

MAKUENI COUNTY WATER POLICY

Kutwiikany'a Kiw'u “Holistic Water Harvesting and Management”



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GOVERNMENT OF MAKUENI COUNTY



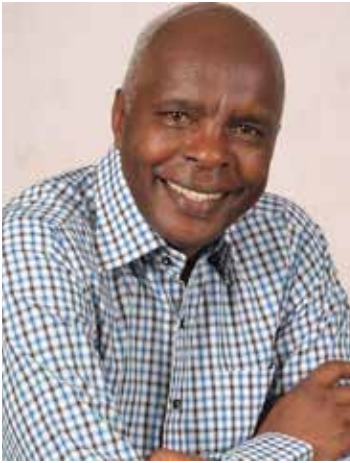
DEPARTMENT OF WATER, SANITATION, ENVIRONMENT & CLIMATE CHANGE

MAKUENI COUNTY WATER POLICY

Kutwiikany'a Kiw'u "Holistic Water Harvesting and Management"

March 2019

FOREWORD



H.E. Prof. Kivutha Kibwana EGH,
Governor, County Government of Makueni

The Makueni County Water Policy is developed to address challenges faced by the County including acute water shortages due to frequent droughts, encroachment, and degradation of water catchment areas. Additionally, there is limited sensitization and awareness of water harvesting and storage techniques as well as poor governance and management of existing water infrastructure. The County is yet to build adequate capacity to develop and manage the available water resources in a sustainable manner. It is with this in mind that the department of Water, Irrigation, Environment and Climate Change with the consultation of relevant stakeholders and through public participation drafted the Makueni Water Policy 2018.

The principles behind the policy are in line with the Sessional Paper No. 1 of 1999 National Policy on Water Resources Management, the spirit of the Constitution of Kenya 2010, Kenya's Vision 2030, Makueni Vision 2025, and the Makueni County Integrated Development Plan (CIDP) 2018 -2022. The policy aims to develop strategies and measures that the County Government of Makueni will use to resolve challenges facing citizens. The strategies and measures, once implemented, will support the economic and the social development of the County through the Transformation Program christened '*Kutwiikan'ya Kiw'u*' (*Holistic Water Harvesting and management*) and will also help contribute to the National Goals of Vision 2030 as well as the Global Sustainable Development Goals.

The Policy proposes a framework for an integrated approach to planning, sustainable development & management of water resources, and progressive realization of the human right to water, sanitation and environment. The protection of our environment and mainstreaming climate change in our planning and budget will reduce disruption of our society, social, and economic losses in case of disasters and will make our gains more sustainable.

The County Government of Makueni is committed to ensuring the constitutional requirement of the right to water as stipulated in Article 43 of the Constitution of Kenya, 2010. The County Government of Makueni also strives to promote the human right to sanitation and environment as written in Articles 43 and 42 of the Constitution of Kenya, 2010.

The Department Water, Environment and Climate Change with the support all the stakeholders, which include non-state actors, development partners and the local communities, and ensure that the strategies & measures outlined in this document are fully implemented, monitored, and evaluated for the benefit of our people.

The County Government of Makueni appreciates the stakeholders, organizations, and individuals who contributed to the lengthy process of formulating this Water Policy. It is against this background that I strongly encourage all water sector stakeholders in Makueni and beyond to work together for the full realization of this Water Policy that aims to achieve our Vision 2025 development goal of '*Kutwiikan'ya Kiw'u*'. (*Holistic Water Harvesting and management*).

H.E. Prof, Kivutha Kibwana EGH,
Governor,
County Government of Makueni

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ACKNOWLEDGMENT



Robert Kisyula
Executive Committee Member

The formulation of the Makueni Water Policy, 2018, undertook an intensive, inclusive, consultative, and participatory approach since it needed holistic situational assessment, reliable information and data as well as consensus building. This process is driven by the fact that the water sector is one of the main pillars of social and economic growth of the County. The Policy formulation had to meet constitutional provisions on the extent of consultations and involvement.

Makueni County is faced with water shortages, and we estimate that many still must walk long distances to their nearest water points, especially women. Currently, the main sources of water are seasonal rivers, boreholes, few shallow wells, earth dams, sand dams, and limited roof catchment. Water production is estimated at 14,489.911 m³/day against a demand of 40,794.390 m³/day leaving a deficit of 26,304.470 m³/day. This translates to water coverage of 36.6% against a national average of 52% (Makueni Vision 2025).

To this extent, we recognize the collective collaboration and support extended to the Department of Water, Sanitation Environment & Climate Change by a wide range of professionals; National Government, our County Government Departments of Finance & Planning, Agriculture/ Livestock, Devolution, Health, Education & Information Communication Technology (ICT) , Lands and Physical Planning , Youth, Gender, Sports & Social services, Water Resources Authority (WRA), National Environment Management Authority (NEMA), National Drought Management Authority (NDMA), Kenya Rain Water Association, our Water Service Providers, Chamber of Commerce, the Sand Authority, World Vision, South Eastern Kenya University (SEKU), Water Services Regulatory Board (WASREB) Water Resources Users Association Council (WRUA Council), and others who participated in the process. We therefore wish to appreciate and recognise their worthwhile contributions. Special appreciation also goes to USAID- Kenya Integrated Water, Sanitation, and Hygiene Project (KIWASH) for their financial and professional input.

This Policy will actualize the vision of a New Makueni is possible now. It is my sincere belief that the Policy will provide the impetus required for legislation, strategies, and regulatory mechanisms that are required for efficient service delivery. The Policy has taken a holistic approach, encompassing all water sector needs and interests, including water resource management, water harvesting and storage, sewerage, sanitation services, sector education and training, technology and innovation, crosscutting issues, institutional framework, investment planning and financing, and the implementation plan. In light of this Water Policy, we are ready to '*Kutwiikan'ya Kiw'u*' in Makueni County.

All stakeholders from the National and the Makueni County Government, private sector, civil society and communities are hereby obligated to ensure full commitment and participation in fulfilling the goal and objectives of this policy. Makueni County Government will put in place mechanisms to ensure that the measures and activities are well coordinated to synergize the sector towards realizing its full potential.

Robert Kisyula
Executive Committee Member
Department of Water, Environment and Climate Change

ABBREVIATIONS

ASALs	Arid and Semi-Arid Lands
CBO	Community Based Organization
CIDP	County Integrated Development Plan
CLTS	Community Led Total Sanitation
CO	Chief Officer
COG	Council of Governors
CTTI`	County Technical Training Institute
DMU	Disaster Management Unit
DTF	Decentralised Treatment Facility
ECM	Executive Committee Member
EIAs	Environmental Impact Assessments
FBO	Faith Based Organizations
HIV/AIDS	Human immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICT	Information Communication Technology
INGO	International Non-Governmental Organizations
KEWI	Kenya Water Institute
KFS	Kenya Forest Service
KIMAWASCO	Kibwezi-Makindu Water & Sewerage Company
KIWASH	Kenya—Integrated Water, Sanitation, and Hygiene Project
KM ²	Kilometers Squared
KPHC	Kenya Population and Housing Census
M ³	Cubic Meters
MBONWASCO	Mbooni Water & Sanitation Company
MCSC&UA	Makueni County Sand Conservation and Utilisation Authority
MEAL	Monitoring, Evaluation, Accountability and Learning
NDMA	National Drought Management Authority
NDMA	National Drought Management Authority
NEMA	National Environmental Management Authority
NGOs	Non-Governmental Organizations
NRW	Non-Revenue Water
O&M	Operation and Maintenance
OVCs	Orphans and Vulnerable Children
PPP	Public-Private Partnership

PWD	People Living with Disability
R&D	Research and Development
RWSS	Rural Water and Sanitation Service
SDGs	Sustainable Development Goals
SEKU	South Eastern Kenya University
SLTS	School Led Total Sanitation
USAID	United States Agency for International Development
WASH	Water Sanitation and Hygiene
WASREB	Water Sector Regulatory Authority
WOWASCO	Wote Water & Sewerage Company
WRA	Water Resource Authority
WRMA	Water Resource Management Authority
WRUA	Water Resource User Association
WSPs	Water Service Provider
WSPs	Water Service Providers
WSTF	Water Sector Trust Fund
CFA	Community Forest Association
WASECC	Water, Sanitation Environment and Climate Change

EXECUTIVE SUMMARY

This Water Policy takes full cognizance of the fact that Makueni water sector has not attained its full potential as manifested by the low coverage indicated in the County plans. This necessitates the need to review the water sector situation in the County. It also requires development of a framework to improve the sector's service delivery and realign it with constitutional environment as well as to ensure adaptability to meet the needs of a changing environment. The County stands to make milestones in the realization of the human right to water and sanitation through successful implementation of this Policy, which has identified measures to respond to challenges experienced in the County and the focus areas addressed. These include: water resource management; water harvesting and storage; urban & rural water and sanitation services; water for agriculture; water for institutions; water sector education, training, and research; emerging and cross cutting issues such as climate change, affirmative action, and dispute and conflict resolution; institutional framework; investment planning; and resource mobilization and financing. The Policy concludes with a chapter on the implementation framework with measures, activities and timelines to ensure the smooth implementation.

The guiding principles are sustainability, institutional collaboration, integrated planning and management, respect for human rights (equity and inclusivity), polluter pays principle, consumer protection, efficiency and value for money, ring fencing revenue, and public participation and stakeholder consultation.

The policy also commits the County Government of Makueni to:

- Promote integrated approach to the management of water resources;
- Develop requisite water harvesting and storage capacity through countywide strategy to meet the rising demand for water in the County;
- Promote progressive realization of the human rights with regard to the provision of water and sanitation services for all;
- Promote partnership and collaboration with relevant institutions;
- Build a strong framework to guide resource mobilization and financing; and
- Enhance institutional framework through capacity building.

The Policy is organized into the following Chapters:

Chapter 1	-	Preamble
Chapter 2	-	Makueni County context
Chapter 3	-	Policy and legislative framework
Chapter 4	-	Policy goal, objective and guiding principles
Chapter 5	-	Water resources management to ensure systematic planning, management, and equitable distribution of water and related resources to maximize economic and social welfare without compromising the sustainability of vital ecosystems.
Chapter 6	-	Water harvesting and storage to develop the necessary water harvesting and storage infrastructure to ensure water security for all.
Chapter 7	-	Urban water and sewerage services to strengthen the provision of urban water supply and sewerage services by creating effective and efficient governance structure that promote consumer protection.

Chapter 8	- Rural Water Supply and Sanitation (RWSS) to improve access to safe water, sanitation and ensure proper governance of RWSS and environmental management and protection.
Chapter 9	- Water for agriculture, environment, forestry, wildlife, & tourism to achieve sustainable land and water utilization and management for agricultural production.
Chapter 10	- Water for institutions to improve the provision and access to safe water and proper sanitation services in public/private institutions.
Chapter 11	- Water for industry & trade to improve the provision and access to safe water and proper sanitation services in industries, factories, markets, trading facilities, and social development initiatives.
Chapter 12	- Water sector training and research to enhance human and technical capacity in the water sector through collaboration with relevant educational, training and research institutions.
Chapter 13	- Resource mobilization and financing to build a strong framework to guide countywide investment planning, entrench sustainable resource mobilization and promote effective and efficient financing in delivering the water sector mandate.
Chapter 14	- Water sector governance & institutional framework to ensure functional and sustainable water sector governance and institutional framework through development and enforcement of the relevant regulations.
Chapter 15	- Water related disaster management to establish systems and models that ensure effective and efficient pre and post disaster management.
Chapter 16	- Private sector participation to ensure a firm and agreeable engagement framework and provide incentives to facilitate sustainable partnerships.
Chapter 17	- Emerging and cross cutting issues to mainstream emerging and crosscutting issues such as gender, climate change, disputes, HIV/AIDs, youth, children, People with Disability (PWD) and conflict resolution and ensure that the sector framework is sensitive and responsive to issues threatening right to clean and safe water.
Chapter 18	- Implementation framework to assist the department, this policy has an implementation matrix to ensure faster service delivery.

This policy will facilitate the realization of Makueni County Vision 2025 through ‘Kutwiikany’a Kiw’u “Holistic Water Harvesting and Management”

CHAPTER I: PREAMBLE

I.1 Rationale for the Development of this Policy

Makueni County Government has demonstrated commitment to providing water to its residents by having a fully-fledged department headed by an Executive Committee Member (ECM) and other staff from ward level to address water issues. In particular, it has ensured that there is a budgetary allocation for the sector every financial year. In order to improve the living standards of the people of the County, the matters of the department have been envisaged in the Makueni County Vision 2025, the County Integrated Development Plan (CIDP), and the Annual Plans. For the County Government to realise this mandate, it must collaborate with other institutions in the planning, development, and management of the County's water sector. Additionally, partnership with Non-Governmental Organizations (NGOs), Faith Based Organizations (FBOs), the private sector, and academic institutions are important. Given all the various stakeholders necessary, it is necessary to have a policy framework to guide the development and management of the water sector.

