

# **DEPARTMENT OF ENVIRONMENT, WATER, ENERGY, MINING AND NATURAL RESOURCES**

## **CHAPTER ONE**

### **1.0 DEPARTMENTAL BACKGROUND**

#### **1.1 Introduction**

This Chapter explains and details the background information, Vision and mission of the sector, strategic goals /objectives, sub-sector and their mandates and the roll of stakeholders in the sector. The chapter also details the programme performance review in the sector, review of the pending bills in the sector, the medium term priorities and the financial plan, analysis of the resources requirements as well as cross cutting linkages, emerging issues, challenges, conclusions and recommendations.

#### **1.2 Background information**

Preserving and creating sustainable habitats for local flora and fauna are critical interventions for improving soils, water and air quality that contribute to the conservation of Nyamira County and the region's ecology. These natural resources are the basic capital that communities depend on for survival, development and prosperity. In Nyamira, the greatest pressure leading to recent decades' dramatic natural resources and environmental degradation (habitat and landscape changes) has been from insatiable demand for agricultural land, biomass fuels, timber and human settlements. The root cause however is undoubtedly the unprecedented rapid changing demography and lifestyles that demands unsustainable provision of goods and services from the ecosystems: food, biomass fuels, water, shelter, timber and herbal medicine. The interventions are aimed at checking on and reversing environmental/ land degradation that has occurred primarily in the last one hundred years. During this period Nyamira transformed from natural tropical forests to an agricultural landscape; having lost her forests, biodiversity, habitats for wildlife and left with degraded soils and water resources.

#### **1.3 Sector Vision and Mission**

##### **Vision**

To be a leading county in the sustainable management, utilization and conservation of the environment, water and natural resources

##### **Mission**

To enhance conservation and sustainable management of environment, water and allied natural resources for socio economic development

#### **1.4 Strategic goals and objectives**

The department has identified thirteen (13) strategic issues, as follows:

- Poor Waste management (solid and liquid),
- Inadequate urban centre landscaping,
- Uncontrolled and Unsustainable ballast/ murram quarrying
- Low Electrification coverage,
- Inadequate supply of tree and forest products,
- Lack Natural resource database
- Inadequate human resource capacity
- Organizational Structure Projects and Programmers Implementation,
- Partnership Establishment and Development.
- Low water coverage
- Encroachment of water catchment areas
- Low community participation in water management issues

### 1.5 Mandates

The core functions of this department will include the following:

- Environmental Policy Management
- Forestry Development Policy Management including Agro forestry and Forest extension services.
- Waste Water Treatment and Disposal policy
- Solid and liquid waste Management
- Conservation and Protection of Natural Resources and Wildlife
- Water Catchment Area Conservation Control and Protection
- Restoration and Protection of Strategic Water Towers
- County Environmental Management including Pollution control and outdoor advertising control
- Water Sources Protection and pollution Control
- Energy Sources & Utilization policy Development
- Renewable Energy Promotion and other alternative energy sources and Development
- Rural Electrification Policy Management
- Street Lighting in Urban Areas

### 1.6 Role of stakeholders.

Name of stakeholder	Role
Government (National / County - Ministry of Environment, Water and natural resources, Ministry of lands, housing and urban development)	Provision of technical support and policy guidelines, financial resources, sector service provision (environmental management, water services, housing, spatial planning, forestry, health, public infrastructure, social services, education among others)
Development Partners (UNEP, UN Habitat, Shelter Afrique, UNFCCC,)	Financing schemes , technical support, policy guide and capacity building
Donor agencies( ADB, Kfw, USAID)	Finance and technical support, capacity building
Government Agencies (WSTF, LVSWWDA, , National Water Harvesting and Storage Authority)	Project implementation, financial support, capacity building and
WASREB, WRA, Water Appeals Tribunal	Regulation. And Arbitration
Private sector	Provision of credit through financial and non-financial institutions, Supply of inputs, partnership and investment.
Research institutions(e.g. KIRDI, KEFRI, KARI, NCST, UNIVERSITIES, KEWI)	Development and promotion of new technologies and research

NGOs ( World Vision Kenya, KIWASNET)	Advocacy, Capacity building, resource provision and promotion of appropriate technologies
Community	Actual participation in project activities-planning, implementation and monitoring and resource provision.
Financial institutions (Banks, micro-enterprises)	Credit facilities, direct project financing, capacity building

