COUNTY GOVERNMENT OF MACHAKOS

TASKFORCE REPORT

ON WATER SECTOR REFORMS

APRIL 2024

WATER SECTOR REFORMS TASKFORCE

LETTER OF TRANSMITTAL

30th April, 2024

H.E. HON. WAVINYA NDETI, EGH

THE GOVERNOR,

COUNTY GOVERNMENT OF MACHAKOS

MACHAKOS

Your Excellency,

As part of your interventions geared towards improving governance and service delivery in the water sector, you appointed the Machakos Water Sector Reforms Taskforce vide Gazette Notice No.9779 dated 28th July, 2023. The Taskforce mandate was to review and restructure the six (6) public water companies, draft a Machakos County Water and Sanitation Bill and develop a Water and Sanitation Masterplan for Machakos County.

The objective of the proposed reforms is to address the challenges and constraints faced by the water and sanitation sector including; service delivery, water utilization, scarcity and conservation. The reforms are aimed at enhancing and ensuring sustainable water and sanitation management practices, improving water provision efficiency and promoting equitable access to water and sanitation services. The Taskforce undertook its assignment diligently and after extensive review, research, stakeholder engagement and public participation developed this report.

In this report, you will find a comprehensive situational analysis of water and sanitation service management in the county, taskforce study findings, recommendations, proposed implementation matrix and M&E Framework.

It is now our pleasure and honor to submit the report. We take this opportunity to thank you for the honor and trust that you bestowed upon us, and also express our continued loyalty and highest esteem to the people and the County Government of Machakos.

Yours Sincerely,

#	Name	Position	Signature
1	**Hon.(Eng.) Francis Maliti**	**Chairman**	
2	**Hon. Paul Museku**	**Member**	
3	**Hon. Benson Mbai**	**Member**	
4	**Prof. Charles Kaloki**	**Member**	
5	**Dr. Shadrack Muya**	**Member**	
6	**Eric Wamiti**	**Member**	
7	**Rita Kaloki**	**Member**	
8	**Ms. Tabitha Ngutu**	**Member**	
9	**Ms. Maureen Bosibori**	**Member**	
10	**Abdullahi Y. Guliye (CPA)**	**Co-Opted Member**	
11	**Ms. Teresia Wavinya**	**Co-Opted Member**	
12	**Ms. Juliet Nthambi**	**Co-Opted Member**	



Photo1: Taskforce Members, Source WSSRT, 2024



Photo 2; Workshop Group Photo, Source WSSRT, 2024



Photo 3: Secretariat Members, Source WSSRT, 2024

SECRETARIAT MEMBERS TO THE TASKFORCE

#	Name	Designation
1	Rose Ngina Kimeu	Assistant Director
2	Justus Maithya Mutua	Chief ICT Officer
3	Joshua Kilonzi Musyoka	Research Officer

ACKNOWLEDGEMENT

The taskforce acknowledges the immense support received during the study and formulation of this report from the Office of the Governor, Office of the county Secretary, Departments of Water and Finance for facilitating logistics for the taskforce, the Department of Public Participation, Citizen Engagement and Customer Service for support in public engagement and County Assembly of Machakos Committee on Water and Irrigation for their engagement and valuable input.

Special acknowledgement goes to the various stakeholders in the water sector especially WASREB and TAWWDA for their support and guidance during this exercise. Our appreciation also goes to individual members of public, opinion and sector leaders who actively participated in the taskforce public engagements.

TERMS OF REFERENCE

The taskforce was appointed and gazetted vide the Kenya Gazette Notice NO. 9779, dated 28th July, 2023 with Terms of Reference as follows;

a) to review and restructure all the six public water service providers (WSPs) in the County.
b) to identify and document the current state of the water service providers including governance structures, commercial viability, operational challenges, risk management strategies and compliance with relevant policy, legal and regulatory provisions.
c) to develop a comprehensive roadmap for the review and restructuring of the Water and sanitation companies incorporating timelines, responsibilities and deliverables.
d) to identify specific services or functions to be focused on during the restructuring, such as water supply, sanitation management and infrastructure development.
e) to identify and address potential risks, challenges, or obstacles that may arise during the restructuring process.
f) to engage with relevant stakeholders, including government agencies, regulatory bodies, water service providers, consumer groups and industry experts.
g) to coordinate and facilitate regular meetings, workshops and consultations with stakeholders including public participation to gather input and ensure effective communication.
h) to establish working groups or subcommittees to address specific aspects of the restructuring process, such as legal and regulatory, human resource, financial and operational matters.
i) to assess and map out all the current assets and liabilities of the water service providers.

j) to supervise the Transfer of all the assets from TAWWDA to the County Government of Machakos.

k) to continuously monitor and evaluate the implementation of key activities.

l) to draft the Machakos County Water and Sanitation Bill.

m) to develop Machakos County Water and Sanitation Masterplan; and

n) to recommend strategies to ensure sustainable water and sanitation management within the County.

i. EXECUTIVE SUMMARY

Machakos County, which is largely arid, lies within the Tana and Athi Rivers drainage basins. These basins form the main water sources for the County. Other County water sources include earth dams, sand dams/ weirs, water pans, boreholes, springs and seasonal rivers. Despite the availability of these water resources, distribution to actual and potential users still remains a challenge. This, compounded with low sanitation coverage of about 20% has meant that the county has not met its optimal production over the years.

At the core of efficient and effective water and sanitation management, is the efficacy of the public WSPs. Unfortunately, the existing public WSPs have performed dismally and are commercially unviable. Upon review of financial audit reports of the six (6) WSPs in Machakos County, the Senate Committee on County Public Investments and Special Funds directed that these WSPs be restructured in order to make them commercially viable. It is against this background that H.E the Governor appointed and gazetted a taskforce through gazette notice no. 9779 dated 28th July, 2023 to study and recommend reforms in the county water sector. The taskforce terms of reference included inter alia; restructuring of WSPs, developing the County Water and sanitation Bill and development of a Water and Sanitation Masterplan.

The Taskforce was launched by the Governor on the 10th August, 2023 and commenced its work on the 14th August 2023. The taskforce term was for a period of six (6) months but was extended for a further period of three (3) months. The taskforce used an evidence-based approach in collection and analysis of data to achieve its set objectives in line with its terms of reference. A stakeholder engagement plan and tools for data collection were developed based on target audiences. The exercise involved reviewing existing data on water resources, status of the six public WSPs,

Verification of water assets and infrastructure, and assessment of water and sanitation service delivery.

The taskforce used different methods to collect information from both primary and secondary sources.

In addition, the Taskforce had a series of in-depth interviews and group discussions where appropriate with selected key informants and stakeholders. These included the county department of Water, Irrigation Sanitation Environment and Climate Change, WSPs, County Assembly Committee on water and sanitation, WASREB, TAWWDA, KITWASCO, AWWDA among others. Prior to public engagement, a public notice for participation and request for memoranda was published in the print media. The taskforce conducted public hearings in the various sub counties where it received representations, memoranda and petitions from the public. Further, the taskforce undertook field visits to collect data. The data was then analyzed and synthesized to deduce findings and recommendations.

Some of the key findings of the taskforce are summarized as follows:

1) All the WSPs are commercially unviable.
2) There was corruption and unethical practices in the WSPs.
3) Some of the CEOs are unqualified while others are serving beyond their term limit, against the regulators guideline.
4) All the WSPs have unexplained and unsustainable NRW exceeding the regulators recommended maximum level of 25%.
5) All the WSPs have poor service provision and technology adoption as evidenced by the regulators report and KENAO audit reports.
6) Only MAVWASCO and Municipal Council of Machakos water and sewerage Companies have operating license from the regulator (WASREB).
7) All the WSPs have huge outstanding debts and pending bills which pose financial challenges.
8) Water allocation and distribution conflicts are rampant
9) Most of the WSPs have old and dilapidated water and sanitation infrastructure.

