



REPUBLIC OF KENYA



COUNTY GOVERNMENT OF NYAMIRA

SECTOR PLAN FOR

ENVIRONMENTAL PROTECTION, WATER AND NATURAL RESOURCES

2023 – 2033



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

FOREWORD



Natural resources are essential for the social and economic development of a nation or community; as a nation or community develops the demand for natural resources increases against the limited natural endowment. This may lead to natural resource scarcity which could also result in conflicts if sustainable development is not practiced. This Sector Plan represents the means to achieve environmental protection and improvement throughout Nyamira County. This Plan sets out the vision for the Department of Environment, Energy, Mining and Natural Resources and outlines the steps necessary to achieve the stated goals over the next ten years.

Nyamira County through this Department is committed to creating an enabling environment for the management of the environment and natural resources. Through sustainable management of the environment and our resources, it is expected that there will be improved economic and social conditions in Nyamira County. The Department is committed to achieve equity, ecological sustainability and economic growth for Nyamira county residents. This Sector Plan for 2023- 2033 has been created through a participatory and consultative process. In line with the dynamic environment challenges and focusing on the priority areas, the Department plans to effectively and efficiently deliver services to all.

There is power in individual and collective action to improve the environment. Just as all community members shared in the opportunity to contribute to the development of the Sector Plan, all community members have an opportunity to share in the implementation of the Plan. During this sectoral plan period, the Department plans to address various challenges including; pollution, loss of biodiversity, land degradation and wise use of natural resources. A special focus area identified is on environmental conservation, climate change and sustainable management of natural resources as they are a critical driving force to economic and socio development.

Environment and natural resources management issues are multi-sectoral in nature and require inclusive engagement of all stakeholders. It is therefore, our commitment to implement this Sectoral Plan and fulfil the aspirations of the residents in Nyamira County for a productive life in a healthy environment

John Omambia Matiang'i

County Executive Committee Member

Environment, Energy, Climate Change, Mining and Natural Resources

Acknowledgements



The Department of Water, Environment, Energy, Climate Change, Mining and Natural Resources has a mandate to conserve, develop and sustainably manage environment and natural resources. While it has been recognized that environmental resources contribute significantly to the social and economic development, the benefits have not been fully realised due to weak enforcement of the environmental legislation and policies and inadequate inclusiveness in the sustainable management of the environment.

To address the sector challenges, the Department of Environment, Energy, Climate Change, Mining and Natural Resources is committed to implementation of the Environment Management and Coordination Act (1999) and the Forest Act. In addition, the department will implement this through the active participation of stakeholders at all levels. Special thanks go to the Executive Committee Member in charge of the department of Environment, Climate Change, Energy, Mining and Natural Resources for providing the visionary and able leadership. His invaluable contribution on the course of the Department is highly appreciated.

I acknowledge Economists from the Department of Finance and Planning- Director Paul Onyango and Teddy Kiage- for their facilitative role and expert services provided during the preparation of this plan. I would like to thank the drafting team; Mr. George McOoko, Director Isaac Mainye, Director Edward Magare, Director Oliver Ogado, Director Hillary Sese and Director Daniel Omwansa for their enthusiasm, commitment and dedication in the preparation of the plan. I also wish to thank specifically the efforts and roles played by the stakeholders in the diverse areas in environmental management, without whose contribution much wouldn't have been achieved. It is my strong conviction that the successful implementation of this Sector plan will improve the performance of the Department and, in particular, contribute greatly towards the achievements of our county's development agenda.

Joshua Ombogo Marwanga

County Chief Officer

Environment, Climate Change, Energy, Mining and Natural Resources

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ACRONYMS AND ABBREVIATIONS

ADB	African Development Bank
AIA	Appropriation in Aid
AIDS	Acquired Immune Deficiency Syndrome
CCO	County Chief Officer
CIDP	County Integrated Development Plan
CO	Chief Officer
ECDE	Early Childhood Development Education
ECM	Executive Committee Member
EIA	Environmental impact assessment
EMCA	Environmental Management and Coordination Act
GDP	Growth Development Produce
GIS	Geo Information Systems
GPS	Geographical Positioning System
HIV	Human Immune-Deficiency Virus
ICT	Information and Communication Technologies
KARI	Kenya Agricultural Research Institute
KEFRI	Kenya Forest Research Institute
KFS	Kenya Forest Services
NASCOP	National Aids and STI Coordination Programme
NEMA	National Environment and Management Authority
NGO	Non-Governmental Organization
NRM	Natural Resource Management
PPP	Public Private Partnership
REA	Rural Electrification Authority
WRUA	Water Resource Users Association

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EXECUTIVE SUMMARY

Sector planning process keeps an organization on track all the time, and allows it to respond adaptively to change. In recognizing this sector of ENVIRONMENTAL PROTECTION, WATER AND NATURAL RESOURCES of Nyamira County have developed a sector plan which covers the next ten years (2023-2033).

In delivering services to citizens the sector of ENVIRONMENTAL PROTECTION, WATER AND NATURAL RESOURCES of Nyamira County will be guided by creativity and innovativeness, professionalism and timeliness, partnership, transparency and accountability, team spirit and integrity as its core values. Overly, this will require working strategies, leadership commitment, a committed staffing and support from stakeholders.

Under the leadership of Executive Committee Member and Departmental Chief Officer, the Department of ENVIRONMENTAL PROTECTION, WATER AND NATURAL RESOURCES has five sub sectors each with distinguishable constitutional functions.

**CHAPTER ONE;
OVERVIEW AND BACKGROUND OF THE SECTOR**

1.0 INTRODUCTION

This chapter gives the details of the sector in terms of overview of the county, background of the county, mandates of the sector, rationale for the County Sectoral Plan, approach/methodology in the preparation of the sector plan

1.1 Overview of the County

Nyamira is situated in the Western part of Kenya. The County covers an area of 899.4km². It lies between latitude 00 30' and 00 45' south and between longitude 34 45' and 35 00' east. It is indeed formed part of one of the divisions of the larger Kisii district way back in 1970s. In 1987, the Nyamira as a divisional boundary was created a district which has since existed with four constituencies. The coming of the devolution in 2013, Nyamira forms part of the 47 County Governments with one extra Constituency created and 20 electoral wards. The County Headquarter is located in Nyamira South Sub County, Township ward formerly the head-quarter for Nyamira District. It is located along Konate Junction Miruka Centre Road approximately six (6) kilometres from the Konate Junction, off the Kisii Chemosit Road

The County's topography is mostly hilly "*Gusii highlands*". The Kiabonyoru, Nyabisimba, Nkoora, Kemasare hills and the Manga ridge are the most predominant features in the county. The two topographic zones in the county lie between 1,250 m and 2,100 m above the sea level. The low zones comprise of swampy, wetlands and valley bottoms while the upper zones are dominated by the hills. The permanent rivers and streams found in the County include Sondu, Eaka, Kijauri, Kemera, Charachani, Gucha (Kuja), Bisembe, Mogonga, Chirichiro, Ramacha and Egesagane. All these rivers and several streams found in the County drain their water into Lake Victoria. The major types of soil found in the County are red volcanic (Nitosols) which are deep, fertile and well-drained accounting for 85 per cent while the remaining 15 per cent are those found in the valley bottoms and swampy areas suitable for brick making.

The County is divided into two major Agro-ecological zones. The highland (LH1 and LH2) covers 82 per cent of the County while the upper midland zone (UM1, UM2 and UM3) covers the remaining 18 per cent. Although the vegetation in the County is evergreen, there is no gazetted forest. The county has a bimodal pattern of annual rainfall that is well distributed, reliable and adequate for a wide range of crops. Annual rainfall ranges between 1200 mm-2100 mm per annum. The long and short rain seasons start from December to June and July to November respectively, with no distinct dry spell separating them. The maximum day and minimum night temperatures are normally between 28.7°C and 10.1°C respectively, resulting to an average normal temperature of 19.4°C which is favourable for both agricultural and livestock production.

The county has an estimated population of 653,515 as at 2022, with 336,407 being female and 317,108 males. Agriculture is the County's economic backbone where 90% of its population is dependent on agricultural production and marketing directly and indirectly. It supports 80% of total employment opportunities in the county. Nyamira County lies in the Lake Victoria region, a region whose thirteen (14) counties have come together and formed the Lake Region Economic Bloc with the common understanding that strategic connections between Counties with shared interests seated in a desire for mutual benefit can be an effective and intelligent means of increasing the possibility of creating notable development impact across several counties. The Lake Region Economic Bloc is made up of Bungoma, Busia, Homa Bay, Kakamega, Kisii, Kisumu, Migori, Nyamira, Siaya, Vihiga, Bomet, Trans Nzoia and Kericho Counties.