The County is endowed with both surface and ground water resources. Its major rivers include River Athi, which is permanent, and several seasonal rivers such as Thwake, Kibwezi, Kiboko, Kaiti, Muooni, Kikuu/ Kiangini, Thange, Kambu and Mtito Andei. Despite these resources, the County has not fully realized their potential due to inadequate financial resources and investment in the water sector. Water availability in the County is estimated to be 14,489 m³/day while the water demand is estimated to be 40,794 m³/day (Makueni County Vision 2025). There is a deficit of approximately 25,000 m³/day that needs to be addressed through improved planning and management of available water resources. The average distance to nearest water source is 5Km, which indicates that a large portion of the population lacks easy access to potable water, illustrating the need to develop more sustainable water projects in the County. Rivers can be used for development of major water supply schemes. Local communities to harvest rainwater have also used rock and roof catchments. In addition, there is a need to promote water storage in the County through the construction of dams and use of storage tanks at household and institutional level.

The County faces a number of challenges with regard to water resources development and management. The main challenges include the following:

- 1) The catchment degradation is affecting both surface and ground water resources in terms of quantity and quality;
- 2) Over-abstraction and illegal abstraction of both ground and surface water resources;
- 3) Limited assessment and monitoring of the water resources in the County, making it increasingly difficult to make informed decisions on development and sustainable management of water resources;
- 4) Increasing pollution of both surface and ground water resources due urban, agricultural, and industrial development;
- 5) Severe water scarcity due to unsustainable sand harvesting and quarrying;
- 6) Lack of sewerage and sanitation facilities in major towns as well as water shortage, poor planning, and poor drainage further aggravated by an increasing population;
- 7) Increasing water demand due to increasing population and expansion of agricultural and economic activities across sectors;
- 8) Low practice of harvesting and storing water due to low investment and financing of requisite infrastructure;

- 9) Limited investment and financing for the water sector due to lack of clear national and County investment plans and inadequate public financing; and
- 10) Limited capacity and lack of effective coordination mechanism among actors.

To address the above challenges, the County has developed a policy that:

- 1) Aligns the water sector with the Constitution of Kenya 2010 and devolved function;
- 2) Responds to emerging issues relevant to the development of the water sector, nationally and globally, among them Vision 2030, the Sustainable Development Goals (SDGs) and the Africa Union Agenda 2063;
- 3) Is formulated through a consultative and participatory process that builds ownership and consensus, as well as ensures gains from the knowledge and experiences of stakeholders;
- 4) Aims at improving access to water through roof water harvesting construction of sand dams, earth-dams, use of roads for water and storage and drilling of boreholes; and
- 5) Addresses coordinated development and management of water, land, and other related resources to maximize economic efficiency, social equity, and welfare while ensuring ecological sustainability.

1.2 Methodology

The formulation of the Water Policy involved wide stakeholder representation to build ownership and consensus. The stakeholders were drawn from various National Government institutions, Non-state actors, Council of Governors (COG), County departments, Agencies, International Non-Governmental Organizations (INGOs), FBOs, and Learning Institutions as well the private sector.

The Department of Water, Sanitation Environment and Climate Change working collaboratively with a technical team spearheaded the policy formulation process. The team held several meetings to identify and synthesize the key issues to include in the Policy. The outcomes of the technical meetings were draft policy documents, which was presented to the public in public participation fora that were held in all the 30 wards in the County, drawing over 1200 participants. In addition, a stakeholder workshop involving representation from various institutions in the County was in order to further validate and promote ownership of the policy document.

The technical team conducted a benchmarking exercise in Kiambu and Nairobi Counties to gather lessons and best practices concerning water resources development and management.

CHAPTER 2: CONTEXT OF MAKUENI COUNTY

2.1 Introduction

Makueni County is one of the Counties in the arid and semi-arid regions of Kenya, and it covers a surface area of 8,034.7 Km². The projected population in the County is 0.9 million people (Makueni County Vision 2025). The County is generally dry and faced with a lack of water in the companies threatens their profits, supply chains, investments and reputations. These risks also have massive impacts on communities and governments, threatens broader socio economic development.

2.2 Geographic Location and Size

The County borders several counties-Kajiado to the West, Taita Taveta to the South, Kitui to the East, and Machakos to the North. It lies between Latitude 1°35' and 30°00' South and Longitude 37°10' and 38°30' east. The County has 6 Sub Counties, 30 wards, and 60 Sub-Wards.

2.3 Physiographic Features and Climatic Conditions

The land rises slightly below 600 meters above sea level in Tsavo at the southern end of the County to 1900 m above sea level in Mbooni Hills. The southern part of the County is low lying grassland, which receives little rainfall but has potential for livestock production, bee keeping, and horticulture production along the river basins. The northern part of the County is hilly with medium rainfall and has potential for food crop production, dairy, horticulture, and coffee production. Northern Makueni County (mainly Kilungu, Kaiti, Kilome, and Mbooni) has few indigenous and more exotic trees. Major physical features in the County includes the volcanic Chyulu hills which lie along the South West border of the County; Mbooni Hills in Mbooni Sub County; and Kilungu and Luani Hills in Kaiti Sub County.

The County experiences two rainy seasons: the long rains occurring in March and April and the short rains occurring in November and December. The hilly parts of Mbooni and Kilungu receive 800-1200mm of rainfall per year. Low rainfall and high temperatures of 35.8°C is experienced in the low-lying zones. There are extreme differences in temperatures in the County that can be explained by changes in altitude. The high elevation areas to the north such as Kilungu, Luani, and Mbooni hills are usually cool, with temperatures ranging from 20.2°C to 24.6°C, while the low-lying areas of the south such as Kitise and Kambu are usually hot with temperatures reaching 35.8°C in the dry season. During the dry periods between May and October, the lower parts of the County experience severe heat.

2.4 Administrative and Political Units

The County is currently divided into 6 Sub Counties, namely Mbooni, Kilome, Kaiti, Makueni, and Kibwezi West and Kibwezi East. There are 30 Wards and 60 sub wards. The six Sub Counties also form the constituencies.

2.5 Demographic Features

The 2012 projected population in the County stands at 922,183 consisting of 449,036 males and 473,147 females. This is an increase from 884,253 as per the 2009 by Kenya Population and Housing Census (KPHC). The annual population growth rate stands at 1.4%. The population of children is 43.8% (0-14), and for those over 65 is 5.1%. The population density is 120 persons/ Km². The County estimates that there are 200,000 households with water

production of 14,500 m³/day and a water demand of 40,800 M³/day with a 2015-projected population of 961,739 persons.

Of the six constituencies, Makueni constituency has the highest population at 202,010, which accounts for 22% of the total County population. Mbooni is the second largest, accounting for 21% followed by Kibwezi West at 19% while Kibwezi East has 15% of the total population. Kaiti and Kilome constituencies have the least population, accounting for 14% and 10% of the total population, respectively. The high population in Makueni is attributed to the location of the County headquarters in the Constituency. Mbooni constituency is relatively highly productive in terms of agriculture thereby attracting a larger population.

2.6 Land and Land Use

The County has inadequate designated public land for development of public utilities and the land has been subjected to a lot of pressure due to over-reliance on its resources. There has also been rapid population growth in the County in the recent past, exacerbating the over-utilization of land resources. Most communities are made up of farmers who depend on land for their livelihood, well-being, and sustenance. Their situation is tenuous given that the County is located in Arid and Semi-arid Lands (ASALs) and thus the environmental and climatic conditions are not favorable for crop production. This has resulted to the locals engaging in other sustenance activities such as charcoal burning, logging, and even sand harvesting, all of which result in over-use of land and environmental degradation.

CHAPTER 3: LEGAL FRAMEWORK

This water policy is anchored in the following legal framework:

3.1 The Constitution of Kenya 2010

Article 43(1) (d), of the Constitution of Kenya 2010, provides for the right to clean and safe water in adequate quantities to every person. It is the role of the government to provide, protect, and uphold this social economic right.

Part II of the Fourth Schedule further specifies the devolved functions of the County Government. The County Government has a mandate to implement specific National Government policies on natural resources and environmental conservation, including soil and water conservation and forestry. It is the role of the County Government to implement inter alia the National Water Act 2016.

Similarly, the schedule confers the County the mandate to provide for water and sanitation services and to develop storm-water management systems in built-up areas. This implies that it is the obligation of the county to legislate on this functional area.

3.2 County Government Act, 2012

This act established the County Governments and in Section 5 expressly states that the functions of the County Government are as set out in the Constitution of Kenya 2010. The Act gives the County Government authority to govern and create legislation on their functional areas.

3.3 Kenya Vision 2030

Kenya Vision 2030 is based on the three pillars, namely, economic, social, and political interests. It recognises that water is necessary to enable the Vision to ensure that Kenyans have access to water and improved sanitation by 2030. Additional supply and efficient management of the water resource in Makueni is required.

The Vision specifically proposes to address the following challenges that affect Makueni County: water scarcity, water security, catchment management, increased water demand, better quality, and increasing the amount of irrigated land.

The objective of the social economic pillar inter alia is to ensure water and improved sanitation access to all by 2030. Makueni County is committed to ensure efficient water resource management for economic growth, poverty reduction, health and food security through the policy formulation.

3.4 The National Water Act 2016

The purpose of the National Water Act 2016 was to provide for regulation, management, and development of water resources and water and sewerage services. County Government has a mandate to implement the provisions of this Act.

Further, the Act requires County Governments to establish water services providers. Pursuant to Section 158 of the Act, County Governments shall comply with the standards of commercial viability set out by the regulatory Board. The County Government is mandated to develop strategies for the management of the water service providers.

Additionally, every County Government is obligated to put in place measures for the provision of water services to rural areas, which is considered not to be commercially viable for the provision of water services. The measures referred to in subsection (2) include the development of point sources, small scale piped systems, and stand pipes which meet the standards set by the Regulatory Board and which may be managed by the community associations, public benefits organizations, or a private person under a contract with the County Government.

3.5 Makueni County Vision 2025

Makueni County's vision is anchored on ten commitments that address specific challenges. The first commitment is *Kutwiikany'a Silikali (Woni na Mivango ya Silikali)*/ Establishing the Makueni County Government and the second is *Kutwiikany'a Kiwu* (Holistic Water Harvesting) and Management among other commitments.

The development of a Water Policy Framework will provide a legal framework for harvesting, storage, treatment, distribution, management, governance, and utilization of water resources in the County. The Policy will also guide operations of water service providers and community water schemes including the protection and management of water catchment areas and wetlands.

3.6 Makueni County Integrated Development Plan (CIDP) 2018 – 2022

Increasing availability and access to water is one of the County development priorities, this will be realised through three major development initiatives: water harvesting, water distribution, and construction of mega dams. The realization of this development plan and the water policy formulation shall form the basis of the initiatives.

CHAPTER 4: GOAL, OBJECTIVES, AND GUIDING PRINCIPLES

4.1 Goal

The policy goal is to provide a framework for sustainable development and management of water resources, including promotion of water harvesting and storage in Makueni County.

4.2 Specific Objectives

The specific objectives of the policy are:

- 4.2.1** To promote development and expansion of water harvesting and storage infrastructure for industrial domestic, irrigation, and other uses;
- 4.2.2** To develop technical capacity and mobilize financial resources to undertake water development in the county;
- 4.2.3** To promote effective coordination of the water sector with the county including alignment with other relevant policies;
- 4.2.4** To strengthen sustainable water resource management in the county through enforcement and compliance of environmental policies and regulations;
- 4.2.5** To accelerate delivery of water and sanitation services in the county;
- 4.2.6** To strengthen water governance among Water Services Providers (WSPs) and community water schemes (CWS).