## CHAPTER TWO

### 2.0 ANALYSIS OF PERFORMANCE

#### 2.1 PROGRAMME PERFORMANCE REVIEW 2017/2018-2019/2020

##### 2.1.1 Review of sector Programme/Sub-Programme performance- delivery of outputs/KPI/Targets as per the table below

**Table 2.1: Sector programme Performance Reviews**

Programme	Key outputs	Key performance indicators	Planned target			Achieved targets			Remarks
			2017/18	2018/19	2019/20	2017/18	2018/19	2019/20	
<b>Programme.Policy, Planning general administration and support services</b>									
General Administration	Payment of salaries	No of months salaries paid	12	12	12	12	12	12	Paid salaries
Policy dev. & planning	Policies, bills developed	No .of policies developed	1	3	5	0	1	2	zero drafts bill and water policy
	Strategic plan	Number of strategic plans developed	-	1	1	-	1	1	Plan developed and completed
Payment of Utility Bills	Payment of electricity bills	No. of bills paid	36	36	36	36	36	33	Electricity bills for water, street lights, and office
<b>Programme : Water supply and Management Services</b>									
Rural water services	Boreholes drilled	No. of boreholes drilled and capped	4	20	20	1	0	0	Contract for drilling rig terminated
	Purchase of drilling rig	Drilling rig delivered	1	1	1	0	0	0	Contract terminated
	Water supply schemes	No. water supplies constructed pipeline laid ,kiosks, tanks, treatment plant	8	6	4	11	0	3	Target attained except for 18-19
	Spring protection	No. of springs constructed	50	235	160	30	80	60	Target

Programme	Key outputs	Key performance indicators	Planned target			Achieved targets			Remarks
			2017/18	2018/19	2019/20	2017/18	2018/19	2019/20	
									attained
	Roof water harvesting	No. of schools supplied with tanks	40	40	0	30	0	0	Target attained more funds to be allocated
Major Town water management services	Completion/Overhaul of water supplies	No. of water supplies overhauled	3	4	0	3	0	0	Increase budget allocation
<b>Programme 3: Environmental Protection and Management Services</b>									
Agroforestry promotion services	Setting up of tree nurseries	Number of tree nurseries developed	5	5	20	5	0	0	Ongoing establishment of remainder
	Distribution of tree seedlings	No. seedlings distributed	100,000	100,000	100,000	7,000	20,000	22,500	Ongoing project to protect rivers
	County Environment Committee meetings	No. of meetings held	0	0	0	0	1	1	Include budget
Pollution & waste management services	Solid waste collection	No. of tones collected and dumped	8,500	9,000	10,000	5,550	7,000	9,500	Increase allocation of fuel for garbage collection
<b>Programme 4: Energy mineral resources services</b>									
Energy Resources dev. & services	Solar powered street lights	Number of poles installed	240	75	60	240	75	60	Increase allocation to cover back streets and markets
	Home solar lights	Number of solar units distributed	1,000	1,000	0	800	0	0	Increase budgetary allocations
Mineral exploration & mining promotion	Mining site inventory	Data mining inventory report	1	1	1	0	0	0	No inventory established
<b>Programme 5: Climate Change Services</b>									

Programme	Key outputs	Key performance indicators	Planned target			Achieved targets			Remarks
			2017/18	2018/19	2019/20	2017/18	2018/19	2019/20	
Climate change adaptation activities	Distribution of tree seedlings	No. tree seedlings distributed	0	0	0	0	0	0	New directorate as per Council of Governors (COG)
Climate Change Mitigation activities	Sensitization of the public on causes, effects and interventions of climate change	No. of residents trained	0	0	0	0	0	0	New directorate as per Council of Governors (COG)
Policy development and Planning	Climate change Policy	No. of policies	0	0	0	0	0	0	
	Climate Change Bill	No. of Bills	0	0	0	0	0	0	
	Climate Change Regulations	No. of regulations	0	0	0	0	0	0	
	Climate change adaptation plan	No. of plans	0	0	0	0	0	0	
	Climate Change Mitigation plan	No. of plans	0	0	0	0	0	0	
	Climate change Action Plan	No. of plans	0	0	0	0	0	0	

## 2.2 Expenditure analysis for the period 2017/2018 to 2019/2020

### 2.2.1 Summary of expenditure by programmes, 2017/2018 - 2019/2020

Table 2.2: The budgetary allocation and expenditure for the sector for the period under review

PROGRAMME	APPROVED BUDGET			ACTUAL EXPENDITURE		
	2017/18	2018/19	2019/2020	2017/18	2018/19	2019/2020
General administration and support services	85,491,844	109,357,763		89,914,713		
Policy and Planning services	3,762,023	4,950,000		2,597,240		
Water supply and management services	185,089,680	191,072,067		55,826,099		

PROGRAMME	APPROVED BUDGET			ACTUAL EXPENDITURE		
	2017/18	2018/19	2019/2020	2017/18	2018/19	2019/2020
Energy mineral resources services	50,407,649	45,430,050		2,907,437		
Environmental protection and management services	21,909,800	7,758,996		3,756,843		
<b>Vote Totals</b>	<b>346,660,996</b>	<b>358,568,876</b>		<b>155,032,332</b>		

