/10.

The trends in expenditure analysis indicate that there has been a general underutilization of recurrent expenditure. Between 2008/09 and 2009/10, the average underutilization of recurrent expenditure funds stood at 4.5%. The underutilisation is attributed to: Slow and bureaucratic procurement procedures particularly for road maintenance projects which are not synchronized with flow of funds; Delayed exchequer releases especially towards the end of the financial year and in some cases lack of the exchequer releases; and Breakdown of the IFMIS system especially towards end of the financial year when a number of transactions usually delayed due to procurement procedures are being affected.

The approved and actual Development expenditure budget on Physical Infrastructure Sector has been increasing since 2007/08 FY. The total approved expenditure increased from Kshs 65,558 million in FY 2007/08 to Kshs. 109,422 million in FY 2009/10. The total actual expenditure increased from 51,159 million in 2007/08 to Kshs 80,840 million in 2009/10. Expenditure on Roads and Energy accounted for 83.7 per cent and 85.5 percent of the total approved and total actual Development expenditure for the FY 2009/10.

The increased allocation in the original and actual expenditure was in line with Government commitment and recognition of the country's infrastructure including roads, airports, ports, energy generation and supply as being the foundation of the Kenya Vision 2030. The trends in expenditure analysis indicate that there has been a general underutilization of development expenditure. Between 2007/08 and 2009/10, the average underutilization of development expenditure for the period under review stood at 28.7%. The underutilisation is attributed to: Procurement challenges particularly donor funded projects; Inadequate counterpart funding which affects the expenditure on the donor component; and Delayed exchequer releases and disbursement of funds from development partners.

Approved external funding has been increasing over the period under review. The approved external funding increased from Kshs. 28,562 million in 2007/08 to Kshs. 40,455 million in 2009/10. The total actual external funding increased by 56.7 per cent from Kshs 15,698 million in 2007/08 to Kshs. 24,594 million in 2009/10. The major beneficiaries were; Roads and Energy sub-sectors accounting for 59 and 32 per cent respectively during 2009/10 FY. The funding was mainly for the improvement of road network and energy projects.

In FY 2009/10, the total pending bill for the sector was Kshs.14, 071 million. Bills on the development vote were Kshs. 13,387 million while for recurrent was Kshs. 684 million. Roads, Public Works, Housing and Local Government sub-sectors contributed the sector's pending bills in both Development and Recurrent. Most bills emanates from backlog in payment of claims towards closure of financial year. Over the last three years, there has been remarkable improvement in settling pending bills in recurrent vote due to prudent financial management. However, the trend has been rising mainly as a result of delayed payments for contracted civil works and professional services, variation of contracts, austerity measures and delays in exchequer releases to facilitate payments in the development vote. Notably some of the pending bills captured in the table have been settled.

According to Budget Outlook Paper (BOPA) 20011/12 – 2013/14 the Gross sector ceiling for the Physical Infrastructure Sector in Financial Year 2011/12 amounts to Kshs.186, 497 Million. The net recurrent budget ceiling is Kshs. 8,976 Million while Development GOK budget ceiling is Kshs.73,771 Million. However the development sector resource requirement is over and above sector ceiling by Kshs. 78,355 Million. Consequently, sub sectors have undertaken explicit prioritization of programmes to be within the resource envelope to ensure that funds are focused on identified priorities.

The Sector has been implementing key reforms aimed at enhancing efficiency and effectiveness in service delivery. In the Roads sub-sector following the enactment of the Roads Act 2007, the Government has operationalized the three Road Authorities namely; the Kenya National Highways Authority (KeNHA), the Kenya Rural Roads Authority (KeRRA) and Kenya Urban Roads Authority (KURA).

The Government is implementing the Housing policy through implementation of key sub programmes namely the housing development and estates management with various projects. In the Energy sub-sector, the Government has consolidated the Electric Power Act and the Petroleum Act through the Energy Act 2007. The Rural Electrification Authority (REA), the Energy Regulatory Commission (ERC) and the Energy Tribunal have been established. In addition, a state-owned Geothermal Development Company (GDC) has been established to be in charge of geothermal resource assessments and sale of steam to future independent power producers (IPPs) and KenGen for electricity generation; GDC will also sell low-

enthalpy geothermal fluids to other users. Further, Kenya Electricity Transmission Company (KETRACO), which is 100% government owned, has been established to be responsible for construction and maintenance of new power transmission lines. Kenya Power and Lighting Company (KPLC) is responsible for distribution and will keep its current stock of existing 132 kV and 220 kV transmission lines.

In order to enhance the performance of the construction industry as the premier agent for the development and management of infrastructure facilities and services, a Comprehensive Public Works Policy will be implemented through a National Construction Authority (NCA) which will be established. The objective will be to strengthen the capacity of Kenya's construction industry. To this end, a cab Memo on establishment of a NCA has been approved by Cabinet and the bill has been forwarded to parliament for approval. Plans are also underway to strengthen the Engineers Registration Board (ERB), to allow the ERB to provide relevant training, share knowledge and strengthen self regulation and the sanctioning of unprofessional and unethical conduct by practicing engineers and consulting firms.

CHAPTER ONE: INTRODUCTION

1.1 Background

The Physical Infrastructure Sector consists of Roads; Public Works; Transport; Energy; Local Government; Nairobi Metropolitan Development and Housing Sub-Sectors. Poor infrastructure was identified under Economic Recovery Strategy for Wealth and Employment Creation 2003-07 (ERS) as a major constraint to doing business. The Kenya Vision 2030 recognises infrastructure as an enabler for sustained development of the economy and particularly the six key sectors identified under the economic pillar.

The development of high quality infrastructure is critical for socio-economic transformation in the Medium Term. The strategies and measures to be pursued in the Medium Term include; supporting development initiatives around flagship projects, strengthening institutional framework, enhancing efficiency and quality as well as increasing the pace of projects so that they are completed as envisaged, protecting the environment as a national asset and conserving it for the benefit of the future generations and the wider international community. Other measures include encouraging private sector participation in the provision of infrastructure services through the Public-Private-Partnership (PPP) framework.

The Sector aims at improving both the quality and quantity of the existing physical infrastructure facilities in order to contribute to the attainment and maintenance of a sustained economic growth of over 10% per annum by 2012 and beyond. In the long run, the aim is to provide an enabling environment for socio-economic development. This will provide necessary support to the six key sectors and flagship projects which have been prioritized to drive the Kenyan economy towards achieving the aspirations of the Kenya Vision 2030.

The Kenya Vision 2030 like its predecessor the ERS calls for a considerable shift in the manner in which the country deploys her resources to acquire the necessary capacity and access to infrastructure services in their wealth creation through inter alia; Below are the flagship projects in the Sector;

Nairobi Fresh Produce Wholesale Hub: The flagship project will be developed under the Public Private Partnership framework to address challenges facing fresh produce marketing and market infrastructure. It is envisioned that the proposed development will be a vehicle towards a centre of excellence in fresh produce marketing. Success of the project will lead to the replication of similar hubs in other major urban areas in Kenya.

Dredging and Deepening the Mombasa Port: The dredging of the port to deepen the channel to 16metres will enable larger post-Panama vessels to access the port and thereby remove the risk of the port slowly evolving into a feeder facility which larger vessels have no access. Dredging the port to 16 meters to accommodate panama vessels is underway. Under Port Container Terminal Expansion, Procurement of consultancy for civil works supervision is complete. Awarding of civil works contract is at an advanced stage.

Nairobi Metropolitan Region Rapid Bus Transit System: The Government has laid plans for the development of a rapid bus transport system starting with the following three transport corridors: Athi River Town to Kikuyu Town (approximately 38 km); Thika Town to the Central Business District (approximately 50 kms); and Jomo Kenyatta International Airport to the Central Business District (approximately 25 kms). The Nairobi Metropolitan region

rapid bus transit is expected to be operational in four years time. So far a feasibility study on Mass Rapid Transit System for Nairobi Metropolitan region is being undertaken together with development of commuter rail services in an effort to decongest Nairobi Metropolitan region.

Development of Light Rail for Nairobi and its Suburbs: The area expected to be served by the light rail stretches from Nairobi Railway Station, situated in the Central Business District, to Embakasi/Jomo Kenyatta International Airport, a distance of 15.6 kilometres, and borders the heavily populated industrial area, Makongeni, Makandara, Buru Buru, Doonholm and Pipeline, Jogoo Road, Outer Ring Road, Airport Roads, Mombasa Road, the Airport Siding and the Nairobi-Makandara. It is projected that the new light rail services will serve at least 150,000 daily passengers, which is 5 per cent of the future public transport demand in the Nairobi metropolitan area. To make this possible, a feasibility study for light Rail/Commuters trains to JKIA, CDB and suburbs (Athi River to City Centre, Kikuyu Town to city centre and Thika Town to the Central Business District) is in progress.

Development of a New Transport Corridor to Southern Sudan and Ethiopia: This corridor will link Lamu, Kenya's North Eastern province, Ethiopia and Southern Sudan: The project involves the development of a new transport corridor from the new port at Lamu through Garrisa, Isiolo, Maralal, Lodwar, and Lokichogio to branch at Isiolo to Ethiopia and Southern Sudan. This will comprise a new road network, railway line, oil refinery at Lamu, oil pipeline, Lamu Airport and free port at Lamu (Manda Bay) in addition to resort cities at the coast and in Isiolo. In addition to raising the scope for this region's tourism, agriculture and industrial potential, the project will open up access to Southern Sudan, which has huge unexploited natural resources, including oil. Under this project, major roads linking Kenya to Ethiopia ongoing e.g. Isiolo-Merile is almost complete; Merile-Marsabit is on procurement stage; Marsabit-Turbi has been tendered while discussion with ADB are on-going on Turbi-Moyale road while the World Bank has funded feasibility and design Transport corridor linking Kenya to Southern Sudan. Further, Terms of Reference (TORs) for the feasibility study has been developed and advertised for expression of interest. Consultancy service for the feasibility study and preparation of preliminary designs, master plan for Lamu, and detailed designs for the first three berths awarded. The study was commissioned in June 2010 and will be completed in March 2011.

National Road Safety Programme: The objective of this programme shall be to fast-track implementation of the National Road Safety Action Plan to achieve the targets of reducing the incidence of road crashes and its impact on the Kenyan Economy. To this end, three committees have been formed including: Infrastructure and Engineering, Enforcement and Information and Education committees to spearhead the work of the Council. Some of the measures instituted to reduce overloading include the banning of trucks/trailers with four-axle configurations in line with the agreed Common Market for Eastern and Southern Africa (COMESA) protocol. Modernization of the weighbridges to enable monitoring of operations from a central control room is in progress. Already Mariakani and Athi River weighbridges have been put under private management while axle-weighing are being installed and structures being constructed in 6 weighbridges (Mtwapa, Isinya, Juja, Busia, Mai Mahiu and Eldoret) while 10 mobile weighbridges are in the process of procurement.

Computerised Information Maintenance Management Systems Programme: This will develop three integrated computerised systems to manage our roads, bridges and pavements. The Road Maintenance Management System will be used to monitor the condition of roads,

and manage road maintenance works. The Bridge Maintenance Management System will be used to monitor the condition of bridges on the main roads network and manage maintenance works on those bridges. The Pavement Maintenance Management System will be used for the short- and long-term planning of road resurfacing and rehabilitation works.

Rehabilitation and Maintenance of Airstrips and Airport Expansion and Modernisation: This will involve rehabilitation and expansion of airstrips and airports serving tourist and commercial sites in the country.

Nairobi City Integrated Close Circuit Television System: This will be a system designed to provide 24-hour close circuit television surveillance of the City of Nairobi. It will be integrated into the Nairobi Metropolitan Region's Intelligent Transport Information System. The first phase will cover the City of Nairobi and will eventually be extended to cover the business districts of the Nairobi Metropolitan Region and key intersections and other and other urban areas.

Construction Industry Development Policy: In order to enhance the performance of the construction industry as the premier agent for the development and management of infrastructure facilities and services, a Comprehensive Construction Industry Development Policy to be implemented through a dedicated Construction Industry Development Board will be formulated within 12 months and thereafter consistently implemented. One of its objectives will be to strengthen the capacity of Kenya's construction industry. A cab Memo on establishment of a NCA has been approved by Cabinet and the bill has been forwarded to parliament for approval. Plans are also underway to strengthen the Engineers Registration Board (ERB), to allow the ERB to provide relevant training, share knowledge and strengthen self regulation and the sanctioning of unprofessional and unethical conduct by practicing engineers and consulting firms.

Public Facilities Improvement Programme: This programme will target the improvement of the visual appeal and functionality of all public facilities and buildings. In this regard, maintenance and management of public facilities will be enhanced through comprehensive facility management approaches. Citizens will be encouraged to value and respect public facilities through a series of public education and awareness programmes aimed at engendering a sense of civic responsibility and foster nation-building attitudes among all citizens. This programme will be supported by dedicated Computerised Facilities Management Information Systems.

Rural Electrification Programme: This programme will facilitate supply of power from the national grid to 460 trading centres and 110 secondary schools among other public facilities. In addition the Programme intends to spend Kshs. 180 million to provide solar electricity generators to 74 public institutions such as secondary schools, boarding primary schools, health centres and dispensaries. Some isolated mini diesel power stations will also be constructed to serve areas which are uneconomical to be supplied power from the national grid.

Geothermal Appraisal at Olkaria IV: Six (6) appraisal wells will be drilled to assess the commercial viability of producing 140 MW of electricity. In the medium the drilling campaign will be stepped up to other areas with geothermal resources to realize adequate steam to produce equivalent 600MWe

Coal Exploration: Initial exploratory drilling at Mui Basin in Kitui and Mwingi Districts has indicated the existence of coal in this area. During the MTP period, appraisal drilling and assessment will be undertaken to determine the quantity and quality with a view to ascertaining the commercial viability of the coal deposits. Coal exploration will thereafter be extended to cover other areas such as Karoo in the Coast Province.

Wind Power Generation: Wind power generation by KenGen and IPPs is expected to supply a total of about 150 MW.

Cogeneration: Power will also be produced in the process of producing sugar. The sugar factories in the country have the potential of producing about 120 MW using bagasse as the base.

Least Cost Power Master Plan: The Plan will identify new generation and supply sources to ensure that the national electricity supply is in tandem with demand taking into account the 15% margin required to ensure security of supply. In light of frequent droughts and the increase in oil prices, emphasis will be placed on the development of alternative energy resources especially geothermal, solar, wind power and coal. Since power projects take time to construct, measures will be taken to fast track implementation of the power projects in the Master Plan to ensure adequate energy supply to meet the demand over the MTP period.

Capacity Enhancement of the Oil Pipeline: The flow rate of the Mombasa - Nairobi oil pipeline will be increased from 440,000 litres per hour to 880,000 litres per hour. While the Nairobi - Eldoret oil pipeline will be augmented with a 14-inch diameter parallel pipeline to increase the pumping flow rate from 220,000 litres per hour to 440,000 litres per hour.

Kenya - Uganda Oil Pipeline: The two Governments of Kenya and Uganda will partner with a private investor to extend the oil pipeline from Eldoret to Kampala.

Promotion of LPG Consumption: A 6,000 ton common user LPG import handling, storage and distribution facilities will be constructed in Mombasa. In Nairobi a 2,000 ton storage and distribution facilities will be constructed. These facilities in Mombasa and Nairobi, which will be undertaken on public-private partnership, are expected to increase the sizes of imported parcel, storage space and supply of sources resulting to reduction of freight costs hence making LPG cheaper in the country.

Other Programmes Include;

Installation of physical and social infrastructure in slums in 20 urban areas to formalise slums, permit construction of permanent houses and attract private investment; Production of 200,000 housing units annually by 2012 through a mixture of initiatives in order to fill the huge housing gap in the country (e.g. build/enhance capacity in local authorities to provide serviced land; and/or to produce low-cost housing); Establishment of housing technology centres in each constituency to increase access to decent housing by promoting location-specific building materials and low-cost housing; Establishing a secondary mortgage finance corporation to increase access to housing finance; and Enacting the Housing Bill, 2006 to legislate for a one-stop housing development approvals mechanism to fast-track approval of housing plans and reduce the time cost of construction.

Key Initiatives

In addition to the flagship projects, a number of initiatives will also be carried out in the next five years.

Build capacity in Kenya's Urban Planning Departments: Planning departments will be established in all urban local authorities. Existing central government planners will be re-deployed to man the newly-established departments; this will alleviate the current shortage of urban planning capacity at both technical and managerial levels in most local authorities. Install user-friendly approval systems in local authorities.

Operationalise a National Decentralisation and Devolution Policy: In order to ensure that urban planning is properly integrated and all inclusive, a national decentralisation/devolution policy will be operationalized to entrench local level participatory planning and development.

Capacity Building for the Building Industry: Capacity building will be supported to enhance planning, implementation and management in the housing sector. Skills inventory will be undertaken in order to focus on priority areas for capacity development. To provide skills and local capacity in this sector, Kenyan companies will compete in local and regional building markets development and a national construction corporation will be established.

Access to Finance: In order to increase access to finance among low-income households and among developers, a secondary mortgage finance corporation, a national housing fund and housing and infrastructure bonds will be established. Mechanisms to support group or cooperative housing schemes will be instituted.

Legislative, Institutional and Regulatory Reforms: To support Vision 2030 aspirations, key legislative, institutional and regulatory reforms will be implemented. The objective of the reforms will be to reduce the housing plans approval period (from more than 180 days to no more than 90 days) and increase by 50 per cent every year the number of contractors in various categories. Further, detailed guidelines will be developed to promote public-private partnerships in the development of the housing sector.

Low-cost Housing: Enhance efforts to design and implement truly low-cost housing models/prototypes/pre-approved building plans. This can be promoted through rural technical institutes.

Wholesale Hubs and Producer Business Groups (PBG)/Retail Market Pilot Project

The sub sector intends to undertake to create 10 wholesale hubs and 1,000 – 1500 PBG with a pilot project in Maragua. This project will increase whole sale activities within Maragua and its environment. In addition the sub sector will build at least 10 “Tier 1” retail markets.

Expansion of Market Outreach

The sub sector also intends to expand at least 40 markets in cities, municipalities and town councils beside construction of 3 hawkers markets.

National Mapping (GIS)/Metropolitan Development

The Sub sector has continued to conduct GIS mapping and planning of various towns countrywide and it intends to prepare six metropolitan development and for special local authorities and border towns and municipalities.