10) All the WSPs reported at least one stalled project in their area of coverage.
11) Encroachment into land allocated for water resources and infrastructure is widespread.

The key recommendations of the taskforce are:

1) Cluster the WSPs from the current six (6) into one (1) Water and Sanitation Company, with nine (9) branches based on the sub counties and adopt the name of **Machakos County Water and Sanitation Company.**
2) Enact a County Water and Sanitation Bill in line with Water Act 2016.
3) Shift from free water policy to a cost sharing model based on regulator tariffs.
4) Transfer management of all county water boreholes and dams with treatment plants from the water department to the new WSP.
5) Develop a County water and Sanitation investment plan to support the proposed WSP.
6) Resurvey and title all land allocated for water resources.
7) The County Government to pursue implementation of the Second Masinga Dam intake in order to resolve the existing conflict between KITWASCO and Masinga residents. The new line which will serve Masinga to be operated by the proposed WSP.
8) County government to facilitate **desilting** of the **Yatta Canal** and **Muuoni Earth** dam in Yatta and Kathiani Sub Counties respectively.
9) County Government to facilitate the completion of a County Water and Sanitation Master plan

ii. LIST OF ACRONYMS

AGM	:	Annual General Meeting
AWWDA	:	Athi Water Works Development
BoD	:	Board of Directors
CBO	:	Community Based Organization
CEO	:	Chief Executive Officer
CMT	:	Core Management Team
CoK	:	Constitution of Kenya (2010)
CS	:	Cabinet Secretary
CSR	:	Corporate Social Responsibility
EMCA	:	Environmental Management and Coordination Act
FGD	:	Focus Group Discussion
ICT	:	Information and Communication Technology
KEBS	:	Kenya Bureau of Standards
KITWASCO	:	Kitui Water and Sanitation Company
KPI	:	Key Performance Indicator
LN	:	Legal Notice
NGO	:	Non-Governmental Organization
NLC	:	National Land Commission
NRW	:	Non-Revenue Water
O&M	:	Operations and Maintenance
PFMA	:	Public Finance Management Act, 2012
PIE	:	Personal Interest Exploration
SDG	:	Sustainable Development Goals
TAWWDA	:	Tana and Athi Rivers Water Works Development Agency
TNA	:	Training Needs Assessment
TOR	:	Terms of Reference
WARIS	:	Water Regulation Information System

WASPA	:	Water Service Providers' Association
WASREB	:	Water Services Regulatory Board
WHSA	:	Water Harvesting and Storage Authority
WRA	:	Water Resource Authority
WSB	:	Water Services Board
WSP	:	Water Services Provider
WSSRT	:	Water and Sanitation Sector Reforms Taskforce
WSTF	:	Water Sector Trust Fund
WT	:	Water Tribunal
WWDA	:	Water Works Development Agency

iii. DEFINITION OF KEY TERMS

Accountability	Refers to taking or being assigned responsibility for something that you have done or something you are supposed to do
Articles of Association	The document that contains the information about the rules and regulations of the company
Benchmarking	A process of measuring or evaluating oneself by comparison with a standard Best Practice Commercial or professional procedure that are accepted or prescribed as being correct or most effective
Board Charter	The policy document that defines the respective roles, responsibilities and authorities of the Board of Directors (both individually and collectively) and management in setting the direction, the management and the control of the organization
Board of Directors	A group of people who jointly supervise the activities of an organization as a board
Chief Executive Officer	The highest-ranking person in a company or other institution, ultimately responsible for taking managerial decisions
Code of Ethics	Refer to the guide of principles designed to help professionals conduct business ethically, honestly and with integrity
Committee of the Board	The members of the Board of Directors who are mandated to carry out specified functions, programs, or projects assigned by the Board

Company Limited by Guarantee

It is a company structure that does not have any shares or shareholders (like the more common limited by shares structure) but is owned by guarantors who agree to pay a set amount of money towards company's debts.

Company Limited by Shares

A company limited by shares is one in which the liability of its members is limited by the company's articles to any amount unpaid on the shares held by its members

Core Values The guiding rules or fundamental beliefs of the organization

Corporate Governance

It is the set of rules, processes or laws by which businesses are operated, regulated or controlled. The term encompasses the internal and external factors that affect the interests of a company's stakeholders, including shareholders, customers, suppliers, government regulators and management

Corporate Social Responsibility

The management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders

Customer Service Charter

It is a written policy that communicates an organization's commitment to doing business with others. When writing a Service Charter, one wants to define the purpose, scope and standards of the organization's commitment to customer service for the employees and customers to know what to expect

Director	The person from a group of managers who leads or supervises a particular area of a company
Internal Audit	This is an independent, objective assurance and consulting activity designed to add value to improve an organization's operations
Key Performance Indicators (KPIs)	This is a measurable value that demonstrates how effectively a company is achieving key business objectives
Mandate	This refers to the authority to carry out a policy, instruction or orders in the company
Memorandum of Association	It is a legal document prepared in the formation and registration process of a limited liability company to define its relationship with shareholders
Mission	The statement that defines a company's business, its objectives and its approach to reach those objectives.
Non-Executive Director	The director of a company who does not engage in the day-today management of the organization but is involved in policy making and planning exercises
Non-Revenue Water	Non-revenue water is water that has been produced and is 'lost' before it reaches the customer. Losses can be real losses or apparent losses
Quorum	The number of members of a body that when duly assembled is legally competent to transact business
Risk Audit	This is the examination and documentation of the effectiveness of risk responses in dealing with identified risk and their root causes, as well as, the effectiveness of the risk management process

Risk Management	The process of identifying, assessing and controlling threats to an organization's capital and earnings
Shareholder	An owner of shares in a company
Stakeholder	A stakeholder is any person, organization, social group, or society at large that has a stake in the business
Strategic Objectives	The statements that indicate what is critical or important in the organizational strategy
Trusteeship	An appointed person or institution that manages assets for the benefit of someone else
Vision	The statement that describes the desired future position of the company

iv. GUIDING LAWS AND STATUTES

Agriculture Food and Fisheries Act 2013

Climate Change Act 2016.

Constitution of Kenya 2010.

County Government Act 2012.

Energy Act 2006.

Environmental Management and Coordination Act.

Land Act 2012.

Machakos County Sand Harvesting Act 2014

National Land Commission Act 2012.

Public Finance Management Act 2015.

Public Procurement and Assets Disposal Act 2015.

Public Health Act,

Survey Act Cap, 295.

Water Act 2016.

Water Regulations 2021.

WASREB Guidelines.