The County has intercounty relations; along the Homabay County (Rachuonyo) border there is ethnic intermarriages, this is evident in Miruka and Nyamusi areas that has promoted peace coexistence. Miruka and Keroka markets along the borders of Homabay and Kisii counties respectively have promoted exchange of goods and services for the people living along these borders. The existence of the tea zones in Kericho and Nyamira counties has promoted employment among the tea factories and the dwellings.

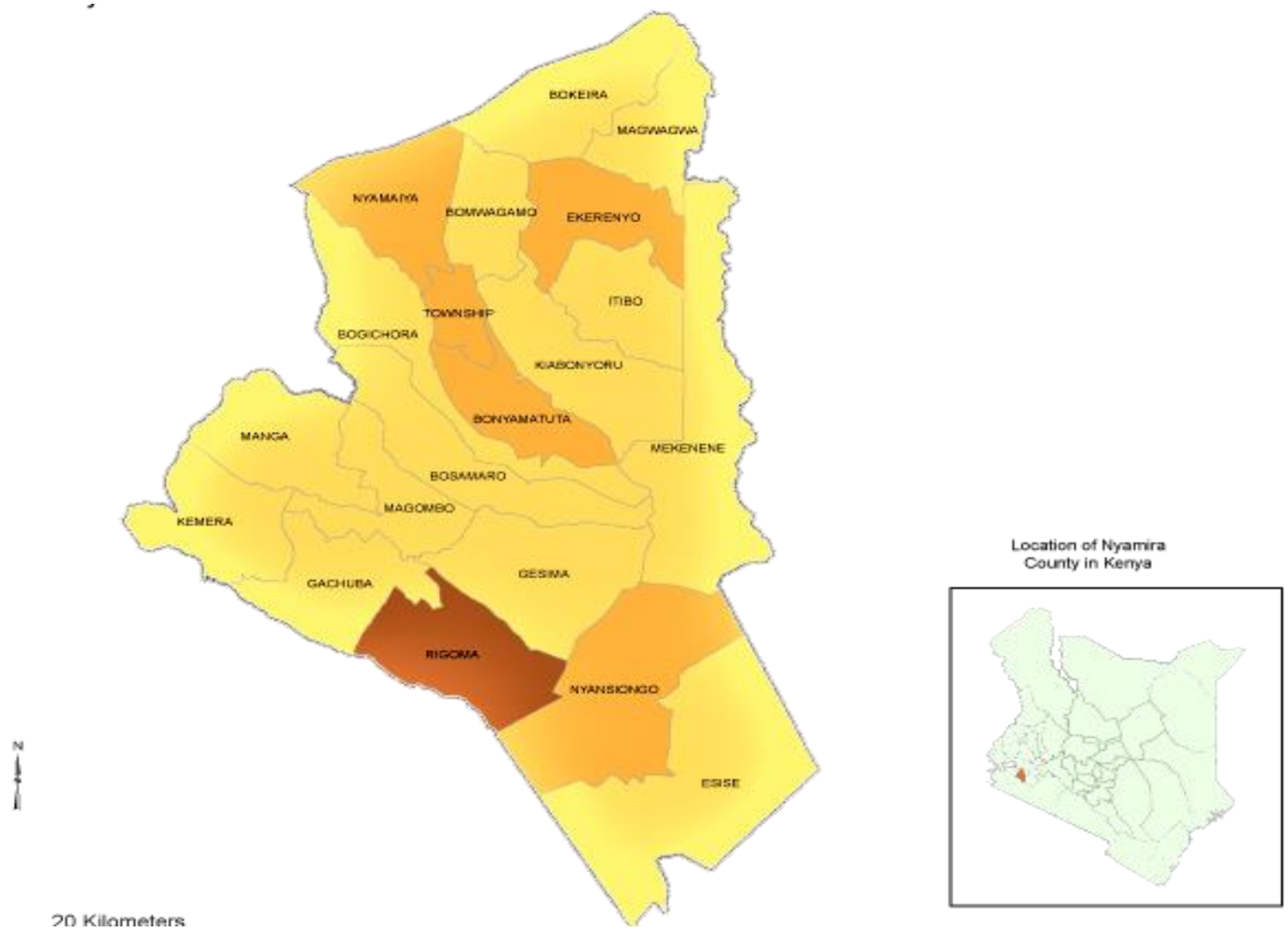


Figure 1 Map of Nyamira County

1.2 Background information

This is the Third Sectoral Plan developed by the Sector of Environmental protection, Water and Natural Resources in the County. This strategic plan will also form the basis of guiding the Sector’s activities for the subsequent years as well as being reference frame for other sectors.

Mandate

The mandate of the Sector of Environmental protection, Water and Natural Resources has a mandate to conserve, develop and sustainably manage environment and natural resources.

Sub-sector and their Mandates:

Administration

- Monitoring and Evaluation of the ongoing projects
- Advocacy and capacity building on the functions of the sector
- Provision of policy guidelines for the sector

- Departmental human resource management

Water services

- Water Sources Protection and pollution Control
- Waste Water Treatment and Disposal policy
- Liquid waste Management
- Water Catchment Area Conservation Control and Protection
- Restoration and Protection of Strategic Water Tower
- Provision of accessible clean drinking water

Environment and Natural resources

- Environmental Policy Management
- Forestry Development Policy Management including Agro forestry and Forest extension service
- Solid waste management, collection and disposal
- Conservation and Protection of Natural Resources and Wildlife
- County Environmental Management including Pollution control and outdoor advertising control
- Tree nursery establishment and support

Energy, Mining and Natural resources

- Development of Energy Sources & Utilization policy
- Promotion of Renewable Energy and other alternative energy sources and Development
- Rural Electrification Policy Management
- Street Lighting in Urban Areas
- Provision of framework and structures for mineral exploitation

Climate Change

- Coordinating and monitoring the implementation of the climate change policy
- Regulatory arrangements to mitigate emissions of carbon dioxide and targeted greenhouse gases into the atmosphere
- Promote the establishment, maintenance and use of greenhouse gas sinks;
- Coordinating, mainstreaming and integrating climate change programs into the sectoral strategic plans
- Identifying low carbon development strategies and coordinating related measurement, reporting and verification
- Developing strategies and coordinating actions for building resilience to climate change and enhancing adaptive capacity
- Taking measures to anticipate, prevent or minimize the causes of climate change and its adverse effects;
- Serving as the County knowledge and information management center for collating, verifying, refining, and disseminating knowledge and information on climate change

- Developing and implementing educational and public awareness, communication and outreach programs on climate change and its effects

1.3 Rationale for the County Sectoral Plan

Legal Framework

The Constitution of Kenya, 2010 created a two-tier system of governance, the National and Devolved governments that are distinct but interdependent, each with specific functions as set out in fourth schedule of the constitution. The Fourth Schedule delineates the functions of both the national and county governments.

Part XI of the County Governments Act, 2012 requires County Governments to plan for the County. The Act requires that Counties prepare County plans including a Ten-year County Sector Plan. The Act prescribes that County plans should ensure harmony between National and County plans and that no government spending should be made outside the approved framework.

Linkages

Kenya's Vision 2030 is an economic blueprint that seeks to create "a globally competitive and prosperous nation with a high quality of life by 2030". The Vision aims to transform the country into a newly industrializing, middle-income country providing a high quality of life to all its citizens in a clean and secure environment. The Vision is anchored on three key pillars: economic; social; and political. Kenya Vision 2030 is implemented through successive five years Medium Term Plans (MTP) at the national level while the Sector plans implement it at the county level.

The Sector Plan has integrated and will implement the 17 Global Sustainable Development Goals (SDGs) as outlined in the UN 2030 Agenda for Sustainable Development. The Plan's Implementation is also aligned towards achieving the Goals of the African Union Agenda 2063 which constitutes the strategic framework for socio-economic transformation of the continent in the next 50 years.

1.4 Approach/methodology in the preparation of the sector plan

A concept note was issued regarding the preparation of the sector plans, then after a circular was circulated to departments by the budgeting and planning department to carry out public participation regarding the plan.

After that the county cabinet approved the concept note, the governor went ahead to launch the exercise.

As a constitutional requirement, an advertisement was gazetted to give the public information on the venue, dates and issues to be discussed during public participation.