While significant gains in infrastructure development have been realised over the last 5 years, Kenya's global competitiveness is still weak, it is attributed to high cost of doing business. Some of the challenges include; high cost of power, poor road network and poor performance by the Kenya Railways Corporation Concessionaire.

The Sector has been implementing key reforms aimed at enhancing efficiency and effectiveness in service delivery. In the Roads sub-sector following the enactment of the Roads Act 2007, the Government has operationalized the three Road Authorities namely; the Kenya National Highways Authority (KeNHA), the Kenya Rural Roads Authority (KeRRA) and Kenya Urban Roads Authority (KURA).

The Government is implementing the Housing policy through implementation of key sub programmes namely the housing development and estates management with various projects. In the Energy sub-sector, the Government has consolidated the Electric Power Act and the Petroleum Act through the Energy Act 2007. The Rural Electrification Authority (REA), the Energy Regulatory Commission (ERC) and the Energy Tribunal have been established. In addition, a state-owned Geothermal Development Company (GDC) has been established to be in charge of geothermal resource assessments and sale of steam to future independent power producers (IPPs) and KenGen for electricity generation; GDC will also sell low-enthalpy geothermal fluids to other users. Further, Kenya Electricity Transmission Company (KETRACO), which is 100% government owned, has been established to be responsible for construction and maintenance of new power transmission lines. Kenya Power and Lighting Company (KPLC) is responsible for distribution and will keep its current stock of existing 132 kV and 220 kV transmission lines.

In order to enhance the performance of the construction industry as the premier agent for the development and management of infrastructure facilities and services, a Comprehensive Public Works Policy will be implemented through a National Construction Authority (NCA) which will be established. The objective will be to strengthen the capacity of Kenya's construction industry. To this end, a cab Memo on establishment of a NCA has been approved by Cabinet and the bill has been forwarded to parliament for approval. Plans are also underway to strengthen the Engineers Registration Board (ERB), to allow the ERB to provide relevant training, share knowledge and strengthen self regulation and the sanctioning of unprofessional and unethical conduct by practicing engineers and consulting firms.

The Government has, finalized the draft Integrated National Transport Policy paper under the theme "*Moving a Working Nation*" which prescribes policies aimed at facilitating national and regional integration, promoting trade, economic development, contributing to poverty reduction and wealth creation and the achievement of the objectives of Vision 2030 and beyond. .

Some of the achievements in the Sector in 2009/10 include: construction of 385km km of new roads and rehabilitation of 320 km; maintaining of 26 airstrips in National Parks and Reserves; preparation of the National Integrated Transport Policy which has been adopted by the Cabinet; finalization of consultancy report on feasibility study on terminal facilities to handle capacity of 1.2Million TEUs per annum; formation of National Road Safety Council; completion of 6 stalled building projects; construction of 730 Meters of sea wall; construction of 40 footbridges; relocation of 600 Kibera residents to the decanting site; installation of 124 public institutions with PV systems; connecting 1,714 markets and public institutions and

220,000 households to the national grid; completion of 6 bus parks; construction of 6 wholesale markets at an advanced stage; 2 junctions within metro CBD signalized;

1.2 Sector Vision and Mission

The **Vision** is “Provide cost-effective, world-class infrastructure facilities and services in support of Vision 2030”.

The **Mission** is “To provide efficient, affordable and reliable infrastructure for sustainable economic growth and development through construction, modernization, rehabilitation and effective management of all infrastructure facilities”

1.3 Sector Goals/Strategic Objectives of the Sector

The sector goals are:

- Accelerating ongoing infrastructure development, focusing on quality, aesthetics and functionality of the infrastructure services developed;
- Infrastructure development to support identified flagship projects to ensure contribution to the economic growth and social equity goals;
- Improving efficiency and effectiveness of the infrastructure development process at all levels planning, contracting, and construction;
- Protecting environment as a national asset and conserving it for benefit of the future generation;
- Providing a utility sector (electricity) that is modern, customer- oriented and technologically-enabled to provide efficient, cost-effective, quality services to all citizens; and
- Cultivating social attitude of respect and care for public infrastructure facilities and services amongst all citizens.

The Strategic Objectives are:

- Strengthening the institutional framework for infrastructure development and accelerating the speed of completion ;
- Raising efficiency and quality of infrastructure projects and timely implementation of infrastructure projects;
- Developing and maintaining an integrated, safe and efficient transport network;
- Integrating information and communication technologies in the process of infrastructure service provision;
- Benchmarking infrastructure facilities and services provision with globally acceptable performance standards targeting enhanced customer satisfaction;
- Enhancing private sector participation in the provision of infrastructure facilities and services strategically complemented by public sector interventions.

1.4 Sub-Sectors and their Mandates

1.4.1 Roads Sub-Sector

The Sub-Sector is charged with the responsibility of providing and maintaining vital road infrastructural facilities in the country. It is also an advisor to the government on plant and

equipment. The aim of the sub sector is to improve both quality and quantity of the existing facilities to generate more economic growth.

Mandate

The sub-sector is responsible for development, rehabilitation and maintenance of road network in the country (classified, urban and rural roads as well as roads in National Parks and reserves).

1.4.2 Public Works Sub-Sector

The Sub-sector is charged with the responsibility of providing and maintaining vital basic infrastructural facilities in the country in close liaison with other relevant ministries and departments. The Ministry's main responsibility is development, maintenance, and rehabilitation of buildings and other public Works in the country. The Ministry is also an advisor to the government on building plans.

Mandate

The sub-sector is responsible for development, maintenance and rehabilitation of Government Buildings and Other Public Works in the country.

1.4.3 Transport Sub-Sector

The Transport Sub-sector in Kenya encompasses a transport system comprising of the following modes: road, rail, air and maritime transport. The sector is crucial in the promotion of socio-economic activities and development. An effective, efficient and reliable transport system is a mainspring for rapid and sustained development in terms of national, regional and international integration, trade facilitation, poverty reduction and improvement of welfare of the citizenry.

In the Vision 2030, the transport sub - sector is a key transforming pillar which is expected to play a pivotal role in steering Kenya's economy towards a middle income level by facilitating mobility of people, goods and services.

Mandate

The Sub-sector is responsible for transport policy formulation and development of regulatory framework and transport infrastructure.

1.4.3 Energy Sub-Sector

Mandate

The sub-sector is responsible for energy policy formulation and implementation.

1.4.5 Local Government Sub-Sector

The Local Government sub sector is focused at improving the infrastructural, governance and managerial capacity of Local Authorities which is geared towards the achievements of Vision 2030. The ministry's main focus is to ensure Operationalization of policy, institutional and legal framework within the local Authorities to enhance service delivery .The activities of the sub sector are in line with other government policies e.g. Poverty Reduction, equitable

distribution of resources, Employment and Wealth creation, good governance as well as promotion of local economic growth and development.

Mandate

Oversight, Management and Development support to National urban and metro areas and towns and county councils

1.4.6 Housing Sub-Sector

The sub-sector is strategic in facilitating production and management of quality, affordable and decent housing in urban areas and improvement of quality shelter in rural areas. This is done through provision of effective and efficient estate management services; improvement of tenancy relations; Housing Policy development; Slum Upgrading; Civil Servants Housing Development; Documentation and Dissemination of Appropriate Low Cost Building Materials and Technologies; Promotion of Public-Private Partnerships in housing infrastructure development; and Mainstreaming of M&E in programmes and projects.

Mandate

The sub-sector facilitates development and management of quality and affordable housing for Kenyans.

1.4.7 Nairobi Metropolitan Development Sub-Sector

The sub-sector is mandated to plan the development of integrated roads, bus and rail infrastructure, efficient mass transport system, replacement of slums with affordable low cost/rental housing, efficient water supply and waste management for Metropolitan area among others.

Mandate

The sub-sector is responsible for the planning and development of an integrated spatial growth of the Nairobi Metropolitan region.

1.5 Autonomous and Semi-Autonomous Government Agencies (SAGAs)

Between 2006 and 2008 through the Roads Act 2006 and Energy Act 2007, six SAGAs were created as part of the reform agenda for the sector.

1.5.1 Roads Sub-Sector

1. The Kenya National Highways Authority (KeNHA): is responsible for the development and maintenance of class A, B and C roads. KeNHA will also advise the Minister responsible for Roads on technical issues such as standards, axle load and research development. KeNHA will also create regions of operations countrywide;
2. The Kenya Rural Roads Authority (KeRRA): is responsible for all rural and small town roads of Class D and below including Forest Roads, Special Purpose Roads and Unclassified Roads currently under county councils and town councils. KeRRA will also manage funds allocated to Constituencies;
3. Kenya Urban Roads Authority (KURA): is responsible for management and maintenance of all roads within cities and major municipalities. Local Authorities will remain major stakeholders in prioritizing road works to be implemented by KURA;

4. The Kenya Wildlife Service (KWS) is a roads agency responsible for roads in National Parks and Game Reserves as well as access roads allocated to KWS by Ministry of Roads; and
5. The Kenya Roads Board established by Kenya Roads Board Act 1999: is responsible for funding maintenance of all roads including approval of maintenance work programmes, technical and financial audits of works funded by the Board.

The Government has also approved the transformation of three other departments into Semi-Autonomous Government Agencies (SAGAs). These are:

6. Mechanical and Transport Department : is responsible for provision on commercial basis of equipment to the road agencies and private sector for development and maintenance of road infrastructure;
7. Materials Testing and Research Department: is responsible for materials testing and research; and
8. Kenya Institute of Highways and Building Technology (KIHBT): is responsible for providing infrastructure training to public and private sector staff.

1.5.2 Public Works Sub-Sector

The Ministry does not have SAGAs.

1.5.3 Transport Sub-Sector

- Kenya Civil Aviation Authority (KCAA) is responsible for regulation of the aviation industry and ensuring air safety navigation in the country;
- Kenya Airports Authority (KAA) manages the most important and fastest transport link to the outside world. The Authority ensures that there are adequate efficient and safe airports in Kenya.
- Kenya Ports Authority (KPA) manages the ports, along the coastline that provides the expansive hinterland of mainland Kenya, Rwanda, Burundi, Sudan and Uganda with cheap transport link to the outside world.
- Kenya Ferry Services (KFS) provides free ferry services to the public across the Likoni and Mtongwe channels on the Indian Ocean.
- Kenya National Shipping Line (KNSL) was established with the objective of transportation of bulky cargo as a recommendation adopted at an international forum on shipping development
- Kenya Railways Corporation (KRC) provides rail services that are essential for transportation of commodities to and from the port of Mombasa in addition to providing commuter and passenger services.
- Kenya Maritime Authority (KMA) responsible to regulate and co-ordinate activities in the Maritime industry

1.5.4 Energy Sub-Sector

1. Kenya Power and Lighting Company Limited (KPLC) – is responsible for electricity transmission and distribution;
2. Energy Regulatory Commission (ERC) regulates the entire energy sector and protects interest of stakeholders;

3. Rural Electrification Authority (REA) is responsible for accelerating rural electrification at a pace consistent with government policy.
4. Energy Tribunal arbitrates disputes between ERC and aggrieved stakeholders in the energy sub-sector.
5. Kenya Pipeline Company (KPC): operates the oil pipeline system for the transportation and storage of petroleum products;
6. National Oil Corporation of Kenya (National Oil): is responsible for petroleum exploration and fuel marketing;
7. Kenya Electricity Generating Company (KenGen) is the main electricity generating company, accounting for 87% of the total installed capacity;
8. Kenya Petroleum Refineries Ltd (KPRL) is responsible for crude oil refining in the country.
9. Geothermal Development Company (GDC) is responsible for development of geothermal resources.
10. Kenya Electricity Transmission Company (KETRACO) is responsible for construction and operation of power transmission lines.

1.5.5 Local Government Sub-Sector

1. Local Government Loan Authority (LGLA): established under the act of Parliament Chapter 270 of the Laws of Kenya to secure and operate a revolving fund for lending specifically to local authorities. The Corporation has been inactive and the ministry has restructured it in readiness for commencement of operations;
2. Local Authority Provident Fund (LAPF): established under the Local Authority Provident Fund Act, chapter 272 of the Laws of Kenya. It operates a lump sum benefits Scheme for employees in Local Authorities, and the performance of the fund is self sustaining; and
3. Kenya Local Government Staff Superannuation Fund: a Pension Scheme Fund administered by Local Authorities.
4. National Urban and Metropolitan Areas Development Board: To coordinate creation of other metropolitan areas in the country.

1.5.6 Housing Sub-Sector

The NHC acts as the implementing arm of Government Housing Policy by providing loans to Local Authorities, Companies, Societies, Individuals or Housing organizations for promoting the development of housing schemes or for purchase of land for provision of shelter. The Act also enables NHC to construct dwellings and carry out approved schemes directly.

1.6 Role of Sector Stakeholders

1.6.1 Government

The Government main role will be to undertake investments core and high priority projects that will spur economic growth subsequently creating employment and wealth. The Government proposes to expand provision of infrastructure on a cost recovery basis and in the process increase public financial resources where feasible, and where investment capital costs cannot be recouped; operational, management and maintenance expenditures will be funded from user charges. Transparency in the award of contracts including execution of Government contracts and enforcement of laid down procedures on contractual obligations by both parties during implementation will be ensured.

The Government will endeavour to play a regulatory and facilitative role in the Sector especially where private sector participation is envisaged. One of the areas to encourage private sector participation is the streamlining of tax regimes and other levies in the sector to be more responsive to specific sector needs.

1.6.2 Private Sector Organizations and Professional Bodies

The government has developed a comprehensive privatization program, which includes institutional and regulatory reforms to allow for private sector participation in infrastructure development. The PPP framework has been developed and is expected to enhance private sector participation in the provision of infrastructure facilities and services strategically complimented by public sector intervention.

1.6.3 Role of Civil Society Organization

Non-Governmental Organizations, Community Based Organizations, Faith Based Organizations and other special interest groups are involved in the planning, implementation, and monitoring and evaluation of the sector's programmes and activities.

1.6.4 Development Partners and International Organizations

Development partners and international organizations are key partners in the country's infrastructure development process. They compliment government efforts through grants, prioritization of programmes/projects and loans to the sector.

1.6.5 Parliament

The parliament through its specific committees plays a key role in the approval of sector policies and enactment of sector specific legislations which are key in timely projects/programmes implementations.

CHAPTER TWO: SECTOR PERFORMANCE AND ACHIEVEMENTS DURING THE PERIOD 2007/08-2009/10

2.1 Performance of Programmes

Table 2.1: Performance of Programmes

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|---|---|---|---|
| Roads | | | |
| Programme Name: Road Development, Maintenance and Management Programme Outcome: Expanded, Rehabilitated and Maintained road network | | | |
| Construction of Roads and Bridges | 350km | 385km | Output exceeded on account of increased construction capacity Performance was below target due to transition handicaps on implementation of the Roads Act 2007 and review of the Kenya Roads Board Act 1999. |
| Rehabilitation of Roads and Airstrips in Game Parks and Reserves | 350 km 2 Airstrips | 320 km of Roads Rehabilitated 1 Airstrips Rehabilitated | |
| Routine Maintenance of Airstrips | 40 Airstrips | 26 airstrips maintained | |
| Transport | | | |
| Programme Name: National Transport Management and Infrastructure Development Programme Outcome: Efficient transportation system for trade and mobility | | | |
| Transport Policy Development | National Integrated Transport Policy | A Sessional Paper on Integrated National Transport Policy | The National Integrated Transport Policy adopted by the Cabinet; Sessional paper not presented to Parliament. |
| | Reviewed Bilateral Air Service Agreements | Reviewed Bilateral Air Service Agreements (BASAs) with 15 Countries and negotiated and concluded over 10 BASAs resulting to designation of Fly540 Nairobi –Dar-salaam route and the Mombasa Safari Mombasa Dar-salaam route | Review of the agreements realised the targets. This is enhancing Kenya's business with Regional and International Airlines. |
| | Shipping Acts | Reviewed 4 maritime bills and enactment of the Merchant Shipping Act 2009 | Review of maritime bills felt short of target because of lack of enough provision. |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|--------------------------------------|--|--|--|
| | Reviewed Railway Concession Agreement | Railways Concession Agreement Reviewed and amendment deeds signed | Review was aimed at enhancing operations standards and efficiency |
| Computerization of Transport Systems | Transport data integration (All data on road transport integrated into data centre) | Net working of the Ministry done by 70% | Not completed due insufficient funds |
| | Computerisation of Transport Services (Motor Vehicle Services) | Structured cabling in six MVI (Unit) done. | Have adopted the Transport Integrated Management Systems |
| Port & Kenya Ferry Services | Terminal facilities to handle capacity of 1.2Million TEUs per annum | Consultancy report on feasibility study ready | Construction to start in January, 2011 |
| | Free Port facilities on 3,000 acres at Dongo Kundu Road and Rail to link the free port and the Port. | An Inter Ministerial committee was formed to steer the process. | No fund to compensate the persons to be displaced by the project. |
| | Fully operational Ferries | Two ferries delivered from German where they were being constructed and are now operational. | More additional ferries required. |
| Road Transport Safety | Establishment of Road Safety Council | Road Safety Council Formed | The Council is operational but requires funds to fully implement the action plan |
| Maritime Services Improvement | Policy Guidelines and Regulations developed. | Enactment of the Merchant and shipping Act 2009 | Target not realised due to insufficient funds. |
| | Equipped Search and Rescue Centre at Mombasa and Kisumu | Mombasa Rescue coordination centre and Kisumu Search and Rescue (SAR) centre equipped | 100% maritime search and rescue facilities installed |
| Air Transport services | Expansion of Airports and Rehabilitation of Air Strips | 40 airstrips rehabilitated and undergoing routine maintenance | Rehabilitation of other airstrips is ongoing |
| Air Accident Investigation | Air Accident Preventive Reports and establishment of Air Accident Reporting System | Air Accident Reporting Systems put in place | Reports done after occurrence of Air Accident |
| | | Air Accident Preventive Reports and Guidelines developed | Air Accident Guidelines being applied. |
| Rail Services Improvement | Second Lamu Transport Corridor | Procured a Consultant to undertake the Feasibility Study on the Lamu Corridor | Work in progress |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|---|--|---|---|
| | Upgraded Northern Corridor (from Mombasa to Kampala) | Report for the Second Transport Corridor, design for the Standard railway Line | Re-evaluation of the Transaction advisor |
| | Foundation for Public Private Venture for development of the Mass Transit Routes namely Athi River to City Centre, Kikuyu Town to city centre and Thika Town to the CBD. | Feasibility Report for light Rail/ Commuters trains to JKIA, CBD and Suburbs in progress. | Construction work to start in January 2011 |
| | Secured Railway Reserve in Kibera and Mukuru/ Relocation | Engagement of Social Expert to advice on relocation. | Relocation plan ready awaiting funding |
| Public Works | | | |
| Programme Name: Government Buildings | | | |
| Programme Outcome: Well constructed/developed government buildings and offices | | | |
| Completion of stalled building projects | 13 stalled building projects to be constructed and completed | 6 stalled building projects constructed and completed | Inadequate funding affecting implementation |
| Design, documentation and supervision of construction of new building projects | 120 new buildings Designed, documented and supervised | 229 new buildings Designed, documented and supervised | Increased human capacity hence the target surpassed |
| Refurbishment/ maintenance of government buildings | 50 buildings rehabilitated and maintained | 86 buildings rehabilitated and maintained | Increased human capacity hence the target surpassed |
| Electrify government building units | 20 housing units electrified | 40 housing units electrified | Programme ongoing |
| Design documentation and supervision of economic stimulus | 1325 were designed and documented and are being supervised | 1325 were designed and documented and are being supervised | Program on Going |
| Provision of lightning protection in government buildings in lightning prone areas | 12 lightning protection in government buildings in lightning prone areas provided | 5 lightning protection in government buildings in lightning prone areas provided | Programme ongoing |
| Maintain Electrical and mechanical building services in Government buildings | 100% Maintenance of electrical and mechanical services | Maintained electrical and mechanical services to 95% | Inadequate fund |
| Installation of PABX's in government offices and institutions | 2 new PABX's in government offices and institutions installed | Nil | Inadequate funds |
| Programme Name: Coastline Infrastructure and pedestrian access | | | |
| Programme Outcome: Improved accessibility into and out of waters | | | |
| Construction and rehabilitation jetties | 60% jetties constructed and | 66% jetties constructed and Rehabilitated | On going program |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|---|---|---|---|
| | Rehabilitated | | |
| Construction and Rehabilitation of seawalls | 970 Meters of sea wall | 730 Meters of sea wall constructed and maintained | Inadequate funds were allocated to the programme |
| Construction of footbridges | 40 footbridges to be constructed | 40 footbridges constructed | Completed |
| Programme Name: Procurement Ware Housing and Supply Programme Outcome: Efficient utilization of common user items | | | |
| Procurement warehousing and supply | 135 Term and Quantity contracts procured | 135 Term and Quantity contracts procured | Target achieved |
| Programme Name: Construction Standards and Research Programme Outcome: Improved building materials and methods in construction | | | |
| Construction Standards and Research | 3 areas of buildings research to be undertaken | 2 areas of buildings research undertaken | Inadequate personnel for research |
| Housing | | | |
| Programme Name: Housing Development and Human Settlement Programme Outcome: Decent and affordable housing in urban areas and improved quality shelter in rural areas as well as efficiently and effectively managed government estates | | | |
| Sub-Programme 1: Housing Development | Relocate 600 Kibera residents to the decanting site | Relocation of residents from Kibera Soweto East A completed | Relocation to pave way for development of the vacated space |
| | Design and Construction ¹ of Sewerage line at Kibera to connect the Decanting site to the main NCC sewer line | Sewerage line to connect the decanting site to the main NCC sewer line completed | Completed and decanting site occupied |
| | Design and Construction of 400 housing units at Kibera Soweto East village Zone A to 45% | Residents relocated, structures cleared, tender documents for fencing ready. Project is at 45% completion level | Construction not taken off due to a court order |
| | Design and Construction of 400 housing units, one primary school, one nursery school, one social hall, one market centre and one health centre in Mavoko, Athi River to 75% level | Project at 66% completion level | The project behind schedule |
| | Form and register 4 | Six (6) cooperatives were | These cooperatives |