4.3 Guiding Principles

The guiding principles for the Makueni County water policy are as follows:

- 4.3.1 Sustainability:** Makueni County Water Policy considers water to be a finite resource which must be used efficiently, taking into account the needs of current generation without compromising the ability of future generations;
- 4.3.2 Institutional collaboration:** The County Government will work in a consultative and collaborative manner with all stakeholders in the water sector;
- 4.3.3 Integrated planning and management:** Planning of the water sector in the County will promote integrated planning and management across all key sectors, taking into account interests of competing groups, sectors, and the needs of the environment;
- 4.3.4 Respect for human rights:** Every resident of Makueni County has a right to clean and safe water in adequate quantities and to reasonable standards of sanitation;
- 4.3.5 Equity and inclusivity:** Water resources shall be allocated fairly according to need, value to economy, and efficient usage, mindful of marginalized and vulnerable groups;
- 4.3.6 Polluter pay principle:** Any entity whose activities affect the quality of a water resource should bear the cost of restoration, compensation and abatement to manage water pollution;

- 4.3.7 Consumer protection:** The sector will implement measures that shall ensure water is available, accessible, affordable, reliable, sustainable, and in the right quality, quantity, and the right time while being mindful of marginalized and vulnerable groups;
- 4.3.8 Efficiency and value for money:** Every effort will be made in the development, management, governance and implementation of projects to ensure value for money;
- 4.3.9 Ring fencing:** Revenues generated from charges, fees, and tariffs on water shall be used for water activities only;
- 4.3.10 Public participation and stakeholder consultation:** Measures will be put either in place to ensure that those affected positively or negatively by any water activities are involved in the decision-making processes; and
- 4.3.11 Consumer user pay principle:** The County will sensitise all consumers to pay for all water related services.

4.4 Policy Statements

The County Government of Makueni will remain committed to realization of the following overall Policy Statements:

- 4.4.1** To promote an integrated approach to the management of water resources by ensuring measures are put in place for water quality management, catchment protection and conservation, exploration and application of appropriate technology, monitoring and information systems.
- 4.4.2** To develop requisite water harvesting and storage capacity through countywide strategy to meet the County`s rising water demand.
- 4.4.3** To promote progressive realization of human rights with regard to the provision of water and sanitation services by creating effective and efficient human, institutional, infrastructure, and management capacities.
- 4.4.4** To promote partnership and collaboration with relevant institutions to enhance education, training, and research in the county`s water sector.
- 4.4.5** To build a strong framework to guide countywide investment planning, entrench sustainable resource mobilization, and promote effective and efficient financing in delivering the water sector mandate.
- 4.4.6** To enhance institutional framework through capacity building in human resource, institutional infrastructure, and financing.
- 4.4.7** To engage the National Government in the management and use of cross county water resources.
- 4.4.8** To embrace modern technology especially in hydrogeological survey, CAD among others
- 4.4.9** To ensure that contractual works are implemented in line with the legally agreed standards: Architectural Association of Kenya (AAK), Public Procurement Oversight Authority Act (PPOA) and the International Federation of Consulting Engineers (FIDIC)
- 4.4.10** To adopt holistic methodologies of moisture and soil conservation

CHAPTER 5: WATER RESOURCES MANAGEMENT

5.1 Sector Context

The County has one permanent river, the Athi. There are other semi-permanent rivers such as Kibwezi, Kiboko, Kaiti, Muooni, Kikuu/Kiangini, Thange, Kambu, Makindu, Kibwezi, Mtito Andei and others all of which are seasonal and therefore provide limited surface water resources. The scarcity is exacerbated by over-abstraction, catchment degradation, and climate change, unsustainable exploitation of the sand resource, and encroachment of riparian land. The quality of surface water has been deteriorating due to pollution, poor environmental management practices, and inadequate water storage infrastructure.

Groundwater aquifers are underutilised due to limited technological exploration, poor ground water research and development, groundwater recharge, and low capacity for groundwater development such as Umanyi springs. The Water Resources Authority (WRA) guides the exploitation of ground water, and the regulations are not usually complied with. Integrated land and water resources are affected by degradation and encroachment of riparian areas by incompatible land uses.

There is disparity in the distribution of water resources across the County and within basins and sub-catchments. This calls for the National Government to develop policies for cross-county and inter-basin water transfers. Water scarcity affects water balances and effective transfers this has resulted in disputes and conflict.

There is a weak framework in surveillance and monitoring of water resources' quality, which leads to low policy enforcement and compliance. There is need to strengthen the role of the county in controlling water quality, public health, pollution control, and solid waste management functions.

The County has challenges in making water related decisions due to inadequate data. Low sensitization among stakeholders and lack of understanding of the role of private sector impedes participation in water resource management.

5.2 Goal & Objectives

5.2.1 Goal

To ensure systematic planning, management, and equitable distribution of water and related resources to maximize economic and social welfare without compromising the sustainability of vital ecosystems.

5.2.2 Objectives

- 5.2.2.1 To manage water resources in a sustainable manner.
- 5.2.2.2 To establish strong governance management structures.
- 5.2.2.3 To increase accessibility to clean and adequate water to the population.
- 5.2.2.4 To promote gender mainstreaming.

5.3 Measures

The County Government will:

- 5.3.1** Map and establish a water resource data base to guide water resource infrastructure planning and development;
- 5.3.2** Ensure that water resources, riparian, and catchment areas are well protected, rehabilitated, conserved, and managed by enhancing the capacity of relevant institutions;
- 5.3.3** Strengthen capacity, research, and training of water professionals to support sustainable development of water resources;
- 5.3.4** Collaborate with Water Resource Management Authority (WRMA) and WRA to ensure that the allocation of water abstraction rights observes equity, giving priority to domestic use, vulnerable groups, and the ecological reserve;
- 5.3.5** Promote integration and adoption of innovative treatment and recycling technologies for sustainable water resource management;
- 5.3.6** Collaborate with National Government to encourage, engage, and coordinate with neighbouring counties, regional institutions, the private sector, and communities to enhance management of shared water resources;
- 5.3.7** Implement the polluter pays principle in collaboration with other relevant institutions;
- 5.3.8** Ensure the implementation of the Makueni Sand Conservation and Utilization Act, 2015, to enhance the conservation of the environment and specifically monitor the utilization of sand resource.
- 5.3.9** Ensure before commencement of water works, the land ownership is transferred to the County Government

CHAPTER 6: WATER HARVESTING AND STORAGE

6.1 Sector Context

The County Government of Makueni invests in water harvesting, storage, treatment and distribution using earth dams, sand dams, farm ponds, water pans, road surface run-off, and rock and roof catchment. The County plans to expand water harvesting and storage to ensure adequate potable water is available at the household level. This will reduce the average distance to the nearest water point from the current distance of 8 Km to 3 Km. The County will also encourage household and institutional water harvesting to increase access from 35% to 70% by 2025 (Makueni Vision 2025). Water harvesting and storage is expected to contribute to enhancing food security, improving health standards, and increasing household incomes.

Surface run-off remains high as evidenced during perennial cycles of flooding when aquifers are depleted due to unsustainable ground water exploitation and low rates of groundwater recharge. The County plans to build six strategic dams, six medium dams, twenty small dams, and drill boreholes in order to increase the total water volume to 73 million M³ per year.

There is a huge potential for run-off water harvesting along rivers, roads, and roofs for domestic use and irrigation. The County has not explored the full potential of water harvesting and storage, partly due to absence of a clear policy, uncoordinated investment, inadequate financial resources, inappropriate technology, and weak institutional framework. There will be deliberate efforts to invest in modern and appropriate technologies in water harvesting and distribution.

Inadequate data and other relevant information on the existing water investments, potential water harvesting and storage, maintenance, and rehabilitation hinders planning and implementation of county and cross-county investments.

There is limited coordination among National and County Governments to ensure compliance with standards and building codes for water harvesting and storage infrastructure. Additionally, there is inadequate enforcement on legal framework of classification, registration and licensing of professionals to ensure identification and establishment of construction and safety standards.

Inadequate integration of private sector, society support groups, and communities in water harvesting and storage development is not fully tapped in building synergy with public interventions. The interventions supported by these groups are small scale with limited financial and technical capacities, and if coordinated well it can improve water access.

Makueni continues to experience the effects of climate change induced disasters, particularly drought and floods. Water harvesting and storage is an important strategy to reduce the risks of drought, floods, and food security. The current responses are constrained by poor planning, insufficient resources, and poor use of appropriate technology. The problem of floods, especially in urban areas, is aggravated by poor drainage, inadequate, and dilapidated infrastructure.

There is limited access to land for development of infrastructure for water harvesting and storage. In most cases, there is the need for compulsory acquisition, displacement of population and property, land valuation and compensation. This escalates the cost of projects and causes delays in implementation of planned interventions. The share of

the public resources allocated to development and implementation of water harvesting and storage capacity is inadequate.

6.2 Goal & Objective

6.2.1 Goal

To develop the necessary water harvesting and storage infrastructure to ensure water security for all.

6.2.2 Objectives

The specific objectives are to address the following:

- 6.2.2.1 To increase water access through rain water harvesting & storage technologies that ensure water is harvested before it hits the ground and becomes contaminated; and
- 6.2.2.2 To reduce distance to water sources, which would reduce the time needed to fetch water.

6.3 Measures

The County Government will:

- 6.3.1 Develop a County water harvesting and storage strategy to guide the integration of planning, budgeting, and coordination of county, communities, and other actors development.
- 6.3.2 Promote roof water harvesting and storage at homestead level, learning and health institutions and FBOs and business premises through installation of at least two water storage tanks of 10,000 litres each and promote private sector participation.
- 6.3.3 Promote flood control mechanisms by constructing sand-dams, gabions, and storm water drains and to recycle stored storm water while ensuring compliance with regulations, guidelines, standards, and certifications for water harvesting and storage.
- 6.3.4 Allocate sufficient funding to implement innovative approaches to contain cost escalations in water harvesting and storage infrastructure.
- 6.5.5 Facilitate and support the Makueni County Sand Conservation and Utilization Authority to plan and construct sand dams and gabions at viable sites in all the rivers and streams to enhance water harvesting and storage for domestic use and food security.
- 6.5.6 Ensure that road construction does not overlook harvesting of road surface runoff and promote drifts without culverts for enhanced water harvesting and storage.
- 6.5.7 The county will consider compensation where the project requires the displacement of people.
- 6.5.8 The county will support the community through hiring and leasing of county machines and plants for infrastructure development in accordance with Makueni County Finance Bill.

CHAPTER 7: URBAN WATER AND SEWERAGE SERVICES

7.1 Context

Urban water supply is publicly owned and managed by the County Government through a board. Currently, the county has three water companies. These are Wote Water and Sewerage Company (WOWASCO), Kibwezi Makindu Water and Sewerage Company (KIMAWASCO) and Mbooni Water and Sanitation Company (MBONWASCO). The Nolturesh Water and Sewerage Company shared between Makueni, Machakos and Kajiado Counties. The companies are mandated to supply water within their areas of jurisdiction.

Climate change has contributed to reduced water levels in our water sources leading to interruption of water related services. Levels of Non-Revenue Water (NRW) remain high, and this affects the pricing of water, quality of service, and commercial viability of water service utilities. NRW is attributed to water distribution system losses, commercial losses, governance challenges and negatively affects the business of the water companies.

The existing infrastructure is mostly old and dilapidated, and the County does not allocate adequate resources to address these issues. This leads to loss of water as well as loss of revenue. There is need to rehabilitate and extend existing infrastructure to respond to the growing demand, and within built-up areas, there is need to harvest and store rainwater from the roofs.

Sewerage coverage remains low due to rapid urbanization and low investment in sewerage. No towns in the County have sewerage services, and where plans exist, they have not been implemented. The existing sanitation facilities/services, such as septic tanks and toilets, are not built according to any code or regulation. This results in poorly structured and ineffective waste disposal. The exhauster services do not have designated disposal sites, which causes pollution that creates health risks for the communities. The County needs to develop sewerage and sanitation strategies for investment planning and financing. These strategies should include integrating wastewater management with other water infrastructure in the County in order to allow for increased revenue collection.

Performance of water companies still needs to be improved as some companies have high levels of NRW and low hours of service. Devolution has led to increased water sector financing, better adherence to standards, but revenue collection in most Water Service Providers (WSPs) is still low, and operation/maintenance costs and debt collection remain challenges.

Urban water service providers are regulated and operated within the regulatory regimes. However, some continue to operate within a weak governance framework, inadequate capacity, insufficient finances, old infrastructure, and inappropriate technology. This result in less effective service deliver.

Budget allocation for the sector has been increasing over time, and water and sanitation coverage require huge financial resource for investments. However, private sector interest in investment remains low. High operational costs make it impossible for investors to break-even, making them less than ideal candidates to receive credit. Currently, the sector lacks adequate resource mobilization strategy and the investment plans.

Investment planning for water and sanitation infrastructure has not been well coordinated between the National Government and County Governments. Lack of integrated investment plans for water and sanitation infrastructure

limits synergies among investment interventions and stakeholder reduces participation and limits resource mobilization. The County Governments are faced with challenges related to handling asset agreements and loan obligations. The framework for engagement of private entities by the county should be put in place.

The sector is characterized by high inefficiency in water use due to losses attributable to wastage, application of inappropriate technology, and weak monitoring and water audit systems.

Lack of baseline data on water use for domestic, agriculture, forests and wild life, irrigation, institutions, and industries that hamper planning and decision making on water use efficiency and standards of equipment and appliances.