Afterward, a five-day consultation exercise to operationalize the various sector working groups was held in Best Western hotel. This forum was meant to develop the sectoral plans. Several stakeholders allied to the sectors were invited for consultations. A template for the sectoral plans was shared by the National Treasury Planning department invited to the meeting to provide technical backstopping. The technical working group for

the sector alongside the stakeholder went working into group to develop the sectoral plan. Various stakeholders were represented including the technical teams from the county government comprising the CECs, CCOs and, County directors of the sector.

CHAPTER TWO:
PERFORMANCE REVIEW OF THE PREVIOUS
COUNTY INTEGRATED DEVELOPMENT PLAN 2018-2022

2.0 Introduction

This chapter provides a review on implementation of the previous CIDP 2018-2022. It presents an analysis of sector performance in terms of revenues, expenditures and key outcomes as well as the major challenges faced in the implementation of the plan.

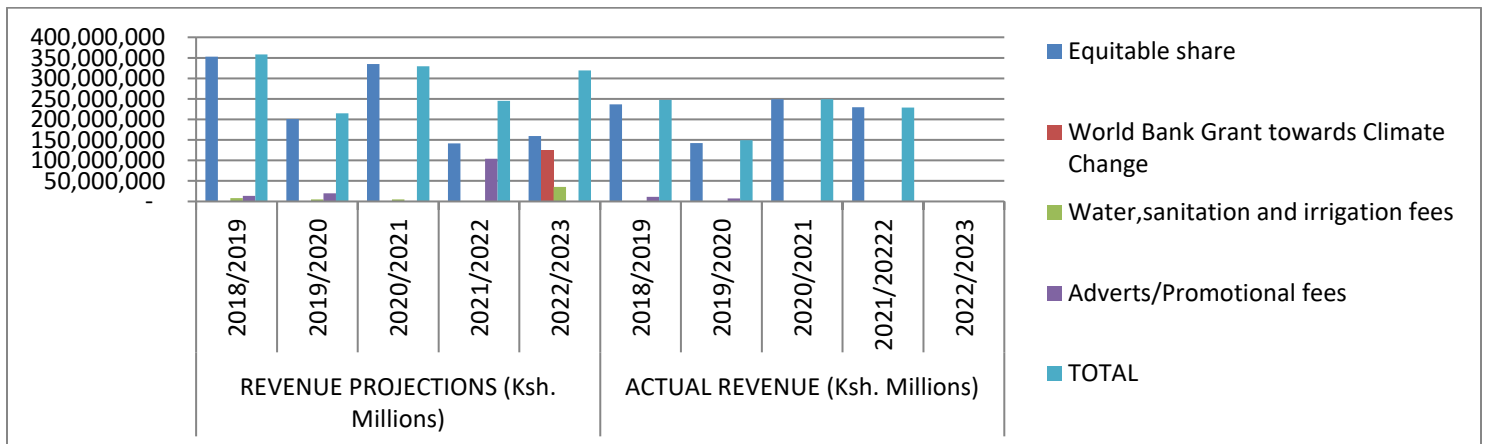
2.1 Analysis of the Sector Revenue Sources

Table 1 Analysis of Sector Revenue Sources

The table below shows an analysis on annual revenue projections against the actual revenue collected.

REVENUE SOURCES	REVENUE PROJECTIONS (Ksh. Millions)					ACTUAL REVENUE (Ksh. Millions)				
	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Equitable share	352,677,109	200,874,613	334,964,186	141,366,046	115,493,627	236,556,893	142,091,675	248,761,544	229,206,606	115,493,627
World Bank Grant towards Climate Change	-	-	-	-	22,000,000	-	-	-	-	-
Water, sanitation and irrigation fees	8,000,000	5,356,108	5,356,108	5,529	35,201,027	78,010	3,720	32,640	128,400	38,960
Adverts/Promotional fees	13,891,767	19,624,962	-	103,663,340	-	10,975,603	6,973,647	-	-	-
Building material cess	-	-	-	-	-	-	-	-	-	2,611,153
TOTAL	358,568,876	215,143,467	329,608,078	245,023,857	172,694,654	247,454,486	149,061,602	248,728,904	229,078,206	118,143,740

Figure 2 Graphical analysis of sector revenue sources



2.2 Sector Budget Expenditure Analysis

Table 2 Table of Sector Budget Expenditure Analysis

This table explains the sector budget expenditure analysis for total budget allocation, actual expenditure and the absorption rate.

FINANCIAL YEAR	Total Budget	Total Actual	Variance	Absorption
	Allocation (Ksh in millions)	Expenditure (Ksh in millions)		rate (%)
2018/2019	358,568,876	247,454,486	-111,114,390	69
2019/2020	215,143,467	149,061,602	-66,081,865	69
2020/2021	329,608,078	248,728,904	-80,879,174	75
2021/2022	245,023,857	229,078,206	-15,945,651	93
2022/2023	319,364,654		-319,364,654	-
TOTAL	1,467,708,932	874,323,198	-593,385,734	

2.3 Sector Programs Performance Review

General Administration Policy and Planning

Irrigation and Water management

Water supply and management services

In the plan period, the Water supply and management services targeted to Increase accessibility to clean and safe water for domestic and industrial use from estimated 35 % to 60 % by year 2022 by; constructing 40 water supply schemes and achieved constructing 5, drilling and developing 70 boreholes and achieving 40, developing and protecting 300 water springs and achieving 370, desilting 6 dams and achieving 4 and by forming a targeted 140 Water Users Associations and at the end of the period achieving 60.

Environmental Protection and Management services

In the plan period, the Environmental Protection and Management services targeted to promote environmental conservation, health and safety through sustainable development approaches by; establishing 5 tree nurseries per sub-county and reforesting 5 hill tops.

2.4 Emerging Issues, Challenges and Lessons Learnt

Water supply and management services

S/NO	EMERGING ISSUES	CHALLENGES IN IMPLEMENTING THE CIDP	LESSON LEARNED
1	Low water supply and sanitation coverage	Low funding Low water yield from springs/streams Limited infrastructure development Lack of land for infrastructure development	Develop resource mobilization unit Development of water supply infrastructure Improve water management.
2	Non-Revenue water	Pipe leakages Illegal connections Aged water supply systems	Regular maintenance of the water system Enforcement of regulations.
3	Unfavourable climate change.	Changing rainfall patterns, high temperatures	To promote climate smart technologies in water resources Capacity building of water committees.
4	High energy costs	Inefficient production systems, Unconducive geographical terrain	Develop use of green energy and gravity scheme to reduce the cost of energy.
5	Low uptake of appropriate Technology	Inadequate knowledge and technical skills	adopt appropriate technology, enhance gravity scheme and green energy
6	Shared Water Resources.	Clannism Lack of political will Poor inter-clan relationship	
7	Inadequate skills and staff shortages	Aging staff, no succession plan	Recruitment and training of staff Short Courses /trainings
8	Inadequate land for infrastructure Development	High Population Lack Of Policy on Way Leaves for Water Infrastructure High Land Cost Land Tenure System	Customize the water act Allow for land acquisition during design.
9	Inadequate baseline data and information	No baseline data Low staff capacity and skill Low funding Lack of equipment Ineffective planning	Promote access to information, networking and dissemination Establish baseline database Capacity build staff
10	Water sources pollution	Farming practices Land sizes No policy Soil erosion	Promotion of modern farming technologies, reduce water source pollution, Awareness creation on modern farming practices/ and improve solid waste management
11	Poor Waste water management	Increased urban population Lack of sewerage infrastructure No policy	develop site treatment system Establishment of sewerage system Development waste water disposal policy Improve waste water disposal

			Development of sewerage system
12	Low uptake of Roof water harvesting	Inadequate knowledge	Increase no of households with water tanks for harvesting rain water

Environmental Protection and Management services

Emerging issues

1. Mainstreaming planning of HIV AIDS Programmes
2. Covid 19 pandemic
3. Mainstreaming in related gender issues

Challenges in implementation of Previous CIDP

1. Failure to adhere to norms during of supplementary where reallocations of projects are done and deviate from strict implementations of the CIDP
2. Proper sensitization be done to MCAs to understands regulations to implementation CID projects through Budgeting approval

Lessons Learnt

1. CIDP is a tool in planning if it is implemented fully
2. Proper training on the CIDP is required before initiation on planning next five years and previous well analyzed report on implementation by finance