¹ For all design and construction of projects, work to be done is apportioned as follows: Site identification and preparation of PDP (10%), cadastral survey and approval (10%); architectural, civil, electrical and mechanical designs and bill of quantities (10%); tendering and award (10%); construction 60%.

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|-----------------------------|---|---|---|
| | housing cooperatives in informal settlements within selected project areas | formed | are critical avenues of mobilising resources for housing and improved tenure arrangements |
| | Design and Construction of 0.5 Km of access road in Kibera (Phase I) to completion | 0.5 Km of access road in Kibera completed | Completed and in use |
| | Design and Construction in development and rehabilitation of 7 Social and Physical Infrastructure in main Provincial Towns and key urban centres to 75% | Road under construction in Mombasa; market sheds and high mast lights in Nyeri; classrooms blocks in Kakamega; classroom block and maternity hospital in Nakuru and classroom block and a social hall in Kisumu | Project at 72% performance level |
| | Design and Construction of 1.35 Km of access road in Langata, Nairobi | 1.35 Km of access road in Langata Nairobi completed | Completed and opened for use |
| | Design and Construction of 7 Km of Trunk sewerage line and 5 Km of Trunk water line in Thika Town to 70% | 7 Km of Trunk sewerage line and 5 Km of Trunk water line are near completion | Project on course and is at 74.77% level |
| | Design and Construction of 7 Km of Trunk sewerage line and 2 Km of Trunk water line in Athi River Town to 70%. | Phase 1 complete, 2 nd phase commenced | On course |
| | Design and Construction of 6 Km of Trunk sewerage line and 0.60 Km of anti-malarial drainage in Eldoret Town. | design and construction works near complete | On course and at 84.26 % |
| | Design and construction of infrastructural services (e.g. access roads, water, sewerage) on 20 acres of land for housing development. | 26 acres of land opened up for housing development | |
| | Identification and | 19 best practices in housing | The best practices |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|--|--|---|--|
| | documentation of 14 Best Practices in Housing and Human Settlements | and human settlements identified | were documented and an exhibition held. |
| | Establish 15 constituency Appropriate Building Technologies (ABTs) Centres | 20 constituency ABTs centres established | Positive variance resulted from fast-tracking the process of securing land and cost sharing from CDF kitty in some constituencies |
| | Hold 30 workshops for training, demonstration and dissemination of Appropriate Building Technologies (ABTs) in all provinces | 61 workshops were conducted | Objective of these workshops is to disseminate and demonstrate utilisation of ABTs. Over-performance due to community awareness |
| | Disburse Kshs. 450m as loans to civil servants to purchase or develop houses. | Kshs.509m loans advanced for direct purchase or construction of housing | Approximately KShs. 3.4B has been disbursed for direct of houses from Civil Servants Housing Scheme (CSHS) and the open market or construction |
| | Design and Construction of 526 housing units for sale to Civil Servants in Ngara Phase II, commercial centre and nursery school | 77.04% of design and construction complete | On course |
| | Design and Construction of 220 housing units for sale to Civil Servants (in Ngara Phase I-130, Nyeri Road – 40 and Kilimani - 50). | 95% design and construction works | Ngara project behind schedule |
| | Design and Construction of 280 houses along Jogoo Road | 54% design and construction works | Behind schedule though it has registered improved performance |
| | Design and construction of 22 housing units in Makueni Road-Kileleshwa to 99% | 92.9% complete | Project behind schedule |
| Sub-Programme 2: Estates Management | Refurbish 2,220 government houses | 2,274 government houses refurbished | Target surpassed |
| | Register 1,000 | 1321 Government houses | Over-performance |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|--|--|---|--|
| | government houses | registered | due to a previous backlog |
| | Security fencing for 525 government houses | 583 government houses fenced | Target realised. |
| | Maintenance of civil works | <ul style="list-style-type: none"> Sewerage systems overhauled (15 sites) Electrification of 240 units including electricity meter separation | |
| | Renovation of Protection House and Bima towers Mombasa | <ul style="list-style-type: none"> Design and tendering completed Renovations commenced | Protection house to be completed in 2010/2011 |
| | Purchase of plots at Upper Hill | <ul style="list-style-type: none"> Negotiations done Partial payment made | |
| | Provision of offices to district stations | Renovations, upgrading and extensions for 10 stations completed | |
| | Prepare Draft Building Laws and Regulations | Draft finalised | |
| | Resolve rent tribunal cases within 2 months after close of defence hearing | 706 cases were resolved within 2 months | Target met, no pending cases |
| | Finalize the Landlord and Tenant Bill 2007 | Done | The Bill has been approved by the Cabinet awaiting publication by AG |
| | Hold 4 public fora to sensitize the public on the activities of the Rent Tribunal | Six (6) sensitisation fora were held | The objective of holding these fora is educate the public on Tribunal services |
| | Establish 4 rent restriction tribunal stations at satellite locations | 4 rent restriction tribunal stations at satellite locations | These satellite stations decentralise RRT services |
| Energy | | | |
| Programme Name: Energy Development and Management | | | |
| Programme Outcome: Improved standards of living for Kenyans | | | |
| Sub-Program 1: Rural Electrification | To provide solar PV systems in 60 public institutions in ASAL areas | 124 installed with PV systems | Set target was achieved and even surpassed |
| | Construct 8 new mini grids and associated diesel power generation stations in ASAL | Civil work for 8 mini grids completed | Tenders for installation of machines was cancelled and advertised afresh. |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|---|---|--|--|
| | To electrify 880 markets and public institutions | 1,714 markets and public institutions connected | Targets achieved and exceeded |
| Sub-Programme 2: National Grid System Enhancement & Development | Connect 200,000 households with electricity | 220,000 households connected | <ul style="list-style-type: none"> The target was exceeded due to increased funding from initial Kshs 2.5 billion to Kshs 3 billions. 100,000 connections were done under Rural Electrification programme. |
| | Project preparation for 260km 400kV Line Singida - Arusha - Nairobi Transmission line constructed | Project preparation and award of tender for construction | Bids invited Tenders to be opened in February 2010. |
| | Project preparation and mobilization of finances for 686km 500kV HDVC, 400kV sub-station to import 300 MW Ethiopia – Suswa Interconnector constructed | Feasibility study completed. Bids for construction being prepared | |
| | Project preparation and mobilization of finances 200 Km 220 KV Olkaria - Lessos Transmission Line | Feasibility study updated and EIA prepared. | |
| | Bidding process for 200 Km 220 KV Lessos - Tororo Transmission Line | Bidding process on going | |
| | 200 km of 1500 Km 132KV Back-Bone Transmission Lines | Grid extended by 90 km | |
| Sub-Programme 3: Exploration and development of geothermal energy resources | Construction of 35MW Olkaria II third unit | Construction of 35 MW unit completed | Targets achieved |
| | Drill 6 geothermal production wells for 140 MW Olkaria I capacity enhancement | 6 production wells drilled Optimization study completed indicating additional 140MW available | Targets achieved |
| | Drill 10 geothermal production wells for 140 MW Olkaria IV power plant | 10 production wells drilled Optimization study completed indicating additional 140MW available | Targets achieved |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|--|--|---|--|
| Sub-Programme 4: Exploration, exploitation, distribution, infrastructure enhancement and substitution of fossil energy resources | Drilling of 15 coal appraisal wells | 20 coal appraisal wells were drilled | First well started on 2/7/09 and the last well completed on 2/8/2010 |
| | Procure of JV partner. Construction of 300MW coal fired power plant to start | JV partner procured | KCAA has denied permission to construct the plant at Dongo Kundu. New site for plant is being sought |
| | contractor mobilization and commencement on construction of 325 km 14 inch oil pipeline from Nairobi to Eldoret | agreements prepared tenders awarded awaiting signing negations with lenders on-going | there has been delays in obtaining financing for the project |
| | Completion of project scoping phase for 352 km 10-inch diameter oil pipeline from Eldoret to Kampala constructed Finalization of land valuation | § Tenders evaluated and contract awarded. § Detailed engineering design on going. § Draft project agreements prepared | § Following discovery of oil in Uganda, consideration of having a reversible pipeline being considered. § Final investment decision not yet done by the project developer |
| | Award tender and begin construction of 6,000 tonnes bulk LPG storage 12-inch LPG from Kipevu to Changamwe for distribution constructed. | Technical and financial evaluation done and report being finalized | The new shareholders of KPRL(ESSAR) have requested for information to understand the basis of the project |
| | Award tender and begin construction of 2,000 tonnes LPG storage and distribution facilities in Nairobi constructed | Sourced Joint Partner (BPCL) | There has been delays in finalizing project business plan and the preliminary engineering design by BPCL |
| | Assess petroleum potential in Nyanza Tertiary Rift. | Assessment carried and a report produced | Sedimentary basin with potential identified. |
| | Sub-Programme 5: Wood fuel Resources Development | Increase acreage on wood fuel plantations by 1400 hectares | 1400 Hectares achieved |
| Increase households using energy saving stoves & charcoal | | 50% | Target achieved |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|---|--|--|---|
| | kilns from 47% to 50% | | |
| Sub-Programme 6: Development of Renewable Energy Technologies | Increase solar power generation by 75 Kwp | 260Kwp solar PV installed | Targets achieved and even surpassed |
| | Project preparation for 300 MW Wind Power Plant in Marsabit | Project preparation progressed | § Project preparation on going |
| | § Signing of PPA with KPLC § Award of tender for construction of plant | PPA negotiations approved | § PPA negotiations have been approved by E.R.C. |
| | Increase wind power generation by 5.1 MW at Ngong | 5.1 MW achieved | Targets achieved earlier than scheduled |
| Sub-Programme 7: Energy Efficiency Enhancement | Three investment grade energy audits in industrial establishments | Carried three audits | Target achieved |
| | Carry out a sector Environmental and Social Impact Assessment studies | Study carried out and report produced | Target achieved |
| | Carry out feasibility study on liquefied natural gas Plant and import facility | Sourcing for a consultant to carry out the study | Target achieved |
| Local Government | | | |
| Programme Name: Local Authority Management and Development | | | |
| Programme Outcome: Improved infrastructure and Management in Local Authorities | | | |
| Sub- Programme 1: Urban and County Development | | | |
| | Reconstruction of 92.37km of access roads to bituminous standard | 60.67 km completed and under use | Inadequate funds |
| | Completion of 8 bus parks | 6 Bus parks completed | Inadequate funds |
| | Pilot Geographical information System (GIS) | Base maps, attribute data Prepared | |
| | Develop urban Strategic plan, Digital Mapping and Planning of 23 urban centres | -Five (5) completed and launched | Inadequate funds |
| | Develop National urban development policy | Draft concept paper | Concept paper awaiting cabinet approval |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|---|---|---|--|
| | Carry out solid waste management studies in four (4) major towns. | Two completed | Inadequate funds |
| | Construction of 8 kms of storm water drainage | 4 kms of storm water drainage constructed | Inadequate funds |
| | Rehabilitate 9 primary schools in poor urban areas | Tender awarded for two schools | Delay in procurement due to donor conditionalities |
| | Upgrade Physical and social infrastructure in five (5) informal settlements | One completed | Four (4) awaiting Donor no objection |
| | Purchase five (5) fire ambulances for 5 LAs | Procured 3 and handed over | Inadequate funding |
| Sub- programme 2:Market Development | | | |
| | Carry out feasibility studies for 10 wholesale Market hubs | 3 feasibility studies done | Inadequate funds |
| | Construction of 10 wholesale markets, | Construction of five (5) commenced | Inadequate funds |
| | Construction of 43 retail markets, | 14 completed | Inadequate funds |
| | Construction of 4 hawkers markets | One completed and one under construction | Inadequate funds |
| | Construction of 210 Economic Stimulus markets (ESP) | Construction of 210 ESP markets commenced | Validation of CDF tender award |
| Sub- Programme 3: Local Authority Management and Advisory Services | | | |
| | 175 LAs on Performance contracts | 175 LAs Performance contracts signed | |
| | Undertake 20 Audit inspections | 34 Audit inspections undertaken | |
| | Implementation of RBM (RRI) in 175 LAs | 175 LAs on RRI | |
| | 2000 ex street children rehabilitated | 2000 street children rehabilitated | |
| | Review and Launch of SFRTF 5 year Strategic Plan | SFRTF Strategic plan launched | |
| | Support the implementation of Drop-in-centres in Nine (9) | Drop in centres in nine (9) towns supported | |
| | Leasing of the Nyeri Children and Youth Centre. | Centre leased | There is intention of purchasing the centre |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|--|--|---|--|
| Sub – Programme 4: Reform in Local Government. | | | |
| | Development and dissemination of Governance and Service Delivery Tools in 15 LAs | Service delivery tools developed and disseminated in 15 LAs | EU contract ended in September, 2010 More funds needed to disseminate the tools to the remaining LAs(160) |
| | Develop LGSRS (Local Government sector reform Strategy) | LGSRS (Local Government sector reform Strategy) developed | |
| | Implementation of Higher Performance Account in 175 LAs | Higher performance account implemented in 175 LAs | |
| Nairobi Metropolitan Development | | | |
| Programme: Metropolitan infrastructure and services | | | |
| Outcome: : Improved infrastructure, security and quality of life in NMR | | | |
| Metropolitan mobility and transport Sub-Programme | | | |
| Rehabilitate Metropolitan Roads | 10 km bitumen road rehabilitated | 5 km bitumen road rehabilitated | To run for 2 financial years |
| Traffic management | 2 junctions within metro CBD signalized | 2 junctions signalized | |
| | To prepare 4 documents for decongestion tendering process | Tendered 4 number projects for decongestion | To implement this financial year |
| Metropolitan infrastructure & utilities Sub-Programme | | | |
| Housing& slums reduction | Preparation of 13 advisory plans for slums in the Metro Region | Advisory plans for 13 slums in place | Done |
| | Conduct 1 pilot housing study | 1 slum reduction pilot housing study done | Done |
| Water & sewerage works | Relocate water and sewerage line along Thika road in liason with Nairobi water Company | Truck line relocated | No cost was incurred by the Ministry |
| Metropolitan planning, promotion, administration and Research Sub-Programme | | | |
| General administration | Improvement of work environment | Offices completed | On going |
| | Staffing levels | Approved establishment | Ongoing |
| | Improved Governance | Implemented policies | Ongoing |
| | MTEF policy direction | Ministerial Budget | Ongoing |
| | Improved service delivery | Ministerial service delivery charter developed | Awaiting Dissemination |
| Land use Planning | Preparation of Metro spatial plan | Draft Metro spatial plan in place | Ongoing |
| Nairobi metropolitan board | Oversight for the metropolis | Draft metro by law By laws compendium | Not done |

| Programme/ Sub-programme | Intended Output | Output Achieved | Remarks |
|---|---|---|---------|
| | | Database on report Workshop reports | |
| Safety and Security Sub-Programme | | | |
| Installation of security floodlights | Install 300 Street light | 300 number of Street light installed and 24 hours guaranteed security | |
| Procurement of fire fighting engines and ambulances | Procure 10 fire engines and 5 ambulances | 10 fire engines and 5 ambulances procured | |
| Creation of Nairobi metropolitan police | Procure vehicles for rapid response of the police | 10 vehicles procured for rapid response of the police | |

2.2 Key Indicators of Sector and Sub-Sector Performance

Roads

Key indicators and their performance in the Sub Sector are as follows;

- No of Kilometres of Roads and Bridges Constructed
- No of Kilometres of Roads and Bridges Rehabilitated
- No of Kilometres of Roads and Bridges Maintained
- No of Designs of Roads and Bridges
- No of Graduates in Capacity building to improve local construction capacity
- No of Kilometres of Roads and Airstrips maintained in Game Parks and National Reserves

Transport

- Docking of Panamax vessels
- % reduction in road accidents and fatalities (number of accidents and fatalities on monthly or on annual basis)
- Number of rehabilitated and maintained airstrips across the country
- Number of operational international airports
- Percentage of freight by rail from the port of Mombasa in relative to the freight on road
- Reduction of the cargo dwelling time at the port
- Number of air accidents investigations reports
- Feasibility study report for the Lamu port Southern Sudan Transport Corridor
- Number of berths in the port of Lamu
- Transport data centre established
- Light Railway Line constructed within the City

Public Works

Key indicators and their performance in the Sub Sector are as follows;

- Number of stalled Government building projects completed
- Number of Design, documentation and supervision of new Government Buildings
- Number of Government buildings constructed and Maintained
- Kms of coastline infrastructure constructed and Maintained
- Number of design documentation and construction of foot bridges
- Number of construction standards and research done

Housing

Sub-sector performance as highlighted in section 2.1 above has the following key indicators;

- Number of physical and social infrastructure installed in slums and informal settlements.
- Number of Constituency Appropriate Building Technology Centres established.
- Numbers of Acres opened up for housing development through housing infrastructure development.
- Housing development initiatives.
- Number of refurbished and secured government houses.
- Number of resolved rent tribunal cases.

