

# REPUBLIC OF KENYA

# ENVIRONMENTAL PROTECTION, WATER AND NATURAL RESOURCES SECTOR $\mathbf{REPORT}$

# MEDIUM TERM EXPENDITURE FRAMEWORK (MTEF) BUDGET FOR THE PERIOD 2018/19-2020/21

# NOVEMBER

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# ABBREVIATIONS AND ACRONYMS

AfDB - African Development Bank

A-I-A - Appropriation in Aid

ARUD - Agriculture, Rural & Urban Development

ASAL - Arid & Semi-Arid Lands

CAJ - Commission on Administrative Justice

CBK - Central Bank of Kenya

CDM - Clean Development Mechanism

COK - Constitution of Kenya

CSOs - Civil Society Organizations

DANIDA - Danish International Development Agency
DFID - Department for International Development
EACC - Ethics and Anti-Corruption Commission

EMCA - Environmental Management & Coordination Act

EPWNR - Environmental Protection, Water and Natural Resources

FBOs - Faith Based Organizations

FY - Financial Year

GDP - Gross Domestic Product

GECAS - General Economic & Commercial Affairs Sector

GOK - Government of Kenya

Ha - Hectares

ICT - Information Communication Technology

JICA - Japanese International Copperation agency

KEFRI - Kenya Forest Research Institute

KEWI - Kenya Water Institute
KFS - Kenya Forest Service

KMD - Kenya Meteorological Department

KM - <del>Kilometres</del><u>Kilometers</u>

KRA - Kenya Revenue Authority

KWRTI - Kenya Wildlife Research Training Institute

KWS - Kenya Wildlife Service

KWTA- Kenya Water Towers Agency

LVEMP - Lake Victoria Environment Programme

MI - Mining Institute

MOU - Memorandum of Understanding

MTEF - Medium Term Expenditure Framework

MTP - Medium Term Plan

NEMA- National Environment Management Authority

NETFUND - National Environment Trust Fund NGOs - Non-Governmental Organizations

NIB - National Irrigation Board

NMC - National Mining Corporation

NSE - Nairobi Securities Exchange

NWCPC - National Water Corporation & Pipeline Corporation

PA&IRS - Public Administration & International Relations Sector

PPPs - Public Private Partnerships

RANET - Radio Internet

SAGAs - Semi-Autonomous Government Agencies
UNDP - United Nations Development Programme
UNEP - United Nations Environment Programme

UPOPs - <u>Unintentional Persistent Unintentional Persistent</u> Organic Pollutants

WABs - Water Appeals Board

WASREB - Water Services Regulatory Board

WCK - Wildlife Clubs of Kenya

WRMA - Water Regulatory Management Authority

WSB - Water Services Board
WSPs - Water Services Providers
WSTF - Water Services Trust Fund

#### **EXECUTIVE SUMMARY**

The Environmental Protection, Water and Natural Resources (EPWNR) Sector consists of five subsectors namely Environment, Natural Resources, Water, Irrigation and Mining. The sector is embedded in Article 42 of the Constitution and is expected to provide for a clean and healthy environment for every person,—Article 69 of the Constitution requires the State to ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits. In addition, Article 43 (1)(d) of the Constitution states that every person has the right to clean and safe water in adequate quantities.

The sector plays a crucial role in the economy as its investment will ensure the delivery of direct and indirect goods and services that are the backbone for the main productive sectors namely agriculture, tourism, energy and manufacturing. It has direct and indirect linkages with all other sectors of the economy thus promoting socio-economic development geared towards the realization of the Kenya Vision 2030 and various international commitments relating to the sector. According to Economic Survey 2017, the sector contributed about 3.7% to Gross Domestic Product (GDP) in 2016.

The Vision of the sector is "Sustainable development in a secure environment" while its mission is "To promote sustainable utilization and management of environment and natural resources for socio- economic development." The overall goal is to ensure sustainable development in a clean and secure environment. The specific objectives are to: enhance sustainable management of environment, water, irrigation and natural resources; ensure access to water and natural resources benefits for socio-economic development; enhance capacity building for environment, water and natural resources management; increase utilization of land through irrigation, drainage and land reclamation; enhance research on environment, water and natural resources for sustainable development<sub>1</sub> and protect and reclaim the environment in order to establish a durable and sustainable system of development and resilience to climate change.

During the period under review, the sector managed to enact Mining Act 2016, Water Act 2016, Forest Conservation and Management Act 2016 and Wildlife Conservation and Management Act 2013. Forest cover increased from 6.9% to 7.2% and poaching was reduced from 80% to 40%. A total of 20 automatic weather stations were installed. Area under irrigation increased by 150,623 acres with a production of 114,083 tons of cereals. The proportion of people with access to clean water increased from 56.9% to 59.9% while the proportion with access to sewerage services increased from 10.2% to 15%.

The sector has many emerging issues including but not limited to the use of ICT in tracking, mapping and monitoring of resources; discovery of mineral resources resulting in high expectations of the mining communities and environmental degradation; different policies and legislations on management of trans-boundary resources like water and wildlife; and sophistication of poaching, smuggling and trafficking. In addition, transitioning to green economy, devolution and management of water resources, formalization of artisanal miners, e-

management and commitment to international/global agreements are other emerging issues in the sector.

The performance of the sector has continued to be affected by a number of challenges including, inadequate funding, impacts of climate change, increasing population, pollution, poor waste management, desertification, poor sanitation, poaching and smuggling, over-exploitation of ecosystem and species, expansion of agriculture and settlements into fragile water towers ecosystems thus leading to biodiversity loss and unsustainable land use practices that pose serious threats to the attainment of clean and secure environment. In addition, inadequate data and information, inadequate human resources, inadequate equipment and machines, delays in enactment of legal and policy framework and insecurity have also been experienced in the sector.

The budgetary allocation of the sector within the review period was **Ksh.224.4 Billion** and actual expenditure was **Ksh.185.2 Billion** representing absorption rate of 82.5%.In 2018/19 the sector has been allocated **KSh.76.2 Billion** against a requirement of **Ksh.234.1 Billion** representing 32.6% of the requirement.

Development expenditure was shared by the subsectors using the following criteria; executive/cabinet approval, on-going projects, achievability, sustainability, source of funding—

Accuracy accuracy of project concept notes, and one-off expenditure. On the other hand, personnel emoluments, annual increment and statutory obligations subscriptions informed sharing of recurrent expenditure.

The Sector has a total resource requirement of kshs.235, 608 million out of which Recurrent budget is Ksh. 49,537 million and Development budget is Ksh. 186,071 million. This is against an allocation of ksh. 78,059 million out of which Recurrent allocation is ksh.23,272 and Development allocation is ksh.s54,787. The Sector therefore has a total resource gap of Ksh.s180,821 157,549 million. The development budget allocation has been prioritized to address the BIG FOUR priority initiatives with the Stated Department of Water the State Department of Irrigation being identified as an enabler and and the State Department of Irrigation being identified as an enabler and the State Department of Irrigation being identified as a Driver to the BIG Four initiatives. The State Department of Water has allocated ksh.3, 137 Million out of ksh.1-which ksh.1, 920 2,327 million is to support Industrialization, Manufacturing and Agro processing cluster.ksh.processing cluster.ksh.9250 ,374 million in to support of Affordable Housing.Ksh., Ksh.172,633 million in support of Universal Healthcare and Kshs.13,552250 Food Security Cluster. Tand—the State Department of irrigation has allocated kshs14,653 million to cater for irrigation services to address Food Security initiative.

The sector has the potential to contribute significantly to gross domestic product (GDP) towards achieving double digit economic growth, employment creation, foreign exchange, infrastructural development and provision of raw materials for industrial development. However, it has continued to receive low budgetary allocation that is inadequate to enable the sector to coordinate and manage its programmes effectively. In order to improve the performance of the sector in the next MTEF period (2018/19 to 2020/21), ensure the efficient and effective delivery of services and to achieve the objectives of the sector in line with Constitution of Kenya 2010, Kenya Vision 2030 and MTP III, the following key recommendations are proposed for implementation: Fast track finalization of policies and legal frameworks; research and

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innovation; climate change; capacity building and awareness creation and innovative financing/partnership. viii

**CHAPTER ONE** 

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#### 1.0 INTRODUCTION

# 1.1 Background

The Environmental Protection, Water and Natural Resources (EPWNR) Sector consists of five subsectors namely Environment, Natural Resources, Water, Irrigation and Mining. There are 28 semi-autonomous government agencies (SAGAs) with Water subsector having 16, Natural Resource 6, Environment 2, Mining 3 and Irrigation 1. In line with Article 42 of the Constitution, the sector is required to provide for a clean and healthy environment for every person while Article 69 requires the State to ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits. Article 43 (1) (d) of the Constitution states that every person has the right to clean and safe water in adequate quantities. The investment in this sector will ensure the delivery of direct and indirect goods and services that are the backbone for the main productive sectors namely agriculture, tourism, energy and manufacturing. According to Economic Survey 2017, the sector contributed about 41.5% to gross domestic product (GDP) in 2016. It has direct and indirect linkages with all other sectors of the economy thus promoting socio-economic development geared towards the realization of the Kenya Vision 2030, relevant Sustainable Development Goals (SDGs) and various multilateral agreements relating to the sector.

The sector faces a number of challenges in development and management of the limited natural resources. These include; inadequate funding, impacts of climate change, increasing population, pollution, poor waste management, desertification, poor sanitation, poaching and smuggling, over-exploitation of ecosystem and species, expansion of agriculture and settlements into fragile water towers ecosystems thus leading to biodiversity loss and unsustainable land use practices that pose serious threats to the attainment of clean and secure environment. In addition, inadequate data and information, inadequate human resources, inadequate equipment and machines, delays in enactment of legal and policy framework and insecurity. To address these challenges, the sector continues to review and enforce policy measures that govern the exploitation, management and conservation of the environment and natural resources. However, the limited resources allocated to the sector have continued to affect programme performance, attainment of sector objectives and contribution to the economy.

This report outlines medium term priorities and corresponding resources in line with the Third Medium Term Plan (MTP III, 2018-2022) of the Kenya Vision 2030. It further outlines the broad development policies, plans and programmes for the financial year (FY) 2018/19-2020/21 medium term expenditure framework (MTEF) budget. In preparation of the report, the Programme Performance Review, Programme Based Budget and Sub-Sector reports informed the MTEF budgetary allocations. Focus has been given on efficiency and effectiveness of public spending by assessing value for money that was obtained in previous allocations and determined

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which programmes to be given priority for funding for the MTEF period. In addition, the inputs of key stakeholders have been taken into account in preparation of this sector report.

The report is organized into six chapters based on Treasury Circular No.9/2017 of 30th August, 2017 as follows; Chapter one presents an introduction which provides the background, Sector vision, mission and strategic goals/objectives, sub-sectors and their mandates, description of Autonomous and Semi-Autonomous Government Agencies; and the role of stakeholders. Chapter two gives an outline of the Sector's programmes performance review of expenditures for the period 2014/15 - 2016/17. Chapter three presents medium term priorities and financial plan for the MTEF period 2018/19 - 2020/21. Chapter four discusses cross-sector linkages and emerging issues/challenges, while Chapter five provides the conclusions and Chapter six outlines the proposed recommendations.

#### 1.2 Sector Vision and Mission

Sector Vision "Sustainable development in a secure environment."

**Sector Mission** "To promote sustainable utilization and management of environment and natural resources for socio- economic development."

#### 1.3 Strategic Goals/Objectives of the Sector

The overall goal of the Sector is to ensure sustainable development in a clean and secure environment. The specific objectives include:

- (i) To enhance sustainable management of environment, water, irrigation and natural resources;
- (ii) To ensure access to water and natural resources benefits for socio-economic development;
- (iii) To enhance capacity building for environment, water and natural resources management;
- (iv) To increase utilization of land through irrigation, drainage and land reclamation;
- To enhance research on environment, water and natural resources for sustainable development.
- (vi) To protect and reclaim the environment in order to establish a durable and sustainable system of development and resilience to climate change

#### 1.4 Sub-Sectors and their Mandates

The sub-sectors' mandate are detailed in the Executive Order No. 1/2016.on the Organization of the Government of the Republic of Kenya, May 2016.

# **Environment Sub-Sector**

The sub-sector's mandate includes; National Environmental Policy and Management; Protection and Conservation of the Natural Environment; Climate Change Policy; Pollution Control; Lake Victoria Environmental Management Programme; Restoration of Lake Naivasha Basin; Kenya Meteorological Department; and Kenya Meteorological Training College.

#### **Natural Resources Sub-Sector**

The sub-sector's mandate is Forestry Development Policy Management; Conservation and Protection of National Wildlife; Development of Forests, Re-afforestation and Agro-forestry; Restoration of Strategic Water Towers; Kenya Forestry Services; Wildlife Conservation and Protection Policy; Conservation and Protection of National Wildlife Heritage; Collaboration with Wildlife Clubs of Kenya; and Marine Parks.

#### Water Sub-Sector

The sub-sector's mandate is Water Resources Management Policy, Water and Sewerage Services Management Policy, Waste Water Treatment and Disposal Policy, Water Catchment Area Conservation, Control and Protection, Water Quality and Pollution Control, Sanitation Management and Management of Public Water Schemes and Community Water Project.

# **Irrigation Sub-Sector**

The sub-sector's mandate is National Irrigation Policy and Management, Water Storage and Flood Control, Land Reclamation/ Dams and Dykes, Management of Irrigation Schemes and Mapping, Designating and Developing Areas Ideal for Irrigation Schemes.

# Mining Sub -Sector

The sub-sector's mandate is to develop policy on Extractive Industry; conduct mineral exploration & develop mining policy management; prepare inventory and mapping of mineral resources; coordinate mining and minerals development policy, develop policies on the management of quarrying of rocks and industrial minerals, ensure management of health conditions and health and safety in mines, conduct mining capacity development and value addition, conduct resource surveys and remote sensing; and Maintain geological data (research, collection, collation, analysis).

# 1.5 Autonomous and Semi-Autonomous Government Agencies

The sector has 27 semi-autonomous government agencies (SAGAs) as presented below.

# 1.5.1 Environment sub-sector

The subsector has two SAGAs namely;

#### 1.5.1.1 National Environment Management Authority (NEMA)

NEMA was established under Environmental Management and Coordination Act, 1999 and mandated to exercise general supervision and coordination over all matters relating to the environment and to be the principal instrument of Government in the implementation of policies, regulations and standards relating to the environment.

#### 1.5.1.2 National Environment Trust Fund (NETFUND)

NETFUND was established under Environmental Management and Coordination Act, 1999 to facilitate research intended to further the requirements of environmental management, capacity building, environmental awards, environmental publications, scholarships and grants.

#### 1.5.2 Natural Resources Sub-sector

The Natural Resources sub-sector provides policy guidance, capacity building, resource mobilization, coordination and oversight for the following statutory institutions:

#### 1.5.2.1Kenya Forest Service (KFS)

KFS was established in February 2007 under the Forest Act, 2005 to conserve develop and sustainably manage forest resources for Kenya's socio-economic development.

# 1.5.2.2Kenya Forest Research Institute (KEFRI)

KEFRI was established in 1986 under the Science and Technology Act (Cap. 250) with the mandate of carrying out research in forestry and allied natural resources.

# 1.5.2.3Kenya Wildlife Service (KWS)

KWS was established under Wildlife (Conservation and Management) Act Cap. 376 No. 16 of 1989 now repealed and replaced by the Wildlife Conservation and Management Act No. 47 of 2013. The Mandate of the Service is to undertake protection, conservation, research, enforcement of wildlife laws and regulations, and the general management of wildlife resources in the country.

#### 1.5.2.4Kenya Water Towers Agency (KWTA)

KWTA was established vide Legal Notice No. 27 of 20th April, 2012. The Agency's mandate is to coordinate and oversee the protection, rehabilitation, conservation and sustainable management of water towers. The Agency provides a pivotal role in ensuring the sustainable conservation and management of all critical catchment areas and biodiversity hotspots within the Water Towers.

#### 1.5.2.5 Kenya Wildlife Research and Training Institute (KWRTI)

KWRTI is a body corporate established under Article 50 of the Wildlife Conservation and Management Act No. 47 of 2013. The Institute is to collect and analyze wildlife data and information to support planning and decision making and undertake research through remote sensing and geographic information system to enhance wildlife conservation and management. Other functions are undertake wildlife research and related emerging areas and provide training and capacity development programmes courses in wildlife conservation and management and related disciplines and award certificates and diplomas.

# 1.5.2.6 Wildlife Clubs of Kenya (WCK)

WCK is a charitable organization formed in 1968. It is a youth conservation education organization supported by the government of Kenya through the Ministry of Natural Resources. WCK believes that sustained education from grassroots to leadership levels is the single most important element in improved environmental protection and conservation. We run all our programs on the ethos that an informed and engaged citizenry, motivated by effective education, public awareness, outreach and training is needed to help ensure that Kenya has enough to self-sustain now and in the future.

#### 1.5.3 Water Sub-Sector

Water sub-sector has 16 SAGAs as described below:

#### 1.5.3.1 Water Tribunal (WT)

The Tribunal is established under the Water Act, 2016 to hear and determine any dispute concerning water resources or water services. WT is the successor of Water Appeals Board (WAB) that was enacted under Water Act, 2002.

# 1.5.3.1 Water Services Regulatory Board (WASREB)

WASREB is established under the Water Act, 2016 to regulate water and sewerage services provision including issuing of licenses, setting service standards and guidelines for tariffs and prices.

#### 1.5.3.1 Water Resources Authority (WRA)

The Authority is established under the Water Act 2016 to regulate the management and use of water resources including water allocation, source protection and conservation, water quality management and pollution control as well as collaboration on international waters. WRA is the successor of Water Resources Management Authority (WRMA).

# 1.5.3.2 Water Sector Trust Fund (WSTF)

The Water Sector Trust Fund is established under the Water Act, 2016 to provide conditional and unconditional grants to counties, in addition to the Equalization Fund and to assist in financing the development and management of water services in marginalized and underserved areas. This includes community level initiatives for the sustainable management of water resources, development of water services in under-served rural areas, development of water services in the under-served poor urban areas, and research activities in the area of water resources Management, water services, sewerage and sanitation. Water Sector Trust Fund is the successor of Water Services Trust Fund (WSTF).

# 1.5.3.3 Eight (8) Regional Water Services Boards (WSBs)

Were established under the Water Act, 2002 to manage water and sewerage service provision in their respective areas of jurisdiction. The eight Water Services Boards are: Tana, Athi, Tanathi, Lake Victoria South, Lake Victoria North, Rift Valley, Coast and Northern Water Services Boards. Their role is to ensure efficient and economical provision of water and sewerage services, contracting Water Services Providers (WSPs), developing water and sewerage facilities, regulating water services and tariffs and procuring and leasing water and sewerage facilities. The Water Services Boards will be transformed to Water Works Development Agencies in line with Water Act, 2016.

# 1.5.3.4 National Water Harvesting and Storage Authority (NWHSA)

NWHSA is established under the Water Act, 2016 to undertake the development of national public water works for water resources storage and flood control on behalf of the national government; and maintain and manage national public water works infrastructure for water resources storage. The Authority is the successor of National Water Conservation and Pipeline Corporation (NWCPC).

#### 1.5.3.5 Kenya Water Institute (KEWI)

KEWI was transformed into a semi-autonomous institution in July 2002 through the Kenya Water Institute Act, 2001. KEWI provides training, research and consultancy services in the water and irrigation sector.

# 1.5.3.6 Regional Centre on Ground Water Resources Education, Training and Research in East Africa (RCGWRETREA)

The Regional Centre was established through a Legal Notice No. 252 of 18th December, 2015 to undertake education, training and research in the East African region.

# 1.5.3.7 Water Resources Management Research Institute (WRMRI)

The Research Institute was established under Kenya Agriculture and Livestock Research Act of 2013 to undertake research in water resources management. The research institute was assigned as an institution of the State Department for Water Services through Executive Order No. 1 of 2016.

#### 1.5.4 Irrigation Sub-Sector

The Irrigation sub-sector has one SAGA,

#### 1.5.4.4 National Irrigation Board (NIB).

It was established in 1966 through Irrigation Act (CAP 347) and is mandated to develop, promote and improve irrigated agriculture through sustainable exploitation of available irrigation and drainage potential in Kenya. Its key responsibility is development and management of the National Irrigation Schemes in the country.

# 1.5.5 Mining Sub-Sector

The Mining Act, 2016 has established the following three SAGAs in the subsector:

# **1.5.5.1** National Mining Corporation (NMC)

The Mining Act, 2016 mandates the NMC to engage in mineral prospecting and mining; Invest on behalf of the National Government; Acquire by agreement and hold interests in any undertaking, enterprise or project associated with the exploration, prospecting and mining; and acquire shares or interest in any firm, company or other body of persons, whether corporate or unincorporated which is engaged in the mining, prospecting, refining, grading, producing, cutting, processing, buying, selling or marketing of minerals; and carry on its business,

# 1.5.5.2 Mining Institutes (MIs)

The Mining Act, 2016 mandates the MIs to offer courses in mining related field for middle and higher level management (certificate, diploma, degree and post-graduate); be a capacity building centre for all ministry staff including mineral auditors and certifying agents; collaborate in developing mining courses related curriculum and act as a research institution in which innovative mining technologies shall be incubated and tested.

#### 1.5.5.3 Mineral Rights Board (MRB)

The Mining Act, 2016 mandates MRB to be the sole organ to review applications, approval and renewal of mining licenses. It is also mandated to solve any disputes arising from concession

management in all mining areas. The Board functions will be decentralized to all mining counties through formation of respective County Mining Committees.

#### 1.6 Role of Sector Stakeholders

The Constitution of Kenya, 2010 provides for public participation and engagement in the budget making processes to enhance accountability and transparency in resource utilization. The Sector has a wide range of stakeholders whose roles are outlined below:

#### 1.6.1 Public/Citizens

Public participation in the budget process is a Constitutional legal requirement as stipulated in Article 201(a) of the Constitution of Kenya. It is through public participation process where stakeholders give their views and input on the proposed programmes and projects. Public participation creates a widespread support for policies, programmes and projects, and this increases ownership.

#### 1.6.2 Research and Academic Institutions

The Sector needs human capital, which is competent enough to deliver on its mandate. Research institutions, universities and other institutions of higher learning play a critical role in capacity building for the sector in terms of technical training at all levels and creation of knowledge through research. A close collaboration between the sector and these institutions is important in development of relevant training programs and research activities which would lead to optimum performance of the sector.

# 1.6.3 Government Ministries, Departments and Agencies (MDAs)

The sector works closely with several government ministries, departments and agencies while implementing its mandate. The MDAs include The National Treasury, State Law Office, Ministry of Agriculture, Livestock and Fisheries, Ministry of Interior and Coordination, Ministry of Industrialization and Enterprise Development, Ministry of Devolution and Planning, Ministry of Transport and Infrastructure, Ministry of Land, Housing and Urban Development among others. They support the sector with financial resources, complimenting policy guidelines, technical support and infrastructure. Other agencies like Ethics and Anti-Corruption Commission (EACC), Auditor General, the Office of the Ombudsman/Commission on Administrative Justice (CAJ) provide oversight in the use of resources in the sector.

# 1.6.4 Private Sector Organizations and professional bodies

These stakeholders are endowed with both human and financial resources that could be tapped into for resource mobilization and advocacy. They promote professional management; improve innovation, research and development; and policy analysis, in addition to provision of goods and services.

# 1.6.5 Non-State Actors, Civil Societies and Non-Governmental Organizations

The Civil Society Organizations (CSOs) including Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs), Faith Based Organizations (FBOs,) and other special interest groups participate and support programmes in the sector. These institutions are involved in resource mobilization, community empowerment, and technical support, creation of awareness on environmental protection and conservation of natural resources such as tree planting, prevention of soil erosion and conservation of water catchment areas among others.

# 1.6.6 Development Partners and International Organizations

Development Partners and International Organizations provide financial and technical support and capacity development. The sector collaborates with development partners in the implementation of its programmes. Some of these organizations include United Nations Environmental Program (UNEP), United Nations Development Programme (UNDP), UN Women, Danish International Development Agency (DANIDA), Swedish International Development Agency (SIDA) and Department for International Development (DFID), Finland Government among others.

#### 1.6.7 Parliament

The policies and laws in the sector are legislated by Parliament. In addition, it approves the annual budget and revised budget estimates. The legislative process takes a lot of time which directly impacts on timely implementation of the projects /programmes.

# 1.6.8 County Governments

Article 6(2) of the Constitution of Kenya, 2010 (CoK 2010) establishes the national and county governments as distinct and interdependent each with its own functions. The Article also requires that both levels of government relate to each other in a consultative and cooperative manner. The functions of both levels of government are provided for in Article 185, Article 186(1) and listed in the Fourth Schedule. Other Articles in the Constitution also delineate further functions and imposes obligations on both levels of government in the execution of their mandates.

That the National Government is largely assigned policy, regulatory and capacity building functions while the County Governments are mainly responsible for the implementation of the national policies and service delivery.

#### 1.6.9 Media

The media is important in advocacy and communicating the sector's policies, projects and programmes to the public. Responsible reporting by the media is therefore crucial for transparency and accountability in the use of resources.

# **CHAPTER TWO**

#### 2.0 PROGRAMME PERFORMANCE REVIEW 2014/15 - 2016/17

This chapter presents the performance of the sector programmes and sub programmes. Further, the budgetary allocation and expenditure trends for the financial years 2014/15 - 2016/17 are summarized below. Implementation of all the planned development interventions continued in accordance with the successive work plans and budgetary provision throughout the period under review. The Work Plans are annual and are derived from the 2013- 2017 Strategic Plans (Ministry of Environment, and Natural Resources, Ministry of Water and Irrigation and Ministry of Mining), which are aligned to the Medium Term Plan (MTP II) of the Kenya Vision 2030 and Jubilee Manifesto. Allocated resources were utilized as planned and the performance results are discussed below.

# 2.1 Review of Sub Sector Programme Performance

Table 2.1 shows the summary of the key output and key performance indicator per programme and the achievements by the sector for the period under review. From the table it is clear that the subsectors achieved most of their planned targets.

**Table 2.1: Sector Programme Performance Review** 

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
P1. General Ac	dministration, F	Planning and Support Servi	ces						
P1. General	Administrati	Number of policies	3	3	3	3	3	4	National
Administratio	ve services	implemented							Environment
n, Planning									Policy 2014
and Support									Education for
Services									Sustainable
									Development
									2014. Wetland
									Policy 2014,
									Integrated Coastal
									Zone
									Management
									Zone Policy
									mplemented
	Administrati	Number of policies/Bills	1	1	2	1	1	2	Water Act 2016
	ve services	developed							gazetted; Draft
									water policy and
									Draft
									Transboundary
									water Bill
									developed in
	G 1	N. I. G. H.	1	1	1	1	1	1	2016/17
	Gazetted	Number Gazette notices	1	1	1	1	1	1	NCA is also
	water								registering the
	contractors								contractors thus
	and								need for
	professionals Water	No. of annulled Students	1 200	1 400	1.500	1 252	1 450	1 447	harmony.  Demand for
	technicians	No. of enrolled Students in KEWI	1,200	1,400	1,500	1,252	1,458	1,447	technical
	technicians	III KEWI							courses has
									increased over

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
		D .: C . 1 .	77	70	02	77	92	0.4	time.
		Proportion of students graduating	77	79	83	77	82	84	Demand for technical courses has increased over time.
	Water resource center	Percentage completion of water resource center	-	-	27	80	80	90	
Policy development/r eview & development of bills	Mining Policy and Bill	Mining & Minerals Policy developed	2	2	2	2	2	2	Mining and Mineral Policy approved by Cabinet, Sessional Paper No. 7 Published
		National Extractive Policy developed	0	0	1	0	0	1	To be subjected to stakeholders
			1	1	1	1	1	1	Mining bill enacted
	Commercial Explosives Policy and Bill	Commercial Explosives Policy developed	1	0	0	0	0	0	Licensing of commercial explosives modules incorporated in the Online Mining Cadastre Portal
	Draft Geo- information Policy and Bill	Draft Geo-Information Policy and Bill	1	1	1	0	1	1	Draft National Remote Sensing Policy & Bill should be finalized &

<b>Programme:</b>	Key Output	Key Performance indicator	Planned Target			Achieved Targets			Remarks	
J			2014/15	2015/16	2016/17	2014/15	2015/16	2016/17		
									presented to parliament	
P 2. Environm	ent and Natura	l Resources Management a	nd Protecti	on						
S P 2.1: Policy	& Governance	in Environment & Natural	Resources	Managemen	t					
Policy & Governance in Environment & Natural Resources Management	Environment al policies	No. of policies developed	2	2	2	2	2	2	National Meteorology Bill, Draft National Meteorology Policy, Agreements Relating to Natural Resource Act 2016, National Waste Management Policy, Kenya Strategic Investment Framework On SLM 2017-2027	
	Improved environment governance	No. of MEAs, ratified and domesticated	3	3	3	3	3	5	MEAs ratified and domesticated (Convention of biological diversity, United Nation Convention to combat desertification, Stockholm	

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks	
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17		
									Convention,	
									Roterdam	
									Convention,	
									Basel	
									Convention)	
	Mercury	Mercury Inventory	-	2	2	-	2	2	Project	
	Initial Action	Ratification instrument of							completed	
	for Kenya	Minamanta convention								
S P 2.2: Nation	nal Environmen	t Management								
	Catchment	Number of hectares under	2250	2250	2250	170	1600	3459 Ha	More hectares	
	conserved	sustainable							realized due	
	and	Land management							optimal use of	
	rehabilitated	practice.							resources	
	Rehabilitated	No. of KMs of urban	70KM	70KM	24 Km	110km	160KM	20 km	Budget cuts	
	and protected	rivers rehabilitated and							affected project	
	river riparian	protected							implementation	
	zones	Hectares of catchment	288 ha	320 ha	320 ha	160 ha	0 ha	76 ha		
		rehabilitated								
		Number of trees planted	864000	960000	960000	40000	450000	19000		
		along the catchment								
		No. of indigenous tree	-	1000,000	290,000	600,000	800,000	180,000		
		seedling planted								
	Reduced	No. of counties	47	47	47	35	47	47	47 Counties	
	waste and	implementing waste	47	47	47	33	47	47	mapped and	
	pollution	management strategy							monitored on	
	control	management strategy							implementation	
	Control								of waste	
									management	
									strategy	
		No. of mapped pollution	8	12	5	5	5	5	Mapped in	
		sources		12					Mombasa,	
		Sources							Thika, Eldoret,	
									Kisumu and	
				1	1	1	1	1	ixisuillu allu	

<b>Programme:</b>	Key Output	<b>Key Performance</b>	Planned T	'arget		Achieved Ta	argets		Remarks
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
									Nakuru
		No. of National and County Environment Action Plans prepared and monitored	48	48	48	48	48	48	Statutory requirement to conduct thus done
		Number of Waste water Treatment Facilities constructed	3	3	3	0	0	3	Three sewerage facilities (Kisumu, Homa bay and Bomet) completed
		Number of Sanitation facilities (public/schools) constructed	17	17	17	0	0	9	Long World Bank procurement processes and iterative 'No Objections' led to delays in procurement of works
		Number of people provided with access to improved sanitation facilities.	17,280	17,280	17,280	0	0	90,300	The project is community driven ,more sanitation facilities were done by the community
		Number of industries adopted Cleaner Production Technologies	0	0	78	0	0	66	Delays in finalizing MOUs affected the target thus the non -

Programme:	Key Output	Key Performance	Planned Target			Achieved Ta	argets		Remarks	
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17		
									achievement.	
	Public complaints cases resolved	% of public complains resolved	100%	70%	100%	100%	100%	100%	All 74 environmental cases reported were prosecuted in courts	
	Climate change mitigated	No. of Nationally Appropriate Mitigation Actions) (NAMA) proposals	-	3	2	-	3	3	Achieved by 2016	
		No of climate change programmes and projects approved and supported	2	2	3	2	2	3	Achieved by end of 2016	
		No of regulations	-	-	1	-	-	1	Submitted to parliament	
		No of action reports to operationalize NCCAP	2	3	6	2	3	5	The actions will be complete by end of 2017	
	Database on HCFC (hydrochlorfl uoro carbons)	No. of databases on HCFC	10	10		10	10			
	ODS (Ozone depleting substances) report	No. of ODS reports	2	2	2	2	2	2		
	Complaince	No. of licences issued as per regulations	1200	3635	3,800	3,635	5,789	11,983	EIAs fees scrapped, intensive inspections thus the increase in licences issued	

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks	
J		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17		
		3 regulation reviewed	1	1	1	1	1	1	Biodiversity, EIA/EA and Waste management regulations reviewed	
P 3: Meteorold S P 3.1:Moder	0	Number of CDD sub- projects implemented under the project	247	247	247	22	225	247	Delays in finalizing financing agreements affected the target thus the deficit of 22 CDD's projects in FY 2014/15 and 2015/16	
	Weather and climate information	No. of Seismic Stations installed	3	2	0	3	0	0	The budget cut affected the installation of seismic station.	
		No. of Automatic Weather stations (AWS) installed	36	12	12	12	36.	32	20 AWS from LECRD project	
		Airport/ Automatic Weather Observing System (AWOS)	3	3	3	3	0	3	AWOS installed in Eldoret, Kisumu, JKIA	
		No. of Automatic Hydromet stations	20	0	20	19	2	0	Budget Cut affected the achievement	

<b>Programme:</b>	Key Output	Key Performance	Planned T	arget		Achieved Targets			Remarks
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
		No. of Upper air observatory systems	1	2	2	1	2	2	Achieved
		AMSS upgraded	1	0	0	1	0	0	Data collection platform tendered and awarded, National WIGOS Mets Data and Web- tendered
		No. of data management systems (CLISYS)	1	0	0	1	0	0	Undertaken in 2014/15
Sub-Programm	ne 3.2: Advertei	nt Weather Modification							
	Mitigation of adverse impacts of severe weather and	No. of Weather radars installed	3	2	2	0	0	0	Relocation of radar at JKIA affected by terminal 2 works
	extreme climate events	No. of Mobile pollution monitoring laboratory acquired	1	0	0	1	0	0	Achieved in 2014/15FY
		No. of Weather modification research centre constructed	1	0	0	1	0	0	Budget cut affected equipping the research centre
		ement and Protection							
	Conservation a	and Management							
Green Zone Development Support Project	5 main water towers rehabilitated and protected	Area rehabilitated and protected (ha)	120,000	0	0	125,000	0	0	The Project ended in 2014/15. Involvement of the CFAs in the

<b>Programme:</b>	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
, and the second		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
Natural Resource Management Project	5 main water towers rehabilitated and protected		80,000	0	0	91,000	0	0	project led to the over achievement.
School Greening Programme	Rain Water reticulation Infrastructure in selected schools set up	Number of water harvesting facilities installed.	51	580	210	51	580	205	
	Tree nurseries established in selected schools countrywide	Number of tree nurseries established	0	0	210	0	0	205	
	Tree seedlings planted in selected schools countrywide	No. of seedlings planted	0	0	1,650,000	0	0	3,075,000	
Kenya Water Towers Protection and Climate Change Mitigation and adaptation (WaTER) Project	2 main water towers rehabilitated and protected	Area rehabilitated and protected (ha)	0	0	50	0	0	65	The project started during last financial year and will enhance forest rehabilitation in Mt Elgon and Cheranganyi forest ecosystem

<b>Programme:</b>	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
J	, ,	indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
Forest Irrigation Climate and Green Energy Project (FICAGE)	5 main water towers rehabilitated and protected	Area rehabilitated and protected (ha)	0	0	20	0	0	18	The project started during last financial year and will enhance forest rehabilitation in Mau, Aberdare, Mt Kenya forest ecosystem.
Natural Forest Conservation Project	5 main water towers Rehabilitated and protected	Area rehabilitated and protected (ha)	0	620,000	750,000	0	688,415	781,885.5	Involvement of CFAs led to over achievement
	New forest areas gazetted.	Area of forest gazetted (Ha)	90,000	90,000	0	0	565,607	6,944.51	In 2016/17 the gazetted forest was achieved following fast tracking of consultative process with County Governments.
	Nature based enterprises (non- wood forest products) established.	No of enterprises established	180	120	132	450	132	176	The over achievements was caused by the positive response from CFA's user groups due to the increased income and employment.

Programme:	Key Output	Key Performance	Planned T	'arget		Achieved Ta	argets		Remarks	
	, ,	indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17		
Establishment of Forest Plantations	Forest plantation areas established and managed	Area established and managed	8,000	10,000	10,000	8,100	6,886	7,367.7	The underachieveme nt was caused by the reduction of budgetary allocations during the year	
Farm and Dry land Forest Management	Farm forestry/agro forestry/com mercial/Bam boo forests on community and private lands established	Area established, list of farms (Ha)	38,000	189,000	18,500	83,350	30,845	20,653.2	2015/16FY farm forestry was devolved	
	Seedlings produced	Number of seedlings produced (Million)	110	141	170	125	165	177	The activity benefitted from inclusion and participation of various stakeholders.	
	Charcoal producer associations for sustainable production facilitated.	No of Registered Associations	150	2	0	210	2	0	Devolve to the Counties	
	Degraded sites outside public forest areas	Area rehabilitated (Ha)	3,500	40	0	3,294	63	0	The activity was not planned for since it the function has	

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
Ü		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
	rehabilitated  Tree growing	Number of seedlings	300	0	0	250	0	0	been transferred to County Governments This activity has
	in urban areas and roadside promoted	planted (000)							been transferred to County Governments
	Farmer Field Schools (FFS) established	Number FFS established	50	2	12	17	1	12	It was initially supported by JICA. However the funds were discontinued in between.
Capacity Building for sustainable forest management	Forest cover and carbon stock monitoring system established	Percent of finalization of the monitoring system	0	0	30	0	0	35	The system is expected to provide useful information for planning and decision making in forest management.
Rehabilitation of Forest Rangers Camps	Improved living conditions for Forest Rangers	No. of Forest Rangers Camps	0	27	12	0	5	10	There was underfunding of the project.
Forest Roads Improvement	Improved accessibility in forest reserves	Length of road improved (KM)	1,950	2,124	1,696	1,975	2,224	1,055	In 2016/17 there was underfunding on the activity.

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
System for Land Based Emissions Estimation in Kenya (SLEEK)	Daily climate grids developed	No. of daily climate grids developed	20	10	0	20	10	0	The development partner funds were not available in 2016/17.
	Forest Growth Curves Developed	No. of Forest growth curves developed for plantations and natural forests	3 for plantatio n forest	3 for natural forest	0	3 for plantation forest	3 for natural forest	0	The development partner funds were not available in 2016/17.
	Soil carbon maps for Kenya developed	No. of Soil carbon maps for Kenya developed	0	1	0	0	1	0	The development partner funds were not available in 2016/17.
	Field trials for Maize and beans conducted	No. of field trials done for Maize and beans,	2	2	0	2	2	0	The development partner funds were not available in 2016/17.
	Phase I System developed	% of Phase I System development	10	20	0	10	20	0	The development partner funds were not available in 2016/17
	Land Cover maps developed	No. of Land Cover maps developed	10	8	1	10	8	-	The development partner funds

Programme:	Key Output	Key Performance	Planned 7	<b>Farget</b>		Achieved '	Targets		Remarks
_		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
									were not available in 2016/17
SP 4.2: Foresti	ry Research and	-							
Development of Forest Research Technologies	Research Technologies developed	No. of research technologies developed	21	23	20	21	23	21	Target met or over achieved due to the fact that JICA supported the
		No. of publications produced	40	40	41	45	43	45	project.
Construction of Green houses	New tree products developed	No. of tree products developed	4	4	4	4	3	4	
	New tree products incubated and linked to SMEs	No. of new tree products incubated and linked to SMEs	2	2	3	3	2	3	
Construction of tree seed processing units	High quality tree seeds produced and distributed	Kg of tree seed	9,500	10,000	9,700	9,600	11,000	11,900	Target over- achieved due to some of the activities were funded by JICA
	Seed orchards and seed stand established	No. hectares of seed orchards and stands	42	41	40	43	42	43	
Construction of Farmers' Resource Centers in Migori,	Farmers' resource centre constructed.	Number of resource centers and office blocks	1	1	2	1	1	2	Target achieved

Programme:	Key Output	y Output   Key Performance   Pl		<b>Farget</b>		Achieved 7	<b>Fargets</b>		Remarks
o o		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
TaitaTaveta and Marigat	Research findings disseminated through: -105 field days	No. of field days held	35	35	30	42	40	42	Collaboration with Sub- County Training Centers, NGOs and CBOS led to
	Advisory services provided to stakeholders	No. of advisory services provided	200	225	225	235	240	235	overachievemen t
	Hold capacity building trainings	No. of trainings	4	2	5	6	7	5	This was achieved through linkages with organizations for paid for tailor made training
Development of Dry land Eco-region Research Programme- Tiva On Forest as a center of excellence	Demonstratio n plots established	No. of demonstration plots established	13	16	18	16	16	19	Counterpart funding for the JICA project partly supported this activity. More demonstration plot to be developed to
Development of Drought Tolerant Trees for Adaptation to Climate Change	Drought tolerant tree species developed	Number of species	2	2	2	2	2	2	increase adoption of dryland agroforestry technologies

<b>Programme:</b>	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
J		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
Installation of Water hydrants in Kitui Centre Phase II, and Lamu and Muguga	Water hydrants installed	Number of hydrants installed	2	2	2	2	2	2	Lamu water hydrant not done due to lack of funds
		e in Natural Resource Mana	, 0	1	1	•	T	1	
Refurbishment of NSSF Building	Habitable work Environment	Number of floors refurbished	0	0	2	0	0	2	Achieved
offices	Natural Resources Policies reviewed	No of legislation reviewed	0	1	1	0	1	1	Wildlife Management and Conservation Act 2013 under Review, Forest Act 2016 Under implementation
		No of regulations reviewed	0	0	18	0	0	18	18 regulations on wildlife developed
SP 4.4: Nationa			10.000	20,000	121 000	10.000	121 000	121 000	
Mitigation and management of soil loss	Improved Water Towers Ecosystem	Area protected in Ha	10,000	20,000	121,000	10,000	121,000	121,000	Over achievement due to the Joint Enforcement
	Health and	Area rehabilitated in Ha	0	200	0	0	200	0	Unit
	resilience	No. of water towers with SMP	1	0	1	1	0	1	Management Plans were developed for, Chyulu and Taita Hills (Nyache Micro-

<b>Programme:</b>	Key Output	Key Performance	Planned T	Carget		Achieved T	Targets		Remarks
	1 1	indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
									catchment)
		No. of water tower with	5	0	2	5	0	2	Assessment
		resource catalogue							conducted in
		(assessment reports)							Chyulu,
									Lerroghi,
									Shimba Hills,
									Enoosupukia,
									Aberdares,
									Loita&Taita
									Hills
	Critical	No. of Critical catchment	5	5	2	5	5	2	Critical
	catchment,	within water towers							catchment,
	within water	identified and secured							wetlands and
	towers								Biodiversity
	ecosystems								Hotspots
	Identified								identified for
	and secured								securing in 2
									Water towers
									namely Taita Hills and
	Community	No. of nature based	2	3	1	0	0	1	Chyulu Samburu Honey
	Sustainable	enterprises developed	2	3	1	U	0	1	Refinery
	livelihood	emerprises developed							revitalized in
	support								Lerroghi Water
	programmes								Tower
	within water	No. of catchments with	0	1	0	0	0	0	one Payment for
	towers	PES framework	O	1			l o	O .	Ecosystem
	established	1 LS Hamework							Framework was
									developed for
									Sondu Miriu
									Catchment- Mau
									Water Towers
									awaiting

<b>Programme:</b>	Key Output	Key Performance	Planned T			Achieved Targets			Remarks	
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17		
									Operationalizati on	
		onal Parks and Reserves M								
Modernization of Anti-	Capacity for Sustainable	No. of ground security patrols	12,000	12,480	20, 000	12,220	22,880	24,928		
poaching Technology	wildlife Conservation and use enhanced	No. of hours for Aerial security patrols	2,400	2,500	2,800	2,438	3,200	1,200	4 aircrafts grounded for major maintenance	
		No. of field intelligence operations contacted	10	12	64	16	20	93	Change in strategy and execution has contributed to better coverage	
		% Reduction in poaching.	20%	40%	40%	68%	80%	76%	Statistics is on the endangered species i.e. Elephants and Rhinos.	
		Categories of equipment acquired	3	4	4	4	4	3	Budget cuts affected achievement	
Ranger housing	Ranger houses	No .of Ranger houses constructed	50	30	70	23	24	12	Affected by availability of	
programme	constructed and Maintained	No. Ranger houses rehabilitated	250	100	100	120	30	20	resources	
Human Wildlife Conflict Mitigation	Improved Response rate to Human	No. of Wildlife corridors Mapped and Secured	3	3	2	2	1	100	Mapping done in house as opposed to a consultant.	
Programme	wildlife	No. of Conservation	500	300	650	650	274	702	Community,	