2.5 SECTOR DEVELOPMENT ISSUES

Table 3 Sector Development Issues

Major Issues/Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/strengths within the sector	Strategies
DIRECTORATE OF ENVIRONMENT					
Uncontrolled noise pollution Control	Lack of awareness on appropriate measures on Noise pollution Control mechanisms Lack of trained staff involved in noise pollution controls Lack of tools of work gadgets	Practice appropriate measures of noise pollution Control Capacity builds all staff involved provision of sufficient tools of work	Adequate county administrative structures in implementation of procedures on noise pollution control mechanisms Adequate staff for training Adequate staffing Acquire gadgets/tools of work	Existence of partners in reinforcing the Noise pollution controls mechanisms Deployed sub county Environment officers Existing EMCA laws Existing of Directorate structure to wards	Sensitise the public on noise pollution control mechanisms Carry out crackdown throughout the county in controlling noise pollution Establishment database of all noise pollution offenders as means of monitoring and controls. Carry out inspections on noise pollution offenders and ensure proper controls Purchase required tools (Noise measurement Gadgets) for effective implementation of the process.
Insufficient solid waste Management systems that meet international standards.	Inadequate of budgetary allocation	Practice proper international waste management standard systems in solid waste management	Adequate staff strengths.	Sufficient staff involved in waste management Directorate staff structure to wards Current 25 skips at Keroka and Nyansiongo 3 current trucks involved in solid waste transportation One hired dumpsite for dumping of waste	Acquisition of two acreage of land in Nyamira north and manga sub counties to be designated as dumpsite. Purchase of sufficient tools of work for garbage handling Purchase of 5 Trucks fitted with skips per Sub County. Fencing and exaction of Dumpsites at manga and Nyamira North. Establishment of 5 waste

					<p>segregation management plant on per sub county.</p> <p>Development Environmental Safeguard Policy and Act governing solid waste management.</p> <p>Establishment of proper Liquid waste housing harvesting and drainage in Keroka, Nyansiongo, Ekerenyo and Ikonge.</p> <p>Establishment of 3 Urban water lagoons</p> <p>Purchase of 25 dust bins stationed at every Market,</p> <p>Purchase of 5 skips per market i.e. (Magombo, Kemera, Keroka, Nyansiongo, Chepilat, Ikonge, Ekerenyo and Nyamusi).</p> <p>Establishment of liquid lagoons at Keroka and Ikonge</p>
Low level of conducting Environmental impact Assessment & audit (ESIA).	Inadequate budgetary allocation	Improve and embrace EMCA requirement in project implementations in all departments' projects.	Adequately trained staff to conduct the ESIA. Awareness on need in Conducting ESIA in all departmental projects	Existing laws, policies and regulations at national level (EMCA). Existence of a pool experts and role models	<p>Budget allocations to conducting ESIA for all projects.</p> <p>Sufficient budgetary allocation in implementation of ESIA in all projects in the county</p>
Lack of policies and acts to regulate key operations on mining & Natural	Inadequate budgetary allocations and staff	Improve general operations on the directorate of efficiency on mining & Natural	Awareness on the mining and natural resources activities	National government policy and Act	<p>Resource mobilization to instrument the; Mining policy and Act.</p> <p>Hire 3 Geologists.</p> <p>Exploitation of Natural</p>

resources		resources			Resources Act
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Major Issues/Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/strengths within the sector	Strategies
FORESTRY					
Blue gum (Eucalyptus spp) planted on water catchment areas.	Lack of awareness on appropriate tree species suitable for water catchment areas.	Practice appropriate tree species site marching during tree planting.	Replace blue gum with water friendly tree species.	Tree planting. Responsive public. Reliable tree seedling species supply.	Sensitise the public on tree planting regulations. Carry out riverine rehabilitation by planting bamboo and other appropriate tree spp. Increase seedling production through establishment of private and community tree nursery.
Insufficient extension services.	Lack of prioritisation. Lack of transport.	Employ foresters and forest rangers. Improved extension services.	Adequate staff strengths. Purchase motor vehicles and motor bikes.	Deploy one forester and four forest guards for each of the five sub counties.	Recruit qualified personnel. (Foresters and forest guards)

CLIMATE CHANGE

Major Issues/Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/strengths within the sector	Strategies
Adverse climate change effects	Emission of greenhouse gases into the atmosphere.	Mainstream climate change mitigation and adaptation measures	<p>Promote green growth and circular economy activities</p> <p>Provision of real-time meteorological and climate forecast data.</p>	<p>-Available Global, National and county policies and legal framework on climate change</p> <p>- Available qualified personnel with knowledge on climate change</p> <p>-Political goodwill</p> <p>-Public goodwill on climate change interventions</p> <p>-Available funding opportunities Globally</p>	<p>-Adopt Green Procurement</p> <p>-Green financing</p> <p>- Train to create awareness on climate change</p> <p>-Introduce and advocate for green buildings.</p> <p>-Introduction and advocating for renewable energy us e.g. energy saving bulbs, jikos, use of biogas, solar energy use, wind power use etc.</p> <p>-Introduce Circular economy concept on waste management (Rethink about waste handling, Segregate, Reduce, Repair, Reuse, recycle)</p> <p>- climate smart agriculture</p> <p>- afforestation and reforestation programs</p> <p>- rehabilitation of degraded landscapes</p> <p>-Enforcement of the legal framework on climate change in the county</p> <p>- establishment of weather stations in the 20 county wards</p> <p>- developing regulations to operationalize the climate change Act</p> <p>- developing Climate Information Service plan for the county</p> <p>- establishment of the weather/Climate Change Service Centre for the county</p>
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Water Services	Low water yield from springs/river s	Planting of eucalyptus trees Cultivation up to riverbanks Climate change effects Encroachment of catchment areas lack of Political goodwill	Increase water yield from springs/river s To remove eucalyptus trees	Existing legislation/ EMCA act	Establishment of bamboo plantings Watershed /Catchment management, spring protection Formation of WRUAs
	Poor watershed/catchment management	Population growth versus land size Absence of WRUAs. Poor farming practices Lack of Political goodwill	To rehabilitate Water shed and catchment areas Train the communities on importance of preserving water catchment areas	Existence of WRA	Formation of WRUAs Awareness creation
	Poor management of water supply schemes	Inadequate technical skills, lack of local project ownership	Improved service delivery Formation of county water service provider (water company)	Water act 2002/2016	Establishment of county water company Enhance skill development

IRRIGATION

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
Low area under Irrigation	Poor & erratic Rainfall pattern	To Increase utilization of land through irrigation, drainage and water storage	Increase area under irrigation. Harness the under-exploited irrigation potential	Strengths: Qualified Technical Staff. Reinforcement of water by-laws. Reliable agriculture	Promotion of appropriate irrigation technologies

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
			<p>Promote Appropriate irrigation technologies.</p> <p>Improve irrigated agricultural productivity</p> <p>Increase irrigated horticultural crop production.</p>	<p>sub sector data base.</p> <p>Existence of organizational and Management structures.</p> <p>Transparency and Accountability.</p> <p>Good service delivery and resource management.</p> <p>Committed staff.</p> <p>Article 45 of the constitution on rights of people to adequate food and nutrition.</p>	
Water scarcity and water productivity in rain-fed agriculture	Diminishing water resources	Improve the available water sources/resources	<p>Promote water harvesting and storage for irrigation services.</p> <p>Improve irrigation water management for increased productivity per unit volume of water.</p>	<p>OPPORTUNITIES:</p> <p>Appropriate legal and regulatory framework.</p> <p>Collaborative Efforts with other stakeholders. - CBO, CSO</p> <p>Unexploited Irrigated Agricultural potential.</p> <p>Comprehensive Farmers Technical</p>	Improvement of available water sources/resources
	Poor water management				Improving water management for productivity
	Use of traditional irrigation methods				Promotion of Water harvesting technologies and storage, utilization and management.
					improvement in irrigation water use efficiency
					Promotion of modern irrigation technologies

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
	Poor water abstraction methods, delivery and management within the scheme.			Training.	Improvement of existing irrigation and drainage infrastructures Institutional strengthening and capacity building
	Insufficient water during dry periods			Adoption of climate smart irrigated agricultural technologies.	
	Poor drainage system			Potential for ICT in irrigated agricultural development.	
Under-exploited irrigation potential	Low levels of public participation.	To enhance public participation in irrigation planning and development	Promote PPP in irrigation development.	Use of most advanced technology in irrigated agriculture. Gender/youth mainstreaming in leadership for better management of projects.	Enhance public participation
	Low levels of investment.		Enhance resource mobilization for irrigation.		Promote resource mobilization and PPP to compliment the budgetary allocations.
	Inadequate budgetary allocation.		Promote public participation		Increase budgetary allocation to the irrigation sub-sector
Inappropriate irrigation technology adoption and development	Limited awareness on the irrigation technologies available	Capacity Build the farmers /staff on appropriate irrigation technologies.	Promote irrigation technology adoption and development.	Improved physical infrastructure. Increased Fish-farming in wetlands thereby enhancing water conservation and purification.	Promotion of appropriate irrigation technologies & similar affordable technologies
	Lack of technical knowhow on the part of farmers /staff		Capacity build farmers' and staff.		Capacity building of farmers'/staff
low rate of irrigation infrastructure development	Low level of funding. Lack of credit facilities for irrigation equipment and materials	Promote infrastructure development for irrigation, drainage and water storage.	Resource mobilization & PPP.	Readily available labor: Opportunity to use solar, wind and	Establish financing mechanisms in partnership with the private sector /irrigation equipment suppliers/dealers