7.2 Goal and Objectives

7.2.1 Goal

To provide adequate, affordable and sustainable water, sewerage and sanitation services by strengthening and creating effective and efficient governance structure that promote consumer protection and service provision.

7.2.2 Objectives

The specific objectives

7.2.2.1 To improve efficiency and coverage of water services.

7.2.2.2 To guide the development and management of sustainable water supply and waste water disposal.

7.2.2.3 To promote the participation of urban communities and the private sector in water service delivery

7.3 Measures

The County Government will:

7.3.1 Allocate adequate resources for development, rehabilitation, and expansion of existing facilities and promote cost-recovery.

7.3.2 Facilitating and strengthen community, private sector and other organizations participation in financing and service delivery through creation forums.

7.3.3 Promote technology that require low investment, are least operation and maintenance such as gravity, solar and wind power for pumping.

7.3.4 Recognizing women and vulnerable groups as being among the principal actors in the provision of urban water supply services.

7.3.5 Undertake a needs assessment plan and develop a sewerage and sanitation facilities for all urban areas.

7.3.6 Mainstream climate-change adaptation measures in all water development programs and projects to ensure availability of water resources in urban areas

7.3.7 Build human resource capacity (staff and Boards) in the WSP to manage water and sewerage services.

7.3.8 Support a collaboration framework for development and operation of cross-county water project.

7.3.9 Ensure automation of urban water supplies through smart meters

7.3.10 Set aside adequate budgetary provisions to Water Service Providers (WSPs) for operations and infrastructure improvement

CHAPTER 8: RURAL WATER SUPPLY AND SANITATION (RWSS)

8.1 Sector Context

Overall levels of access to improved water supply and sanitation facilities in rural Makueni County are low. The quantity and quality of water consumed by the majority of rural households has a significant impact on health, welfare, and productivity of the people. The challenges faced in this sector include low investment and poor management of community water projects which leads to acute water shortages since most areas are currently underserved. Improving access to basic sanitation facilities is an even greater challenge, and efforts should focus first on small towns and peri-urban areas where the need is greatest.

8.1.1 Sanitation and Hygiene Education

Levels of access to sanitation and hygiene facilities in rural areas of Makueni are low, and this is reflected in the high incidence of water borne diseases associated with inadequate access to water and sanitation services.

There is need for integration of sanitation and hygiene education with water supply interventions for effective coordination and collaboration.

8.1.2 Technology Choice and Sustainable Operation and Maintenance

Problems of sustainability are often due to use of inappropriate technology and poor location choice or design. Technology selected should be appropriate to local communities in order to ensure sustainability.

8.1.3 Governance and capacity of community water services:

Community WSPs operate under weak governance framework and operate outside the regulatory regimes. Their compliance with minimum service standards therefore goes unchecked.

8.1.4 Community Participation

The sustainability of community-managed water supplies depends on the active participation of user communities in planning, design, operation, and maintenance of schemes. In many schemes, water users are not adequately involved in the process, and schemes do not reflect the needs and priorities of end users, including women and children. The respective roles and responsibilities of communities about the planning, financing and management of infrastructure development and subsequent operation and maintenance not clearly defined within the institutional framework that is legally recognized. User communities are not trained to take over full responsibility for managerial and financial operation and maintenance of RWSS schemes. Procedures will be developed to facilitate registration of water user groups as legal owners of rural water supply facilities in order to empower communities to manage schemes themselves.

The County Government has an important role to ensure coordinated development and management of the RWSS sub-sector. It has the overall responsibility for rural water sector development and remains directly accountable to the people for the quality of services provided.

There is lack of staff with adequate skills, including technical and management qualifications that creates the need for a comprehensive capacity strengthening and enhancement program to implement different RWSS functions.

Substantial investment has been injected in order to improve service provision in the rural areas, yet 90% of the projects are still poorly managed. Additionally, the rural communities have a limited capacity to contribute to capital investments. There is need for the County Government to invest in the governance of the rural projects and create incentives to attract private sector investments.

8.2 Policy Goal & Objective

8.2.1 Goal

Improve access to safe water and sanitation and ensure proper governance of RWSS and environmental management and protection for sustainability.

8.2.2 Objectives

Specific Objectives on rural water, sanitation and hygiene are as follows:

- 8.2.2.1 To provide adequate, affordable, and sustainable safe water supply services and promote sanitation and hygiene education alongside water supply.
- 8.2.2.2 To promote active participation of water users, including all vulnerable groups, in all aspects of planning, design, operation, and maintenance of RWSS schemes and to support water service providers to take responsibility of rural schemes.
- 8.2.2.3 To support water providers to make informed technology choices which take into account local needs and priorities and existing capacity for management and financing of Observation and Measures (O&M).
- 8.2.2.4 To promote involvement of private sector in the delivery of RWSS services including development of water harvesting structures where appropriate.
- 8.2.2.5 To clearly define institutional arrangements within the RWSS sub-sector including capacity building and human resource development.
- 8.2.2.6 To mobilize sufficient finances from public and private sources to cover capital and operational expenditure and develop a sector-wide financing strategy to ensure long term sustainability.

8.3 Measures

The county will:

- 8.3.1** Develop specific strategies to increase public awareness for uptake and use of sanitation and hygiene technologies in rural areas.
- 8.3.2** Develop guidelines to encourage the participation of user communities and build capacity of water management committees in all aspects of the RWSS project cycle.
- 8.3.3** Implement Environmental Impact Assessments (EIAs) on all water development projects and nurture community water service providers to enhance capacity of service delivery and compliance to set standards.
- 8.3.4** Ensure County Rural Water Board formally regulates the community water service providers for better governance.
- 8.3.5** Facilitate private sector and NGO involvement in the delivery of goods and services and ensure investment priorities are given to areas that are currently underserved.
- 8.3.6** Facilitate access of technology choices and expertise for timely repair and maintenance of the schemes through standardization of equipment and promotion of private sector involvement.

- 8.3.7** Clearly define the roles and responsibilities of government and non-government actors in developing and managing RWSS facilities including procedures for working in partnership and mechanisms for coordination and collaboration with other sectors.
- 8.3.8** Develop a sector-wide financing strategy to ensure mobilization of adequate financial resources to meet RWSS sub-sector objectives and targets.
- 8.3.9** Undertake a comprehensive and detailed training needs assessment to ensure human resource development and capacity building.

CHAPTER 9: WATER FOR AGRICULTURE, ENVIRONMENT, FORESTRY, WILDLIFE AND TOURISM

9.1 Context

9.1.1 Water for Forestry, Wildlife and Tourism

The development of forestry has the potential to improve the livelihoods of the poor rural population and the economy in general. However, the forest cover has decreased over the years.

The major physical features in Makueni County include the volcanic Chyulu hills that lie in Kibwezi East and West Sub Counties, Mbooni hills in Mbooni Sub County, Kilungu and Luani hills in Kaiti Sub County and Nzau hill in Makueni Sub County. Other features include Makongo Forest and Makuli Forest. Makueni County has limited forest covers that are under increasing pressure due to population increase, encroachment, expansion of agriculture, livestock grazing, harvesting of timber, and fuel wood collection.

The forests serve a range of important environmental functions, including water conservation and mitigation for climate change. Rehabilitation and conservation of the forests can play an important role in supporting wider efforts to protect water catchments. Forests guard against soil erosion and drying of watercourses including springs, and low forest cover leads to poor bio diversity of flora and fauna. The County strives to ensure that an integrated approach to development of a catchment management strategy, including enforcement rules, is put in place.

Given the existence of wildlife in Makueni, the development of game parks will depend on water resources conservation and development that does not adversely affect flora and fauna. The rich cultural diversity, numerous rivers and hills, forestry and wildlife offer a great potential source of future tourism revenue. The County will focus on provision of water for wildlife and recreational activities.

9.1.2 Water for Environment

Makueni County faces numerous environmental challenges associated with sustainable use of renewable natural resources in the context of development and urbanization. Water resource development involves harvesting water run-off, roof catchment, sub surface water, and development of water infrastructure. Water uses such as irrigation and mining can lead to pollution of water sources and other environmental effects such as water logging and salinization of soils. Sand is the major natural resource available in almost all the rivers and streams. Other resources include limestone, granite, gypsum, and quartz in Kibwezi West Constituency, though their commercial viability has not been established.

There is, therefore, an urgent need to raise awareness of environmental issues and develop basic environmental standards to guide water resources development. In particular, it is necessary to maintain environmental flows that support basic ecosystem functions. Maintenance of minimum flows in rivers and other watercourses is important to maintain water quality and protect plants, fish, and other animals. The natural cycle of seasonal flooding replenishes essential nutrients, which maintains the productivity of ecosystems upon which people depend for their livelihood.

Major causes of surface water pollution include discharge of untreated effluent and solid waste from urban areas

(including small industries such as hotels, tanneries and abattoirs), discharge of water produced from agriculture, mining activities, and pollution of waterways by river barges. Incidences of ground water pollution also have negative impacts on drinking water quality in urban areas, for example, putting up pit latrines too close to water sources. As such, all development needs to be integrated with environmental management and EIA to ensure that the developments undertaken do not adversely affect the environment.

9.2 Policy Goal

9.2.1 Goal

The Policy goal is to achieve sustainable land and water utilization and management for agricultural production, environment, wildlife and tourism, to create a prosperous Makueni.

9.2.2 Objective

The specific objective is to establish a strong framework to guide countywide agricultural planning, entrench sustainable practices, and promote effective and efficient use of water resources for forestry, agriculture, environment, and wild life and tourism activities.

9.3 Measures

The County Government will:

- 9.3.1** Promote the enforcement of riparian reserve by pegging.
- 9.3.2** Reduce human/wildlife conflict by designating buffer zones.
- 9.3.3** Reduce overreliance on rain fed agriculture by providing water for agriculture, introducing conservation agriculture, planting drought tolerant crops, synchronized farming, establishment of artificial fishponds, pasture production and preservation.
- 9.3.4** Increase public/private partnerships liaison to expedite funding of water and agriculture programs.
- 9.3.5** Promote growing indigenous trees, community forest association to implement and enforce water and environmental policies and regulations.
- 9.3.6** Put in place governance structure to manage and enforce policies to arrest environmental degradation resulting from over-exploitation of ground water sources, sand harvesting, charcoal burning, logging, and human encroachment on protected areas.
- 9.3.7** Ensure regular and periodic monitoring of wastewater disposal points.
- 9.3.8** Ensure integrated approach to empowerment of rural communities through programs that bring water related benefits such as irrigation schemes, artificial insemination, Tetheka fund, and support to cooperatives, OVCs and PWDs.
- 9.3.9** Encourage and support the use and development of renewable energy and other alternative sources of energy in rural areas to ease overdependence on land resources of livelihoods for wood fuel and charcoal burning.
- 9.3.10** Engage and promote farmer managed regeneration forest.

CHAPTER 10: WATER FOR INSTITUTIONS

10.1 Sector context

According to the Makueni Vision 2025, the County has 1,378 Early Childhood Development (ECD) Centres with a total enrolment of 53,685 pupils with 2,000 teachers. The County has 1,021 primary schools with a total enrolment of 304,288 pupils and 7,929 teachers. There are 399 secondary schools with a total enrolment of 100,712 students with 3,158 teachers. The County has 12 tertiary institutions, 38 County Technical Training Institutes (CTTIs), and 2 university satellite campuses. Majority of the schools and other learning institutions have water tanks, however, there is poor management and wastage of water. Many tanks lack proper drainage, cleanliness, and maintenance. Lack of adequate and safe water sources in schools places significant limitations on education opportunities and health outcomes on the students. Where insufficient sources exist, children carry water with them for drinking and cooking. This results in a significant wastage of learning time and poses health risks especially where water is from unsafe sources. The associated health impacts result in increased absenteeism of children.

The County has 156 public health facilities. They include nine level four hospitals in Makindu, Makueni, Mbooni, Tawa, Kilungu, Sultan Hamud, Matiliku, Kathonzweni, and Kibwezi. This also includes 21 level 3 hospitals and 125 dispensaries. The County also has 2 private hospitals, 36 clinics, and 27 dispensaries that complement the government efforts. In all these facilities, the lack of safe and sufficient water for use by patients—particularly women and children- limits the effectiveness of treatment provided. For school-going children, limited knowledge of good personal hygiene and poor hygiene practices contribute to ill health resulting to absenteeism. Lack of sufficient, private, appropriate, and gender separated/sensitive sanitation facilities has significant impact on attendance and retention rates of female students in particular who are constrained from going to school during their menstrual period and may ultimately drop out of school completely. A number of NGOs have been working to ensure adequate and appropriate provision of WASH facilities and hygiene promotion activities in institutions.