Programme:	Key Output	Key Performance	Planned 7	<b>Farget</b>		Achieved 7	argets		Remarks
Ü		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
(Fences)	conflict	Awareness programmes							schools and
									media programs
		% rate of response to	100	100	100	80%	82%	85%	Prolonged
		HWC case							drought has lead
									to increase in HWC cases.
		Kms of Fence	265	50	100	290	15	42	The works are
		Constructed	203	30	100	290	13	42	ongoing in
		Constructed							Nairobi,
									Nakuru, Meru,
									Ruma and
									Tsavos
		Kms of Fence Maintained	1600	1650	1750	1600	1600	1800	
		No of Constructed water	2	1	2	1	0	4	constructed
		pans							using the
									drought
									mitigation funds
									in the Tsavos
34 : 4	T 1	V C D I	250	60		175	1.5	0	and Amboseli
Maintenance of Access	Improved infrastructure	Km of Roads Rehabilitated	350	60	0	175	15	0	Project crucial but not funded
roads and	in Parks	Km of Roads Maintained	2,500	2,500	0	2,650	890	0	in 2016/17
Airstrips in	III I tilks	No. of Airstrips upgraded	4	1	0	2,030	0	0	III 2010/17
National Parks		Troi of Timourpo upgraded				-			
Digital Radio	Wildlife	Digital radio system	1	1	1	1	1	1	Digital radio
Equipment	security	installed in 3							system installed
	communicati	conservation areas							in Southern,
	on services								Tsavo and
	improved in								Central rift
	three								conservation
	conservation								areas
Conservation	areas Policy and	Pilot guidelines for	1	1	1	0	0	1	Guidelines
of	legislative	implementation of	1	1	1			1	drafted

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
_		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
Biodiversity of Northern Kenya (AFD)	framework developed	Wildlife policy							finalized, endorsed with stakeholders in the first two years of project implementation
		Marsabit National Park gazette	1	-	-	-	-	1	Gazetted in 2016/17. Planned in 2014/15, .
	Ecosystems conserved	Km of Fence Rehabilitated			6.7			6.7	Achieved
		No. of staff houses constructed			24			19	Affected by inadequate funding
		Payment for ecosystem services study			1			1	PES study for Marsabit Forest Ecosystem done.
		Hydrological structures			1			0	Procurement process finalized and contracts awarded
Wildlife Resource Centers	Regional resource Centres established	No of Resource Centers constructed and renovated	1	1	1	0	0	0	Inadequate financial resources affected construction of the centers
		es Management	1	T	1		1	1	. 1
Sub- Programme	Conserved and protected	No. of M&E reports on water quality	4	4	4	4	4	4	
5.1: Water	water	No. of ground water maps	1	2	2	1	2	2	2 Ground water

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
ResourcesCon servation and Protection	resources	produced							maps for Turkana South, and Marsabit
		No. of ground water reports	1	1	2	1	1	2	
		No. of exploratory boreholes drilled in Turkana and Marsabit aquifers	0	10	10	0	10	8	Delay in procurement process affected the target
		No. of SCMPs developed/ implemented	20	20	50	26	26	8	Inadequate funds affected the achievement
		No. of water resources monitoring stations rehabilitated/ established	90	120	50	90	65	50	Budget reduction in 2015/16.
		No. of abstraction and pollution surveys conducted	6	6	12	6	6	12	Target achieved
		No. of telemetric stations installed in LVS	-	-	50	-	-	6	Inadequate funding
	Water safety and security- Athi	Improved water safety (%)	-	-	0.5	-	-	0.5	
	Water conservation services- Lamu	Area gazette (%)	-	5	30	-	5	30	
	Ground water conservation- Kikuyu springs	No. of gazette notice	-	-	1	-	-	1	
	Kenya	No .of reports	-	-	4	-	-	4	

Programme:	Key Output	Key Performance	Planned T	arget		Achieved Ta	argets		Remarks
Ü		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
	ground								
	waters								
	mapped								
	Sustainable	Establishment of project	-	-	6	-	-	6	
	management	coordination mechanism							
	of L.	(10%)							
	Turkana								
	basin								
	Compliance	No. of reports	-	-	10	-	-	10	
	and								
	standards-								
	water quality								
	Hydrometsun	No of stations installed	-	-	10	-	-	6	Inadequate
	der IGAD-								funding
	HYCOS								
	Automated	No. of WSPs	-	-	20	-	-	20	
	Compliance								
	and standards								
Sub-Programn		torage and Flood Control							
Sub-	Medium	% completion of	-	20	40	-	20	35.2	Siyoi dam: there
Programme	sized dams	construction							were delays in
5.2: Water									payment.
Storage and	Flood control	No. of raising dykes	-	-	10	-	_	10	
Flood Control		constructed							
	Dykes/Flood	Kms of flood control	10.5	10.1	11.5	19.03	8.75	5.45	In 2016/17, part
	Control	dykes constructed							of funding for
	structures								flood control
									was reallocated
									to water storage
									(Siyoi dam)
Sub-Programn	ne 5.3: Water Si	upply Infrastructure							
	Improved	No. of rural water	17	67	18	7	60	28	Additional
	access to	projects constructed							funds from
	water	No. of WRUA projects	25	61	45	2	61	84	donor

Programme:	Key Output	Key Performance	Planned Ta	arget		Achieved T	Remarks		
J		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
	services to	completed							
	Underserved	No. of urban water	35	31	43	35	38	34	Additional
	areas &	projects completed							funds from
	informal								donor in
	settlements								2015/16
	Improved	Additional people served	0.5m	0.5m	0.5m	1.13m	1.11m	1.69m	48 projects
	access to	with clean water							were completed
	water and								out of a target of 40 which led
	sanitation services								to additional
	services								people being
									served with
									clean water
		M <sup>3</sup> of water supplied per	_	1,100,000	800,000	_	1,100,000	1,200,000	Additional
		day		, ,	,		, ,	,,	100,000 m <sup>3</sup> per
									day was
									supplied in the
									whole country.
		No. of medium sized	2	4	4	2	4	4	Kiambu,
		towns water supply							Gatundu, Siaya,
		expanded							Keroka water
									supplies
									completed
		Additional people served	550,000	550,000	200,000	325,562	273,447	390,639	Delay in
		with sewerage services							procurement
		D ('(0)) C	5.4	5.0	57	560	50	50.0	process
		Proportion (%) of	54	56	57	56.9	58	59.9	48 projects
		population with access to clean water							were completed out of a target
		cican water							of 40
									translating to
									2.9 percent
									increase in
									population with

Programme:	Key Output	Key Performance	Planned T	<b>Farget</b>		Achieved '	Achieved Targets		
, and the second	, ,	indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
									access to clean water
		Proportion of population with access to sewerage services	9.2%	21%	25%	10.2%	10.5%	15%	The under achievement was due to few sewerage projects being completed in the rural areas despite high urban coverage
Kisii Water Supply and Sanitation Project (Bunyunyu Dam)	Implemented RAP	% RAP implemented	-	-	40	-	-	20	Stakeholder engagement took longer than expected affecting the target
Sabor Iten Supply Project	Water supply services	% completion	35	84	100	35	84	100	Project complete
Mwache dam water projects	12m m <sup>3</sup> Mwache Dam	% completion	-	-	10	-	-	7%	Design Review almost complete and RAP started
Upper Tana Natural Resources Management Project	Agricultural packages adapted to agro-ecological and socio-economic contexts;	Tons of high quality legume/ root-crops seeds produced	52	120	120	117	122	126	Additional funds from donor
Water services- Kiambere	Water supply services	% completion	-	-	60	-	-	15	Delay in Contract Mobilization

Programme:	Key Output	Key Performance	Planned 7	Target		Achieved	Targets		Remarks	
Q	, ,	indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17		
Water supply services- Kirandich II	Water supply services	% completion	-	-	23	-	-	15	Delay in Contract Mobilization	
Water supply services - Manooni	Water supply services	% completion	-	-	100	-	-	100	Project Complete	
Water Sector Development (Lake Victoria South)	Water supply services	% completion	-	5	30	-	5	30	Works at 30% complete	
Water Sector Development (Support WSTF)	Water supply services	% completion	10	30	60	6	26	58	Delay in release of funds	
Nairobi Water distribution network	Water supply services	% completion	-	-	50	-	-	30	Delay in Procurement	
Water supply services- Nairobi satellite towns	Water supply services	Additional people served	-	-	16,000	-	-	16,000	Project to be completed in 2017/18 FY	
Complimentar y Water supply services Funding for Kisumu Water and Sewerage	Water supply services	Additional HHs connected	-	-	30,000	-	-	32,000	Additional funds from donor.	
Extension of Nairobi Water Supply (Northern Collector)	Water supply services	% completion	-	-	45	-	-	30	Change of ground conditions slowing down progress. Water Tunnel is at	

Programme:	Key Output	Key Performance	Planned T	Target		Achieved	Targets		Remarks
Ü		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
									30%
Water & Sanitation Services & Improvement Project (Athi WSB)	Water supply services	% of water tunnel	-	-	25	-	-	30	Additional funds from donor.
Nairobi water and sanitation improved (OBA)	Water supply services	No. of projects	-	25	55	20	-	40	Delay in procurement
Kenya Urban water and sanitation improved (OBA)	Water supply and sanitation services	No. of projects	-	5	6	4	9	5	Delay in release of funds
Nairobi River Basin Restoration Programme: Sewerage improvement project	Sewerage Services	% completion	20	45	70	20	45	86	Additional funds from donor
Lake Victoria Water Supply & Sanitation Programme Phase II	Water supply and sanitation services	% completion	45	80	100	50	85	90	Lack of land for feacal sludge facility
Small towns & Rural WSS improved	Water supply services	Additional HHs connected	-	-	50,000	-	-	50,000	
Garissa Sewarage Project	Sewerage Services	Sewerage coverage	30	40	50	32	41	70	Additional funds from donor

Programme:	Key Output	Key Performance	Planned 7	Target		Achieved Targets			Remarks
8	, I	indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
Rehabilitation of Water Supply and Sewerage for Oloitokitok Town	Water supply and sanitation services	% completion	-	-	50	-	-	11.4	Delay due to litigation
Itare Dam Water Project	Water supply services	% completion	3	20	42	1	2	12	Delay in Mobilization of specialized equipment
Kajiado Rural Water Supply	Water supply services	% completion	-	-	40	-	-	39.04	Project within the timeline
Kiserian Sewerage Project	Sewerage Services	% completion	-	-	40	-	-	24.07	Delay in RAP completion
Migori water and sanitation project	Water supply and sanitation services	% completion	-	-	Feasibility and EIA	-	-	Feasibility	
Siaya/Bondo Water Supply & Sanitation	Water supply and sanitation services	% completion	80	100	100	70	95	100	Project Complete with pending bill
Kisumu water supply LTAP1	Water supply services	No. of people served	58	76	100,000	60	82	100,000	Project Complete
Migori- Homa bay Wastewater (Trilateral Program)	Water supply and sanitation services	No. of people served	-	-	80,000	-	-	0	The project is at 5% complete
Kisumu water supply LVWATSAN	Water supply services	No. of people served	-	-	100,000	-	-	0	Delay in release of funds. Project 2% Complete

Programme:	Key Output	Key Performance	Planned T	Carget		Achieved '	Targets		Remarks
Ö	, ,	indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
Water Harvesting Program (GoK)	Water supply services	No. of boreholes drilled	-	-	7	-	-	7	
Kiambere – Mwingi Water Supply and sanitation project	Water supply and sanitation services	% completion	-	-	60	-	-	4	Delay in Procurement
Mt. Kilimanjaro - Amboseli - Namanga Water supply project	Water supply services	% completion	-	-	100			100	Project complete
Kangonde Water supply project	Kangonde Water supply project	% completion	-	-	100			100	Project complete
Masinga- Ikaatine- Ikalakala water supply project	Water supply services	% completion	-	-	100	0	0	78	Delay in release of funds
Drilling and equipping of 40 no. boreholes	Water supply services	No. of boreholes	-	-	40	-	-	20	Delay in release of funds
Up-scaling of Basic Sanitation for the Urban Poor (UBSUP)	Water supply services	No. of people with access to improved sanitation	8,800	150,000	140,000	4,600	39,000	68,190	Land ownership wrangles that delayed implementation
Water Supply	Water supply	No. of people served	7,455	25,000	25,000	7,455	21,930	28,817	Additional

Programme:	Key Output	Key Performance	Planned 7	<b>Farget</b>		Achieved Targets			Remarks
Ü		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
and Sanitation for the Urban Poor	services								funds from donor
Support to Equitable Access to quality water	Water supply services	No. of people served	-	-	222,000	-	-	163,898	Delay in release of funds
Vihiga Cluster Project- Belgium funding	Water supply services	% completion	-	-	40	0	0	5	Delay in Procurement
Sirisia - Chwele (Koica)	Water supply services	No. of people served	-	-	10,000	-	-	0	Project at 60%
Moi's Bridge - Matunda Water and Sewerage Project	Water supply and sanitation services	% completion	-	-	90	0	30	90	
Maua water and drainage project	Water supply And drainage services	No. of people served	-	-	30,000	-	-	30,000	100% complete on water distribution network
Chemususu Dam Water Supply Project	Water supply services	% completion	-	-	23	1	9	27	The contractor overachieved against the planned target and has pending certificates
Sabor – Iten – Tambach Water Supply Project	Water supply services	% completion	-	-	96	35	84	97	Additional funds from donor

Programme:	Key Output	Key Performance	Planned T	arget		Achieved T	argets		Remarks
_		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
Pusol water	Water supply	% completion	-	-	81	-	-	84	Additional
projects -	services								funds from
KIDDP									donor
Nyahururu	Water supply	% completion	-	-	60	-	-	100	Additional
Water supply	services								funds from
Project									donor
Soy Kosachei	Water supply	% completion	-	-	15	-	-	5	Delay in release
Water Project	services								of funds
Programme 6:	Irrigation and l	Drainage Infrastructure							
S.P 6.1	Increased	Acres under irrigation	-	25,000	-	-	14,100	-	Target acreage
Promotion of	area under								not achieved due
Irrigation and	irrigation								to reduced
Drainage									funding.
Development									
and									
Management									
		ional Development.							
SP 7.1	River bank	Kilometers of river bank	-	60	-	-	60	-	Transferred to
Integrated	rehabilitated	rehabilitated							Ministry of
Regional	Regional	No. of Regional	2	2	-	2	2	-	Environment and
Development	Investment	Investment plans							Natural
	plans								Resources
	developed								
P.8 Irrigation a	and Land Recla	mation							
8.1 Promotion	Irrigation	Percentage of			100%			100%	
of Irrigation	support	coordination &	_	-		-	_		Target achieved
and Drainage	services	completion of the							8
Development		targeted acres							
and	Irrigation	Acreage of irrigated land							Target acreage
Management	support	(acres)	15,000	6,000	-	1,200	2,040	-	not achieved due
	services			, , , , , , , , , , , , , , , , , , , ,					to reduction in
	(Irrigation								funding
	and drainage								
	services)								

<b>Programme:</b>	Key Output	Key Performance	Planned T	arget		Achieved T	argets		Remarks
_		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
	Irrigation support services	Percentage of coordination & completion of the targeted acres	-	-	100%	-	-	100%	
	Irrigation support services (NIB)	Acreage of irrigated land (acres)	10,000	30,000	-	25,643	14,100	-	2015/16 FY target affected by budget cuts
	Irrigation services( Small holder Irrigation Programme Mt .Kenya)	Size of acreage under irrigation	-	-	200	-	-	-	Feasibility studies and negotiation finalised. Civil works to start 2018/19 FY.
	Irrigation services(Low er Nzoia)	No. of acreage under irrigation	-	-	450	-	-	-	Project Budgeted under KWSRP –Water)
	Irrigation services(Bura Irrigation)	Km. of canal constructed	-	-	25km	-	-	-	Project at 30% construction of intake and new gravity irrigation
		Size of acreage of land under irrigation	-	-	1,000 acres	-	-	-	canals almost completed. Construction of structures on going thus the non-achivement
	Irrigation services(Com munity based Small holder Irrigation)	No. of acres under irrigation	-	-	1,600	-	-	1,450	One project was not completed affecting area under irrigation

<b>Programme:</b>	Key Output	Key Performance	Planned T	arget		Achieved T	argets		Remarks
J		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
	Irrigation services(Gala na Kulalu Irrigation Development Project) Irrigation services(Nati onal Expanded	Size of acreage under irrigation (acres)  Size of acreage of land under irrigation (acres)	-	-	10,000	-	-	7000	Civil works at 75% affecting acreage under irrigation. 45% production and operation.  There were many pending bills, and the funds were used
	Irrigation Development Programme) Irrigation services(Mw ea Irrigation	Percentage completion of the dam	-	-	15%	-	-	0	Land compensation 98%. Civil works
	Development Programme)	Size of acreage irrigated	-	-	1,000		-	0	0%.
		Households settled	-	-	47	-	-	47	
	Irrigation services	Size of acreage of land under irrigation	-	-	0	-	-	-	National Treasury is at final stages of
		Km. of canal network constructed	-	-	20 km	-	-	-	concluding loan agreement.
	Land reclamation services	Draft land reclamation bill	-	-	Land Reclamati on Act	-	-	1	Draft Land Reclamation Bill subjected to stakeholders.

Programme:	Key Output	Key Performance	Planned T	arget		Achieved T	argets		Remarks
_		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
		Acreage of reclaimed land.			50 Ha.			-	In adequate funding for the project.
		No. of sub-water shed assessed for degradation and initiate reclamation	2	2	-	2	2	1	National land degradation assessment at low resolution completed. Assessment on Lake Magadi almost complete.
		No. of policies completed	-	2	-	-	2 policies are in draft form	2	Draft Land Reclamation Policy and strategy, and Water Harvesting and Storage Policy subjected to stakeholders.
P.9 Water Stor	age and Flood	Control							
SP 9.1 Water Storage and Flood Control	Thwake Multi- purpose dam	% completion level			2%			0%	
		PAPs compensated and engagement of contractor.	Impleme ntation of RAP	Complete compensati on payments for PAPs. Procureme nt of	Complete compensat ion payments for PAPs. Procureme nt of	Consultati on on compensat ion value for land and property	Prequalifi cation of contractor s done. Draft design review	Evaluation of bids done to completio n. Verificatio n carried	Land acqusition taken longer than anticipated due to delays by PAPs and GoK to agree on compensation

Programme:	Key Output	Key Performance	Planned T	arget		Achieved T	argets		Remarks
Ü	, ,	indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
				Contractor for constructio n of Thwake dam and associated	Contractor for constructio n of Thwake dam and associated	agreed between GoK and PAPs.	done.	out to determine cause of land price variations.	value of land and property
		% of works and services	2	works.	works.	2	2	-	In adequate budgetary provision and resettlement issues have affected implementation of the project.
	Gakindu Irrigation Scheme.	% completion level	-	-	12%	-		12%	ar the project
	Increased water storage per capita( National Water Harvesting and Ground Water Exploitation)	Cubic metres of completed water pans/small dams	-	-	16	-	-	12	Lengthy procurement processes affected the target
	Water supply services in ASAL areas(Water for School)	No. of schools in ASAL areas with boreholes	-	-	100	-	-	71	Lengthy procurement processes

Programme:	Key Output	Key Performance	Planned T	arget		Achieved T	argets		Remarks
J		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
Outcome: To g	enerate geo-spa	tial data and information f	or sustainal	ole developm	ent				
Resource	Wildlife/Live	No. of rangeland counties	5	5	5	5	6	6	
Surveys and	stock	surveyed							
Remote	population								
Sensing	Survey								
	Mapped land	No. of counties mapped	4	4	4	4	4	4	
	use/cover								
	Water	No. of Water towers	2	2	2	2	2	2	
	Towers	Mapped							
	Mapped								
	National food	No. Maize and wheat	1	1	1	1	1	0	No funds for this
	security	Report/data generated							activity in
	Forecast								2016/2017
	Wetlands	No. of wetlands mapped	6	6	6	6	6	0	financial year
	Mapped								
	Updated	No. of Geo-Databases	3	3	3	3	3	0	
	Geo-	updated							
	Databases								
		irce Development	_		_				
Outcome: Deve		e geological and mineral re							I
	Government	Government revenue	1.2 Bn	1.35 Bn	1.5Bn	KSh	KSh 1.28	KSh.	Target not
	revenue	from mining increased				71.Mn	Bn	1.08Bn	achieved due to
									delay in
									publishing
	<b>5</b> 1	N. 6			2		2		regulations
	Enhanced	No. of counties explored	3	3	3	3	3	1	Target not
	information	No. of Exploration	3	3	3	3	3	1	achieved due to
	on mineral	Reports							funding and lack
	occurrences	No of Coolesias D	4	1	2	4	1	2	of transport
	& deposit	No of Geological Report	4	1	2	4	1	2	Target achieved
	Increased	% of local ownership	30	30	30	0	0	0	Target not

<b>Programme:</b>	Key Output	Key Performance	Planned T	arget		Achieved T	argets		Remarks
J		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
	investment in								achieved as the
	mining								regulation is yet
									to be developed
	Increased	No. of Mineral Value	2	2	2	1	1		Land acquisition
	revenue,	Additions Centres						1	for granite
	foreign	constructed	50	00	100	70	00	100	processing plant
	exchange,	% completion of civil	50	80	100	50	80	100	in vihiga not
	incomes &	works							completed
	livelihood, increased								
	employment								
	Enhanced	-No. of Geological Data	1	1	1	1	1	1	
	data &	Bank constructed	1	1	1	1	1	1	
	information	No. of TORs to guide		_	1	_	_	1	
	on mineral	repatriation of geo-data	_	_	1	-	-	1	
	occurrences	developed and agreed							
	& deposit	-No. of Equipments		14	_	_	12	_	Equipping the
	& deposit	installed	_	14	_	-	12	_	Mineral
	Enhanced	% of civil works in	20	50	100	20	50	100	Certification
	revenue	Modernizing Mineral	20	30	100	20	30	100	Laboratory in
	Tevenue	certification laboratory							progress
	Enhanced	No. Mineral Audit Unit	1	1	-	1	1	_	No. Mineral
	royalty	established and	-	-		1	-		Audit Unit
	collection	operationalized							established and
		7							operationalized
		No. of revenue	-	-	1	-	-	0	No. of revenue
		management system							management
		(RMS)							system (RMS)
	Increased	-No. of National Mining	1	1	1	0	0	0	Awaiting
	government	Corporation							publication of or
	investment in	operationalized							regulations to
	mining	-No. of National Mining	1	1	1	0	0	0	operationalized
		Corporation							it.
		operationalized							

<b>Programme:</b>	Key Output	Key Performance	Planned T	'arget		Achieved '	<b>Targets</b>		Remarks
		indicator	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
		-No. of National Mining Corporation operationalized	1	1	1	0	0	0	
	Improved skills in	No. of Mining Institute established	1	1	1	0	0	0	Cabinet directed the Ministry to
	mining sector	No. of Curriculum No. of Mous signed	-	-	1 2	-	-	2	seek for collaborative institutions
	Nationwide airborne geophysical survey	% coverage of the country mapped	% of the country land mass covered	20	40	100	0	0	0
	Geosciences data and information	% of Geosciences data and information digitized	% of Geoscien ces data and informati on digitized	10	20	30	0	0	70

#### 2.2 Analysis of expenditure Trends

The budgetary allocation for the sub sector increased from KShs. 66.7 Bn in FY 2014/15 to KShs. 73.5 Bn in the FY 2016/17 and then increased to KShs. 84.175 Bn in 2016/17FY. The actual expenditure was KShs. 55.5 Bn, 58.8 Bn and KShs. 70.9 Bn respectively an increase of 6% and 21% respectively from FY 2015/16 to FY 2016/17. The absorption rates were 83.2%, 80% and 84.2% for FYs 2014/15, 2015/16 and 2016/17 respectively. The expenditure per programme and sub-programme is presented in tables 2.3-2.5.

Programme 1: General Administration, Planning and Support Services – Environment The programme actual expenditures were KShs. 631 Mn, KShs, 896 Mn, and KShs. 686 Mn for FYs 2014/15, 2015/16 and 2016/17 respectively. The approved expenditures were KShs. 867 Mn, 944 Mn, and KShs. 1.039 Bn for the FYs 2014/15, 2015/16 and 2016/17 respectively. The programme actual and approved expenditures changes were 72.7%, 94.9% and 66% during the review period. The actual expenditure increased by 42% from FY 2014/15 to FY 2015/16 and decreased by 23.4% from FY 2015/16 to FY 2016/17 respectively as presented in tables 2.2. – 2.5. The decrease in FY 2016/17 in expenditure was due to austerity measures and transfer of services to the State Department of Natural Resources. The subsector has restricted foreign and domestic travel to only critical functions. In addition, the subsector has also restricted hiring of casual laborers.

#### Programme 2: Environment and Natural Resources Management and Protection

The programme actual expenditures were KShs. 12.862 Bn, KShs, 16.302 Bn, and KShs. 17.515 Bn for FYs 2014/15, 2015/16 and 2016/17 respectively. The approved expenditures were KShs. 14.219 Bn, 17.312 Bn, and KShs. 17.648 Bn for the FYs 2014/15, 2015/16 and 2016/17 respectively. The actual expenditures to approved expenditures changes were 90%, 94% and 99% for the FYs 2014/15, 2015/16 and 2016/17 respectively. The actual expenditures increased by 7% and 27% from FY 2014/15 to FY 2015/16 and FY 2015/16 respectively as shown in tables 2.3 - 2.5.. Given the limited financial resources, sector has ensured that priorities are adhered to implementation processes fast-tracked to avoid cost overruns. In addition, the subsector strives to ensure that procurement process is competitive with affirmative action to Youth, Women and with Disability in order to ensure that the subsector gets the maximum value money. Moreover, the subsector has restricted hiring of casual laborer in issues like tree planting, and river riparian rehabilitation to avoid budget overruns.

#### **Programme 3: Meteorological Services**

The programme actual expenditures were KShs. 2.322 Bn, KShs, 2.034 Bn, and KShs. 1.472 Bn for FYs 2014/15, 2015/16 and 2016/17 respectively. The approved expenditures were KShs. 2.477 Bn, 2.097 Bn, and KShs. 1,594 Bn for the FYs 2014.15, 2015/16 and 2016/17 respectively. The actual expenditures to approved expenditures changes were 94%, 97% and 66.5% of the approved budget in the FYs between 2014/15 to 2016/17 respectively. In this programme, the actual expenditure decreased by 12% and 28% from FY 2014/15 to FY 2015/16 and FY 2015/16 to FY 2016/17 respectively as presented in tables 2.2. – 2.5. In addition, the subsector strives to ensure that procurement process is competitive with affirmative action to Youth, Women and with Disability in order to ensure that the subsector gets the maximum value money. In instances where there is has been massive budget cuts the subsector has deferred activities that couldn't be funded with the constraints.

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The allocation for the programme was KShs. 935 Mn, KShs. 818 Mn and KShs. 892 Mn for FYs 2014/15, 2015/16 and 2016/17 respectively. The Actual expenditures were KShs. 815 Mn, KShs. 629 Mn and KShs. 816 Mn respectively as presented in tables 2.2. - 2.5. The average absorption was 85% during the review period.

### **Programme 5: Water Resources Management**

The allocation was KShs. 26.4 Bn, KShs. 34.9 Bn, and KShs. 48 Bn during through the review period. The actual expenditures were KShs. 24.7 Bn, KShs. 28.7 Bn, and 39.4 Bn representing an average absorption rate of 86%. The actual budget increased by 16% and 37% from year FY 2014 to FY 2015/16 and FY 2015/16 and FY 2016/17 respectively as indicated in tables 2.2.-2.5.

#### **Programme 6: Integrated Regional Development**

The allocation during the review period was KShs.3.9 Bn and KShs. 4.0 Bn for the FYs 2014/15 and 2015/16 respectively as presented in tables 2.2.-2.5. The average absorption rate was 88% and the actual budget increased by 4.4% from FY 2014/15 to FY 2015/16 respectively.

### **Programme 7: Irrigation and Land Reclamation**

The budget allocation was KShs. 15.95 Bn, KShs.13.4 Bn and KShs.9.14 Bn for FYs 2014/15, 2015/16 and 2016/17 respectively. The actual expenditure was KShs. 9.1 Bn, KShs. KShs. 8.2 Bn, and KShs. 6.9 Bn respectively as shown in tables 2.2. – 2.5. The average absorption was 64.8% and declined by 10% and 16% between FY 2014/15 to FY 2016/17.

## **Programme 8: Water Storage and Flood Control**

The programme actual expenditures were KShs. 53 Mn and KShs. 1.885 Bn for FYs 2015/16 and 2016/17 respectively. The approved expenditures were KShs.160 Mn and 3.645 Bn for FY 2015/16 and FY 2016/17 respectively as presented in tables 2.2. – 2.5. The actual expenditures to approved expenditures changes were 33% and 52% of the approved budget in the FYs between 2015/16 and 2016/17 respectively. During the period the actual expenditure increased by 43% from 2014/15FY to 2016 and 1% between 2015/16 and 2016/17 FY respectively.

## Programme 9: General Administration, Planning and Support Services - Mining

The programme actual expenditures were KShs. 240 Mn, KShs, 315 Mn, and KShs. 416 Mn for financial year 2014/15, 2015/16 and 2016/17 respectively. The approved expenditures were KShs. 261 Mn, 415 Mn, and KShs. 513 Mn for the FYs 2014/15, 2015/16 and 2016/17 respectively as presented in tables 2.2.— 2.5. The programme actual and approved expenditures changes were 92%, 84% and 99% during the review period. The actual expenditure increased by 31% from FY 2014/15 to FY 2015/16 and by 42% from FY 2015/16 to FY 2016/17 respectively.

# **Programme 10: Remote Surveys and Remote Sensing**

The programme actual expenditures were KShs. 527 Mn, KShs, 239 Mn, and KShs. 442 Mn for FYs 2014/15, 2015/16 and 2016/17 respectively. The approved expenditures were KShs. 642 Mn, 924 Mn, and KShs. 515 Mn for the FYs 2014/15, 2015/16 and 2016/17 respectively as shown in tables 2.2. – 2.5. The programme actual and approved expenditures changes were 82%, 74% and 81% during the review period. The actual expenditure decreased by 54.6%

from FY 2014/15 to FY 2015/16 and increased by 84% from FY 2015/16 to FY 2016/17 respectively.

## **Programme 11: Mineral Resource Management**

The programme actual expenditures were KShs. 877 Bn KShs, 138 Mn, and KShs. 889 Mn for FYs 2014/15, 2015/16 and 2016/17 respectively. The approved expenditures were KShs. 1.057 Bn, 884 Mn, and KShs. 1.195 Bn for the FYs 2014/15, 2015/16 and 2016/17 respectively as presented in tables 2.2. – 2.5. The programme actual and approved expenditures changes were 83%, 16% and 74% during the review period. The actual expenditure decreased by 84% during the period.

Table 2.2: Analysis of Recurrent Expenditure Sector and Vote

Economic Classification						
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Gross	9,740	12,783	3,678	9,240	12,060	3,494
	2,838	6,217	818	2,838	6,217	800
NET	6,902	6,566	2,860	6,402	5,843	2,694
Compensation to Employees	1,119	1,204	1,181	1,116	1,200	1179
Transfers	7,986	10,638	2,121	7,519	10,020	1945
Other Recurrent	635	941	376	605	840	370
Economic Classification			ation			
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Gross			12563			12555
AIA			6240			6240
NET			6323			6315
Compensation to Employees			96			91
			11394			11394
						1070
Economic						1070
Classification			2016/17			2016/17
CPOSS						3,752
AIA	2,138	2,138	2,321	2,138	1,582	
NET	2 104	2 121	2 365	1 510	2 122	1,387 2,365
	2,104	2,121	2,303		,	537
employees	650	660	585			
	,	,			,	2,971
						244
Economic Classification	(Kshs Milli	ons)		(Kshs Milli	ons)	
						2016/17
						835
						370
						465
Compensation to Employees	147	149	93	141	149	110
Transfers	526	308	708	126	308	678
Other Recurrent	14	24	69	13	24	48
Economic Classification			ation			
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Gross	768	728	900	716	579	747
		2.4	14	18	14	5
AIA	33	34	17			-
AIA NET	735	694	886	698	565	742
NET Compensation to	735	694	886	698	565	742
	Gross AIA NET Compensation to Employees Transfers Other Recurrent Economic Classification  Gross AIA NET Compensation to Employees Transfers Other Recurrent Economic Classification  GROSS AIA NET Compensation to Employees Transfers Other Recurrent Economic Classification  GROSS AIA NET Compensation to employees Transfers other Recurrent Economic Classification  Gross AIA NET Compensation to Employees Transfers Other Recurrent Economic Classification  Gross AIA NET Compensation to Employees Transfers Other Recurrent Economic Classification  Classification	Classification	Classification	Classification	Approved Budget Allocation (KShs Millions)	Classification

Table 2.3: Analysis of Development Expenditure by Sub-Sectorand Vote

Vote and Vote Details		•	Budget Alloca		Actual Exp	enditure	
		(KShs Milli			(KShs Milli		
	Description	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
	Gross	7,823	5,191	2,083	6,575	4,858	2,057
1105 State Department of	GOK	4,964	1,276	1,143	3,805	1,250	1112
Environment	Loans	2,121	598	500	2,050	430	515
	Grants	738	3,317	440	720	3,178	430
	Local AIA	0	0	0	0	0	0
Vote and Vote Details	Description	APPROVE	D BUDGET		ACTUAL I	EXPENDITU	RE
		2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
1106 State Department of	Gross			1959			1917
Natural Resources	GOK			1546			1506
	Loans						
	Grants			411			411
	Local AIA						
1103	Description		Budget Alloca	ation	Actual Exp		
		(Kshs Milli		2045/45	(Kshs Milli		2015/48
	~	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
1103 State Department of Water Services	Gross GOK	<b>27,037</b> 9,706	35,448 10,420	<b>44,205</b> 14,316	<b>25,261</b> 9,306	<b>29,220</b> 9,300	<b>36,533</b> 13,932
water services	Loans	15,503	20,004	28,229	14,268	17,502	21,581
	Grants	1.828	5,024	1,660	1,687	2,418	1,020
	Local AIA	1,020	3,024	1,000	1,087	2,418	1,020
Vote and Vote Details.	Description	A nanagara d I	Budget Alloca	-	Actual Exp	- 	
vote and vote Details.	Description	(Kshs Milli		ation	(Kshs Milli		
		2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
1104 State Department for	Gross	15,264	13114	11,911	8,861	7794	7,989
Irrigation.	GoK	10,667	11287	7,435	8,285	7732	5,837
	Loans	2,591	1462	4,204	317	62	2,152
	Grants	2,005	365	272	259	0	0
	Local AIA	-	0	-	-	0	0
Vote and Vote Details	Description	Approved I	Budget Alloca	ation	Actual Exp	enditure	
	-	(Kshs Milli			(Kshs Milli		
		2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
1191 State Department of	Gross	1192	1496	1321	928	113	1000
Mining	GOK	1170	1474	1311	906	91	990
	Loans	0	0	0	0	0	0
	Grants	22	22	10	22	22	10
	Local AIA	0	0	0	0	0	0

 $\begin{tabular}{lll} Table 2.4: Analysis of Programmes/Sub-Programmes Expenditure by Sub-Sector and Vote \\ \end{tabular}$ 

PROGRAMME		proved Budg		A	Actual Expend		
	2014/15	Shs Millions 2015/16	2016/17	2014/15	(KShs. Millio 2015/16	2016/17	
Environment Sub-Sector	2014/15	2015/10	2010/17	2014/15	2010/10	2010/17	
PROGRAMME 1: General Administration	n, Planning and	l Support Ser	vices				
SP 1.1 General Administration, Planning and Support Services	867	944	1039	631	896	1036	
Total Programme 1	867	944	1039	631	896	1036	
PROGRAMME 2: Environment and Natu	ıral Resource M	Ianagement a	nd Protection				
S P 2.1: Policy & Governance in Environment & Natural Resources Management	0	282	110		256	105	
S P 2.2: National Environment Management	3,040	4,578	3019	2,961	4,187	2938	
S.P 2.3 Forest Conservation and Management		4,287	0		4,101	0	
S.P 2.4 Forestry Research and Development	5,480	1,550	0	5421	1428	0	
S.P 2.5 wildlife security, national parks and reserves management	5,699	4,236	0	4,480	4,016	0	
Total Programme 2	14,219	14,933	3,129	12,862	13,988	3,043	
PROGRAMME 3: Meteorological Service	es						
S P 3.1: Meteorological Infrastructure Modernization	2,197	1,790	1,433	2,062	1,757	1,327	
S P 3.2: Advertent Weather Modification Programme	280	307	161	260	277	145	
Total Programme 3	2,477	2,097	1,594	2,322	2,034	1,472	
TOTAL VOTE 1105	17,563	17,974	5,762	15,815	16,918	5,551	
Natural Resources Sub-Sector							
PROGRAMME	Approved Bu Millions)			-			
DOGD LIGHT A F. A. L.	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	
PROGRAMME 2: Environment and Natu S P 3.5: Policy & Governance in Environment & Natural Resources Management	irai Resource M	ianagement a	1,080.00	•		1,080	
S P 3.6: National Resources Management			409			409	
S.P 3.1 Forest conservation and management			6,109			6,069	
S.P 3.2 Forestry Research and Development			1558			1,558	
S.P3.7 wildlife security, national parks and reserves management			5363			5,356	
Total Programme 2	0		14,519	0		14,472	
Total Vote 1103							
Water Services Sub-Sector							
PROGRAMME		Budget Alloca Millions)				896 1036  256 105  4,187 2938  4,101 0  1428 0  4,016 0  13,988 3,043  1,757 1,327  277 145  2,034 1,472  16,918 5,551  re (KShs. Millions)  /16 2016/17  1,080  409  6,069  1,558  5,356  14,472	
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17	

Programme .1 General Administration, Planning and Support Services						
Training and Support Services						
1001020 SP. 2.2 Water Policy Management	935	818	892	815	629	816
Total P .1 General Administration, Planning and Support Services	935	818	892	815	629	816
P 2 .Water Resources Management						
<b>SP. 2.1</b> Water Resources Conservation and Protection	2,154	2,144	3,968	1,894	2,111	2,665
SP. 2.2 Water Storage and Flood Control	3,936	2,248	2,371	3,903	2,229	2,256
SP. 2.3 Water Supply Infrastructure	20,286	30,474	41,661	18,870	24,368	34,548
Total Programme 3:Water Resources Management	26,376	34,866	48,000	24,667	28,708	39,469
P 3: Integrated Regional Development						
SP 3.1: Integrated Regional Development	3,909	3,992	-	3,383	3,556	-
SP 3.2: Land Reclamation	59	32	-	53	31	-
Total Programme 3: Integrated Regional Development	3,968	4,024	-	3,436	3,587	-
TOTAL VOTE 1103	31,279	39,708	48,892	28,918	32,924	40,285
Irrigation Sub-Sector						
Programmes	Approved B	Budget Alloca Millions)	tion(KShs.	Actual Ex	kpenditure (KS	Shs. Millions)
	2014/15	Millions) 2015/16	2016/17	2014/15	2015/16	2016/17
1014000 P.4 Irrigation and Land		Millions)			<u> </u>	
	2014/15	Millions) 2015/16	2016/17	2014/15	2015/16	2016/17
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.	2014/15 15,952 15,896	Millions) 2015/16 13,435 13,385	<b>2016/17 9,135</b> 9,093	<b>2014/15 9,141</b> 9,090	2015/16 8,222 8,172	2016/17 6,939 6,898
1014000 P.4 Irrigation and Land Reclamation. 1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.	2014/15 15,952 15,896	Millions) 2015/16 13,435	<b>2016/17 9,135</b> 9,093	<b>2014/15 9,141</b> 9,090	2015/16 8,222 8,172	2016/17 6,939 6,898
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood	2014/15 15,952 15,896	Millions) 2015/16 13,435 13,385	<b>2016/17 9,135</b> 9,093	<b>2014/15 9,141</b> 9,090	2015/16 8,222 8,172	2016/17 6,939 6,898
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104	2014/15 15,952 15,896 56 0	Millions)  2015/16  13,435  13,385  50  160	2016/17 9,135 9,093 42 3645	2014/15 9,141 9,090 51 0	2015/16 8,222 8,172 50 53	2016/17 6,939 6,898 41 1885
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104 Mining Sub-Sector	2014/15 15,952 15,896 56 0	Millions) 2015/16 13,435 13,385 50 160 160 13,595	2016/17 9,135 9,093 42 3645 3,645	2014/15 9,141 9,090 51 0 0 9,141	2015/16 8,222 8,172 50 53 53 8,275	2016/17 6,939 6,898 41 1885 1,885
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104	2014/15 15,952 15,896 56 0 0 15,952	Millions) 2015/16 13,435 13,385 50 160 160 13,595	2016/17 9,135 9,093 42 3645 3,645 12,780	2014/15 9,141 9,090 51 0 9,141 Actual Ex	2015/16 8,222 8,172 50 53 53 8,275	2016/17 6,939 6,898 41 1885 1,885 8,824 Shs. Millions)
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104 Mining Sub-Sector Programme	2014/15 15,952 15,896 15,896 0 0 15,952  Approved But 2014/15	Millions) 2015/16 13,435 13,385 50 160 160 13,595 dget (KShs. N 2015/16	2016/17 9,135 9,093 42 3645 3,645	2014/15 9,141 9,090 51 0 0 9,141	2015/16 8,222 8,172 50 53 53 8,275	2016/17 6,939 6,898 41 1885 1,885
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104 Mining Sub-Sector	2014/15 15,952 15,896 15,896 0 0 15,952  Approved But 2014/15	Millions) 2015/16 13,435 13,385 50 160 160 13,595 dget (KShs. N 2015/16	2016/17 9,135 9,093 42 3645 3,645 12,780	2014/15 9,141 9,090 51 0 9,141 Actual Ex	2015/16 8,222 8,172 50 53 53 8,275	2016/17 6,939 6,898 41 1885 1,885 8,824 Shs. Millions)
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104 Mining Sub-Sector Programme  PROGRAMME 1: General Planning and Sub-Programme 1.1: Mining Policy Development and Coordination  Total Programme 1	2014/15 15,952 15,896 0 0 15,952 Approved But 2014/15 Support Service 261	Millions) 2015/16 13,435 13,385 50 160 160 13,595 dget (KShs. N 2015/16 ess 415	2016/17 9,135 9,093 42 3645 3,645 12,780 Millions) 2016/17	2014/15 9,141 9,090 51 0 9,141  Actual Ez 2014/15	2015/16 8,222 8,172 50 53 53 8,275 spenditure (KS 2015/16	2016/17 6,939 6,898 41 1885 1,885 8,824 Shs. Millions) 2016/17
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104  Mining Sub-Sector Programme  PROGRAMME 1: General Planning and Sub-Programme 1.1: Mining Policy Development and Coordination  Total Programme 1  PROGRAMME 2: Resources Surveys and	2014/15 15,952 15,896 0 0 15,952 Approved But 2014/15 Support Service 261 1 Remote Sensin	Millions) 2015/16 13,435 13,385 50 160 160 13,595 dget (KShs. N 2015/16 ess 415	2016/17 9,135 9,093 42 3645 3,645 12,780  Millions) 2016/17  513	2014/15 9,141 9,090 51 0 9,141  Actual Ex 2014/15 240	2015/16 8,222 8,172 50 53 53 8,275 ependiture (KS 2015/16	2016/17 6,939 6,898 41 1885 1,885 8,824 Shs. Millions) 2016/17
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation.  1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104 Mining Sub-Sector Programme  PROGRAMME 1: General Planning and Sub-Programme 1.1: Mining Policy Development and Coordination  Total Programme 1  PROGRAMME 2: Resources Surveys and Sub-Programme 2.1: Resources Surveys and Remote Sensing	2014/15 15,952 15,896 0 0 15,952 Approved But 2014/15 Support Service 261 1 Remote Sensin 642	Millions) 2015/16 13,435 13,385 50 160 160 13,595 dget (KShs. N 2015/16 es 415 415	2016/17 9,135 9,093 42 3645 3,645 12,780 41llions) 2016/17 513	2014/15 9,141 9,090 51 0 9,141  Actual Ex 2014/15  240  527	2015/16 8,222 8,172 50 53 53 8,275 2015/16 315	2016/17 6,939 6,898 41 1885 1,885 8,824 Shs. Millions) 2016/17 416 442
1014000 P.4 Irrigation and Land Reclamation.  1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management.  1014020 SP 4.2 Land Reclamation. 1015000 P.1 Water Storage and Flood Control.  1015010 SP 1.1 Water Storage and Flood Control.  TOTAL VOTE 1104 Mining Sub-Sector Programme  PROGRAMME 1: General Planning and Sub-Programme 1.1: Mining Policy Development and Coordination  Total Programme 1  PROGRAMME 2: Resources Surveys and Sub-Programme 2.1: Resources Surveys and Remote Sensing  Total Programme 2	2014/15 15,952 15,896  56 0  15,952  Approved But 2014/15 Support Service 261 1 Remote Sensin 642 642	Millions) 2015/16 13,435 13,385 50 160 160 13,595 dget (KShs. N 2015/16 ess 415	2016/17 9,135 9,093 42 3645 3,645 12,780  Millions) 2016/17  513	2014/15 9,141 9,090 51 0 9,141  Actual Ex 2014/15 240	2015/16 8,222 8,172 50 53 53 8,275 ependiture (KS 2015/16	2016/17 6,939 6,898 41 1885 1,885 8,824 Shs. Millions) 2016/17
1014000 P.4 Irrigation and Land Reclamation. 1014010 SP 4.1 Promotion of Irrigation and Drainage Development and Management. 1014020 SP 4.2 Land Reclamation. 1015000 P.1 Water Storage and Flood Control. 1015010 SP 1.1 Water Storage and Flood Control. TOTAL VOTE 1104 Mining Sub-Sector Programme  PROGRAMME 1: General Planning and Sub-Programme 1.1: Mining Policy Development and Coordination  Total Programme 1 PROGRAMME 2: Resources Surveys and Sub-Programme 2.1: Resources Surveys and Sub-Programme 2.1: Resources Surveys and Remote Sensing	2014/15 15,952 15,896  56 0  15,952  Approved But 2014/15 Support Service 261 1 Remote Sensin 642 642	Millions) 2015/16 13,435 13,385 50 160 160 13,595 dget (KShs. N 2015/16 es 415 415	2016/17 9,135 9,093 42 3645 3,645 12,780 41llions) 2016/17 513	2014/15 9,141 9,090 51 0 9,141  Actual Ex 2014/15  240  527	2015/16 8,222 8,172 50 53 53 8,275 2015/16 315	2016/17 6,939 6,898 41 1885 1,885 8,824 Shs. Millions) 2016/17 416 442