Energy

- Number of solar electricity generators (PVs) installed in public institutions and facilities;
- Number of mini grids and associated diesel power generation stations constructed
- Number of public institutions and market centres connected with electricity;
- Number of new households connected with electricity;
- Number of kilometres of transmission and distribution lines constructed;
- Number of substations constructed / rehabilitated;
- Number of exploration and production geothermal wells drilled;
- Construction of 35MW Olkaria II third unit;
- Drilling of 15 coal appraisal wells ;
- Construction of 300MW coal-fired power plant ;
- 352 km 10-inch diameter oil pipeline from Eldoret to Kampala constructed;
- Tender for construction of 2,000 tonnes LPG storage and distribution facilities in Nairobi awarded;
- Acreage of wood fuel plantations increase d by 1400 hectares
- Number of households using energy saving stoves & charcoal kilns increased

LOCAL GOVERNMENT

- Number of markets/wholesale hubs constructed
- Number of Kms of access road constructed
- Number of bus parks constructed
- Number of reforms institutionalized in LAs
- Number of LAs put under performance contracting

METROPOLITAN

Access, mobility and connectivity through effective transportation

- Pedestrianisation (NMT-4KM)
- Plan and design Pedestrianisation Thika and Mavoko Municipalities
- Number of Bitumen road constructed
- Urban traffic control for management of traffic in the city of Nairobi
- Number of metropolitan spatial plan
- Number of physical development plans within NMR
- Number of strategic environmental assessments for landfills in NMR
- Metropolitan observatory and resource centre (MO & RC).
- Number of refuse truck for MLAs

- Established parks and Metro Square Programme (Metro tower & Metro squares).
- Number of street/public lights installed in various parts of the NMR
- Number of fire officers trained in the NMR on fire disaster preparedness/management and fire drills and lectures
- Property and street addressing within NMR
- Number of ambulances and fire engines/ land Rover procured

2.3 Expenditure Analysis

2.3.1 Analysis of Recurrent Expenditure

Table 2.2: Analysis of Recurrent Expenditures for the Sector (Kshs. Millions)

| Sub-Sectors | Approved Estimates | | | Actual Expenditures | | |
|----------------------------------|--------------------|---------------|-----------------|---------------------|---------------|-----------------|
| | 2007/08 | 2008/09 | 2009/10 | 2007/08 | 2008/09 | 2009/10 |
| Roads | 24,400 | 21,159 | 21,852 | 17,277 | 20,647 | 20,969 |
| Transport | 4,021 | 3,214 | 3,389 | 3,937 | 3,191 | 3,286 |
| Public Works | 792 | 991 | 1,671 | 709 | 929 | 1232 |
| Housing | 1,766 | 1,715 | 1,836.5 | 1,293 | 1,433 | 1,515.3 |
| Energy | 322 | 365 | 409.3 | 290 | 348 | 362 |
| Local Government | 1,005 | 1,296 | 11,348 | 963 | 1,078 | 11,330 |
| Nairobi Metropolitan Development | 42 | 268 | 338 | 39 | 266 | 299 |
| TOTAL | 32,348 | 29,008 | 40,843.8 | 24,508 | 27,892 | 38,993.3 |

The table above indicates that both the approved recurrent expenditure budget on Physical Infrastructure Sector increased from Kshs. 32,348 million in 2007/08 financial year to Kshs. 40,844 million in 2009/10 FY. The total actual recurrent expenditure increased from 75.7 per cent in 2007/08 to 95.5 in 2009/10. The upward trend in recurrent expenditure has been due to the increase in the Road Maintenance Fuel Levy Fund levied on petroleum products. Expenditure on roads constituted 54 per cent and 53.8 per cent of the total approved and actual recurrent physical infrastructure expenditure respectively for the FY 2009/10.

The trends in expenditure analysis indicate that there has been a general underutilization of recurrent expenditure. Between 2008/09 and 2009/10, the average underutilization of recurrent expenditure funds stood at 4.5%. The underutilisation is attributed to: Slow and bureaucratic procurement procedures particularly for road maintenance projects which are not synchronized with flow of funds; Delayed exchequer releases especially towards the end of the financial year and in some cases lack of the exchequer releases; and Breakdown of the IFMIS system especially towards end of the financial year when a number of transactions usually delayed due to procurement procedures are being affected.

2.3.2 Analysis of Development Expenditure

Table 2.3: Analysis of Development Expenditures for the Sector (Kshs. Millions)

| Sub Sectors | Approved Estimates | | | Actual Expenditures | | |
|-------------|--------------------|---------|---------|---------------------|---------|---------|
| | 2007/08 | 2008/09 | 2009/10 | 2007/08 | 2008/09 | 2009/10 |
| Roads | 33,682 | 46,437 | 58,491 | 24,597 | 36,279 | 36,577 |
| Transport | 4,789 | 2,482 | 5,792 | 3,324 | 2,013 | 3,548 |

| Sub Sectors | Approved Estimates | | | Actual Expenditures | | |
|----------------------------------|--------------------|---------------|----------------|---------------------|---------------|---------------|
| | 2007/08 | 2008/09 | 2009/10 | 2007/08 | 2008/09 | 2009/10 |
| Public Works | 1,705 | 2,287 | 3,971 | 1,454 | 2,137 | 3,007 |
| Housing | 1,364 | 2,066 | 2,074 | 1,284 | 1,900 | 2,063 |
| Energy | 21,075 | 31,260 | 33,118 | 17,704 | 30,560 | 32,513 |
| Local Government | 2,973 | 2,375 | 4,556 | 2,796 | 2,057 | 1,988 |
| Nairobi Metropolitan Development | 0 | 1,650 | 1,420 | 0 | 1,150 | 1,144 |
| TOTAL | 65,588 | 88,557 | 109,422 | 51,159 | 76,096 | 80,840 |

The approved and actual development expenditure budget on Physical Infrastructure Sector has been increasing since 2007/08 financial year as presented in the table above. The total approved expenditure increased from Kshs 65,558 million in FY 2007/08 to Kshs. 109,422 million in FY 2009/10. The total actual expenditure increased from 51,159 million in 2007/08 to Kshs 80,840 million in 2009/10. Expenditure on Roads and Energy accounted for 83.7 per cent and 85.5 percent of the total approved and total actual Development expenditure for the FY 2009/10.

The increased allocation in the original and actual expenditure was in line with Government commitment and recognition of the country's infrastructure including roads, airports, ports, energy generation and supply as being the foundation of the Kenya Vision 2030. The trends in expenditure analysis indicate that there has been a general underutilization of development expenditure. Between 2007/08 and 2009/10, the average underutilization of development expenditure for the period under review stood at 28.7%. The underutilisation is attributed to: Procurement challenges particularly donor funded projects; Inadequate counterpart funding which affects the expenditure on the donor component; and Delayed exchequer releases and disbursement of funds from development partners.

2.3.3 Analysis of Externally Funded Programmes

Table 2.4: Analysis of Donor Funded Programmes (Kshs. Millions)

| | Approved Estimates | | | Actual Expenditure | | |
|-------------------------|--------------------|---------------|---------------|--------------------|---------------|---------------|
| | 2007/08 | 2008/09 | 2009/10 | 2007/08 | 2008/09 | 2009/10 |
| Roads | | | | | | |
| Revenue | 2,980 | 1,140 | 1,099 | 1,644 | 857 | 465 |
| AIA | 14,070 | 20,813 | 27,022 | 7,375 | 14,869 | 14,070 |
| Sub-total | 17,050 | 21,953 | 28,121 | 9,019 | 15,726 | 14,535 |
| Transport | | | | | | |
| Revenue | 2,980 | 1,140 | 1,099 | 1,644 | 857 | 465 |
| AIA | 493 | 271 | 1,701 | 80 | 140 | 166 |
| Sub-total | 3,473 | 1,411 | 2,800 | 1,724 | 997 | 631 |
| Housing | | | | | | |
| Revenue | 0 | 0 | 0 | 0 | 0 | 0 |
| AIA | 8 | 25 | 50 | 8 | 25 | 50 |
| Sub-total | 8 | 25 | 50 | 8 | 25 | 50 |
| Energy | | | | | | |
| Revenue | 1,959 | 2,119 | 1,693 | 856 | 2,119 | 1,699 |
| AIA | 5,269 | 6,382 | 6,352 | 3,288 | 5,412 | 6,240 |
| Sub-total | 7,228 | 8,501 | 8,045 | 4,144 | 7,531 | 7,939 |
| Local Government | | | | | | |
| Revenue | 173 | 113 | 784 | 173 | 113 | 784 |
| AIA | 630 | 1,088 | 655 | 630 | 1,088 | 655 |

| | Approved Estimates | | | Actual Expenditure | | |
|------------------|--------------------|---------------|---------------|--------------------|---------------|---------------|
| | 2007/08 | 2008/09 | 2009/10 | 2007/08 | 2008/09 | 2009/10 |
| Sub-total | 803 | 1,201 | 1439 | 803 | 1,201 | 1439 |
| TOTAL | 28,562 | 33,091 | 40,455 | 15,698 | 25,480 | 24,594 |

The table above shows that approved external funding has been increasing over the period under review. The approved external funding increased from Kshs. 28,562 million in 2007/08 to Kshs. 40,455 million in 2009/10. The total actual external funding increased by 56.7 per cent from Kshs 15,698 million in 2007/08 to Kshs. 24,594 million in 2009/10. The major beneficiaries were; Roads and Energy sub-sectors accounting for 59 and 32 per cent respectively during 2009/10 FY. The funding was mainly for the improvement of road network and energy projects.

2.4 Review of Pending Bills

2.4.1 Recurrent Pending Bills

Table 2.5: Analysis of Recurrent Pending Bills (Kshs. Millions)

| Sub Sector | Due to Lack of liquidity | | | Due to Lack of provision | | |
|----------------------|--------------------------|------------|------------|--------------------------|------------|------------|
| | 2007/08 | 2008/09 | 2009/10 | 2007/08 | 2008/09 | 2009/10 |
| Roads | 25 | 152 | 126 | 59 | 377 | 389 |
| Transport | 0 | 3 | 33 | 0 | 0 | 0 |
| Public Works | 5 | 52 | 7 | 0 | 5 | 0 |
| Housing | 53 | 0 | 7 | 0 | 0 | 0 |
| Energy | 0 | 0 | | 0 | 0 | 0 |
| Local Government | 0 | 0 | 0 | 0 | 0 | 5 |
| Nairobi Metropolitan | 0 | 0 | | 0 | 0 | 0 |
| TOTAL | 83 | 207 | 290 | 59 | 382 | 394 |

2.4.2 Development Pending Bills

Table 2.6: Analysis of Development Pending Bills (Kshs. Millions)

| Sub Sector | Due to Lack of liquidity | | | Due to Lack of provision | | |
|----------------------|--------------------------|--------------|--------------|--------------------------|--------------|---------------|
| | 2007/08 | 2008/09 | 2009/10 | 2007/08 | 2008/09 | 2009/10 |
| Roads | 0.4 | 0.5 | 1,801 | 6,000 | 9,000 | 10,000 |
| Transport | 0 | 0 | 0 | 0 | 0 | 0 |
| Public Works | 943 | 113 | 0 | 0 | 300 | 740 |
| Housing | 21 | 0 | 2 | 0 | 0 | 0 |
| Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Local Government | 0 | 0 | 0 | 0 | 0 | 844 |
| Nairobi Metropolitan | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 964.9 | 113.5 | 1,803 | 6,690 | 9,633 | 11,584 |

In FY 2009/10, the total pending bill for the sector was Kshs.14, 071 million. Bills on the development vote were Kshs. 13,387 million while for recurrent was Kshs. 684 million. Roads, Public Works, Housing and Local Government sub-sectors contributed the sector's pending bills in both Development and Recurrent. Most bills emanates from backlog in payment of claims towards closure of financial year. Over the last four years, there has been

remarkable improvement in settling pending bills in recurrent vote due to prudent financial management. However, the trend has been rising mainly as a result of delayed payments for contracted civil works and professional services, variation of contracts, austerity measures and delays in exchequer releases to facilitate payments in the development vote. Notably some of the pending bills captured in the table have been settled. The Kenya Urban Transport Infrastructure Project (KUTIP) bill came about as a result of the suspension of the credit arrangement. However, the credit arrangement came to a close on 30th June 2005. Notwithstanding the closing of credit agreement the government had a contractual obligation to pay for the works done and certified. The conditions of the contract had spelt out that the employer shall pay contractor the amount certified by the project manager within 21 days of the date of each certificate. If the employer makes late payment, the contractor shall be paid interest on late payment in the next payment. Interest shall be calculated from the date by which payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payment is made. The last time Treasury authorized payment of KUTIP bills was 2008/09 as at 31st march 2009 KUTIP bills was standing at Kshs. 300Million, since it has continued to remain outstanding it is accruing interest and likely to create litigation cases.

CHAPTER THREE: MEDIUM TERM PRIORITIES AND FINANCIAL PLAN FOR THE MTEF PERIOD 2011/12-2013/14

3.1 Prioritization of Programmes and Sub-programmes

3.1.1 Programmes and their Objectives

Table 3.1: Programmes and their Objectives

| Programme | Objectives |
|---|---|
| Roads | |
| Road Development, Maintenance and Management | To expand, rehabilitate and maintain the road network in addition to building capacity for road construction |
| Transport | |
| Transport Management and Safety | To develop and review policies and regulatory guidelines that guarantee provision of efficient, safe and reliable transport services |
| Transport Infrastructure Development | To develop, expand and modernise Transport Infrastructure System to facilitates efficient trade and mobility |
| Public Works | |
| Government Buildings | To provide a better Working Environment and ensure efficient use of Government Investment. |
| Coastline Infrastructure and pedestrian access | To improve accessibility to coastal towns, neighbouring island and areas of difficult Terrain. |
| Procurement, Warehousing and Supply | To ensure efficient utilization of common user items |
| Construction Standards and Research | To ensure provision of improved building materials and methods in construction |
| General administration and planning support programme | To provide policy guidelines, coordination and provision of support services |
| Housing | |
| Housing Development and Human Settlement Programme | To facilitate access to decent and affordable housing and improved living conditions in informal settlements in urban areas, improved quality shelter in rural areas and efficient and effective managed government estates / plots |
| Energy | |
| National Electrification Programme | Increase Access to Electricity |
| Renewable Energy Resources Programme | Development of Renewable Sources of Energy |
| Petroleum Exploration and Distribution Programme | Security of Fossil Fuel Resources |
| Centralised Support Services Programme | Performance Improvement |
| Local Government | |
| Local Authority management and development | To enhance good governance and service delivery in LAs |
| Nairobi Metropolitan Development | |
| Metropolitan infrastructure and services | To enhance infrastructure connectivity and accessibility, safety and security that facilitates within the metropolitan area. |

3.1.2 Programmes, Sub-programmes, Expected Outcomes, Outputs and Key Performance Indicators for the Sector

Table 3.2: Programmes, Sub-programmes, Expected Outcomes, Outputs and KPI

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|---|--|--|
| Roads | | |
| Programme: Road Development, Maintenance and Management | | |
| Programme Outcome: Efficient and Economical Road Transport | | |
| Construction of Roads and Bridges | 500 Kilometres constructed | No. of kilometres of roads constructed |
| Rehabilitation of Roads and Bridges | 650 Kilometres rehabilitated | No. of Kilometres rehabilitated |
| Maintenance of Roads and Bridges | 52,245 Kilometres maintained | No. of Kilometres maintained |
| Design of Roads and Bridges | 10 designs completed | No. of designs completed |
| Capacity building to improve local construction capacity | 350 graduates trained | No. of successful graduates |
| Construction and maintenance of airstrips in Game Reserves and National Parks | 2 airstrips constructed to bitumen standard and operationalized | No. of airstrips Constructed |
| | 26 airstrips maintained | No. of airstrips maintained |
| Routine Maintenance of Roads in Game Parks and National Parks | 500km | No. of km of roads maintained |
| Transport | | |
| Programme 1: Transport Management and Safety | | |
| Programme Outcome: Efficient and safe transport system | | |
| General Administration Planning and Policy Development | Developed 50 year National Transport master plan | 50 year transport master plan developed |
| | Finalized Mass Rapid Transport Systems report | Consultancy report on the Mass Rapid Transport System |
| | Transport Policies, guidelines developed and legislations initiated. | Number of Transport Policies, guidelines and legislations. |
| | Developed Transport Integrated Management System | Functional Integrated Transport System |
| | Developed Transport Data Centre | Fully operational data centre |
| Marine Transport Services Management | 5 Kenyan trained in sea farers | Number of Kenyans trained in seafarers |
| | 4 Maritime Conventions Ratified and domesticated | Number Maritime convention ratified and domesticated |
| | 10 Awareness campaigns on maritime industry | Number of awareness campaigns undertaken |
| | 9 Maritime bills Reviewed | Number of Maritime bills Reviewed. |
| | Updated and modernized Maritime Laws | Number of Bills with incorporated International Maritime Conventions |
| Road Transport Safety | Reduced Road Accidents and Incidences by 50% | % reduction in number of Roads Accidents and Incidences |
| | Established National Road Safety Authority | Established semi-autonomous Authority |
| | Developed road crash data management system | Road crash data management system developed |
| | 210 road safety awareness campaign | Number of road safety |