### 2.3 Analysis of programme expenditure by economic classification

Table 2.3 Programme Expenditure by Economic classification 2017/2018-2019/2020

ANALYSIS OF PROGRAMME EXPENDITURE BY ECONOMIC CLASSIFICATION						
ECONOMIC CLASSIFICATION	APPROVED BUDGET			ACTUAL EXPENDITURE		
	2017/18	2018/19	2019/2020	2017/18	2018/19	2019/2020
Compensation of Employees	89,245,595	95,387,228		82,807,408	82,260,514	
Use of Goods and Services	45,280,652	34,293,956		34,340,605	26,497,157	
Social Benefits	586,783.00	2,700,575		100,000	2,700,575	
Acquisition of Non-Financial Assets	188,422,840	226,187,117		182,565,054	80,727,928	
<b>TOTAL</b>	<b>325,269,370</b>	<b>358,568,876</b>		<b>370,616,256</b>	<b>192,186,174</b>	

### 2.4 Analysis of capital projects

Table 2.4: Analysis of performance Capital Projects

Department Name: ENVIRONMENT ,WATER,ENERGY,MINING AND NATURAL RESOURCES														
Programme :Water supply and management services														
Sub Programme: Rural water services														
S. N o.	Project Name	Location	Contract date	Expected completion date	Expected final cost	Source of Funds (Equitable share, conditional Grant)	Budget provision 2016/2017	Completion stage 2017/2018 (%)	Budget provision 2017/2018	Completion stage 2018/2019 (%)	Budget provision 2019/2020	Budget provision 2019/2020	Completion stage 2020/2021 (%)	Comments
1	Kemasare II	Nyamai ya	April 2017	October 2017	4,728,286	Equitable share	4,728,286	21	3,179,096.00	88	0	1000000	100	Funds for phase 3 of project
2	Nyambari a phase 1 wp	Magombo	April 2017	October 2017	13,214,137	Equitable share	0	0	13,214,137	85	1,960,382	10,000,000	20	More funds to complete phase 2
3	Bosiango phase 1	Bogichora	April 2017	October 2017	3,949,336	Equitable share	0	0	3,949,336.00	100	0	0	100	To budget for phase 2
4	Eronge primary wp	Esise	April 2017	October 2017	2,317,367	Equitable share	2,317,367	0	2,317,367	100	0	0	0	Project completed
5	Gesurebh phase 1	Manga	April 2017	October 2017	3,254,960	Equitable share	3,254,960	0	3,254,960	100	0	0	0	To budget for phase 2
5	Nyansiongo Geokonge II wp	Magwagwa	April 2017	October 2017	3,283,374	Equitable share	3,283,374	0	3,283,374	100	0	0	0	To budget for pump purchase
6	Raitigo II WP	Esise	April 2017	October 2017	8,439,327.12	Equitable share	8,439,327.12	0	8,439,327.12	100	0	0	0	To budget for phase 3
7	Kiabonyoru I wp	Kiabonyoru	April 2017	October 2017	22,181,629	Equitable share	0	0	22,181,629	30	15554887	10,000,000	20	budget for phase 2
8	Nyanchonoria bh	Rigoma	April 2017	October 2017	4,791,994.80	Equitable share	4,791,994.80	0	4,791,994.80	100	0	0	0	Project completed
9	Nyandoch e /Ibere	Nyansiongo	April 2017	October 2017	4,290,109.20	Equitable share	4,290,109.20	0	4,290,109.20	36	2,728,578.10	0	100	Project completed
10	Nyariachobh	Gachuba	April 2017	October 2017	4,221,429	Equitable share	4,221,429	0	4,221,429	100	0	0	0	Project completed



<b>Department Name: ENVIRONMENT ,WATER,ENERGY,MINING AND NATURAL RESOURCES</b>														
<b>Programme :Water supply and management services</b>														
<b>Sub Programme: Rural water services</b>														
11	Omorare	Ekereny o	April 2017	October 2017	3,313,7 25.60	Equitable share	3,313, 725.6 0	0	3,313,725 .60	100	0	0	0	Project completed
12	Tinga /Ekoro	Bosamar o/Manga	April 2017	October 2017	6,814,0 51.2	Equitable share	6,814, 051.2	0	6,814,051 .2	60	2,737,0 00.744	0	95	Budget for electricity
13	Kiamarita (nyamano gu) borehole phase 1	Magom bo	June 2018	October 20178	3,227,1 20	Equitable share	0	0	3,227,120	72	887400	3,000, 000	50	To budget for phase 2
14	Enchoro bh	Bosamar o	MAY 2015		<b>5,802,1 86.60</b>	Equitable share	<b>5,802, 186.6 0</b>	0	<b>3,150,188 .80</b>	54	0		0	Budget to complete
15	Kitaru Emboye	Kiabony oru/Mek enene	MAY 2015		7,102,3 76.80	Equitable share	7,102, 376.8 0	0	<b>3,907,000</b>	55	0	0	55	Budget to complete
16	Ikonge Water Project	Ekereny o	April 2015		4,743,6 00 2	Equitable share				100	0		0	Project completed unpaid balance
<b>Programme: Energy and Mineral Resources Services</b>														
	Solar street lights	All wards			-	Budget to complete	13,000,0 00	100	14,000,0 00	100		16,000,0 00	100	Project complete d and closed
	Home solar	All wards				Equitable share	0	0	8,500,00 0	100		0	0	Closed
<b>Programme: Environmental protection and management services</b>														
	Skip foundati on	All wards			<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
	Afforest ation	All wards			<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