Sub-Programme 3.2: Geological survey and mineral exploration	520	552	708	366	106	502
Total Programme 3	1,057	885	1,195	877	138	889
Total Vote 1191	1,960	2,224	2,223	1,644	692	1,747
Total Expenditure for the Sector	66,754	73,501	84,176	55,518	58,809	70,879

Table 2.5: Programme Expenditure Analysis by Economic Classification (Amount in KShs. Millions)

Environment Sub Sector						
Analysis of Programme Expendi	ture by Economic C	Classification				
Programme	APPROVED BUD	GET		ACTUAL	EXPENDITUI	RE
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Prog. 1: General Administration	, Planning and Sup	port Services				
Recurrent Expenditure	810	932	698	609	705	678
Compensation to Employees	198	482	250	195	260	250
Use of Good and Services	601	425	285	404	420	278
Grants and Other transfers						
Other Recurrent	11	25	163	10	25	150
Capital Expenditure	57	12	340	22	10	338
Acquisition of Non Financial Assets	0	10	0	0	8	6
Capital Grants to Government Agencies			340	0		330
Other Development	57	2	0	22	2	2
Total Expenditure	867	944	1038	631	715	1016
Programme 2: Environment and	Natural Managem	ent and Prote	ction	•		
Recurrent Expenditure	1,336	6,940	1,930	1,060	6,510	1,923
Compensation to Employees	56	95	63	48	95	61
Use of Good and Services	83	422	27	77	418	25
Grants and Other transfers	1,197	6,423	1840	935	5,997	1,837
Other Recurrent						
Capital Expenditure	12,883	7,993	1,199	11,802	7,784	1,120
Acquisition of Non Financial Assets	5,605	2,623	313	4,761	2,654	300
Capital Grants to Government Agencies	5,386	331	698	5196	316	640
Other Development	1,892	5,039	188	1845	4,814	180
Total Expenditure	14,219	14,933	3,129	12,862	14,294	3,043
Prog. 3: Meteorological Services				•		
Recurrent Expenditure	1,067	1,097	1,049	1,060	1,026	799
Compensation to Employees	844	880	867	840	862	795
Use of Good and Services	191	192	171	188	150	169
Grants and Other transfers	14	14	4	14	14	4
Other Recurrent	18	11	7	18		6
Capital Expenditure	1,410	1,000	546	1,262	883	693
Acquisition of Non Financial Assets	1,389	979	524	1,262	864	674
Capital Grants to Government Agencies						
Other Development	21	21	22		19	19
Total Expenditure	2,477	2,097	1,595	2,322	1,909	1,492
Total Vote	17,563	17,974	5,762	15,815	16,918	5,551

<b>Economic Classification</b>	APPROVED BUI	OGET		ACTUAL	EXPENDITUI	RE
	Ksh. Millions			Ksh. Millio	ons	
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
PROGRAMME 2: Environment	t and Natural Resou	rce Managem		ction.	1	
Current Expenditure			12,563			12,555
Compesation to Employees			96			91
Use of Goods and Services			1,073			1,070
Grants and Other Transfers	0		11,394	0		11,394
Other Recurrent	0		1,958	0		0 1,917
Capital Development  Acquisition of Non-Financial Assets			0			0
Capital Grants to Government Agencies			1,955			1,914
Other Development			3			3
Total Programme			14,521			14,472
TOTAL VOTE			14,521			14,472
Water Sub-Sector						
<b>Economic Classification</b>	Approved (Ks	Budget Alloc shs.Millions)	ation	A	Actual Expendi (Kshs.Millio	
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Programme 1:General Administ	ration, Planning an	d Support Ser	vices	•		
Current Expenditure						
Current Expenditure	759	666	615	610	535	539
Compensation of Employees	349	243	219	242	225	241
Use of Goods and Services	182	197	192	147	177	154
Grants and Other transfers	221	221	201	221	133	140
Other Current	7	5	4	-	-	4
Capital Expenditure	175	151	277	205	94	277
Acquisition of Non Financial Assets	175	151	25	205	91	25
Capital Grants to Government Agencies			252	-	3	252
Other Capital						
Total Programme	934	010	892	015	(20)	917
SP. 3.1 Water Resources Conser		818	892	815	629	816
	1		I			
Current Expenditure  Compensation of Employees	771	748	1,103 204	512	748	660
1 1 1	206	185		206	185	186
Use of Goods and Services	43	41	34	43	41	26
Grants and Other transfers	519	519	863	263	519	448
Other Current	3	3	2	-	3	-
Capital Expenditure	1,382	1,395	2,865	1,382	1,394	2,005
Acquisition of Non Financial Assets	1,078	1,090	2,297	1,078	1,090	1,437
Capital Grants to Government Agencies			568			568
Other development						

	304	305		304	304	-
Total Programme	2,153	2,143	3,968	1,894	2,142	2,665
SP. 2.2 Water Storage and Floo		2,140	3,500	1,024	2,142	2,002
Current Expenditure	306	293	279	273	273	165
Compensation of Employees	33	20	-	_	-	-
Use of Goods and Services	273	-	-	273	-	-
Subsidies, Grants and Other transfers		273	279	-	273	165
Other Current		-	-	_	-	-
Capital Expenditure	3,630	1,956	2,092	3,630	1,956	2,092
Acquisition of Non Financial Assets	3,630	1,956	-	3,630	1,956	-
Capital Grants to Government Agencies			2,092	-	-	2,092
Other Capital			-	-	-	-
Total Programme	3,936	2,249	2,371	3,903	2,229	2,256
	1			SP. 2.3	Water Supply	Infrastructure
Current Expenditure	1,782	1,944	2,690	1,598	1,678	2,389
Compensation of Employees	18	183	162	1,596	183	109
Use of Goods and Services	15	19	12	15	19	-
Grants and Other transfers	1,741	1,741	2,515	1,565	1,476	2,279
Other Current	8	1	1	-	-	1
Capital Expenditure	18,505	28,530	38,971	17,272	22,690	32,160
Capital Grants to Government Agencies	-	100	9,672	-	100	9,296
Acquisition of Non Financial Assets	18,505	28,430	29,189	17,272	22,590	22,759
Other Capital	-	-	111	-	-	105
Total Programme	20,287	30,474	41,661	18,870	24,368	34,549 d Development
	T .	T	riogra	mme 3.me;	graceu Negiona	n Development
Current Expenditure	624	606	_	664	470	_
Compensation of Employees	43	28	-	43	22	-
Use of Goods and Services	28	25	-	78	15	-
Subsidies, Grants and Other transfers	553	553	-	543	433	-
Other Current	-	-	-	-	-	-
Capital Expenditure	3,345	3,417	-	2,772	3,086	_
Acquisition of Non Financial Assets	2,082	2,092	-	1,509	1,761	-
Capital Grants to Government Agencies	1,263	1,325	-	1,263	1,325	-

Other Capital	-	-				
Total Programme	3,969	4.023	-	2 426	2.556	-
TOTAL VOTE 1103	3,969	4,023		3,436	3,556	-
	31,279	39,707	48,892	28,918	32,924	40,286
Irrigation Sub-Sector						
Economic Classification	APPRO	OVED BUDGE	T	ACT	TUAL EXPEN	DITURE
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
1014000 P.4 Irrigation and Land	Reclamation					
Current expenditure	687	481	870	280	481	836
Compensation of Employees	147	149	93	141	149	110
Use of Goods and Services	14	24	67	13	24	48
Grants and other Transfers	526	308	708	126	308	678
Other Recurrent	-	-	2	-	-	-
Capital expenditure	15,265	12,954	8,266	8,861	7,741	6,105
Acquisition of Non Financial Assets	4,605	3,347	668	2,623	406	245
Capital Grants to Government Agencies	10,660	9,607	7,598	6,238	7,335	5,860
Other Development	-	-	-	-	-	-
Gross Expenditure	15,952	13,435	9,136	9,141	8,222	6,941
1014010 SP 4.1 Promotion of Irr	igation and Drainas	ge Developmen	t and Manage	ement.	ļ.	
Current expenditure	648	448	833	246	448	795
Compensation of Employees	117	125	65	116	125	76
Use of Goods and Services	5	15	58	4	15	41
Grants and other Transfers	526	308	708	126	308	678
Other Recurrent	-	-	2	-	-	-
Capital expenditure	15,248	12,937	8,261	8,844	7,724	6,105
Acquisition of Non Financial Assets	4,588	3,330	663	2,606	389	245
Capital Grants to Government Agencies	10,660	9,607	7,598	6,238	7,335	5,860
Other Development	-	-	-	-	-	-
Gross Expenditure	15,896	13,385	9,094	9,090	8,172	6,900
1014020 SP 4.2 Land Reclamatic	on					
Current expenditure	39	33	37	34	33	41
Compensation of Employees	30	24	28	25	24	34
Use of Goods and Services	9	9	9	9	9	7
Grants and other Transfers	-	-	-	-	-	-
Other Recurrent	-	-	-	-	-	-
Capital expenditure	17	17	5	17	17	0
Acquisition of Non Financial Assets	17	17	5	17	17	-
Capital Grants to Government Agencies	-	-	-	-	-	-
Other Development	-	-	-	-	-	-
Gross Expenditure	56	50	42	51	50	41
1015000 P.1 Water Storage and						
Current expenditure	0	0	0	0	0	0
Compensation of Employees	0	0	0	0	0	0
Use of Goods and Services	0	0	0	0	0	0

Grants and other Transfers	0	0	0	0	0	0
Other Recurrent	0	0	0	0	0	0
Capital expenditure	0	160	3645	0	53	1885
Acquisition of Non Financial Assets	0	160	1,015	0	53	782
Capital Grants to Government Agencies	0	0	2,630	0	0	1,103
Other Development	0	0	0	0	0	0
Gross Expenditure	0	160	3,645	0	53	1,885
1015010 SP 1.1 Water Storage an	d Flood Control.					,,,,,,
Current expenditure	0	0	0	0	0	0
Compensation of Employees	0	0	0	0	0	0
Use of Goods and Services	0	0	0	0	0	0
Grants and other Transfers	0	0	0	0	0	0
Other Recurrent	0	0	0	0	0	0
Capital expenditure	0	160	3,645	0	53	1,885
Acquisition of Non Financial	0	160	1,015	0	53	782
Assets		100	<u> </u>		33	
Capital Grants to Government Agencies	0	-	2,630	0	-	1,103
Other Development	0			0		
Gross Expenditure	0	160	3645	0	53	1885
Total Programmes		<u> </u>				
Current expenditure	687	481	870	280	481	836
Compensation of Employees	147	149	93	141	149	110
Use of Goods and Services	14	24	67	13	24	48
Grants and other Transfers	526	308	708	126	308	678
Other Recurrent	-	-	2		-	_
Capital expenditure	15,265	13,114	11,910	8,861	7,794	7,990
Acquisition of Non Financial Assets	4,605	3,507	1,682	2,623	459	1,027
Capital Grants to Government Agencies	10,660	9,607	10,228	6,238	7,335	6,963
Other Development				_	_	
TOTAL VOTE	15,952	13,595	12,780	9,141	8,275	8,826
Mining Sub Sector	10,752	10,000	12,700	>,141	0,275	0,020
Training Sub-Sector	APPRO	VED BUDGE	T	ACT	UAL EXPENI	DITURE
Economic Classification.	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
PROGRAMME 1: General Plant						
Current Expenditure	256	313	512	235	276	416
Compensation to Employees	111	124	145	111	140	144
Use of Goods and Services	112	156	352	106	121	272
Grants and Other Transfers	0	0	0	0	0	0
Other Recurrent	33	33	15	18	15	0
Capital Expenditure	5	103	0	5	39	0
Acquisition of Non-financial Assets	5	103	0	5	39	0
Total Programme 1	261	416	512	240	315	416
PROGRAMME 2: Resource Sur	veys and Remote Se	ensing				
Current Expenditure	257	208	163	238	165	128
Compensation to Employees	80	71	82	80	69	62
Use of Goods and Services	113	105	68	110	82	53
Grants and Other Transfers	11	11	13	11	0	13
	53		0	37	14	0

Capital Expenditure	385	716	351	289	74	314
Acquisition of Non-financial	385	716	351	289	74	314
Assets						
Total Programme 2	642	924	514	527	239	442
PROGRAMME 3: Mineral Resources	Management				'	
Current Expenditure	255	205	225	243	138	203
Compensation to Employees	131	120	135	131	113	125
Use of Goods and Services	110	78	84	101	25	72
Grants and Other Transfers	7	7	6	6	0	6
Other Recurrent	7	0	0	5	0	0
Capital Expenditure	802	679	970	634	0	686
Acquisition of Non-financial	802	679	970	634	0	686
Assets						
Total Programme 3	1057	884	1195	877	138	889
Total Vote	1,960	2,224	2,221	1,644	692	1,747
Total Expenditure Sector						
	66,754	73,500	84,176	55,518	58,809	70,879

# Analysis of Performance of Capital Projects (KShs. Million)

Table 2.6 gives a summary of performance of capital projects in the sector for the period 2014/15-2016/17

 Table 2.6
 Analysis of Performance of Capital Projects (KShs. Million)

State Departn	nent for	Environ	ment															
Project code	Total			Timeli	ne	FY 2014	1/15			FY 2015	5/16			FY 2010	5/17			Remarks
&project title	Est	Est Cos	st of															
	cost	the pro	ject															
	of	(financ	ing)															
	proje	Forei	GO	Start	Expecte	Appro	Appro	Cumula	Comple	Appro	Appro	Cumula	Comple	Appro	Appro	Cumula	Comple	
	ct or	gn	K	date	d	ved	ved	tive	tion	ved	ved	tive	tion	ved	ved	tive	tion	
	contr				complet	Foreig	GOK	expendi	stage as	Foreig	GOK	expendi	stage as	Foreig	GOK	expendi	stage as	
	act				ion date	n	Budge	ture as	at 30th	n	Budge	ture as	at 30th	n	Budge	ture as	at 30th	
	value					budget	t	at 30th	June,	budget	t	at 30th	June,	budget	t	at 30th	June,	
	(a)							June,	2015			June,	2016			June,	2017	
	` ′							2015	(%)			2016	(%)			2017	(%)	
	Ksh M	illion				Ksh Million												
Project 1	4,000	0	4	07-	30/06/2	0	320	1559	35%	0	288	1,847	40%	0	60	1907	40%	Ongoing
Nairobi	,		000	01-	020							,						
RiverRehabil				09														
itation and																		
Restoration																		
Programme.																		
Urban Rivers	2000	0	2		30-06-	0	88	134	10%	0	126	260	15%	0	188	448	20%	Ongoing
Rehabilitatio			000		2024													
n and																		
Restoration																		
Programme																		
Suswa Lake	4000	0	400	01-	30-06-	0	0	0	0	0	0	0	0	0	0	0	0	This is a
Magi-Migori			0	07-	2020													new
Environment				2017														project
Restoration																		1 3
Project																		
1105102400	1000	60 M	40	2012	2021/2		42.9	125	20%	17	70	165	31		70 M	178 M	42%	GoK
Imarisha			M		2		M											commit
Lake																		ment
Naivasha																		inadequa

State Departm	ent for	Environ	ment															
Project code &project title	Total Est cost of	Est Cos the pro	ject ing)	Timeli			FY 2014/15			FY 2015/16				FY 2016				Remarks
Catchment Management	proje ct or contr act value (a)	Forei gn	GO K	Start date	Expecte d complet ion date	Appro ved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2015	Comple tion stage as at 30th June, 2015 (%)	Appro ved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2016	Comple tion stage as at 30th June, 2016 (%)	Approved Foreig n budget	Approved GOK Budge t	Cumula tive expendi ture as at 30th June, 2017	Comple tion stage as at 30th June, 2017 (%)	
Catchment Management in Kenya																		te, slow donor release
Phasing Out Ozone Depleting Substance Project Operationaliz ed	60M	45	15	2009	Continu	15	5	280	80%	15	5	300	80	15	5	320	85	Under extensio n for two years
Medical Waste and Hazardous Waste Facility Project	2,500	1,600	900	11- 07- 15	2019	-	-	-		1451	200			100	167			Not commen ced due to issue of land acquisiti on
Mercury Initial Actions for Kenya	22	18	4	Marc h 2014	Sept 2016	10	1	11	30%	8	2	21	80	-	1	22	100	Project extended for one year and has been complete d
Support to Kenya for the	44	30	14	Jan 2015	Jan 2017	10	3	13	20%	-	5	18	30	20	6	44	50	Not complete

State Departn Project code	Total	EHVII OII	шепт	Timeli		FY 2014	1/15			FY 201:	5/16			FY 2010	6/17			Remarks
&project title	Est cost of	Est Cos the pro	ject ing)						F1 2013/10				11 2010/17				Remarks	
Revision of the NBSAPs and	proje ct or contr act value (a)	Forei gn	GO K	Start date	Expecte d complet ion date	Appro ved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2015	Comple tion stage as at 30th June, 2015 (%)	Appro ved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2016	Comple tion stage as at 30th June, 2016 (%)	Approved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2017	Comple tion stage as at 30th June, 2017 (%)	
the NBSAPs																		d due to no disburse ment by the donor
Sound Chemicals Management Mainstreamin g & UPOPs Reduction in Kenya	492	451	41	Jan 2016	Jan 2021	-	-	-	-	-	3	3	10	34	8	45	20	Project ongoing
Project ID: P100406/P15 3466: Project Title: Lake Victoria Environment al Management project - Phase II (LVEMP II)	4226	3842	384	May 2009	Dec 2017	1428	50	1,124	58	598	26	258	64	1172	26	1198	92.3	Ongoing , LVEMF III unde under negotiat ons
NETFUND Green	538	353	185 10	Dec- 13	Dec-19	39	10	49	20%	78	-	78	50%	72	20	92		Ongoin

State Departm	ent for	Environ	ment															
Project code &project title	Total Est cost of	Est Cos the pro	st of ject ing)	Timeli	ine	FY 2014	4/15			FY 2015				FY 2016	5/17			Remarks
	proje ct or contr act value (a)	Forei gn	GO K	Start date	Expecte d complet ion date	Appro ved Foreig n budget	Approved GOK Budge	Cumula tive expendi ture as at 30th June, 2015	Comple tion stage as at 30th June, 2015 (%)	Appro ved Foreig n budget	Approved GOK Budge t	Cumula tive expendi ture as at 30th June, 2016	Comple tion stage as at 30th June, 2016 (%)	Approved Foreig n budget	Approved GOK Budge t	Cumula tive expendi ture as at 30th June, 2017	Comple tion stage as at 30th June, 2017 (%)	
Innovations Phase I- 1105102800																		
Enhancing climate resilience and nutrition uptake through the fortification of corn flour and high nutrition value crops	18	18	-	Oct- 14	Jun-16	8	0	8	40%	10	-	18	100%					Complet
Supporting the implementati on of Kenya's National Green Economy Strategy through the development of Low	64	56	8	Jun- 16	Dec-18													New

State Departn	nent for	Environ	ment															
Project code &project title	Total Est cost of	Est Costhe pro	ject ing)	Timeli		FY 2014				FY 201:				FY 2010				Remarks
	proje ct or contr act value (a)	Forei gn	GO K	Start date	Expecte d complet ion date	Appro ved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2015	Comple tion stage as at 30th June, 2015 (%)	Appro ved Foreig n budget	Approved GOK Budge	Cumula tive expendi ture as at 30th June, 2016	Comple tion stage as at 30th June, 2016 (%)	Appro ved Foreig n budget	Approved GOK Budge t	Cumula tive expendi ture as at 30th June, 2017	Comple tion stage as at 30th June, 2017 (%)	
carbon Projects and Resource Mobilization - 1105102800																		
Construction of Embu Greenpoint	16.2	16.2	0	Aug- 13	Apr-15	16.2	0	15.7	97%	Nil	Nil	16.2	100%	Nil	Nil	Nil	100%	Complet ed and ir use
Construction of KajiadoGree npoint	20.9	20.9	0	Sep- 14	Jul-15	20.9	0	16.72	80%	Nil	Nil	20.9	100%	Nil	Nil	Nil	100%	Complet ed and in use
Construction of KilifiGreenp oint	18.2	18.2	0	Oct- 14	Jul-15	18.2	0	12.74	70%	Nil	Nil	16.38	90%	Nil	Nil	18.2	100%	Complet ed and in use
Integrated Programme to build resilience to climate change & adaptive capacity of vulnerable	999	999	Nil	2015 /16	2018/1	Nil	-	-	Nil	0	0	59	6%	437	Nil	295	30%	Delay in the start of the project

State Departn		Environ	ment	mı ···		TT 1 0 5 :												
Project code &project title	Total Est cost of	Est Cos the pro	ject ing)	Timeli		FY 2014				FY 201:				FY 2010				Remarks
	proje ct or contr act value (a)	Forei gn	GO K	Start date	Expecte d complet ion date	Appro ved Foreig n budget	Approved GOK Budge	Cumula tive expendi ture as at 30th June, 2015	Comple tion stage as at 30th June, 2015 (%)	Appro ved Foreig n budget	Approved GOK Budge	Cumula tive expendi ture as at 30th June, 2016	Comple tion stage as at 30th June, 2016 (%)	Appro ved Foreig n budget	Approved GOK Budge	Cumula tive expendi ture as at 30th June, 2017	Comple tion stage as at 30th June, 2017 (%)	
communities in Kenya																		
Green Growth and Employment Programme	660	600	60	2016 /17	2020/2	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil			New project by DANID A
Purchase of Digital Equipment	980	-	980	2014 /15	2019/2 0	-	0	0	0	-	133	133	14	-	212	233.0	24	ongoing
Upper Wind Observation	340	-	340	2014 /15	2018/1 9	-	0	0	0	-	0	0	0	-	87	43.5	13	ongoing
High Performance Computing	1,144		1,1 44	2014 /15	2018/1 9	-				-	330	330	29	-	100	380.0	33	ongoing
Climate Database Management System	301		301	2014 /15	2016/1	-	41		10	-	137	137	50	-	48	161.0	53	ongoing
Tidal Gauges Network	240		240	2015 /16	2019/2 0	-				-		0	0	-	20	10.0	4	ongoing
Acquisition of CAT 3 Airport Weather	780		780	2014 /15	2018/1	-	0			-	80	80	10	-	200	180.0	23	ongoing

State Departm		Environ	ment	T: 1		EV 201	1/15			EV 2017	7/1.6			EX 201	7/17			D 1
Project code &project title	Total Est cost of	Est Cos the proj (financi	ect ng)	Timeli		FY 2014	1/15			FY 2015	5/16			FY 2010	5/17			Remark
	proje ct or contr act value (a)	Forei gn	GO K	Start date	Expecte d complet ion date	Approved Foreig n budget	Approved GOK Budge	Cumula tive expendi ture as at 30th June, 2015	Comple tion stage as at 30th June, 2015 (%)	Appro ved Foreig n budget	Approved GOK Budge t	Cumula tive expendi ture as at 30th June, 2016	Comple tion stage as at 30th June, 2016 (%)	Appro ved Foreig n budget	Approved GOK Budge t	Cumula tive expendi ture as at 30th June, 2017	Comple tion stage as at 30th June, 2017 (%)	
Observing System (AWOS) – Phase III																		
Acquisition of CAT 3 Automatic Weather Stations (AWS) - Phase IV	735		735	2015 /16	2017/1	-	40		5	-	80	80	10	-	40	120.0	16	ongoing
Integrated Hydro- Meteorologic al Information & Decision Support System	475		475	2015 /16	2019/2	-	0	0	n/a	-	40	0	10	-	40	20.0	4	ongoing
Weather Radar Surveillance Network	1,500		1,5 00	2015 /16	2019/2	-				-	100	0	0	-	100	35.0	2	ongoing
RANET- Kenya	1424		142 4	2014 /15	2019/2 0	-				-	234	146	10	-	234	256.0	18	ongoing

State Departn	ent for	Environ	ment															
Project code	Total			Timeli	ine	FY 2014	4/15			FY 2015	5/16			FY 2010	5/17			Remarks
&project title	Est cost of	Est Cos the pro (financ	ject															
	proje ct or contr act value (a)	Forei gn	GO K	Start date	Expecte d complet ion date	Appro ved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2015	Comple tion stage as at 30th June, 2015 (%)	Appro ved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2016	Comple tion stage as at 30th June, 2016 (%)	Appro ved Foreig n budget	Appro ved GOK Budge t	Cumula tive expendi ture as at 30th June, 2017	Comple tion stage as at 30th June, 2017 (%)	
Community Radio (PHASE III)																		
Urban Pollution Monitoring Station Network	620		620	2014 /15	2019/2							78		-	20			
Support to Low Carbon Climate Resilient	94	74	20	01- 07- 14	31/06/1	14	5	19	20	30	8	45	60	30	7	75	80	On- going project
Low Emission And Climate Resilient Development In Kenya	832	756	76	10- 01- 14	30/09/2 017	275	25	285	25	325	26	585	70	156	25	765	90	Extende d to 2019
Green Growth & Employment	330	300	30	2016 /17	2019/2 0	-	-	-	-	-	-	-	-	100	10	80	30	On- going project
Supporting implementati on of Green Economy	132	84	48	08- 01- 16	31/12/2 018	-	-	-	-	25	16	30	10	35	16	70	65	On- going project

## **Natural Resources Sub-sector**

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	t	Timel	ine	FY 2014	I/15			FY 2015	5/16			FY 201	16/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Appro ved GOK Budge t	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n								KSh	s Million						
1101001600 Headquarter s Forestry Developmen	750	0	750	2011 /12	2015/16	0	100	315	65	0	230	480	75	0	0	0	0	Project ended in 2015/16
1101001800 Forestry Training College - Londiani	100	0	100	2011 /12	2015/16	0	18.15	65	55	0	40	80	70	0	0	0	0	Project ended in 2015/16
1101001900 Roads Construction unit	350	0	350	2011 /12	2015/16	0	82.2	115	45	120	55	0	0	0	0	190	55	Ongoing
1101002000 Forestry Extension Services	350	0	350	2010 /11	2014/15	0	40	210	55	0	0	0	0	0	0	0	0	Project ended in 2014/15
1101002100 Forest	550	0	550	2011 /12	2015/16	0	43.4	155	35	0	72	0	60	0	0	0	0	Project ended in

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	: t	Timel	ine	FY 2014	I/15			FY 2015	5/16			FY 201	6/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Appro ved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Approved GOK Budge	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n								KSh	s Million						
Inspection and patrol Unit																		2015/16
1101002300 Support for Community Based Farm Forestry Enterprises in Semi AridAreas	450	380	70	2011 /12	2015/20 16	0	65	415	85	0	0	0	0	0	0	0	0	Project ended in 2014/15
1101002400 Natural Resource Management	850	720	130	2011 /12	2015/16	0	69	680	75	0	0	0	0	0	0	0	0	Project ended in 2014/15
1101002500 Green Zone Developmen t Support Project	1200	850	350	2011 /12	2015/16	0	114.2	920	85	0	0	0	0	0	0	0	0	Project ended in 2014/15
1101002600 Miti MingiMaish a Bora	950	800	150	2011 /12	2015/16	357	85	610	65	456.1	0	0	0	0	0	0	0	Project ended in 2015/16

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	: t	Timel	ine	FY 2014	I/15			FY 2015	5/16			FY 201	6/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Approved GOK Budge t	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n								KSh	s Million						
101900 Natural Forest Conservatio	3275	0	327 5	1/7/2 016	30/6/20 21	0	0	0	0	0	0	0	0	0	40	40	1	On-going
102000 Establishme nt of Forest Plantations	1900	0	190 0	1/7/2 016	30/6/20 21	0	0	0	0	0	0	0	0	0	85	85	4	On-going
102100 Farm and Dry land Forest Management	2524	0	252 4	1/7/2 014	30/6/20 21	0	41	0	1	0	72	113	4	0	37	150	5	On-going
101800 School Greening Programme	5000	0	500 0	1/7/2 015	30/6/20 21	0	39.9	0	0	0	667			0	545			On-going
100400 Water Towers Protection and Climate Change Mitigation	880	440	440	1/7/2 016	31/12/2 019	0	0	0	0	0	0	0	0	100	33	133	15	On-going

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	:	Timel	ine	FY 2014	I/15			FY 2015	5/16			FY 201	6/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Approved Foreig n Budge	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Approved GOK Budge	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n								KSh	s Million						
and Adaptation (WaTER)																		
102400 Capacity Builing for sustainable forest management	2700	1100	159 0	1/7/2 016	30/6/20 20	0	0	0	0	0	0	0	0	50	40	90	6	On-going
100500 Forest Irrigation Climate and Green Energy Project (FICaGE)	4057	2637	142	1/7/2 016	31/12/2 023	0	0	0	0	0	0	0	0	0	30	30	1	On-going
102200 Rehabilitatio n of buildings (Forest Rangers	281	0	281	1/7/2 014	30/6/20 18	0	0	0	0	0	36	36	12	0	47	83	29	On-going

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	i t	Timel	ine	FY 2014	I/15			FY 2015	5/16			FY 201	6/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Approved Foreig n Budge	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Appro ved GOK Budge t	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n								KSh	s Million						
Camps)																		
102300 Forest Roads Improvemen	661	0	661	1/7/2 014	30/6/21	0	82	82	12	0	125	207	31	0	63	270	40	On-going
102700 Forest Fire Prevention Management Project	1200	0	120 0	1/7/2 017	30/6/20 22	0	0	0	0	0	0	0	0	0	0	0	0	On-going
100300 System for Land-Based Emissions Estimation in Kenya (SLEEK).	250	0	250	1/07 2013	Ongoin g	0	0	0	continu	0	0	0	continu	0	5	2.5	Contino us	The projects will assist the Governm ent of Kenya in decision making to meet its national

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finan	t	Timel	ine	FY 2014	1/15			FY 2015	5/16			FY 201	6/17			Remarks
Till	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Approved Foreig n Budge	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Approved GOK Budge	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n							'	KSh	s Million						
																		developm ent goals and internatio nal reporting obligatio ns to UNFCCC
101100 Developmen t of Forest Research Technologie s	1.425	0	1.4 25	1/7/2 014	Contino	0	10	10	0	0	15	25	continu ous	0	25	50	Contino	Ongoing even though the uptake is low
102800 Construction of tree seed processing units	625	0	625	1/7/2 017	30/6/20 21	0	0	0	0	0	0	0	0	0	0	0	0	The project started at the start of the current financial year
100800 Construction	130	0	130	1/7/2 015	30/6/20 20	0	0	0	0	0	5	5	5%	0	5	10	10%	Ongoing

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	t	Timel	ine	FY 2014	4/15			FY 2015	5/16			FY 201	16/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Approved GOK Budge t	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n								KSh	s Million			•	•		
of Green houses																		
100600/1007 00 Construction of Farmer's , Centers in Migori, TaitaTaveta, Turkana and Rumuruti	589	0	589	1/8/2 014	30/6/20 21	0	20	20	25	0	21	41	30%	0	26	67	45%	Ongoing, the buildings are complete for migori, turkana and taitatavet a but not yet equipped
Developmen t of Dry land Eco-region Research Programme- Tiva On Forest as a centre of excellence	215	0	215	1/8/2 014	30/6/20 21	0	5	5	5	0	5	10	10%	0	5	15	15%	Ongoing

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	t cing)	Timel		FY 2014	1/15			FY 2015	5/16			FY 201	6/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Approved Foreign Budget	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Approved GOK Budge	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n								KSh	s Million						
100200 Developmen t of Drought Tolerant Trees for Adaptation to Climate Change	515	500	15	1/12/ 2012	30/11/2 016	100	5	300	55%	100	5	405	85%	100	5	510	99%	Funded by JICA, some activities to be moved to KEFRI
Installation of Water in Kitui Centre Phase II, and Lamu and Muguga	75	0	75	1/7/2 017	30/6/20 20	0	0	5	5%	0	10	15	25%	0	5	20	30%	Ongoing, however has experienc ed some budget limitation
102500 Mitigation & Management of Soil Loss	831	0	831	1/7/2 014	1/7/202 0	0	180	180	23	0	50	230	28	0	55	285	30	hampered due to budget cuts
Modernizati on of Ant poaching Technology	2760	0	276 0	1/7/2 013	contino us	0	650	848.5	31%	0	56.2	904.7	33%	0	110	1015	37%	Ongoing

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	t	Timel	ine	FY 2014	I/15			FY 2015	5/16			FY 201	6/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Appro ved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Appro ved GOK Budge t	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n						1 ( /		KSh	s Million	. ( /					
101400 Ranger housing programme	8750	0	875 0	1/7/2 008	31/6/20 120	0	150	169.0	2%	0	32	201	2%	0	65	266	3%	Ongoing but affected by budget cuts
101300 Human Wildlife Conflict Mitigation Programme (Fences)	2650	0	265 0	1/7/2 008	31/6/20 20	0	80	20.0	1%	0	0	20	1%	0	90	110	4%	progress hampered by low funding
101500 Conservatio n of Biodiversity of Northern Kenya (AFD)	1145.	880	265	1/7/2 013	30/6/20 19	880	0	193.2	17%	880	0	193.2	17%	276.5	5	350.307	31%	project progress partly slowed by procurem ent process delays
101600 Wildlife Resource Centres	207.3	4.5	182 .8	1/7/2 013	30/06/2 018	5	0	26.47	13	0	0	37.47	18	0	10	47.47	23	•

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	: t	Timel	ine	FY 2014	1/15			FY 2015	5/16			FY 201	6/17			Remarks
	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Appro ved GOK Budge t	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n						1 ( /		KSh	s Million	. ( /				l .	
103000 Kenya Wildlife Conservatio n Project	530	500	30	1/7/2 017	30/9/20 19	0	0	0.0	0%	0	0	0	0%	0	0	0	0%	New
100100 Digital Radio Equipment	792	659	133	1/7/2 013	30/6/20 18	559	133	692.0	87%	692		692	87%	70		762	99%	project complete d, awaiting commisio ning
Maintenance of Access Roads and Airstrip in National parks	100,0 00			1/7/2 008	contino us		537.7	3764.3	4%	0	272.7	4037.0	4%	0	0	0	0%	project crucial but not funded in 2016/17
102600 Construction of Wild life Fence in Laikipia						205.5	0	205.5	1/7/201 7	30/6/2 018	0	0	0	0	0	0	0	New Project
101700 Refurbishme	25	0	25	1/7/2 016	1/12/20 16	0	0	0	0	0	0	0	0	0	25	12.5	100	Complete d

Project Code and Project Title	Total Cost of Proje	Estima Cost of Project (Finance	t	Timeli	ine	FY 2014	I/15			FY 2015	5/16			FY 201	6/17			Remarks
Title	ct/Co ntrac t Value	Forei gn	GO K	Star t Date	Expecte d Comple tion Date	Appro ved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2015	Comple tion Stage as at 30th June 2015 (%)	Approved Foreig n Budge t	Appr oved GOK Budg et	Cumul ative Expend iture as at 30th June, 2016	Comple tion Stage as at 30th June 2016 (%)	Appr oved Forei gn Budg et	Appro ved GOK Budge t	Cumul ative Expend iture as at 30th June, 2017	Comple tion Stage as at 30th June 2017 (%)	
	KS	hs Millio	n								KSh	s Million		•				
nt of NSSF Building.																		

## **Water Services Subsector**

Project Code	Estimated			Time	line	FY 2014/	15			FY 2015/	16			FY 2016/	17			Remark
& Project Title	cost of project or contract value	Finan	ct cing	date	Expected completion date	Approved on Foreign Budget	GoK			Approved Foreign Budget	GoK	expenditure as at 30th	Completion estage as at 30th June 2016 (%)		d Approved GoK Budget	expenditure as at 30th		ı s
		r oreig	GoF	`					(70)									
	Kshs Milli	ion				Kshs Mill	ion	1			-1		1	1	1	1	1	
1103107600 Construction of Water Resource Center	l l	0	267	Nov- 2014	Dec 2018	0	112	180	80	0	27	180	80	0	27	186	90	On going
1103107700 Geo-Equipping of resource Centre	50	0	50	Sept 2016	Dec 2020	0	0	0	0	0	0	0	0	0	4	2	60	On going
Infrastructural Development of Satellite Campuses and head office	270	0	270	Sept 2016	Aug 2021	0	0	0	0	0	0	0	0	0	20	5	10	On going
Develop New Training Programmes	13	0	13	Sept 2016	Aug 2021	0	0	0	0	0	0	0	0	0	5	4	60	On going
1103101700 Kenya Water Security and Climate Resilience Project (KWSCRP-I)	19,370	1	7,500	,	Jan. 2012 I		50 20	515	2.7%	700	150	1,100	6%	550	150	2,100	11%	
Coastal Region Water Security and Climate Resilience Project (KWSCRP-II)	21,900	2	20,000	1,900	Jun. 2016 I	Dec 2022 0	0	0	0	0	0	0	О	400	250	319	1.5%	

1103102600 Upper Tana Natural	6885	5635	1250	May 2012	Dec 2020	698	140	983.7	15%	750	140	1,773	28%	866	130	3,097	50%	
Resources Management Project																		
1103105800 Kenya Groundwater mapping Program	5,200	3,200	2,000	Jan. 2015	Dec 2021	0	0	0	0	0	114	114	2%	0	104	218	4%	
1103106000 Installation of National Water quality monitoring network stations	100	0	100	Jan. 2016	Jun. 2022	0	0	0	0	0	0	0	0	0	7	7	13%	
1103106100 Installation of Hydro meteorological network under IGAD-HYCOS Hydromet	260	150	110	Jul. 2014	Jun. 2023	0	0	0	0	0	0	0	0	0	15	15	25%	
1103103700 Drilling of Exploratory Boreholes for Turkana	800	0		June 2014	June 2020	0	55	54.241	6.8%	0	304	65.241	8.16%	0	177	230.983	28.87%	On going
1103103600 Athi River Restoration Programme	2,500	0	2,500	April 2015	June 2020	0	4	4	0.16%	0	25	4	0.16%	0	25	27.50	1.1%	On going
1103103800 Implementation of Sub Catchment Management Plans		500		·	June 2020	0	53	53	1.06%	0	59	67	1.34%	0	60	123.184	2.5%	On going
1103103900 Construction and Rehabilitation of Water Resource Monitoring Station	2300	600	1700	July 2013	June 2030	0	5	5	0.22%	0	80	8	0.35	0	50	46.820	2.04%	On going
1103104100 Kikuyu Springs Groundwater Conservation	300	0	300	2016	2023	0	6	6	2%	0	10	18	6%	0	20	36.728	12.24%	On going

1103104200	330	0	330	2016	2023	0	6	6	1.8%	0	10	6	1.8%	0	30	28.092	8.5%	On going
Lamu																		
Groundwater																		
Conservation																		
1103104000	500	120	380	2016	Ongoing	0	4	4	0.8%	0	56	9	2.4%	0	36	51.710	10.3%	On going
Water					0 0													
Abstraction and																		
Pollution Control																		
Surveys																		
	656	400	256	Ian 2016	Jun. 2021	0	0	0	0	0	0	0	0	0	15	15	5.8%	
Project on	030	400	230	Jan. 2010	Jun. 2021	U	U	ľ	Ü	U	Ü	o .	Ü	U	13	13	3.670	
Sustainable																		
Development																		
Lake Turkana																		
and its River																		
Basin																		
	0.500	0	0.600				500	500	-	0		10.55	2.5			2255	25.5	
Siyoi dam	9,600	O		Marc	March 2018	0	500	500	5	0	565	1065	25.6	0	1,310	2375	37.5	
				2015														
Isiolo dam	17,000	14450	2550	I1 2010	June 2022	0	10	10	4	0	0	10	5	0	0	10	-	
Isioio dam	17,000	14450	2550	July 2018	June 2022	U	10	10	4	U	U	10	5	U	U	10	3	
Rare dam	28,600	0	28 600	Inly 2019	June 2021	0	0	0	2	0	0	0	2.5	0	0	0	4.5	
Kare dam	28,000	U	28,000	July 2018	June 2021	U	U	U	2	U	U	U	2.3	U	U	U	4.3	
Upper narok dam	6.200	0	6 200	Inly 2019	June 2021	0	10	10	1.6	0	15	25	3.2	0	0	25	4.8	
Opper narok dam	0,200	U	0,200	July 2018	June 2021	U	10	10	1.0	U	13	23	3.2	U	U	23	4.0	
Rumuruti dam	5,600	0	5 600	Inly 2019	June 2020	0	10	10	1.6	0	10	10	3.2	0	0	10	4.8	
Kumuruu dam	3,000	U	3,000	July 2018	June 2020	U	10	10	1.0	U	10	10	3.2	U	U	10	4.0	
Londiani	14,100	11985	2115	Inly 2019	June 2021	0	10	10	1.6	0	0	10	3.2	0	0	10	4.8	
Londiani	14,100	11983	2113	July 2018	June 2021	U	10	10	1.0	U	U	10	5.2	U	U	10	4.0	
Thua dam	1,350	0	1 250	Inly 2010	June 2023	0	0	0	0	0	5	5	0.5	0	0	5	1.6	
i iiua uaiii	1,330	U	1,550	July 2019	June 2023	U	U	U	U	U	9	3	0.5	U	U	3	1.0	
Koru dam	45,000	0	45,000	I1 2010	June 2022	0	400	400	5	0	0	400	5	0	10	418	-	
Koru dam	45,000	U	45,000	July 2018	June 2022	0	400	400	5	U	U	400	Э	U	18	418	5	
Badasa dam	4,700	0	4.700	Inly 2019	Dec 2020	0	0	0	Court case	0	1.5	0	Amicable	0	198	198	5	
Badasa dam	4,700	U	4,700	July 2018	Dec 2020	U	U	U		U	1.5	U		U	198	198	3	
									on going				settlement					
I Imaga	2,600	0	2.600	Inde: 2019	Dec 2020	0	0	0	A ubituati	0	8.9	0	Amicable	0	541	541	5	-
Umaa	2,000	U	2,600	July 2018	Dec 2020	U	U	U	Arbitration	U	8.9	U		U	541	541	Э	
									on going				settlement					
				1	1	I					1		1	1		1	1	

7,000	5950	1050	July 2018	June 2022	0	0	0	1.6	0	0	0	1.6	0	0	0	0	
14,100	11985	2115	July 2018	June 2022	0	0	0	0.5	0	0	0	1.6	0	0	0	0	
14,300	12155	2145	July 2018	June 2022	0	0	0	3.2	0	5	0	3.2	0	0	0	0	
22,000	18700	3300	July 2018	June 2022	0	0	0	1.6	0	8	0	5	0	0	0	0	
15,300	13005	2295	July 2018	June 2022	0	0	0	0.5	0	0	0	1.6	0	0	0	0	
50	0	50	July 2018	Dec 2018	0	135	135	95	0	108	243	95	0	0	243	95	
20	0	20	Annually	Annually	0	50	50	0	0	26	76	0	0	0	76	0	
20	0	20	Annually	Annually	0	60	60	0	0	19	79	0	0	10	89	0	
20	0	20	Annually	Annually	0	20	20	0	0	22	42	0	0	15	57	0	
20	0	20	Annually	Annually	0	20	20	0	0	7	27	0	0	20	47	0	
20	0	20	Annually	Annually	0	10	10	0	0	10.6	20.6	0	0	0	20.6	0	
20	0	20	Annually	Annually	0	0	0	0	0	0	0	0	0	13	13	0	
20	0	20	Annually	Annually	0	0	0	0	0	0	0	0	0	14	14	0	
20	0	20	Annually	Annually	0	0	0	0	0	0	0	0	0	20	20	0	
25	0	25	Annually	Annually	0	20	20	0	0	0	20	0	0	0	20	0	
	14,100  14,300  22,000  15,300  50  20  20  20  20  20  20	14,100 11985 14,300 12155 22,000 18700 15,300 13005 50 0 20 0 20 0 20 0 20 0 20 0 20 0	14,100     11985     2115       14,300     12155     2145       22,000     18700     3300       15,300     13005     2295       50     0     50       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20       20     0     20	14,100	14,100       11985       2115       July 2018 June 2022         14,300       12155       2145       July 2018 June 2022         22,000       18700       3300       July 2018 June 2022         15,300       13005       2295       July 2018 June 2022         50       0       50       July 2018 Dec 2018         20       0       20       Annually Annually         20       0       20       Annually Annually	14,100	14,100	14,100	14,100	14,100	14,100	14,100	14,100	14,100	14,100	14,100	14,100