Particular attention should be given to the development of latrines and hand washing facilities, ensuring they are separate for boys and girls in schools and for men and women in institutions. Hygiene promotion and sensitization should be done in all institutions. Such activities represent a key means to ensure that the sanitation privacy needs of school going children, girls in particular, are met, a key factor to ensure their continued enrolment in school.

10.2 Policy Goal

10.2.1 Goal

The Policy goal is to improve the provision and access to safe water and proper sanitation services in public/private institutions.

10.2.2 Objectives

The County will specifically pursue the following policy objectives-

10.2.2.1 Increase safe water storage by ensuring inclusion of water harvesting and storage facilities in every institution project design.

10.2.2.2 Promote provision of safe water and sanitation services in public and private institutions for better health and well-being for all in the community.

- 10.2.2.3 Promote investment and maintenance of infrastructure for proper waste management in public and private sector facilities.
- 10.2.2.4 Involve communities in planning, construction, use, and maintenance of user-friendly water, sanitation, and hygiene facilities for institutions and communities.
- 10.2.2.5 Ensure every institution and household contributes to achievement of 10% forest cover and catchment protection.

10.3 Measures

The County Government will -

- 10.3.1** Ensure that every public and private institution including churches, mosques, learning institutions, and health facilities endeavor to harvest rainwater by installing at least two 10,000 liters water tanks.
- 10.3.2** Promote investment in WASH facilities in public and private institutions to increase the impact of health and nutrition interventions in the County.
- 10.3.3** Promote appropriate technology, clean energy, and material for construction of water harvesting and storage structures.
- 10.3.4** Invest in a database on water and sanitation hygiene in public and private institutions.
- 10.3.5** Integrate hygiene promotion activities within routine health and nutrition activities in private and public institutions.
- 10.3.6** Promote School Led Total Sanitation (SLTS) and Community Led Total Sanitation (CLTS) approach to support progressive steps towards behavioral transformation and latrine promotion in communities.
- 10.3.7** Strengthen programs aimed at environmental sanitation that would include activities related to cleaning of urban centers, schools, church compounds and public spaces.
- 10.3.8** Promote and support the achievement of the minimum 10% forest cover at house hold, institutional and public areas.

CHAPTER 11: WATER FOR INDUSTRY & TRADE

11.1 Sector Context

The County has limited industries due to unexploited natural resources, distance from major urban centers, and low levels of investment. Many markets lack clean water and proper sanitation. Poor urban planning is a major contributor to inadequate provision of water and sanitation facilities. The few public facilities that exist are poorly managed and public hygiene in the market centers is insufficient. Liquid and solid waste management is a major issue in the County.

Social development is about putting people at the center of development. While substantial progress was achieved in the implementation of county projects outlined in the development plans through concerted efforts by the implementing departments and other agencies, various obstacles impacted negatively on the outcome and success. There still remain high regional inequalities in terms of access to various social services.

Water is at the center of economic and social development: it is vital to maintain health, grow food, generate energy, and create jobs while sustaining the natural environment. Proper maintenance of our environment will contribute to carbon offsetting through management of our water towers

11.2 Policy Goal and Objectives

11.2.1 Goal

The Policy goal is to improve the provision and access to safe water and proper sanitation services in industries, factories, markets, trading facilities, and social development initiatives.

11.3. Objective

The County will pursue the following specific Policy objectives-

- 11.3.1** To ensure provision and storage of safe water, sanitation services, and waste management in industries, factories, markets, trading facilities, and social development activities.
- 11.3.2** To ensure public participation in planning, construction, use, and maintenance of user friendly water, sanitation, and hygiene facilities for industries, factories, markets, trading facilities, and social development initiatives.
- 11.3.3** To improve water, sanitation, and hygiene facilities for better health and well-being of staff and communities within industries, factories, markets, trading facilities, and social development activities.

11.4 Policy Measures

The proposed policy measures are as follows:

- 11.4.1** Promote investment in WASH facilities in industries, factories, markets and trading facilities.
- 11.4.2** Invest in a database on water and sanitation hygiene in industries, factories, markets and trading facilities.
- 11.4.3** Develop dedicated water connections to industries, factories, markets, public toilets, health facilities and trading facilities from proximal water service providers.

- 11.4.4** Promote personal hygiene including hand washing with soap and protection of food and water within market centers.
- 11.4.5** Strengthen programs aimed at environmental sanitation that would include activities related to cleaning of industries, factories, markets, trading facilities and their compounds.
- 11.4.6** Enforce regulations for factory liquid waste disposal.
- 11.4.7** Ensure that every industry, factory, market, and trading facility endeavor to harvest rainwater by installing at least two 10,000 liters water tanks for water harvesting and storage.
- 11.4.8** Set a county clean – up day for all industries, factories, markets, trading facilities, churches and other institutions.

CHAPTER 12: WATER SECTOR TRAINING, RESEARCH, AND INNOVATION

12.1 Sector Context

The capacity for efficient and effective planning, development, and management of the water sector is still limited in the County. This has been attributed to inadequate investments in training and research, limited financial allocations, and inadequate coordination within the sector. There is also inadequate support to technological innovation with respect to incentives, development of institutional capacities, and enforcement of intellectual property rights. Training and research activities in the County are not effectively linked to the needs of the water sector, and there is limited collaboration with institutions that have training and research mandates.

There is, therefore, a need to build capacity in the water sector in order to achieve the targets set in County's Vision 2025 as well as Kenya's Vision 2030. The implementation of various educational, training and research Programmes in the County can be undertaken in collaboration with relevant institutions.

12.2 Policy Goal

12.2.1 Goal

The County Government will enhance human and technical capacity in the water sector through collaboration with relevant educational, training, and research institutions.

12.2.2 Objective

The County will pursue the following Policy objectives:

- 12.2.2.1 Promote training and research activities in the County by effectively linking them to the needs of the water sector.
- 12.2.2.2 Strengthen collaboration with institutions that have training and research mandates in order to build the required capacity in the County.
- 12.2.2.3 Build the capacity for efficient and effective planning, development, and management of the water sector in the County.
- 12.2.2.4 Increase investments in training and research in the water sector by increasing financial allocations.

12.3 Policy Measures

The County Government will:

- 12.3.1** Strengthen linkages between research, development, and innovation within water sector in relation to water resource management, harvesting and storage and sanitation services.
- 12.3.2** Establish a mechanism and processes to enhance institutional networks to build synergies for research, development, and innovation.
- 12.3.3** Support and provide incentives and regulatory mechanisms to enhance coordination between the private sector and institutions undertaking research on water, development, and technological innovation.

- 12.3.4** Assess capacity needs of the water sector and coordinate with education and training institutions to develop or update relevant curriculum for basic education and professional training, including professional certification.
- 12.3.5** Identify and set aside one County Technical Training Institute (CTTI) for water related courses.
- 12.3.6** Establish collaboration with the relevant universities and training institutions to make them more responsive to the needs of the water sector in the county.

CHAPTER 13: RESOURCE MOBILIZATION AND FINANCING

13.1 Sector Context

Investment planning in the water sector is critical, as Makueni is Arid and Semi-Arid Land (ASAL) with increasing demand for water use, bearing in mind that investment in the sector is capital intensive. Investment planning in the water sector has not been adequately linked with the economic planning and budgetary processes at county level.

The sector has not been able to generate sufficient resources internally or externally to sustain its investment needs. Therefore, financial resources for water sector public investments have been limited to overreliance on the share of devolved funds, NGO contributions, and private sector funds as loans or grants. The sector continues to face other challenges of mobilization of resources, including weak performance by WSPs that undermine solvency and commercial viability. The sector has not fully embraced the Public-Private Partnership (PPP) since there is no framework in place. There is need for a sustainable resource mobilization strategy. Encouragement of private sector investments in the sector is also critical, and this will require clear engagement and incentive framework or any other promotion strategies.

The sector continues to face other challenges financial challenges, including disparities in funding of the water sector. There are also challenges in financial leakages and wastage, duplication, and implementation of many small water projects.

13.2 Goal & Objective

13.2.1 Goal

The Policy goal is to build a strong framework to guide countywide investment planning, entrench sustainable resource mobilization, and promote effective and efficient financing in delivering the water sector mandate.

13.2.2 Objective

The specific Policy objective is to enable the County to mobilize adequate investments for water related projects in the water sector for sustainable development and to enhance integration of water sector investment planning with economic planning and budgetary processes at County and Sub-County levels in collaboration with other stakeholders.

13.3 Measures

The Government will:

- 13.3.1 Develop and implement a comprehensive investment plan for the water sector by integrating the county and other stakeholders' plans including tapping indigenous technical knowledge.
- 13.3.2 Ensure coordination of investment, needs assessment, planning and implementation to include all water sub-sectors.
- 13.3.3 Develop a framework to enhance best practices in the financial management of water companies and community water service providers to improve their commercial viability.

13.3.4 Develop and facilitate an incentive framework to promote public private partnerships investments in projects where commercial viability is low yet they are priority areas with respect to fulfilment of pertinent human rights.

CHAPTER 14: WATER SECTOR GOVERNANCE & INSTITUTIONAL FRAMEWORK

14.1 Sector Context

The institutional framework governing the water sector in Makueni draws its structure and mandate from the Constitution of Kenya, 2010 and national legislations, which identify water as a shared function between National and County Governments. Makueni County Government is expected to implement National Government policies on natural resources and environmental conservation, including soil and water conservation. Specific functions for the County Government include water and sanitation services, county water public works, and establishment and management of water service providers.

The Constitution classifies water resources as part of public land and vests these on the National Government where it comprises of all rivers, lakes, and other water bodies. Kenya has put in place intergovernmental basin committees under the regulatory authority of the National Government to manage water resources at basin level. Makueni County falls under Athi Basin managed by the Middle Athi Sub-Region-WRA.

The provision of water services is classified as a county function by the Constitution of Kenya 2010. Inter-basin, intra-basin and cross-county water transfer is regulated by the Provisions of Water Act 2016. The need to develop water harvesting and storage infrastructure will require support by the county. It will require significant financial investments and implementation of appropriate County and/or intergovernmental institutional arrangements, with sufficient coordination, financing, and technical capacity.

Given the functions of the two levels of government and multiple institutions in the water sub-sector, there are challenges in collaboration, coordination and overlapping mandates. The sector continues to face issues in corporate governance and performance of institutions in service delivery. Some institutions have continued to face capacity challenges especially in terms of human resource, infrastructure and finance. The level of stakeholder involvement, public participation and representation by water sector institutions in decision-making processes is low. The institutions mandated to manage water resources at the local level, which include WRUA, water project management committees and water and sanitation companies, are faced with poor leadership, governance challenges and misappropriation of financial resources and assets. Failure to comply with the existing legislations and good practices has resulted in poor service delivery and ultimate collapse of some institutions.

14.2 Policy Goal and Objectives

14.2.1 Goal

The Policy goal is to ensure functional and sustainable water sector governance and institutional framework through development and enforcement of the relevant regulations.

14.2.2 Specific Objectives

14.2.2.1 To develop guidelines/regulations for rural water supply schemes.

14.2.2.2 To enhance and strengthen corporate governance in all water sector institutions.

14.2.2.3 To engage and support natural resources conservation and management through local institutions such as CFAs, climate change committees, sand management committees and WRUAs.

14.3 Measures

The County Government will:

- 14.3.1** Establish Water Board that shall have the powers and functions necessary for entering into service agreement with water service providers on behalf of the County Government.
- 14.3.2** Harmonize and integrate institutional frameworks within sectorial and cross-sectorial areas to enhance collaboration and coordination and to build synergy for sustainable water resources management, harvesting and storage, and provision of water and sanitation services.
- 14.3.3** Build capacity in leadership and governance, planning, financial management, role and mandate of water institutions to strengthen service delivery. This will involve human resource development, technical support, infrastructure development and financial support.
- 14.3.4** Provide for an approach to strengthen stakeholder involvement, public participation and representation by water sector institutions in decision-making processes. This will include consumer engagement to enhance customer satisfaction.
- 14.3.5** Put in place a mechanism for monitoring and evaluation of the institutions including regular and appropriate reporting and financial audits among others.
- 14.3.6** Establish a Water Audit Unit whose function is to carry out annual audits for all water institutions including community water service schemes.
- 14.3.7** Establish a county level annual Water, Sanitation Environment and Climate Change forum (WASECC)
- 14.3.8** Ensure that WRUAs in collaboration with WSPs and other stakeholders are supported for improved efficiency and effectiveness in water resources management.