## 2.5 REVIEW OF PENDING BILLS

### 2.5.1 Recurrent Pending Bills

No.	Supplier	Item	LPO/LSO	Amount	status
1	Florida garage	Motor vehicle maintenance	0	62640	Pending payment
2	Benoa motors	Motor vehicle maintenance	0	375,000	Pending payment
3	Nyamira practical	Motor vehicle maintenance		<b>28,700</b>	Pending payment
4	Benoa motors	Motor vehicle maintenance	0	<b>120,000</b>	Pending payment
5	Hilal petrol station	fuel	0	300,000	Pending payment
6	Hilal petrol station	fuel	0	98,500	Pending payment
7	Borabu	Catering	0	21,600	Pending payment
	<b>Total</b>			<b>1,006,440</b>	

## 2.5.2 Development Pending Bills

<b>DEVELOPMENT PENDING OBLIGATIONS FOR WATER PROJECTS 2019/2020 FY</b>				
<b>Ward/ Vendor</b>	<b>Intervention</b>	<b>Location/ Description</b>	<b>Total Cost</b>	<b>Payment Status</b>
Bogichora	Provision of water	Spring Rehabilitation (7+2)	1,800,000	Work in progress
	Provision of water	Piping of water at Bosiango Borehole	2,200,000	Work in progress
Bokeira	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
Bomwagamo	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
	Provision of water	Completion of Bomwagamo Water project	800,000	Work in progress
Bonyamatuta	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
Bosamaro	Provision of water	Spring Rehabilitation	1,400,000	Work in progress
	Provision of water	Completion of Enchoro Water project	2,000,000	Work in progress
Ekerenyo	Provision of water	Water tank Rehabilitation + Piping	1,600,000	Work in progress
	Provision of water	Spring rehabilitation	800,000	Work in progress
Esise	Provision of water	Spring protection	1,600,000	Work in progress
Gachuba	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
Gesima	Provision of water	Water Piping at Esani + Repair of Water Tank Machururiati + 2 Springs	2,000,000	Work in progress
Itibo	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
Kemera	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
Kiabonyoru	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
Magombo	Provision of water	Nyamanagu Water piping Project	2,000,000	Work in progress
Magombo	Provision of water	Spring rehabilitation	800,000	Work in progress
Magwagwa	Provision of water	Spring Rehabilitation	1,600,000	Work in progress

Manga	Provision of water	Spring Rehabilitation (8+4)	2,400,000	Work in progress
Manga	Provision of water	Water Scheme Pipe Rehabilitation	1,200,000	Work in progress
Mekenene	Provision of water	Spring protection	1,600,000	Work in progress
Nyamaiya	Provision of water	Water Distribution from Masosa Borehole	1,500,000	Work in progress
	Provision of water	Completion of Kemasare Water Project + Piping	1,500,000	Work in progress
Nyansiongo	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
Rigoma	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
Township	Provision of water	Spring Rehabilitation	1,600,000	Work in progress
	Provision of water	Water Piping to Sitipale	2,000,000	Work in progress
Work on progress	Provision of water	Borehole at Kiamarira	930,000	Work in progress

## CHAPTER THREE

### 3.0 PRIORITIZATION

#### 3.1.0 MEDIUM TERM PRIORITIES AND FINANCIAL PLAN 2021/2022-2023/2024

#### 3.1 Prioritization of Programmes and sub-programmes

##### 3.1.1 Programmes and their objectives

3.1.1.1 Programmes, sub-programmes, expected outcomes, outputs, and key performance indicators (KPIs) for the Sector as per the format below

Table 3.1: Programmes/Sub-Programme, outcome, outputs and KPIs

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2019/2020	Actual achievement 2019/2020	Target Baseline 2020/2021	Target 2021/2022	Target 2022/2023	Target 2023/2024
<b>Programme 1: Policy, Planning, general administration and support services</b>									
General Adm	Administration	Efficient and Effective services Delivered	Salaries and utilities paid Payroll processed	12	12	12	12	12	12
	Administration	Staff recruitment	No of new staff recruited	10	0	20	30	16	19
	Administration	Utility bills	Bills paid	12	12	12	12	12	12
	Administration	Training and capacity building	No of courses attended	20	3	35	32	35	40
Policy dev. & planning	Directorates	Policies, bills developed	No .of policies developed	3	2	8	3	3	2
		Budget plan	Budget developed	1	1	1	1	1	1
		Office supplies	No. Office supplies delivered	12	12	12	4	4	4
		Fuel and lubricants	Litres supplied	20,000	30,000	54,000	60,000	66,0000	72,600
		Maintenance of motor vehicles/cycles	No.of services carried out	130	90	192	210	230	240