Tana river flood - Tana river	20	0	20	Annually	Annually	0	0	0	0	0	0	0	0	0	0	0	0	
1103101800 Nairobi Sanitation Oba Project	433	433	0	Feb 2016	Feb 2018	0	0	0	0	100	0	0	7%	100	0	52	37%	Allocation has been low
1103106200 Water Sector Reform Programme	1,400	1,400	0	2013	2019	550	0	525.3	31%	300	0	808.3	46%	162.6	0	950.3	61%	
1103101400 The Project For Management Of Non-Revenue Water In Kenya	760	400	360	Sept- 2009	June 2021	0	0	210	20%	60	10	280	30%	65	10	355	45%	Sourcing for Equipmen t
Kathangachiini Water Supply Project	70	70	-	Dec - 2014	Oct-2015	70	0	70	100	-	-	-	-	-	-	-	-	
Kithuru Water Project	20	20	-	Dec - 2014	Jun-2015	20	0	20	100	-	-	-	-	-	-	-	-	
Othaya Water Supply Project	515	463.5	51.5	Aug - 2012	Aug-2014	41	7.7	515	100	-	-	-	-	-	-	-	-	
Othaya Town Sewerage Project	251.7	226.5	25.2	Aug - 2012	Aug-2014	88	1.9	251.7	100	-	-	-	-	-	-	-	-	
Mukurweini Water Supply Project	593.4	534.1	59.3	Aug - 2012	Aug-2014	188	2.7	593.4	100	-	-	-	-	-	-	-	-	
Maua Water Supply Project Project	380	342	38	Aug - 2012	Aug-2014	152	2.1	380	100	-	-	-	-	-	-	-	-	
1103106300 Maua water and drainage project Phase II	511.4	0	511.4	Jun-2016	Dec-2017	0	0	0	0	-	400	87.1	15	-	289.2	376.3	75%	
Maua Water Distribution Project	225.1	0	225.1	Jun-2016	Jun-2017	0	0	0	0	-	200	26.8	15	-	149.2	176	85%	

Nairobi Water and Sewerage Emergency Physical Investment Project (NWSEPIP)	6,500	6,500	0	Sep-06	Dec-11	250		6,220	1	200	-	6,340	1	-	-	6,350	98.00%	
1103101600 Water & Sanitation Services & Improvement Project	16,000	14,880	1,120	Dec-12	Dec-18	-		3,308	0	3,000	270	6,280	0	3,500		6,578	41.11%	
1103101300 Extension Of Nairobi Water Supply (Northem Collector)	11,060	10,050	1,010	Apr-14	Dec-19	400		330	0	1,000	200	428	0	3,000	250	1,530	13.83%	
1103102100 Nairobi Rivers Basin Restoration	4,710	4,239	471	Sep. 2012	Dec-16	1,450		3,086	1	830	120	4,354	1	400	20	4,036	85.69%	
1103101000 Nairobi Water Distribution Network Phase I	3,300	2,700	600	Jul-14	Dec-18	90		86	0	1,300	130	135	0	800	90	50	1.52%	
1103101100 Nairobi Satelite Towns Water and Sanitation Program	3,080	2,600	480	Jul-14	Dec-18	-		-	0	600	60	42	0	400	80	70	2.27%	
1103102900 Kiserian Sewerage Project	1,400	0	900	Jul-15	Jun-18	-		150	0	-	500	347	0	-	120	337	24.07%	
1103102400 Rehabilitation Of Water Supply And Sewerage For Oloitokitok Town	1,123	825	298	Dec-13	Jun-18	-		-	0	50		-	0	150	60	128	11.40%	
1103102800 Kajiado Rural Water Supply	999	898	101	Apr-16	Jun-18	-		-	0	-		-	0	400	32	390	39.04%	
Nyahururu Water & sewerage Project	1,432	1,045	387	2012	2015	0	0	1,432	0	0	0	0	0	0	0	0	0	

	1						1								1			
Isiolo Water & sewerage Project	900	657	243	2012	2017	0	0	700	90	50	50	800	96	0	0	900	100	
1103102300 GarissaSewarage Project	711	640	71	2009	2014	180	20	732	100	0	0	0	0	0	0	0	0	
Mandera Water	193	0	193	2013	2014	0	63	0	100	0	0	0	0	0	0	0	0	
Griftu water	69	0	69	2013	2014	0	69	69	100	0	0	0	0	0	0	0	0	
Eldas water	89	0	89	2013	2014	0	0	100	100	0	0	0	0	0	0	0	0	
NYS water	357	0	0	2013	2014	0	357	357	100	0	0	0	0	0	0	0	0	
ADB grant	370	370	0	2011	2014	0	0	370	100	0	0	0	0	0	0	0	0	
Garissa sewerage phs 2	696	306	390	2014	2017	0	0	150	0	0	0	200	0	0	0	278	50	
Bute KIDDIP	45	45		2013	2015	20	0	45	100	0	0	0	0	0	0	0	0	
Garbatulla	52	0	52	2014	2015	0	33	73	100	0	0	0	0	0	0	0	0	
Merti w/s	47	0	47	2013	2015	0	8	8	100	0	0	0	0	0	0	0	0	
Water Services Board Support Project;	1500	1200	300	Jun-12	Dec-15	145	27	1100	100%	0	115	1100	100%	0	65	1473		Pending bill
Small Towns Rural Water Supply and Sanitation Project	2409	2155	254	Mar-13	Dec-16	335	25	1711	70%	450	20	2681	100%	1500	30	2681		Pending bill
Kisumu Water Supply and Sanitation Project-Long Term Action Plan III:	1320	1200	120	Jan-10	Sep-16	450	5	455	98%	346	61	629	100%	500	60	1,189		Pending bill

	3850	3400	480	Feb-14	Jun-20	270	5	65	0%	660	20	65	5%	1000	50	933	30%	On going
Water Sector Development (Lake Victoria South) ( Kericho, Kisii, Nyamira,																		
Litein)																		
Lake Victoria Water and Sanitation Short & Long Term intervention – Kericho, Keroka and Isebania Towns.	1506	1320	186	Aug-14	Dec-18	500	10	693	90%	820	25	693	85%	820	80	1282	90%	Ongoing
1103100100 Kisii	5929	5254	584	Nov-15	Dec-22	0	28	14		35	10	12	5%	35	50	15	5%	On going
Water Supply And Sanitation Project ( Bunyunyu Dam)	3636	3234	364	1404-13	Dec-22	U	20	14		33	10	12	370	33	50		370	On going
1103103300 Kericho- Homa bay Wastewater (Trilateral Program)	1900	1710	190	Aug-16	Dec-21	0	0			50	3	14	5%	0	20	14	5%	Feasibility stage
Kisumu water supply and sewerage, LVWATSAN- Package 1&2	7000	6000	1,000	Jul-17	Jun-22	-	-	_	-	-	-		-	1.8	15	1.8	2%	Ongoing
·	91	76	14	Sep-13	Apr-17	40	-	54	60%	36	-	75		3	0	75	100%	Complete d
1103103500 Water Harvesting Program (GoK)	600	0	600	Jul-15	Jun-20	0	0	0	0%									
Mini hydro Power System Water Supply Kisii	1400	1260	140	Jul-17	Dec-21	0	0	0	0%	0	0	0	0%	0				New Project
Homabay cluster project (Belgium Govt).	1100	1000	100	Jun-17	Jul-20	0	0	0	0%	0	0	0	0%	0	0	0	5%	New project

Rangwe Water Supply Project Phase I	50	0	50	Jun-17	Oct-17	0	0	27	60%	-	_	46	90%	-	-	50	100%	Complete d
Sindo Water Supply	23	23	0	Jan-16	Jul-17	0	0	0	0%	23	20	-	0%	-	0	21	100%	Complete d
Rangwe Water Supply Phase II	24	0	24	Jun-17	Oct-17	0	0	0	-	-	_	-	-	=	25	3	31%	on going
West Karachuonyo Water distribution network Project phase 2	36	0	36	Nov-17	Jan-18	0	0	0	0%	0	0	0	0%	0	0	0		Waiting for funds
Rongo Water Supply Project	42	0	42	Aug-11	Jun-20	0	20	32	60%		10	32	60%	-	-	32	60%	on going
Kegati Water Treatment Expansion Project	68	0	68	Aug-10	Jun-20	0	0	60	60%	-	-	60	65%	-	-	-	65%	on going
West uyoma Water Supply Project	45	0	45	Jan-18	Jun-20	0	0	0	0%	0	0	0	0%	0	0	0		On going
Integrated Water Resource Management Program	3000	0	0	Jun-17	Dec-19	0	0	0	0%	0	0	0	0%	0	0	0		New Project
WaSSIP Project – Lumakanda - Kipkarren Water supply project	267	240.3	26.7	Mar 2010	Nov 2015	5	0.5	267	95%	0	0	267	100%	0	0	267	100%	
WaSSIP AF – Drought Mitigation Programme Drilling and Equipping of 17 No Boreholes within LVNWSB Area.		200	0	2014	Feb 2017	30	0	32	10%	2.6	0	39	20%	131	0	172	90%	
Nakayonjo Water Supply Project	140	120	20	Apr 2011	June 2016	5	0.5	130	95%	10	1	140	100%	0	0	140	100%	

National Water Harvesting and Storage Programme	210	0	210	April 2014	Sept 2014	0	60	155.3	80%	0	140	210	100%	0	0	210	100%	
WaSSIP- AF – Drought Mitigation Programme Drilling and Equipping of 10 No Boreholes within LVSWSB Area	150	150		May 2014	Feb 2017	7	0	11	30%	2.5	0	17	60%	133	0	53	60%	
WaSSIP- AF – Drought Mitigation Programme Drilling and Equipping of 22 No Boreholes within RVWSB Area	440	440	0	May 2014	Feb 2017	27	0	36.1	30%	100	0	50	40%	390	0	88	20%	
WaSSIP-AF- Ellegerini and Kapsoya Water Supply Project	673	673	67	May 2016	Jan 2018	0	0	2.4	10%	125	12.5	133	5%	300	30	372	60%	
WaSSIP-AF- Kwanza Water Supply Project	115	115	0	Aug 2016	Nov 2017	5	0	0	0%	1.5	0	6.4	5%	55	0	42	50%	
	65	65	0	June 2016	Oct 2017	0	0	0	0%	20	0	10.7	5%	54	0	40.2	60%	
Kapindaram Water Supply Project	78	78	0	Nov 2016	Nov 2017	5	0	0	0%	3	0	3	5%	73	0	17.6	40%	
Suswa Water Supply Project	108	108	0	Dec 2016	Dec 2017	0	0	0	0%	10	0	7	2%	48	0	40	40%	
Kapcherop Phase II Additional Water Supply Project		128	12.8		Aug 2016	0	0	0	0%	50	5		40%	48	4.8	110	100%	
WaSSIP-Mumias Informal Settlement Water Supply Project	70	70	7	Nov 2014	Sept 2015	14	1.4	14	80%	60	4.1	55	100%	0	0	0	100%	

Eldoret Informal	98	98	10	May	Sept 2016	14	0	9	2%	60	6	64	90%	24	4	79	100%	
Settlement Water Supply Project				2015														
Rehabilitation and Augmentation of Chesikaki Water Supply Project- KIDDP	134	134	0	July, 2015	Dec 2017	10	0	9.8	5%	46	0	49.2	65%	78	0	83	100%	
Bridge and Matunda Water and Sanitation Projects	30	0		May 2016	June 2017	0	0	0	0	0	20	11.6	30%	0	10	22.3	90%	
1103105700 Mt Elgon-Bungoma- Busia Gravity Scheme	37	0	37	Feb 2016	May 2017	0	10	5.4	5%	0	15	16.3	40%	0	0	23.6	90%	
Eldoret Water and Sanitation Master Plans	160	160	16	Oct 2016	Oct 2017	0	0	0	0%	0	0	0	0%	50	1	30	80%	
1103105300 Vihiga Cluster Project-Belgium funding	1,700	1,700		August 2016	August 2019	0	0	0	0%	0	0	0	0%	0	10	5	5%	
NRW for Kimilili and Mumias	26	26	2.6	Nov 2016	June 2018	0	0	0	0%	0	0	0	0%	10	1	2.6	10%	
Kaewa-Masinga Water Supply	109	_	109	Jul-13	Sep-14	-	109	109	100%	-	_	109.2	0%	=	-	109.2	100%	
1103104400 Kiambere – Mwingi Water Supply and sanitation project Phase II	1,450	1,400	50	Jan-17	Jan-19	-	-	-	0%	500	-	11	0%	300	2	14	4%	
Migwani Water Supply	100	100		May-15	Dec-17	100	-	-	40%	-	_	-	50%	-	-	75	80%	
Konza Phase City water supply	77	_	77	Jan-14	Sep-15	-	-	-	82%	-	-	-	100%	-	-	_	100%	
Matungulu water supply project	116	116	-	Feb-12	Dec-17	-	77		81%	-	-	-	95%	-	-	114	98%	

MasingaKitui	2,378	2.000	378	Aug-12	Jun-15	L			0%			1	100%	L		L	100%	1
water supply and Sanitation project		2,000	376	Aug-12	Jun-13				070				10070				100%	
Rehabilitation of Yatta canal	2,200	2,000	200	Aug-14	Dec-16	1,900	50	220	15%	1,200	100	772	35%	-	-	1,532	100%	
Kajiado water supply project	70	70	-	Jul-13	Sep-14	70	-	70	100%	-	-	-	100%	-	-	-	100%	
MasingaIkaatineI kalakala Water supply project	189	-	139	Jan-17	Jan-18	-	139	-	0%	-	-	-	0%	-	172	8	78%	
Construction of Small dams and water pans	350	-	350	Jul-13	Jun-14	-	348	348	100%	-	-	348	100%	-	-	348	100%	
1103102700 Itare Dam Water Project	35,000	29,000	6,000	June 2016	June 2020	0	10	10	1	10,000	189	4,189	5	10,000	189	8378	12	
Narok Water Supply project.	1,500	1,350	150	Jan 2014	June 2016	600	35	635	40	750	55	1,170	100	0	0	1,440	100	
Baringo County Borehole Water project	1,250	100	150	July 2014	June 2016	600	35	635	51	500	15	1,150	95	0	0	1,150	95	
1103109000 Chemususu Dam Water Supply Project	3,500	0	3,500	July 2016	June 2020	0	27	27	1	0	300	327	9	0	500	827	27	
1103100600 Rehabilitation of Water and Sanitation - Kirandich Phase II	1,985	1,800	185	Feb 2017	June 2019	600	12	12	0.1	600	30	42	0.2	600	40	82	0.4	
Sabor – Iten – Tambach Water Supply Project	1,950	1,800	150	Jan 2015	Dec 2016	640	40	680	35	925	25	1,630	84	235	0	1,865	97	
1103109100 Sabor – Iten – Tambach Water Supply Project Phase II	1,000	1,000	0	July 2016	Dec 2017	0	0	0	0	300	0	300	30	600	0	900	90	
Napuu Well field Development Project	35	0	35	Feb 2014	June 2015	0	25	35	100	0	0	0	100	0	0	0	100	

LotikipWellfield Development	2.9	0	2.9	July 2014	June 2015	0	2.9	2.9	100	0	0	0	100	0	0	0	100	
Project 1103107800 Kenya Town Sustainable water Supply and Sanitation	3,604	3,163	428	July 2017	June 2020	0	0	0	0	0	0	0	0	0	0	0	0.1	
Programme - RV																		
Pusol Water Supply Project	84	0	84	July 2016	Dec 2017	0	0	0	0	0	0	0	0	0	84	84	74	
Lake Nakuru Biodiversity Conservation Project.	100	0	100	July 2016	Dec 2017	0	0	0	0	0	0	0	0	0	0	0	50	
1103101600 Water & Sanitation Services & Improvement Project	7,552	6,872	680	Dec-12	Dec-17	910	90	2,181	28.88	910	90.0	3,397	45	3,514.42	347.58	4,803	63.6	project ongoing
Mwache Dam- Dam Construction, Treatment Works Construction and Transmission Mains Construction (AFD)	14,800	13,320	1,480	Jul-17	Jul-21	0	0	0	0.00	0	0	0.0	0.0	0	O	0.0	0.0	New Project
Water and Sanitation Development Project (IDA)	4,000	4,000	0	Dec-17	Oct-22	0	0	0	0.00	0	0	0.0	0.0	0	0	0.0	0.0	New Project
	33,500	30,150	3,350	Nov-17	Jun-21	0	0	0	0.00	0	0	0.0	0.0	0	0	0.0	0.0	New Project
Equalization fund project	2,690	0	2,690	Jul-17	Jul-21	0	0	0	0.00	0	0	0.0	0.0	0	0	0.0	0.0	New Project
1103104900 Up- scaling of Basic Sanitation for the Urban Poor (UBSUP)	1,013	713	300	Jul. 2011	Dec. 2018	350	50	349.7	35%	228	25	525.6	52%	0	50	576.7	57%	

1103100900 Water Sector Development (Support WSTF)	1,656	1,183	473	Dec. 2014	Jun. 2018	141.5	100	100	6%	472	100	422.3	26%	420.5	152	965.3	58%	
	1,385	1,185	200	Dec. 2014	Jun. 2018	85	25	0	0%	200	25	125.8	9%	117.5	25	250.2	18%	
1103105100 Support to Equitable Access to quality water	1,050	750	300	Oct. 2014	Jun-19	169	125	169	16%	60	50	0	16%	40	195	257.5	24%	
1103100300 Support to the Water Resources Management and Water Service Provision	865	460	405	Oct. 2014	Jun-19	205	150	205	24%	40	200	0	24%	106	0	90.4	34%	
T103105200 Green growth and employment creation-Access to and management.		975	293	Jul. 2016	Jun. 2021	0	0	0	0	0	0	0	0	328	0	102	8%	
Climate Proofing Investments for Resilience in ASAL (CPIRA)	3,076	2,270	806	Aug-17	Dec-21	0	0	0	0	0	0	0	0	0	0	0	0	
Water Supply and Sanitation for the Urban Poor -KfW IV	1,771	1,265	506	Jan-18	Jun-21	0	0	0	0	0	0	0	0	0	0	0	0	
Pro-poor access to Water and Sanitation in ASAL-Denmark	2,000	1,500	500	Nov-17	Dec-20	0	0	0	0	0	0	0	0	0	0	0	0	
Server room upgrade	3.4	0	3.4	17.3.16	17.8.16	0	0	0	0	0	3.4	2.7	80	0	0.7	2.7	100	
ICT Hardware	4.8	0	4.8		17.8.16	0	0	0	0	0	4.8	3.8	80	0	1.0	3.8	100	

1103109400	0	0	15	1-7-2016	30-6-2017	0	0	0	0	0	0	15	10	0	60	75	30	
Development of																		
Regulatory																		
systems																		

## Irrigation Subsector

Project Code & Project	Total Estimat ed Cost		ted Cost Project ncing)	Ti	meline		FY 20	014/15			FY 20	015/16			FY	2016/17		Remarks
Title	of Project or Contrac t Value (a) (Kshs. Millions	Foreig n	GoK	Start Date	Expected Completi on Date	Approv ed Foreign Budget	Approv ed GoK Budget	Cum m. Exp. as at 30th June, 2015	Completio n stage as at 30th June, 2015 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumm. Exp.as at 30th June, 2016	Complet ion stage as at 30th June, 2016 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumulati ve Expenditu re as at 30th June, 2017	Completio n stage as at 30th June, 2017 (%)	
110410010 0 Thwake Multi- Purpose Water Developme nt Program.	38,000	12,530	25,470	12/4/1	12/31/21	160	-	16	0.07	509	962	920	4	215	800	1,706	8	92% of Program overall budget is for civil works - construction of Thwake dam, which shall be absorbed upon the signing of the contract with the contractor. This explains the low absorption rate.

Project Code & Project	Total Estimat ed Cost	of the	ed Cost Project ncing)	Ti	meline		FY 20	014/15			FY 20	015/16			FY	2016/17		Remarks
Title	of Project or Contrac t Value (a) (Kshs. Millions	Foreig n	GoK	Start Date	Expected Completi on Date	Approv ed Foreign Budget	Approv ed GoK Budget	Cum m. Exp. as at 30th June, 2015	Completio n stage as at 30th June, 2015 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumm. Exp.as at 30th June, 2016	Complet ion stage as at 30th June, 2016 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumulati ve Expenditu re as at 30th June, 2017	Completio n stage as at 30th June, 2017 (%)	
110410020 0 Small holder Irrigation Programme	630	550	80	2/26/1	6/30/19	,	•	-	-	-	-		-	172	30	100	15.87	The project is at the fourth phase where the procurement of the Implementati on Support Consultant (ISC) is completed. Currently, farmers are being prepared for uptake of the loan and construction is expected to start in 2018-2019 FY.
110410040 0 Bura Irrigation Scheme.	7,356	2,207	5,149	5/27/1	7/31/18	-	•	-	-	735	340	1,853	25	230	500	2,583	30	Project at 30% construction of intake and new gravity irrigation canals almost completed. Construction of structures on going.

Project Code & Project	Total Estimat ed Cost	Estimat of the l (Final	Project	Ti	meline		FY 20	014/15			FY 20	015/16			FY	2016/17		Remarks
Title	of Project or Contrac t Value (a) (Kshs. Millions	Foreig n	GoK	Start Date	Expected Completi on Date	Approv ed Foreign Budget	Approv ed GoK Budget	Cum m. Exp. as at 30th June, 2015	Completio n stage as at 30th June, 2015 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumm. Exp.as at 30th June, 2016	Complet ion stage as at 30th June, 2016 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumulati ve Expenditu re as at 30th June, 2017	Completio n stage as at 30th June, 2017 (%)	
110410050 0 Land Reclamatio n (Land Degradatio n Assessment Program)	394	-	394	7/30/1	6/30/20	•	-	-	-	-	-	-	-	-	-	54	13.7	-
110410060 0 Community Based Irrigation Projects.	9,280	-	9,280	7/30/1	6/30/19	-	-	-	-	-	-	-	-	-	270	2,739	29.5	-
110410070 0 GalanaKula lu Irrigation Developme nt Project (10,000acre s).	8,681	7,295	1,386	8/30/1	7/31/17	-	-	-	20	3,190	1,416	4,116	50% civil works. 25% productio n and operation	2,600	615	7,331	75% civil works. 45% production and operation.	Donor funded flagship project. On completion, the project will as a start meet the food needs of Coast region residents who are adversely affected by drought.

Project Code & Project	Total Estimat ed Cost	of the	ted Cost Project ncing)	Ti	meline		FY 20	)14/15			FY 2	015/16			FY	2016/17		Remarks
Title	of Project or Contrac t Value (a) (Kshs. Millions	Foreig n	GoK	Start Date	Expected Completi on Date	Approv ed Foreign Budget	Approv ed GoK Budget	Cum m. Exp. as at 30th June, 2015	Completio n stage as at 30th June, 2015 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumm. Exp.as at 30th June, 2016	Complet ion stage as at 30th June, 2016 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumulati ve Expenditu re as at 30th June, 2017	Completio n stage as at 30th June, 2017 (%)	
110410080 0 National Expanded Irrigation Programme	225,998	-	225,99	7/30/1	6/30/20		-	1	15	10	4,073	15,006	23% civil works	-	2,305	17,256	30% civil works	Ongoing project. Funds availed will towards settling pending bills and completion of stalled projects.
110410090 0 Mwea Irrigation Developme nt Project (Thiba Dam and Irrigation Area).	19,967	7,884	12,083	2/28/1	6/30/20	,	-	-	Land compensati on 10%. Civil works 0%	2,207	850	4,316	Land compens ation 98%. Civil works 0%.	1,049	350	5,208	Land compensati on 98%. Civil works 0%.	JICA funded project. GoK funds allocated will go towards paying part of the land compensatio n to enable possession of the site by the Contractor.
110410100 0 Rwabura Irrigation Developme nt Project.	880	800	80	7/1/16	7/30/20	-	-	-	-	-	-	-	-	-	30	30	3.4	Spanish funded project. Funds allocated will go torwards paying for the way leave to allow

Project Code & Project	Total Estimat ed Cost	of the	ted Cost Project ncing)	Ti	meline		FY 20	014/15			FY 2	015/16			FY	2016/17		Remarks
Title	of Project or Contrac t Value (a) (Kshs. Millions	Foreig n	GoK	Start Date	Expected Completi on Date	Approv ed Foreign Budget	Approv ed GoK Budget	Cum m. Exp. as at 30th June, 2015	Completio n stage as at 30th June, 2015 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumm. Exp.as at 30th June, 2016	Complet ion stage as at 30th June, 2016 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumulati ve Expenditu re as at 30th June, 2017	Completio n stage as at 30th June, 2017 (%)	
	,																	possession of the site by the Contractor.
110410110 0 National Water Harvesting and Ground Water Exploitatio n.	11,000	-	11,000	8/30/1	6/30/21	-	-	-	-	-	-	-	-	-	2,000	997	9	GoK funded project aiming to increase water availability to enhance land productivity through micro irrigation and other uses.
110410120 0 Water for Schools.	2,030	-	2,030	7/30/1 6	8/30/20	-	-	-	-	-	-	-	-	-	530	6.23	0.30	Extracted water will be used for small scale irrigation and domestic use and encourage the youth to embrace irrigated agriculture
110410130 0 Turkana Irrigation	9,197	-	9,197	6/30/1	6/30/20	-	-	-	-	-	-	-	-	-	-	-	-	On goingproject where

Project Code & Project Title	Total Estimat ed Cost	Estimated Cost of the Project (Financing)		Timeline		FY 2014/15				FY 2015/16				FY 2016/17				Remarks
	of Project or Contrac t Value (a) (Kshs. Millions	Foreig n	GoK	Start Date	Expected Completi on Date	Approv ed Foreign Budget	Approv ed GoK Budget	Cum m. Exp. as at 30th June, 2015	Completio n stage as at 30th June, 2015 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumm. Exp.as at 30th June, 2016	Complet ion stage as at 30th June, 2016 (%)	Approv ed Foreign Budget	Approv ed GoK Budget	Cumulati ve Expenditu re as at 30th June, 2017	Completio n stage as at 30th June, 2017 (%)	
Developme nt Project.																		projects affected by El-Nino will be reinstated. These project go along way in supplementing the food needs of the Turkana Community during drought. Project previously implemented under National Expanded Irrigation Programme.
110410150 0 Lower Kuja Irrigation Scheme.	4,414	-	4,414	5/31/1	30/6/21	-	-	-	-			-	-	,	-			Ongoing project that will entail implementati on of farm irrigation infrastructur e to enable utilization of primary infrastructur e installed under phase 1.

**Mining Subsector** 

	Subsec		, ,	m	eline		E357.4	2014/15			ES. 201	F11.6			TIN 201 //	5		
Project Code & Project Name	Total Cost of Project/ Contrac t Value	Proje (Final g)	Cost of Project inancin gP or G Start Expec App App Cumu Co							FY 2015/16				FY 2016/1			Remarks	
		For eig n	G O K	Start Date	Expec ted Comp letion Date	App rove d Fore ign Bud get	App rove d GO K Bud get	Cumu lative Expen diture as at 30th June, 2015	Comp letion Stage as at 30th June 2015 (%)	Approved Foreign Budget	Approv ed GOK Budget	Cumula tive Expendi ture as at 30th June, 2016	Completi on Stage as at 30th June 2016 (%)	Appro ved Foreig n Budget	Appro ved GOK Budget	Cumula tive Expendi ture as at 30th June, 2017	Completion Stage as at 30th June 2017 (%)	Remarks
		Million									Ksh Mill		,					
1191002 01Geolo gical data bank	400	0	40 0	2014 /7	2018/	0	0	0	0%	0	30	30	100%	0	100	43	50%	Contract awarded Project is ongoing
1191100 301Mini ng cadastre portal	380	30	35 0	2015 /7	2018/	30	0	30	100%	0	2	2	100%	0	60	34	56%	Project is ongoing & additional modules incorporated
1191100 401Mine ral Audit Support	365	0	36 5	2015 /7	2018/	0	0	0	0%	0	11	10	100%	0	70	24	40%	Contact awarded to PWC for consultancy. Project is ongoing
1191100 501Mine ral Certificat ion Lab	798	0	79 8	2014 /7	2018/	0	0	0	0%	0	73	18	30%	0	103	52	50%	Contract for equipment awarded. Project is ongoing
1191100 601Geol ogical mapping & mineral mapping	1.061	0	1.0 61	2015 /7	2018/	0	0	0	0%	0	143	45	35%	0	130	77	60%	Contract for equipment awarded. Project is ongoing

1191100 701Gem stone Centre- TaitaTav eta	120	0	12	2015	2018/	0	0	0	0%	0	25	25	100%	0	35	30	90%	Project civil works are complete awaiting equipment installation
1191101 501Grani te assesmen tcentre in Vihiga	200	0	20 0	2016	2018/	0	0	0	0%	0	0	0	0%	0	80	5	10%	Project at inception stqge.consultanc y being undertaken
1191101 401Natio nal Airborne Geophys ical servey	9.740	9.0	74 0	2015	2018/	0	0	0	0%	0	45	12	30%	0	144	144	100%	Project to be funded by China Exim bank
1191100 801Afric an Mineral Develop ment centre	84	0	84	2016	2018/	0	0	0	0%	0	0	0	0%	0	10	4	50%	Project is ongoing (site identified)
1191100 901Acqu isition of Lidar scanner	340	0	34	2016 /7	2018/	0	0	0	0%	0	0	0	0%	0	140	140	100%	Lidar procured and user training ongoing
1191101 001Acqu isition of a Hypespe ctral sensor	270	0	27 0	2016	2018/	0	0	0	0%	0	0	0	0%	0	70	70	100%	Sensor procured and user training ongoing
1191101 101Geo- informati on infrastuct ure for resource mapping	340	0	34 0	2015 /7	2018/	0	0	0	0%	0	25	25	100%	0	60	20	40%	Sateliteimegerys oftwares and licenses to be procured

1191101 2010ver haul of survey aircraft	256	0	25 6	2015 /7	2018/	0	0	0	0%	0	6	6	100%	0	20	20	100%	Overhaul of 2 partenavia 68 aircraft
1191101 601Reha bilitation of MadiniH se& DRSRS Hqs	300	0	30 0	2016 /7	2018/	0	0	0	0%	0	0	0	0%	0	50	0	0%	Funds were factored late in Supplementary II estimates.Contra ctissiued and contractor on site
1191100 101Extra ctive industrie s for sustainab le develop ment	88	88	0	2014 /7	2018/	22	0	22	100%	22	0	22	100%	0	10	10	100%	Grant AIA from UNDP. roject is ongoing

#### 2.3 Review of Sector Pending Bills

The sector has seen an increase in pending bills over the review period mainly due to uncertainty in the budgetary allocations. The total pending bills increased by 139% from KSh. 8,204 Mn in 2014/15 to KSh. 19,758.6 Mn in 2016/17. This was due to budget cuts for ongoing projects which were under contracts. The details of pending bills are shown in table 2.7 below. The ratio of pending bills to the actual expenditure was 15%, 24% and 28% during the period.

#### 2.3.1 Recurrent Pending Bills

The recurrent bills increased from Kshs. 944 Mn to KShs. 1,614 Mns from 2014/15 to 2016/17FY representing an increase of 71%. The ratio of recurrent pending bills to the actual expenditures was on average of 2% during the period under review. Notably, majority of recurrent pending bills were due to sue of goods and services and social benefits which were brought by lack of exchequer.

## 2.3.2 Development Pending Bills

The development pending bills increase by 132% from KShs. 6,523 Mn in 2014/15 to KSh. 15,134.8 Mn in 2016/17. The increase was due to amounts owed to contractors for works and consultancy services for the various projects undertaken by the sector. This was accessioned by the budget cuts for ongoing projects which were under contracts. The ratio of development pending to actual expenditure is 12%, 17% and 21% for 2014/15,2015/16, 2016/17 respectively.

Table 2.7: Summary of Pending Bills by Nature and Type (KShs. Millions)

Type/ Nature	Due to	lack of exc	chequer	Due to	lack of pr	ovision
	2014/15	2015/16	2016/17	2014/15	2015/16	2016/17
Recurrent Expenditure	944	1184	1615	737	2865	2830
Compensation of Employees	13	37	31	1	4	0
Use of Goods and Services e.g. utilities, domestic and foreign travel	756	987	1161	676	545	892
Social benefits e.g. NHIF, NSSF, etc.	175	160	150	0	461	516
Other expense	0	0	273	60	1855	1422
<b>Development Expenditure</b>	768	3036	6279	5755	6754	8855
Acquisition of Non-Financial Assets	224	2038	3259	5755	6754	8439
Use of Goods and Services e.g. utilities, domestic and foreign travel,	42	416	246	0	0	416
Other expenses	502	582	2774	0	0	0
TOTAL PENDING BILLS	1712	4220	7894	6492	9619	11685

#### **CHAPTER THREE**

#### 3.0 MEDIUM TERM PRIORITIES AND FINANCIAL PLAN 2018/19-2020/21

The Chapter identifies programmes, sub-programmes, outputs, key performance indicators and budgetary requirement for the sector implementation in MTEF period 2018/19 - 2020/21. The chapter further expounds on the resource requirements under each programme, sub programme, economic classifications as well as Semi-Autonomous Government Agencies (SAGAs). The chapter presents programme ranking criteria that form the basis of resource allocation.

### 3.1 Prioritization of programmes and sub programmes

In the MTEF period 2018/19-2020/21, EPWNR sector has prioritized programs and sub programs intended to promote sustainable utilization and management of environment and natural resources for socio-economic development. The sector has prioritized its programmes using the criteria below as derived from Treasury Circular No. 9/2017 of August 30, 2017 among other relevant policy documents.

#### 1. Enablers of the BIG FOUR Agenda.

- 4-2. Linkages of the programme with the objectives of the Medium Term Plan of Vision 2030
- 2-3. Degree of which a programme is specific in addressing the vulnerable members of the society especially children, people living with disabilities, women and the elderly among others
- 3.4. Degree to which programmes address core poverty interventions
- 4-5. Degree to which the programme addresses core mandate of the Ministry, and the defined Government Priorities
- 5.6. Expected outputs and outcomes from a programme
- 6.7. Backward and forward linkages of a programme with other programmes
- 7-8. Requirements for the ongoing priority programmes planned for funding in the medium-term
- **8.9**. Donor commitment and requirement for the commensurate
- 9.10. Cost effectiveness and sustainability of the programme

#### 3.1.1 Programme and Their Objectives

Objectives
ector.
To provide policy and legal framework for efficient and effective management of the environment.
To sustainably manage and conserve environment.
To provide reliable weather and climate information for decision making.
Sub-sector.
To sustainably manage and conserve forests and water towers

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Programmes	Objectives
Wildlife Conservation and Management	To sustainably conserve and manage Kenya's wildlife
General, Administration, Planning and Support Services	To provide policy and legal framework for efficient and effective management of the natural resources
State Department for Water Services Sub	-sector
General Administration, Planning and Support Services	To promote good governance in the management of water resources
Water Resources Management	To increase availability of safe and adequate water resources
Water and Sewerage Infrastructure Development	To enhance accessibility of water and sewerage services
<b>State Department for Irrigation Sub-secto</b>	or
Irrigation and Land Reclamation	To enhance utilization of land through irrigation, drainage and land reclamation.
Water Storage and Flood Control	To increase per capita water storage capacity for irrigation and other uses.
General Administration, Planning and Support Services	To provide efficient and effective support services for delivery of the State Department's programmes.
Ministry of Mining Sub-sector.	
Mineral Resource Development	To develop and manage geological and mineral resources database
Resource Surveys and Remote Sensing	To generate geo-spatial data and information for sustainable development.
General Administration, Planning and Support Services	To provide efficient and effective support services for management of mineral and geo-information data.

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

Table 3.1 below summarizes the programme, delivery unit, key programme output, key performance indicator, targets and achievements for financial 2016/17, base line targets for financial year 2017/18 and targets for the MTEF period 2018/19-2020/21.

Table 3.1 Programmes/ Sub-Programme, Outcome, outputs and Key Performance Indicator (KPIs)

Environment	Sub sector								
Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		nistration Planning and Suppo and legal framework for efficion	ort Services ent and effective management of	the enviror	nment				
SP 1: General	Administratio n, Finance and	Policies, legal and institutional Framework	No. of policies developed	1	4	3	3	3	3
Administrati	Planning	developed	No. of Bills Developed	1	-	1	1	1	1
on, Planning and Support		Planning Services	No. of M& E reports	4	4	4	4	4	4
Services			Number of Sector reports	1	1	1	1	1	1
		Financial Services	No. of days funds are released upon release of exchequer	5	5	5	5	5	5
			Number of audit report	12	12	12	12	12	12
			Number of weeks taken to procure supplies and services upon requisition	5	5	5	5	5	5
		Management and Protection nage and conserve environmen	nt		•				
SP 2.1: Policy &	Directorate of Environment	Improved environment governance Number of	No. of policies developed and implemented	2	2	2	2	2	2
Governance in			No. Of legislations developed and reviewed	2	2	2	2	2	2
Environmen t			No. of MEAs, ratified and domesticated	3	2	5	5	5	5
		Phased out ozone depleting substances	No of ODS Friendly technologies being used	3	2	10	15	15	-
			% of compliance to Montreal Protocol	45	45	50	60	60	-
	MEAs	Support to Kenya for the revision of NBSAPs	No. of framework for the protection, conservation and management of biodiversity	2	1	1	1	1	1

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
			developed						
		Sound Chemical Management and UPOPs reduction in Kenya	No. of policies and strategies and action plans developed	3	4	4	4	4	4
SP 2.2: National Environmen t	LVEMP II	Waste Management and Pollution Control	Number of waste water Treatment Facilities (sewerage) constructed/rehabilitated	3	3	3	0	0	0
Managemen t			Number of Sanitation facilities- bio toilets In public/schools constructed.	17	9	17	0	0	0
	NEMA	Waste Management and Pollution Control	No. of Counties monitored on the implementation of the waste management strategy	35	47	47	47	47	47
			No. of counties pollution and waste sources mapped	5	5	10	6	8	12
			No. of sector stakeholders Sensitized on environmental management	17	20	23	25	27	30
		Compliance with environmental laws	% of environmental cases prosecuted	100	100	100	100	100	100
			No. of licenses issued as per regulations	5,789	11,983	4,000	6,600	6800	7,300
			No. of regulation reviewed	1	1	1	1	1	1
			No. of National and County Environment Action Plans prepared and monitored	47	47	48	48	48	48
			1 National and 47 County SOEs every 2 years	48	48	48	-	48	-

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		Managed and Conserved Environment	No of Wetlands gazetted as conservation areas/reserves			6	6	6	
	NETFUND	Increased funds availed to support environmental awards , capacity building, research , publications, scholarships and grants	No. of environmental awards, capacity building, research, publications and scholarship projects implemented and monitored	30	46	36	45	45	50
			Funds mobilized (Ksh million)	120	129	180	180	180	180
		Increased awards for up scaling best practices.	No. of projects awarded and upscaled	27	26	15	30	35	40
		Increased access to credit and grants for green Micro, Small and Medium Size Enterprises (MSMEs) in Kenya	Funds mobilized (Ksh million)	-	-	0	500	500	500
		Adoption of green energy technologies	No. of green energy adoption projects designed, developed and implemented	-	-	1	1	1	0
			No. of green growth applied research projects supported	-	-	2	2	2	2
			No. of CIDPs (2017-2022) integrating green energy technologies agenda	-	-	5	5	5	5
		Enhanced capacity of state agencies to access climate finance	No. of low carbon & climate resilient green growth concepts developed to access climate finance	-	-	-	9	0	0
			No. of bankable/ investment proposals developed for submission to relevant	-	-	-	3	0	0

ogramme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/2
			funding agencies						
	LECRD	Intended Nationally Determined Contributions (INDCs) Prepared	Number of laws, policies, strategies, plans, or regulations addressing	1	1	1	0	0	0
		Mechanisms established to track climate financing flows.	climate change at National level (Officially proposed/adopted	1	1	1	0	0	0
		Low cost quality solar lanterns widely adopted.	Number of technologies or management practices in	1	1	1	0	0	0
		An operational National GHG Inventory system.	development phases of research, field testing or made available for transfer of development	1	1	1	0	0	0
		Solar PV powered information and business centers in ASALs.	Expected lifetime energy savings from energy efficiency or energy conservation (Giga Joules)	0	0	1.2	0	0	0
		Climate Change integrated in national and county decision making processes	Number of people trained, mentored, provided TA at the County /sub-national level	159	108	108	60	0	0
		Operational National Climate Change Diagnostic Laboratory.	No. of Operational National Climate Change Diagnostic Laboratory.	1	0	1	0	0	0
		Area Yield Insurance Index agriculture insurance provided to farmers	Number of newly supported or formed public private partnerships.	6	1	6	0	0	0
	URRP/DOE	Riparian areas rehabilitated and protected	No. of KM of riparian areas rehabilitated	24	20	24	100	100	100

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem	Target (Baseline)	Target 2018/19	Target 2019/20	Target 2020/21
					ent 2016/17	2017/18			
			No. of seedlings planted (Million)	1	0.18	1.4	1.6	1.8	1.8
	Imarisha Naivasha	Managed and conserved environment	Hectares of rehabilitated river riparian.	320	76	320	320	320	320
	Programme		Number of seedlings planted.	960,000	19,000	960,000	960,000	960,000	960,000
			No. of community outreach forums within the catchment	13	0	12	12	12	12
			No. of alternative livelihood systems supported within the basin	5	1	4	4	4	4
	LVEMP II	Reduced environmental stress in Lake Victoria basin to enhance basin ecological integrity	Number of hectares under sustainable land management practices in the targeted sub- catchments	2250	3459	2250	0	0	0
			No. of hectares of degraded wetlands restored and/or rehabilitated	300	304	300	0	0	0
			Number of identified water hyacinth hotspots with active monitoring and removal activities	5	4	5	0	0	0
			Number of Community Driven Development sub- projects implemented.	247	225	247	0	0	0
	LVEMP III	Improved collaborative management of trans- boundary natural resources of Lake Victoria Basin	Number of feasibility studies and Baseline reports.	0	0	60	60	60	0
	National Solid Waste Management	Improved knowledge on national waste management status	No. of Baseline reports on national solid waste management	-	-	2	2	1	-

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		Improved waste management	Number of mapped national	-	-	30	45	50	-
		Infrastructure Established waste management capacity building and awareness	dumpsites  Number of trainings and publicity events	-	-	282	144	50	-
	Suswa-Lake Magadi-	Reduced soil erosion in upper catchment	No of km of Terraces	-	-	20	20	20	20
	Migori environment restoration	Increased area of rehabilitated landscape catchment	No. of seedlings raised and planted (Million)	-	-	5	5	5	5
	project	Established Vetiver grass on gulley's	No. of Acres established	-	-	50	60	70	80
		Improved knowledge and skills on catchment restoration	Community capacity building events	-	-	25	20	5	5
SP 2.4: National Climate Change Adaptation and Mitigation	CCD	Green Economy Strategy and Implementation Plan finalized and rolled out	- No. of technologies promoted and piloted	2	3	4	5	6	7
	3: Meteorologica provide reliable	l Services e weather and climate informat	ion for decision making						
SP 3.1: Modernizati	Meteorologica 1 Department	Weather and climate products and information	No. of Digital Equipment No. of Upper Wind stations	300	300	2	300	300	300
on of Meteorologi			No. of sondes No. weather balloons	365 365	365 365		1095 1095	1095 1095	1825 1825

Environment	Sub sector								
Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
cal Services			No. of High Performance Computing systems	3	3	4	0	0	0
			No. of Climate Database Management System	2	0	2	5	5	5
			No. of Tidal Gauges	2	0	2	2	2	2
			No. of Airport Weather Observing System (AWOS) – Phase IV	3	3	3	3	3	3
			No. of Automatic Weather Stations (AWS) - Phase V	15	20	20	20	20	20
			No. of Hydro-Meteorological stations installed	20	0	20	20	20	20
SP 3. 2:	Meteorologica	Weather modification	No. of Weather Radars	2	0	2	1	1	0
Advertent Weather	1 Department		No. of Community Resource centers	2	2	0	4	4	4
Modificatio n			No. of stations	2	2	2	4	4	4
			No. of RANET equipment	20	20	30	30	40	40
			No. of Weather modification research center	0	0	0	1	1	1
			No. of cloud laboratory	0	0	1	1	1	1
			No. of specialized aircrafts	0	0	0	0	0	2

Natural Resource	es Sub sector								
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		nt and Protection ee cover for improved	livelihoods						