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|--|--|---|
| | | campaigns |
| | Documentation of all the black spots across the country | Documented list of all black spots in the country |
| | Erection of road studs in all black spot areas | Number of roads sections with roads studs at black spot areas |
| Rail Transport Services Management | Improved Efficiency in Railway Transport Services | % Increase of tonnes of Cargo transported by rail % Increase of people using railway transport annually |
| Air Transport Services Management | Air accidents investigations reports | Number of air accidents reports against the total number of air accidents occurred |
| | Maintained secure and safe airspace | Number of International Airlines using our airports/airspace |
| | 6 Airstrips Rehabilitated | No. of airstrips rehabilitated |
| | 2 New BASAs negotiated and concluded | Number of new BASAs negotiated and concluded |
| | 3 Air Services Conventions and Protocols Ratified | No. of protocols and convention ratified |
| | 9 existing BASAs reviewed | Number of BASAs reviewed |
| Programme2: Transport Infrastructure Development. Programme Outcome: Sustained economic development | | |
| Development of Air Transport Infrastructure | Expansion of Kisumu International Airport | Expanded Kisumu International Airport |
| | Constructed Terminal building at Jomo Kenyatta International Airport | Completed terminal building |
| | Constructed Second runway at Jomo Kenyatta International Airport | Second operational Runway constructed |
| | Improved and modernised Jomo Kenyatta International Airport | % Increase in annual handling capacity from the current 2.5 million passengers |
| | Expanded runway facilities of the 40 airstrips | Number of runway facilities expanded |
| | Developed Aircraft Accident Investigation Laboratory | Operational Aircraft Accident Investigation Laboratory. |
| Development and Expansion of Ports facilities | Dredged Mombasa Port to 16 Metres | Number of metres dredged Docking of post panamax vessels |
| | Duty Free Trade Port on 3,000 acres land at Dongo Kundu | Detailed Dongo Kundu development master plan Detailed engineering design for the duty fee trade port Actual construction work |
| | Expanded Mombasa Container Terminal facilities to a capacity of 1.2 million TEUs per annum | Number of TEUS in million handling capacity |
| | Single window System Established | Established single window System |
| Development of Railway network | Feasibility study for the Standard Gauge Railway Line (Mombasa to Malaba 1200 km) | Feasibility Study Report |
| | Upgraded existing Railway Line to Standard Gauge (Mombasa to Malaba 1200 km) | Number of Kilometres of existing Railway Line upgraded to Standard Gauge |
| | Constructed Light Rail Line. | Number of Kilometres of Light |

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|--|---|---|
| | Interchange Link from JKIA- CBD 15.6 km Thika Town-CBD 50 km Athi River-CBD Kikuyu Town- CBD | Rail Constructed in every route |
| | Detailed design report for the first 3 berths in Lamu Port | Detailed design for the first three berths |
| | 3 Berths Developed in Lamu Port | Number of berths developed in Lamu Port |
| | Completed Lamu Port Southern Sudan-Ethiopia(LAPSSET) Transport Corridor study | LAPSSET study report |
| | 40 Metres Railway Reserve area secured | Number of Metres of Railway Reserve secured |
| | 40 Metres Secured Railway Reserve area fenced | Number of Metres of Secured Railway Reserve area fenced |
| Public Works | | |
| Programme: Government Buildings | | |
| Programme Outcome: Better Working Environment and Efficient use of Government Investment | | |
| Completion of stalled projects | 20 projects to be constructed. | Number of Projects Completed |
| Refurbishment/maintenance of buildings | 100 building to be refurbishment and maintained. | Number of Projects Completed |
| Construction of new Buildings | 80 projects to be completed | Number of Projects Completed |
| Electrify of government Building. | 50 units to be electrified | Number of units electrified |
| Provide lightening protection in government building | 15 premises to be protected | Number of premises protected Reduced incidence of lightening. |
| Installation of PABX'S in government offices and institution | 5 PABX to be installed | Number of PABX'S Installed |
| Programme: Coastline Infrastructure and pedestrian access | | |
| Programme Outcome: Improved accessibility into and out of waters | | |
| Construction and Rehabilitation of jetties | One jetty to be constructed two jetties to be rehabilitated in Lamu and Kwale counties. | Number of jetties Completed |
| Construction and Rehabilitation of seawalls | 1760 meters of seawall to be completed | Meters of Sea wall Completed |
| Construction of footbridges | 200 foot bridges to be constructed | Number of footbridges Completed |
| Programme: Procurement, warehousing and supply | | |
| Outcome: Efficient utilization of common user items | | |
| Procurement, warehousing and supply | 45 Term Contracts Procured | Number of Term Contracts Procured |
| Programme: Construction Standards and Research | | |
| Outcome: Improved building materials and methods in construction | | |
| Construction Standards and Research | 3 areas of buildings research undertaken | Number of research topics completed |
| Housing | | |
| Programme: Housing Development and Human Settlement | | |
| Outcome: Decent and affordable housing and improved living conditions of informal settlements in urban areas, improved quality shelter in rural areas and efficient and effective managed government estates/plots. | | |
| Housing Development | <ul style="list-style-type: none"> 30 constituency Appropriate Building Technologies (ABTs) Centres established 2300 new trainees in use of ABTs Review progress in the implementation of approved housing sector incentives. Comprehensive national housing survey | <ul style="list-style-type: none"> No. of constituency ABTs Centres established No. of trainees trained on use of ABTs No of sensitization workshops held Survey report |

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|--------------------------------|--|---|
| | Design and construct 400No. housing units at Kibera Soweto East village Zone A | No. of housing units |
| | Design and construct 400 housing units, one primary school, one nursery school, one social hall, one market centre and one health centre in Mavoko, Athi River | <ul style="list-style-type: none"> No. of housing units No. of social infrastructure facilities |
| | Development and rehabilitation of 7 social and physical infrastructure in main provincial towns | No. of social and physical infrastructure facilities |
| | Operationalise 50 housing cooperatives in informal settlements | No. of housing cooperatives |
| | Mobilise Kshs.15 M from operational housing cooperative | Amount of savings in Kshs. |
| | Implementation of Kenya Informal Settlements Improvement Programme (KISIP) in 10 informal settlements | <ul style="list-style-type: none"> Project Appraisal Document (PAD) No. informal settlements with improved infrastructure and tenure status |
| | <ul style="list-style-type: none"> 100 acres of land opened up for housing development in nine (9) towns 20 km of trunk sewerage lines in 5 provincial towns 10 km of water line in 5 provincial towns 70 km access roads to bitumen/murram standards in Nairobi | <ul style="list-style-type: none"> No. of acres of land opened up No. of km of housing infrastructure No. of km of roads |
| | 2,000 housing units developed/purchased under Civil Servants Housing Scheme | <ul style="list-style-type: none"> No. of housing units developed Amount of loans disbursed |
| Estates Management | 7,500 government housing units refurbished | No. of Government housing units refurbished |
| | 900,000 sq ft of office space acquired in Nairobi | No. of additional office space in sq ft |
| | 4,650 plots/estates secured | No. of estates/plots with Government houses secured |
| | 100% registration of Government houses | No. of govt houses registered |
| | Maintenance of civil works i.e. upgrading infrastructure in government estates e.g. sewerage systems | No. of upgraded infrastructure |
| | Building register and housing data inventory computerized | Soft copy of building register and inventory |
| | Offices provided to more district stations | No. of offices available |
| | Maintenance policy formulated | Policy |
| | Building Laws and Regulations Finalised | Building Laws and Regulations |
| | Timely resolution of Rent Tribunal cases | Time taken to dispose of cases after closure of defence hearing |
| | 5 public fora to sensitize public on Rent Tribunal activities | No. of fora |
| | 2 defunct RRT stations revived | No. of RRT stations revived |
| Energy | | |

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|--|---|--|
| National Grid System | 1. 90 km Chemosit – Kisii 132 kV line 2. 60 km Kisii – Awendo 132 kV line 3. 93 km Kamburu – Meru 132kV line 4. 320 km Rabai – Garsen – Lamu 220 kV line 5. 450 km Mombasa – Nairobi 400 kV line 6. 180 km Kilimambogo – Githambo 132 kV line 7. 50 km Thika – Kiganjo 132 kV line 8. 110 km Nanyuki – Nyahururu line 132 kv 9. 110 km Lessos – Karbanet line 132 kv 10. 100 km Olkaria – Narok line132 kv 11. 80 km Bomet – Sotik line132 kv 12. 185 km Mwingi – Kitui – Wote – Sultan Hamud line 132 kv 13. 70 km Iciara – Kieni – Embu line 132 kv 14. 233 km Lessos – Tororo line220 kv 15. 200 km Kindaruma – Mwingi - Garissa line220 kv 16. 60 km Kitale – Eldoret line132 kv | Number of kms of power transmission lines constructed, rehabilitation and energised |
| | 300,000 additional customers connected | No. of customers connected |
| | Policy Paper on Nuclear Energy | Policy document on Nuclear Energy |
| | Report on Electric power system stability study | Electric power system stability study report |
| | 300 acres of land acquisition for power generation using LNG, CNG and Coal | No. of acres of land acquired |
| | 55MW of wind power plant constructed at Ngong hills | 55MW wind power station |
| | 120MW of Emergency power electricity | No. of MW of Emergency power procured |
| | 20 geothermal wells drilled by GDC and 12 wells by Contractor | No. of Geothermal production wells drilled |
| | 140 MW at Olkaria I | Additional geothermal power by 2014 |
| | 140 MW at Olkaria IV | Additional geothermal power by 2014 |
| 2 geothermal areas assessed | No. of Geothermal areas assessed | |
| 15 coal exploration holes drilled | No. of Coal exploration holes drilled | |
| 2 drilling rigs | Procurement of drilling rigs | |
| Geothermal wells drilling materials procured | Procurement of geothermal drilling materials for Olkaria I & IV, Menengai I, II & III steam fields | |
| 1 report on coal reserve assessment | Coal reserve assessment report | |
| Rural Electrification | 1000 public institutions connected | Rural public institutions connected with electricity |
| | 180 PVs installed | Public institutions installed with solar electricity generators (PVs) in ASAL areas. |

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|--|--|--|
| Programme : Renewable Energy Resources | | |
| Programme Outcome: Clean Energy Sources | | |
| Wood fuel Resource Development | 320 Ha of trees planted | Acreage of trees planted |
| | 2 new Energy centres established | No. of new energy centres established |
| | 3200 improved cook stoves/charcoal kilns | Households/institutions with improved cook stoves / charcoal kilns |
| | 2 pilot research projects | No. of pilot research projects established |
| Renewable Energy Technologies | 20 wind masts and data loggers; Updated Wind Resource Atlas | No. of wind masts and data loggers installed Updated Wind Resource Atlas |
| | Feasibility study | Use of solar water heaters in tea factories and abattoirs |
| | Report on small hydro power sites | Feasibility study on 14 small hydro power sites |
| | 1 Biogas digester installed | Number of Biogas digester installed |
| | 3 Public buildings efficiently lighted (Nyayo House, Harambee House and Treasury Building) | Number of Public buildings efficiently lighted (Nyayo House, Harambee House and Treasury Building) |
| | Policy on development of biofuels | Number of Policy on development of biofuels |
| | 6 Energy Audit carried out | No. of Industries Audited for Energy efficiency |
| | 2 institutions with biogas digesters | No. of institutions with sewage based biogas digesters |
| | 24 schools with cook stoves | No. of schools with cook stoves |
| | 2 community small hydro power stations c | No. of community small hydro power stations |
| Programme : Petroleum Exploration and Distribution Programme | | |
| Programme Outcome: Increase data in the unlicensed blocks to attract investment and increase security of supply of petroleum products | | |
| Petroleum Exploration and Distribution | 1 Seismic Survey of unlicensed Blocks carried out | Seismic Surveys report |
| | 1 Gravity Survey of unlicensed Blocks conducted | Gravity Surveys report |
| | 2 petroleum promotion international conferences held | No. of promotional conferences of Petroleum Blocks to international companies |
| | National Petroleum Data Centre established | National Petroleum Data Centre established |
| | 30% market share for National Oil | Expansion of National Oil market share |
| | Report prepared | Study on procurement of national strategic stocks of petroleum products |
| | Regulation enforcement | Maintenance of minimum operational stocks by oil marketing companies |
| | Standardized values fitted in all LPG cylinders | Accessibility of branded LPG in the market |
| Programme : Centralised Support Programme | | |

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|---|---|---|
| Programme Outcome: Efficient delivery of services | | |
| Administrative Services | Administrative services offered | Efficient administration in the Energy sub - sector |
| | Integrated Energy Sector Information Management System | Ministry linked with its Parastatals |
| Planning and Project Monitoring | Planning services offered | Efficient planning in the Energy sub - sector |
| Financial Services | Financial services offered | Efficient financial management in the Energy Sub - sector |
| Local Government | | |
| Programme : Local Authority management and development | | |
| Outcome: Improved infrastructure and management in Local Authorities | | |
| Sub Programme 1: Urban and County Development | Construction of ten(10) bus parks | No of Bus parks constructed |
| | Design, Documentation and supervision of 13(hubs, wholesale, retail) markets | Number of design reports, tender Documents and EIA reports prepared. |
| | Design, Documentation and supervision of 210 Livestock Markets | Number of design reports, tender documents and EIA reports prepared. |
| | Development of National Urban Development Policy | Policy Paper |
| | Development of urban database and implementation of GIS / LIS in LAs | Number of LAs with GIS/LIS |
| | Upgrading of four (4) Informal settlements | Number of informal settlements upgraded |
| | Solid waste management studies in two towns carried out | No. of studies carried out |
| | Construction of forty(40) km of storm water drainage | Number of Kilometres constructed |
| | Feasibility study on establishment of Fire and Disaster Management carried out | Feasibility study report |
| | Construction of 102 km of roads | Number of kilometres constructed |
| | Kazi Kwa Vijana(175 LAs) (KKV) / Kenya Youth Empowerment Project in 39 counties; 200 km of drainage cleaned; Culverts cleaned; 200 km of bush cleared; | Number of KM of drainage cleaned, No. of trees planted; No. of culverts cleaned; area of bush cleared. |
| | Construction of fire and disaster response centres in four (4) counties | Number of fire and disaster response centres constructed |
| | Purchase of assorted fire fighting equipments for 4 LAs | Number of fire equipments purchased |
| | Implementation of Kenya Municipal Programmes (KMP) in fifteen(15) LAs | Monitoring and evaluation reports |
| | Implementation of Kisumu Urban Programme (KUP) | No. of schools constructed |
| | Construction and upgrading of nine (9) Schools in Nairobi and Mombasa | Number of schools constructed and upgraded |
| | Sensitization & dissemination of Building code, Standards and safety in LAs | Number of officers in LAs sensitized |
| | Sub Programme 2: Market development | Construction of six (6) Wholesale hubs |

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|--|---|--|
| | Construction of twelve (12) Wholesale Markets | Number of wholesale markets constructed |
| | Construction of twenty three (23) Retail Markets | Number of Retail markets constructed |
| | Construction of 210 livestock Markets | Number of livestock markets constructed |
| | Construction of 2,000 Modern Kiosks in 10 major towns | Number of kiosks constructed |
| Sub Programme 3: Local Authority Management and Advisory Services | Conduct Thirty four(34) inspections | Number of inspections conducted |
| | Performance contracting in 175 LAs | Number of LAs on Performance Contracts |
| | Implementation of RBM(RRI) in LAs | Number of LAs on RRI |
| | Rehabilitation of 2000 ex street children | Number of ex street children rehabilitated |
| | Purchase of Model Street Families Rehabilitation Facility Nyeri Children and Youth Empowerment Centre(CYEC) | Rehabilitation facility purchased |
| | Support 8 street children Drop – in – centres | Number of Drop- in- centres supported |
| Sub Programme 4: Reform in Local Government | Installation of LAIFOMS (Local Authority Integrated Financial Operation Management Systems) in 92 LAs | No. of LAs on LAIFOMS |
| | Dissemination of Performance improvement tools in 175 LAs | No of LAs implementing the tools(manuals) |
| | Implementation of Local Government reform strategy in LAs | Level of Implementation of strategy in LAs |
| Nairobi Metropolitan Development | | |
| Programme 1: Metropolitan Infrastructure and Services | | |
| Metropolitan mobility and transport | 50 Km of strategic roads constructed, and rehabilitated | No. of Km of roads constructed, and rehabilitated |
| | Develop Metro urban Transport Information System | Urban Transport Information System in place |
| | 50 Signalized junctions in Nairobi Metropolitan Region | No. of signalized junctions |
| | 1 Bus Rapid Transit developed | Bus Rapid Transit developed and operational |
| Metropolitan infrastructure & utilities social and infrastructure facilities | Develop & implement urban – design | An Urban design in place |
| | Study on Pilot housing project in Thika & Movoko slums elimination | Feasibility report done |
| | 2 Pilot Metro market in Thika and Kiambu | Feasibility report and market constructed |
| | Study on Pilot landfill project at Thika & Nairobi in Solid Waste Management | Feasibility report and project initiated |
| | 20 Water tanks constructed in the Metro Region | Number of (100-200 m ³) capacity water tanks constructed |
| | Develop flood mitigation plan | Flood mitigation plan in place |
| | Construction of 120 boreholes in water deficit counties | Number of boreholes sunk within the four Metro counties |
| | Spatial plan for Metro region | Spatial development plan in place and implemented |
| | Develop Metro Region GIS map | GIS map in place and implemented |
| Conduct Nairobi Metropolitan Region | Feasibility report | |

| Programme/Sub-programme | Key Outputs | Key Performance Indicators |
|--|--|---|
| | Branding study | |
| | Develop 3 Metro environmental parks & reserves | Number of parks & reserves developed |
| Safety and Security sub- programme Outcome: A safe and secured Metropolis for 24 hour economy | Install 67 No. high mast Metro Wide security lighting | Number of high mast security lights installed in NMR |
| | Install 30,000 No. CCTV for integrated urban surveillance system | Number of CCTV Cameras installed in NMR |
| | 1 No. emergency service control room | Initialize and operationalised emergency service control room |
| | Capacity build 45 officers in emergency services | Number of trained officers on rapid response |
| | Procure 10 No. ambulances | No. of ambulances procured and distributed |

3.1.3 Programmes by Order of Ranking

- Road Development, Maintenance and Management Programme
- National Electrification Programme
- Government Buildings
- Local Authority Management and Development
- Transport Infrastructure Development
- Housing Development and Human Settlement Programme
- Coastline Infrastructure and Pedestrian Access
- Metropolitan Infrastructure and Services
- Transport Management and Safety
- Renewable Energy Resources Programme
- Petroleum Exploration and Distribution Programme
- Procurement Ware Housing and Supply
- Construction Standards and Research
- Centralized Support Services.