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CHAPTER ONE: INTRODUCTION

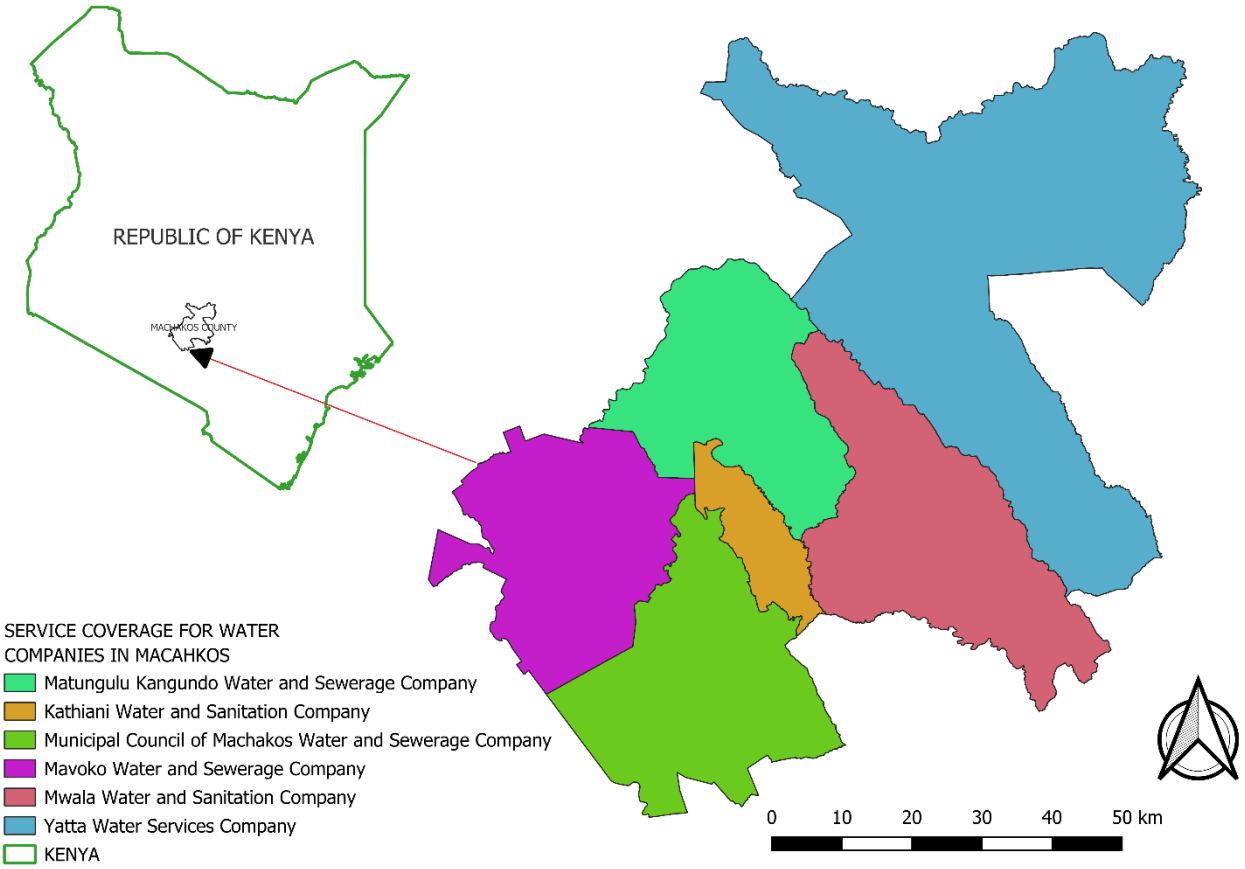
1.0 Overview

Water is a finite resource with a per capita national availability of 452 cubic meters (Republic of Kenya, 2021). Against a backdrop of increasing scarcity due to intensification of human economic activities, the importance of accessible and reliable water services cannot be overstated in ensuring the well-being and development of any community. The Constitution of Kenya, 2010 grants every Kenyan a right to clean and safe water in adequate quantities. Water Service provision is a devolved function as provided in part 2 of the fourth schedule (COK, 2010). Moreover, County Governments are mandated by legislation to implement strategies to ensure the provision of water services to rural regions deemed economically unfeasible. Like most parts of the country, Machakos County faces serious challenges in the water sector including low availability and poor access to safe drinking water and inadequate sanitation infrastructure and services. The present Public Water Service Providers have failed to meet the demand for water and sanitation services within their areas of supply.

Studies and reports by regulator and oversight bodies have revealed that these WSPs continue to be commercially unviable and therefore the need to undertake reforms in the sector.

The County Government of Machakos recognizes water as a key driver towards the achievement of the Governor's three (3) pillar manifesto on Food security, Social – Economic Empowerment and Infrastructure development (*See Ref: Machakos County Government (2022) Hon. Wavinya Ndeti Manifesto 2022-2027*). The County Government has therefore embarked on water sector reforms in an effort towards meeting Sustainable Development Goal (SDG) number 6 whose objective is to ensure availability and sustainable management of water and sanitation for all. This goal not only aims for sustainable water management across the globe but also underpins other sustainable development goals for example, agriculture, climate change, food security, health, among others.

This report presents the findings and recommendations of the task force on Machakos County Water Sector Reforms and provides a detailed account and analysis of the key issues, proposed interventions, and policy recommendations that emerged from the taskforce's comprehensive review. Moreover, effective and efficient service delivery in the water sector would be a big stride towards integrated water resource management and in the long-term would spur sustainable development in Machakos County.



Map 1: The location of the six Machakos County Water Service Providers.

Source: MWSSRT, 2024

1.1 Background

Machakos County has six (6) public WSPs covering urban and rural areas.

The WASREB Impact Report 2021/2022 revealed that the WSPs in Machakos County only covered 28% of the county's population. At the core of efficient and effective water and sanitation management, is the efficacy of the public WSPs. Unfortunately, the existing public WSPs have performed dismally and are commercially unviable. Upon review of financial audit reports of the six (6) WSPs in Machakos county, the Senate Committee on County Public Investments and Special Funds directed that these WSPs be restructured in order to make them commercially viable. It is against this background that H.E the Governor appointed and gazetted a taskforce through gazette notice no. 9779 dated 28th July, 2023 to study and recommend reforms in the county water sector. Recognizing the crucial role of water services in the livelihoods of the residents, the Taskforce was mandated to comprehensively study and recommend reforms in the water and sanitation sector pursuant to article 43 of the Constitution of Kenya, 2010 and section 30 (2) (l) as read together with section 31 of the County Governments Act, 2012.

The terms of reference of the taskforce was to undertake a comprehensive review and a feasibility study of all the six (6) public water service providers, assess, develop and implement strategies to improve water management; with a vision to ensure **sustainable water supply and sanitation services within the county**. Further, the Taskforce was mandated to establish a legal framework for governance of the water sector, develop a Water Masterplan and oversee the restructuring and reorganization of the six water service providers.

1.2 Membership of the Taskforce (*See Appendix 1 Gazette Notice No.9779*)

The Governor appointed a taskforce comprising ten (10) experts drawn from various sectors and professions. The taskforce co-opted three additional members, who were identified based on their individual and institutional expertise. The secretariat included joint secretaries and technical officers from the county water department.

1.3 Methodology

1.3.1 Inception of taskforce operations

In a meeting held on 15th August, 2023 the taskforce established guiding principles, scope of work, timelines, venues and meeting dates. The Taskforce developed a work plan based on the scope of work and used an evidence-based approach to achieve the set objectives. A communication strategy was developed for effective coordination between the taskforce and relevant stakeholders, institutions and departments.

1.3.2 Technical Sub-committees

The taskforce clustered the terms of reference into four thematic areas and assigned four (4) technical subcommittees as listed below;

1) WSPs Restructuring Committee,
2) Asset Verification and mapping Committee,
3) Water and Sanitation Bill Committee
4) Water Masterplan Committee

1.3.3 Ethical Considerations

Conflict of interest

The chairman of the taskforce advised each member to disclose all information regarding any possible personal or professional conflicts of interest in regard to the scope of work.

Confidentiality

The taskforce developed a protocol for storage of data, disclosure and reporting mechanisms in line with the privacy and data protection policy. The team further established an understanding about what type of information is appropriate for open sharing during discussions with relevant stakeholders and information exchanges across institutions and public forums.