CHAPTER 15: WATER RELATED DISASTER MANAGEMENT

15.1 Sector Context

There have been several episodes of major floods and droughts in the last four decades. The floods, which are due to poor drainage and riverbank overflows especially at Barazani, Sultan Hamud and Marwa among other areas, have resulted in loss of life, livelihoods, and widespread environmental degradation. The worst floods experienced in the early 1960s, 1993, 1998, and in 2018 resulted in population displacement in the low land areas of the county. Frequent droughts leading to food shortage resulting in widespread famine is also a major challenge.

The Disaster Management Unit (DMU) in the County Government faces financial resource challenges and operates in an uncoordinated manner, resulting in poor response to emergencies. Information and data collection is not harmonized which further affects response and pre-positioning for disasters. There is need to take deliberate action to plan mitigation and management measures for future disasters. This requires identification of disaster prone areas and establishment of basic early warning systems.

15.2 Policy Goal and Objectives

15.2.1 Goal

Establish systems and models that ensure effective and efficient pre and post disaster management.

15.2.2 Objectives

The specific objectives are;

15.2.2.1 To establish and strengthen existing systems and disaster related information centers.

15.2.2.2 To establish, develop and maintain community early warning systems and disaster preparedness plans.

15.2.2.3 To develop guidelines for disaster management and mitigation.

15.3 Measures

The County Government will:

15.3.1 Develop and enforce water related disaster response and management guidelines.

15.3.2 Establish water financial reserve fund and coordinate mechanisms for effective disaster management.

15.3.3 Promote capacity building for communities and other players on water related disaster preparedness and management to develop and maintain community preparedness plans.

15.3.4 Ensure community early warning systems and disaster preparedness plans to avoid undesirable incidents

CHAPTER 16: PRIVATE SECTOR PARTICIPATION

16.1 Context

The private sector has not played a significant role in the development, conservation, and management of water resources and supplies in Makueni County. The private sector, working in partnership with relevant stakeholders to develop and operate water supply infrastructure, can offer a number of potential advantages in terms of efficiency and effectiveness.

The private sector operators are expected to increase in future since there are significant opportunities that exist for their involvement in scaling up service delivery in rural water supply and sanitation services in Makueni County. There is need to develop a framework and build the capacity of the County Government to work in partnership with the private sector. The performance of private sector operators should be legally recognized and procedures, guidelines, and regulations developed for monitoring

16.2 Policy Goal and Objectives

16.2.1 Goal

Ensure a firm and agreeable engagement framework and provide incentives to facilitate sustainable partnerships.

16.2.2 Objectives

The specific objectives are to:

- 16.2.2.1 To engage and enhance partnerships with the private sector to speed up investments, operations, and management in water and sanitation infrastructure.
- 16.2.2.2 To encourage transfer of skills and appropriate technology from the private sector to the public sector.
- 16.2.2.3 To create linkages with manufacturers/ industrialists of water tanks and other accessories required in the water services.
- 16.2.2.4 To create and promote water based micro enterprises within the county i.e. bottling of drinking water and management of public sanitation facilities.

16.3 Measures

The County Government of Makueni will:

- 16.3.1 Attract private sector investments through incentives such as provision of space and concessions.
- 16.3.2 Develop jointly with partners bankable/viable investment proposals for private sector actors and investors.
- 16.3.3 Facilitate a workable framework allowing the private sector to directly link and invest recoverable soft loans for water and sanitation infrastructure development.
- 16.3.4 Facilitate the private sector to train local service providers in management operations of all adopted technologies.
- 16.3.5 Develop and transform the County and private water sector funds into water microfinance institutions with the intent of promoting borrowing and saving and mobilisation of capital in the water sector.
- 16.3.6 Regulate private sector associations in the water sector e.g. water vendors

CHAPTER 17: EMERGING AND CROSS CUTTING ISSUES

17.1 Sector Context

17.1.1 The Constitutional requirement

The County has fully embraced the principle of affirmative action in the water sector by ensuring provision of water for domestic, livestock, and irrigation based on geographical location, rural-urban, area of settlement (formal and / or informal), gender, age, and disabilities among others.

17.1.2 Gender Issues

Gender groups face different constraints, interests, opportunities, and challenges associated with water. This calls for gender responsive budgeting and interventions. The women of Makueni County make a significant contribution and are responsible for most of the agricultural and domestic work. They have limited access to safe drinking water and basic sanitation and spend long hours collecting water.

17.1.3 HIV/AIDS Issues

In Makueni County, access to water supply and sanitation facilities is particularly important for people living with HIV/AIDS and for the provision of home-based care to AIDS patients. Improved access increases the dignity of both patients and caregivers and reduces the burden of care felt when needing to fetch water from longer distances or when facilities breakdown.

Water is needed for bathing patients, washing bed linen and clothes, taking medicines, and preparation of safe formula for babies. It is needed to keep the house environment and latrines clean in order to reduce the risk of opportunistic infections such as diarrhea and skin diseases that commonly affect people with AIDS. Hygiene education is particularly important in order to encourage hygienic behavior and ensure safe storage and handling of water within the household.

HIV/AIDS not only affects the ability to pay for water and sanitation services but also the ability to participate and influence water supply decisions due to marginalization, discrimination, and stigmatization.

17.1.4 Disputes and Conflict Resolution.

Conflict and disputes have arisen in the past relating to management of water resources, sand harvesting and storage, and community and household water services. The county lacks elaborate dispute and conflict resolution mechanisms for addressing water sector conflicts. Empowering community groups: WRUAs, CBOs and FBOs—on conflict resolution issues through capacity building and awareness creation will reduce conflicts. Communities are not sensitized on alternative dispute resolution methods. In case of inter-county conflicts, the County Government will engage with the National Government to establish independent panels of experts.

17.1.5 Climate change:

In Makueni County, the ecosystem has been adversely affected by climate change and environmental degradation leading to a decline in quality and quantity of water. Extreme climatic events such as droughts and floods have become more frequent and intense leading to loss of lives, destruction of properties, and disruption of economic activities.

Destruction of water catchments has elevated the issue of water scarcity and decreased water levels in aquifers. Climate change impacts on water are manifested in other sectors like forestry, health, energy, agriculture, roads and education. Adaptation and mitigation programmes within the water sector have not been fully integrated and implemented as envisioned in the national climate change policy framework.

17.1.6 Youth

In Makueni County, most youth have left the rural areas for the urban centres. This has left the management of the water projects and conservation of environment to the aged population. Consequently, the areas are deprived of professional (i.e. marketing, ICT), modern technological skills and active work force to operate and maintain the water supply systems efficiently.

To avert the situation, the county should develop strategies to encourage youth to remain in the rural areas through social economic empowerment.

17.1.7 Children

Children suffer most, especially when they are required to fetch water from long distances for domestic use. Similarly, because of use of unclean water children in school are prone to waterborne diseases especially during period of water shortages.

17.1.8 People with Disability (PWDs)

People with disability especially in the rural areas under go difficulties to access water services. This causes further suffering and marginalization leading to isolation and extreme poverty. Water infrastructure planning should take into account the needs of special groups by supporting them with modern and appropriate water technology and capacity building for economic advancement.

17.2 Policy Goal and Objective

17.2.1 Goal

Mainstream emerging and crosscutting issues such as gender, climate change, conflicts, HIV/AIDs, youth, children and PWD to ensure that the sector framework is sensitive and responsive to issues threatening their rights to clean and safe water.

17.2.2 Objective

17.2.2.1 To mainstream all crosscutting issues in water sector planning, management, and operations to ensure inclusiveness for enhanced social economic development for all.

17.3 Measures

The County Government will:

- 17.3.1** In partnership with the relevant stakeholders mainstream climate change, gender, people with disability, HIV/AIDS awareness, youth and children issues in the sector opportunities, activities and programmes by undertaking assessment of levels of inequality to determine appropriate affirmation actions.
- 17.3.2** Develop a guiding principle and encourage alternative dispute resolution mechanisms for the water sector and empower community groups: WRUAS, CBOs and FBOs on the conflict resolution measures.
- 17.3.3** In collaboration with the relevant stakeholders establish climate change committee in all wards and mainstream climate change issues in all sectors for adaptation and mitigation.
- 17.3.4** Establish county level dispute resolution panels.

CHAPTER 18: IMPLEMENTATION FRAMEWORK

18.1 Context

To assist the department, this policy has an implementation Matrix to ensure faster service delivery. Lack of a water policy has been one of the major challenges in realizing the development goals and objectives of the County. Communication within the water sector has been inadequate, limiting participation and engagement of civil society, the private sector, and the public in general. This policy will guide the County in the planning, coordinating, financing, development, management and sustainability of water resources.

18.2 Partnership and linkages

Working relations across institutions, departments and partners have been weak. This policy will consolidate and strengthen future working relations with all stakeholders.

To track the progress of implementation and evaluation of related outcomes, the county will implement a Monitoring, Evaluation, Accountability and Learning (MEAL) system that will provide reliable data on progress, challenges, achievement of key performance indicators as well as lessons learnt. Performance contracting will be used as an effective tool through which targets, inputs, and the resultant outputs can be determined, evaluated and rewarded. The implementation of this policy will require adequate human, technological and financial resources to ensure effective and complete implementation.

18.3 Implementation Matrix Goal and Objective

18.3.1. Goal

The implementation of the matrix will ensure coordination and linkage for the effective and efficient delivery of water services and management of water resources in the County.

The Specific objective is:

To ensures smooth transition from policy development to implementation

18.4 Measures

The County Government will:-

18.4.1 Establish a Water Policy and Governance Unit to ensure that the activities, the responsible persons and the timelines are adhered.

18.4.2 The County will come up with interdepartmental linkages for policy implementation.

I.5 Implementation Matrix

WATER RESOURCES MANAGEMENT			
Policy measures	Actions	Coordinator	Timeline
Map and establish a water resource data base to guide water resource infrastructure planning and development	Hold a stakeholder forum and discuss the modalities.	ECM Water	2018-2019
	Develop a TOR for the mapping.	ECM Water	March 2019
	Conduct mapping by geo-referencing water resources and generate report and database	ECM Water	June 2019
	Validation meeting with stakeholders	ECM Water	June 2019
	Disseminate the report to the stakeholders for implementations.	ECM Water	July 2019
	Develop and implement a County water resource assessment and monitoring framework for surface and groundwater resources, and water quality.	ECM water	Two years
	Establish a water resources systems coordination framework among sector actors.	ECM water	Two years
	Develop and implement a County water resource assessment and monitoring framework for surface and groundwater resources, and water quality.	ECM water	Two years
	Establish a water resources systems coordination framework among sector actors.	ECM water	Two years
Ensure that water resources, riparian and catchment areas are well protected, rehabilitated, conserved and managed by enhance the capacity of relevant institutions	Hold sensitization meetings on riparian and catchment protection and at Ward level incorporating all the relevant stakeholders	ECM Water	Continuous
	Establish local structures for riparian and catchment protection - WRUAs	ECM Water	February 2019
	Establish Makueni water towers committee	ECM Water	November 2018
	Support development of Sub-Catchment Management Plans for WRUAs	ECM Water	April-June 2019
	Undertake pegging of the riparian areas along rivers, springs and dams	ECM Water	2019
	Tree growing, rehabilitation of degraded lands along the riparian and catchment areas	ECM Water	Continuous
	Enforce compliance of the relevant laws and regulations in protection of the riparian and catchment areas	ECM Water	Continuous

Strengthen capacity, research and training of water professionals to support sustainable development of water resources.	Training of the structures at the local level on their role and mandate - WRUA, Sub-County and Ward Sand Management Committees, CFAs	ECM Water	March 2019
	Establish stakeholder for and hold quarterly review meeting on compliance	ECM Water	Continuous
	Develop a curriculum addressing the existing gaps and train water professional	ECM Water	Continuous
	Develop Guidelines for Management of aquifer recharge	ECM Water	June 2019
	Establish a Makueni water training institute	ECM Water	Two years
	Develop land use and guidelines on watersheds/ water catchments management	ECM water	May 2019
	Implement the guidelines and enforce for compliance	ECM water	Continuous
Promote integration and adoption of innovative treatment and recycling technologies for sustainable water resource management	Classify water resources for purposes of developing Resource Quality Objectives (RQOs) for all water resources.	ECM water	July 2019
	Customize relevant standards and guidelines to Makueni Context	ECM water	June 2019
	Undertake Inter-agency coordination for monitoring of domestic and industrial effluent	ECM water	Continuous
	Strengthen compliance and enforcement of standards.	ECM water	Continuous
	Develop a framework classifying incentives for domestic and industrial effluent discharges	ECM water	One year
Encourage, engage and coordinate with neighbouring counties, regional institutions, private sector and communities to enhance management of shared water resources.	Develop and implement a County water resource assessment and monitoring framework for surface and groundwater resources, and water quality.	ECM water	Two years
	Establish a water resources systems coordination framework among sector actors.	ECM water	Two years
	Continued engagement with relevant counties and institutions through consultative and information sharing for a	ECM Water	Continuous
	Develop national legal and technical capacity on trans boundary water resources management, development and negotiation.	ECM Water	Continuous
	Undertake Ward level awareness and outreach campaigns on water resource management	ECM water	Continuous
	Develop financial mechanisms to incentivize the private sector to invest in water resources management	ECM Water	August 2019