3.2 Analysis of Resource Requirement by:-

3.2.1 Sector

Table 3.3: Analysis of Resource Requirement (Kshs. Millions)

| | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--------------|----------------------|----------------------|---------------------|-------------------|
| | | | 2012/13 | 2013/14 |
| Recurrent | 48,229.83 | 59,791.88 | 66,097.77 | 69,800.75 |
| Development | 135,470.36 | 212,705.38 | 265,513.96 | 245,729.02 |
| Total | 183,700.19 | 272,497.26 | 331,611.73 | 315,529.77 |

3.2.2 Sub-Sectors

Table 3.4: Recurrent Resource Requirements by Sub-sector (Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--------------|----------------------|----------------------|---------------------|---------|
| | | | 2012/13 | 2013/14 |
| Roads | 25,548 | 31,040 | 31,659 | 34,264 |
| Transport | 4,430 | 6,357 | 9,895 | 8,922 |
| Public Works | 1,470.72 | 1,827 | 2,210 | 2,377.2 |

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|----------------|----------------------|----------------------|---------------------|------------------|
| | | | 2012/13 | 2013/14 |
| Housing | 977.8 | 2,170 | 2,193 | 2,255 |
| Energy | 2,283.31 | 2,682.88 | 2,853.77 | 3,087.55 |
| Local G. | 13,201 | 15,135 | 16,700 | 18,300 |
| Nairobi Metro. | 319 | 580 | 587 | 595 |
| Total | 48,229.83 | 59,791.88 | 66,097.77 | 69,800.75 |

Table 3.5: Development Resource Requirements by Sub-sector (Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|----------------|----------------------|----------------------|---------------------|-------------------|
| | | | 2012/13 | 2013/14 |
| Roads | 79,194 | 86,276 | 92,871 | 96,026 |
| Transport | 7,213 | 13,378 | 17,676 | 14,026 |
| Public Works | 5,051.50 | 9,561 | 8,662 | 7,318 |
| Housing | 2,982.0 | 11,045.0 | 11,192.0 | 11,930 |
| Energy | 34,072.86 | 65,448.38 | 66,836.96 | 55,879.02 |
| Local G. | 5,799 | 17,865 | 19,300 | 21,700 |
| Nairobi Metro. | 1,158 | 9,132 | 48,976 | 38,850 |
| Total | 135,470.36 | 212,705.38 | 265,513.96 | 245,729.02 |

3.2.3 Programmes and Sub-Programmes

Table 3.6: Resource Requirements by Programme and Sub-Programme ((Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--|----------------------|----------------------|---------------------|----------------|
| | | | 2012/13 | 2013/14 |
| Roads | | | | |
| Programme: Road Development, Maintenance and Management | | | | |
| Construction of Roads and Bridges | 33,820 | 34,458 | 47,342 | 50,300 |
| Rehabilitation of Roads and Bridges | 37,112 | 44,730 | 45,505 | 46,035 |
| Maintenance of Roads and Bridges | 27,888 | 31,770 | 28,608 | 30,240 |
| Design of Roads and Bridges | 5,208 | 6,208 | 2,050 | 2,860 |
| Capacity Building for Road Construction | 150 | 150 | 195 | 205 |
| Infrastructure development in National Parks and Reserves | 564 | 1,000 | 830 | 650 |
| Total | 104,742 | 118,316 | 124,530 | 130,290 |
| Transport | | | | |
| Programme 1: Transport Management and Safety | | | | |
| General Administration Planning and Policy Development | 589 | 992 | 1,142 | 1,111 |
| Marine Transport Services Management | 518 | 578 | 609 | 620 |
| Road Transport Safety | 123 | 1,010 | 720 | 737 |
| Management of Rail Transport | 150 | 300 | 300 | 300 |
| Air Transport Services Management | 2,358 | 2,720 | 2,765 | 2,795 |
| Sub-total for P.1 | 3,738 | 5,600 | 5,536 | 5,563 |

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--|----------------------|----------------------|---------------------|---------------|
| | | | 2012/13 | 2013/14 |
| Programme 2: Transport Infrastructure Development. | | | | |
| Development of Air Transport Infrastructure | 3,251 | 7,294 | 12,144 | 8,494 |
| Development and Expansion of Ports facilities | 3,025 | 1,776 | 1,176 | 1,176 |
| Development of railway network | 1,629 | 5,065 | 8,715 | 7,715 |
| Sub-total for P.2 | 7,905 | 14,135 | 22,035 | 17,385 |
| TOTAL | 11,643 | 19,735 | 27,571 | 22,948 |
| Housing | | | | |
| Programme: Housing Development and Human Settlement Programme | | | | |
| Sub-Programme 1: Housing Development | 2,617.50 | 10,385.00 | 10,573.00 | 11,035 |
| Su-Programme 2: Estates Management | 1,342.30 | 2,830.00 | 2,812.00 | 3,150 |
| Total | 3,959.80 | 13,215 | 13,385 | 14,185 |
| Public Works | | | | |
| Programme 1: Government Buildings | | | | |
| Sub Programmes | | | | |
| Completion of stalled projects | 4,285.60 | 5,600 | 5,471 | 5,100 |
| Refurbishment/maintenance of projects | 179.4 | 80 | 292 | 500 |
| Construction of New Buildings | 236.6 | 1,785 | 1,335 | 1,072 |
| Total for Government Buildings | 4,701.60 | 7,465 | 7,098 | 6,672 |
| Programme 2: Coastline Infrastructure and pedestrian access | | | | |
| Construction and Rehabilitation. of jetties and seawalls | 479.1 | 882 | 1,066.75 | 606 |
| Construction of footbridges | 450 | 1,844 | 1,263.25 | 850 |
| Total for Coastline & Pedestrian Infrastructure. | 929.1 | 2,726 | 2,330 | 1,456 |
| Programme 3: Procurement, Warehousing and Supply | | | | |
| Procurement, Warehousing & supply | 49.14 | 66 | 78 | 98.7 |
| Total for Procurement, Warehousing & Supply | 49.14 | 66 | 78 | 98.7 |
| Programme 4: Construction Standards and Research | | | | |
| Construction standards and Research | 30.14 | 47 | 40 | 42.5 |
| Total for Construction Standards and Research | 30.14 | 47 | 40 | 42.5 |
| Programme 4: General Administration and Services | | | | |

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--|----------------------|----------------------|---------------------|------------------|
| | | | 2012/13 | 2013/14 |
| General administration planning & support programme | 812.64 | 1,084 | 1,326 | 1,426 |
| Total for General administration planning & support programme | 812.64 | 1,084 | 1,326 | 1,426 |
| Total | 6,522.6 | 11,388 | 10,872 | 9,695 |
| Energy | | | | |
| Programme 1: National Electrification Programme | | | | |
| National Grid System | 16,076.34 | 22,765.47 | 24,656.83 | 20,215.21 |
| Geothermal and Coal exploration | 12,362.25 | 27,817.23 | 26,785.24 | 19,443.03 |
| Rural Electrification | 6,133 | 14,440 | 14,917.80 | 15,934.85 |
| Sub-total for P.1 | 34,571.6 | 65,022.70 | 66,359.87 | 55,593.09 |
| Programme 2: Renewable Energy Resources Programme | | | | |
| Wood fuel Resources Development | 294.06 | 326.37 | 375.13 | 394.6 |
| Renewable Energy Technologies | 605.46 | 592.29 | 745.38 | 849.41 |
| Sub-total for P.2 | 899.52 | 918.66 | 1120.51 | 1244.01 |
| Programme 3: Petroleum Exploration and Distribution Programme | | | | |
| Petroleum Exploration and Distribution | 404.46 | 866.05 | 947.89 | 999.38 |
| Sub-total for P.3 | 404.46 | 866.05 | 947.89 | 999.38 |
| Programme 4: Centralized Support Service Programme | | | | |
| Administrative Services | 439.26 | 1,253.78 | 1,191.11 | 1,080.96 |
| Planning and Project Monitoring | 15.41 | 38.27 | 39.88 | 15.97 |
| Financial Services | 25.9 | 31.8 | 31.45 | 33.14 |
| Sub-total for P.4 | 480.57 | 1,323.85 | 1262.44 | 1130.07 |
| Total | 36,356.14 | 68,131.26 | 69,690.71 | 58,966.55 |
| Local Government | | | | |
| Programme: Local Authority Management and Development | | | | |
| Sub Programme 1: Urban and County development | 2,989 | 9,865 | 10,800 | 12,700 |
| Sub Programme 2: Market development | 2,810 | 8,000 | 8,500 | 9,000 |
| Sub Programme 3: Local Authority Management and Advisory Services | 901 | 1,835 | 2,400 | 3,000 |
| Sub Programme 4: Reform in Local Government | 12,300 | 13,300 | 14,300 | 15,300 |
| Total | 19,000 | 33,000 | 36,000 | 40,000 |
| Nairobi Metropolitan | | | | |
| Programme: Metropolitan Services | | | | |

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--|----------------------|----------------------|---------------------|-------------------|
| | | | 2012/13 | 2013/14 |
| Sub Programme 1: Metropolitan mobility and transport Programme | 1,291 | 3,000 | 32,500 | 27,382 |
| Sub Programme 2: Metropolitan social infrastructure & quality of life programme | 126 | 3,800 | 6,063 | 5,063 |
| Sub Programme 3: Metropolitan planning, promotion, administration and Research programme | 19 | 1,112 | 7,200 | 5,200 |
| Sub Programme 4: Safety and emergency programmes | 41 | 1,800 | 3,800 | 1,800 |
| Total Expenditure | 1,477 | 9,712 | 49,563 | 39,445 |
| GRAND TOTAL | 183,700.56 | 273,497.26 | 331,612 | 315,529.75 |

3.2.4 Devolved Levels-Counties/Districts

No submissions

3.2.5 Economic Classification

Table 3.7: Resource Requirements by Economic Classification (Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|---|----------------------|----------------------|---------------------|-----------------|
| | | | 2012/13 | 2013/14 |
| Roads | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 1,097 | 1,598 | 1,691 | 1,750 |
| Use of Goods and Services | 1,021 | 1,522 | 1,725 | 1,880 |
| Current Transfer Govt Agencies | 21,430 | 25,920 | 26,038 | 28,319 |
| Other Recurrent | 2,000 | 2,000 | 2,205 | 2,315 |
| Sub Total | 25,548 | 31,040 | 31,659 | 34,264 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 317 | 583 | 349 | 367 |
| Capital Transfers to Government Agencies ((Road Authorities)) | 78,138 | 85,513 | 91,499 | 94,806 |
| Capital Transfers to KWS | 564 | 1000 | 830 | 650 |
| Other development | 175 | 180 | 193 | 203 |
| Sub-total | 79,194 | 87,276 | 92,871 | 96,026 |
| TOTAL | 104,742 | 118,316 | 124,530 | 130,290 |
| Public Works | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 994.66 | 1,015 | 1,043.80 | 1,065.20 |
| Use of Goods and Services | 429.83 | 711 | 1,041.30 | 1,156 |
| Current Transfer Govt Agencies | 0 | 0 | 0 | 0 |
| Other Recurrent | 46.23 | 101 | 125 | 156 |
| Sub Total | 1,470.72 | 1,827 | 2,210.10 | 2,377.20 |

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--|----------------------|----------------------|---------------------|---------------|
| | | | 2012/13 | 2013/14 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 89 | 106 | 149 | 159 |
| Capital Transfers to Government Agencies | 0 | 0 | 0 | 0 |
| Other Development | 4,962.90 | 9,455 | 8513 | 7,159 |
| Sub totals | 5,051.90 | 9,561 | 8662 | 7,318 |
| TOTAL | 6,522.6 | 11,388 | 10,872 | 9,695 |
| Housing | | | | |
| Current Expenditure | | | | |
| Employee Compensation | 305 | 320 | 333 | 345 |
| Use of Goods & Services | 639.8 | 1,130 | 1,135 | 1,180 |
| Current transfers Govt Agencies | 15 | 700 | 700 | 700 |
| Other Current | 18 | 20 | 25 | 30 |
| Sub Total | 977.8 | 2,170 | 2,193 | 2,255 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 2,282 | 11,045 | 11,192 | 11,930 |
| Capital transfers to Govt Agencies | 700 | 0 | 0 | 0 |
| Other Development | 0 | 0 | 0 | 0 |
| Sub Total | 2,982 | 11,045 | 11,192 | 11,930 |
| TOTAL | 3,959.80 | 13,215 | 13,385 | 14,185 |
| Transport | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 354 | 603 | 654 | 700 |
| Use of Goods and Services | 1,272 | 2,050 | 5,842 | 4,889 |
| Current Transfer Govt Agencies | 2,804 | 3,704 | 3,399 | 3,333 |
| Other Recurrent | 0 | 0 | 0 | 0 |
| Sub Total | 4,430 | 6,357 | 9,895 | 8,922 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 1,960 | 7,537 | 6,935 | 6,485 |
| Capital Transfers to Government Agencies | 5,253 | 5,841 | 10,741 | 7,541 |
| Other Development | 0 | 0 | 0 | 0 |
| Sub Total | 7,213 | 13,378 | 17,676 | 14,026 |
| TOTAL | 11,643 | 19,735 | 27,571 | 22,948 |
| Nairobi Metropolitan | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 114 | 120 | 125 | 130 |
| Use of Goods and Services | 0 | 0 | 0 | 0 |
| Current Transfer Govt Agencies | 0 | 0 | 0 | 0 |
| Other Recurrent | 205 | 460 | 462 | 465 |
| Sub Total | 319 | 580 | 587 | 595 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 0 | 0 | 0 | 0 |

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--|----------------------|----------------------|---------------------|-------------------|
| | | | 2012/13 | 2013/14 |
| Capital Transfers to Government Agencies | 0 | 0 | 0 | 0 |
| Other Development | 1,158 | 9,132 | 48,976 | 38,850 |
| Sub Total | 1,158 | 9,132 | 48,976 | 38,850 |
| TOTAL | 1,477 | 9,712 | 49,563 | 39,445 |
| Local Government | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 204 | 272 | 283 | 294 |
| Use of Goods and Services | 697 | 1,563 | 2,117 | 2,706 |
| Current Transfer Govt Agencies | 12,300 | 13,300 | 14,300 | 15,300 |
| Other Recurrent | 0 | 0 | 0 | 0 |
| Sub Total | 13,201 | 15,135 | 16,700 | 18,300 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 5,799 | 17,865 | 19,300 | 18,700 |
| Capital Transfers to Government Agencies | 0 | 0 | 0 | 0 |
| Other Development | 0 | 0 | 0 | 0 |
| Sub totals | 5,799 | 17,865 | 19,300 | 21,700 |
| TOTAL | 19,000 | 33,000 | 36,000 | 40,000 |
| Energy | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 223.24 | 396.12 | 411.96 | 454.43 |
| Use of Goods and Services | 229.15 | 283.4 | 320.81 | 360.63 |
| Current Transfer Govt Agencies | 1,800.50 | 1,935.50 | 2072.5 | 2,220.50 |
| Other Recurrent | 30.29 | 67.85 | 48.5 | 51.97 |
| Sub Total | 2,283.29 | 2,682.87 | 2,853.77 | 3,087.53 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 15,910.20 | 40,683.15 | 40,798.66 | 29,419.72 |
| Capital Transfers to Government Agencies | 17,543.80 | 23,071.55 | 24,283.86 | 24,552.59 |
| Other Development | 618.85 | 1,693.68 | 1,754.43 | 1,906.70 |
| Sub totals | 34,072.85 | 65,448.38 | 66,836.95 | 55,879.01 |
| TOTAL | 36,356.14 | 68,131.26 | 69,690.72 | 58,966.57 |
| GRAND TOTAL | 183,700.56 | 273,497.26 | 331,612 | 315,529.77 |

3.3 Analysis of Resource Requirements Vs Allocation

3.3.1 Recurrent

Table 3.8: Analysis of Resource Requirements Vs Allocation (Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Requirements Vs Allocation | | |
|---------------|----------------------|----------------------------|------------------------|-------------------|
| | | Requirement- 2011/12 | Allocation- 2011/12 | Variance |
| Roads | 25,548 | 31,040 | 25,646 | -5,394.0 |
| Transport | 4,430 | 6,357 | 3,816 | -2,541.0 |
| Public Works | 1,470.72 | 1,827 | 1,519.04 | -308.0 |
| Housing | 977.8 | 2,170 | 1,702 | -468.0 |
| Energy | 2,283.29 | 2,682.87 | 2,381 | -301.9 |
| Local Govt | 13,201 | 15,135 | 14,243 | -892.0 |
| Nairobi Metro | 319 | 580 | 334 | -246.0 |
| Total | 48,229.81 | 59,791.87 | 49,641.04 | -10,150.83 |

3.3.2 Development

Table 3.9: Analysis of Resource Requirements Vs Allocation (Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Requirements Vs Allocation | | |
|----------------|----------------------|----------------------------|----------------|----------------|
| | | Requirement | Allocation | Variance |
| | | 2011/12 | 2011/12 | |
| Roads | 79,194 | 87,276 | 81,299 | -5,977 |
| Transport | 7,213 | 13,378 | 9,255 | -4,123 |
| Public Works | 5,051.9 | 9,561 | 6,052 | -3,509 |
| Housing | 2,982 | 11,045 | 2,782 | -8,263 |
| Energy | 34,072.85 | 65,448.38 | 44,880 | -20,568 |
| Local Govt | 5,799 | 17,865 | 4,486 | -13,379 |
| Nairobi Metro. | 1,158 | 9,132 | 1,558 | -7,574 |
| Total | 135,470.75 | 213,705.38 | 150,312 | -63,393 |