1.3.4 Data Collection and Analysis

The taskforce developed a stakeholder engagement plan and tools for data collection based on the targeted groups. The exercise involved reviewing existing data on water resources, status of the six public WSPs, Verification of water assets and infrastructure, and assessment of water and sanitation service delivery. The stakeholder engagement involved interviews with the WSP core management team and staff, conducting extensive public participation to solicit input from the public with the support of the County Citizen Engagement Department and meetings with

representatives of relevant agencies of national government including WASREB and TAWWDA. Prior to public engagement, a public notice for participation and request for memoranda was published in the print media.

The taskforce also engaged KITWASCO to understand the historical challenges in Masinga Sub-County water service provision.

Data analysis included a systematic review of the legal and institutional framework, current situation of the county water resources, and evidence-based viability assessment of the WSPs, quantitative and qualitative analysis of water and sanitation demands across sub-counties, revenue generation and service provision modelling of the proposed WSP.

1.3.5 Outcomes

Having determined the adequacy of the evidence, the analysis informed the taskforce findings, recommendations and conclusions. Extrapolation was used to make inferences across the analytic framework to complete a chain of evidence connecting the intervention with the expected benefits of improved water and sanitation service delivery and overall benefits.

A Water and Sanitation Bill was prepared for enactment by the County Assembly. The proposed interventions were also coherent with the development of the County Water and Sanitation Bill which aligned with the Water Act 2016.

1.4 Challenges

The taskforce encountered various challenges including; budgetary constraints, logistics, bureaucracy, information access, time constraints, transport facilitation and stakeholder inclination. These challenges impeded the timely development and delivery of this report.

CHAPTER TWO: METHODOLOGY

2.0 Introduction

The methodology adopted by the taskforce for assessment and evaluation of the water sector in Machakos County involved a multi-dimensional approach to gather both quantitative and qualitative data, ensuring a comprehensive understanding of the water sector status within Machakos County.

2.1. Data Collection Methods:

The taskforce utilized both primary and secondary sources of data.

2.1.1 Primary sources

Surveys:

The taskforce undertook surveys to collect quantitative data from all six water companies, WASREB and TAWWDA, which focused on the companies' technical, commercial, financial, governance and human resources functions.

Interviews:

Face to face interviews were conducted with management, employees and other stakeholders of the water companies. These interviews were aimed at gathering qualitative insights into their experiences, opinions, and suggestions regarding the operations of these WSPs.

Observations:

Taskforce members undertook assessment tours of all six water companies, inspected infrastructure, observed daily operations, workflows, and interacted with employees. This hands-on approach allowed the taskforce to gain a firsthand understanding of the dynamics within these companies, relationship with their customers and stakeholders.

Focus Groups:

The taskforce organized focus group sessions with diverse participants and stakeholders to explore specific issues in service delivery. These sessions were

instrumental in gathering detailed qualitative information, particularly on the free water policy and company structure, size, and area of coverage.

Public Participation:

The taskforce conducted extensive public participation as a fundamental constitutional principle (Article 118 CoK, 2010) which enabled information sharing, dialogue, debate and feedback from the public.

2.1.2 Secondary Sources

Document Analysis:

Existing company documents, including registration status (**CR12**), management reports, senate reports, company policies and other sources were reviewed. This document analysis aimed at understanding functional history, organizational structure, and current operational status of the water companies.

2.2 Engagement with Relevant Institutions

In addition to assessing the water companies, the taskforce engaged other institutions critical to water sector governance in Machakos County. This included engagement with TAWWDA and KITWASCO at their respective offices in Kitui County and presented reports to Water Services Regulatory Board in Nairobi.

The taskforce jointly with KITWASCO also inspected the Masinga Dam intake and Water treatment plant, Yatta Canal and its intake on Thika River, and the treatment and storage plants at Matuu.

Overall, the taskforce obtained and analyzed detailed information on the public water companies in Machakos County and their governance structures.



Photo 4: Taskforce Engagement with WASREB Management Team.

Source: MWSSRT, 2024





Photo 5: Taskforce Engagement with County Assembly.

Source: MWSSRT, 2024

CHAPTER THREE: SITUATIONAL ANALYSIS

3.1 Introduction

The constitution of Kenya 2010 mandates the National Government to develop National Public Water and Sewerage works and Water Resources management and Regulation of water services. Further the constitution mandates county governments to provide water services, sanitation management, catchment protection and county public water works (**COK, 2010**). Upon the alignment of the Water Act, 2016 to the Constitution of Kenya, 2010, both National and County Governments have implemented various reforms for the development and management of water resources.

The National policy on sewerage and non-sewer sanitation services prioritizes progressive and equitable realization of these services using technologies that are appropriate for urban and rural areas and household needs including creating effective and efficient human, institutional infrastructure and management capacities as well as putting in place the required standards to promote consumer protection to be applied by all cadres of sanitation providers.

Water is a social and economic good which is critical for sustainable development of the County. In the provision of water services, the water Act 2016 provided for formation of the Public Water Service Providers (**WSPs**) as per Section 77 of the Act. Further, the responsibilities of the WSPs are provided in Section 78 (1) as provision of water services within areas specified in the license and development of County assets for water service provision. Section 74 provides for licensing of WSPs while section 75 (4) requires the Water Services Regulatory Board (WASREB) to develop and publish guidelines to regulate the conduct of licensed Water Services Providers.

In order to achieve its objectives, the taskforce undertook a situational analysis to understand the service areas, operations, human resources, compliance, financial

management, proposed projects, technology adoption, environmental and social safeguards of the Water Service Providers.

Machakos County has six (6) established Water Service Providers (WSPs) that include Kathiani, Machakos, Matungulu-Kangundo, Mavoko, Mwala and Yatta-Masinga Water and Sewerage/Sanitation Companies.