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
	Low budgetary allocation			hydro power for pumping water for micro-irrigation systems and water harvesting.	Improve funding level for irrigation sub-sector development
Lack of technical Know-how and skills on irrigation water management	Poor knowledge and skills on irrigation water management	Enhance farmers' technical capacity.	Farmers Educational Tours, Agricultural Show attendance	High demand for irrigation water management services.	Capacity building of farmers and staff
					Mainstreaming farmers participation
					Mainstream gender equity and youth involvement
Poor irrigation Water Management	Poor scheme organization	Promote irrigation water management	Improve water management for productivity Promote Water harvesting technologies and storage, utilization and management Capacity building of farmers'/staffs	Presence of devolved funds.	Institutional strengthening and capacity building
	Poor operation, maintenance and management				
Waterlogging	Poor drainage system	Control Wetland water regime	Construction of drainage structures and channels		Provide sufficient drainage
Increased inequity	Disparity in public participation and gender balance	Promote Public participation in irrigation projects	Community organization and management Gender Mainstreaming		Ensure effective public participation
					Balance Gender in all project decision making and activities.
Weaker Community Infrastructure	poor community organization and management	Enhance Scheme organization and management	Strengthen community organization and management Improve farmers'		Ensure effective public participation
					Balance intensified agriculture with other activities

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
			participation Promote public participation in schemes		
Reduction in Irrigation water quality	Water pollution by human/industrial development	Promote safe use of water in irrigation schemes	Enforce return water quality. Compliance with WHO water quality standards & regulations.		Define and enforce return water quality Control industrial development
	Water quality problems for downstream users		Enforce Water Quality monitoring mechanisms Capacity building farmers on safe use and disposal of Agro chemicals and package		Monitor irrigation water quality Training farmers Inclusion of disposal of chemical and waste in the by -laws.
poorly developed marketing channels and irrigated commodity value chains	Lack of properly developed marketing channels and irrigated commodity value chains	Improve Market outlets and Marketing Strategy.	Provision of Market outlets information. Link farmers to Digital Marketing Apps.		Establish proper market channels and irrigated commodity value chains Proper commodity pricing strategy
poorly developed channels for participation by irrigators and weak governance of water users' /farmer associations	Weak farmers' organization and management. Poor farmer participation and cooperation	Improve Scheme Organization and Management	Capacity Building of Farmers. Promote Stakeholder Linkages Promote Farmer		Improve scheme management Enhance stakeholder participation Enhance farmer participation and cooperation in

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
			Participation		decision making
Provision of Support services	inadequate support services	Provide Support Services for Irrigation development	Establish effective M&E Systems Resource Mobilization		Mechanisms for improved coordination, monitoring and evaluation.
insecure land tenure and unsustainable land use,	Communal landownership, uncontrolled land use,	Formulate appropriate institutions and legal frameworks to address land rights.	Address land tenure and ownership issues. Reduce land conflicts using rules and regulations safeguarding land rights		Formulation of appropriate institutional and legal framework to address land rights.
Inadequate private sector participation and investments	Poor private sector participation and low investments	Promote PPP	Promote PPP investment in irrigation sub-sector		Enhance private sector participation and investments
Poor stakeholder participation and linkages	Lack of awareness of other stakeholders & their activities				Harmonization of roles and functions, in the development, operation and management of irrigation in the county
Encroachment into low lying wetlands to increase agricultural production	high pressure on land in the scheme area	To conserve and promote the sustainable use of wetland water resources for the economic development of the people living in and around wetland areas.	To alleviate poverty through improved incomes and household food security by promoting increased level of crop production under controlled agricultural		Diversification of crop enterprises Capacity building of farmers and staff
	competition for land between cash crop and food crops				Input grants and establish revolving funds
	limited knowledge				
	lack of capital to				Diversification of crop

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
	invest		drainage		enterprises
Wetland degradation	Poor farm planning		Wetland rehabilitation, conservation and management		Improvement of the drainage infrastructure
	Poorly drained wetland.				Rehabilitation of the poorly drained wetlands.
	Poor drainage infrastructure.				Controlling the water regime
Farmers' technical incapacity	Lack of technical knowhow				Capacity building of farmers / staff
	Poor exposure on irrigation farming				Educational tours and excursions for farmers'/staff
Land tenure system in the drainage area	communal with a few having title deeds				Encourage registration of estates/properties for proper management and development.
Water Scarcity Pollution of existing water sources	Insufficient quantity of water available for crop production				Promotion and adoption of improved methods of rainwater /surface run-off harvesting technologies and systems.
	Quality of water available is detrimental to health				
	Poor rainfall regime –adverse weather & persistent drought				
Low adoption of Rainwater Harvesting	Disjointed information on existing technologies that require minimum adaptation	Sustainable rainwater harvesting development for increased irrigated agricultural productivity and	Enhancing agricultural productivity and food security through adoption of RWH.		Promotion and adoption of RWH technologies
	Inadequate				Enhance Stakeholders

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
	collaboration and networking mechanisms	food security	Promoting best practices in rainwater management in order to enhance food security and water availability		networking and collaboration on RWH technologies and systems
	Low acceptance of a new technology by the land users'				Capacity building of the farmers' /staff
	Adoption of production systems that accelerate environmental degradation and declining soil fertility				Integration of land users' knowledge and innovation in planning Technical improvements on existing RWH to supplement unreliable rainfall.
Water conflict between users'	High social inequity				Provision of adequate water –construction of water pans using low technology water harvesting.
	Economic marginalization				Increase water supply through more efficient utilization of rainfall. Promote rain water harvesting
	Upstream-downstream conflicts				Address Environmental governance and gender issues
	Limited/excessive				Assign water undertakers to monitor water abstraction and allocation. Construction of water

Major Issues /Problems	Causes	Development Objective	Immediate Objective	Existing opportunities/ strengths within the sector	Strategies
	run-off on shared road/footpath/farm boundary during the rainy season				pans
Inadequate water for agricultural purpose	Poor rainfall patterns	Development of water sources / resources and Alternative water sources/resources for irrigation purposes.	<p>Promotion and adoption of appropriate water harvesting and storage techniques.</p> <p>Improvement of available water sources/resources.</p> <p>Promotion of modern irrigation technologies</p> <p>Institutional strengthening and capacity building.</p> <p>Mainstreaming use of emerging water sources and technologies.</p>		Promote Water harvesting and storage

CHAPTER 3:
SECTOR DEVELOPMENT PRIORITIES, STRATEGIES AND
PROGRAMMES

3.0 Introduction

This Chapter should provide sector development priorities, strategies, Programs, flagship projects, and cross-sectoral linkages.

3.1 SECTOR VISION, MISSION AND GOAL

3.1.1 VISION

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

3.1.2 MISSION

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

3.1.3 Strategic goals and objectives

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

- Poor Waste management (solid and liquid),
- Inadequate urban center 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

3.2 Sector composition and their roles

3.2.1 ENVIRONMENTAL PROTECTION

Environment & Natural Resources is charged with all environmental matters and enforcement of environmental laws to ensure sustainable development and compliance to the environmental regulations, afforestation, conservation and enforcement of forest policies hence ensuring the achievement of the 10 per cent forest cover threshold.

3.2.2 WATER

Water department is charged with all water and liquid waste management in the county

3.2.3 CLIMATE CHANGE/IRRIGATION AND FORESTRY

Supporting activities related to meteorology with regard to safety of life and protection of property, include: monitoring and analysis of climate change, expansion and management of meteorological network, downscaling and domesticating of national seasonal weather forecasts and climate outlook to the county, monitoring and analysis of air pollution, providing weather and climate information to various sectors such as agriculture, water, energy, public health and sanitation, and transport for improving the well-being of the communities and natural resource conservation.