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2019/2020	Actual achievement 2019/2020	Target Baseline 2020/2021	Target 2021/2022	Target 2022/2023	Target 2023/2024
<b>Programme 2: Water Supply and Management Services</b>									
<b>Outcome: To improve access to safe and portable water</b>									
Rural water services	Water	Boreholes drilled	No. of boreholes drilled and capped	20	0	37	20	30	22
		Boreholes equipped	No of boreholes equipped (solar pv, pumping unit, pump control unit and tanks)	2	1	3	34	20	<b>30</b>
		Piped Water supply schemes	No.of Kilometers pipelines laid	6	0	10	68	40	<b>50</b>
		Electricity connection to Tinga water supply		3	0	0	1	0	<b>0</b>
		Spring protection	No of springs constructed	235	138	122	100	80	<b>60</b>
		Water storage	No. of Water pan desilted	2	0	0	1	1	1
		Feasibility study	No of feasibility study reports	20	10	37	20	20	20
Major Town water management services		Completion/Over haul of water supplies	No of water supplies overhauled	2	1	1	7	3	<b>4</b>
<b>Programme 3:Energy mineral resources services</b>									
<b>Outcome. To promote secure business environment</b>									
Energy Resources dev services	Energy	Solar powered street lights	Number of poles installed	120	<b>75</b>	49	50	50	50
		High mast street lighting	No of lights installed	8	0	0	50	50	50
		Home solar lights	Number of solar units distributed	1,000	0	0	1`000	1000	1000
Mineral exploration & mining promotion		Mining site inventory	Data mining inventory report	1	0	0	1	0	0
		Environmental impact assesment for	No of Impact reports	0	0	0	3	3	2

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2019/2020	Actual achievement 2019/2020	Target Baseline 2020/2021	Target 2021/2022	Target 2022/2023	Target 2023/2024
		mining sites							
<b>Programme 4: Environmental Protection and Management services</b>									
<b>Outcome. To promote clean and healthy environment</b>									
Agroforestry promotion services	Environment and Natural resources	Afforestation of hilltops	Number of seedlings planted on hilltops	20,000	0	0	5,000	15,000	18,000
		Distribution of tree seedlings	No seedlings distributed	80,000	20,000	0	100,000	200,000	200,000
		Solid waste collection	No of tons collected and dumped	4,500	7,000	10,000	12,000	15,000	18,000
		Payment of wages (casual labour)	No. of payrolls prepared	12	12	12	12	12	12
Pollution & waste management services		Identification and fencing of land for dump site	No of sites identified	0	0	0	5	0	0
		Environmental impact assessment	No impact reports	0	0	0	5	1	0
		County Environment Committee meetings	No. of meetings held	4	0	4	4	4	4
		Skips foundation	No.of skips foundation	25	15	0	5	5	5
Pollution & waste management services		Purchase of skips	No of skips purchased	0	0	0	5	5	5
<b>Programme 5: Climate Change services</b>									
Climate change adaptation activities		Reforestation of hilltops	No. tree seedlings distributed	0	0	0	20,000	50,000	70,000
Climate Change Mitigation activities		Sensitization of the public on causes, effects and interventions of climate change adaptation and	No. of residents trained	0	0	0	10,000	10,000	10,000

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target 2019/2020	Actual achievement 2019/2020	Target Baseline 2020/2021	Target 2021/2022	Target 2022/2023	Target 2023/2024
		mitigation measures							
Policy development and Planning		Climate change Policy & Bill	No. of policies	0	0	0	2	3	3

### 3.2 Programmes by order of Ranking

Table 3.2: Ranking of programmes

S/N	Programme	Rank
1	Policy, Planning and general administration and support services	1
2	Water supply and Management services	2
3	Environmental protection and management services	3
4	Energy mineral resources services	4
5	Climate Change services	5

### 3.3 ANALYSIS OF RESOURCES REQUIREMENTS VERSUS ALLOCATION

#### 3.3.1 Sub-Sector/Sector (Recurrent)

Table 3.3: Recurrent requirements/allocation

Sector Name	2020/2021 Estimate	REQUIREMENT			ALLOCATION			VARIANCE/2021-2022 R Vs A
		2021/22	2022/23	2023/24	2021/22	2022/23	2023/24	
Department of Environment, Water, Mining, Energy and Natural Resources								
Revenue sources	Local revenue	7,675,102						