3.3.3 Devolved Levels-Counties/Districts

No submissions

3.3.4 Semi Autonomous Government Agencies

Recurrent

Table 3.10: Resource Requirements Vs Allocation by SAGAs (Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Requirements Vs Allocation | | |
|------------------|----------------------|----------------------------|--------------|-------------|
| | | Requirement | Allocation | Variance |
| | | 2011/12 | 2011/12 | |
| Roads | | | | |
| KeNHA | 150 | 170 | 150 | -20 |
| KeRRA | 300 | 350 | 300 | -50 |
| KURA | 50 | 400 | 50 | -350 |
| KWS | 0 | 0 | 0 | 0 |
| Sub-total | 500 | 920 | 500 | -420 |
| Transport | | | | |
| KMA | 135 | 135 | 135 | 0 |
| KCAA | 0 | 0 | 0 | 0 |
| KFS | 300 | 300 | 300 | 0 |
| Sub-total | 435 | 435 | 435 | 0 |
| Energy | | | | |
| KETRACO | 400 | 450 | 416 | -34 |
| GDC | 700 | 750 | 728 | -22 |
| REA | 700 | 735 | 717 | -18 |
| Sub-total | 1,800 | 1,935 | 1,861 | -74 |
| Total | 2,735 | 3,290 | 2,796 | -494 |

Development

Table 3.11: Resource Requirements Vs Allocation by SAGAs (Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Requirements Vs Allocation | | |
|------------------|----------------------|----------------------------|---------------|----------------|
| | | Requirement | Allocation | Variance |
| | | 2011/12 | 2011/12 | |
| Roads | | | | |
| KeNHA | 18,982 | 27,000 | 19,982 | -7,018 |
| KeRRA | 14,046 | 18,000 | 14,746 | -3,254 |
| KURA | 1,245 | 4,455 | 1,450 | -3,005 |
| KWS | 564 | 829 | 764 | -65 |
| Sub-total | 34,837 | 50,284 | 36,942 | -13,342 |
| Transport | | | | |
| KMA | 0 | 0 | 0 | 0 |
| KCAA | 0 | 600 | 0 | -600 |
| KFS | 37 | 37 | 37 | 0 |
| Sub-total | 37 | 637 | 37 | -600 |
| Energy | | | | |

| Sub-sector | Estimates 2010/11 | Requirements Vs Allocation | | |
|------------------|----------------------|----------------------------|---------------|------------------|
| | | Requirement | Allocation | Variance |
| | | 2011/12 | 2011/12 | |
| KETRACO | 7,829 | 10,502.60 | 9,199 | -1,303.6 |
| GDC | 11,562 | 26,925.33 | 15,286 | -11,639.3 |
| REA | 3,583 | 10,900 | 4,436 | -6,464.0 |
| Sub-total | 22,974 | 48,328 | 28,921 | -19,406.9 |
| Total | 57,808 | 99,049 | 65,900 | -33,348.9 |

3.3.5 Programmes and Sub-programmes

Table 3.12: Requirements Vs Allocation by Programmes/Sub-programmes (Millions)

| Programme/Sub-programme | Estimates 2010/11 | Requirements Vs Allocation | | |
|--|----------------------|----------------------------|------------------------|----------------|
| | | Requirement- 2011/12 | Allocation- 2011/12 | Variance |
| Roads | | | | |
| Programme: Road Development, Maintenance and Management Programme | | | | |
| Construction of Roads and Bridges | 33,820 | 34,458 | 32,372 | -2,086 |
| Rehabilitation of Roads and Bridges | 37,112 | 44,730 | 42,956 | -1,774 |
| Maintenance of Roads and Bridges | 27,888 | 31,770 | 28,608 | -3,162 |
| Design of Roads and Bridges | 5,208 | 6,208 | 2,050 | -4,158 |
| Capacity Building for Road Construction | 150 | 150 | 195 | 45 |
| Infrastructure development in National Parks and Reserves | 564 | 1,000 | 764 | -236 |
| Total | 104,742 | 118,316 | 106,945 | -11,371 |
| Transport | | | | |
| Programme 1: Transport Management and Safety | | | | |
| General Administration Planning and Policy Development | 589 | 992 | 645 | -347 |
| Marine Transport Services Management | 518 | 578 | 518 | -60 |
| Road Transport Safety | 123 | 1,010 | 123 | -887 |
| Rail Transport Services Management | 150 | 300 | 150 | -150 |
| Air Transport Services Management | 2,358 | 2,720 | 2,380 | -340 |
| Sub-total for P.1 | 3,738 | 5,600 | 3,816 | -1,784 |
| Programme 2: Transport Infrastructure Development. | | | | |
| Development of Air Transport Infrastructure | 3,251 | 7,294 | 3,501 | -3793 |
| Development and Expansion of Ports facilities | 3,025 | 1,776 | 3,025 | 1249 |
| Development of railway network | 1,629 | 5,065 | 2,729 | -2336 |

| Programme/Sub-programme | Estimates 2010/11 | Requirements Vs Allocation | | |
|--|----------------------|----------------------------|------------------------|------------------|
| | | Requirement- 2011/12 | Allocation- 2011/12 | Variance |
| Sub-total for P.2 | 7,905 | 14,135 | 9,255 | -4880 |
| Total | 11,643 | 19,735 | 13,071 | -6,664 |
| Public Works | | | | |
| Programme 1: Government Buildings | | | | |
| Sub Programmes | | | | |
| Completion of stalled projects | 4,285.6 | 5,600.0 | 4,886.6 | -713.4 |
| Refurbishment/maintenance of projects | 179.4 | 80.0 | 209.4 | 129.4 |
| Construction of New Buildings | 236.6 | 1,785.0 | 302.5 | -1,482.5 |
| Total for Government Buildings | 4,701.60 | 7,465 | 5,398.5 | -2,066 |
| Programme 2: Coastline Infrastructure and pedestrian access | | | | |
| Construction and Rehabilitation of jetties and seawalls | 479.1 | 882.0 | 579.64 | -302.4 |
| Construction of footbridges | 450.0 | 1844.0 | 671.5 | -1172.5 |
| Total for Coastline & Pedestrian Infrastructure. | 929.1 | 2,726 | 1,251.14 | -1474.86 |
| Programme 3: Procurement, Warehousing and Supply | | | | |
| Procurement, Warehousing & supply | 49.14 | 66 | 49.9 | -16.15 |
| Total for Procurement, Warehousing & Supply | 49.14 | 66 | 49.9 | -16.15 |
| Programme 4: Construction Standards and Research | | | | |
| Construction standards and Research | 30.14 | 47 | 31.98 | -15.02 |
| Total for Construction Standards and Research | 30.14 | 47 | 31.98 | -15.02 |
| Programme 4: General Administration Services | | | | |
| General administration planning & support programme | 812.64 | 1,084 | 839.54 | -244.46 |
| Total for General administration planning & support programme | 812.64 | 1,084 | 839.54 | -244.46 |
| Total | 6,522.6 | 11,388 | 7,571.04 | -3,816.96 |
| Housing | | | | |
| Programme: Housing Development and Human Settlement Programme | | | | |
| Sub-Programme 1: Housing Development | 2,617.50 | 10,385 | 2,964 | -7,421.1 |
| Sub-Programme 2: Estates Management | 1,342.30 | 2,830 | 1,520 | -1,310.1 |
| Total | 3,959.80 | 13,215 | 4,484 | -8,731.2 |
| Energy | | | | |
| Programme 1: National Electrification Programme | | | | |

| Programme/Sub-programme | Estimates 2010/11 | Requirements Vs Allocation | | |
|---|----------------------|----------------------------|------------------------|------------------|
| | | Requirement- 2011/12 | Allocation- 2011/12 | Variance |
| National Grid System | 16,076.3 | 22,765.5 | 20,873 | -1,892.5 |
| Geothermal and Coal exploration | 12,362.3 | 27,817.2 | 16,142 | -11,675.2 |
| Rural Electrification | 6,133.0 | 14,440.0 | 7,716 | -6,724.0 |
| Sub-total for P.1 | 34,571.6 | 65,022.7 | 44,731 | -20,291.7 |
| Programme 2: Renewable Energy Resources Programme | | | | |
| Wood fuel Resources Development | 294.06 | 326.37 | 229 | -97.4 |
| Renewable Energy Technologies | 605.46 | 592.29 | 463 | -129.3 |
| Sub-total for P.2 | 899.52 | 918.66 | 692 | -226.7 |
| Programme 3: Petroleum Exploration and Distribution Programme | | | | |
| Petroleum Exploration and Distribution | 404.46 | 866.05 | 650 | -216.1 |
| Sub-total for P.3 | 404.46 | 866.05 | 650 | -216.1 |
| Programme 4: Centralized Support Service Programme | | | | |
| Administrative Services | 439.26 | 1,253.78 | 1,122 | -131.8 |
| Planning and Project Monitoring | 15.41 | 38.27 | 39 | 0.7 |
| Financial Services | 25.9 | 31.8 | 27 | -4.8 |
| Sub-total for P.4 | 480.57 | 1,323.85 | 1,188 | -135.9 |
| Total | 36,356.14 | 68,131.26 | 47,261 | -20,870.3 |
| Local Government | | | | |
| Programme: Local Authority Management and Development | | | | |
| Sub Programme 1: Urban and County development | 2,989 | 9,865 | 2,486 | -7,379 |
| Sub Programme 2: Market development | 2,810 | 8,000 | 2,000 | -6,000 |
| Sub Programme 3: Local Authority Management and Advisory Services | 901 | 1,835 | 943 | -892 |
| Sub Programme 4: Reform in Local Government | 12,300 | 13,300 | 13,300 | 0 |
| Total | 19,000 | 33,000 | 18,729 | -14,271 |
| Nairobi Metropolitan | | | | |
| Sub Programme 1: Metropolitan mobility and transport Programme | 1,291 | 3,000 | 1,324 | -1,676 |
| Sub Programme 2: Metropolitan social infrastructure & quality of life programme | 126 | 3,800 | 226 | -3,574 |
| Sub Programme 3: Metropolitan planning, promotion, administration and Research programme | 19 | 1,112 | 143 | -969 |

| Programme/Sub-programme | Estimates 2010/11 | Requirements Vs Allocation | | |
|--|----------------------|----------------------------|------------------------|----------------|
| | | Requirement- 2011/12 | Allocation- 2011/12 | Variance |
| Sub Programme 4: Safety and emergency programmes | 41 | 1,800 | 199 | -1,601 |
| Total Expenditure | 1,477 | 9,712 | 1,892 | -7,820 |
| GRAND TOTAL | 183,700.56 | 273,497.26 | 199,953 | -73,544 |

3.3.6 Economic Classification

Table 3.13: Requirements Vs Allocation by Economic Classification (Kshs. Millions)

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|---|----------------------|----------------------|---------------------|-----------------|
| | | | 2012/13 | 2013/14 |
| Roads | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 1,097 | 1,598 | 1,691 | 1,750 |
| Use of Goods and Services | 1,021 | 1,522 | 1,725 | 1,880 |
| Current Transfer Govt Agencies | 21,440 | 25,920 | 26,038 | 28,319 |
| Other Recurrent | 2,000 | 2,000 | 2,205 | 2,315 |
| Sub Total | 25,558 | 31,040 | 31,659 | 34,264 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 317 | 583 | 349 | 367 |
| Capital Transfers to Government Agencies ((Road Authorities)) | 78,120 | 84,884 | 91,499 | 94,806 |
| Capital Transfers to KWS | 564 | 829 | 830 | 650 |
| Other development | 175 | 180 | 193 | 203 |
| Sub-total | 79,176 | 86,476 | 92,871 | 96,026 |
| TOTAL | 104,734 | 117,516 | 124,530 | 130,290 |
| Public Works | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 994.66 | 1,015 | 1,043.80 | 1,065.20 |
| Use of Goods and Services | 429.83 | 711 | 1,041.30 | 1,156 |
| Current Transfer Govt Agencies | 0 | 0 | 0 | 0 |
| Other Recurrent | 46.23 | 101 | 125.45 | 161 |
| Sub Total | 1,470.72 | 1,827 | 2,210.55 | 2,382.20 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 89 | 106 | 149 | 164 |
| Capital Transfers to Government Agencies | 0 | 0 | 0 | 0 |
| Other Development | 4,962.50 | 9,455 | 8,513 | 7,159 |
| Sub totals | 5,051.50 | 9,561 | 8,662 | 7,323 |
| TOTAL | 6,522 | 11,388 | 10,873 | 9,705 |
| Housing | | | | |
| Current Expenditure | | | | |

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--|----------------------|----------------------|---------------------|---------------|
| | | | 2012/13 | 2013/14 |
| Employee Compensation | 305 | 320 | 333 | 345 |
| Use of Goods & Services | 639.8 | 1,130 | 1,135 | 1,180 |
| Current transfers Govt Agencies | 15 | 700 | 700 | 700 |
| Other Current | 18 | 20 | 25 | 30 |
| Sub Total | 977.8 | 2,170 | 2,193 | 2,255 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 2,282 | 11,045 | 11,192 | 11,930 |
| Capital transfers to Govt Agencies | 700 | 0 | 0 | 0 |
| Other Development | 0 | 0 | 0 | 0 |
| Sub Total | 2,982 | 11,045 | 11,192 | 11,930 |
| TOTAL | 3,959.80 | 13,215 | 13,385 | 14,185 |
| Transport | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 354 | 603 | 654 | 700 |
| Use of Goods and Services | 1,272 | 2,050 | 5,842 | 4,889 |
| Current Transfer Govt Agencies | 2,804 | 3,704 | 3,399 | 3,333 |
| Other Recurrent | 0 | 0 | 0 | 0 |
| Sub Total | 4,430 | 6,357 | 9,895 | 8,922 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 1,960 | 7,537 | 6,935 | 6,485 |
| Capital Transfers to Government Agencies | 5,253 | 5,841 | 10,741 | 7,541 |
| Other Development | 0 | 0 | 0 | 0 |
| Sub Total | 7,213 | 13,378 | 17,676 | 14,026 |
| TOTAL | 11,643 | 19,735 | 27,571 | 23,248 |
| Nairobi Metropolitan | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 114 | 120 | 125 | 130 |
| Use of Goods and Services | 0 | 0 | 0 | 0 |
| Current Transfer Govt Agencies | 0 | 0 | 0 | 0 |
| Other Recurrent | 205 | 460 | 462 | 465 |
| Sub Total | 319 | 580 | 587 | 595 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 0 | 0 | 0 | 0 |
| Capital Transfers to Government Agencies | 0 | 0 | 0 | 0 |
| Other Development | 1,158 | 9,713 | 48,563 | 38,850 |
| Sub Total | 1,158 | 9,713 | 48,563 | 38,850 |
| TOTAL | 1,477 | 10,293 | 49,150 | 39,445 |
| Local Government | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 204 | 272 | 283 | 294 |

| Sub-sector | Estimates 2010/11 | Estimates 2011/12 | Projected Estimates | |
|--|----------------------|----------------------|---------------------|-------------------|
| | | | 2012/13 | 2013/14 |
| Use of Goods and Services | 697 | 1,563 | 2,117 | 2,706 |
| Current Transfer Govt Agencies | 12,300 | 13,300 | 14,300 | 15,300 |
| Other Recurrent | 0 | 0 | 0 | 0 |
| Sub Total | 13,201 | 15,135 | 16,700 | 18,300 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 5,799 | 17,865 | 19,300 | 18,700 |
| Capital Transfers to Government Agencies | 0 | 0 | 0 | 0 |
| Other Development | 0 | 0 | 0 | 0 |
| Sub totals | 5,799 | 17,865 | 19,300 | 21,700 |
| TOTAL | 19,000 | 33,000 | 36,000 | 40,000 |
| Energy | | | | |
| Current Expenditure | | | | |
| Compensation of Employees | 223.24 | 396.12 | 411.96 | 454.43 |
| Use of Goods and Services | 229.15 | 283.4 | 320.81 | 360.63 |
| Current Transfer Govt Agencies | 1,800.50 | 1,935.50 | 2,072.50 | 2,220.50 |
| Other Recurrent | 30.4 | 67.85 | 48.5 | 51.97 |
| Sub Total | 2,283.29 | 2,682.87 | 2,853.77 | 3,087.53 |
| Capital Expenditure | | | | |
| Acquisition of Non-Financial Assets | 15,910.20 | 40,683.15 | 40,798.66 | 29,419.72 |
| Capital Transfers to Government Agencies | 17,543.80 | 23,071.55 | 24,283.86 | 24,552.59 |
| Other Development | 618.86 | 1,693.68 | 1,754.43 | 1,906.70 |
| Sub totals | 34,072.86 | 65,448.38 | 66,836.95 | 55,879.01 |
| TOTAL | 36,356.15 | 68,131.26 | 69,690.72 | 58,966.57 |
| GRAND TOTAL | 183,692.94 | 273,278.26 | 331,199.72 | 315,839.57 |

CHAPTER FOUR: CROSS SECTOR LINKAGES

4.1 Analysis of other Sector Linkages to the Sector

Physical Infrastructure Sector is one of the key players in rapid and sustainable economic growth and development. There are strong linkages both (forward and backward) with other sectors. The envisaged economic growth of 10% in the Vision 2030 can only be achieved and sustained with an efficient and functioning physical infrastructure.

The Sector interlink virtually with all other sectors. The sector facilitates production, trade and reduction in the cost of doing business. To enhance the tourist attraction, physical infrastructure is one of the players in facilitating mobility.

The Sector recognizes the importance of protecting and conserving the environment and thus why in every physical infrastructure projects there is always an undertaking of the environmental Impact assessment. Physical infrastructure projects are labour intensive and therefore require both the skilled and the unskilled manpower.