3.3 SECTOR DEVELOPMENT PRIORITIES AND STRATEGIES:

The sector priorities should be derived from the sector development issues documented in Chapters One and Two of the Plan. Strategies to achieve sector priorities should be proposed in relation to root causes of the development issues.

Information in this section should be presented in Table 16.

Table 4 Sector Priorities and Strategies

Sector Priorities	Strategies
•Poor Waste management (solid and liquid)	•To ensure efficient and effective waste management through collaboration with the public, relevant government department, and development partners.
•Compliance on regulations adherence	•To promote awareness on environmental requirements and regulations
•Inadequate urban centre landscaping	•To uplift the aesthetic features of urban centres
•Controlled and sustainable ballast/ murram quarrying	•To promote sustainable quarrying activities in line with the developed environmental standards
•Controlled and sustainable brick making sector	•To promote sustainable brick making activities in line with the developed environmental standards
•Electrification coverage	•To ensure electrification of market centres, primary schools and health centres in Nyamira county
•Adequate supply of tree and forest products	•To increase the current tree cover in Nyamira county from 35per cent to 45per cent
<ul style="list-style-type: none"> • Natural resource database • Inadequate human resource capacity • Organizational Resource Base, • Organizational Structure Projects and Programmes Implementation 	<ul style="list-style-type: none"> •Build adequate human resource capacity •To attain optimal staff levels, •To achieve adequacy in facilities and equipment for field operations, •To source for adequate financial resources for projects / programmes implementation i.e. Resource mobilization •Build and enhance skills and competences of staff at all levels,

3.4 SECTOR PROGRAMS AND FLAGSHIP PROJECTS

3.4.1 Sector Programs

The section should provide sector Programmes to be implemented within the planned period. This information should be presented in a tabular form.

Table 5 Sector Programmes

Project Name/ Location	Targets	Description of activities	Cost Ksh	Source of funding	Time Frame	Implementing Agency
Development of waste water disposal infrastructure (Sewerage Infrastructure)	Save disposal of waste water.	All urban areas in the county	200,000,000	CG	2018-2022	EWEMNR
Establishment of sewerage system and treatment. Nyamira, Keroka and Nyansiongo towns in the County.	3	Construction of the sewerage system.	3,000,000,000	CG/NG	2022	LVSWSB
Solid Waste Management Site County wide.	3	To establish waste management sites for Nyamira, Nyansiongo and Keroka, towns.	9,000,000	CG	2022	EWEMNR
Sanitary Landfill (Waste to Energy Plant)	1	Start waste to energy project Establish a group for waste recycling; training of the group in waste recycling; create awareness to people on waste recycling.	200,000,000	CG/PPP	2020	EWEMNR/PPP
New cemetery site; Nyamira, Keroka and Nyansiongo towns.	.3	Establish 3 cemetery sites Identification and purchase of land; administration of these cemeteries	.100,000,000	CG	2020	EWEMNR
Refuse collection in trading centres at Keroka & Nyansiongo	2	Tractor and trailer purchase	36,000,000	CG	2020	EWEMNR
Provide for the Public Toilets Services in all the trading centres. Nyamira, Miruka, Kebirigo, Ekerenyo Ikonge, Tinga, Manga, Nyansiongo, Gesima Magombo	10	Construction of complete public toilets at Bus/Matatu park;	40,000,000	CG	2022	EWEMNR
Urban forestry in Nyamira, Keroka, Manga, Ekerenyo and Nyansiongo towns;	10 km	Beautification/ landscaping and tree planting of a total of 8 km of streets public awareness	8,000,000	CG	2022	EWEMNR
Carbon credit	25% forest cover	Take Inventory of carbon footprints and emissions of GHGs to guide long term interventions.	5,000,000	CG	2022	EWEMNR

Project Name	Location (Location / Sub-County- Constituency)	Objective	Description of Key Activities	Key Output(s)	Time Frame*	Estimated cost (Ksh.)	Source of Funds	Lead Agency
Purchase of 2acreage of land for dumpsite	Ikonge and Keroka	Solid waste management	Public awareness forums Land advert	2 acreages of land be fenced and excavated dumpsites	2022 - 2023	14m	County Government	Environment
Purchase of Noise pollution gadgets	Sub counties	Noise pollution control	Measurement of noise in all noise activities	staff well equipped	2022-224	400,000	CG	Environment
Tools of Work	all 7 markets	solid waste management	all staff involved in waste management	Developed policy & Acts	2022-2227	1m	cg	Env
Environmental safeguard policy, Acts and regulations.	at HQ	Managing waste, noise pollution	public engagement sector meetings	Developed policy and Acts	2022-2025	1m	CG	ENV
Mining & Natural resources policy and Acts	HQ	Mining and Natural Resources Controls	Stakeholders' engagements	Developed policies & Acts	2022-2024	1m	CG	ENV
Trucks fitted with skips to transport wastes	One per Sub County	Waste man agent	Procurement process	5 trucks	2022-2027	10m	CG	ENV
Purchase of Skips& construction of foundations	5 per 7 markets	Management of solid waste	Budgeting and procurement	35 skips	2022-2027	10m	CG	ENV
Environmental impact Assessment & Audit	HQ	Ensure proper requirement are followed	Awareness to all stakeholders All projects must be subjected to	Audit Reports EIA Reports	2022-2027	1m	cg	ENV

Project Name	Location (Location / Sub-County- Constituency)	Objective	Description of Key Activities	Key Output(s)	Time Frame*	Estimated cost (Ksh.)	Source of Funds	Lead Agency
			ESIA					
Occupation health & environmental safety policy & Act	HQ	Ensure regulation of safety procedures in all our offices	Awareness activities	Developed Policy & act	2022-2024	1m	CG	ENV

3.4.2 Flagship Projects

Table 6 Flagship Projects

Project Name	Location (Location / Sub-County- Constituency)	Objective	Description of Key Activities	Key Output(s)	Time Frame*	Estimated cost (Ksh.)	Source of Funds	Lead Agency
Establishment of Solid Waste Management plant	Ikonge and Keroka, Magombo, Nyansiongo	Solid waste management	Public awareness forums. Land advert	2 acreages of land be fenced and excavated dumpsites	2022 - 2023	70m	County Government	Environment
Nyamira Water and Sanitation Company	HQ	Supply of treated water	Construction of NYAWASCO		10 years		County Government	Water and Irrigation

Note: The Programmes and projects should mainstream cross-cutting issues such as green growth and green economy, climate change, HIV and AIDS, Gender, Youth, Persons with Disability (PWD), and Disaster Risks among others.

3.5 CIDP Linkages with National Development Agenda, Regional and International

Development Frameworks

This section should indicate how the CIDP is linked with and is contributing towards the achievement of the following (among others):

- i. Kenya Vision 2030 and its Medium-Term Plans;

- ii. The UN 2030 Agenda and the Sustainable Development Goals;
- iii. Africa’s Agenda 2063;
- iv. Paris Agreement on Climate Change, 2015;
- v. EAC Vision 2050;
- vi. ICPD25 Kenya Commitments; and
- vii. Sendai Framework for Disaster Risk Reduction 2015 – 2030.

This information should be presented in Table 19.

Table 7 Linkage with Kenya Vision 2030, other plans and international obligations

National Development Agenda/Regional/International Obligations	Aspirations/Goals	County Government contributions/Interventions*
ENVIRONMENT, WATER, CLIMATE CHANGE, FORESTRY, IRRIGATION AND NATURAL RESOURCES		
ICPD25 Kenya Commitment	ICPD25 Comm. No.5, 7, 8	<p>Enhance integration of population, health and development programmes and projects into Medium Term Plans (MTPs) and the Medium-Term Expenditure Framework (MTEF) to ensure budgetary allocations and efficient implementation of programmes and projects by 2030.</p> <p>Integrate population issues into the formulation, implementation, monitoring and evaluation of all policies and programmes relating to sustainable development at national, county and sub-county levels by 2030.</p> <p>Harness the demographic dividend through investments in health and citizens wellbeing; education and skills training; employment creation and entrepreneurship; and rights, governance and empowerment of young people by 2022 as outlined in the Kenya’s Demographic Dividend Roadmap. This includes the establishment of a National Coordination Mechanism for Demographic Dividend by 2020.</p> <p>Track and monitor the implementation of the ICPD25 Nairobi Summit commitments through the National Council for Population and Development in the State Department for Planning.</p>
SDGs	Goal 6, 7, 11, 13, 14,	<p>Ensure availability and sustainable management of water and sanitation for all.</p> <p>Ensure access to affordable, reliable, sustainable and modern energy for all</p> <p>Make cities and human settlements inclusive, safe, resilient and sustainable.</p>

		Take urgent action to combat climate change and its impacts Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Agenda 2063	1.A prosperous Africa based on inclusive growth and sustainable development	Improvement of habitats and access to basic necessities of life – water, sanitation, electricity Transforming Africa’s economies through beneficiation from Africa’s natural resources Exploiting the vast potential of Africa’s blue/ocean economy Putting in place measures to sustainably manage the continent’s rich biodiversity, forests, land and waters and using mainly adaptive measures to address Climate change risks.