	Exchequer	116,130,605	136,077,393	196,985,520	210,582,859	85,821,009	90,112,059	94,617,662	-50,256,348
Totals	NET								
<b>Expenditure</b>	Compensation to employees	101,821,267	132,003,393	144,185,520	157,582,859	75,246,347	79,008,664	82,959,097	-56,757,046
	Other recurrent	14,309,338	40,740,000	52,800,000	53,000,000	10,574,662	11,103,395	11,658,565	-30,165,338
		<b>116,130,605</b>	<b>136,077,393</b>	<b>196,985,520</b>	<b>210,582,859</b>	<b>85,821,009</b>	<b>90,112,059</b>	<b>94,617,662</b>	<b>-91,948,018</b>

### 3.4 Sub-sector/sector (Development)

Table 3.4 Development requirements/allocation

Sector Name		REQUIREMENT				ALLOCATION		
		2020/2021	2021/2022	2022/23	2023/24	2021/2022	2022/23	2023/24
<b>Vote and Vote Details: Department of Environment</b>								
<b>xx1</b>	<b>Gross</b>							
	<b>GOK</b>	196,348,000				70,693,673	74,228,357	77,939,775
	<b>Loans</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Grants</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Local AIA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### 3.5 Programmes/sub-programmes (current and capital) as per the format below

#### 3.5.1 Analysis of resources requirement vs Allocation for 2019/20-2022/23

**Table 3.5 Programme/sub-Programme resources requirement**

<b>Programme 1: Policy, Planning, general administration and support services</b>								
			<b>REQUIREMENTS</b>			<b>ALLOCATIONS</b>		
	<b>Activities</b>	<b>Baseline 2020/2021</b>	<b>2021/2022</b>	<b>2022/2023</b>	<b>2023/2024</b>	<b>2021/2022</b>	<b>2022/2023</b>	<b>2023/2024</b>
<b>Sub-programme 1</b> general administration and support services	<b>Compensation for employees</b>	101,821,267	132,003,393	144,185,520	157,582,859	59,477,767	62,451,656	65,574,238
	Utilities /electricity	14,309,338	15,000,000	16,000,000	17,000,000			
	Fuel		6,000,000	6,600,000	7,200,000			
	Maintenance		8,400,000	9,200,000	9,600,000			
	Training		2,340,000	3,000,000	3,200,000			
<b>Sub-programme 2</b> Policy, Planning	<b>Policy</b>		9,000,000	9,000,000	6,000,000	3,851,138	4,043,694	4,245,879
	<b>Budget plan</b>		7,000,000	9,000,000	10,000,000			
<b>Total Programme</b>		<b>116,130,105</b>	<b>179,743,393</b>	<b>196,985,520</b>	<b>210,582,859</b>	<b>63,328,905</b>	<b>66,495,350</b>	<b>69,820,117</b>
			<b>REQUIREMENT</b>			<b>ALLOCATION</b>		
<b>Programme 2: Water Supply and Management Services</b>								
	<b>Activities</b>	<b>Baseline 2020/2021</b>	<b>2021/2022</b>	<b>2022/2023</b>	<b>2023/2024</b>	<b>2021/2022</b>	<b>2022/2023</b>	<b>2023/2024</b>
Rural water services	Boreholes drilling		46,000,000	46,000,000	50,600,000	35,301,976	37,067,094	38,920,478
	No of boreholes equipped (solar pv, pumping unit, pump control unit and tanks)		23,800,000	31,040,000	45,560,000			
	Piping of Water supply		38,080,000	22,400,000	28,000,000			

	schemes							
	Electricity connection		3,600,000	0	0			
	Spring protection		20,000,000	16,000,000	12,000,000			
	Water storage		3,000,000	3,000,000	3,000,000			
	Feasibility study		2,000,000	10,000,000	10,000,000			
Major Town water management services	Completion /Overhaul of water supplies		38,500,000	35,000,000	40,000,000	390,600	410,130	430,637
<b>Program Total</b>			<b>174,980,000</b>	<b>163,440,000</b>	<b>177,160,000</b>	<b>35,692,576</b>	<b>37,477,204</b>	<b>39,351,065</b>
<b>Programme 3: Energy mineral resources services</b>								
Energy Resources dev services	Solar powered street lights	10,050,000	11,500,000	11,500,000	11,500,000	38,561,752	40,489,840	42,514,332
	Home solar lights	0	7,500,000	7,500,000	7,500,000			
	Mining site inventory							
	High mast street lighting	0	85,000,000	85,000,000	85,000,000			
	Home solar lights							
Mineral exploration & mining promotion	Mining site inventory	0	1,000,000	0	0	0	0	0
<b>TOTAL</b>		<b>10,050,000</b>	<b>105,000,000</b>	<b>104,000,000</b>	<b>104,000,000</b>	<b>38,561,752</b>	<b>40,489,840</b>	<b>42,514,332</b>
<b>Programme 4: Environmental Protection and Management services</b>								