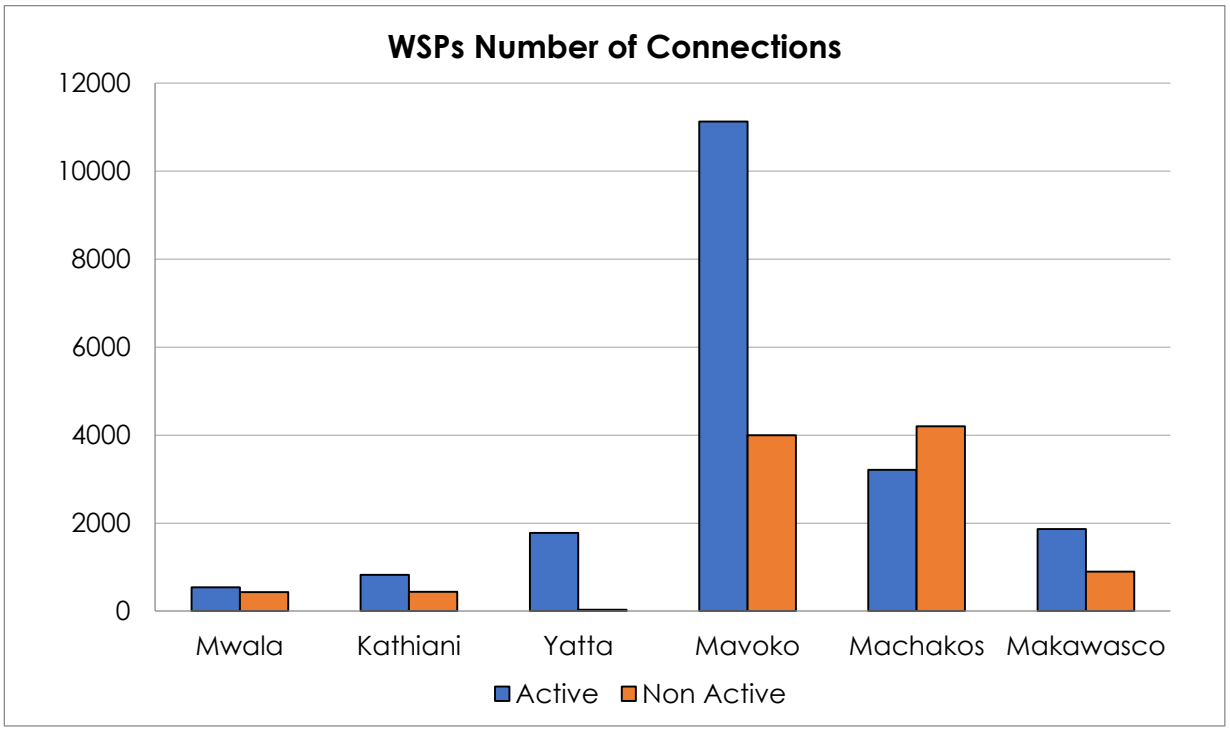


Figure 1; Machakos County WSPs Number of Connections, Source MWSSRT, 2024

3.2 Kathiani Water and Sanitation Company

3.2.0 Introduction

Kathiani Water and Sanitation Company Limited (KAWASCO) was incorporated on the 29th August, 2014 as a limited liability company under the Companies Act Cap 486 (revised 2015).

3.2.1 Service Area

The company is mandated to provide water and sanitation services within Kathiani Sub-County, which includes Kathiani Central, Upper Kaewa, Lower Kaewa and Mitaboni wards as regulated by WASREB and the Water Act 2016, covering an area of 80.5 sq. km. serving a total population of approximately 112,000 persons.

3.2.2 Operations

The average water production is 100,541m^3 per annum, of which only 70,381m^3 was billed to customers leaving a difference of 30,160m^3 translating to 30% NRW worth KES 3,166,800.00. This exceeds the regulator's standard of maximum 25% set by WASREB by 5%. The company has 1,268 metered water connections with 828 connections remaining active (*Ref: Auditor General's Report 2022/2023 financial year*)

a) Water Sources

Muuoni Dam

The main source of water is Muuoni dam. Water from the dam gravitates to treatment works about 600m downstream where it is treated before distribution to consumers. The treatment facility comprises three composite filter units, each capable of producing 10-15m^3 per hour. However, one of the filter units was damaged after a landslide. The areas served include Mbee, Isyukoni, Kathiani town, Mukukuni, Lumbwa, Kaiani and Ngoleni, an area of approximately 35km^2 and a population of about 22,000 people.

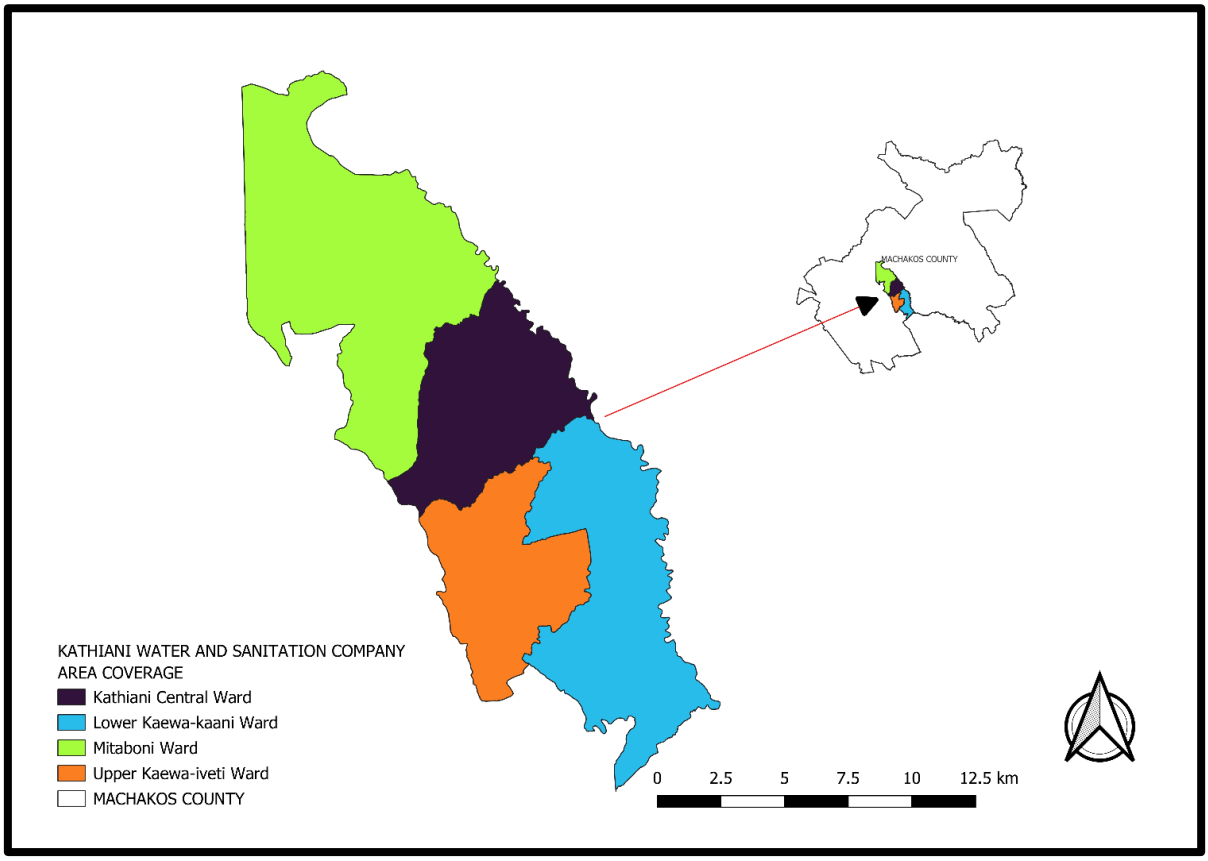
Boreholes

The County Government has drilled and rehabilitated 31 boreholes around the Sub County. However, as per the date of this report, eleven (11) boreholes were not

functional due to malfunctioned submersible pumps, vandalism of solar panels and water pipelines. The water company however, does not have ownership/access to these boreholes.

Sanitation

The area lacks developed sewerage infrastructure.



Map 2: Kathiani Water and Sanitation Company Area of Service

Source: MWSSRT, 2024

3.2.3 Governance

The taskforce observed that there were five (5) directors appointed for a period of three (3) years vide gazette notice no. 9868 dated 24th September 2021 as presented in the list below.

S/No.	Name	Designation
1.	Philip Ndolo Mutua	Chairperson
2.	Florence M. David	Member- Women Representative
3.	George Kyalo Wambua	Member- Business Community
4.	Stephen Mumo Kaloki	Member- Business Community
5.	Mary Syombua Kiilu	Member Residents Association
6.	Chief Officer or Alternate	Water and Irrigation
7.	Chief Officer or Alternate	Finance and County Treasury

The CR12 submitted by the company's Managing Director consisted of: - George Kyalo Wambua as a director and shareholder, Johnbosco Malelu as a director and shareholder and Stella W. Nyamu as an ordinary member. The Taskforce established that, the County Government is not represented in the ownership of this WSP contrary to Water Services Regulations 2021 section 10.

The Auditor General's report 2022/2023 FY highlighted that internal controls, risk management and overall governance for Kathiani Water and Sanitation Company were not effective.