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
SP 1.1: Forests Conservation	Kenya Forest Service	Increase forest cover	% Increase forest cover	6.9	6.9	7.1	-	-	-
and Management	System for Land Based Emissions Estimation in Kenya (SLEEK)	A fully functional measurement, reporting and Verification (MRV) system.	No. of modules developed, validated, calibrated and attached to the MRV system	3	3	3	-	-	-
	Kenya's Water Tower Protection & Climate Change (WaTER) Programme-EU	Conservation and protection of water towers	Area of forest conserved and protected in the water towers in Ha.	200	50	180	-	-	-
	Forest Irrigation Climate and Green Energy Project (FICaGE)	Increased forest cover in the ASALS and dry land	Area of dry land under forest irrigation in Ha.	50	18	2500	-	-	-
	Green schools	Greened public schools	No. of schools Greened	110	125	178	-	-	-
	Natural Forestry Programme	Increased national forest cover	Area of existing closed canopy forests protected (Million Ha)	2.3	2.3	2.4	-	-	-
			Area of degraded natural forest rehabilitated (Ha)	628,000	781,885.1	633,500	-	-	-
		Increase net forest cover in non-	Area of forest cleared of invasive species (Ha)	0	0	1200	-	-	-

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Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		terrestrial forests (mangroves)	Ha of degraded mangrove ecosystems rehabilitated	0	0	450	-	-	-
	Forest Plantations	Increased industrial forest plantation cover	Area plantations forest protected against poaching, diseases& fire in ha	142,000	142,000	142,000	-	-	-
			Established, implemented and monitored station management plans	12	12	22	-	-	-
			Establishment of bamboo plantations in gazette forest (Ha)	4,000	1,009	6,500	-	-	-
	Farm and Dry land Forest Development	Increase private forest plantation cover	Area under promotion of fast growing species in private land in Ha	9,500	9,000	10,500	-	-	-
		Increase farmland and ASAL tree cover	Area of farms with integrated tree growing in Ha	40,000	19,643.8	50,000	-	-	-
	Forest rangers camp rehabilitation	Forest rangers camp rehabilitation	No. of Forest rangers camp rehabilitated	12	10	250	-	-	
	Forest roads	Forest roads constructed	Kms of forest roads maintained	2124	2224	2650	-	-	-
			kms of forest roads improved	1696	1055	750			
			No. of bridges built	2	1	4	-	-	-

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	Capacity Project for Sustainable	Enhanced capacity for sustainable forest management	No. of Pilots implemented	1	1	1			
	Forest Management	Forest cover percentage mapped	No. of new tree breeds	2	2	2			
		out	% of forest area mapped	0	0	100	-	-	-
	Forest Fire Protection Management	Fire breaks established	Length of firebreaks established (Km)	500	525	1500	-	-	-
	Project	Fire outbreak alert and warning system developed	No. of systems developed	1	1	1	-	-	-
		Training on fire fighting	No, of training held	2	0	4	-	-	-
		Procurement of appropriate equipment	No. of equipment procured	50	0	50	-	-	-
SP.1.2: Forestry Research and	Development of forest	Forest research technologies	No. of research technologies developed	20	21	21			
Development	research technologies	High quality tree seeds	Kg of tree seed produced and distributed	9,700	11,900	9,800	-	-	-
		Seed orchards and seed stand	No. hectares of seed orchards	40	43	42	-	-	-
		New tree products developed	No. of tree products developed	4	4	4	-	-	-
		New tree products incubated and linked to SMEs	No. of new tree products incubated and linked to SMEs	3	3	3	-	-	-

Natural Resour	rces Sub sector								
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	Construction of tree seed processing units	Seeds processing units constructed	No. of Seeds processing units constructed	1	1	1	-	-	-
	Construction of green houses	Increased research capacity	No. of new forestry and products developed	4	4	4	-	-	-
	Construction of Farmer's Resource Center – Taita Taveta and Migori	Increased uptake of forest technologies	No. of forestry technologies and products disseminated	2	2	8	-	-	-
	Development of dryland Eco- region research programme – Tiva on forest as a centre of excellence	Increased research capacity	Status Report	4	4	4	-	-	-
	Development of drought tolerant trees for adaptation to climate	Orchards of Melia volkensii, Acacia tortills and Melia volkensii developed	Ha. of orchards planted	1	1	1	-	-	-
	change	Ha of. progenies of Melia volkensii and Acacia tortilis established	Ha. of progenies established	1	1	2	-	-	-
	Installation of Water hydrants Muguga and	Enhanced research capacity	Percentage of completion	100	100	100	-	-	-

Programme	Delivery Unit	Key Outputs	Key Performance	Target	Actual	Target	Target	Target	Target
Trogramme	·	Key Outputs	indicators	2016/17	Achievem ent 2016/17	( Baseline) 2017/18	2018/19	2019/20	2020/21
	Kitui								
SP 1.3: Policy and Governance in Natural Resource	Conservation Directorate	Forest and wildlife governance	Number of policies, bills and legislation developed and reviewed.	2	2	2	-	-	-
Management	Conservation Department - Forestry	Forest and wildlife governance	Number of policies, bills and legislation developed and reviewed	1	1	1	-	-	,
	Headquarters Administrative Services	Administrative services	Administrative services (%)	100	100	100	-	-	
	Planning and Project Monitoring	Planning services	Planning services (%)	100	100	100	-	-	-
	Financial	Financial services	Financial services (%)	100	100	100	-	-	
	Refurbishment of NSSF Building offices	Habitable Working Environment	Number of floors renovated	1	2	2	-	-	-
SP.1.4: National Resource	Kenya Water Towers Agency	Increased Water towers	Area protected (Ha)	121,000	121,000	200,000	-	-	-
Management		Ecosystem Health	Area rehabilitated (Ha)	200	200	500			
		and resilience	No. of water towers with SMP	1	1	5	-	-	-
			No. of water tower with resource Catalogue(assessment reports)	2	5	5	-	-	-

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		Critical catchment, wetlands and Biodiversity Hotspots within waters towers ecosystems secured.	No. of water towers/critical catchment, wetlands and Biodiversity Hotspots within waters towers ecosystems secured	2	2	5	-	-	-
	Mitigation and management of soil loss	Increased Water Towers Ecosystem Health and	Area protected in Ha  No. of water towers with SMP	121,000	121,000	200,000	-	-	-
		resilience	No. of water tower with resource catalogue	0	0	5			
		Critical catchment, wetlands and Biodiversity Hotspots within water towers ecosystems Secured	No. of water towers/ critical catchment, wetlands and Biodiversity Hotspots identified/secured	2	2	5	-	-	
	Community Livelihood	Community sustainable	No. of nature based enterprises developed	1	1	5	-	-	-
	Improvement Programme (CLIP)	livelihood support programmes established	No. of Water Towers Monitoring Frameworks developed	0	0	3	-	-	-
SP 1.5: Wildlife Security,	Kenya Wildlife Service	Enhanced capacity for Sustainable	No. of ground security patrols	20, 000	24,928	24, 000	-	-	-
Conservation and		wildlife Conservation and	No. of hours for Aerial security patrols	2800	1200	2600	-	-	-

Natural Resour	rces Sub sector								
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
Management		use	No. of field intelligence operations contacted	64	93	50	-	-	-
			Endangered species recovery strategies developed	2	0	2	-	-	-
			% Rate of response to clinical interventions done.	100	100	100	-	-	-
	Modernization of Reduction in	Reduction in poaching	% Reduction in poaching.	40	80	80	-	-	-
	poaching  Human wildlife		Categories of equipment acquired	4	4	4	-	-	
	Human wildlife mitigation programme	Mitigation of human wildlife conflict	% rate of response to HWC case	100%	85%	100%	-	-	-
	programme		Kms. of Fence Constructed	100	42	50	-	-	-
			Kms. of Fence Maintained	1750	1800	1850	-	-	-
			No. of Constructed water pans, boreholes and earth dams	2	2	1	-	-	-
	Ranger Housing Programme	Construction and rehabilitation of ranger houses	No. of Ranger houses constructed and rehabilitated	70	12	210	-	-	-
	Conservation of Biodiversity in Northern Kenya -	Policy and legislative framework	Pilot guidelines for implementation of Wildlife policy developed	Develop pilot guidelines	Pilot guidelines developed	implementa tion	-	-	-

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	FRANCE		Marsabit National Park gazetted	Marsabit National Park gazetted	Marsabit National Park gazetted	implementa tion	-	-	-
			Marsabit National Park Management plan agreed	gazettment	gazetted	implementa tion	-	-	-
			Rehabilitated Kms. of fence	6.7	6.7	3	-	-	-
	Wildlife resource centers	Wildlife Resource Centers Established	No of constructed and renovated youth hostels Meru ,Nakuru Mombasa Kisumu	3	0	1	-	-	-
	Construction of Wildlife security fence in Laikipia	Wildlife security fence constructed	Kms of Wildlife security fence	-	-	2	-	-	-
	Kenya Wildlife Conservation Project	Wildlife conservation	Reduced anti-poaching rate (%)	-	-	21	-	-	-
	Wildlife governance Conservation	Wildlife governance	No. of policies, bills and legislation developed and reviewed	1	1	1	-	-	-
		Towers Conservation ee cover for improved							
SP 2.1: Forests Resources	Kenya Forest Service	Increase forest cover	% Increase forest cover	-	-	-	7.7	7.9	8.0
Conservation and	Kenya's Water Tower	Conservation and protection of water	Area of forest conserved and	-	-	-	150	225	150

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
Management	Protection & Climate Change (WaTER) Programme-EU	towers	protected in the water towers in Ha.						
	Forest Irrigation Climate and Green Energy Project (FICaGE)	Increased forest cover in the ASALS and dry land	Area of dry land under forest irrigation in Ha.	-	-	-	120	150	180
	Natural Forestry Programme	Increased national forest cover	Area of existing closed canopy forests protected (Million Hectares)	-	-	-	2.5	2.6	2.7
			Area of degraded natural forest rehabilitated through enrichment planting in Ha	-	-	-	4,200	4,700	5,200
			Area of degraded natural forest rehabilitated through natural regeneration (Hectares)	-	-	-	300,000	320,000	320,000
		Increase net forest cover in non-	Area of forest cleared of invasive species (Ha)	-	-	-	350	380	400
		terrestrial forests (mangroves)	Ha of degraded mangrove ecosystems rehabilitated	-	-	-	350	380	400

Programme	Delivery Unit	Key Outputs	Key Performance	Target	Actual	Target	Target	Target	Target
			indicators	2016/17	Achievem ent 2016/17	( Baseline) 2017/18	2018/19	2019/20	2020/21
	Forest Plantations	Increased industrial forest plantation cover	Area of forest plantations protected against poaching, diseases & fire in Ha	-	-	-	142,000	142,000	142,000
			No. of station management plans established, implemented and monitored	-	-	-	20	25	28
			Area of bamboo plantations in gazette forest establishment (Ha)	-	-	-	500	600	800
	Farm and Dry land Forest Development	Increase private forest plantation cover	Area under promotion of fast growing species in private land in Ha	-	-	-	5,000	5,500	6,000
		Increase farmland and ASAL tree over	Area of farms with integrated tree growing in Ha	-	-	-	20,000	25,000	30,000
	Forest rangers camp rehabilitation	Forest rangers camp rehabilitation	No. of Forest rangers camp rehabilitated	-	-	-	40	45	50
	Forest roads	Forest roads maintained/	Kms of forest roads maintained	-	-	-	1,200	1,300	1,500
		improved	kms of forest roads improved	-	-	-	500	600	750
			No. of bridges built	-	-	-	1	2	2
	Capacity Project for Sustainable	Enhanced capacity for sustainable forest management	No. of Pilot counties implemented	-	-	-	2	2	2

	rces Sub sector	T 0 1 1	T D e	I m		Lm ,	1 m 4	I	I # 1
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	Forest Management	New tree breeds developed	No. of new tree breeds	-	-	-	2	2	2
		Forest cover percentage mapped out	% of forest area mapped	-	-	-	100	100	100
	Forest Fire Protection Management	Fire breaks established	Length of firebreaks established (Km)	-	-	-	280	350	400
		Fire outbreak alert and warning system developed	No. of systems developed	-	-	-	2	2	2
		Training on fire fighting	No, of training sessions held	-	-	-	4	6	8
		Procurement of appropriate equipment	No. of equipment procured	-	-	-	50	80	100
	System for Land Based Emissions Estimation in	Derived input for the World Food Studies Simulation model	No. Input derived and Calibrated for World Food Studies Simulation model	-	-	-	6	8	10
	Kenya (SLEEK)	Annual Land cover maps developed	No of Annual Land Cover Maps developed	-	-	-	1	1	1
		Carbon soils sampled	No. of soils Samples collected in monitoring sites	-	-	-	100	300	500
		Digitized forest disturbances	% of digitized forest disturbances	-	-	-	30	40	0
		Specialized equipment procured	% of procured specialized equipment to aid in data collection,	-	-	-	50	40	0

Natural Resour	ces Sub sector								
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
			data validation and verification to enhance accuracy						
SP.2.2: Forest Research and	Development of forest	Forest research technologies	No. of research technologies developed	-	-	-	21	22	23
Development	research technologies	Research findings disseminated through production of various publications	No. of publications produced	-	-	-	20	22	25
	Construction of tree seed processing	High quality tree seeds	Kg of tree seed produced and distributed	-	-	-	10,000	10,200	10,400
	units	Seed orchards and seed stand established	No. hectares of seed orchards and stands established	-	-	-	45	46	46
	Construction of green houses	New tree products developed	No. of tree products developed	-	-	-	4	4	4
		New tree products incubated and linked to SMEs	No. of new tree products incubated and linked to SMEs	-	-	-	4	4	4
	Construction of Farmer's Resource	Construction of Farmer's Resource Centers in Taita Taveta, Laikipia, Turkana and Lamu Phase II	Number of resource centers and office blocks	-	-	-	2	2	2
		Research findings disseminated through field days	No. of field days held	-	-	-	38	39	40

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		Research findings disseminated through provision of advisory services	No. of advisory services provided	-	-	-	235	238	240
		Research findings disseminated through trainings	No. of trainings held	-	-	-	3	3	4
	Development of dryland Eco- region research programme – Tiva on forest as a centre of excellence	Demonstration plots established	No. of demonstration plots established	-	-	-	22	23	24
	Installation of Water hydrants Turkana, Lamu	Improved safety of research assets	Number of water hydrants constructed	-	-	-	1	1	1
	Kenya's Water Tower Protection and Climate	Reduced poverty reduction and sustainable livelihoods	Number of nature based enterprises developed and promoted	-	-	-	3	4	5
	Change Mitigation and Adaptation (WaTER) Programme	Technologies for production, management, processing and utilization of bamboo and high value tree products developed	Number of technologies	-	-	-	3	4	4
		Rehabilitation, conservation and IPM technologies	Number of demonstration plots	-	-	-	3	4	4

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		demonstrated							
	KEFRI/JICA Project: CADEP: Capacity Development Project for sustainable forest management in Kenya (Tree Breeding)	Established high quality dryland seed orchards	Number of Ha	-	-	-	9	10	12
	KEFRI/JICA: CADEP - Capacity	Improved capacity on adaptation to climate change	Number of training workshops held	-	-	-	0	1	1
	Development Project for Sustainable	Improved capacity on adaptation to climate change	Number of regional forums held	-	-	-	1	1	1
	Forest Management in Kenya (Regional Cooperation)	Improved capacity	Number of good practices collected, documented and shared	-	-	-	5	7	8
SP.2.3: Water	Mitigation and	Increased Water	Area protected in Ha	-	-	-	250,000	300,000	350,000
Towers rehabilitation and	management of soil loss	Towers Ecosystem Health and resilience	Area Rehabilitated in Ha	-	-	-	650	700	800
conservation		resinence	No. of Water Towers Conservation Plans (WTCPs) developed	-	-	-	6	7	4

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
			No. of water tower assessed/ Total Economic Valuation	-	-	-	8	7	5
		Secured critical catchment, within water towers ecosystems	No. of water towers secured	-	-	-	5	6	4
	Community Livelihood	Improved livelihoods of	No. of nature based enterprises developed	-	-	-	7	8	6
	Improvement Programme (CLIP)	communities within water towers ecosystem	No. of Payment for Ecosystems framework developed and implemented	-	-	-	4	2	2
			No. of Community schools supported on Climate Change adaptation	-	-	-	7	8	8
	Water Towers Information Management	Monitoring framework developed	No. of Water Towers Monitoring Frameworks developed	-	-	-	1	1	1
	and Monitoring		No. of Water towers monitored	-	-	-	5	5	5
	Programme		No. of GIS laboratory established	-	-	-	1	1	1
			No. of technology center established	-	-	-	1	1	1
	Bio-Green Investment	Improved Ecosystem Land	No. of Ha of bamboo plantation established	-	-	-	5,000	3,000	2,000

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	Programme	cover and provide green Industrial Feed stock	No. of Bamboo Processing units established	-	-	-	1	1	1
			No. of Households benefiting	-	-	-	200	400	400
	Integrated Management of ASAL Water Towers	Enhanced adaptation to climate change impacts	No. of Integrated Watershed and Ecosystem Management Plans developed	-	-	-	3	4	2
			No. of Households benefiting /s supported	-	-	-	1,000	2,000	1,000
		No. of Ha rehabilitated	-	-	-	2,500	3,000	2,000	
	Construction of KWTA	Improved working environment for	Construction site acquired	-	-	-	1	0	0
	Complex HQ	Effective and Efficient service delivery	No. of construction Plans designed	-	-	-	1	0	0
		denvery	Bill of Quantities developed	-	-	-	1	0	0
			Complex constructed	-	-	-	0	1	1
	TUNZA Water Towers programme	Increased stakeholder involvement in management of	National Water Towers Financing and partnership guidelines developed	-	-	-	1	0	0
		water towers	No. of Water Towers Investment Plans	-	-	-	1	1	0

Natural Resources Sub sector											
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21		
			No. of Groups proposals financed	-	-	-	150	150	100		
			No. of Households benefiting	-	-	-	2,250	2,250	1,500		
	nservation and Malthy and valued v	anagement wildlife population, res	silient to threats		•						
SP 3.1: Wildlife Security, Conservation and Management	Wildlife Conservation and Management (HQ)	Secure wildlife migratory corridors and dispersal areas	A National Steering Committee established	-	-	-	Strategy and action plan formulate d				
Ü	unagement (174)		No. of corridors secured	-	-	-	3	2	1		
			No of conservancies established	-	-	-	1	1	1		
			No of easement agreement	-	-	-	2	1	1		
			Hectares of land purchased	-	-	-	17,000	10,000	10,000		
	Kenya Wildlife Service	Enhanced capacity for Sustainable	No. of ground security patrols				25000	27000	29000		
	wildlife Conservation and use	No. of hours for Aerial security patrols				2650	2700	2800			
		use	No. of field intelligence operations contacted				100	120	150		
			Endangered species recovery strategies developed				2	3	4		

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
			% Rate of response to clinical interventions done.	-	-	-	100	100	100
	Modernization of Reduction in	Reduction in poaching	% Reduction in poaching.	-	-	-	82	85	87
	poaching		Categories of equipment acquired	-	-	-	4	4	4
	Human wildlife mitigation	Mitigation of human wildlife conflict	% rate of response to HWC case	-	-	-	100	100	100
	programme		Kms. of Fence Constructed	-	-	-	50	70	100
			Kms. of Fence Maintained	-	-	-	1900	1970	2070
			No. of Constructed water pans, boreholes and earth dams	-	-	-	3	4	5
	Maintenance of Park access	Improved park infrastructure	Kms or road rehabilitated	-	-	-	100	120	150
	roads and airstrips		Kms of road maintained	-	-	-	2750	2800	2850
			No. of airstrips upgraded	-	-	-	2	3	4
	Ranger Housing	Construction and rehabilitation of	No. of Ranger houses constructed	-	-	-	75	80	85
	Programme	ranger houses	No. of ranger houses rehabilitated	-	-	-	30	40	50
	Conservation of Biodiversity	Policy and legislative	Pilot guidelines for implementation of	-	-	-		-	-

	rces Sub sector	T				1			
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	in Northern Kenya -	framework	Wildlife policy developed						
	FRANCE		Marsabit National Park gazetted	-	-	-	-	-	-
			Marsabit National Park Management plan agreed	-	-	-	-	-	-
			Km of fence rehabilitated	-	-	-	30	-	-
		Ecosystems conservation	Km of roads constructed	-	-	-			
			Staff accommodation and other infrastructure constructed	-	-	-	15		
			Hydrological structures constructed-Check dams	-	-	-	2		
	Wildlife resource centers	Wildlife Resource Centers Established	No of constructed and renovated youth hostels Meru ,Nakuru Mombasa Kisumu	-	-	-	1	1	1
	Construction of Wildlife security fence in Laikipia	Wildlife security fence constructed	KMs of Wildlife security fence	-	-	-	55	-	-
	Kenya Wildlife Conservation	Wildlife conservation	Management plans developed	-	-	-	1	-	-
	Project-USAID		No. of equipment acquired	-	-	-	3		
			No. of staff trained	-	-	-	10		

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Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
SP 3.2 Wildlife Research and Developments	Development of Wildlife Research techniques and training	Wildlife data collected and analyzed and inventories established	No. of total Aerial and Ground surveys undertaken	-	-	-	8	10	15
	products	wildlife research and related emerging areas undertaken	No. of wildlife management research undertaken	-	-	-	50	50	50
		wildlife disease surveillance and control undertaken	No. disease surveillance and control undertaken	-	-	-	50	50	50
		Symposia, conferences, workshops and other meetings organized to promote the exchange of views on issues relating to wildlife research and training	No. of symposia, conferences, workshops organised. No. of publications	-	-	-	5	10	10
		Threatened species- specific conservation and management strategies developed and implemented	No. of strategies developed and implemented				5	5	5
		Rare, endemic threatened species recovery programs	No. rare species breeding sanctuaries established	-	-	-	3	5	5

Natural Resourc	es Sub sector								
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		developed by setting up breeding sanctuaries; and restocked through translocations from neighboring Countries	No. animals translocated from neighbouring countries	-	-	-	50	50	50
		Expert committee on Endangered Species responsible for evaluation and listing established	No. of Expert Committee established and operationalized	-	-	-	10	10	10
	Compliance to Multilateral Environments Agreements decisions, resolutions and timely payment obligated subscriptions	Enhanced international corporation and conservation of migratory and cross-border species.	No. of decisions and resolutions implemented per treaty No, of timely subscriptions paid	-	-	-	15	20	20
	dministration, Pla ent and effective s	nning and Support Se ervice delivery	rvices						
SP 4.1: Governance in natural resource.	Conservation Directorate	Forest and wildlife governance	Number of policies, bills and legislation developed and reviewed.	2	2	2	2	2	2
			NFP Board	-	-	-	0	0	0
			Intergovernmental forest forum	-	-	-	2	2	2

Programme	Delivery Unit	Key Outputs	Key Performance	Target	Actual	Target	Target	Target	Target
Frogramme	Denvery Unit	Key Outputs	indicators	2016/17	Actual Achievem ent 2016/17	( Baseline) 2017/18	2018/19	2019/20	2020/21
			Multi-stakeholder forest forum	-	-	-	2	2	2
		Operationalize the forest conservation	NFP Board established	-	-	-	0	0	0
		and management trust fund (FCMTF)	Operational FCMTF	-	-	-	0	0	0
	Headquarters Administrative Services	Administrative Services	Administrative services to staff and customers (%)	-	-	-	100	100	100
	Refurbishment of NSSF Building	Habitable Working Environment	Number of floors renovated	-	-	-	0	0	0
SP 4.2:Planning and project	CPPMU	Strategic planning	Strategic plan developed	-	-	-	1	-	-
monitoring		Monitoring and Evaluation of Vision 2030 projects and Ministerial Programs	No. of quarterly reports	-	-	-	4	4	4
		Annual Work Plan	Ministerial annual workplan prepared	-	-	-	1	1	1
		Signed and vetted performance contract	Vetted and signed performance contract, progress reports prepared	-	-	-	1	1	1
		The Sector Report (Budget)	PPR prepared	-	-	-		1	1
		Research and feasibility studies	Report findings	-	-	-	1	1	1

Natural Resources Sub sector									
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
SP 4.3 Financial management services	Finance	MTEF Reports	No. of MTEF reports	-	-	-	1	1	1
		Annual Draft Estimates	No. of Annual Draft Estimates Report	-	-	-	1	1	1
		Supplementary Estimates	No. of Supplementary Estimates Reports	-	-	-	1	1	1
		Reports to the Controller of Budgets	Quarterly Financial reports	-	-	-	4	4	4
		The Sector Report (Budget)	PBB prepared	-	-	-	1	1	1

Water Services Sub sector										
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21	
Programme 1: General Administration, Planning and Support Services.										
Programme Outcome: Good Governance in the management of water resources.										
SP.1:Water	Headquarters	Water sector	Number of	2	2	3	3	3	3	
Policy	Administration	reforms	policies/Bills/ standards							
management			developed							

Programme	Delivery Unit	Key Outputs	Key Performance	Target	Actual	Target	Target	Target	Target
J			indicators	2016/17	Achievem ent 2016/17	( Baseline) 2017/18	2018/19	2019/20	2020/21
	Kenya Water Institute(KEWI	Students enrolled annually	Number of students enrolled	1500	1447	1500	1500	1550	1650
	Vater Resources N		adequate water resource	es.		l		1	1
SP.2.1: Water Resources conservation	Water Resources	Groundwater water resources map	No. of assessment reports and maps developed	1	1	3	3	5	5
and Protection		Hydro meteorological network installed	No. of telemetric stations installed	8	6	10	10	10	10
		National Water Quality Monitoring Stations	No. of stations Established	4	2	4	4	4	4
		Exploratory boreholes drilled in Turkana, Marsabit and Garissa.	No. of exploratory boreholes	10	8	10	10	10	10
		Implementation of Sub Catchment Management Plans	No. of SCMPs implemented	6	8	6	6	6	6
		No. of Water resources monitoring stations established / rehabilitated and operationalized	Number of stations	50	50	75	75	75	75
		Water Abstraction and Pollution Control Surveys	Number of surveys undertaken	12	12	6	6	6	6
		Kikuyu Springs	Percentage	60	60	80	100		

Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		protected through gazzettement	accomplished on gazettement process						
		Lamu Sand dunes protected through gazzettement	Percentage accomplished on gazettement process	30	30	60	80	100	
SP 2.2 Transboundary	Transboundary Water	Sustainably managed	No. of ESIA Reports developed	-	-	-	1	-	-
Water Resources	Resources	Transboundary ecosystem, and green villages	No. of green villages established	-	-	-	-	4	4
		established	No. of Hydromet stations established	-	-	-	2	2	6
		Well managed Trans-boundary watershed, under Kocholia trans- boundary project	Level of Preliminary works done	0	0		Preliminar y studies	Feasibility study	Designs & tender documents
		cture Development accessibility of water a	and sewerage services						
S.P 3.1 Water and Sewerage Infrastructure	Water and Sewerage Services	Improved access to water services	Additional people served with clean water (Million)	0.5	1.69	1	1.1	1.2	1.5
development	Directorate		Proportion (%) of National population with access to clean water	57	59.9	61	62	63	64
			Proportion (%) of Urban population with access to clean water	66	68.3	70.3	71	74	77
			Proportion (%) of Rural population with access to clean water	48	50.2	53	54	56	59

Water Services	Sub sector								
Programme	Delivery Unit	Key Outputs	Key Performance indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		Improved access to sewerage services	Additional people with access to sewerage services	200,000	210,000	225,000	250,000	270,000	285,000
			Proportion (%) of National population with access to sewerage services	25	15	16	16.6	17.5	18
			Proportion (%) of Urban population with access to sewerage services	25	24.7	26	27	28.5	30
			Proportion (%) of Rural population with access to onsite sanitation	64	64.1	65	65.8	66.2	67
	Water storage Infrastructure Directorate	Medium sized Dams constructed	Average completion (Siyoi- Muruny dam water supply project) (%)	50	33	45	69	88	100
		Dykes/Flood Control structures	Kms of flood control dykes constructed	11.5	5.45	14.7	18	18.95	19.8

Irrigation Sub se	ctor								
Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21

Programme	Delivery Unit	Key Outputs	Key Performance	Target	Actual	Target	Target	Target	Target
vg		120, outputs	Indicators	2016/17	Achievem ent 2016/17	(Baseline) 2017/18	2018/19	2019/20	2020/21
	Irrigation and Lar		. 1	.1 4					
			on, drainage and land re		T =	T = -	T =		
SP 1.1: Land Reclamation	Land Reclamation Services.	Administrative Services.	policy, bill strategies and legislations formulated and implemented.	Draft Land Reclamatio n Policy and Land Reclamatio n Bill.	Revised Draft Land Reclamati on Policy.	Land Reclamatio n Policy, Draft Land Reclamatio n Bill.	Revised Land Reclamati on Strategy.	Water Harvesting and Storage Strategy.	
	Land Reclamation	Lake Magadi Catchment Land	Hectares (Ha) of land reclaimed	-	-	-	-	2,500	4,000
Degr Asse	(Land Degradation	egradation ssessment Kerio Valley	% Reduction in silt load	-	-	-	0.5	1	2
	Assessment Programme)	Assessment Kerio Valley Programme) Catchment Rehabilitation Programme	No. of Hectares (Ha) reclaimed	-	-	-	-	5,000	10,000
		Upper Ewaso Nyiro North Catchment Rehabilitation Programme	No. of Hectares (Ha) reclaimed	-	-	-	-	5,000	10,000
		Expanded ASAL Land Reclamation Programme	No. of Hectares (Ha) reclaimed	-	-	-	-	1,900	2,000
		Turkana Rehabilitation Programme	No. of Hectares (Ha) reclaimed	-	-	-	-	900	1,000
		Garissa Rehabilitation Programme	No. of Hectares (Ha) reclaimed	-	-	-	-	650	700
•		Centre for Training	No. of people trained	-	-	-	100	100	100

Irrigation Sub so Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		and Integrated Research for ASAL Development (CETRAD) Programme	No. of research projects completed.	-	2016/17	-	2	2	2
		Land degradation assessment (LADA) reports.	No. of LADA reports developed	1	1	1	1	10	10
SP 1.2: Irrigation and Drainage.	Irrigation and Drainage Services.	Increased efficiency in implementation of irrigation projects.	Completion rate of Irrigation Projects (%)	-	-	100	100	100	100
	National Irrigation Board.	Irrigation Support Services.	Percentage of coordination & completion of targeted acres.	100	100	100	100	100	100
	Irrigation Water Use.	Increased productivity and sustainability of irrigation schemes.	Percentage Utilization of Irrigation Projects.	-	-	-	60	65	70
		Irrigation and Drainage Information Management System (IDMIS)	Web based irrigation information system; Irrigation data base, and irrigation map	-	-	-	Database created, and Irrigation map produced.	50% of web based system developed.	100% of web based system developed.
	Small Holder Irrigation Programme.	Increased production and productivity.	Increased area under irrigation. (acres)	200	-	700	1,400	700	-
	Bura Irrigation Scheme.	Construction of gravity canal and related structures.	No. of Km constructed.	25	5	5	-	-	-

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		Rehabilitated irrigation area.	No. of acres rehabilitated.	1,000	1,000	7,000	5,000	-	
		Irrigation services	Size of acreage of land under irrigation	1,000	1,000	-	-	-	-
	Community Based Irrigation Projects.	Completion of 270 stalled smallholder projects.	Increased acreage under irrigation (acres).	1,600	1,450	500	700	700	700
	Galana Kulalu Irrigation Development	Galana Kulalu Irrigation Project – Model farm.	No. of acres in model farm planted.	5,000	2,500	10,000	10,000	10,000	10,000
	Project (10,000acres)	Development of 400,000 Ha.	Increased acreage under irrigation (acres). Feasibility study, Detailed Design and Construction (EPC)	-	-	Procureme nt of the EPC Contractor	40% (Studies)	60% (Studies)	
	National Expanded Irrigation Programme.	National Expanded Irrigation Project - increased production and productivity.	No. of acres of irrigation area developed.	15,000	7,000	7,000	12,000	15,000	20,000
	Mwea Irrigation Development Project (Thiba Dam and	Construction of dam.	Percentage progress dam constructed.	15	0	40	60	100	-
	Irrigation Area)	Construction of irrigation infrastructure for Irrigation areas.	Percentage of irrigation area provided with infrastructure.	-	-	18	50	80	100
	Rwabura Irrigation	Increased area under Irrigation	No. of acres of under Irrigation	-	-	150	-	-	-

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	Development Project	Irrigation services	Size of acreage of land under irrigation	-	-	-	1,000	400	-
			Km. of canal network constructed	20	-	-	-	-	-
	Turkana Irrigation	Rehabilitation of Irrigation Projects.	No. of projects.	-	-	4	-	-	-
	Development Project	Increased new area under Irrigation.	No. of acres of irrigation area developed.	-	-	-	5,000	5,000	5,000
	Lower Kuja Irrigation Scheme.	Increased new area under Irrigation.	No. of acres of irrigation area developed.	-	-	20	1,500	2,000	2,000
	Lower Sabor Irrigation Project.	Increased area under Irrigation	No. of acreage irrigated	-	-	-	400	-	-
	ater Storage and								
		<u> </u>	or irrigation and other us						
SP2.1 Water Storage and Flood Control.	Thwake Multipurpose Water Development Program Phase 1.	Thwake Multi - Purpose dam of 681million M3.	Percentage progress dam constructed.	2	2	13	53	75	100
SP 2.2 Water Harvesting.	National Water Harvesting and Ground Water Exploitation.	Increased water Storage and Conservation for Productivity and Land Reclamation.	No. of surface water harvesting projects constructed.	-	-	100	100	100	100
		Increased water storage per capita	Million Cubic meters of completed water pans/small dams	16	12	-	24	25	26

Irrigation Sub se	ector								
Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2016/17	Actual Achievem ent 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	Water for Schools.	Provide Water to Schools mainly in the ASAL areas for Domestic and Micro Irrigation.	No. of Schools Connected with Water.	100	71	70	100	100	100
		ation, Planning and Su							
			livery of the State Depart					1	
SP3.1: General Administration , Planning and	Headquarters Administrative Services-	Administrative Services.	Percentage of Policy and Strategy Implementation	100	100	100	100	100	100
Support Services.	Irrigation.	Planning Services.	No. of Monitoring and Evaluation reports.	4	4	4	4	4	4
		Financial Services.	Annual Budget Prepared.	1	1	1	1	1	1
			Supplementary Budget prepared.	2	2	2	2	2	2
		Procurement Services.	No. of weeks taken to procure supplies and services upon requisition	5	5	5	5	3	3

Programme	Delivery Unit	Key Outputs (KO)	Key Performance Indicators (KPIs)	Target 2016/17	Actual Achieve ment 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
	General Admini oved service del	stration, Planning a livery	nd Support Services						
SP 1.1: Mining Policy Development	Directorate of Corporate Affairs	Policies and Bills developed/reviewe d	No of Policies and Bills developed	4	1	3	1	1	1
and Coordination	Directorate of Corporate Affairs	Records digitized	% of records digitized	20	0	20	30	50	100
	7 Hrans	EDMS and mobile cabinets procured	No. of EDMS procured	1	1	1	-	-	-
		N c	No.of mobile cabinets procured	10	0	10	-	-	-
	Directorate of Corporate Affairs	Strategic Human Resource Planning for recruitment	No. of staff recruited	201	97	250	201	100	50
	Directorate of Corporate Affairs	Madini Hse & DRSRS Modernized	No of Offices refurbished	2	0	1	1	1	1
		Litigation/Mining Cases	No. of cases handled	5	0	5	5	5	5
		Engendering the mining sector	No. of Women, Youth & PWDs issued mining permits	500	0	600	700	800	1000
		ys and Remote Sensi I environment and n							
SP 2.1: Resource	DRSRS	Spatial distribution and statistical	Number of spatial units of wildlife	7,600	7,600	8,000	8,500	9,000	9,500

Programme	Delivery Unit	Key Outputs (KO)	Key Performance Indicators (KPIs)	Target 2016/17	Actual Achieve ment 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
Surveys and Remote Sensing		trends of wildlife/livestock population established	/livestock surveyed						
		Spatial temporal data/information on land use/cover established	No.of Spatial temporal land use/cover thematic maps for counties	4	4	2	2	2	2
		Data on forests cover established	Number of forest blocks mapped.	1	1	4	1	1	1
		Data on land degradation established	No. of counties mapped & assessed	1	1	2	1	1	1
		Mining/quarry sites aerial mapped & monitored for investment	No. of mining/quarry sites mapped	2	2	1	1	1	1
		Spatial Data/information on national maize and wheat production forecast for food	Annual National statistics on maize and wheat production forecast established	1	0	1	1	1	1
Drogramma 2	   Mineral Resource	security					<u> </u>		
		t and revenue from r	nining						
Programme	Delivery Unit	Key Outputs (KO)	Key Performance Indicators (KPIs)	Target 2016/17	Actual Achieve	Target Baseline	Target 2018/19	Target 2019/20	Target 2020/21

Mining Sub sec Programme	Delivery Unit	Key Outputs	Key Performance	Target	Actual	Target	Target	Target	Target
rrogramme	Denvery Clift	(KO)	Indicators (KPIs)	2016/17	Achieve ment 2016/17	(Baseline) 2017/18	2018/19	2019/20	2020/21
					ment 2016/17	2017/18			
SP 3.1: Mineral Resource	Directorate of Mines	Mineral Audit Unit strengthened	Increased revenue collection (Ksh. Billion)	1.4	1.087	1.8	2	2.5	2.5
Development		Mining cadastre/ concessions digital management developed	% of reconfiguration	100	90	90	100	-	-
		Compliance levels improved by mine and quarry operators	No. of operators complying	0	10	20	40	60	60
		Baseline survey done on number of Artisanal and Small scale miners (ASM)	1 no. survey	1	0	1	1	1	1
		ASM formalized as per Mining Act, 2016	No of Artisanal miners licensed	100	0	100	200	300	400
SP. 3.2: Mineral Promotion & Value Addition	Directorate of Mineral Promotion & Value	Mineral Value Addition Centres established	No. of Value Addition centres constructed and equipped	2	1	1	1	1	1
	Addition	Information & data on mining opportunities in Kenya established	No. of Exhibitions & Conferences	5	5	5	5	5	5

Mining Sub se									
Programme	Delivery Unit	Key Outputs (KO)	Key Performance Indicators (KPIs)	Target 2016/17	Actual Achieve ment 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
SP.3.3: Geological	Directorate of Geological	Information on mineral	No.of Exploration Reports	1	1	1	1	1	1
Surveys	Surveys	occurrences & deposit	No. of meters drilled	800	2,000	800	800	800	800
		Transport corridors mapped for minerals	Kms mapped	70	70	100	100	100	100
		minerals mapped and categorized Ro. of counties geology & mineral resources mapped		1	1	1	1	1	1
		National digital geoscience data repository established	% completion of project	50	20	50	30	-	-
		Information on geo-hazard prone areas in the country mapped	No. of counties Geo- hazard area mapped	4	4	2	2	2	2
		Countrywide airborne geophysical survey data established	% of the country surveyed	25	0	25	50	25	-
		Earthquake and Seismological Monitoring Network developed	No. of Seismological stations established	1	0	1	1	1 station	-
		Internationally	% completion	20	100%	50	30	-	-

Mining Sub sec	ctor								
Programme	Delivery Unit	Key Outputs (KO)	Key Performance Indicators (KPIs)	Target 2016/17	Actual Achieve ment 2016/17	Target (Baseline) 2017/18	Target 2018/19	Target 2019/20	Target 2020/21
		Accredited Mineral Certification Laboratory fully equipped							
		Mining Institute established	No. of MOU signed with relevant institutions to offer Mining related courses	2	2	2	1	1	-

## 3.1.3. Programmes by Order of Ranking.

#### **Environment Sub-sector.**

- 1. General Administration, Planning and Support Services.
- 2. Environment Management and Protection.
- 3. Meteorological Services.

#### Natural Resources Sub-sector.

- 1. Forests and Water Towers Conservation and Management
- 2. Wildlife Conservation and Management
- 3. General, Administration, Planning and Support Services

#### Water Services Sub-sector.

- 1. General Administration, Planning and Support Services.
- 2. Water Resources Management.
- 3. Water and Sewerage Infrastructure Development.

#### Irrigation Sub-sector.

- 1. Irrigation and Land Reclamation.
- 2. Water Storage and Flood Control.
- 3. General Administration, Planning and Support Services.

#### Mining Sub-sector.

- 1. Mineral Resource Management
- 2. Resource Surveys and Remote Sensing.
- 3. General Administration, Planning and Support Services.

# 3.2 Analysis of Resource Requirement versus Allocation by Sector/Sub-sector

## 3.2.1. Sector Recurrent

Table 3.2: Recurrent Requirements/ Allocations (Amount Ksh. Million)

## **Recurrent Sector**

				Requiremen	ıt		Allocation	
Sector Require ment		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
	<b>Economic Classification</b>							
	Gross	22,788	49,537	46,493	48,651	23,272	23,906	24,183
	AIA	8,904	8,380	8,702	8,982	7,658	7,708	7,758
	NET	14,149	35,684	32,043	33,497	12,443	12,760	12,955
	Compensation to Employees	2,664	4,864	5,143	5,415	2,588	2,666	2,746
	Transfers	17,520	23,218	24,868	26,344	18,387	18,807	18,912
	Other Recurrent	2,604	21,455	16,482	16,892	2,297	2,433	2,526

## **Environment Sub sector**

				Requirement			Allocation	
State Department for Environme nt		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1105	<b>Economic Classification</b>							
	Gross	2,839	4,372	4,411	4,433	2,948	3,042	3,088
	AIA	109	109	109	109	109	109	109
	NET	2,730	4,263	4,302	4,324	2,839	2,933	2,979
	Compensation to Employees	1,190	1,226	1,265	1,281	1,211	1,241	1,268
	Transfers	1,262	2,261	2,261	2,261	1,400	1,430	1,430
	Other Recurrent	387	885	885	891	337	371	390

# Natural Resources Sub -sector

				Requirement		Allocation				
State Department for Natural Resources		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21		
Vote 1106	Economic Classification									
	Gross	13,513	33,617	30,168	31,461	13,801	13,987	14,110		
	AIA	6,240	6,556	6,806	7,056	6,556	6,606	6,656		
	NET	7,273	27,061	23,362	24,405	7,245	7,381	7,454		

Compensation	145	149	153	157	149	152	157
to Employees							
Transfers	12,374	17,160	18,637	20,003	12,709	12,857	12,957
Other Recurrent	994	16,308	11,378	11,301	944	978	996

## Water Sub -Sector

				Requirement	t		Allocation	
State Department for Water		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1103	<b>Economic Classification</b>							
	Gross	4,017	8,075	8,482	8,966	4,328	4,596	4,628
	AIA	2,141	1,301	1,367	1,397	579	579	579
	NET	1,876	6,774	7,115	7,569	3,749	4,017	4,049
	Compensation to Employees	600	2,350	2,508	2,715	566	583	600
	Transfers	3,155	2,877	2,948	2,924	3,573	3,799	3,803
	Other Recurrent	262	2,848	3,026	3,327	189	214	225

# Irrigation Sub- Sector

				Requirement			Allocation	
State Departmen t for Irrigation		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1104	<b>Economic Classification</b>							
	Gross	955	1,918	2,147	2,511	993	1,019	1,031
	AIA	400	400	400	400	400	400	400
	NET	555	1,518	1,747	2,111	593	619	631
	Compensation to Employees	146	486	549	594	216	222	229
	Transfers	709	888	990	1,135	686	702	702
	Other Recurrent	100	544	608	782	90	95	100

# Ministry Mining Sub -sector

				Requirement			Allocation	
Ministry of Mining		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1191	<b>Economic Classification</b>	Estimates						
	Gross	1,464	1,555	1,285	1,280			Formatted: Right
						1,202	1,262	1,327
	AIA	14	14	20	20			Formatted: Right
						14	14	14
	NET	1,450						Formatted: Right
			1,541	1,265	1,260	1,188	1,248	1, Formatted Table
	Compensation to Employees							Formatted: Right
		583	653	668	668	446	468	492

Transfers							Formatted: Right
	20	32	32	21	19	19	20
Other Recurrent							Formatted: Right
	861	870	585	591	737	775	815

# 3.2.2. Sector Development

## Table 3.3: Development Resource Requirement/ Allocations (Amount Ksh Million)

Development Sector

				Requirement	t		Allocation	
Environment protection, water and natural resources		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
	Economic Classification							
	Gross	50,798	186,071	209,675	163,149	54,787	56,279	58,55
	GOK	19,695	96,747	109,990	86,124	23,685	25,177	27,45
	Loans	25,466	83,365	93,439	70,545	25,466	25,466	25,46
	Grants	5,636	5,959	6,246	6,480	5,636	5,636	5,63
	Local AIA	-	-	-	-	-	-	

# 3.2.2.1 Sub- Sector Development

**Environment Sub-sector** 

ANALYSIS OF	DEVELOPM	MENT RESOURCE REQUIREMENT	VS ALLOCATION						
Requirement Allocation									

State Department for Environment		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1105	Economic Classification							
	Gross	3,628	4,947	5,335	5,337	3,848	3,837	4,058
	GOK	1,904	3,223	3,329	3,392	2,124	2,113	2,334
	Loans	613	613	756	715	613	613	613
	Grants	1,111	1,111	1,250	1,230	1,111	1,111	1,111
	Local AIA	-	-	-	-	-	-	-

## Natural Resource sub -sector

		OF DEVELOPN		Requiremen			Allocation	
State Department for Natural Resources		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1106	Economic Classification							
	Gross	3,877	43,603	43,589	31,487	4,023	4,008	4,33
	GOK	2,813	42,539	42,525	30,423	2,959	2,944	3,269
	Loans	-	-	-	-	-		
	Grants	1,064	1,064	1,064	1,064	1,064	1,064	1,06
	Local AIA	-	-	-	-	-	-	

## Water Sub -sector

	ANALYSIS OI	F DEVELOPN	MENT RES	OURCE REC	UIREMENT	VS ALLOCAT	TION	
				Requiremen	ıt		Allocation	
State Department for Water		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1103	Economic Classification							
	Gross	29,778	108,656	128,024	103,977	31,027	30,996	31,635
	GOK	5,519	31,866	39,540	33,992	6,768	6,737	7,376
	Loans	20,880	73,055	84,574	65,821	20,880	20,880	20,880
	Grants	3,379	3,735	3,910	4,164	3,379	3,379	3,379
	Local AIA	-	-	-	-	-	-	-

## Irrigation Sub- sector

	ANALYSIS OF	DEVELOPN	MENT RES	OURCE REC	QUIREMENT	VS ALLOCAT	TION	
				Requiremen	nt		Allocation	
State Department for Irrigation		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1104	Economic Classification							
	Gross	12,258	24,859	28,767	18,448	14,653	16,208	17,160

GOK	8,225	16,455	21,978	15,759	10,620	12,175	13,127
Loans	3,973	8,377	6,789	2,689	3,973	3,973	3,973
Grants	60	27	0	0	60	60	60
Local AIA	-	ı	1	-	-	-	-

## Mining Sub -sector

	ANALYSIS O			Requirement			Allocation	
State Department for Natural Resources		2017/18 Estimates	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Vote 1106	Economic Classification							
	Gross	1,256	4,006	3,960	3,900	1,236	1,230	1,373
	GOK	1,234	2,664	2,618	2,558	1,214	1,208	1,351
	Loans	0	1,320	1,320	1,320	-	-	-
	Grants	22	22	22	22	22	22	22
	Local AIA	-	-	-	-	-	-	-

#### The justification for the increase in resource requirements is majorly as a result of:

#### 1. Compensation Claims from Wildlife Damages

The pattern of increasing human-wildlife conflicts is evident in Kenya. Land use changes especially within the pastoral systems of Kenya, driven by rapid expansion of cultivation, land subdivision and privatization of land tenure, are largely responsible for the escalating human wildlife conflicts. Conflicts between people and wildlife in Kenya cannot be entirely eliminated but can be mitigated through strategic interventions such as establishment and operationalization of reliable schemes to compensate human death, injury and property damages. The Wildlife Conservation and Management Act, 2013 (WCMA, 2013) set the minimum compensation payment for human death at KSh. 5 million and permanent disability at KSh. 3 million while crop, livestock and property damages are to be compensated at market rates.