The table below illustrates the linkages between the Physical infrastructure and all other MTEF sectors;

| MTEF Sectors | Medium Term Plan Sectors | Linkage with Physical Infrastructure |
|-----------------------------------|---|--|
| Agriculture and Rural Development | Land reforms and Agriculture and Rural Development | The Physical Infrastructure Sector plays an important role in facilitating production, trade and reducing the cost of transportation of agricultural produce through provision of motorable roads. The sector relies on provision of power for its primary industries and lighting the rural population. Local Authorities provide infrastructural facilities which support industrial development and provide market facilities for agricultural produce. |
| Trade ,Tourism and Industry | Tourism, Manufacturing, Wholesale and Retail and Business Process Outsourcing | The Physical Infrastructure Sector provides roads which facilitates trade between market destinations and contributes to improved tourism road networks. Road safety is ensured for the tourists and other road users. Nairobi metropolitan is implementing measures to make Nairobi a 24 hour trading city and regional hub for trade. The sector is also implementing measures for improving and attracting investment through provision of |

| MTEF Sectors | Medium Term Plan Sectors | Linkage with Physical Infrastructure |
|-------------------------------------|--|--|
| | | affordable power for primary and secondary industries |
| Environment ,Water and Irrigation | Environment, Water and Sanitation | The Physical Infrastructure Sector recognizes the importance of protecting and conserving the environment during implementation of infrastructure projects. Environmental Impact Assessment is now mandatory before undertaking implementation of all projects to ensure that the activities carried out do not impact negatively on the environment. The Sector ensures provision of safe water, effective sewage disposal and management of solid waste. The main user of the Meteorological department is Civil Aviation in the Transport Sub- sector where they advice the department on weather status. |
| Human Resource Development | Education and Training, Health, Human Resource development, Employment | The Infrastructure Sector provides employment opportunities through its labour intensive programmes. The Sector also improves infrastructural services such as power, roads, buildings etc to education, health and other social facilities thereby improving living standards. The Sector is implementing programmes taking into account the issue of HIV and AIDS scourge. |
| Research ,Innovation and Technology | ICT, Science Technology and Innovation | The Physical Infrastructure Sector is involved in research on construction materials and technologies, dissemination of research findings and promotion of wider application of innovative materials and technologies .The Sector is adopting new emerging ICT technologies in delivery of its services. |
| Governance ,Justice, Law and Order | Security, Peace Building and Conflict Management, Governance and Rule of Law, Decentralization | GJLO plays important role in sector's legal reform agenda through enactment of legislations e.g. Roads Act 2007, Energy Act |

| MTEF Sectors | Medium Term Plan Sectors | Linkage with Physical Infrastructure |
|---|---|--|
| | | 2006 and the Merchant and Shipping Act 2009. Further, the Sector plays a critical role in the integration of EAC. |
| Public Administration and International Relations | Public Sector Reforms | In every undertaking, planning is an important element. The Sector relate to the Physical Infrastructure on issues of national development planning and public expenditure management, budget tracking and monitoring and evaluation of development programmes and activities as well as access to support services. |
| Special Programmes | Gender, Vulnerable Groups and the Youth, Equity and Wealth Creation | The Physical Infrastructure Sector is currently implementing infrastructure projects such as in roads and energy to disadvantaged areas of the country. |
| National Security | Security | The Physical Infrastructure Sector facilitates the national security sector through provision of infrastructural services such as roads, energy and building. Patrolling Kenyan waters for the security of vessels destined to our country. All important in improving the country's security. |
| Macro Working Group | Financial Services | Financial services are expected to complement and also supplement government funds in planning for and implementation of Physical Infrastructure Sector programmes. |

Physical Infrastructure Sector is an important catalyst of private sector activities because of its facilitative role in enhancing the business operations of the private sector investment. Investment in infrastructure also acts as an incentive to provide private sector investment. The private sector on the other hand is an engine through which the Physical Infrastructure Sector can achieve employment creation and income generation objectives while at the same time partnering in the achievement of the physical infrastructure targets of delivering on projects and programmes. Resources from this Sector when mobilized can supplement government funds in planning for and implementation of Physical Infrastructure Sector activities and programmes.

Private sector organizations are endowed with both human and financial resources that could supplement government's effort. Areas of linkages range from consultancy services on planning of programmes/projects, drawing designs, implementation to programme/project Monitoring and evaluation. The private sector is also a reservoir of human labour (an

important factor of production) from which the Physical Infrastructure Sector draws manpower for its construction projects. Other areas of collaboration include Research & Development with Institutions of higher learning in areas of research on best building/construction practices and technology as well as low cost building materials. This has the potential of lowering cost of construction to the benefit of the low income group and general economy. The private sector also provides consultancy in drawing designs for construction projects, undertake construction, are producers and suppliers of building materials and equipment as well as provide finances (for example housing finance) that are greatly used in Physical Infrastructure Sector. For instance in the housing sub-sector banking and Non-Bank Financial Institutions (NBFIs e.g. Housing Finance and Building Societies) play a critical role in bridging the financial gap required for Housing development, through mortgages and loans. Thus developing Private Public Partnerships (PPPs) will enhance the existing collaboration.

4.2 Cross Sector Linkages and its Impacts on Resource Allocations

It is recognized that Physical Infrastructure Sector is a player in rapid and sustainable economic growth and development. There are strong linkages (both forward and backward) with other sectors. Vision 2030 envisages an economic growth rate of 10% annually. This growth can only be achieved and sustained with an efficient and functioning infrastructure through adequate resource allocation.

The Sector is an important prerequisite in creating and supporting business environment that facilitates private sector investment, growth and job creations. Accelerating development in disadvantaged areas e.g. Arid and Semi-Arid lands, heavy investment in physical infrastructure is necessary to open up these areas for investment in other sector. Investment in physical infrastructure requires large amount of resources and therefore should continue to be a priority area in resource allocation.

CHAPTER FIVE: EMERGING ISSUES AND CHALLENGES

Nairobi Metropolitan

- **Inadequate funding:** The Sub-sector has continued to have a decrease in funding levels from 2 Billion on 2008/09 to 1.1 Billion in 2009/10. This has affected completion of flagship projects that were anticipated in Vision 2030.
- **Staff level not fully addressed:** The Sub-sector encounters capacity gaps as it continued to operate with a deficit between the authorized posts and the staff in post. This in turn implied existence of technical and support **services gaps which impacted negatively** on service delivery. In addition, the Sub-sector faced constraints related to inadequacies of appropriate skills in some cadres of staff that are necessary for the effective performance of some technical tasks
- **Inadequate Office Accommodation:** The number of staff in the Ministry has been rising progressively against the available space in KICC, the Sub-sector faces serious accommodation problems and requires additional space.

Energy

- **Inadequate power supply capacity:** The demand for electricity is growing faster than the ability to install additional generation capacity. This has arisen because of inadequate budgetary support to facilitate timely implementation of generation projects based on the rolling Least Cost Power Development Plan.
- **Over-reliance on hydropower:** Hydro power in Kenya constitutes 70 – 80% of the total electrical power. This over reliance has exposed the country to power rationing in times of drought resulting to use of very expensive emergency power generation.
- **Inability of KPLC to connect all customers:** KPLC is not able to connect electricity to all customers who would like to be connected to the national grid due to overstressed distribution network and shortage of transformers.
- **High cost of power:** The cost of power is high compared to our competitors such as Egypt and South Africa due to high system losses, poor economies of scale , accumulation of fuel cost recovery surcharge and appreciation of the Kenya shillings.
- **Weak transmission and distribution network:** The transmission and distribution system is weak resulting in high system losses, frequent power outages and low quality of supply which increase the cost of doing business.
- **Dependence on donor financing:** With the power utilities having a weak capital base, and given that power generation projects are capital intensive, the country has been over relying on donors for financing, which has not been sufficient.
- **Long lead times in the development of power infrastructure:** Power generation, transmission and distribution infrastructure is capital intensive and take inordinately long time from conception to commission.
- **Low investments in power sector by private investors:** Many Independent Power Producers (IPPs) are not interested in investing in the power sector, and those few who show interest take too long to implement projects and sometimes demand enormous terms such as very high generation tariffs, government guarantees and letters of credit covering several months of payment for both capital and energy charges.
- **High cost of rural electrification:** Due to very high cost of extending the national grid, low densities of customers connected per km of line or per step down transformer.

- **Low countrywide electricity access** at 22% of the total population and 10% of rural population and very slow increase in number of connections.
- **Inadequate sea- port facilities** for handling imported coal and natural gas which are cheaper primary energy resources than petroleum oil-based fuels for power generations.
- **High and ever rising prices of fossil fuels:** Kenya has been adversely affected over the years by the high and ever rising prices of crude oil in the international market and subsequent increases in the prices of petroleum products.
- **Unsecure oil supply:** Due to fragility of the world market, high prices of oil, proliferation of sub-standard fuel dispensing facilities, under-dispensing of products, adulteration of motor fuels, dumping of export products and limited distribution infrastructure in the rural areas.
- **Obsolete oil refinery:** The oil refinery in Mombasa is not only uneconomic to operate but also produces petroleum products which do not meet international quality standards and inadequate LPG quantities which do not match local and export demand.
- **Constrained oil pipeline system:** There is inadequate pipeline capacity to transport oil products from Mombasa to Nairobi and to Western Kenya.
- **Unsustainable biomass use:** has led to deforestation and land degradation.
- **Addressing food security issues when developing the bio-diesel industry:** developing bio diesel industry is sometimes in conflict with food security issues.

Roads

- The sub-sector's allocation has never matched the resources required to provide reliable road (both classified & unclassified) network in the country.
- Inadequate plant and equipment under the Mechanical and Transport fund to meet the ever increasing demand
- Slow procurement and disbursement procedures on the Development co funded projects.
- Huge maintenance backlog of the road network. This has reduced the uptake of new projects.
- Lack of adequate local construction capacity.
- Encroachment of road reserves by private developers.
- Enforcement of the axle load limits
- The reduction of maintenance fund for DE/Other roads and eventual equal distribution of the 10% Fuel Levy Funds meant for maintenance to all constituencies. This has led to a thin spread of financial resources across all the constituencies which does not result into meaningful road maintenance works. The funds are very minute to make any difference in a constituency's road network.
- The management of the Constituency Road Maintenance Funds through the legislative arm of the Government as represented by the CDF mechanism.
- Managing stakeholder expectations and maintaining the existing goodwill.
- Lack of technology to stabilize murrum roads in the parks and reserves.

Local Government

- The factoring of Contribution In-lieu of Rates as part of sub-sector budget ceiling is wrong and disadvantages the allocation to the sub-sector because the funds are disbursed to the local Authorities in respect to land, buildings and forests that belong to other government Ministries and departments.

- Disaster Management preparedness: There's need to enhance disaster preparedness in all Local authorities.
- Inadequate human resource capacity. Most local authorities do not have the capacity required for smooth operations and implementation of projects in the Local authorities.
- Inadequate funding in Recurrent and Development vote
- Solid waste management:- currently only four towns are covered
- Storm water drainage: - There is need to have proper drainage system for storm water and sewerage.
- Increased demand for development and refurbishment of various types of markets as outlet for agricultural, livestock and other products as well as avenue for employment generation.
- Mainstreaming of Monitoring and evaluation

Public Works

- The newly created districts require funds for construction of field offices, operations & maintenance.
- Increased demand for new office space and facilities at the Sub-sector's headquarter.
- Construction and maintenance of seawalls and jetties has emerged as a major life improving program for the residents of the coastal region.
- There is increased demand for foot bridges in the countryside due to the social impact created by the already completed ones.
- Shortage of professional and technical staff, which impacts negatively to the Sub-sector in discharge of its mandate.
- Delay in establishment of National Construction Authority (NCA) to enhance efficiency and coordination in the building construction Industry.
- Inadequate funding in Recurrent and Development vote.
- Increased demand on innovations and research in building technology.
- Mainstreaming of Monitoring and Evaluation of projects.

Housing

- Lack of comprehensive housing sector legislation (legal framework) that has led to uncoordinated housing sector operations thus limiting the Sub-sector's operations in housings sector.
- Lack of research and development programme to support Appropriate Building Materials and Technology.
- Under-occupancy of government quarters due to insecurity and low maintenance levels; and lack of inventory of government quarters and their occupation.
- Low level of funding by government to housing sector development and lack of maintenance policy & integrated legal framework.
- Lack of guidelines to harmonize leasing of government offices and residential accommodation leading to payment for unused and under-used space.
- Escalating prices of building materials.

Transport

- The challenge for the Port of Mombasa is not only that of attracting and servicing increased traffic from the hinterland within Kenya and from the neighbouring countries but also that only small sized vessels are calling at the port while larger post-panamax vessels cannot access the port due to its shallow channel.

- The existing railway track is still a one metre gauge whose capacity is limited.
- The over-reliance on one transport corridor.
- Apart from the increasing demand for an efficient public transport system in the City of Nairobi, the prevailing traffic congestion and environmental pollution in the City still remains a major challenge in the transport sector.
- The rapidly growing aviation industry in Kenya faces major challenges including inadequate; regulations and enforcement, oversight and accident investigation capacity, air transport infrastructure and limited capacity in local training institutions. The aircraft accidents that have occurred in the recent past and the real threat to aviation security that is faced today make it more compelling for the country to work harder towards improving the safety of the airspace and aviation security in order to sustain the growth.
- The sub-sector is undertaking restructuring of technical departments and hence need for more training fund to train new officers, serving and re-designated.
- Fragmented transport systems
- Low investment in transport infrastructure
- Inappropriate Institutional framework
- Slack enforcement of rules and regulations
- Safety/Security at Ports and Airports
- Out-dated legislation
- Lack of standardized curriculum and conflict of interest by the police who test the students and instructors prior to licensing.

CHAPTER SIX: CONCLUSION

The Physical Infrastructure Sector has the necessary capacity to implement the stated programmes and projects as clearly outlined in the expected outputs. The impact of these programmes/projects activities in the sector have a multiplier effect on the social dynamics and reduction of poverty levels and contribute to the achievement of the Kenya Vision 2030. The sector will continue to implement the following programmes: Roads development, maintenance and management; Transport Management and Safety; Transport Infrastructure Development; Local Authority management and development; Housing development and human settlements; Government Building; Coastline Infrastructure and pedestrian access; Procurement and warehousing supply; construction and standard research; Metropolitan infrastructure and services; National Electrification; Renewable Energy Resources, and Petroleum Exploration and distribution.

In the Local Government subsector, the local authorities form engines of development at the grassroots hence there's need to put more emphasis in to the projects meant to benefit the Local Authorities. However, the sub-sector has grossly been underfunded notwithstanding the previous years of budgeting with very crucial projects and activities not undertaken due to lack of budgetary allocation. It's anticipated that funding to the projects will be enhanced to facilitate timely completion. Further, it is envisaged that the Treasury will clear the current debts owed to the local authorities in terms of Contribution in Lieu of Rates (CILOR), which have been crowding out funding to critical services. This will contribute positively to development in the LAs due to improvement in revenues.

Sufficient investments in the Public Works sub-sector are required to facilitate provision of adequate building space for all stakeholders in Government. It is therefore necessary to develop innovative ways of resource mobilization and prudence utilization for optimal growth.

With rapid population and urbanization, proliferations of informal settlements increasingly continue to pose social and economic challenges for the housing sub sector. This can be mitigated by aggressive investment in housing infrastructural facilities and provision of appropriate incentives to foster private sector participation in housing development. Various legislative frameworks relevant to housing such as Building Laws; Housing Bill, Tenant and Landlord Bill need to be fast tracked for enactment to spur growth in the housing sector.

Metropolitan development sub sector has experienced inadequate funding although this has been rising gradually. However, as a result of the continuous capacity building in terms of personnel, facilities and equipment, the sub sector's actual expenditure has been increasing progressively. It is envisaged that the increase in resource allocation as well as the progressive capacity building will enable the sub - sector deliver its services through effective project implementation.

Successful implementation of projects in the roads' sub-sector will be realized if effective collaboration with key stakeholders is enhanced. It is notable that liquidity levels for road contractors have increased on account of reduction of withheld VAT from 16% to 8%. However the refund systems of input VAT continues to be too bureaucratic causing undue delays in the refund. The sub sector has endeavoured to address the challenge of outstanding bills, through timely completion of ongoing projects and did not take to start any new projects

to ensure that ongoing ones are adequately funded and are completed on time. Further, reduction of the percentage earmarked for maintenance of Class DE/Other roads to 10% and equal distribution of the same across all constituencies continues to impact negatively on road maintenance.

The energy sub-sector is critical in ensuring sufficient and efficient power supply. However, it continues to experience inadequate power supply capacity resulting to over-reliance on hydro power. Some of the challenges experienced by the sub sector include inability of KPLC to connect all customers due to weak transmission and distribution network; high cost of power compared to other regional players; dependence on donor financing and their stringent conditionalities, and ever rising prices of fossil fuels prices.

Transport sub-sector provides leadership in Transport policy development and therefore requires enhanced empowerment to facilitate effective co-ordination. With Kenya being strategically located with good access to sea and air connections to most parts of the world, there is pressure to ensure safety in all modes of transport. Piracy in Kenyan water is a concern and requires the concerted efforts and collaboration of the sub-sector and that of Defence by increasing the patrolling in the Kenyan waters along the Indian Ocean. As the road infrastructure is improved, there is need to ensure safety. To do this, road safety awareness campaigns, erection of studs in black spot and adoption of best tested and piloted systems will be enhanced. Effective sub-sector capacities are a pre-requisite in transforming challenges into opportunities through efficient programme implementation.

CHAPTER SEVEN: RECOMMENDATIONS

- Encourage public-private partnership in the sector by providing the necessary incentives.
- Enhance infrastructure financing initiatives such as infrastructure bonds.
- Mobilize adequate financial and human resources to ensure timely implementation of planned projects and retention of professional and technical staff.
- Promote research and development and carry out demonstration on the manufacture of cost effective appropriate technologies.
- Improve the sector's capacity in terms of personnel, facilities and equipments should be sustained so that the sector is able to move towards achieving an optimal level of output.
- Increased use of the local contractors to enhance their capacity.
- The sector to maintain the positive trend on absorption of budget allocation over recent financial years.
- All on-going and stalled projects be adequately funded to ensure that they are completed to contribute to sustainable economic growth.
- Mainstream Monitoring and Evaluation in project implementation.
- Fast track review of out-dated laws and implementation of supportive legal framework.
- Review of the Roads Act 2007 and Kenya Roads Board Act 1999 to allow for a higher percentage for roads maintenance for class DE/Other roads and equitable distribution of the same and restructuring of constituency roads committee.
- Operationalize the Integrated Transport Data System and enhance coordination between traffic enforcement agencies.
- Enforcement of safety and security at Ports, Airports and in the Metro region.
- Diversify energy sources such as fossil, geothermal, nuclear, bio-diesel, bio-gas, wind and solar and promote energy conservation technologies including use of improved charcoal stoves and jikos.
- Mitigate against the impact of high cost of housing.
- CILOR being a transfer fund should be treated separately like LATF so that it does not affect the sub sector's ceiling, treasury should clear outstanding rates to the Local Authorities and it should clear all pending bills relating to KUTIP and any other.

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