3.6 Cross-Sectoral Linkages

Table 8 Cross-sectoral impacts

Programme Name	Linked Sector(s)	Cross-sector Impact		Measures to Harness or Mitigate the Impact
		Synergies*	Adverse impact	
ENVIRONMENT, WATER, CLIMATE CHANGE, FORESTRY, IRRIGATION AND NATURAL RESOURCES	Agriculture, Livestock and fisheries	providing food and livelihoods to the vulnerable groups		
	Roads and public works	provides the link in both social and economic activities facilitate climate change mitigation measures		opening of many rural roads
	Health	Clean and affordable and accessible water for all		fight of negative cultural practices like female genital mutilation, unhygienic traditional male circumcision, and early marriages
	Education	Enhancing skills development through established institutions within it; access to quality education by vulnerable children, orphans and persons with disabilities		provision of bursary to orphans and vulnerable children and persons with disabilities.

Environment Protection, Water and Natural Resources	ensures that workplaces do not pollute the environment through emissions and effluent waste.	<i>Environment pollution</i>	<i>Comply and enforce NEMA guidelines</i>
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**CHAPTER FOUR:
SECTOR IMPLEMENTATION FRAMEWORK**

4.0. INTRODUCTION

This chapter provides the county's institutional arrangement and their specific roles towards implementation of the CIDP. In addition, the chapter should present the resource mobilization and management framework, asset management, and risk and mitigation measures.

4.1. INSTITUTIONAL FRAMEWORK

This section should provide the institutional framework of the County including an organizational chart that displays the implementation the CIDP and how the County's internal transformation needs are addressed. The framework should indicate the County Government's institutional arrangements and demonstrate linkages with the National Government Departments at the county as well as other key stakeholders.

Figure 3 Organizational Chart

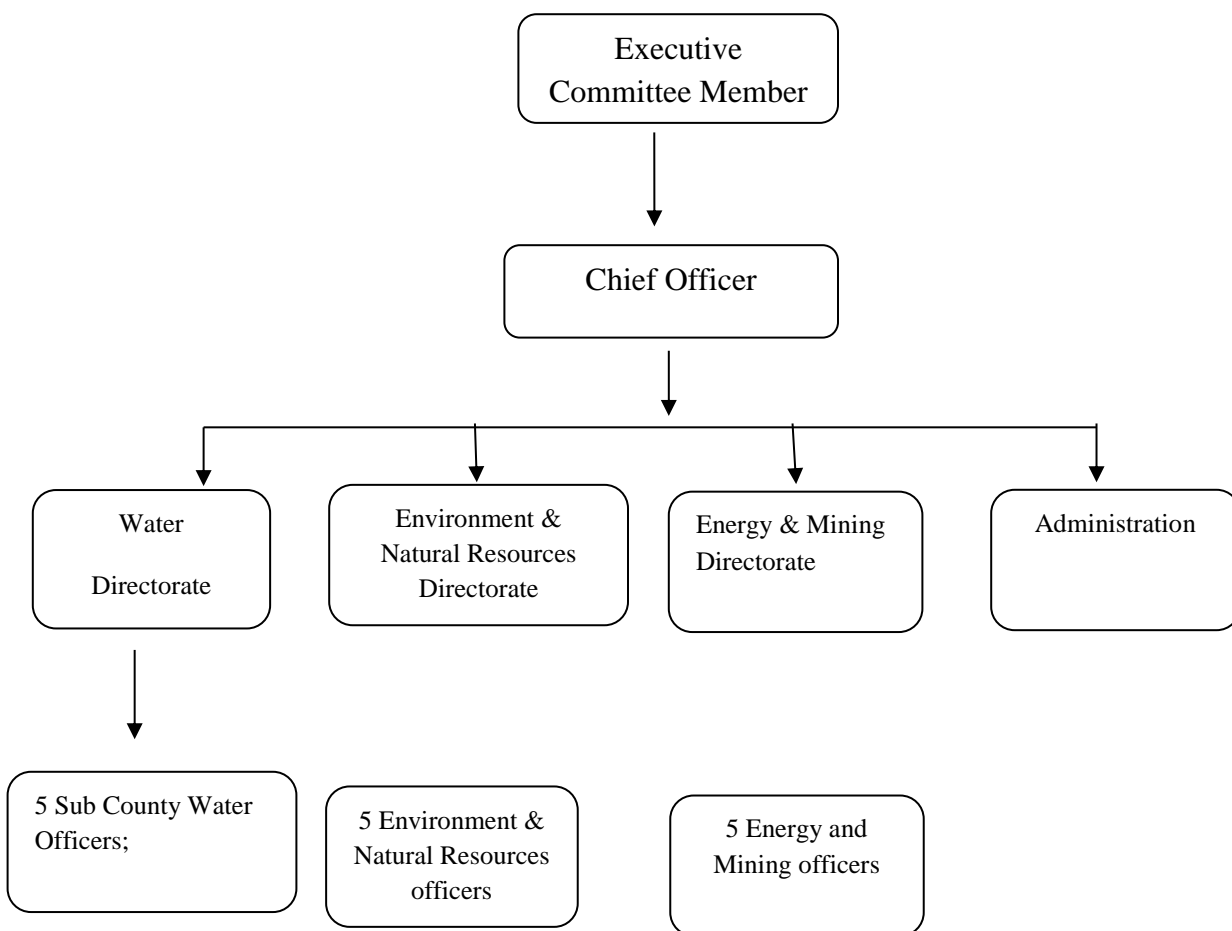


Table 9 Institutional Arrangement

4.2 ROLES OF THE STRUCTURES IN THE IMPLEMENTATION OF THE SECTOR PLAN

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 (Water Services Trust Fund (WSTF), Lake Victoria South Water Works Development Agency (LVSWWDA), Water Resources Authority (WRA), National Water Harvesting Authority NWAHA, Water Service Regulatory Board WASREB, Water Appeals Tribunal WAT)	Project implementation, financial support, capacity building, regulation, appeals
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, KEWASNET)	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

4.3 Resource Mobilization and Management Framework

This section should provide the projected resource requirements by sector, revenue projections, estimated resource gap and measures of addressing the gaps.

4.3.1 Resource Requirements by Sector

This section should indicate the projected financial resources required for each sector during the plan period. The section should also include the percentage of the total budget for each sector. This information should be presented as in Table 22.

Table 10 Summary of Sector Financial Resource Requirements

SECTOR/DEPARTMENT NAME	RESOURCE REQUIREMENT			% OF TOTAL BUDGET REQUIREMENT
	2023-2027	2028-2033	TOTAL	
ENVIRONMENT, ENERGY, NATURAL RESOURCES AND MINING				
General Administration, Policy Planning and Support Services	383,067,710	383,067,710	766,135,420	0.22502698
Water Supply and Management Services	173,177,600	173,177,600	346,355,200	0.101730403
Environmental Protection and Management services.	282,600,445	282,600,445	565,200,890	0.166009098
Energy and Mineral Resources services	863,473,270	863,473,270	1,726,946,540	0.507233519
GRAND TOTAL	1,702,319,025	1,702,319,025	3,404,638,050	1

4.3.2: Revenue Projections

This section should indicate the various sources of revenue in the County

Table 11 Revenue Projections

REVENUE SOURCES	FY 2023-2037	FY 2038-2033	TOTAL
Equitable Sharable Revenue	577,468,135	577,468,135	1,154,936,270
World Bank Grant towards Climate Change	110,000,000	110,000,000	220,000,000
Unspent Balances	-	-	-
Advertisement Charges	-	-	-
Water, sanitation & irrigation fees	176,005,135	176,005,135	352,010,270
TOTAL	863,473,270	863,473,270	1,726,946,540

4.3.3 Estimated Resource Gap

This section should highlight the County resource gap in terms of the estimated resource needs against the projected revenues.