As at end of 2016, the compensation claims for human death and injury was about KSh. 15 Billion, and will require the same allocation to clear. Moving forward, the annual claim from both death and injury is projected at about KSh. 5 Billion annually.

Compensation for wildlife damage is a legal requirement for the government to the affected persons. Lack of providing adequate budget for compensation is leading to:

- i. Lack of community support in conservation
- ii. Retaliatory killing and elimination of wildlife
- iii. General instability in the conservation sector
- iv. Negative sector publicity to government, and
- v. Increased rural poverty due to losses of farm products among others

Nonetheless, the sub sector in consultation with The National Treasury has proposed the establishment of a reliable insurance scheme to cover such human death and injury, and this a welcome relief to both government and the affected public.

#### 2. Securing Wildlife Corridors and Dispersal Areas

In the last few decades, human activities have led to extensive habitat fragmentation, the reduction in wildlife distribution range, shrinking of dry season dispersal areas, blockage of migratory corridors, and increased human-wildlife conflicts. The vast areas of pristine wildlife habitats have been lost or degraded as a result of land subdivisions and conversion of rangelands to crop cultivation and subsistence use. In other cases, fences have been erected that have created barriers to seasonal movements of animals. Proactive land acquisition of parcels of importance for wildlife conservation will contribute to saving wildlife habitats from fragmentation and degradation and will maintain the integrity of ecosystems. The acquisition may be in form of outright purchase, lease, easement or compulsory acquisition.

The Government through the Vision 2030 Flagship projects has already mapped all the wildlife corridors and dispersal areas in Kenya and the Report was launched in July 2017. Therefore, the

main objective of this project is to secure the identified ecological connectivity and dispersal areas to allow wildlife to move freely across landscapes, reduce human wildlife conflict, while at the same time protecting other key land use activities such as agriculture, settlements and infrastructure development and ultimately promote environmental sustainability and equitable social development.

Land is an expensive asset and this requires adequate allocation of budget for the country to safe guard the ecological integrity of the wildlife estate, and enhances the competitiveness of our tourism sector globally. For example, to acquire an important wildlife dispersal area like the Solio Conservancy (17,000 acres) that holds about 20% of Kenyan Rhino population will cost KSh. 6.5 Billion with the cost of an acre being about KSh. 400,000. In the next three years, SDNR intends to acquire several corridors and dispersal areas and as such an annual expenditure of about 30 Billion is anticipated.

#### 3. Forest Conservation

Globally the forest cover constitutes 31% of total land area with only 64 countries having less than 10% forest cover. Within East Africa, the average forest cover is 14.5% per country. However Kenya, which has a total land surface area of 582,645 km², has the least forest cover area in the East African Community, currently standing at about 7.1 %.

Consequently Kenya Forest Service is seeking Ksh. 8,150M, Ksh.9,050M and Ksh.9,350M for year 2018/19, 2019/20 and 2020/21 respectively. The increase in funds from the current year's (2017/18) allocation of Ksh. 6,792million compared with next years (2018/19) request of Ksh. 8,150 Million has been necessitated by restructuring of the forest activities following the review of the Forest Act 2005 to Forest Management and Conservation Act 2016. In this regard, existing projects have increased the resource allocation and new projects have been proposed. Kenya Water Towers rehabilitation and climate change mitigation project have an additional allocation of Ksh. 467 million; the forest irrigation and conservation project have increased from Ksh. 29.5 Million to Ksh. 100 Million; Capacity Development for sustainable forest development has increased from Ksh. 40 Million to Ksh. 420. Additional forest including promotion of private forest, forest 2020 and construction of KFS head quarters have been proposed with a request of Ksh. 79 million, Ksh. 60 million and Ksh. 100 million respectively. The purpose of this project is to facilitate gazettment of additional forests, boundary establishment and titling of forestlands, establishment of new forest plantations, mapping and analysis of all the forest and tree cover. Additional activities include rehabilitation projects; capacity building for sustainable forest development; promotion of sustainable forest management in private forest, construction of forest rangers camps and forest road improvement. The projects will require a total of Ksh. 2,050 millions. Ultimately the country will raise the forest and tree cover to 7.15% in 2018/19 to 7.4% in 2020/21.

## 4. Water Towers Rehabilitation and Conservation

Water Towers, the mountainous and highland areas characterized by extensive landscapes that serve as sources of rivers and streams for the main drainage systems of Kenya and provide lowlands with essential freshwater for irrigation and food production, for industrial use, and for the domestic needs of rapidly growing urban populations. The Water Towers provide invaluable service to Kenya's inhabitants, wildlife and economy by providing multiple ecological, economic, social and cultural benefits, which can provide opportunities for poverty alleviation and economic development as envisaged in the country's Vision 2030 blueprint. Conservation, rehabilitation and protection of Water Towers in Kenya continues to face a number of challenges. The result of this has been adverse environmental impacts such as drying up of rivers, dams and springs, loss of biodiversity, changes in micro-climatic conditions, increase in soil loss and reduction in agricultural production which if not checked will lead to conflicts over the scarce resources among the locals.

There is therefore need to coordinate and oversee the sustainable management of all the fourty two (42) Water Towers in the country. The **Kenya Water Towers Agency** (KWTA) is seeking Kshs. 3,214M, Kshs. 3,452M and Kshs. 2,833M for year 2018/19, 2019/20 and 2020/21 respectively. The number of Water Towers has increased to fourty two (42) from the initial eighteen (18) necessitating the need for more projects and financial to rehabilitate and conserve the Water Towers. KWTA has proposed to have a new project known as Tunza project whose purpose will be to demarcate and gazette all the new Water Towers, establish an Information Management and Monitoring system to ensure timely information for decision making and promotion of PES schemes to reduce pressure on the Water Towers.

#### 5. Wildlife Conservation (Kenya Wildlife Service)

KWS has been unable to implement several approved changes in Salaries and Allowances due to financial constraints since 2014/2015 FY. These include review of hardship allowances for the uniformed staff deployed in hardship areas, re-categorization of the Service from PC3B to PC3A by State Corporation Advisory Committee (SCAC) in July 2014, review of medical allowances etc. These have resulted in the Service lagging behind compared to State Corporations in the same category and similar functions. These discrepancies have been presented to the Salaries and Remuneration Commission (SRC) job evaluation exercise whose final report is expected to incorporate the changes and thus the envisaged increase in salaries budget from Ksh. 4.35 billion to Ksh. 5.2 Billion. In addition KWS, reduced the operating costs by approximately 30% in an attempt to operate within available resources, and thereby greatly affecting service delivery. Several key inputs have been reduced to the bare minimum.

KWS capital budget only covers three areas namely anti-poaching operations, human wildlife conflict mitigation (HWC) and Ranger housing; leaving other key areas that compliment wildlife conservation activities and security of visitors to National parks. These include maintenance of roads in parks for security and tourism activities; acquisition of Vet, Capture and translocation equipment needed in resolving HWC and maintaining integrity of ecosystems, provision of water for wildlife to contain animals within protected areas and reduce HWC. The additional areas of funding greatly contribute towards conservation of not just the wildlife but also ensure ecosystem balance as outlined in the WC&M Act 2013.

## 6. Operationalization of the Mining Act 2016

The Mining Act 2016 was assented to on May 2016 and has led to the creation of additional statutory bodies that require funding for operations and Acquisition of specialized equipment eg Mineral Rights Board (50 Million), National Mining Corporation (100 Million) and the National Mining Institute (65 Million).

Further the Ministry requires additional funding for acquisition of Geological survey equipment, mines inspectorate equipment, resource survey equipment and GOK Counterpart fund to argument the National Airborne Geophysical Survey (740 Million)

# 3.2.1Analysis of Programmes and Sub- Programmes (Current and Capital) Resource Requirement Vs Allocation 2017/18-2018/19

Table 3.4 Analysis of Programme/ Sub- Programme Resource Requirement

Analysis of Programme Expenditure Resource Requirement ( Amount												
Ksh. Millions)												
		2017/18			2018/19		20	19/20			2020/21	
	Current	Capital	Totals	Current	Capital	Totals	Curren t	Ca pit al	Tota ls	Curre nt	Capital	Totals
<b>Environment Sub-Sector</b>												
P1. General Administration, Planning and Support Services												
SP 1.1 General Administration, Planning and Support Services	369	-	369	874	-	874	882	-	882	902	-	902
Total Programme	369		369	874		874	882	-	882	902		902
P 2 Environment Management and Protection												
SP 2.1 National Environment Management	1,228	2,448	3,676	2,228	3,620	5,848	2,228	3,9 15	6,14	2,228	3,901	6,129
SP 2.2 Policy & Governance in Environment	127	-	127	129	-	129	131	_	131	133	_	133
SP 2.3 National Climate Change Adaptation and Mitigation	-	80	80	-	126	126	_	114	114	-	130	130
Total Programme	1,355	2,528	3,883	2,357	3,746	6,103	2,359	4,0 29	6,38 8	2,361	4,031	6,392
P 3. Meteorological Services												
SP 3.1 Modernization of Meteorological Services	1,115	766	1,881	1,141	766	1,907	1,170	766	1,93 6	1,170	766	1,936
SP 3.2 Advertent Weather Modification	-	334	334	-	435	435	-	540	540	-	540	540
Total Programme				1,141								

	1,115	1,100	2,215		1,201	2,342	1,170	1,3 06	2,47 6	1,170	1,306	2,476
Total Vote	2,839	3,628	6,467	4,372	4,947	9,319	4,411	5,3 35	9,74	4,433	5,337	9,770
Natural Resources Sub- Sector												
P1 Natural Resources Management and Protection												
SP 1.1 Forests Conservation and	5.125	2 205	<b>7</b> 242									
Management	5,137	2,205	7,342			-			-			-
SP 1.2 Forestry Research and Developments	1,492	178	1,670			-			-			-
SP 1.3 Policy Governance in Natural Resources Management	174	13	187									-
SP 1.5 National Resource Management	639	669	1,308			_						_
SP 1.4 Wildlife Security, National Parks and Reserves	037	007	1,000									
Managemnt Management	6,071	813	6,884			-			-			-
Total Programme	13,513	3,877	17,390	-		-	•	-	•		•	-
P2. Forests and Water Towers Conservation and Management												
SP 2.1 Forests Resources Conservation and Management	_	-	-	6,206	3,043	9,249	6,718	3,4 53	10,1 71	7,135	3,365	10,500
SP 2. 2 Forest Research and Developments	-	-		1,708	1,465	3,173	1,879	1,4 40	3,31	1,955	1,365	3,320
SP 2.3 Water Towers Rehabilitation and Conservation	-	-		594	2,620	3,214	629	2,8 23	3,45	666	2,167	2,833
Total Programme	_			8,508	7,128	15,636	9,226	7,7 16	16,9 42	9,756	6,897	16,653
P3. Wildlife Conservation and Management										·		
SP 3.1. Wildlife Security,	-	-		24,258								

Conservation and Management			-		33,355	57,613	20,029	33, 183	53,2 12	20,882	23,170	44,052
SP 3.2 Wildlife Research and Developments	-	-	-	400	800	1,200	450	500	950	350	350	700
Total Programme	_	_		24,658	34,155	58,813	20,479	33, 683	54,1 62	21,232	23,520	44,752
P 4. General, Administration, Planning and Support Services												
SP 4.1 Governance in Natural Resource	_	-	-	390	2,320	2,710	398	2,1 90	2,58 8	404	1,070	1,474
SP 4. 2 Planning and Project Monitoring	-	-	-	19	-	19	20	-	20	21	-	21
SP 4.3 Financial Management Services	-	-	-	43	-	43	45	-	45	48	-	48
Total Programme	_	_		451	2,320	2,771	463	2,1 90	2,65	473	1,070	1,543
Total Vote	13,513	3,877	17,390	33,617	43,603	77,220	30,168	43, 589	73,7 57	31,461	31,487	62,948
Water Sub-Sector												
P 1. General Administration, Planning and Support Services												
SP 1.1 Water Policy	647	151	798	616	100	716	650	150	800	685	180	865
Total Programme	647	151	798	616	100	716	650	150	800	685	180	865
P2. Water Resources Conservation and Protection												
SP 2.1 Water Resources Conservation and Protection	1,287	4,608	5,895	2,102	5,625	7,727	2,141	5,7 30	7,87 1	2,180	5,843	8,023
SP 2.2 Transboundary waters	7	80	87	85	85	170	87	91	178	95	97	192
Total Programme	1,294	4,688	5,982	2,187	5,710	7,897	2,228	5,8 21	8,04	2,275	5,940	8,215

P3. Water and Sewerage Infrastructure Development												
SP 3.1 Water and Sewerage Infrastructure Development	2,076	24,939	27,015	5,272	102,846	108,11	5,604	122 ,05 3	127, 657	6,006	97,857	103,86
Total Programme	2,076	24,939	27,015	5,272	102,846	108,11	5,604	122 ,05 3	127, 657	6,006	97,857	103,86
Total Vote	4,017	29,778	33,795	8,075	108,656	116,73 1	8,482	128 ,02 4	136, 506	8,966	103,977	112,94
Irrigation Sub Sector												
P 1. Irrigation and Land Reclamation												
SP 1.1 Land Reclamation	44	5	49	201	200	401	223	136	359	287	-	287
SP 1.2 Irrigation and Drainage	901	6,423	7,324	1,091	9,500	10,591	1,207	12, 051	13,2 58	1,421	9,000	10,421
Total Programme	945	6,428	7,373	1,292	9,700	10,992	1,430	12, 187	13,6 17	1,708	9,000	10,708
P2. Water Storage and Flood Control												
SP 2.1 Water Storage and Flood Control.	-	3,300	3,300	235	11,159	11,394	277	13, 086	13,3 63	304	7,445	7,749
SP 2.2 Water Harvesting	-	2,530	2,530	25	4,000	4,025	32	3,4 94	3,52 6	39	2,003	2,042
Total Programme		5,830	5,830	260	15,159	15,419	309	16, 580	16,8 89	343	9,448	9,791
P 3. General Administration, Planning and Support Services												
SP 3.1 General Administration,		-		366								

Planning and Support Services	10		10		-	366	408	-	408	460	-	460
Total Programme	10	1	10	366	1	366	408	-	408	460	1	460
Total Vote	955	12,258	13,213	1,918	24,859	26,777	2,147	28, 767	30,9 14	2,511	18,448	20,959
Mining Sub-Sector												
P 1 General Administration, Planning & Support Services												
SP 1.1 Mining Policy, Development and Coordination	924	60	984	842	110	952	535	110	645	535	50	585
Total Programme	924	60	984	842	110	952	535	110	645	535	50	585
P 2. Resource Surveys and Remote Sensing.												
SP 2.1 Resource Surveys and Remote Sensing	185	361	546	236	395	631	251	349	600	251	349	600
Total Programme	185	361	546	236	395	631	251	349	600	251	349	600
P 3 Mineral Resource Management												
SP 3.1 Mineral Resource Development	298	352	650	337	488	825	357	488	845	377	488	865
SP 3.2 Geological Surveys and Minerals Exploration	57	483	540	140	3,013	3,153	142	3,0 13	3,15 5	117	3,013	3,130
Total Programme	355	835	1,190	477	3,501	3,978	499	3,5 01	4,00	494	3,501	3,995
Total Vote	1,464	1,256	2,720	1,555	4,006	5,561	1,285	3,9 60	5,24	1,280	3,900	5,180
Sector Totals	22,788	50,798	73,585	49,537	186,071	235,60	46,493	209 ,67 5	256, 168	48,651	163,149	211,80

**Table 3.5 Programme/ Sub- Programme Resource Allocation** 

Analysis of Programme Expenditure Resource Requirement ( Amount Ksh. Millions)												
	2	2017/18			2018/19			2019/20			2020/21	
	Current	Capita 1	Total s	Cur rent	Capit al	Tota ls	Curr ent	Capit al	Tota ls	Current	Capital	Totals
<b>Environment Sub-Sector</b>												
P1. General Administration, Planning and Support Services			0			0			0			0
SP 1.1 General Administration, Planning and Support Services	369	-	369	360		360. 2	383		383	416		416
Total Programme	369	-	369	360	-	360	383	-	383	416	-	416
P 2 Environment Management and Protection												
SP 2.1 National Environment Management	1,228	2,448	3,676	1,36 6	2,686	4,05	1,396	2,675	4,07 1	1,396	2,896	4,292
SP 2.2 Policy & Governance in Environment	127	-	127	129		129	131		131	133		133
SP 2.3 National Climate Change Adaptation and Mitigation	-	80	80		80	80		80	80		80	80
Total Programme	1,355	2,528	3,883	1,49 5	2,766	4,26 1	1,527	2,755	4,28	1,529	2,976	4,505
P 3. Meteorological Services												
SP 3.1 Modernization of Meteorological Services	1,115	766	1,881	1,09	748	1,84 1	1,132	748	1,88 0	1,143	748	1,891
SP 3.2 Advertent Weather Modification	_	334	334		334	334		334	334		334	334
Total Programme	1,115	1,100	2,215	1,09	1,082	2,17 5	1,132	1,082	2,21 4	1,143	1,082	2,225
Total Vote	2,839	3,628	6,467	2,94 8	3,848	6,79 6	3,042	3,837	6,87 9	3,088	4,058	7,146
Natural Resources Sub- Sector												

P1 Natural Resources Management and Protection												
SP 1.1 Forests Conservation and Management	5,137	2,205	7,342			-			-			-
SP 1.2 Forestry Research and Developments	1,492	178	1,670			_			_			_
SP 1.3 Policy Governance in Natural Resources Managemnt	174	13	187			-			-			-
SP 1.5 National Resource Management	639	669	1,308			_			_			_
SP 1.4 Wildlife Security, National Parks and Reserves Managemnt	6,071	813	6,884			-			-			-
Total Programme	13,513	3,877	17,39 0	-	-	-	-	-	-	-	-	-
P2. Forests and Water Towers Conservation and Management												
SP 2.1 Forests Resources Conservation and Management			-	5,22 4	2,130	7,35 4	5,324	2,115	7,43 9	5,444	2,210	7,654
SP 2. 2 Forest Research and Developments			-	1,49 1	173	1,66 4	1,514	173	1,68 7	1,514	173	1,687
SP 2.3 Water Towers Rehabilitation and Conservation			-	472	609	1,08 1	483	609	1,09 2	483	609	1,092
Total Programme	-	-	-	7,18 7	2,912	10,0 99	7,321	2,897	10,2 18	7,441	2,992	10,433
P3. Wildlife Conservation and Management												
SP 3.1. Wildlife Security, Conservation and Management			-	6,23 7	1,088	7,32 5	6,269	1,088	7,35 7	6,269	1,263	7,532
SP 3.2 Wildlife Research and Developments			-	10	9	19	10	9	19	10	64	74
Total Programme	-	-	-	6,24 7	1,097	7,34 4	6,279	1,097	7,37 6	6,279	1,327	7,606
P 4. General, Administration, Planning and Support Services												
SP 4.1 Governance in Natural Resource	_									322	14	

			-	301	14	315	320	14	334			336
SP 4. 2 Planning and Project Monitoring			-	22		22	22		22	22		22
SP 4.3 Financial Management Services			_	45		45	45		45	46		46
Total Programme	-	-	_	368	14	382	387	14	401	390	14	404
Total Vote	13,513	3,877	17,39 0	13,8 01	4,023	17,8 24	13,98 7	4,008	17,9 95	14,110	4,333	18,443
Water Sub-Sector												
P 1. General Administration, Planning and Support Services												
SP 1.1 Water Policy	647	151	798	659	151	810	789	151	940	813	151	964
Total Programme	647	151	798	659	151	810	789	151	940	813	151	964
P2. Water Resources Management												
SP 2.1 Water Resources Conservation and Protection	1,287	4,608	5,895	1,24 2	4,685	5,92 7	1,268	4,685	5,95 3	1,245	4,685	5,930
SP 2.2 Transboundary waters	7	80	87	7	80	87	7	80	87	7	80	87
Total Programme	1,294	4,688	5,982	1,24	4,765	6,01	1,275	4,765	6,04	1,252	4,765	6,017
P3. Water and Sewerage Infrastructure Development										,	,	
SP 3.1 Water and Sewerage Infrastructure Development	2,076	24,939	27,01 5	2,42 0	26,11 1	28,5 31	2,532	26,08 0	28,6 12	2,563	26,719	29,282
Total Programme	2,076	24,939	27,01 5	2,42	26,11 1	28,5 31	2,532	26,08 0	28,6 12	2,563	26,719	29,282
Total Vote	4,017	29,778	33,79 5	4,32 8	31,02 7	35,3 55	4,596	30,99 6	35,5 92	4,628	31,635	36,263
Irrigation Sub Sector												
P 1. Irrigation and Land Reclamation										-		

SP 1.1 Land Reclamation	44	5	49	53	5	58	58	136	194	63	136	199
DI III DANG REVIAMANION			.,,			8,68		150	8,69		100	177
SP 2.1 Irrigation and Drainage	901	6,423	7,324	762	7,923	5	777	7,913	0	778	8,865	9,643
Total Programme	945	6,428	7,373	816	7,928	8,74	835	8,049	8,88 4	840	9,001	9,841
P2. Water Storage and Flood Control												
SP 2.1 Water Storage and Flood Control.	-	3,300	3,300	45	4,325	4,37 0	51	5,925	5,97 6	55	5,925	5,980
SP 2.2 Water Harvesting	-	2,530	2,530	-	2,400	2,40 0		2,234	2,23 4		2,234	2,234
Total Programme	-	5,830	5,830	45	6,725	6,77	51	8,159	8,21	55	8,159	8,214
P 3. General Administration, Planning and Support Services								,			,	
SP 3.1 General Administration, Planning and Support Services	10	-	10	132		132	133		133	136		136
Total Programme	10	-	10	132	-	132	133	-	133	136	-	136
Total Vote	955	12,258	13,21 3	993	14,65 3	15,6 46	1,019	16,20 8	17,2 27	1,031	17,160	18,191
Mining Sub-Sector												
P 1 General Administration, Planning & Support Services												
SP 1.1 Mining Policy, Development and Coordination	924	60	984	800	60	860	839	60	899	880	60	940
Total Programme	924	60	984	800	60	860	839	60	899	880	60	940
P 2. Resource Surveys and Remote Sensing.												
SP 2.1 Resource Surveys and Remote Sensing	185	361	546	184	361	545	184	361	545	185	361	546
Total Programme	185	361	546	184	361	545	184	361	545	185	361	546
P 3 Mineral Resource Management												

SP 3.1 Mineral Resource Development	298	352	650	161	332	493	183	326	509	207	469	676
SP 3.2 Geological Surveys and Minerals Exploration	57	483	540	57	483	540	56	483	539	55	483	538
Total Programme	355	835	1,190	218	815	1,03	239	809	1,04	262	952	1,214
Total Vote	1,464	1,256	2,720	1,20 2	1,236	2,43	1,262	1,230	2,49	1,327	1,373	2,700
Sector Totals	22,788	50,798	73,58 5	23,2 72	54,78 7	78,0 59	23,90	56,27 9	80,1 85	24,183	58,559	82,742

## 3.2.2Programmes and Sub- Programmes by Economic Classification

Table 3.6: Programmes and Sub- Programmes by Economic classifications (Ksh. Millions)

**Analysis of Programme Expenditure by Economic Classification** 

		]	Requiremen	ıt	_	Allocation	
<b>Economic Classification</b>	2017/18	2018/19	2019/20	2020/21	2018/19	2019/20	2020/2 1
Environment							
P1. General Administration, Planning	and Support Ser	vices	1	1			
Current Expenditure	369	874	882	902	360	383	416
Compensation of Employees	217	225	231	245	225	231	245
Use of goods and Services	143	640	642	648	126	143	162
Grants and Other Transfers	-	-	-	-	-	-	_
Other Recurrent	9	9	9	9	9	9	9
Capital Expenditure						•	-

	-	-	-	-			
Acquisition of Non Financial Assets	-	-	-	1	-	-	-
Capital Grants to Government Agencies	-	-	1	1	1	1	-
Other Development	-	-	-	1	ı	1	-
Total Programme	369	874	882	902	360	383	416
SP 1.1 General Administration, Planning an	d Support S	Services					
Current Expenditure	369	874	882	902	360	383	416
Compensation of Employees	217	225	231	245	225	231	245
Use of goods and Services	143	640	642	648	126	143	162
Grants and Other Transfers	-	0	0	0	-	-	-
Other Recurrent	9	9	9	9	9	9	9
Capital Expenditure	-	-			-	-	-
Acquisition of Non-Financial Assets		-	1	1			
Capital Grants to Government Agencies		-	-	1			
Other Development		-	-	-			
Total Sub Programme	369	874	882	902	360	383	416
P 2 Environment Management and Protecti	on						
Current Expenditure	1,355	2,357	2,359	2,361	1,495	1,527	1,529

Compensation of Employees	70	72	74	76	72	74	76
Use of goods and Services	37	37	37	37	37	37	37
Grants and Other Transfers	1,248	2,248	2,248	2,248	1,386	1,416	1,416
Other Recurrent	-	-	-	-	-	-	-
Capital Expenditure	2,528	3,746	4,029	4,031	2,766	2,755	2,976
Acquisition of Non-Financial Assets	389	645	736	686	626	615	836
Capital Grants to Government Agencies	1,917	2,557	2,626	2,630	1,917	1,917	1,917
Other Development	223	544	667	715	223	223	223
Total Programme	3,883	6,103	6,388	6,392	4,261	4,282	4,505
SP 2.1 National Environment Management	· ·					· · · · · · · · · · · · · · · · · · ·	
Current Expenditure	1,228	2,228	2,228	2,228	1,366	1,396	1,396
Compensation of Employees							
Use of goods and Services							
Grants and Other Transfers	1,228	2,228	2,228	2,228	1,366	1,396	1396
Other Recurrent							
Capital Expenditure	2,448	3,620	3,915	3,901	2,686	2,675	2,896
Acquisition of Non Financial Assets	349	590	682	626	586	575	796
Capital Grants to Government Agencies	1,917	2,557	2,626	2,630	1,917	1,917	1,917
Other Development							

	183	473	607	645	183	183	183
Total Sub Programme	3,676	5,848	6,143	6,129	4,052	4,071	4,292
SP 2.2 Policy & Governance in Environmen	ıt						
Current Expenditure	127	129	131	133	129	131	133
Compensation of Employees	70	72	74	76	72	74	76
Use of goods and Services	37	37	37	37	37	37	37
Grants and Other Transfers	20	20	20	20	20	20	20
Other Recurrent							
Capital Expenditure	-	-	-	-	-	-	-
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	127	129	131	133	129	131	133
SP 2.3 National Climate Change Adaptation	n and Mitigat	tion		•			
Current Expenditure	-	-	-	-	-	-	-
Compensation of Employees							
Use of goods and Services							
Grants and Other Transfers							
Other Recurrent							
Capital Expenditure	80	126	114	130	80	80	80
Acquisition of Non Financial Assets	40	55	54	60	40	40	40
Capital Grants to Government Agencies							
Other Development	40	71	60	70	40	40	40
Total Sub Programme							

	80	126	114	130	80	80	80
P 3. Meteorological Services	l l						
Current Expenditure	1,115	1,141	1,170	1,170	1,093	1,132	1,143
Compensation of Employees	903	929	960	960	914	936	947
Use of goods and Services	189	191	189	189	156	173	173
Grants and Other Transfers	14	13	13	13	14	14	14
Other Recurrent	9	8	8	8	9	9	9
Capital Expenditure	1,100	1,201	1,306	1,306	1,082	1,082	1,082
Acquisition of Non Financial Assets	1,100	1,201	1,306	1,306	1,082	1,082	1,082
Capital Grants to Government Agencies	_	-	-	-	-	-	-
Other Development	_	-	-	-	-	-	-
Total Programme	2,215	2,342	2,476	2,476	2,175	2,214	2,225
SP 3.1 Modernization of Meteorological S	ervices						
Current Expenditure	1,115	1,141	1,170	1,170	1,093	1,132	1,143
Compensation of Employees	903	929	960	960	914	936	947
Use of goods and Services	189	191	189	189	156	173	173
Grants and Other Transfers	14	13	13	13	14	14	14
Other Recurrent	9	8	8	8	9	9	9

Capital Expenditure	766	766	766	766	748	748	748
Acquisition of Non Financial Assets	766	766	766	766	748	748	748
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	1,881	1,907	1,936	1,936	1,841	1,880	1,891
SP 3.2 Advertent Weather Modification							
Current Expenditure	-	-	-	-	-	-	-
Compensation of Employees							
Use of goods and Services							
Grants and Other Transfers							
Other Recurrent							
Capital Expenditure	334	435	540	540	334	334	334
Acquisition of Non Financial Assets	334	435	540	540	334	334	334
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	334	435	540	540	334	334	334
Total Vote	6,467	9,319	9,746	9,770	6,796	6,879	7,146
Natural Resources- Sub-Sector							
P.1 Natural Resources Management and Protection							
Current Expenditure	13,513	-	-	-	-	-	-
Compensation of Employees	145	-	-	-	-	-	-

ı	1 1	ı		ı	i	ı	1 1
Use of goods and Services	957	-	-	-	-	-	_
Grants and Other Transfers	12,374	-	-	-	-	-	-
Other Recurrent	37	-	-	-	-	-	-
Capital Expenditure	3,877	-	-	-	-	-	-
Acquisition of Non Financial Assets	6	-	-	-	-	-	-
Capital Grants to Government Agencies	3,867	-	_	_	-	-	-
Other Development	5	-	-	_	-	-	-
Total Programme	17,390	-	_	_	-	_	_
SP 1.1 Forest Conservation and Manageme	ent	•		•		•	
Current Expenditure	5,137	-	-	-	-	-	-
Compensation of Employees	-						
Use of goods and Services	_						
Grants and Other Transfers	5,137						
Other Recurrent							
Capital Expenditure	2,205	-	-	-	-	-	-
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies	2,200						
Other Development	5						

		ĺ				İ	]
Total Sub Programme	7,342	-	-	-	-	-	-
SP.1. 2 Forestry Research and Developments	S						
Current Expenditure	1,492	_	_	_	_	_	_
Compensation of Employees	1,152						
Use of goods and Services							
Grants and Other Transfers	1,492						
Other Recurrent	,						
Capital Expenditure	178	-	-	-	-	-	-
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies	178						
Other Development							
Total Sub Programme	1,670	-	-	-	-	-	-
S.P. 1.3 Policy and Governance in Natural							
Resources							
Current Expenditure	174	-	-	-	-	-	-
Compensation of Employees	121						
Use of goods and Services	53						
Grants and Other Transfers	-						
Other Recurrent	-						
Capital Expenditure	13					-	-
Acquisition of Non Financial Assets							

	-						
Capital Grants to Government Agencies	13						
Other Development	_						
Total Sub Programme	187	_		-	_	_	_
S.P 1.4 National Resource Management	_						
Current Expenditure	639	-	-	-	-	-	-
Compensation of Employees	24						
Use of goods and Services	273						
Grants and Other Transfers	305						
Other Recurrent	37						
Capital Expenditure	669	-	-	-	-	-	-
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies	669						
Other Development							
Total Sub Programme	1,308	-	-	-	-	-	-
S.P 1.5 Wildlife Security, National Parks and Reserves Managemnt							
Current Expenditure	6,071	-	1	1	-	-	
Compensation of Employees	-						
Use of goods and Services							

	631						
Grants and Other Transfers	5,440						
Other Recurrent	2,110						
Capital Expenditure	813	-	-	-	-	-	-
Acquisition of Non Financial Assets	6						
Capital Grants to Government Agencies	807						
Other Development							
Total Sub Programme	6,884	-	-	-	•	-	1
P2. Forests and Water Towers Conservation and Management							
Current Expenditure	-	8,508	9,226	9,756	7,187	7,321	7,441
Compensation of Employees	-	47	48	49	46	47	49
Use of goods and Services	-	59	70	86	19	36	54
Grants and Other Transfers	-	8,402	9,108	9,621	7,122	7,238	7,338
Other Recurrent	-	-	-	-	-	-	-
Capital Expenditure	-	7,128	7,716	6,897	2,912	2,897	2,992
Acquisition of Non Financial Assets	-	-	-	-	-	-	-
Capital Grants to Government Agencies	-	7,128	7,716	6,897	2,912	2,897	2,992
Other Development	-	-	-	-	1	-	-

			1				
Total Programme	-	15,636	16,942	16,653	10,099	10,218	10,433
SP 2. 1. Forest Resources Conservation and N	<b>Manageme</b>	nt		T			
Current Expenditure	-	6,206	6,718	7,135	5,224	5,324	5,444
Compensation of Employees		47	48	49	46	47	49
Use of goods and Services		59	70	86	19	36	54
Grants and Other Transfers		6,100	6,600	7,000	5,159	5,241	5,341
Other Recurrent							
Capital Expenditure	-	3,043	3,453	3,365	2,130	2,115	2,210
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies		3,043	3,453	3,365	2,130	2,115	2,210
Other Development							
Total Sub Programme	-	9,249	10,171	10,500	7,354	7,439	7,654
SP. 2.2 Forest Research and Developments		1		T			
Current Expenditure	-	1,708	1,879	1,955	1,491	1,514	1,514
Compensation of Employees							
Use of goods and Services							
Grants and Other Transfers		1,708	1,879	1,955	1,491	1,514	1,514
Other Recurrent							
Capital Expenditure	-	1,465	1,440	1,365	173	173	173
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies		1,465	1,440	1,365	173	173	173

Other Development							
Total Sub Programme	_	3,173	3,319	3,320	1,664	1,687	1,687
SP. 2. 3 Water Towers rehabilitation and co	nservation	2,272	-,	-,	2,000	2,001	2,00.
Current Expenditure	1	594	629	666	472	483	483
Compensation of Employees		374	027	000	472	703	703
Use of goods and Services							
Grants and Other Transfers		594	629	666	472	483	483
Other Recurrent							
Capital Expenditure	-	2,620	2,823	2,167	609	609	609
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies		2,620	2,823	2,167	609	609	609
Other Development							
Total Sub Programme	_	3,214	3,452	2,833	1,081	1,092	1,092
P 3. Wildlife Conservation and Management		,	,	,	ŕ	ŕ	,
Current Expenditure	-	24,658	20,479	21,232	6,247	6,279	6,279
Compensation of Employees	-	-	-	-	-	-	
Use of goods and Services	-	15,900	10,950	10,850	660	660	660
Grants and Other Transfers	-	8,758	9,529	10,382	5,587	5,619	5,619
Other Recurrent	-	-	-	-	-	=	=
Capital Expenditure	-	34,155	33,683	23,520	1,097	1,097	1,327

	1	1					
Acquisition of Non Financial Assets	-	-	-	-	-	-	-
Capital Grants to Government Agencies	-	34,155	33,683	23,520	1,097	1,097	1,327
Other Development	-	-	-	-	-	-	-
Total Programme	-	58,813	54,162	44,752	7,344	7,376	7,606
SP 3.1 Wildlife Security, Conservation and M	<b>Ianagemen</b>	t	,				
Current Expenditure	-	24,258	20,029	20,882	6,237	6,269	6,269
Compensation of Employees							
Use of goods and Services		15,500	10,500	10,500	650	650	650
Grants and Other Transfers		8,758	9,529	10,382	5,587	5,619	5,619
Other Recurrent							
Capital Expenditure	-	33,355	33,183	23,170	1,088	1,088	1,263
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies		33,355	33,183	23,170	1,088	1,088	1,263
Other Development							
Total Sub Programme	-	57,613	53,212	44,052	7,325	7,357	7,532
SP. 3.2. Wildlife Research and Developments			Т			T	
Current Expenditure	-	400	450	350	10	10	10
Compensation of Employees							
Use of goods and Services	-	400	450	350	10	10	10
Grants and Other Transfers							
Other Recurrent							

Capital Expenditure		800	500	350	9	9	64	
Acquisition of Non Financial Assets	_	800	300	330			04	l
Capital Grants to Government Agencies	-	800	500	350	9	9	64	
Other Development								
Total Sub Programme	-	1,200	950	700	19	19	74	
P4. General, Administration, Planning and S	Support Sei	vices						Ш
Current Expenditure	-	451	463	473	368	387	390	
Compensation of Employees	-	102	105	108	103	105	108	
Use of goods and Services	-	310	317	323	229	246	246	
Grants and Other Transfers	-	-	-	-	-	-	-	
Other Recurrent	-	39	41	42	36	36	36	
Capital Expenditure	-	2,320	2,190	1,070	14	14	14	
Acquisition of Non Financial Assets	-	1,700	1,870	920	-	-	-	
Capital Grants to Government Agencies	-	620	320	150	14	14	14	
Other Development	-	-	-	-	-	-	-	
Total Programme	-	2,771	2,653	1,543	382	401	404	
SP 4. 1. Governance in Natural resource	T		1	-				l
Current Expenditure	-	390	398	404	301	320	322	
Compensation of Employees		76	78	80	76	78	80	

Use of goods and Services		275	279	282	195	212	212
Grants and Other Transfers					-		
Other Recurrent		39	41	42	30	30	30
Capital Expenditure	-	2,320	2,190	1,070	14	14	14
Acquisition of Non Financial Assets		1,700	1,870	920	-	-	-
Capital Grants to Government Agencies		620	320	150	14	14	14
Other Development							
Total Sub Programme	-	2,710	2,588	1,474	315	334	336
SP. 4.2. Planning and project monitoring	, ,						1
Current Expenditure	-	19	20	21	22	22	22
Compensation of Employees		6	6	6	6	6	6
Use of goods and Services		13	14	15	12	12	12
Grants and Other Transfers					-		
Other Recurrent					4	4	4
Capital Expenditure	-	-	-	-	-	-	-
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	-	19	20	21	22	22	22

SP. 4.3 Financia	l Management	Services
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Current Expenditure	-	43	45	48	45	45	46
		21	21	22	21	21	22
Compensation of Employees		21	21	22	21	21	22
Use of goods and Services		22	24	26	22	22	22
Grants and Other Transfers					-		
Other Recurrent					2	2	2
Capital Expenditure	-	1	1	-	-	-	-
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	-	43	45	48	45	45	46
TOTAL VOTE	17,390	77,220	73,757	62,948	17,824	17,995	18,443
Water Sub-sector		-		•	-	-	

## Water Sub-sector

## P 1. General Administration, Planning and Support Services

Current Expenditure	647	616	650	685	659	789	813
Compensation of Employees	258	248	255	265	248	255	265
Use of goods and Services	183	167	191	210	116	132	139
Grants and Other Transfers	201	195	197	202	291	398	404
Other Recurrent	5	6	7	8	4	4	5
Capital Expenditure							

	151	100	150	180	151	151	151
Acquisition of Non Financial Assets	_	_	-	1	_	1	_
•	151	100		100	1.51		151
Capital Grants to Government Agencies	151	100	150	180	151	151	151
Other Development	-	-	-	-	-	-	-
Total Programme	798	716	800	865	810	940	964
SP 1.1 Water Policy							
Current Expenditure	647	616	650	685	659	789	813
Compensation of Employees	258	248	255	265	248	255	265
Use of goods and Services	183	167	191	210	116	132	139
Grants and Other Transfers	201	195	197	202	291	398	404
Other Recurrent	5	6	7	8	4	4	5
Capital Expenditure	151	100	150	180	151	151	151
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies	151	100	150	180	151	151	151
Other Development							
Total Sub Programme	798	716	800	865	810	940	964
P2. Water Resources Conservation and Protection							
Current Expenditure	1,294	2,187	2,228	2,275	1,249	1,275	1,252
Compensation of Employees	94	99	104	109	84	86	88

Use of goods and Services	53	570	604	643	49	45	47
Grants and Other Transfers	1,145	1,516	1,517	1,520	1,114	1,142	1,115
Other Recurrent	2	2	3	3	2	2	2
Capital Expenditure	4,688	5,710	5,821	5,940	4,765	4,765	4,765
Acquisition of Non Financial Assets	-	-	-	-	-	-	_
Capital Grants to Government Agencies	4,688	5,710	5,821	5,940	4,765	4,765	4,765
Other Development	-	-	-	-	-	-	-
Total Sub Programme	5,982	7,897	8,049	8,215	6,014	6,040	6,017
SP 2.1 Water Resources Conservation and	Protection	ı		1	-		
Current Expenditure	1,287	2,102	2,141	2,180	1,242	1,268	1,245
Compensation of Employees	94	99	104	109	84	86	88
Use of goods and Services	49	501	534	568	45	41	43
Grants and Other Transfers	1,142	1,500	1,500	1,500	1,111	1,139	1,112
Other Recurrent	2	2	3	3	2	2	2
Capital Expenditure	4,608	5,625	5,730	5,843	4,685	4,685	4,685
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies	4,608	5625	5730	5843	4,685	4,685	4,685
Other Development							
Total Sub Programme							

	5,895	7,727	7,871	8,023	5,927	5,953	5,930
SP 2.2 Transboundary waters							
Current Expenditure	7	85	87	95	7	7	7
Compensation of Employees							
Use of goods and Services	4	69	70	75	4	4	4
Grants and Other Transfers	3	16	17	20	3	3	3
Other Recurrent							
Capital Expenditure	80	85	91	97	80	80	80
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies	80	85	91	97	80	80	80
Other Development							
Total Sub Programme	87	170	178	192	87	87	87
P3. Water and Sewerage Infrastructure De	velopment						
Current Expenditure	2,076	5,272	5,604	6,006	2,420	2,532	2,563
Compensation of Employees	248	2,003	2,149	2,341	234	242	247
Use of goods and Services	15	2,102	2,220	2,462	14	15	16
Grants and Other Transfers	1,809	1,166	1,234	1,202	2,168	2,259	2,284
Other Recurrent	4	1	1	1	4	16	16
Capital Expenditure	24,939	102,846	122,053	97,857	26,111	26,080	26,719
Acquisition of Non Financial Assets	-	ı	ı	-	-	-	-