3.2.4 Human Resource

The taskforce established that, the Core Management Team for Kathiani Water and Sanitation Company comprised employees listed below : -

S/No.	Name	Designation	Highest Level of Education
1	Johnbosco Malelu	Managing Director	Diploma in Water Technology
2	Eric Nthenge Kabita	Technical Services Manager	Diploma in Water Technology
3	Pius M. Matingi	Finance Manager	
4	Jane Nzili Muya	Procurement Officer	Diploma in Procurement

A close analysis of the core management team shows that the company lacks the necessary experience and competencies required at different positions contrary to the Water Services Regulations 2021 section 11 (1), which states that: "A County Water Services Provider shall employ a Chief Executive Officer and other staff necessary for performing its functions as a licensed water services provider on terms and conditions of employment approved by its Board of Directors. The terms and conditions shall comply with the water sector benchmark on personnel remuneration as set by the Regulatory Board in line with the guidelines issued by the Salaries and Remuneration Commission."

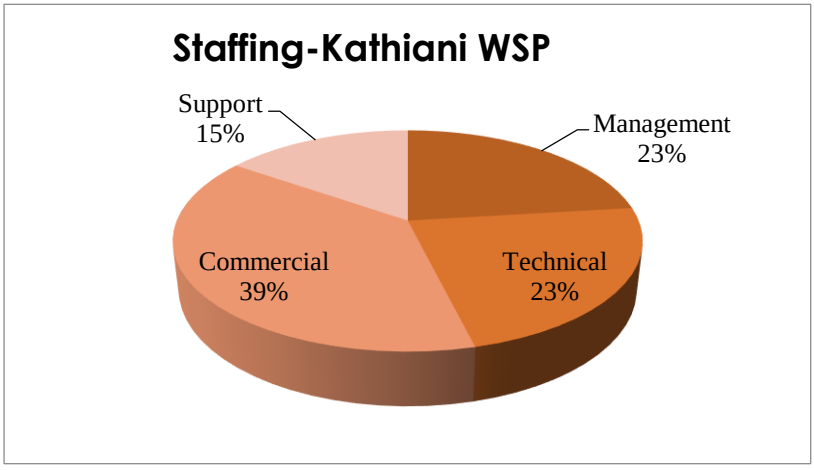


Figure 2: KAWASCO Staffing Ratio, Source KAWASCO Financials, 2023

3.2.5 Compliance

The issues of determination for Kathiani Water Company included the following:

a. Ownership

According to Section 77 of the Water Act, 2016, County Governments are authorized to establish a Water Services Provider, which may be a public limited liability company owned by the County Government.

An examination of the current CR12 document indicates that Kathiani Water and Sanitation Company is owned by two shareholders, George K. Wambua and Managing Director Johnbosco Malelu. Consequently, the County Government is not listed as the owner of the company, which is in violation of Section 77 of the Water Act, 2016.

b. Board of Directors

Sections 79 and 80 of the water Act, 2016 provides the criteria of appointment of Board Members for public Water Service Providers. After appointment, the companies should update the Board members as required by the registrar of companies in the CR12.

The taskforce found that the KAWASCO Board of Directors are not reflected in the CR12 as currently constituted.

c. Management

Chief Executive Officers of WSPs are required to serve for a term of three (3) years, which may be renewed twice subject to satisfactory performance in line with Regulation 11 (3) of the Water Services Regulation of 2021.

KAWASCO Managing Director is a County Government employee who was seconded to act as the managing director. The taskforce observed that, the managing director has been acting as MD for ten years (10) and therefore exceeding the stipulated term as per Water Act, 2016

d. License

Section 72 of the Water Act, 2016 confers the Water Service Regulatory Board powers which include but not limited to, setting license conditions and accredit water services providers with the said license as well as monitoring and enforcing license conditions. A company intending to be licensed as a water services provider is required to submit to the Regulatory Board its memorandum and articles of association that conform to the guidelines developed and approved by the Water Services Regulatory Board. All Water Service Providers must therefore apply for new licenses from the Water Services Regulatory Board (WASREB).

The taskforce observed that Kathiani Water and Sanitation Company Ltd does not have an operational license from WASREB.

Section 85 of the Water Act, 2016 has set clear terms on Water Service Providers who negligibly offer water services without a valid operating License from WASREB hence committing an offence and subsequently, their operational officers to be held liable.

e. Ownership of Assets

The Water Act 2016 in Sections 83 and 153 stipulates that ownership of all water assets shall rest with the County Government who shall hold them on behalf of the public.

KAWASCO presented their asset register and upon inspection by the taskforce, it was found that the County Government of Machakos does not own the assets, including the land on which the water infrastructure and equipment are hosted. Upon inquiry, the taskforce was advised that, these assets are still owned by TAWWDA contrary to section 83 and 153 of the Water Act, 2016

3.2.6 Financials

Section 129 (1) of the Water Act, 2016 stipulates that every body corporate established under the Act shall keep proper books and records of account of the income, expenditure, assets and liabilities. Section 129 (2) provides that within a period of three months after the end of each financial year, each body corporate is required to submit to the Auditor-General the accounts of the body corporate in respect of that year together with: -

(a) Statement of the income and expenditure of the body corporate during that year; and

(b) Statement of the assets and liabilities of the body corporate on the last day of the financial year.

Section 129 (3) provides that, the annual accounts of the body corporate are required to be prepared, audited and reported upon in accordance with the provisions of the Constitution and the Public Audit Act, 2015.

Based on the report of the audit and financial statement, for the year ended 30th June 2023 (Office of the Auditor General, 2023), a **qualified opinion** was made by the auditors. Issues raised as basis of the opinion, include: -

Non-compliance with the public sector accounting standards

i) Inaccuracies in presentation of the financial statements;
   a. Statement of profit or loss and other comprehensive income
   b. Statement of financial position
   c. Statement of cash flows
   d. Statement of comparison of budget and actual accounts

ii) Unsupported trade and other payables

iii) Long outstanding trade and other receivables

iv) Unaccounted for customer deposits

v) Property, plant and equipment schedule was not prepared in accordance with the public sector accounting standard boards financial reporting templates (fair statement, disclosure and ownership of property, plant and equipment of KES 130,768,774.00 could therefore not be confirmed)

vi) Unsupported administrative costs

vii) Misstatement of staff costs

Key matters highlighted include breach of the law by the management such as; late submission of financial statements, undisclosed ownership of the water company, Non- Revenue Water, non-competitive appointment of the board chairperson, lack of approved water sales tariffs, irregularities in procurement and poor budgetary controls.