Table 24: Resource Gaps

FY	Requirement (Ksh. Mn)	Estimated (Ksh. Mn)	
		Revenue	Variance (Ksh. Mn)
2023/24	356,250,000	107,377,482.30	-248,872,517.70
2024/25	356,250,000	107,377,482.30	-248,872,517.70
2025/26	356,250,000	107,377,482.30	-248,872,517.70
2026/27	356,250,000	107,377,482.30	-248,872,517.70
2027/28	356,250,000	107,377,482.30	-248,872,517.70
Total	1,781,250,000	536,887,411.50	-1,244,362,588.50

4.3.4 Resource Mobilization and Management Strategies

This section should identify the feasible resource mobilization and management strategies to address the resource gap. The section should include capital financing strategies, operational financing strategies and other strategies that will enhance cost effectiveness.

4.4 Asset Management

The section should discuss the measures the County Government has put in place to manage its assets.

4.5 Risk Management

This section should provide the key anticipated risks that may hinder the implementation of the CIDP, potential risk implications and proposed mitigation measures to enhance sustainable development. The information should be provided in the format presented in Table 25.

Table 25: Risk, Implication, Level and Mitigation Measures

Risk Category	Risk	Risk Implication	Risk Level (Low, Medium, High)	Mitigation measures
<i>Financial</i>	<i>Inadequate financial resources</i>	<i>Stalled projects</i>	<i>Medium</i>	<i>Resource mobilization Strategies</i>
<i>Technological</i>	<i>Cyber security Risk</i>	<i>Breach of valuable information</i>	<i>High</i>	<i>Investment in cyber security risk management</i>
<i>Climate Change</i>	<i>Drought</i>	<i>Reduction</i>	<i>High</i>	
<i>Organizational</i>	<i>Inadequate Human Resource Capacity</i>	<i>Inefficiency in service delivery</i>	<i>Medium</i>	<i>Timely recruitment</i>

CHAPTER FIVE:
MONITORING, EVALUATION AND LEARNING

5.0 INTRODUCTION

This chapter should outline how the plan will be monitored and evaluated during and after its implementation. The M&E processes, methods and tools should be guided by Section 232 of the Constitution and all the legal provisions that provide for M&E, County M&E Policy in line with the National M&E Policy, CIMES Guidelines, Kenya Norms and Standards for M&E and Kenya Evaluation Guidelines. The chapter should highlight: The proposed M&E structure; data collection, analysis, reporting and learning; M&E outcome indicators tracking; and dissemination and feedback mechanism.

5.1 County Monitoring and Evaluation Structure

5.1.1 County Monitoring and Evaluation Committee (CMEC)

The CMEC has the responsibility of the overall supervision of the plans implementation and prepare the quarterly reports based on the monthly reports emanating from the DMEC and SCMEC through the technical scrutiny by the Technical Monitoring and Evaluation Unit. The CMEC will be in charge of monitoring and evaluating all the flagship projects and any program and projects costing more than Ksh. 10,000,000. The process shall require the co-operation and collaboration of all stakeholders.

The findings and recommendations from the CMEC shall be submitted to the Executive Committee Member for Planning and Finance for the Cabinet Decisions. The findings and recommendations shall also be copied to the Head of Results Office for the analysis to Governor's office for the information and use. The CMEC shall be chaired by the County Executive Committee Member and that all the Accounting Officers of the County entities shall be members of the committees. The Accounting Officer Economic Planning and Budgeting shall be the secretary and The Directorate of Economic Planning and Budgeting shall be the ex-official member of the committee.

5.1.2 Technical Monitoring and evaluation unit (TMEU)

This unit is anchored under Economic Planning and Budgeting directorate with responsibility of technically carrying out the site visits to all the County Projects and Programs. The Unit is chaired by the Directorate of County Economic Planning and Budgeting and membership shall comprise of the Economic Planning and Budgeting and M & E Officers under the directorate of Economic Planning and Budgeting. The secretary and convener are the County M & E officer. The unit shall initiate all the project site visits together with the Head of accounts, Procurement, Revenue and Finance and Statistics. The same shall be done at the County departmental entities. The monitoring and evaluation reports from SCMEC and DMEC shall be submitted to the TMEU on monthly basis to be technically scrutinized and submitted to the CMEC on a quarterly basis. Technically it shall be the responsibility of the TMEU to provide site visit on the flagship projects and programs above Ksh. 10,000,000 on behalf of the CMEC and report quarterly to the same Committee.

5.1.3 The Departmental Monitoring and Evaluation Committee (DMEC)

This is a committee based at the departmental level of the County government and the membership shall comprise of the accounting officer of the department being the chairperson and the Programme Managers appointed in writing by the Executive Committee Member for Finance and Economic planning to be members of the committee. Other members include the departmental accountant, procurement officers, revenue officers and finance officers. The Departmental head of Economic Planning and Budgeting shall be the secretary to the committee.

The departments shall ensure that Departmental Monitoring and Evaluation Units are created within the departments with the following memberships; Departmental Head of economic planning and budgeting who shall be spearhead the process of project site visits of the departmental projects and programs, the departmental head of accounts, departmental head of revenue, departmental head of procurement shall be members. The departmental Monitoring and Evaluation Units shall be responsible for the day-to-day site visits of the projects and programs and shall monitor projects between Ksh. 5,000,000 to at most Ksh. 10,000,000. The DMEC shall submit its reports on a monthly basis to TMEU.

5.1.4 Sub-County Monitoring and Evaluation Committee (SCMEC)

The committee shall be constituted in the Sub-Counties to monitor and evaluate projects and programs within the Sub-County. The committee is chaired by the Sub- County Administrator and the secretary is the officer in charge of Planning at the Sub- County level who shall convene the meetings. The membership is comprised of the Sub- County heads of departments. There shall be established Monitoring and Evaluation secretariat comprised of sub-county administrator, the in charge of economic planning, the sub-county procurement officer, sub-county accountant and sub-county revenue officers who shall be responsible on day-to-day monitoring and evaluation of projects and programs at the sub-county level. The SCMEC shall monitor all the projects and programs between Ksh. 1,000,000 to Ksh. 5,000,000 and shall report to the TMEU on monthly basis.

5.1.5 Ward Monitoring and Evaluation Committee

They're established Ward Monitoring and Evaluation Committee to be chaired by the Ward Administrator and the secretary is the officer in charge of planning at the Sub- County level or his/her representative. The convener is the Ward Administrator. The membership comprises of the ward heads of departments and the Committee is in charge of coordinating M & E activities at the ward level. The committee shall report to the SCMEC on monthly basis and shall monitor the projects and programs below Ksh 1,000,000.

5.2 M&E Capacity

This section should discuss M&E skills available, the resources allocated for M&E function and technological requirements for implementing the M&E function.

5.3 M&E Outcome Indicators

This section should present programme outcome indicators by sector as captured in Table 17 on sector programmes in Chapter Four. The information should be presented as in Table 26.

Table 26: Outcome Indicator Reporting

Programme	Outcome	Outcome Indicator (s)	Baseline*		Mid Term Target	End Term Target	Reporting Responsibility
			Value	Year			
<i>Rural integrated water development programme</i>	<i>Increased access to Safe water</i>	<i>Proportion of HH accessing safe water</i>	26%	2022	38%	50%	<i>Department of Water</i>

5.4 Data Collection, Analysis and Reporting

Reporting is important in this process because it provides feedback to establish the challenges, successes and weaknesses in the implementation of various projects and programs and whether the set objectives can be been achieved or are on course. Sub-County Monthly Monitoring and Evaluation Reports (SCMMER) will be prepared together with Ward Monitoring and Evaluation Reports (WaMER) and submitted to the County Planning Unit (CPU) in order prepare progress reports

Furthermore, County Quarterly Monitoring and Evaluation Report (CQMER) and a County Half Year Monitoring and Evaluation Report will also be prepared to capture progress during a quarter period of the year and half period of the year respectively. Finally, a County Annual Monitoring and Evaluation Report (CAMER) are to be produced and submitted to the County Planning Unit for preparation of Annual Progress Report. These reports will outline in summary from projected targets achievements, facilitating factors and challenges faced. These reports prepared by CPU are for submission to the Governor’s office for information, use and dissemination to the stakeholders. Issues requiring policy interventions will be submitted to the County Executive Committee for action.

Information sharing and reporting is key in reviewing this plan. It will be posted on the official county website for the wider circulation and consumption. It will also provide a mechanism for monitoring and evaluation. Various stakeholders can visit the county website for detailed information. Furthermore, there will be a quarterly stakeholder meeting to share reports at all levels of devolved county government structures and address emerging challenges.