Agroforestry promotion services	Afforestation of hilltops		250,000	750,000	900,000	13,347,491	14,014,865	14,715,609
	Distribution of tree seedlings		5,000,000	10,000,000	10,000,000			
Pollution & waste management services	Solid waste collection		6,000,000	7,500,000	9,000,000	<b>5,583,959</b>	<b>5,863,157</b>	<b>6,156,315</b>
	Payment of wages (casual labour)		2,592,000	2,592,000	2,592,000			
	Identification and fencing of land for dump site		50,000,000	0	0			
	Environmental impact assessment/ Environmental audit		1,000,000	200,000	0			
	Skips foundation		1,250,000	1,250,000	1,250,000			
	Purchase of skips		2,500,000	2,500,000	2,500,000			
<b>Total</b>			<b>70,842,000</b>	<b>25,842,000</b>	<b>26,242,000</b>	<b>18,931,450</b>	<b>19,878,022</b>	<b>20,871,924</b>
<b>Programme 5: Climate Change services</b>								
Climate change adaptation activities	Reforestation of hilltops	<b>0</b>	6,000,000	6,000,000	6,000,000	<b>0</b>	<b>0</b>	<b>0</b>
Climate Change Mitigation activities	Sensitization of the public on causes,	<b>0</b>	6,000,000	6,000,000	6,000,000	<b>0</b>	<b>0</b>	<b>0</b>

	effects and interventions of climate change							
Policy development and Planning	Climate change Policy	0	6,000,000	9,000,000	9,000,000	0	0	0
			<b>18,000,000</b>	<b>21,000,000</b>	<b>21,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>

**CHAPTER FOUR**

## **4.0 CROSS SECTOR LINKAGES AND EMERGING ISSUES/CHALLENGES**

### **4.1. Cross cutting issues.**

#### **4.1.1. Poverty:**

The poor persons or households are described as those with inability to access basic needs such as food, shelter, clothing, health, water and education due to geographical, economic and social factors. According to the KIBHS 2005/2006, the county was estimated to have 46.3% of its population living below the poverty line. About 21.8% were food poor and 1.9% was hardcore poor meaning that they could not meet the basic minimum food requirements even after spending all their income on food alone. The major causes of poverty in the county include:-poor roads, network limited electricity connection, small land sizes, poor crop and animal husbandry practices, inadequate safe and clean drinking, low educational standards and high prevalence of human diseases. Urban poverty in the county stands at 13% while rural poverty stands at 46.3% same as the county poverty. This is because the county is predominantly rural thus majority of the population live in the rural area. Poverty in the urban areas is mainly caused by rural urban migration. There is need for proper planning of these towns as well as developing appropriate programmes in the rural areas to reduce pressure on land which has led to subdivision of land into small uneconomical units. The focus should be on intensive farming, value addition, improvement of infrastructure-electricity and maintenance of roads as well as cottage industries for processing agriculture produce. There is also need for development of market structures and Jua Kali sheds to address urban poverty.

#### **4.1.2. HIV/AIDS:**

HIV/AIDS continues to pose a major challenge to all sectors of the economy and is affecting the development programmes in the county. HIV/AIDS prevalence rate in Nyamira County is 6.9% (Nascop, County HIV Profiles 2012). The main cause of the spread of HIV/AIDS in the county is unsafe sexual behavior and transmission of mother to child. There are approximately 900 new infections annually. Adult ART coverage is 84% as at 2011 and child ART coverage is 21% (Nascop HIV County Profiles 2012). Low uptake of HTC services, infrastructure inadequacies, stigma, human resource and commodities constraints remain as key challenges in the fight against HIV/AIDS in the county. According to NASCOP reports, in 2011 estimated 17, 028 people of whom 15% are children live with HIV/AIDS in Nyamira County. The county is expected to face various socio-economic impacts of HIV/AIDS if interventions are not enhanced. Household expenditure on health care will increase, reducing savings and investments. Pressure on health services will increase, reducing the quality of service offered; households will spend more time in caring for the sick, further affecting productive activities at the household and community levels. An increase in orphans is expected to raise dependency ratios at the household levels. There is need therefore to upscale interventions to mitigate the socio-economic impacts of the pandemic in the county development agenda.

#### **4.1.3. Gender Inequality:**

Women constitute to 52 percent of the county's population. Although the majority, they are generally left out of development decision making processes through lack of representation. Policies, plans and strategies rarely take into consideration gender roles and responsibilities. Considering that in 2009 41,539 out of the 131,039 households (37%) in Nyamira county were female headed, they were certainly more disadvantaged and more likely to be poor compared to other households.

Factors exacerbating gender disparities in the county are rooted in socio-cultural practices such as ownership of production resources (land, capital); participation in decision making and early/child marriages. Other factors include consequences of poor health which are greater in women than in men due to their role in child bearing and lack of skills due to low education standards. Thus, gender equality has to be exercised in ownership of assets and decision making, with full exercise of affirmative action.