Implement the polluter pays principle in collaboration with other relevant institutions.	Enforce laws and regulations	ECM Water	Continuous
	Develop and enforce guidelines on waste management		
	Support WRUAs to implement the Act at grass root level	ECM Water	Continuous
WATER HARVESTING AND STORAGE			
Policy measure	Actions	Coordinator	Timeline
Develop a county water harvesting and storage strategy to guide the integration of planning, budgeting and coordination of county ,communities and other actors development	Establish and operationalize an Authority or Agency to spearhead water harvesting and storage	ECM Water	Two years
Promote roof water harvesting and storage at homestead level, schools and business premises among other institutions through installation of at least two water storage tanks of 10,000 litres each and Promote participation and involvement of private sector.	Sensitize the relevant institutions on the requirement	ECM water	Continuous
	partnering with tank manufacturers, financial institutions, NGOs and other stakeholders	ECM Water	continuous
	Enforce compliance	ECM Water	Continuous
Promote flood control mechanisms by construction of sand-dams, gabions, storm water drains and recycling of stored storm water while ensuring compliance to regulations, guidelines, standards and certifications for water harvesting and storage.	Map areas prone to drought and flood and undertake harvesting and storage interventions	ECM Water	2019

Allocate sufficient funding to implement innovative approaches to contain cost escalations in water harvesting and storage infrastructure	Develop a financing framework to mobilize resources from National Governments, County Governments, Development partners and Private sector	ECM Water	June 2019
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URBAN WATER AND SEWAGE SERVICES

Policy measure	Actions	Coordinator	Timeline
Strengthen programs aimed at environmental Sanitation which would include activities related to cleaning of industries, factories, markets, trading facilities and their compounds	Planning for Water projects/ Programmes in the market and urban centres	ECM Water	1 year
	Providing budgetary allocation to the planned projects/ Programmes	ECM Water	3 years
	Implement and enforce the two 10,000 litres tanks policy	ECM Water	1 year
Increase investment in WASH facilities in industries, factories, markets and trading facilities to increase the impact of health and nutrition interventions in the county	Ensure that there a water structure in trading facilities	ECM Water	3 years
	Sensitizing industries, factories and traders on hygiene, water , environment and waste management standards	ECM Water	Continuous
Promote use of research, development and innovation in water resource management, harvesting and storage, water and sanitation services and establishing mechanisms and processes to enhance institutional network	Capacity building on research and development in the water sector	ECM Water	1 year
	Strengthening linkages between research, development and innovation with sector needs.	ECM Water	2 years
	Liaising with other stakeholders and research institutions on water research	ECM Water	1 year
	Bench-marking with best practices in the world		1 year

RURAL WATER AND SANITATION SERVICES

Policy measure	Actions	Coordinator	Timeline
EIAs should be done on all water development projects and nurture community water service providers to enhance capacity of service delivery and compliance to set standards.	Ensure all water development projects comply with EIA regulations Capacity build community water committees	ECM Water	Continuous
Ensure a county water board formally regulates the community water service providers for better governance.	Formation of county water board Ensure 30% skilled women in the committees & staff of CWSPs	ECM Water	one year
Facilitate private sector and NGOs involvement in the delivery of goods and services and ensure investment priorities are given to areas which are currently unnerved.	Map the underserved areas and develop action plan to improve service levels	ECM Water	2 years
Facilitating availability of technology choices and know-how for timely repair and maintenance of the schemes through standardization of equipment and promotion of private sector involvement,	Promote affordable adoption of appropriate technologies e.g. farm ponds	ECM Water	One year
	Promote & train local spare parts enterprises		
	Promote agroforestry and integrated farming systems	ECM Water	1 Year
	Promoting Synchronized farming	ECM Water	3 years
	Mapping regions where establishment of the fish ponds is viable	ECM Water	1 Year
	Providing support the fish farmers in production, preservation and marketing e.g. provision of fingerlings, liners, fishing gear	ECM Water	Continuous
	Promote value addition of priority agricultural value chains	ECM Water	Continuous
	Providing pasture seeds to farmers and supporting the harvesting and preservation and storage	ECM Water	Continuous
	Undertake land development programmes	ECM Water	

Reduce overreliance on rain fed agriculture by providing water for agriculture, Smart Agriculture -introducing conservation agriculture, planting drought tolerant crops, agro based industries/value addition, synchronized farming, establishment of artificial fishponds, pasture production and preservation	Designate and develop a framework to implement the buffer zones	ECM Water	Continuous
Reduce human wildlife conflict and gazetted forests by designating buffer zones promote the enforcement of riparian reserve by pegging and encourage protection by the community	Undertake programmes for pegging (km)of riparian zones	ECM Water	Continuous
	Sensitize communities on relevant environmental laws		
	Promote community programs on development of the pegged areas for river bank protection		
Increase donor liaison and public private partnerships for funding.	Fundraising through proposals	ECM Water	1 Year
Promote the enforcement of riparian reserve by pegging and encourage protection by the community	Holding stakeholder forums for networking and linkages	ECM Water	1 Year
Increase donor liaison and public private partnerships for funding.	Strengthening the donor liaison office	ECM Water	1 Year
Promote growing indigenous trees, community forest management associations and Implement water and environmental policies and regulations	Training and promoting establishment of tree and fruit nurseries (in case of agroforestry)	ECM Water	1 Year
	Periodic reviews of existing water policies and regulations	ECM Water	3 years

Promote growing indigenous trees, community forest management associations and Implement water and environmental policies and regulations	supporting the establishment of forest management association committees	ECM Water	I Year
	enforcing compliance of water policies and regulations	ECM Water	Continuous
Enforce policies to arrest environmental degradation	Capacity building enforcement officers	ECM Water	I Year
Enhance surveillance in waste water disposal points	Promote integrated environmental conservation programmes	ECM Water	Continuous
		ECM Water	
	Enforcing compliance of policies and regulation and Acts that govern sand harvesting, charcoal burning, logging and human encroachment on protected areas.	ECM Water	Continuous
	Enforce disposal of waste in designate sites	ECM Water	Continuous
Enforce policies to arrest environmental degradation	Monitoring waste disposal sites	ECM Water	Continuous
Ensure water resource mapping and master plan are in place	preparation of County water resource maps	ECM Water	Continuous
	preparation of County water master plan	ECM Water	I Year
Ensure compensation for land used for dam construction and resolve community conflicts on water resources	Conducting land valuation on identified water points	ECM Water	Yearly
	Conducting due diligence on ownership of the land	ECM Water	Yearly
Ensure compensation for land used for dam construction and resolve community conflicts on water resources	Making provisions in the budgets	ECM Water	Yearly
	Ensuring full compensation	ECM Water	I Year
Ensure integrated approach on empowerment to rural communities through programs that bring water related benefits.	Making provisions in the budget	ECM Water	Yearly
	Conducting civic education	ECM Water	Continuous
Ensure integrated approach on empowerment to rural communities through programs that bring water related benefits.	Strengthen the existing support programs	ECM Water	Continuous
	Liaise with solar companies to establish solar farms within the county and subsidies the solar equipment	ECM Water	I Year

Encourage and support the use and development of clean/ renewable energy (solar, biogas, and other alternative sources of energy) in rural areas. To ease overdependence on land resources of livelihoods for wood fuel and charcoal burning	Liaise with the National Government to roll out subsidized alternative sources of energy	ECM Water	1 Year
Encourage and support the use and development of clean/ renewable energy (solar, biogas, and other alternative sources of energy) in rural areas. To ease overdependence on land resources of livelihoods for wood fuel and charcoal burning.	Promote the installation and use of biogas systems	ECM Water	Continuous
	Capacity building the community on WASH Programmes	ECM Water	Continuous

POLICY ON WATER FOR AGRICULTURE

Policy measure	Actions	Coordinator	Timeline
Reduce overreliance on rain fed agriculture by providing water for agriculture, introducing conservation agriculture, planting drought tolerant crops, synchronized farming, establishment of artificial fishponds, pasture production and preservation	Providing water for agriculture	ECM Water	Continuous
	Introducing conservation agriculture	ECM Water	1 Year
	Encouraging Planting of drought tolerant crops.	ECM Water	1 Year
	Promoting Synchronized farming	ECM Water	3 years
	mapping regions where establishment of the fish ponds is viable	ECM Water	1 Year
	Providing support the fish farmers e.g. provision of fingerlings, liners, fishing gear	ECM Water	Continuous
	Establishing market linkages for fish and fish products	ECM Water	Continuous
	Providing pasture seeds to farmers and supporting the harvesting	ECM Water	Continuous
Reduce human wildlife conflict by designating buffer zones	Formation of Conflict Resolution Committees	ECM Water	Continuous
Promote the enforcement of riparian reserve by pegging	Have inter department committees on Riparian Lands	ECM Water	Continuous

Increase donor liaison and public private partnerships for funding.	Fundraising through proposals	ECM Water	1 Year
	Holding stakeholder forums for networking and linkages	ECM Water	1 Year
	Strengthening the donor liaison office	ECM Water	1 Year
Promote growing indigenous trees, community forest association management of forests and Implement water and environmental policies and regulations	Training and promoting establishment of tree nurseries	ECM Water	1 Year
	Periodic reviews of existing water policies and regulations	ECM Water	3 years
	Supporting the establishment of forest association committees	ECM Water	1 Year
	Enforcing compliance of water policies and regulations	ECM Water	Continuous
	capacity building enforcement officers	ECM Water	1 Year
	Training and promoting establishment of tree nurseries	ECM Water	1 Year
	Periodic reviews of existing water policies and regulations	ECM Water	3 years
Enforce policies to arrest environmental degradation	Enforcing compliance of policies and regulation and Acts that govern sand harvesting, charcoal burning, logging and human encroachment on protected areas.	ECM Water	Continuous
Enhance surveillance in waste water disposal points	Enforce disposal of waste in designate sites	ECM Water	Continuous
	Monitoring waste disposal sites	ECM Water	Continuous
Ensure water resource mapping and master plan are in place	Preparation of County water resource maps	ECM Water	Continuous
	Preparation of County water master plan	ECM Water	1 Year
Ensure compensation for land used for dam construction and resolve community conflicts on water resources	Conducting land valuation on identified water points	ECM Water	Yearly
	Conducting due diligence on ownership of the land	ECM Water	Yearly
	Making provisions in the budgets	ECM Water	Yearly
	Ensuring full compensation	ECM Water	1 Year
Ensure integrated approach on empowerment to rural communities through programs that bring water related benefits.	Making provisions in the budget	ECM Water	Yearly
	Conducting civic education	ECM Water	Continuous
	Strengthen the existing support programs	ECM Water	Continuous
Encourage and support the use and development of solar energy and other alternative sources of energy in rural areas. To ease overdependence on land resources of livelihoods for wood fuel and charcoal burning.	Liaise with solar companies to establish solar farms within the county and subsidies the solar equipment	ECM Water	1 Year
	Liaise with the National Government to roll out subsidized alternative sources of energy	ECM Water	1 Year
	Promote the installation and use of biogas systems	ECM Water	Continuous

WATER FOR INSTITUTIONS

Policy measures	Actions	Coordinator	Timeline
Increase investment in WASH facilities in public and private institutions through Integrate hygiene promotion activities within routine health and nutrition activities in schools and health facilities including School Led Total Sanitation (SLTS) approach and Community Led Total Sanitation (CLTS)	Ensure Installation of WASH facilities in all public , private institutions , homes and water structures	ECM Water	Continuous
	Conducting civic education on WASH	ECM Water	
	Link with other stakeholders in mobilizing resources for WASH Programmes	ECM Water	Continuous
	Incorporate WASH facilities in BQ for all County facilities construction	ECM Water	Continuous
	Set quality and standards of the WASH facilities	ECM Water	Continuous
	Enforce the relevant rule, policies and regulations in regard to construction of WASH facilities	ECM Water	Continuous
	Ensure Installation of WASH facilities in all public , private institutions , homes and water structures	ECM Water	Continuous
	Conducting civic education on WASH	ECM Water	
Invest in a database on water and sanitation hygiene in schools and other public and private institutions	Conducting hygiene promotion outreach Programmes	ECM Water	Continuous
	Mapping and Documenting public and private institutions with WASH facilities	ECM Water	Continuous
	Monitoring , evaluating and reporting on WASH facility status	ECM Water	Continuous
	Conducting hygiene promotion outreach Programmes	ECM Water	Continuous
Invest in a database on water and sanitation hygiene in schools and other public and private institutions	Supporting the management and restoration of WASH facilities including ODF(Open Defecation Free Area)	ECM Water	Continuous
Ensure that every public and private institution endeavour to harvest rainwater	implement and enforce the two 10,000 litres policy in public and private institutions, facilities and homes	ECM Water	Continuous
	Support the establishment of farm ponds, water pans in institutions and homestead	ECM Water	Continuous
Strengthen programs aimed at environmental Sanitation that would include activities related to cleaning of school and church compounds, public spaces etc.	Organising periodic cleaning programmes in private and public institutions	ECM Water	Continuous