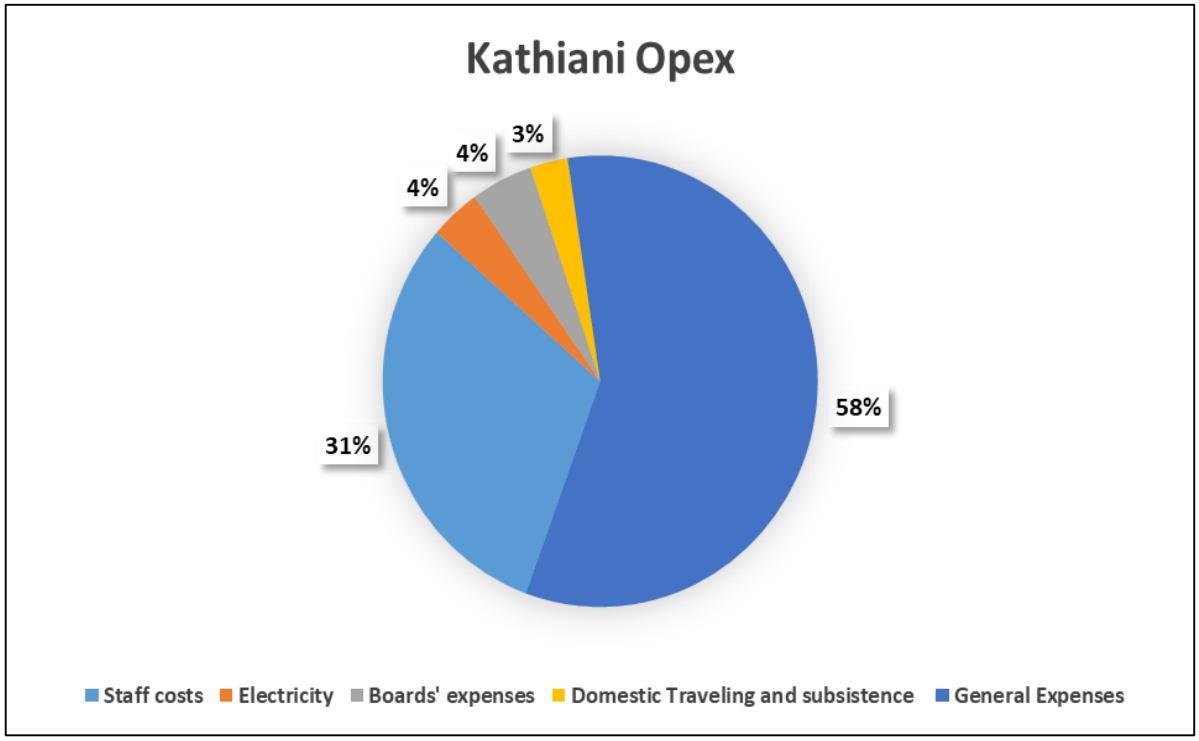


Figure 3: KAWASCO Opex, Source ***Office of the Auditor General Report , 2023***

3.2.7 Liabilities

The company declared liabilities totaling to **KES 7,487,694.00** as broken down in figure 4;

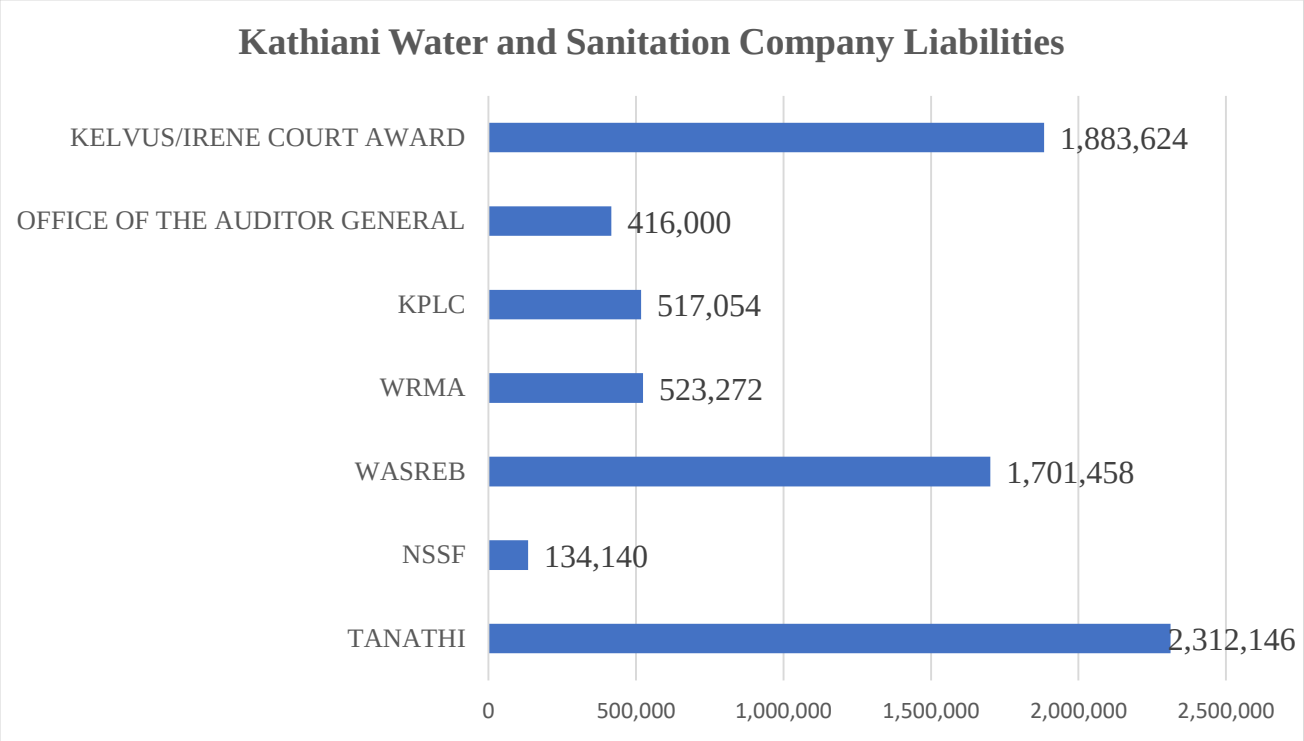


Figure 4: KAWASCO Liabilities, Source, Office of the Auditor General, 2023

3.2.8 On-going Projects

The taskforce noted that there were no ongoing projects within Kathiani Water and Sanitation Company service area.

3.2.9 Proposed Projects

The Water Service Provider proposed for the desilting of Muuoni dam and rehabilitation of its water distribution infrastructure.

3.2.10 Technology

The task force found that the company uses conventional displacement and velocity meters and a manual based metering system. The company has therefore not adopted any modern metering or billing systems.

3.2.11 Environmental and Social Safeguards

It was observed that the company lacked strategies and structures to support environmentally sustainable operations including climate change adaption and mitigation measures. The study revealed the following key deficiencies on:

i. Protection of water resources
ii. Use of alternative clean and renewable sources of energy
iii. Waste management
iv. Risk and disaster management
v. Environmental policy
vi. Grievance/Redress mechanisms for both employees and consumers
vii. Institutions and tools to implement green production

3.2.12 Challenges and Constraints

The Taskforce observed the following challenges facing KAWASCO:

i. Old and dilapidated water infrastructure
ii. Inadequate own water sources – Only one source – Muuoni Earth Dam which needs desilting
iii. High Operation and Maintenance Costs (e.g., high cost of energy - electricity bills of up to Ksh 170,000.00 per month)
iv. Non-Revenue Water (NRW) at 32%
v. Lack of office space (the company shares offices with the NG Department of Interior)
vi. Climate change induced challenges - reduced availability of surface water/ increased loss of water from reservoirs due to evaporation and siltation; lower water levels in major rivers and streams
vii. Competition from private water vendors for water services provision
viii. Water catchment degradation around Muuoni dam
ix. Lack of a sewerage system in Kathiani
x. Vandalism of water infrastructure

KAWASCO SWOT Analysis

In order to evaluate the company's competitive position, risk and potential, the taskforce conducted a SWOT analysis for KAWASCO as presented in table 4;

Strengths	Weaknesses
✓ Availability of water (Muuoni Dam and springs) ✓ A water treatment plant/ infrastructure is installed ✓ Availability of land for expansion of Muuoni Dam ✓ Location of the dam allows gravitational flow of water	• Poor governance (board size and composition not compliant with regulators guideline) • Lack of operating license from WASREB • People – inability to attract dedicated team of professionals • Poor water infrastructure • Weak human resource structure • Lack of office space (the company shares offices with the NG Department of Interior) • Inadequate own water sources – Only one source – Muuoni Dam • High Operation and Maintenance costs • Non-Revenue Water (NRW) at 32% • Lack of a sewerage system in Kathiani
Opportunities	**Threats**
✓ Densely populated area –large customer base ✓ The opportunity to produce affordable water through partnership with private sector (PPPs). ✓ Desilting of Muuoni Dam to increase water production capacity ✓ Availability of 15 County boreholes in their service area. ✓ Potential for expansion of the treatment plant. ✓ Unmet demand in the emerging uncovered areas of the sub county ✓ Potential for adoption of ICT in operations ✓ Potential for adoption of renewable energy for pumping and water treatment ✓ Conducive policy and regulatory framework	• Key water assets are not owned by the company • Competition from private water vendors • Climate change induced challenges leading to reduced availability of surface water/ increased loss of water from reservoirs due to evaporation and siltation • Water catchment degradation and encroachment around Muuoni dam • Vandalism of water infrastructure

Table 2: KAWASCO SWOT Analysis, Source MWSSRT, 2024

The SWOT analysis on Kathiani Water and Sewerage Company reveals that the water company has major weaknesses, facing major threats and therefore is not economically viable.