#### **4.1.4. Youth Issues:**

The youth population in the county stood at 178,918 in 2012 representing 28% of the total population. Some of the challenges facing the youths include: lack of representation in various development forums, risk of engaging in anti-social behavior such as engagement in premarital sex, drug and substance abuse as well as inadequate representation in decision making process. Representation of the youth in some development committees in the county have been attempted with encouraging results. Others interventions include disbursing the Youth Enterprise and Kazi Kwa Vijana Funds. The department has tried to give 30% of contracts to the youth and gender.

#### **4.1.5. Information and Communication Technology (ICT):**

The county's mobile phone services coverage is 92%. Internet services for the public in the county are offered by 45 cyber cafes concentrated only in the three major towns. There are also very few bureaus offering computer services to the public. This makes communication in the county difficult thus hindering development. Digital villages and cyber cafes would be ideal investment opportunities in the county. Radio transmission is accessible to all areas in the county. However, for television transmission only few broadcasters are available while others can only be accessed through satellite dishes that are expensive beyond the reach of the population. Courier services are offered by private courier services, post offices and public service vehicles. The county does not have a well-developed information technology, equipments and machinery. Apart from the SCIDCs, the county does not have a public library. The SCIDCs are not equipped with, fax, computer and internet.

#### **4.1.6. Disaster Risk Management:**



The disasters/calamities in the county are mainly caused by lightning and thunderstorms. However, their impacts has gone down as a result of installation of lightning arrestors in most learning institutions, government buildings, health institutions and community awareness. Others include road accidents affecting the busy roads like Kisii-Sotik and Kisii-ngoina and potential industrial areas. The causes of disaster and factors that exacerbate them include climatic conditions, poor environmental management; road accidents; fires and epidemics due to poor sanitation. The county is generally unprepared to handle and manage most of these disasters due to limited information and preparedness. The county needs to develop strategies that will reduce the vulnerability of the populace and the magnitude of the effect of such emergencies.

#### **4.1.7. Environmental concerns:**

As the population continues to increase, more pressure will be exerted on the natural resources leading to deterioration in the ecosystem balance. Topography, climatic conditions, combined with human activities will determine the kind of adverse effect on the environment and the corrective action required. For instance, where the Industries are located and commercial area adverse impact will include air and dust pollution, surface water and under ground water contamination and litter pollution. This will have a negative effect on the human health, and economic assets. Water catchments areas have been encroached and wet lands destroyed. Water levels in most permanent rivers in the county have been going down a situation which if not controlled may lead to deficiency in water supply in the county. Pollution of water resources resulting from construction of homesteads at water catchments, tea and coffee factories draining effluents into the rivers and streams, lack of disposal sites in Nyamira Town and other markets, the use of fungicides and other farm chemicals have worsened the situation. There is need for concerted efforts in environmental conservation. NEMA should enforce the environmental laws to safeguard the declining water resources and pollution of the environment. The community should also be incorporated in conservation efforts through environmental education awareness among others.

#### **4.1.8. The Physically Challenged:**

The physically challenged in the county are estimated to be 10,104 which is 1.6% of the total population. Although this proportion of the population is discriminated against and seen as dependants, they have a lot of potential to contribute to development. The county faces a number of challenges towards integrating the physically challenged in development among them being the lack of rehabilitation centres, as well as discrimination by other community members. With the available data for the physically challenged, there is need for proper planning for the disables, , mainstream them in development programmes, provide window of opportunities for the persons with disabilities especially through devolved funds-CDF, Women Enterprise Fund, Youth Development Fund among others and sensitize the communities about the challenges facing these group.

#### **4.1.9. National Diversity:**

As already alluded to the Gusii Community predominantly occupies the county, however, the northern and parts as well as the major towns have a significant number of other ethnic communities. Most of these communities are engage in farming or business activities. High in-migration has been noted especially in the three major towns' centers due to those searching for employment opportunities. The cultural diversity of the various communities has seen much intermarriages between the different groups leading to very peaceful co-existence.

#### **4.1.10. Climate Change**

Climate change has continued to cause severe effects in Nyamira County. This has been occasioned by unpredictable rainfall patterns, prolonged drought, reduced volumes of water in rivers, flooding, food insecurity and diseases due to rising temperatures. Water levels in most permanent rivers in the county have been going down a situation which if not controlled may lead to deficiency in water supply in the county. Pollution of water resources resulting from construction of homesteads at water catchments, tea and coffee factories draining effluents into the rivers and streams, lack of disposal sites in Nyamira Town and other markets, the use of fungicides and other farm chemicals have worsened the situation There is need for all departments to align their budgets towards Climate Change mitigation and adaptation interventions. The use of energy saving jikos, solar streetlights, SMART agriculture, agroforestry, afforestation and appropriate waste management should be adopted by all. All relevant departments should include funds in their budgets to mitigate climate change effects.

Report compiled by;

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