Promote appropriate technology, clean energy and material for construction of water harvesting and storage structures	Promoting adoption of green energy in water sector	ECM Water	1 Year
Strengthen programs aimed at environmental Sanitation that would include activities related to cleaning of school and church compounds, public spaces etc.	Promoting of appropriate materials in construction of water facilities and storages	ECM Water	3 years
Promote appropriate technology, clean energy and material for construction of water harvesting and storage structures	Setting provisional budgets, procurement and installation of water harvesting facilities in county institutions	ECM Water	3 years

WATER FOR INDUSTRY AND TRADE

Measures	Actions	Coordinator	Timeline
Increase investment in WASH facilities in industries, factories, markets and trading facilities to increase the impact of health and nutrition interventions in the county.	Increase Budget lines to support creation of WASH facilities	ECM Water	1 year
	Increase support to create awareness through civic education	ECM Water	continuous
	Promoting and monitoring establishment of WASH facilities in industries and factories	ECM Water	1 year
Invest in a database on water and sanitation hygiene in industries, factories, markets and trading facilities	Mapping and Documenting of WASH facilities	ECM Water	1 year
	Monitoring , evaluating and reporting on WASH facility status	ECM Water	continuous
Invest in a database on water and sanitation hygiene in industries, factories, markets and trading facilities	Supporting the management and restoration of WASH facilities.	ECM Water	continuous
Ensure that every industry, factory, market, trading facility endeavours to harvest rain water.	Implement and enforce the two 10,000 litres water tanks policy	ECM Water	1 year
	Increase budget allocation for water harvesting Programmes	ECM Water	1 year

Connection of industries, factories, markets and trading facilities to proximal water sources	Planning for Water projects/ Programmes in the market and urban centres	ECM Water	1 year
	Providing budgetary allocation to the planned projects/ Programmes	ECM Water	3 years
Connection of industries, factories, markets and trading facilities to proximal water sources.	Ensure that there a water structure in trading facilities		3 years
Strengthen programs aimed at environmental	Sensitizing industries, factories and traders on hygiene, water , environment and waste management standards		Continuous
Sanitation which would include activities related to cleaning of industries, factories, markets, trading facilities and their compounds	Enforcing the respective governing policies, regulations and Acts	ECM Water	Continuous
Develop systems for factory waste disposal Promote personal hygiene including hand washing with soap, protection of food and water within Market centres.	Establishment of sewer systems	ECM Water	2 years
	Enforcement of relevant policies and Acts		Continuous
	Organize Sensitizing forums Ensuring provision of relevant facilities and adequate water access	ECM Water	Continuous
WATER SECTOR TRAINING AND RESEARCH			
Policy measures	Actions	Coordinator	Timeline
Promote use of research, development and innovation in water resource management, harvesting and storage, water and sanitation services	Capacity building on research and development in the water sector	ECM Water	1 year
	Strengthening linkages between research, development and innovation with sector needs.	ECM Water	2 years
	Liaising with other stakeholders and research institutions on water research	ECM Water	1 year
	Bench-marking with best practices	ECM Water	1 year
	Establishing linkages with other institutions	ECM Water	1 Year
	Capacity building on research and development in the water sector	ECM Water	1 year

Strengthening linkages between research, development and innovation with sector needs.	Promoting research financing and uptake of research outputs.	ECM Water	1 year
	Carry out needs assessment for the water sector	ECM Water	1 Year
	Linking with universities and other research institutions in research and innovations	ECM Water	1 year
Establish a mechanism and processes to enhance institutional networks to build synergies for research, development and innovation	Integrating of water sector training.	ECM Water	1 year
	Liaising with training institutions in to implement specific training programmes	ECM Water	3 year
Establish collaboration with the South Eastern Kenya University, Kenya Water Institute (KEWI) and other relevant training institutions to make them more responsive to the needs of the water sector in the County.	Liaising with KEWI to set a satellite campus in Makueni County	ECM Water	3 year
	Encouraging Makueni youth to take up water courses in KEWI	ECM Water	3 year
	Collaboration with SEKU on the implementation of specific training programmes	ECM Water	3 year
Support and provide incentives and regulatory mechanisms to enhance coordination between the private sector and institutions undertaking research on water, development and technological innovation.	Create a database of private sector organizations to be involved		
	Develop and sign MoUs with the potential private sector partners	ECM Water	3 years

RESOURCE MOBILIZATION AND FINANCING

Policy measures	Actions	Coordinator	Timeline
Develop and implement a comprehensive investment plan for the water sector by integrating the county and other stakeholders' plans including tapping indigenous technical knowledge	Integrating water investment plans and budget with the other County plans	ECM Water	Continuous
	Stakeholder involvement in water planning and financing	ECM Water	Continuous
	Preparing proposals for funding	ECM Water	Continuous
	Establishing the water needs in the county	ECM Water	1 year
Ensure coordination of investment, needs assessment, planning and implementation to include all water sub-sectors.	Resource mobilization and financing of the investment plans	ECM Water	2 years

Develop a framework to enhance best practices in the financial management of water companies and community water service providers to improve their commercial viability.	Implementation of the water plans	ECM Water	3 years
	Monitoring and review of the implementation	ECM Water	Continuous
	Capacity building of financial management to the water companies and community water service providers	ECM Water	Continuous
	Sensitizing the community water service providers on existing policies, regulations, Acts and standards	ECM Water	Continuous
Develop a framework to enhance best practices in the financial management of water companies and community water service providers to improve their commercial viability.	Developing an asset Management software for all water companies and community water service providers	ECM Water	1 year
Develop and facilitate an incentive framework to promote public private partnerships investments in projects where commercial viability is low yet they are priority areas with respect to fulfilment of pertinent human rights	Training staff in water department on M&E	ECM Water	Continuous

INSTITUTIONAL FRAMEWORK IN WATER SECTOR MANAGEMENT

Policy measure	Action	Coordinator	Timeline
Sensitize the institutions and communities on the rules and regulations governing the institutions and enforce for compliance.	Convene Ward level sensitization meetings/Barazas on the relevant legislations	ECM Water	Continuous
Harmonize and integrate institutional framework within sectorial and cross sectorial areas to enhance collaboration, coordination and built synergy for sustainable water resources management, harvesting and storage, and provision of water and sanitation services.	Establish a collaboration and coordination Framework	ECM Water	July 2019

<p>Strengthen linkages of water sector institutions with other sectors of the economy to build synergy. This will include identification of sectorial and cross-sectorial areas within national and county governments, among public private partners, community water service providers and consumers. This will ensure that best practices within the water sector create sustainable water resource management system and structures.</p>	<p>Develop stakeholders framework for linkages and synergies</p> <p>Implement and review regularly</p>	ECM Water	September 2019
<p>Build capacity in leadership and governance, financial management, role and mandate of water institutions to strengthen service delivery. This will involve human resource development, technical support, infrastructure development and financial support.</p>	Continued financial, human and technical support	ECM Water	Continuous
<p>Put in place a mechanism for monitoring and evaluation of the institutions including regular and appropriate reporting and financial audits among others.</p>	<p>Implement requirements for Board composition as per Mwongozo guidelines</p> <p>Ensure a comprehensive M&E system is in place</p>	ECM Water	Continuous
<p>Ensure that WRUAs in collaboration with other stakeholders are supported for improved efficiency and effectiveness in water resources management</p>	<p>Review of corporate governance principles and develop capacity on implementation</p>	ECM Water	May 2019

	Sensitization of water institutions on national values and principles of governance	ECM Water	Continuous
Put in place a mechanism for monitoring and evaluation of the institutions including regular and appropriate reporting and financial audits among others.	Develop and implement monitoring and evaluation framework	ECM Water	April 2019
DISASTER MANAGEMENT AND EMERGENCIES			
Policy measures	Actions	Coordinator	Timeline
Develop and enforce disaster response and management guidelines	Convene stakeholder consultative forum to develop the guidelines	ECM Water	June 2019
	Implementation of the guidelines	ECM Water	Continuous
Ensure coordination mechanisms for the government and other private actors are in place to respond to emerging disasters effectively.	Initiate a coordination mechanism for the relevant stakeholders in disaster management	ECM Water	April 2019
Ensure a financial reserve fund to manage any emerging disasters	Establish a disaster management reserve fund	ECM Water	June 2019
Promote and ensure availability drought resistant crops through the establishment seed-banks to improve on food security.	Establish community level drought tolerant seed-banks	ECM Water	June 2019
	Capacity strengthening of Farmer organizations and production groups through trainings, exposures, field days	ECM Water	Continuous
Establish grass root disaster management structures for easy coordination at the community level.	Facilitate formation of Ward level disaster management committees	ECM Water	October 2019
Promote capacity building for communities and other players on disaster preparedness and management to develop and maintain community preparedness plans.	Undertake Capacity development programs for the communities to develop the relevant capacity (Trainings, Exposure visits)	ECM Water	September 2019
	Develop and continuously update Ward Level Disaster Management plans	ECM Water	Continuous

PRIVATE SECTOR PARTICIPATION

Policy measures	Actions	Coordinator	Timeline
Attract private sector investments through incentives such as provision of space and concessions.	Map private sector actors in Water sector Identify Private sector requirements Develop engagement framework	ECM Water	One year
Develop jointly with partner's bankable/ viable investment proposal for private sector actors.	Develop bankable proposals for investments	ECM Water	One year
Facilitate a workable framework allowing private sector to directly link and invest recoverable soft loans for water and sanitation infrastructure	Undertake an assessment of private sector actors needs and capacity gaps and build capacity for improved performance Develop a framework for private sector investments in water and sanitation	ECM Water	One year
Facilitate the private sector to train local service providers in management operations of all adopted technologies.	Develop a data base of all technologies supplies and engage them in capacity building of local personnel	ECM Water	One year
Develop and transform the County and private water sector funds into water microfinance institutions with the intent of promoting borrowing and saving and mobilisation of capital in the water sector.	Market viable proposals to financial institutions	ECM Water	one years

CROSS CUTTING ISSUES

Policy measures	Actions	Coordinator	Timeline
In partnership with the relevant stakeholders, mainstream climate change, gender, people with disability, youth and children issues in the sector opportunities, activities and programmes	Assess levels of inequality to determine suitable affirmation actions. Mainstream all cross cutting issues in the planning & budgeting process	ECM Water	One year

Develop a guiding principle and encourage alternative dispute resolution mechanisms for water sector and empower community groups; WRUAS, CBOs and FBOs on the conflict resolution measures.	Appoint mediators Capacity building and awareness creation	ECM Water	One year
Establishing climate change units in all water sector institutions and provide guidance on how they will provide coordination of the mainstreaming of climate change in all the sectors,	Create climate change unit in every sector Assign manager for action plan in every sector	ECM Water	One year
Mainstream awareness of HIV/AIDS in the water sector planning and development in order to reduce susceptibility to HIV infection, and ensure services provided adequately address the needs of people living with HIV/AIDS.	Audit HIV/AIDS interventions updates Organize HIV/ AIDS awareness forums	ECM Water	One year
Encourage the youth to participate water sector decision and use water for small scale enterprises including accessing water sector contracts.	Appoint in decision making positions Build capacity for water & sanitation based enterprises	ECM Water	One year
IMPLEMENTATION FRAMEWORK			
Policy Measures	Actions	Coordinator	Timeline
Design, develop and implement a program of induction, on the water policy at count level	Organize Induction workshops	ECM Water	One year

Provide a comprehensive stakeholder engagement and public participation strategy with adequate human, technical and financial resources for implementation of this Policy.	Establish water sector Stakeholder forums Allocate adequate human & financial resources to implement the policy	ECM Water	One year
Establish institutional M&E unit within the water Department to develop, and have for oversight on an implementation action plan for this policy.	Establish M&E unit in the Departments	ECM Water	One years
Establish a water sector stakeholder engagement and public participation Forum	Organize quarterly and annual stakeholder forums	ECM Water	One year
Put in place mechanisms to utilize performance contracts as tools for review and evaluation of inputs and results under this Policy.	Sensitize staff on key actions for implementation	ECM Water	One year

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