	1		ĺ				
Capital Grants to Government Agencies	24,939	102,846	122,053	97,857	26,111	26,080	26,719
Other Development	_	-	-	-	-	-	-
Total Programme	27,015	108,118	127,657	103,863	28,531	28,612	29,282
SP 3.1 Water and Sewerage Infrastructure	Developmen	ıt					
Current Expenditure	2,076	5,272	5,604	6,006	2,420	2,532	2,563
Compensation of Employees	248	2,003	2,149	2,341	234	242	247
Use of goods and Services	15	2,102	2,220	2,462	14	15	16
Grants and Other Transfers	1,809	1166	1234	1202	2,168	2,259	2,284
Other Recurrent	4	1	1	1	4	16	16
Capital Expenditure	24,939	102,846	122,053	97,857	26,111	26,080	26,719
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies	24,939	102,846	122,053	97,857	26,111	26,080	26,719
Other Development	-						
Total Sub Programme	27,015	108,118	127,657	103,863	28,531	28,612	29,282
TOTAL VOTE	33,795	116,731	136,506	112,943	35,355	35,592	36,263
IRRIGATION SUB SECTOR							
P 1. Irrigation and Land Reclamation				T			
Current Expenditure	945	1,292	1,430	1,708	816	835	840
Compensation of Employees	146	196	214	232	93	95	97

Use of goods and Services	90	207	225	340	36	38	41
Grants and Other Transfers	708	888	990	1,135	686	702	702
Other Recurrent	1	1	1	1	-	-	-
Capital Expenditure	6,428	9,700	12,187	9,000	7,928	8,049	9,001
Acquisition of Non Financial Assets	485	3,700	6,187	3,000	4,693	4,744	5,676
Capital Grants to Government Agencies	5,943	6,000	6,000	6,000	3,235	3,305	3,325
Other Development	-	-	-	-			
Total Programme	7,373	10,992	13,617	10,708	8,744	8,884	9,841
SP 1.1 Land Reclamation							
Current Expenditure	44	201	223	287	53	58	63
Compensation of Employees	32	49	58	67	38	42	46
Use of goods and Services	12	72	83	105	15	16	17
Grants and Other Transfers		80	82	115	1	1	1
Other Recurrent		0	0	0	1	1	Ī
Capital Expenditure	5	200	136	-	5	136	136
Acquisition of Non Financial Assets	5	200	136	-	5	136	136
Capital Grants to Government Agencies	-	0	0	0		-	
Other Development							

Total Sub Programme	49	401	359	287	58	194	199
SP 1.2 Irrigation and Drainage	1 1						1
Current Expenditure	901	1,091	1,207	1,421	762	777	778
Compensation of Employees	114	147	156	165	55	53	52
Use of goods and Services	78	135	142	235	21	22	24
Grants and Other Transfers	708	808	908	1,020	686	702	702
Other Recurrent	1	1	1	1	-	-	-
Capital Expenditure	6,423	9,500	12,051	9,000	7,923	7,913	8,865
Acquisition of Non Financial Assets	480	3,500	6,051	3,000	4,688	4,608	5,540
Capital Grants to Government Agencies	5,943	6,000	6,000	6,000	3,235	3,305	3,325
Other Development					-	-	-
Total Sub Programme	7,324	10,591	13,258	10,421	8,685	8,690	9,643
P2. Water Storage and Flood Control	T T		T				
Current Expenditure	-	260	309	343	45	51	55
Compensation of Employees	-	170	197	215	35	39	43
Use of goods and Services	-	65	71	82	9	10	10
Grants and Other Transfers	-	-	-	-	-	-	-
Other Recurrent	-	25	41	46	2	2	2

			Î				
Capital Expenditure	5,830	15,159	16,580	9,448	6,725	8,159	8,159
Acquisition of Non Financial Assets	5,830	15,159	16,580	9,448	6,725	8,159	8,159
Capital Grants to Government Agencies	-	-	-	-	-	-	-
Other Development	-	-	-	-	-	-	-
Total Programme	5,830	15,419	16,889	9,791	6,770	8,210	8,214
SP 2.1 Water Storage and Flood Control.	1 1					T	
Current Expenditure	_	235	277	304	45	51	55
Compensation of Employees		145	165	176	35	39	43
Use of goods and Services		65	71	82	9	10	10
Grants and Other Transfers		-	-	-	-	-	-
Other Recurrent		25	41	46	2	2	2
Capital Expenditure	3,300	11,159	13,086	7,445	4,325	5,925	5,925
Acquisition of Non Financial Assets	3,300	11,159	13,086	7,445	4,325	5,925	5,925
Capital Grants to Government Agencies							
Other Development					-	-	-
Total Sub Programme	3,300	11,394	13,363	7,749	4,370	5,976	5,980
SP 2.2 Water Harvesting	1	Į.	ı	Ţ	Į.	ı	1
Current Expenditure	_	25	32	39	-	-	-
Compensation of Employees		25	32	39			

Use of goods and Services		ĺ		ĺ			
Grants and Other Transfers							
Other Recurrent							
Capital Expenditure	2,530	4,000	3,494	2,003	2,400	2,234	2,234
Acquisition of Non Financial Assets	2,530	4,000	3,494	2,003	2,400	2,234	2,234
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	2,530	4,025	3,526	2,042	2,400	2,234	2,234
P 3. General Administration, Planning and	l Support Ser	vices					
Current Expenditure	10	366	408	460	132	133	136
Compensation of Employees	-	120	138	147	88	88	89
Use of goods and Services	9	123	135	164	41	42	46
Grants and Other Transfers	1	-	-	-	-	-	
Other Recurrent	-	123	135	149	3	3	1
Capital Expenditure	-	-	-	-	-	-	-
Acquisition of Non Financial Assets	-	-	-	-	-	-	-
Capital Grants to Government Agencies	-	-	-	-	-	-	-
Other Development	-	-	-	-	-	-	-
Total Programme	10	366	408	460	132	133	136
SP 3.1 General Administration, Planning a	nd Support S	ervices					

Current Expenditure	10	366	408	460	134	138	137
Compensation of Employees		120	138	147	88	88	89
Use of goods and Services	9	123	135	164	43	47	47
Grants and Other Transfers	1	0	0	0	-	-	-
Other Recurrent		123	135	149	3	3	1
Capital Expenditure	-	-	-	-			-
Acquisition of Non Financial Assets							
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	10	366	408	460	134	138	137
TOTAL VOTE	13,213	26,777	30,914	20,959	15,646	17,227	18,191

Mining Sub Sector
P 1 General Administration, Planning & Support Services

Current Expenditure	924	842	535	535	800	839	880
Compensation of Employees	219	225	229	229	219	219	219
Use of goods and Services	686	564	251	251	562	601	642
Grants and Other Transfers	-	-	-	-	_	_	_
Other Recurrent	19	53	55	55	19	19	19
Capital Expenditure	60	110	110	50	60	60	60

Acquisition of Non Financial Assets	60	110	110	50	60	60	60
			-				
Capital Grants to Government Agencies	=	-	-	-	-	-	-
Other Development	-	-	-	-	-	-	-
Total Programme	984	952	645	585	860	899	940
SP 1.1 Mining Policy, Development and Coo	rdination						
C	024	943	525	525	800	920	990
Current Expenditure	924	842	535	535	800	839	880
Compensation of Employees	219	225	229	229	219	219	219
Use of goods and Services	686	564	251	251	562	601	642
Grants and Other Transfers							
Other Recurrent	19	53	55	55	19	19	19
Capital Expenditure	60	110	110	50	60	60	60
Acquisition of Non Financial Assets	60	110	110	50	60	60	60
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	984	952	645	585	860	899	940
P 2. Resource Surveys and Remote Sensing.							
Current Expenditure	185	236	251	251	184	184	185
Compensation of Employees	98	100	102	102	98	98	98
Use of goods and Services	66	106	118	118	66	66	66

	1.4	1.4	1.4	1.4	12	10	1.4
Grants and Other Transfers	14	14	14	14	13	13	14
Other Recurrent	7	16	17	17	7	7	7
Capital Expenditure	361	395	349	349	361	361	361
Acquisition of Non Financial Assets	361	395	349	349	361	361	361
Capital Grants to Government Agencies	_	-	-	-	-	-	-
Other Development	-	-	-	-	-	-	-
Total Programme	546	631	600	600	545	545	546
SP 2.1 Resource Surveys and Remote Sensi	ng					Т	Т
Current Expenditure	185	236	251	251	184	184	185
Compensation of Employees	98	100	102	102	98	98	98
Use of goods and Services	66	106	118	118	66	66	66
Grants and Other Transfers	14	14	14	14	13	13	14
Other Recurrent	7	16	17	17	7	7	7
Capital Expenditure	361	395	349	349	361	361	361
Acquisition of Non Financial Assets	361	395	349	349	361	361	361
Capital Grants to Government Agencies							
Other Development							
Total Sub Programme	546	631	600	600	545	545	546
P 3 Mineral Resource Management							

Current Expenditure	355	477	499	494	218	239	262
Compensation of Employees	266	328	337	337	129	151	175
Use of goods and Services	83	115	127	147	83	82	81
Grants and Other Transfers	7	18	18	7	6	6	6
Other Recurrent	_	16	17	3	1	1	_
Capital Expenditure	835	3,501	3,501	3,501	815	809	952
Acquisition of Non Financial Assets	835	1,441	1,441	1,441	815	809	952
Capital Grants to Government Agencies	-				-	-	- 702
Other Development	_	2,060	2,060	2,060		-	
Total Programme	1,190	3,978	4,000	3,995	1,033	1,048	1,214
SP 3.1 Mineral Resource Development	1,170	3,976	4,000	3,993	1,033	1,040	1,214
Current Expenditure	298	337	357	377	161	183	207
Compensation of Employees	260	267	275	275	123	145	169
Use of goods and Services	38	70	82	102	38	38	38
Grants and Other Transfers	_	-	-	-			
Other Recurrent	_	_	-	-	-		
Capital Expenditure	352	488	488	488	332	326	469
Acquisition of Non Financial Assets	332	700	700	700	332	320	707

SECTOR TOTALS	73,585	235,608	256,168	211,800	78,059	80,185	82,742
TOTAL VOTE	2,720	5,561	5,245	5,180	2,438	2,492	2,700
Total Sub Programme	540	3,153	3,155	3,130	540	539	538
Other Development		2,060	2,060	2,060	-	=	-
Capital Grants to Government Agencies							
Acquisition of Non Financial Assets	483	953	953	953	483	483	483
Capital Expenditure	483	3,013	3,013	3,013	483	483	483
Other Recurrent	_	16	17	3	-		
Grants and Other Transfers	7	18	18	7	6	6	6
Use of goods and Services	45	45	45	45	45	44	43
Compensation of Employees	6	61	62	62	6	6	6
Current Expenditure	57	140	142	117	57	56	55
SP 3.2 Geological Surveys and Minerals E	xploration						
Total Sub Programme	650	825	845	865	493	509	676
Other Development		-	-	-			
Capital Grants to Government Agencies		-	-	-			
	352	488	488	488	332	326	469

Table 3.7: Semi- Autonomous Government Agencies (Ksh. Millions)

Environment Sub-Sector

1. National Environment Management Authority (NEMA)

	2017/18	R	EQUIREMEN	NT	A	LLOCATIO	N
<b>Economic Classification</b>	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Current Expenditure	990	1,490	1,540	1,600	1,143	1,165	1,180
Compensation of Employees	750	770	810	835	960	970	980
Use of Goods and Services	240	720	730	765	183	195	200
Grants and other transfers	-	-	-	-	-	-	-
Other recurrent	-	-	-	-	-	-	-
Capital Expenditure	632	1,084	876	640	462	462	462
Acquisition of Non-Financial Assets	-	-	-	-	-	-	-
Capital Grants to Government Agencies	622	1,034	826	590	452	452	452
Other Development	10	50	50	50	10	10	10
Total Expenditure	1,622	2,574	2,416	2,240	1,403	1,417	1,432
GROSS	1,622	2,574	2,416	2,240	1,403	1,417	1,432
AIA - Internally Generated Revenue	90	90	90	90	90	90	90

Development Partners	537	267	267	267	267	267	267
Net-Exchequer	1,532	2,484	2,326	2,150	1,313	1,327	1,342
2. NETFUND							
<b>Economic Classification</b>	2017/18	RI	EQUIREMEN	NT	A	LLOCATIO	N
Economic Classification	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Current Expenditure	138	160	171	171	131	155	163
Compensation of Employees	102	120	125	129	102	117	123
Use of Goods and Services	27	30	35	31	21	28	30
Grants and other transfers	-	-	-	-	-	-	-
Other recurrent	9	10	11	11	9	10	11
Capital Expenditure	157	340	357	375	157	160	167
Acquisition of Non-Financial Assets	-	-	-	-	-	-	-
Capital Grants to Government Agencies	157	340	357	375	157	160	167
Other Development	-	-	-	-	-	-	-
Total Expenditure	295	500	528	546	288	315	330
GROSS	295	500	528	546	288	315	330
AIA - Internally Generated Revenue	-	-	-	-	-	-	-
Development Partners	99	61	61	61	61	61	61

Net-Exchequer	196	439	467	485	227	254	269
3. NATIONAL ENVIRONMENT	TAL COMPLAIN	TS COMMIT	ГТЕЕ				
Economic Classification		R	EQUIREME	NT	A	LLOCATIO	ON
Economic Classification	2017/18 Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Current Expenditure	170	200	250	275	95	105	110
Compensation of Employees	20	30	50	55	20	25	30
Use of Goods and Services	150	170	200	220	70	80	80
Grants and other transfers	-	ī	ı	F	-	-	1
Other recurrent	-	-	-	-	-	-	_
Capital Expenditure							
Acquisition of Non-Financial Assets	_	-	-	-	_	_	_
Capital Grants to Government Agencies	-	-	-	-	-	-	-
Other Development	-	1	1	1	-	•	-
TOTAL VOTE	170	200	250	275	95	105	110
GROSS	170	200	250	275	95	105	110
AIA - Internally Generated Revenue	-	-	-	-	-	-	-
Development Partners	-	-	-	-	-	-	-
Net-Exchequer	170	200	250	275	95	105	110

Natural Resources Sub Seector								
	2017/18	Requirement			Allocation			
<b>Economic Classification</b>	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21	
Kenya Forest Service								
Current Expenditure	5,137	6,100	6,600	7,000	5,328	5,410	5,460	
Compensation of Employees	4,968	5,334	5,707	6,106	5,115	5,141	5,141	
Use of goods and Services	169	766	893	894	213	269	319	
Other Recurrent	-			-		-	-	
Capital Expenditure	1,655	2,050	2,450	2,350	1,655	1,655	1,655	
Acquisition of Non Financial Assets	1,655	2,050	2,450	2,350	1,655	1,655	1,655	
Other Development	-	-		-		-	-	
Total Programme	6,792	8,150	9,050	9,350	6,983	7,065	7,115	
Summary of Expenditure and Revenue Generated								
Gross	6,792	8,150	9,050	9,350	6,983	7,065	7,115	
AIA - Internally Generated Revenue	3,200	3,250	3,300	3,350	3,250	3,300	3,350	
Development Partners	703	411	750	860	703	703	703	
NET-Exchequer	2,889	4,489	5,000	5,140	3,030	3,062	3,062	
Kenya Forest Research Institute								
Current Expenditure	1,491	1,708	1,879	1,955	1,491	1,514	1,514	

Compensation of Employees	1,200	1,397	1,556	1,618	1,341	1,360	1,360
Use of goods and Services	271	271	282	282	112	116	116
Other Recurrent	20	40	41	55	38	38	38
Capital Expenditure	178	1,465	1,440	1,365	173	173	173
Acquisition of Non Financial Assets	113	665	590	495	110	110	110
Other Development	65	800	850	870	63	63	63
Total Programme	1,669	3,173	3,319	3,320	1,664	1,687	1,687
Summary of Expenditure and Revenue Generated							
Gross	1,669	3,173	3,319	3,320	1,664	1,687	1,687
AIA - Internally Generated Revenue	6	6	6	6	6	6	6
Development Partners	-					-	-
NET-Exchequer	1,663	3,167	3,313	3,314	1,658	1,681	1,681
Kenya Water Towers Agency							
Current Expenditure	305	594	629	666	472	483	483
Compensation of Employees	240	358	369	380	358	362	362
Use of goods and Services	65	236	260	286	114	121	121
Other Recurrent	-						
Capital Expenditure							

	669		2,620	2,823	2,167	609	609	609
Acquisition of Non Financial								
Assets	669		2,620	2,823	2,167	609	609	609
Other Development	-		-	-	-	=	-	-
Total Programme	974		3,214	3,452	2,833	1,081	1,092	1,092
Summary of Expenditure and Revenue Generated			,					
Gross	974		3,214	3,452	2,833	1,081	1,092	1,092
AIA - Internally Generated Revenue	-		-	-	-	=	-	-
Development Partners	-		-	-	-	-	-	-
NET-Exchequer	974		3,214	3,452	2,833	1,081	1,092	1,092
Kenya Wildlife Service								
Current Expenditure	5,415		8,713	9,484	10,332	5,552	5,584	5,584
Compensation of Employees		4,359	5,243	5,768	6,345	4,763	4,795	4,795
Use of goods and Services		1,056	3,469	3,716	3,988	789	789	789
Other Recurrent	-		1	-	-	-	-	-
Capital Expenditure	793		3,285	3,143	3,140	1,043	1,043	1,043
Acquisition of Non Financial					,	,	Í	ĺ
Assets		793	3,285	3,143	3,140	1,043	1,043	1,043
Other Development								
Total Programme	6,208		11,998	12,627	13,472	6,595	6,627	6,627
Summary of Expenditure and								

Revenue Generated								
Gross	6,208		11,998	12,627	13,472	6,595	6,627	6,627
AIA - Internally Generated			,	,	-			
Revenue		3,034	3,300	3,500	3,700	3,290	3,290	3,290
Development Partners		197	396	63	-	197	197	197
NET-Exchequer	2,976		8,301	9,064	9,772	3,108	3,140	3,140
Wildlife Clubs of Kenya								
Current Expenditure	58		80	90	110	34	34	34
Compensation of Employees	25		45	45	50	24	24	24
Use of goods and Services	-		-	-	-	-	-	-
Other Recurrent	33		35	45	60	10	10	10
Capital Expenditure	20		70	40	30	20	20	20
Acquisition of Non Financial Assets	20		70	40	30	20	20	20
Other Development	-		1	-	-	-	-	-
Total Programme	78		150	130	140	54	54	54
Summary of Expenditure and Revenue Generated								
Gross	78		150	130	140	54	54	54
AIA - Internally Generated Revenue	33		35	37	40	10	10	10
Development Patners	-		-	-	-	-	_	-

NET E 1	45	115	0.2	100			
NET-Exchequer	45	115	93	100	44	44	44
Water Sub Sector							
1. Kenya Water Institute	·						
<b>Economic Classification</b>	2017/18	I	REQUIREME	ENT	A	LLOCATION	ON
Economic Classification	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Current Expenditure	201	390	437	481	294	398	404
Compensation of Employees	201	223	246	271	294	398	404
Use of Goods and Services	-	167	191	210	-	-	-
Other Recurrent	-			_	-	-	-
Capital Expenditure	31	100	150	180	31	31	31
Aquisation of Non-Financial Assets	31	100	150	180	31	31	31
Other Development	-	_		_	-	-	-
Total Expenditure	232	490	587	661	325	429	435
Summary of Expenditure and Revenue Generated							
Gross	232	490	587	661	325	429	435
AIA - Internally Generated Revenue	60	60	60	60	60	60	60
Development Patners	-	-		-		-	-
NET-Exchequer	172	430	527	601	265	369	375

2. Water Resource Management	Authority								
Current Expenditure	757	3,050		2,151		1,758	727	738	748
Compensation of Employees	407	1,049	)	1,117		1,189	600	608	617
Use of Goods and Services	350	501		534		568	127	134	140
Other Recurrent	-	1,500		500		-	-	-	-
Capital Expenditure	1,526	1,625	1	1,730		1,843	1,547	1,537	1,527
Aquisation of Non-Financial Assets	768	818		872		928	1,547	1,537	1,527
Other Development	757	806		859		914	-	-	-
Total Expenditure	2,283	4,674	ļ	3,881		3,601	2,274	2,275	2,275
Summary of Expenditure and Revenue Generated									
Gross	2,283	4,674	ļ	3,881		3,601	2,274	2,275	2,275
AIA - Internally Generated Revenue	350	350		350		350	350	350	350
<b>Development Patners</b>	-		-	_		-	-	-	-
NET-Exchequer	1,933	4,324	ļ	3,531		3,251	1,924	1,925	1,925
3. Tana Water Services Board	T						I	ı	1
Current Expenditure		96	213		244	281	96	97	g
Compensation of Employees		93	116		146	182	93	94	Ģ
Use of Goods and Services		3	92		94	94	3	3	

Other Recurrent	-	5	5	5	-	-	-
Capital Expenditure	300	6,089	2,315	1,050	625	575	1,050
Aquisation of Non-Financial		,	,	,			,
Assets	300	6,089	2,315	1,050	625	575	1,050
Other Development	-	-	-	-	-	-	-
Total Expenditure	396	6,302	2,559	1,331	721	672	1,149
Summary of Expenditure and Revenue Generated			,	,			,
Gross	396	6,302	2,559	1,331	721	672	1,149
AIA - Internally Generated							•
Revenue	84	-	84	84	84	84	84
Development Patners	10	-	-	-	-	-	-
NET-Exchequer	302	6,302	2,475	1,247	637	588	1,065
4 . Athi Water Services Board							
Current Expenditure	500	506	545	584	482	489	495
Compensation of Employees	240	284	310	324	240	243	247
Use of Goods and Services	220	180	185	200	202	212	222
Other Recurrent	40	42	50	60	40	42	44
Capital Expenditure	7,112	33,935	30,827	17,813	7,592	7,356	7,801
Aquisation of Non-Financial Assets	7,112	33,935	30,827	17,813	7,592	7,356	7,801
Other Development		=		=			

	-		-		-	-	-
Total Expenditure	7,612	34,441	31,372	18,397	8,074	7,845	8,296
Summary of Expenditure and	7,022	0 1,1 12	01,012	20,000	3,071	7,012	0,270
Revenue Generated							
Gross	7,612	34,441	31,372	18,397	8,074	7,845	8,296
AIA - Internally Generated	, ,	- /	- /-	- /	- / -	,	-, -, -
Revenue	500	-	-	-	-	-	-
Development Patners	2,000	2,000	2,000	2,000	2,000	2,000	2,000
NET-Exchequer	5,112	32,441	29,372	16,397	6,074	5,845	6,296
5. Northern Water Services Board	Ţ,						
Current Expenditure	106	126	136	141	101	102	104
Compensation of Employees	71	67	74	78	71	72	73
Use of Goods and Services	35	59	62	64	33	33	33
Other Recurrent	-	-	-	-	-	-	-
Capital Expenditure	319	6,120	16,005	13,700	469	469	469
Aquisation of Non-Financial Assets	-	_	-	-	-	_	-
Other Development	319	6,120	16,005	13,700	469	469	469
Total Expenditure	424	6,246	16,141	13,841	570	571	573
Summary of Expenditure and Revenue Generated			,				
Gross	424	6,246	16,141	13,841	570	571	573

AIA - Internally Generated Revenue	15	_	_	_	_	_	_
Development Patners	146	146	146	146	146	146	146
NET-Exchequer	263	6,100	15,995	13,695	424	425	427
6. Lake Victoria South Water Service	es Board						
Current Expenditure	90	260	281	309	87	88	89
Compensation of Employees	90	119	123	136	87	88	89
Use of Goods and Services	-	64	75	82	-	-	
Other Recurrent	-	77	83	91	-	-	
Capital Expenditure	3,057	7,549	8,623	9,075	2,459	3,251	3,209
Aquisation of Non-Financial Assets	3,147	7,549	8,623	9,075	2,459	3,251	3,209
Other Development	-	-	-	-	-	-	
Total Expenditure	3,112	7,809	8,904	9,384	2,546	3,339	3,298
Summary of Expenditure and Revenue Generated							
Gross	3,112	7,809	8,904	9,384	2,546	3,339	3,298
AIA - Internally Generated Revenue	35	-	-	-	-	-	
Development Patners	1,357	1,357	1,357	1,357	1,357	1,357	1,357
NET-Exchequer	1,720	6,452	7,547	8,027	1,189	1,982	1,94
7.Lake Victoria North Water Service	es Board						

		20.5	24.5	225	- 4		
Current Expenditure	66	305	315	325	64	65	66
Compensation of Employees	66	113	116	120	64	65	66
Use of Goods and Services	-	101	106	110	-	-	-
Other Recurrent	-	91	93	95	-	-	-
Capital Expenditure	2,663	7,433	10,550	12,714	2,727	2,822	1,894
Aquisation of Non-Financial Assets	2,663	7,433	10,550	12,714	2,727	2,822	1,894
Other Development	-	-	-	-	-	-	-
Total Expenditure	2,729	7,738	10,865	13,039	2,791	2,887	1,960
Summary of Expenditure and Revenue Generated							
Gross	2,729	7,738	10,865	13,039	2,791	2,887	1,960
AIA - Internally Generated Revenue	35	-	-	-	-	-	-
Development Patners	2,000	2,000	2,000	2,000	2,000	2,000	1,500
NET-Exchequer	694	5,738	8,865	11,039	791	887	460
					8. Tanath	i Water Serv	vices Board
Current Expenditure	76	314	344	379	74	75	76
Compensation of Employees	76	101	111	122	25	25	26
Use of Goods and Services	-	193	209	230	46	48	50
Other Recurrent	-						

		20	24	26	-	-	-
Capital Expenditure	899	6,131	6,825	5,700	1,149	1,107	531
Aquisation of Non-Financial	077	0,131	0,025	3,700	1,142	1,107	331
Assets	899	6,131	6,825	5,700	1,149	1,107	531
110000	0,7,	0,101	0,020	2,700	1,1 .>	1,107	
Other Development	-	-	-	-	-	-	-
Total Expenditure	975	6,445	7,169	6,079	1,223	1,182	607
Summary of Expenditure and		3,112	1,1	2,011	_,	_,	
Revenue Generated							
Gross	975	6,445	7 160	<i>(</i> 070	1 222	1 102	607
AIA - Internally Generated	9/5	0,445	7,169	6,079	1,223	1,182	007
Revenue	51	_	_	_	_	_	_
Revenue	31	_					
Development Patners Partners	650	650	650	650	650	650	200
NET-Exchequer	274	5,795	6,519	5,429	573	532	407
9. Rift Valley Water Services Board			,	<u> </u>			
Current Expenditure	221	464	460	445	211	214	217
Compensation of Employees	82	90	92	94	82	83	84
Use of Goods and Services	139	157	164	168	108	114	119
Other Recurrent	-	217	204	184	21	22	23
	- 10-	4= 0.45					
Capital Expenditure	6,102	17,912	23,005	13,745	6,099	5,714	6,254
Aquisation of Non-Financial	6 102	17.012	22.005	12.745	C 000	5714	C 254
Assets	6,102	17,912	23,005	13,745	6,099	5,714	6,254
Other Development	-	-	-	-	-	-	_

		40.0=4	22.45	11100	< 240	<b>.</b> 0.00	- <b>.</b>
Total Expenditure	6,323	18,376	23,465	14,190	6,310	5,928	6,471
Summary of Expenditure and Revenue Generated							
Revenue Generateu							
Gross	6,323	18,376	23,465	14,190	6,310	5,928	6,471
AIA - Internally Generated				Ź	ĺ	ĺ	
Revenue	211	-	-	-	-	-	-
Development Patners Partners	5,320	5,320	5,320	5,320	5,320	5,320	5,320
NET-Exchequer	792	13,056	18,145	8,870	990	608	1,151
10. Coast Water Services Board							
	(21	1.000	1 240	1.467	(21	C 40	< 40
Current Expenditure	631	1,266	1,340	1,467	631	640	649
Compensation of Employees	210	233	238	282	210	213	216
Use of Goods and Services	421	641	673	818	392	411	431
Other Recurrent		392	429	367	-	-	-
Capital Expenditure	5,200	5,102	6,603	7,004	1,605	2,115	3,150
Aquisation Acquisition of Non-	,	,	,	Ź	,		,
Financial Assets	5,200	5,100	6,600	7,000	1,605	2,115	3,150
Other Development	-	2	3	4	-	-	-
Total Expenditure	5,831	6,368	7,943	8,471	2,236	2,755	3,799
Summary of Expenditure and			, ,		, , ,	, , , ,	
Revenue Generated							
Gross	5,831	6,368	7,943	8,471	2,236	2,755	3,799
AIA - Internally Generated		-		-			·

Revenue	631		-		-	-	-
Development Patners Partners	1,000	1,000	1,000	1,000	1,000	1,000	1,000
NET-Exchequer	4,200	5,368	6,943	7,471	1,236	1,755	2,799
					11. Wa	ter Sector T	rust Fund
Current Expenditure	27	481	519	561	190	193	195
Compensation of Employees	27	191	210	232	190	193	195
Use of Goods and Services		210	221	232	-	-	-
Other Recurrent		80	88	97	-	-	-
Capital Expenditure	3,039	3,790	2,745	1,936	1,797	1,797	1,797
Aquisation Acquisition of Non- Financial Assets	5	15	25	30	1,797	1,797	1,797
Other Development	3,034	3,775	2,720	1,906	-	-	-
Total Expenditure	3,066	4,271	3,264	2,497	1,987	1,990	1,992
Summary of Expenditure and Revenue Generated							
Gross	3,066	4,271	3,264	2,497	1,987	1,990	1,992
AIA - Internally Generated Revenue	-	-	-	-	-	-	-
Development PatnersPartners	1,961	1,961	1,961	1,961	1,500	1,000	500
NET-Exchequer	1,105	2,310	1,303	536	487	990	1,492
12. National Water Conservation and	l Pipeline Corpo	ration			1		
Current Expenditure							

	279	1,126	1,197	1,277	270	274	278
Compensation of Employees	279	563	599	638	555	563	571
Use of Goods and Services	-	320	340	363	-	-	_
Other Recurrent	-	243	258	276	-	-	-
Capital Expenditure	224	8,525	14,040	14,620	1,246	1,320	1,400
Aquisation Acquisition of Non- Financial Assets	224	8,525	14,040	14,620	1,246	1,320	1,400
Other Development	-	_	-	-	_	-	-
Total Expenditure	503	9,651	15,237	15,897	1,516	1,594	1,678
Summary of Expenditure and Revenue Generated							
Gross	503	9,651	15,237	15,897	1,516	1,594	1,678
AIA - Internally Generated Revenue	100	100	100	100	100	100	100
Development PatnersPartners	-	-	-	_	_	-	-
NET-Exchequer	403	9,551	15,137	15,797	1,416	1,494	1,578
13. Water Services Regulatory Board				,	,	,	,
Current Expenditure	65	210	220	235	65	66	67
Compensation of Employees	65	126	130	134	65	66	67
Use of Goods and Services		84	90	101	-	-	-
Other Recurrent	-	-	-	-	-	-	-

	(0)	260	515	500	<b>60</b>	<b></b>	<b>60</b>
Capital Expenditure	60	260	515	500	60	60	60
Aquisation Acquisition of Non- Financial Assets	60	260	515	500	60	60	60
Tilidikidi Assets	00	200	313	300	00	00	00
Other Development	-	-	-	-	-	-	-
Total Expenditure	125	470	735	735	125	126	127
Summary of Expenditure and Revenue Generated							
Gross	125	470	735	735	125	126	127
AIA - Internally Generated							
Revenue	65	65	65	65	65	65	65
Development Patners	-	-	-	-	-	-	-
NET-Exchequer	60	405	670	670	60	61	62
					14	. Water App	eals Board
Current Expenditure	20	21	21	22	19	19	20
Compensation of Employees	-	-	-	-	1		
Use of Goods and Services	-	-	-	-	-		
Other Recurrent	20	21	21	22	18	19	20
Capital Expenditure	-	-	-	-	1		
Aquisation Acquisition of Non-Financial Assets	-	-	-	-	-	-	-
Other Development	-	-	-	-	-	-	-
Total Expenditure							

	20	21	21	22	19	19	20
Summary of Expenditure and							
Revenue Generated							
Comme	20	21	21	22	10	10	20
Gross AIA - Internally Generated	20	21	21	22	19	19	20
Revenue	0	0	0	0	0	0	0
Development PatnersPartners	U	U	U	U	U	U	U
Development Fathers arthers							
NET-Exchequer	20	21	21	22	19	19	19
15. Regional Centre on Groundwater	r Resources E	ducation Tr	aining and R	esearch in Ea	st Africa		
Current Expenditure	16	113	197	200	16	16	16
Compensation of Employees	_						
Compensation of Employees	-	-	-	-	-	-	-
Use of Goods and Services	16	113	197	200	15	16	16
050 01 00000 0110 001 11000	10					10	
Other Recurrent	-	-	-	-	-	-	-
Capital Expenditure	-	43	45	40	-	-	-
Aquisation Acquisition of Non-							
Financial Assets	-	43	45	40	-	-	-
Other Development							
Other Development	-		1	-	-	-	-
Total Expenditure	16	156	242	240	16	16	16
Summary of Expenditure and							
Revenue Generated	-						
Gross	16	156	242	240	16	16	16
AIA - Internally Generated		Λ			Δ.	Λ.	Λ
Revenue	0	0	0	0	0	0	0
Development Patners Partners							

NET-Exchequer	16	156	241	239	16	16	16
16.Water Resources Management	Research Institu	ute					T.
Current Expenditure	-	80	120	160	-	-	-
Compensation of Employees	-	10	15	25	-	-	-
Use of Goods and Services	-	70	105	135	-	-	-
Other Recurrent	-	-	-	-	-	-	-
Capital Expenditure	-	-	-	-	-	-	-
Aquisation Acquisition of Non- Financial Assets	-	20	30	40	-	-	-
Other Development	-	-	-	-	-	-	-
Total Expenditure	-	100	150	200	-	-	-
Summary of Expenditure and Revenue Generated							
GROSS	-	100	150	200	-	-	-
AIA - Internally Generated Revenue	-	-	-	ı	-	-	-
Development Patners Partners	-	-	-	-	-	-	-
Net-Exchequer	-	100	150	200	-	-	-
Irrigation Sub- Sector							
	2017/18		Requirement			Allocation	
<b>Economic Classification</b>	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21

National Irrigation Board							
Current Expenditure	708	808	908	1,020	686	708	708
Compensation of Employees	308	361	390	435	355	372	383
Use of goods and Services	-	-	-	-	-	-	-
Other Recurrent	400	447	518	585	332	336	325
Capital Expenditure	5,923	6,000	6,000	6,000	6,523	6,523	6,523
Acquisition of Non Financial Assets							
Other Development	5,923	6,000	6,000	6,000	6,523	6,523	6,523
Total Programme	6,631	6,808	6,908	7,020	7,209	7,231	7,231
Summary of Expenditure and Revenue Generated							
Gross	6,631	6,808	6,908	7,020	7,209	7,231	7,231
AIA - Internally Generated Revenue	400	400	400	400	400	400	400
Development PatnersPartners	2,133	2,133	2,133	2,133	2,133	2,133	2,133
NET-Exchequer	4,098	4,275	4,375	4,487	4,676	4,698	4,698
Mining Sub- Sector							
	2017/18		Requirement			Allocation	
<b>Economic Classification</b>	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
National Mining Cooperation							
Current Expenditure							

	9	105	115	115	9	9	9
Compensation of Employees	-	60	70	70			
Use of goods and Services	9	45	45	45	9	9	9
Other Recurrent	-	-	-		-	-	-
Capital Expenditure	-	-	-			-	
Acquisition of Non Financial Assets	-	100	100	100	-	-	-
Other Development							
Total Programme	9	105	115	115	9	9	9
Summary of Expenditure and Revenue Generated							
Gross	9	105	115	115	9	9	9
AIA - Internally Generated Revenue							
Development PatnersPartners							
NET-Exchequer	9	105	115	115	9	9	9
National Mining Mining Institute							
Current Expenditure	11	75	105	105	11	11	11
Compensation of Employees	_	40	50	50	-	-	-
Use of goods and Services	11	35	55	55	11	11	11
Other Recurrent	_	_	-	-	_	_	_
Capital Expenditure		-		-			

	-		-		-	-	-
Acquisition of Non Financial Assets	-	200	250	250	-	-	-
Other Development							
Total Programme	11	75	105	105	11	11	11
Summary of Expenditure and Revenue Generated							
Gross	11	75	105	105	11	11	11
AIA - Internally Generated Revenue	-	-	-	-	-	-	-
Development PatnersPartners	-	-	-	-	-	-	-
NET-Exchequer	11	75	105	105	11	11	11

Environment Sub-Sector							
1. National Environment Management A	uthority(NEMA	)					
Economic Classification	2017/18	RF	QUIREME	NT	Al	LLOCATIO	)N
Economic Classification	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Current Expenditure	990	1,490	1,540	1,600	1,151	1,165	1,180
Compensation of Employees	750	770	810	835	960	970	980
Use of Goods and Services	240	720	730	765	191	195	200
Grants and other transfers							
Other recurrent							
Capital Expenditure	632	1,084	876	640	462	462	462
Acquisition of Non-Financial Assets							
Capital Grants to Government Agencies	622	1,034	826	590	452	452	452

Other Development	10	50	50	50	10	10	10
Total Expenditure	1,622	2,574	2,416	2,240	1,403	1,417	1,432
GROSS	1,622	2,574	2,416	2,240	1,403	1,417	1,432
AIA - Internally Generated Revenue	90	90	90	90	90	90	90
Development Partners	537	267	267	267	267	267	267
Net-Exchequer	1,532	2,484	2,326	2,150	1,313	1,327	1,342
2. NETFUND							
Economic Classification	2017/18	RI	EQUIREME	NT	A	LLOCATIO	ON
Economic Classification	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Current Expenditure	138	160	171	171	131	155	163
Compensation of Employees	102	120	125	129	102	117	123
Use of Goods and Services	27	30	35	31	21	28	30
Grants and other transfers							
Other recurrent	9	10	11	11	9	10	11
Capital Expenditure	157	340	357	375	157	160	167
Acquisition of Non-Financial Assets							
Capital Grants to Government Agencies	157	340	357	375	157	160	167
Other Development							
Total Expenditure	295	500	528	546	288	315	330
GROSS	295	500	528	546	288	315	330
AIA - Internally Generated Revenue	0	0	0	0	0	0	0
Development Partners	99	61	61	61	61	61	61
Net-Exchequer	196	439	467	485	227	254	269
3. NATIONAL ENVIRONMENTAL CO	MPLAINTS CO	MMITTEE					
		RI	EQUIREME	NT	A	LLOCATIO	ON
Economic Classification	2017/18 Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21

Current Expenditure	170	200	250	275	95	105	110
Compensation of Employees	20	30	50	55	20	25	30
Use of Goods and Services	150	170	200	220	75	80	80
Grants and other transfers							
Other recurrent							
Capital Expenditure							
Acquisition of Non-Financial Assets	0	0	0	0	0	0	0
Capital Grants to Government Agencies							
Other Development							
TOTAL VOTE	170	200	250	275	95	105	110
GROSS	170	200	250	275	95	105	110
AIA - Internally Generated Revenue							
Development Partners							
Net-Exchequer	170	200	250	275	95	105	110
Natural Resources Sub Seector							
	2017/18	]	Requiremen	t		Allocation	
<b>Economic Classification</b>	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
Kenya Forest Service							
Current Expenditure	5137	6100	6600	7000	5284	5310	5310
Compensation of Employees	4,968	5,334	5,707	6,106	5115	5141	5141
Use of goods and Services	169	766	893	894	169	169	169
Other Recurrent							
Capital Expenditure	1655	2050	2450	2350	1655	1655	1655
Acquisition of Non-Financial Assets	1,655	2,050	2,450	2350	1655	1655	1655
Other Development							
<b>Total Programme</b>	6792	8150	9050	9350	6939	6965	6965
Summary of Expenditure and Revenue Generated							
	(502	8150	9050	9350	6939	6965	6965
Gross	6792	0150	3030	9330	0232	0203	0705

Development Partners	703	411	750	860	703	703	703
NET-Exchequer	2,889	4,489	5,000	5,140	3,036	3,062	3,062
Kenya Forest Research Institute							
Current Expenditure	1,491	1708	1879	1955	1495	1514	1514
Compensation of Employees	1200	1397	1556	1618	1341	1360	1360
Use of goods and Services	271	271	282	282	116	116	116
Other Recurrent	20	40	41	55	38	38	38
Capital Expenditure	178	1465	1440	1365	173	173	173
Acquisition of Non-Financial Assets	113	665	590	495	110	110	110
Other Development	65	800	850	870	63	63	63
Total Programme	1669	3173	3319	3320	1668	1687	1687
Summary of Expenditure and Revenue Generated							
Gross	1669	3173	3319	3320	1668	1687	1687
AIA - Internally Generated Revenue	5.6	6	6	6	6	6	6
Development Partners							
NET-Exchequer	1663.4	3167	3313	3314	1662	1681	1681
Kenya Water Towers Agency							
<b>Current Expenditure</b>	305	594	629	666	479	483	483
Compensation of Employees	240	358	369	380	358	362	362
Use of goods and Services	65	236	260	286	121	121	121
Other Recurrent	0						
Capital Expenditure	669	2620	2823	2167	609	609	609
Acquisition of Non-Financial Assets	669	2620	2823	2167	609	609	609
Other Development							
Total Programme	974	3214	3452	2833	1088	1092	1092
Summary of Expenditure and Revenue Generated							
Gross	974	3214	3452	2833	1088	1092	1092
AIA - Internally Generated Revenue							

Development Partners							
NET-Exchequer	974	3214	3452	2833	1088	1092	1092
Kenya Wildlife Service							
<b>Current Expenditure</b>	5,415	8,713	9,484	10,332	5296	5328	5328
Compensation of Employees	4,359	5,243	5,768	6,345	4763	4795	4795
Use of goods and Services	1,056	3,469	3,716	3,988	533	533	533
Other Recurrent							
Capital Expenditure	793	3,285	3,143	3,140	1043	1043	1043
Acquisition of Non-Financial Assets	793	3,285	3,143	3,140	1043	1043	1043
Other Development							
Total Programme	6,208	11,998	12,627	13,472	6339	6371	6371
<b>Summary of Expenditure and Revenue</b>							
Generated							
Gross	6,208	11,998	12,627	13,472	6339	6371	6371
AIA - Internally Generated Revenue	3,034	3,300	3,500	3,700	3034	3034	3034
Development Partners	197	396	63	-	197	197	197
NET-Exchequer	2,976	8,301	9,064	9,772	3108	3140	3140
Wildlife Clubs of Kenya							
Current Expenditure	58	80	90	110	57	57	57
Compensation of Employees	25	45	45	50	24	24	24
Use of goods and Services							
Other Recurrent	33	35	45	60	33	33	33
Capital Expenditure	20	70	40	30	20	20	20
Acquisition of Non-Financial Assets	20	70	40	30	20	20	20
Other Development							
<b>Total Programme</b>	78	150	130	140	77	77	77
Summary of Expenditure and Revenue Generated							
Gross	78	150	130	140	77	77	77
AIA - Internally Generated Revenue	33	35	37	40	33	33	33

Development Partners							
NET-Exchequer	45	115	93	100	44	44	44
Water Sub Sector							

## 1. Kenya Water Institute

Economic Classification	2017/18	R	EQUIREME	ENT	ALLOCATION			
Economic Classification	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21	
Current Expenditure	201	390	437	481	294	398	404	
Compensation of Employees	201	223	246	271	294	398	404	
Use of Goods and Services		167	191	210	-	-	-	
Other Recurrent	-	-	-	-	-	-	-	
Capital Expenditure	31	100	150	180	31	31	31	
Acquisition of Non-Financial Assets	31	100	150	180	31	31	31	
Other Development	-	-	-	-	-	-	-	
Total Expenditure	232	490	587	661	325	429	435	
Summary of Expenditure and Revenue Generated								
Gross	232	490	587	661	325	429	435	
AIA - Internally Generated Revenue	60	60	60	60	60	60	60	
Development Partners	-	-	-	-	-	-	-	
NET-Exchequer	172	430	527	601	265	369	375	

2. Water Resource Management Author	ity						
Current Expenditure	757	3,050	2,151	1,758	737	747	758
Compensation of Employees	407	1,049	1,117	1,189	600	608	617
Use of Goods and Services	350	501	534	568	137	144	151
Other Recurrent	-	1,500	500	-	-	-	-
Capital Expenditure	1,526	1,625	1,730	1,843	1,520	1,510	1,500
Acquisition of Non-Financial Assets	768	818	872	928	1,520	1,510	1,500
Other Development	757	806	859	914	-	-	-
Total Expenditure	2,283	4,674	3,881	3,601	2,257	2,257	2,258
Summary of Expenditure and Revenue Generated							
Gross	2,283	4,674	3,881	3,601	2,257	2,257	2,258
AIA - Internally Generated Revenue	350	350	350	350	350	350	350
Development Partners	-	_	-	_	-	-	-
NET-Exchequer	1,933	4,324	3,531	3,251	1,907	1,907	1,908
3. Tana Water Services Board			1				
Current Expenditure	96	213	244	281	96	97	99
Compensation of Employees	93	116	146	182	93	94	96
Use of Goods and Services	3	92	94	94	3	3	3

Other Recurrent		5	5	5	-	-	-
Capital Expenditure	300	6,089	2,315	1,050	625	575	1,050
Acquisition of Non-Financial Assets	300	6,089	2,315	1,050	625	575	1,050
Other Development	-	-	_	_	-	-	-
Total Expenditure	396	6,302	2,559	1,331	721	672	1,149
Summary of Expenditure and Revenue Generated							
Gross	396	6,302	2,559	1,331	721	672	1,149
AIA - Internally Generated Revenue	84		84	84	84	84	84
Development Partners	10		-	-	-	-	-
NET-Exchequer	302	6,302	2,475	1,247	637	588	1,065
4 . Athi Water Services Board							
Current Expenditure	500	506	545	584	500	507	514
Compensation of Employees	240	284	310	324	240	243	247
Use of Goods and Services	220	180	185	200	220	231	242
Other Recurrent	40	42	50	60	40	42	44
Capital Expenditure	7,112	33,935	30,827	17,813	7,169	6,933	7,378
Acquisition of Non-Financial Assets	7,112	33,935	30,827	17,813	7,169	6,933	7,378
Other Development							

	-	-	-	-	-	-	-
Total Expenditure	7,612	34,441	31,372	18,397	7,669	7,440	7,892
Summary of Expenditure and Revenue Generated	7-	- /	- /-	- /	, , , , ,		7-1
Gross	7,612	34,441	31,372	18,397	7,669	7,440	7,892
AIA - Internally Generated Revenue	500	_	-	-	-	-	-
Development Partners	2,000	2,000	2,000	2,000	2,000	2,000	2,000
NET-Exchequer	5,112	32,441	29,372	16,397	5,669	5,440	5,892
5. Northern Water Services Board							
Current Expenditure	106	126	136	141	101	102	104
Compensation of Employees	71	67	74	78	71	72	73
Use of Goods and Services	35	59	62	64	35	35	36
Other Recurrent	-	-	-	-	-	-	-
Capital Expenditure	319	6,120	16,005	13,700	469	469	469
Acquisition of Non-Financial Assets	-		-	-	-	-	-
Other Development	319	6,120	16,005	13,700	469	469	469
Total Expenditure	424	6,246	16,141	13,841	570	571	573
Summary of Expenditure and Revenue Generated							
Gross	424	6,246	16,141	13,841	570	571	573

AIA - Internally Generated Revenue	15		-	-	-	-	-
Development Partners	146	146	146	146	146	146	146
NET-Exchequer	263	6,100	15,995	13,695	424	425	427
6. Lake Victoria South Water Services B	oard						_
Current Expenditure	90	260	281	309	87	88	89
Compensation of Employees	90	119	123	136	87	88	89
Use of Goods and Services	-	64	75	82	-	-	-
Other Recurrent	-	77	83	91	-	-	-
Capital Expenditure	3,057	7,549	8,623	9,075	2,459	3,251	3,209
Acquisition of Non-Financial Assets	3,147	7,549	8,623	9,075	2,459	3,251	3,209
Other Development	-	-	-	-	-	-	-
Total Expenditure	3,112	7,809	8,904	9,384	2,546	3,339	3,298
Summary of Expenditure and Revenue Generated							
Gross	3,112	7,809	8,904	9,384	2,546	3,339	3,298
AIA - Internally Generated Revenue	35	-	-	-	-	-	-
Development Partners	1,357	1,357	1,357	1,357	1,357	1,357	1,357
NET-Exchequer	1,720	6,452	7,547	8,027	1,189	1,982	1,941
7.Lake Victoria North Water Services Bo	ard	/					, ,

G IF III		205	215	225			
Current Expenditure	66	305	315	325	64	65	66
Compensation of Employees	66	113	116	120	64	65	66
Use of Goods and Services	-	101	106	110	-	-	-
Other Recurrent	-	91	93	95	-	-	-
Capital Expenditure	2,663	7,433	10,550	12,714	2,727	2,822	1,894
Acquisition of Non-Financial Assets	2,663	7,433	10,550	12,714	2,727	2,822	1,894
Other Development	-	-	-	-	-	-	-
Total Expenditure	2,729	7,738	10,865	13,039	2,791	2,887	1,960
Summary of Expenditure and Revenue Generated							
Gross	2,729	7,738	10,865	13,039	2,791	2,887	1,960
AIA - Internally Generated Revenue	35	-	-	-	-	-	-
Development Partners	2,000	2,000	2,000	2,000	2,000	2,000	1,500
NET-Exchequer	694	5,738	8,865	11,039	791	887	460
8. Tana Athi Water Services Board							
Current Expenditure	76	314	344	379	74	75	76
Compensation of Employees	76	101	111	122	25	25	26
Use of Goods and Services	-	193	209	230	49	51	54
Other Recurrent	-	20	24	26	-	-	-
Capital Expenditure	899	6,131	6,825	5,700	1,149	1,107	531
Acquisition of Non-Financial Assets	899	6,131	6,825	5,700	1,149	1,107	531

Other Development	-	-	-	-	-	-	-
Total Expenditure	975	6,445	7,169	6,079	1,223	1,182	607
Summary of Expenditure and Revenue							
Generated							
Gross	975	6,445	7,169	6,079	1,223	1,182	607
AIA - Internally Generated Revenue	51	-	-	-	-	-	-
Development Partners	650	650	650	650	650	650	200
NET-Exchequer	274	5,795	6,519	5,429	573	532	407
9. Rift Valley Water Services Board							
Current Expenditure	221	464	460	445	221	224	227
Compensation of Employees	82	90	92	94	82	83	84
Use of Goods and Services	139	157	164	168	118	124	130
Other Recurrent	-	217	204	184	21	22	23
Capital Expenditure	6,102	17,912	23,005	13,745	6,099	5,714	6,254
Acquisition of Non-Financial Assets	6,102	17,912	23,005	13,745	6,099	5,714	6,254
Other Development	-	-	-	-	-	-	-
Total Expenditure	6,323	18,376	23,465	14,190	6,320	5,938	6,481
Summary of Expenditure and Revenue Generated							
Gross	6,323	18,376	23,465	14,190	6,320	5,938	6,481
AIA - Internally Generated Revenue	211	-	-	-	-	-	-
<b>Development Partners</b>	5,320	5,320	5,320	5,320	5,320	5,320	5,320
NET-Exchequer	792	13,056	18,145	8,870	1,000	618	1,161
10. Coast Water Services Board							
Current Expenditure	631	1,266	1,340	1,467	631	640	649
Compensation of Employees	210	233	238	282	210	213	216
Use of Goods and Services	421	641	673	818	421	442	463
Other Recurrent		392	429	367	-	-	-
Capital Expenditure	5,200	5,102	6,603	7,004	1,605	2,115	3,150
Acquisition of Non-Financial Assets	5,200	5,100	6,600	7,000	1,605	2,115	3,150

Other Development	-	2	3	4	-	-	-
Total Expenditure	5,831	6,368	7,943	8,471	2,236	2,755	3,799
Summary of Expenditure and Revenue Generated		,	,	,	·	·	,
Gross	5,831	6,368	7,943	8,471	2,236	2,755	3,799
AIA - Internally Generated Revenue	631	-	-	-	-	-	-
<b>Development Partners</b>	1,000	1,000	1,000	1,000	1,000	1,000	1,000
NET-Exchequer	4,200	5,368	6,943	7,471	1,236	1,755	2,799
11. Water Sector Trust Fund							
Current Expenditure	27	481	519	561	190	193	195
Compensation of Employees	27	191	210	232	190	193	195
Use of Goods and Services		210	221	232	-	-	-
Other Recurrent		80	88	97	-	-	-
Capital Expenditure	3,039	3,790	2,745	1,936	1,797	1,797	1,797
Acquisition of Non-Financial Assets	5	15	25	30	1,797	1,797	1,797
Other Development	3,034	3,775	2,720	1,906	ı	-	-
Total Expenditure	3,066	4,271	3,264	2,497	1,987	1,990	1,992
Summary of Expenditure and Revenue							
Generated							
Gross	3,066	4,271	3,264	2,497	1,987	1,990	1,992
AIA - Internally Generated Revenue	-	-	-	-	-	-	-
Development Partners	1,961	1,961	1,961	1,961	1,500	1,000	500
NET-Exchequer	1,105	2,310	1,303	536	487	990	1,492
12. National Water Conservation and Pipe	eline Corporatio	on					
Current Expenditure	279	1,126	1,197	1,277	270	274	278
Compensation of Employees	279	563	599	638	270	274	278
Use of Goods and Services	-	320	340	363	-	-	-

	I						
Other Recurrent	-	243	258	276	-	-	-
Capital Expenditure	224	8,525	14,040	14,620	1,246	1,320	1,400
Acquisition of Non-Financial Assets	224	8,525	14,040	14,620	1.246	1,320	1,400
	·	3,2 _2	- 1,0 10	- 1,0 - 0	1,210		,
Other Development	-	-	-	-	-	-	-
Total Expenditure	503	9,651	15,237	15,897	1,516	1,594	1,678
Summary of Expenditure and Revenue Generated							
Gross	503	9,651	15,237	15,897	1,516	1,594	1,678
AIA - Internally Generated Revenue	100	100	100	100	100	100	100
Development Partners	-	-	-	•	-	-	-
NET-Exchequer	403	9,551	15,137	15,797	1,416	1,494	1,578
13. Water Services Regulatory Board							
Current Expenditure	65	210	220	235	65	66	67
Compensation of Employees	65	126	130	134	65	66	67
Use of Goods and Services		84	90	101	-	-	-
Other Recurrent	=	-	-	-	-	-	-
Capital Expenditure	60	260	515	500	60	60	60
Acquisition of Non-Financial Assets	60	260	515	500	60	60	60
Other Development	-	-	-	-	-	-	-
Total Expenditure	125	470	735	735	125	126	127
Summary of Expenditure and Revenue Generated							
Gross	125	470	735	735	125	126	127

AIA - Internally Generated Revenue	65	65	65	65	65	65	65
<b>Development Partners</b>	-	-	-	-	-	-	-
NET-Exchequer	60	405	670	670	60	61	62
14. Water Appeals Board							
Current Expenditure	20	21	21	22	19	19	20
Compensation of Employees	-	-	-	-	-	<u> </u> -	-
Use of Goods and Services	-	-	-	-	-	-	-
Other Recurrent	20	21	21	22	19	19	20
Capital Expenditure	-	-	-	-	-	-	-
Acquisition of Non-Financial Assets	-	_	-	-	-	-	-
Other Development	-	_	-	-	-	-	-
<b>Total Expenditure</b>	20	21	21	22	19	19	20
Summary of Expenditure and Revenue Generated							
Gross	20	21	21	22	19	19	20
AIA - Internally Generated Revenue	0	0	0	0	0	0	0
<b>Development Partners</b>							
NET-Exchequer	20	21	21	22	19	19	19
15. Regional Centre on Groundwater Re	sources Educa	ation Trainin	g and Resea	rch in East A	frica		
Current Expenditure	16	113	197	200	16	16	16
Compensation of Employees	-	-	-	-	=		-
Use of Goods and Services	16	113	197	200	16	16	16
Other Recurrent	-	-	-	-	-	_	-
Capital Expenditure	-	43	45	40	-	_	_

					l	1	
Acquisition of Non-Financial Assets	-	43	45	40	-	-	-
Other Development	-	-	-	-	-	-	_
Total Expenditure	16	156	242	240	16	16	16
Summary of Expenditure and Revenue							
Generated	-						
Gross	16	156	242	240	16	16	16
AIA - Internally Generated Revenue	0	0	0	0	0	0	0
<b>Development Partners</b>							
NET-Exchequer	16	156	241	239	16	16	16
16.Water Resources Management Research	ch Institute						
Current Expenditure	-	80	120	160	-	-	-
Compensation of Employees	-	10	15	25	-	-	-
Use of Goods and Services	-	70	105	135	-	-	-
Other Recurrent	-	-	-	_	-	-	-
Capital Expenditure	-	-	-	-	-	-	-
Acquisition of Non-Financial Assets	-	20	30	40	-	-	-
Other Development	-	-	-	-	-	-	-
Total Expenditure	-	100	150	200	-	-	-
Summary of Expenditure and Revenue Generated							
GROSS	-	100	150	200	-	-	-
AIA - Internally Generated Revenue	=	-	-	_	-	-	-
Development Partners	-	-	-	-	-	-	-
Net-Exchequer	-	100	150	200	-	-	-
Irrigation Sub- Sector							
	2017/18	]	Requiremen	t		Allocation	
<b>Economic Classification</b>	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21

National Irrigation Board							
<b>Current Expenditure</b>	708	808	908	1,020	692.6	708	708
Compensation of Employees	308	361	390	435	361	372	383
Use of goods and Services	-	-	-	-	-	-	-
Other Recurrent	400	447	518	585	332	336	325
Capital Expenditure	5,923	6,000	6,000	6,000	5,923	5,923	5,923
Acquisition of Non-Financial Assets							
Other Development	5,923	6,000	6,000	6,000	5,923	5,923	5,923
Total Programme	6,631	6,808	6,908	7,020	6,616	6,631	6,631
Summary of Expenditure and Revenue Generated							
Gross	6,631	6,808	6,908	7,020	6,616	6,631	6,631
AIA - Internally Generated Revenue	400	400	400	400	400	400	400
Development Partners	2,133	2,133	2,133	2,133	2,133	2,133	2,133
NET-Exchequer	4,098	4,275	4,375	4,487	4,083	4,098	4,098
Mining Sub- Sector	2017/18		Requiremen	nt		Allocation	
<b>Economic Classification</b>	Allocation	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21
National Mining Cooperation							
Current Expenditure	9	105	115	115	9	9	9
Compensation of Employees	-	60	70	70			
Use of goods and Services	9	45	45	45	9	9	9
Other Recurrent	-	-	-	-	-	-	-
Capital Expenditure	-	-	-	-	-	-	-
Acquisition of Non-Financial Assets	-	100	100	100	0	0	0
Other Development							
Total Programme	9	105	115	115	9	9	9
Summary of Expenditure and Revenue Generated							

Gross	9	105	115	115	9	9	9
AIA - Internally Generated Revenue							
Development Partners							
NET-Exchequer	9	105	115	115	9	9	9
National Mining Institute							
<b>Current Expenditure</b>	11	75	105	105	11	11	11
Compensation of Employees	-	40	50	50	0	0	0
Use of goods and Services	11	35	55	55	11	11	11
Other Recurrent	-	-	-	-	0	0	0
Capital Expenditure	-	-	-	-	0	0	0
Acquisition of Non-Financial Assets	=	200	250	250	0	0	0
Other Development							
Total Programme	11	75	105	105	11	11	11
Summary of Expenditure and Revenue Generated							
Gross	11	75	105	105	11	11	11
AIA - Internally Generated Revenue							
Development Partners							
NET-Exchequer	11	75	105	105	11	11	11

## **BIG FOUR SECTOR INITIATIVE INTERVENTIONS,**

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The Sector has realigned its allocation to address the BIG FOUR initiatives. The State Department of Irrigation and the State Department of Water have been identified as Enablers to the BIG Four clusters. The allocations to the clusters are as Table 3.2.4.

## TABLE 3.2.4: SUMMARY OF THE BIG FOUR INTERVENTIONS; ENABLERS; DRIVERS

## STATE DEPARTMENT OF FOR WATER SERVICES IRRIGATION

			Allocation for	or 2018/19		
S/NO	PROGRAMMES/PROJECTS	OUTPUT	Estimated	GOK	PPP/Don	Total
			<b>Total Cost</b>		or	
				Ksł	ı.M	
1	Galana Kulalu Food Security Project (Model Farm)	10,000 acres 54,000 tons of maize	8,681	615	-	615
2	National Expanded Irrigation Programme	384,000 acres. Kshs.45.4 billion annually from horticultural crops, food crops and fruit trees, 12,150 tons maize, and 17,920 tons rice	114,000	3,055	-	3,055
3	Bura Irrigation Rehabilitation Project	15,000 acres. 20,000 tons seed maize	7,356	900	369	1,269
4	Mwea Irrigation Development Project	11MCM of water - Thiba dam 25,000 acres. 120,000 tons of paddy (two seasons)	19,967	550	1,764	2,314
5	Rwabura Irrigation Development Project	1,500 acres Various Horticultural valued at Kshs 225 M.	880	30	-	30

6	Turkana Irrigation Development Programme.	15,000 acres 22,000 tons of maize crops annually	9,197	140	-	140
7	Community Based Irrigation Projects.	Completion of 290 stalled smallholder projects	9,280	280	-	280
8	Small holder Irrigation Programme.	Increased production and productivity	630	20	200	220
9	Lower Kuja Irrigation Scheme	Increased new area under irrigation	4,694	-	1	-
10	Lower Sabor Irrigation Project	Increased area under irrigation	400	-	1	1
11	Land Reclamation (Land Degradation Assessment Programme).	Land Degradation Assessment (LADA) reports	394	5	ı	5
		TOTAL	175,479	4,095	2,333	5,595
12	National Water Harvesting and Ground Water Exploitation.	Increased water storage and conservation for productivity, and land reclamation	11,000	2,000	-	2,000
13	Water for Schools (Micro-Irrigation Water for Schools)	Provide water to schools mainly in the ASAL areas for domestic and micro irrigation	2,030	400	-	400
14	Thwake Multi-purpose Water Development Programme	Thwake Multi-purpose dam of 681 million M3	38,000	2,625	1,700	4,325
TOTAL				4,130	1,700	5,025
GRAND TOTAL FOR STATE DEPARTMENT OF IRRIGATION			226,509	8,225	4,033	10,620

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TABL	E 3.2.4: SUM	MARY OF THE BIG FOUR	ENABLERS FOR FY 2018/19				•
STAT	E DEPARTM	ENT FOR WATER SERVIO	CES	<b>.</b>	_		
S/ No.	Target Area	PROJECT NAME	OUTPUT	Estimated Cost	Allocation for 2018/19		
					GoK	PPP/Donor	Total
				KShs millions			
CLUS	STER - INDUS	TRIALIZATION, MANUFA	ACTURING AND AGRO-PROCESSING				
1	Naivasha Industrial Park	Malewa Dam and Water Supply Project	Malewa Multi-Purpose Dam and 20,000m3/day Water Supply and pipelines to serve Ol Kalou in Nyandarua County, Naivasha and Gilgil Towns in Nakuru County. Project expected to support Manufacturing and Housing and to serve a population of 200,000 adequately up to 2035. The project will also support the other clusters of the BIG 4	20,000	200	500	700
2		Industrial Park Sewerage Project	Sewerage pipeline laid to serve the industrial park	2,000	200	-	200
3	Dongo Kundu	Mzima II Pipeline	Gravity Pipeline to improve Water Supply in four counties of Taita Taveta, Kilifi, Kwale and Mombasa	40,000	200	-	200

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4	5 SGR Parks at Naivasha, Mariakani and Embakasi	Mariakani Water Supply Project	Malewa Multi-Purpose Dam and 20,000m3/day Water Supply and pipelines to serve Ol Kalou in Nyandarua County, Naivasha and Gilgil Towns in Nakuru County. Project expected to support Manufacturing and Housing and to serve a population of 200,000 adequately up to 2035. The project will also support the other clusters of the BIG 4. Immediate works will focus on Mariakani Water Supply project. Connecting the SGR park in Mombasa	20,000	100	500	600
5	Athi River Industrial Sheds	Oloolotikosh Dam and Water Supply Project	Construction of 25m high dam and water supply of capacity 20,000m³/day to serve Athi River, Kitengela, Isinya and Kajiado towns. Project will serve a population of 300,000 people	15,000	50	-	50
6		Ndarugu 1 Dam and Water Supply project	Water storage dam of 225million m3 , Intake works, treatment works of 173,000m3/day, pumping units, pipeline works of over 200km, Main distribution pipelines and water storage tanks, sewerage system to supply water to 1,000,000 people in Utawala, Embakasi, Mavoko and Kitengela towns thereby supporting Housing and Healthcare	40,000	50	-	50
7	Eldoret Industrial Park	Two Rivers Dam and Expansion of Sosiani Treatment Works	A new dam of height 24m with associated works and a Treatment plant of 60,000m3/day Treatment Works to benefit 600,000 people.	10,000	50	50	100
8		Kerita Dam and Water Supply	A new dam of height 20m with associated works and a Treatment plant of 20,000m3/day Treatment Works to benefit 200,000 people.	5,000	20	-	20
	Total			152,000	870	1,050	1,920

9	Additional Land Under Irrigation	Kithino Dam	The proposed project components comprise a 40m high dam on Kithino River with an estimated 110 million cubic meters storage, 15,000m3/day water treatment plant and distribution network to serve a projected population of 160,000 and irrigation of 20,000 hectares. The target areas are lower parts of Imenti South Constituency in Meru County and Tharaka Constituency in Tharaka-Nithi County	25,000	50	-	50
10		Kamumu Dam	The proposed project components comprise a 60m high dam on Ena River with an estimated 22 million cubic meters storage, 15,000m3/day water treatment plant and distribution network to serve a projected population of 97,000 in and irrigation infrastructure for irrigation of 17,500ha of land. The target areas are parts of Mbeere North and Mbeere South Constituencies in Embu County and parts of Igamba ngombe constituency in Tharaka – Nithi County	20,000	50	-	50
11		Rupingazi Dam	The proposed project components comprise a 40m high dam on Rupingazi River with an estimated 28 million cubic meters storage, 20,000m3/day water treatment plant and distribution network to serve a projected population of 120,000 in and irrigation infrastructure for irrigation of 10,000ha of land. The target areas are parts of Mbeere North and Mbeere South Constituencies in Embu County and parts of Mwea Constituency in Kirinyaga County	23,000	50	-	50

12		Thambana Dam	The proposed project components comprise a 40m high dam on Rupingazi River with an estimated 27 million cubic meters storage, 15,000m3/day water treatment plant and distribution network to serve a projected population of 160,000 in and irrigation infrastructure for irrigation of 10,000ha of land. The target areas are parts of Manyatta and Mbeere South Constituencies in Embu County and parts of Mwea Constituency in Kirinyaga	18,500	50	-	50
13		Maara Dam	County.  The proposed project components comprise a 70m high dam on North Maara River with an estimated 15 million cubic meters storage, 4,000m3/day water treatment plant and distribution network to serve a projected population of 50,000 in and irrigation infrastructure for irrigation of 2,000ha of land.	6,200	50	-	50
	Total			92,700	250	-	250
CLUS	ΓER - AFFOR	DABLE HOUSING					
14	Mavoko Housing Project	Ndarugu 1 Dam water supply project	Water storage dam of 225million m3, Intake works, treatment works of 173,000m3/day, pumping units, pipeline works of over 200km, Main distribution pipelines and water storage tanks, sewerage system to supply water to 1,000,000 people in Utawala, Embakasi, Mavoko and Kitengela towns thereby supporting Housing and Healthcare	40,000	80	-	80

		Nairobi Water Distribution Network Phase I	The project involves laying of 22km 1.0m diameter pipeline from Kiambu – Roysambu - JKIA, Construct 10,000m3 reservoir at JKIA to serve peri-urban areas of Nairobi and JKIA Airport. Laying 9km 700mm diameter pipeline, Construct 5,000m3 reservoir at Kabete. Project will serve a population of 400,000 people and supoport Healthcare and Housing.	870	120	750	870
	Total			40,870	200	<u>750</u>	950 950
CLUS	TER - UNIVE	RSAL HEALTHCARE					
17	eHubs collection and	Installation of National Water quality monitoring network stations	Monitoring Stations Installed	100	7	-	7
18	disseminati on of information	Establish the aluminum residuals in drinking water	Aluminium Aluminum Residual Test Completed	100 100	10 10	<u> </u>	10 10
	Total			200 200	<u>17</u> <del>17</del>	1	17 17
SUMN	SUMMARY						
	Industrializa Agro-Proces	ation, Manufacturing and sing		152,000	870	1,050	1,920
	Food and Nutrition Security			92,700	250	-	250
	Affordable I			40,870	200	750 750	950

	Universal Healthcare	200	17	•	17 17
	Total for State Department Water	285,770	1,337	1,800	3,137

# 3.2.3 Resource Allocation Criteria

The Environment Protection, Water and Natural Resources have recommended the below mentioned for adoption as the resource allocation criteria.

NO	CRITERIA	CRITERIA INDICATORS	EVIDENCE
		DEVELOPMENT	
1	Executive/Cabinet Approval	Cabinet Memo and Executive directives	Cabinet memos and Letters
2	On-going projects	Status of implementation and absorption capacity of the project	Implementation Status
3	Achievability/Sustainability	Project design including feasibility studies, Land availability,	Donor agreement, PPP and MOU's
	Source of funding	Environmental Impact Assessment	
		GOK,/Donor, PPP and GOK counterpart funding	Availability of the fiscal space
4	Relevance of the project	Consistency with Jubilee      The American area to Vision	Captured in MTP II and the Sectoral reports
		transformation agenda, Vision 2030,Consistency with MTP III	Sectoral reports
		Addressing core mandate of the	
		Subsector/Ministry and poverty reduction intervention	
5	Project concept note	Submission	Submission of project concept notes to the National Treasury.
6	One – Off Expenditures	Project Completion Timelines	Concept Notes
	RECURR	ENT	
1	Personnel emoluments Annual increment	Salaries for Ministry /Sub sector establishment.	Supported by IPPD, Treasury & PSC authority to recruit
2	Statutory obligations and membership subscriptions	Subscriptions and dues to International organizations	Demand notes and payment trends
3	Utilities e.g. Rent and rates and utilities	Lease agreement	Lease agreement
4	Transfers (SAGAs) Annex 5 of the guidelines	Current and Capital Grants to Parastatals	Payment trends
5	One – Off Expenditures	Project Completion Timelines	Concept Notes

# **CHAPTER FOUR**

# 4.0 CROSS SECTOR LINKAGES, EMERGING ISSUES AND CHALLENGES

The Environmental Protection, Water and Natural Resources Sector recognizes the cross-sector linkages, emerging issues and challenges that affect its performance as it contributes to the realization of the Vision 2030, Sustainable Development Goals and multilateral agreements relating to the sector. The sector has direct and indirect linkages with other sectors which promote socio-economic development and also contributes immensely to life support systems by providing goods and services to the country.

#### 4.1 Cross Sector Linkages

i. Agriculture, Rural and Urban Development (ARUD) Sector

The sector provides information on: weather forecast; early warning systems; conducts mapping of- livestock, wildlife and water towers; land use/land cover; food production forecast; policy guideline on infrastructure development; pr7ovision of water and irrigation infrastructure to the Agriculture, Rural and Urban Development Sector.

#### ii. Energy, Infrastructure and ICT Sector

The EPWNR sector provides guidelines for good environmental practices, proper disposal of electronic, solid, liquid and gaseous wastes. Sustainable management and conservation of environment, water, and natural resources contributes towards sustainable provision of hydro, geothermal, biomass energies and promotes other sources of renewable energies such as solar and wind.

for sustainable use of resources but also facilitates energy connectivity to schools through t

Additionally, this sector does not only conduct coal exploration that requires transport network (road and rail) and ICT for communication; services which are provided by the energy, infrastructure and ICT sector he Rural Electrification Authority for borehole water pumping under water for schools project.

# iii. General Economic and Commercial Affairs Sector (GECAS)

The sector offers opportunities to General Economic and Commercial Affairs Sector (GECAS) Sector through provision of raw materials to industries, opportunities in tourism development, security and management of trans-boundary resources. In addition, the sector provides useful data and information such as meteorological and wildlife mapping. In turn, the GECA sector provides standards, legislation, regulations, guidelines and framework for trans-boundary management of resources and international trade.

#### iv. Health Sector

The sector provides clean and safe water, medicinal products for human and animals, sanitation services and promotion of a clean environment that leads to an improvement in the health of the population. It also provides guidelines on the requirements for clean environment which contribute to low incidences of diseases. In addition, the sector regulates disposal of medical waste and adequate sanitation in conformity with environmental laws.

Further, health sector collaborates with the environmental protection, water and natural resources sector in the provision of health (medical personnel in case of mine accidents) and sanitation services. In addition, the health sector complies with the set standards and guidelines to ensure a clean and healthy environment.

#### v. Education Sector

The sector benefits the education sector through provision of building materials, water, environmental conservation programmes, industrial attachment/internship and employment opportunities while the education sector facilitates integration of environmental, water and natural resources issues in education system including planting of trees and research on environmental issues.

## vi. Governance, Justice, Law and Order Sector (GJLOS)

The sector provides policy direction on management of environment, water and natural resources to reduce conflicts among communities in the use of the resources. In turn, the GJLOS ensures improved governance through drafting of bills, law enforcement, and provision of security

# vii. Public Administration and International Relations Sector (PA&IRS)

The sector offers technical inputs in the development of policies, guidelines and legislations relating to PA&IR sector. The sector implements policies and guidelines emanating from the Public Administration and International Relations sector. In addition, the sector facilitates the trans-boundary resource management and coordination of multilateral agreements and arrangements. In turn, Public Administration and International Relations sector provides oversight, financial resources, human resources and remuneration policy guidelines

#### viii. National Security Sector

The sector benefits from sharing intelligence and security information for environmental crime prevention, prosecutions and conflict resolution. The national security sector collaborates on protection of environment and law enforcement.

# ix. Social Protection, Culture and Recreation Sector

The sector promotes preservation of historical, cultural, spiritual and heritage sites. It also provides guidelines and indigenous technical knowledge on the conservation and protection of the environment for sustainable use. In addition, the social sector provides labour policies and legislation on conducive working environment. The sector organizes forums for youth,

women and marginalized groups to create awareness on environmental conservation activities.

Further, the sector issues licenses and permits to conduct mineral exploration on community land that may lead to acquisition or reclamation of land resulting to displacement of people and change of their livelihoods. The sector also processes licenses for activities likely to have negative impact on cultural and recreational sites.

# a. Emerging Issues

The emerging issues in the sector include;

#### i. Rapid advancement in Information Communication Technology (ICT)

ICT presents the sector with opportunities for development and expansion in the management of resources through tracking, mapping, monitoring and research. However, there are emerging challenges in the rapidly changing nature of ICT and how the sector responds to these changes. The rapid changes require resources to remain relevant by adopting technological changes and tap on opportunities

# ii. Discovery of mineral resources

Discovery of economically viable natural resources have raised national expectations in terms of benefits at the expense of environmental conservation. However, it has brought anxiety and fear of relocation and resettlement, cultural change and sharing of benefits and related costs. There is thus need for community involvement in management and utilization of natural resources to avoid incidences of conflicts and litigation.

#### iii. Management of Trans-boundary Resources

Different policies and legislation on trans-boundary resources affects management on wildlife, forests and water resources. This is manifested in some Eastern African countries which allow hunting while others prohibit consequently affecting conservation activities across the region. The sector proposes harmonization of transboundary policies and frameworks on the management of trans-boundary resources.

## iv. Emergence of green economy

The global community is increasingly advocating for green energy sources to fuel the industrial economic growth that respects environmental health in a bid to address challenges of climate change. This shift towards a development path that promotes resource efficiency and sustainable management of natural resources, social inclusion, resilience and sustainable infrastructural development is a major concern. Kenya has adapted this transition through green growth programme and this will require resources.

#### v. E-waste management and disposa

Electronic and electrical equipment waste (e-waste) is the fastest emerging waste stream that is rapidly and increasingly being seen in dumpsites across the country. Inappropriate disposal of e-waste leads to significant environmental problems but also to a systematic loss of

secondary materials. In addition there is inadequate capacity to recover, recycle and re - use the various forms of waste.

# vi. Sophistication of illegal harvesting of sandalwood, wildlife poaching, smuggling and trafficking

There is escalating illegal harvesting of sandalwood, wildlife poaching, smuggling and/or trafficking of trophies like ivory and rhino horn in Kenya and the East African region. The rise in demand for sandalwood and wildlife products in the international market has led to the proliferation of advanced poaching equipment into the country that pose a great danger to wildlife and sandalwood throughout the year.

# vii. Managing Community/Stakeholders expectation

The country has of late witnessed increased community interest in the extractive sector following discovery of strategic and economically viable minerals. This has led to increased exploration, extraction and demand for mineral resources. Consequently, County Governments and community expectations have been raised with potential for conflicts if not adequately addressed.

#### viii. The Climate Change Act 2016 implementation

The Climate Change Act 2016, establishes a high-level climate change coordination framework that includes the National Climate Change Council chaired by the President. Hence significant resources are required for operationalization of the Act. ii) Commitment to and implementation of the Paris Agreement (30% emission target by 2030).

# ix. Recent plastic ban

The ban on the use, manufacture and importation of all plastic bags used for commercial and household packaging provide an opportunity for research, innovation and promoting tree growing that could support use for bio-degradable materials. The ban requires financial support for mopping up of existing plastics in the environment and continuous management and pollution control.

# x. Land Degradation Neutrality

This is a national obligation in implementing United Nations Convention to Combat Desertification (UNCCD) and sustainable development goal no 15 target 15.3

# xi. Terrorism and religious extremism

Terrorism and religious extremism has continued to divert attention and critical resources away from the development agendas of nations around the world. In addition, targeted regions have continued to suffer from loss of human life, destruction of livelihood and infrastructure, as well economic loss due to drops in tourism numbers. Affected countries require to invest more in counter measures. As a result, key sectors have become neglected due to diversion of funds. For example, Boni forest in Lamu County was affected by terrorism and religious extremism as it became a hiding ground for terrorists.

#### xii. Charcoal Rules and Regulations Review

The sector works with various stakeholders across the country in reviewing the rules and regulations that govern the charcoal business in order to make it sustainable and reduce pressure on forests. Currently the country earns at least Ksh. 32 billion annually from charcoal trade, and the new regulations are expected to not only bring sanity to charcoal trade, but also involve charcoal traders in environmental conservation.

#### xiii. Encroachment to wetlands

Degradation of wetlands is aggravated by dumping of dredged soil from infrastructure developments (especially roads) that help in drying the wetland areas to facilitate the development of intended projects. This has resulted to reduced ground water recharge necessitating deepening of existing boreholes at additional cost and drilling of new deeper boreholes that generally produce poor quality water.

# xiv. Emergence of pollution threats

Occurrence of organic and chemical pollutants, especially pharmaceuticals by-products, in water sources poses a human and animal health risk particularly in mimicking hormones.

# 4.2 Challenges

# i. Operationalization of the legal, regulatory and policy frameworks

The sector has new legal, regulatory and policy frameworks (Mining Act 2016, Forest Conservation and Management Act 2016, Climate Change Act 2016 and Water Act 2016) that requires to be operationalized. The operationalization requires time, finance and adequate human capital to implement. Related to this are the court cases have led to delay in implementation of projects.

## ii. Delays in enactments of Legal and policy framework

The enactment of new laws and approval of policies takes long thus hindering delivery of services in the Sector. This is coupled with lengthy consultative Legislative process which requires a lot of resources to meet the Constitutional requirement of stakeholder participation and ownership.

# iii. Inadequate human resources, specialized equipment and office space

The sector has an aging workforce following the freeze on recruitment. This has affected succession management in critical areas. In addition, there are new institutions that require staffing and capacity building. Despite the sectors' contribution to the national economy, some of the specialized equipment and facilities being used by the Departments are obsolete and require replacement. In addition, there is inadequate office space for the staff and this hinders efficient operations and performance.

#### iv. Inadequate data and Information on Natural Resources

There is inadequate data and information on natural resource in the sector. In some instances, the data and information may be outdated. There is need to conduct nationwide mapping and assessment of natural resources such as water, wildlife and mineral potential of the country.

#### v. Climate change

The effects of climate change and associated extreme weather events threaten sustainable development and impacts negatively on the sector. Flooding and droughts affect food production, water supply, housing access, livestock production and general livelihoods of the people. This results in substantial reallocation of resources towards mitigation and adaptation.

#### vi. Environmental degradation

Environmental degradation manifests in several forms including air and water pollution; and deep quarries which may affect human, animal and plant health and pose safety concerns; reduced land quality, reduced water resources capacity and siltation of water reservoirs. This calls for measures to be put in place to protect the environment and natural resources. Emergence of persistence organic and inorganic wastes, erosion from roads development and grabbing of riparian lands is threatening natural resources in major cities and towns

## vii. Diminishing water resources

The sector is currently experiencing a challenge in the dwindling water resources as a result of too much focus by development partners as well as the government on water infrastructure development as opposed to water resource management.

#### viii. Degradation of Natural Resources

The rapid population growth in the country has resulted into land degradation arising from increased demand for settlements, urbanization, farming, fuelwood and wildlife/ human conflicts. Consequently, this has led to the loss of natural resources including, forests, water towers and wildlife corridors.

# ix. Inadequate funding

The current levels of funding to the sector from the exchequer as well as from other sources are inadequate and this hampers the sector's performance. This is a great challenge especially considering the huge financial outlay required in implementing essential infrastructure and provision of services. Inadequate funding for research, data generation, analysis, monitoring and evaluation are a key challenge in the sector.

# x. Human/Wildlife Conflict and Rising Compensation Claims

The Wildlife Conservation and Management Act, 2013, Section 25 of the Act provides for compensation for personal injury, death or damage to property or crops or predation by wildlife. Since the enactment of the Act, the number of claims has proven to be unsustainable given the compensation levels provided for in the Act.

#### xi. Formalization of artisanal miners

Under the old mining law, Cap 306 of 1940, artisanal miners operated illegally and practiced inappropriate mining techniques leading to mine accidents, deaths and environmental degradation as deep mines left open pose risks to both human beings and animals. The widespread use of mercury and cyanide also affect the lives of the miners mainly women and pollute the water. Also the use of illegal explosives for blasting rocks in the mines pose danger to the lives of artisanal miners leading to accidents and death. However, the new Mining Act, 2016 legalizes artisanal miners but the challenge is the huge financial requirement needed to map out artisanal miners so that they do not operate within areas held by other rights holders. Resources are also needed to enforcing health, safety and environment standards to minimize mine accidents and deaths and provide support including loans, public education, encouraging formation of cooperatives to enhance markets for the mineral products and eliminate middlemen who exploit the artisanal miners.

#### xii. Commitment to international, global Agreement

Commitment to international and global agreements will require adequate financial resources for the targets to be realized. This will require financial commitments during the budgetary process.

# xiii. Devolution and Management of Natural Resources at Regional, National and County level.

The issue of management and sharing of benefits between the East African states, national and county governments and the communities have not been streamlined leading to conflicts.

The Devolution of the management and protection of natural resources to the county has posed a challenge as this natural resources do not respect national or county boundaries. As a result of this, disputes have arisen in the benefit sharing of this resources and the revenue generated from them.

The growth of forests in the country has been affected by the slow pace in embracing and implementing the devolved the functions.

# xiv. Managing Community/Stakeholders expectation

The country has of late witnessed increased community interest in the extractive sector following discovery of strategic and economically viable minerals. This has led to increased exploration, extraction and demand for mineral resources. Consequently, County Governments and community expectations have been raised with potential for conflicts if not adequately addressed.

## xv. Irrigation Water Management

The irrigation and drainage development has focused more on providing irrigation infrastructure and giving little attention to the requisite social environment which determines the production, productivity and sustainability of these irrigation schemes.

#### CHAPTER FIVE

#### 5.0 CONCLUSION

This section summarizes the key findings based on the highlighted objectives and major issues identified in the sector. The sector has the potential to contribute significantly to increase economic growth, employment <u>creationcreation</u>, food <u>security</u>, foreign exchange, infrastructural development and provision of raw materials for industrial development.

During the period under review, the sector managed to enact Mining Act, 2016 and developed a set of 13 regulations to operationalize the Act, enacted Water Act 2016, Forest Conservation and Management Act 2016, Wildlife Conservation and Management Act 2013 and relevant regulations developed to operationalize the Acts. Forest cover increased from 6.9% to 7.2% and poaching was reduced from 80% to 40%. A total of 20 automatic weather stations were installed and 7 centres of excellence in environment management were established.

Investments in Irrigation, land reclamation and water storage has built resilience of communities against droughts and floods by increasing irrigated area and water storage by 150,623 acres with a production of 114,083 tons of cereals and 12 million cubic metres, respectively as well as providing 71 schools with water.

During the period under review the proportion of people with access to clean water increased from 56.9% to 59.9% which is about additional population of 3.9 million people while the proportion of population with access to sewerage services increased from 10.2% to 15% which translate to additional 1 million people over the same period. In water resources management 10No. exploratory wells were drilled in Turkana central, Wajir and Garissa Counties to explore the groundwater potential, mapping of Turkana south and Marsabit groundwater aquifers was initiated with 4No. of reports and maps produced, in addition 10No. Hydrometric stations were upgraded from manual to telemetric status to enable real time data transmission.

However, the sector is faced with a number of challenges such as inadequate financing of all priority projects, poaching and illegal trade, environmental degradation, climate change, inadequate information, data and human resources, and modern equipment, policy and legislative framework, capacity building and awareness creation, promotion of nature based enterprises,

gazettement and rehabilitation of riparian catchment and degraded areas among others. These challenges need to be addressed as they continue to negatively affect the performance of the sector. The sector will therefore, effectively and efficiently utilize the allocated budgetary allocations to address these challenges. In addition, more resources will be mobilized from the development partners, civil society organizations and private sector through public-private partnerships. The public are expected to play an active role in the protection, conservation and management of the environment and natural resources to ensure the future generation is not deprived of their rights to a clean environment and sustainable use of natural resources.

However, despite the potential the sector has to contribute to the Gross Domestic Product (GDP), it has continued to receive low budgetary allocation that is inadequate to enable the sector to coordinate, manage and implement its programmes effectively. There is therefore, need to increase the budgetary allocation so that the sector can realize its mandate. The sector recommendations are outlined in chapter 6.

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#### **CHAPTER SIX**

#### 6.0 RECOMENDATIONS

This chapter presents recommendations of the sector based on the findings in the previous chapters of the report.

The following are the recommendations which are necessary to improve the performance of the sector in the MTEF - (2018/19 to 2020/21) period, to ensure the efficient and effective delivery of services and to achieve the objectives of the sector in line with Constitution of Kenya 2010, Kenya Vision 2030 and MTP III.

# 1. Policy and legislative framework

Fast-track enactment of new laws, development of policies, review the existing policies, legislation of laws and development of institutional frameworks in the National Parliament.

#### 2. Increased funding

There is need for additional resources <u>for to be mobilized to complete</u> sector programmes/projects <u>implementation</u> and especially Vision 2030 flagship <u>projects projects</u>. Focus should be <u>on ensuring full funding of the BIG FOUR priority projects</u>. The development budget should be increased to ensure all critical priority projects are implemented, <u>and</u> counterpart funding is provided <u>in full in line with the government commitments</u>. Recurrent budget should be increased to cater for salaries, subscription to international treaties and monitoring and evaluation to be carried out which is key component in project cycle.

# 3. Capacity Building and Awareness Creation

There is need for enhanced awareness creation to curb water and air pollution, land reclamation activities and production of bio-degradable bags, capacity building for technical staff and training for MTEF Programme Based Budget preparation and implementation should be carried out. The sector endeavors to entrench the issues of the vulnerable and marginalized population in planning and budgeting.

#### 4. Promotion of nature based enterprises

It is recommended that support for nature based enterprises be enhanced to reduce poverty, improve livelihoods and incomes while at the same time addressing environmental rehabilitation issues.

## 5. Economic valuation of Natural Capital

Lack of baseline data on the economic value of natural capital contributes to low funding of the sector. There is need to undertake national economic valuation of natural resources for mainstreaming in the national budgetary process.

# 6. Gazettement and rehabilitation of riparian, catchment and degraded areas

There is need for mapping, surveying, delineating and gazettement in order to protect, rehabilitate, conserve riparian and water catchment areas through promoting of sustainable land management practices such as tree planting, gully rehabilitation among others.

# 7. Innovative financing/partnership

There is need to identify and develop new financing models to fund sector programmes and projects such as through the Payment for Ecosystem Services (PES) models. These models will tap in new sources of finance which include Public Private Partnerships (PPPs), commercial and private financing. This will ensure that the sector meets its financing needs and subsequently achieve the long term development objectives of Kenya Vision 2030.

# 8. Modernization of Forest and Wildlife Technology

There is need to acquire advanced technology and equipment for the rangers and forest guards to eliminate poaching and trafficking of wildlife and forest products.

# 9. Research and innovation

There is need for financing research and innovation to enhance Natural Resource Conservation and Management, especially fast growing commercial tree species for use as packaging materials which will sustain the ban on plastic bags; documentation of emerging new organic chemical

pollutants and pharmaceuticals by-products for development of policies and regulations for use and disposal of waste, and more so E-waste management and disposal.

#### 10. Climate change

The effects of climate change and associated extreme weather events threaten sustainable development and impacts negatively on the sector. To address this, there is need for substantial allocation of resources towards mitigation and adaptation.

# 11. Human/wildlife conflict and rising compensation claims

There is need to review the Act on compensation for personal injury, death or damage to property with a view to make it sustainable.

#### 12. Encouraging stakeholders to take advantage of Carbon Credits

The sector encourages stakeholders to take appropriate mitigation and adaption measures that will contribute to the reduction of carbon emission. They will hence earn carbon credit through CDM projects, renewable energy, waste management and planting trees.

## 13. .Loss of AIA collection

The National Treasury should finance the gap created by the loss of AIA which used to be collected by various institutions but have been scraped or/ and are being received by other entities as per the various new Acts that have come in to effect.

# 14. Management of trans-boundary resources

There is need for harmonization of trans-boundary policies and frameworks on the management of trans-boundary resources.