3.2.13 KAWASCO General Observations

The taskforce made the following observations: -

i. Kathiani Water and Sanitation Company provides water services without the requisite license by WASREB thus providing services irregularly
ii. The CEO of the water company was not competitively recruited and has exceeded his tenure.
iii. The company is not commercially viable.
iv. The County Government of Machakos does not own the water company as provided by the Water Act 2016.
v. The board was not competitively recruited as stipulated by the Water Act, 2016.
vi. The assets of the Kathiani Water Company/ WSP are owned by TAWWDA contrary to Sections 83 and 153 of the water Act, 2016.
vii. Most of the water service provider's infrastructure is old and dilapidated;
viii. The water company has only one water source the Muuoni dam which is silted, further reducing the water capacity.

3.2.14 Recommendations

Kathiani Water and Sanitation Company ltd is not commercially viable. As currently constituted, it cannot be able to meet its mandate. It is therefore recommended that Kathiani Water and Sanitation Company ltd be dissolved and restructured into a cluster.

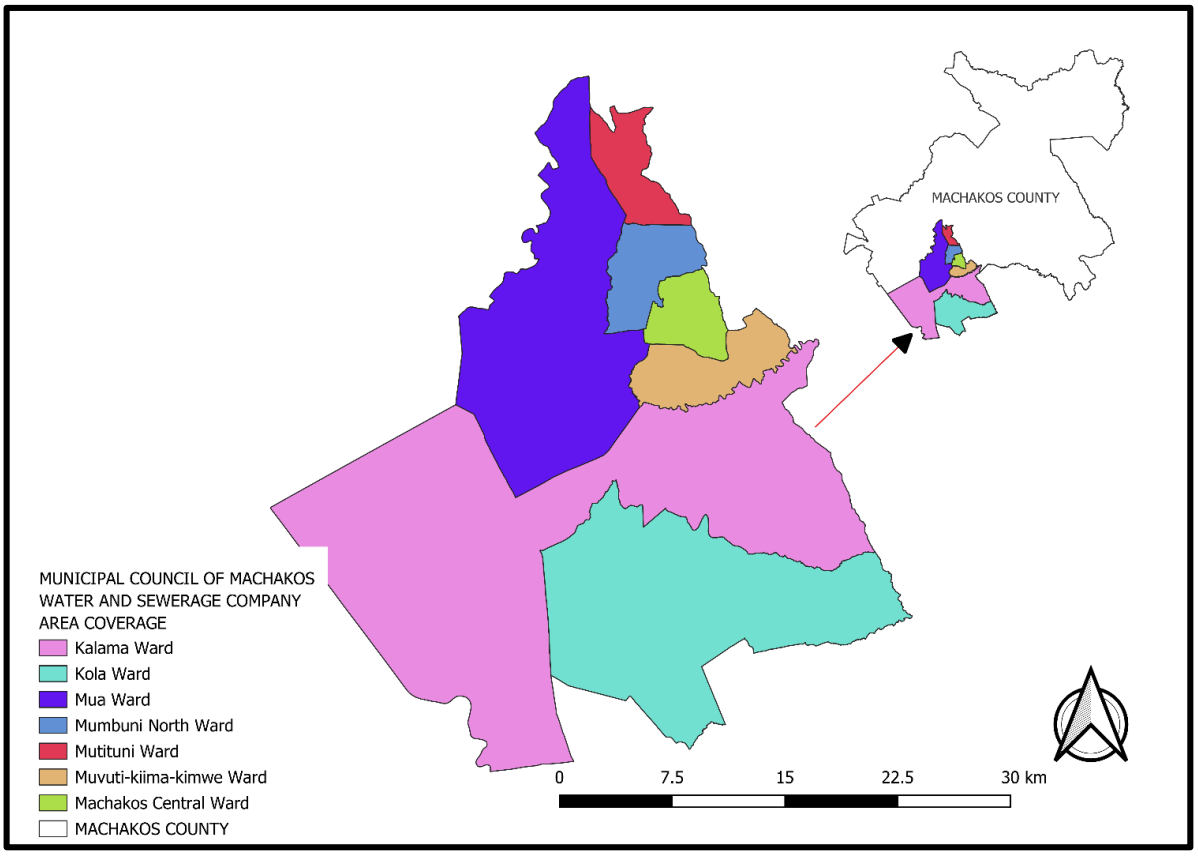
3.3 Municipal Council of Machakos Water and Sewerage Company

3.3.1 Introduction

Municipal Council of Machakos Water and Sewerage Company Limited was incorporated on 6th July, 2005 as a limited company under the Companies Act Cap 486 (Revised 2015).

3.3.2 Area of service

The company is mandated to provide water and sewerage services within Machakos Sub County which includes Machakos Central, Kalama, Kola, Mumbuni North, Mutituni/Ngelani, Muvuti/Kiima Kimwe and Mua Wards as regulated by WASREB and the Water Act 2016 with a water coverage of 57%.



Map 3: Municipal Council of Machakos Water and Sewerage Company Service Area

Source: MWSSRT, 2024

3.3.3 Operations

The company operates three (3) water treatment plants; new conventional works serving Katoloni reservoirs, and two old units of vertical flow sedimentation and composite works serving Iveti reservoir. These units have a design capacity of **5,000m³/d**, **3,500m³/d** and **600m³/d** respectively, hence a total design capacity of **9,100m³/d**. The average production is currently at **3,300m³/d** against a demand of **13,000m³/d**. The taskforce noted that the existing distribution network consists of GI, AC and uPVC pipes with varying diameters ranging 50mm - 150mm which was laid in **1957**. The company has 7,300 metered water connections with 4,400 active water connections.

a.) Water Sources

The Municipal Council of Machakos Water and Sewerage Company primarily relies on Maruba Dam as its main water source, which has a design capacity of 245,000 cubic meters. Additionally, the company operates a total of seven boreholes, of which four—namely Makovo, Kwa Nguli, Miwani, and the Office Borehole—are currently functional. The remaining three boreholes, identified as Plant A, Plant B, and Plant C, are not operational at this time.

b.) Sanitation

The Municipal Council of Machakos Water and Sewerage Company has an existing sewerage system that was laid between 1971-1973 that covers Machakos CBD, Muthini, Kariobangi and parts of Eastleigh with 600 active sewer connections which is 29% coverage. The taskforce also noted that the company has an ongoing sewer project under construction (Kenya Towns Sustainable Water supply and Sanitation Program) funded by AfDB and being implemented by AWWDA.

The Mitheu treatment works has a capacity of 2,500m³/day and is partially operational due to encroachment by Kiima Kimwe farmers. The company through partnership with Water Sector Trust Fund has constructed two (2) Decentralized Treatment Facilities (DTF) of 30m³/day and 50m³/day capacities to augment waste water treatment from private exhauster services.

3.3.4 Governance

The CR12 which is in the custody of the registrar of companies indicates that, the company was registered on 6th July 2005 and the board of directors comprises twelve (12) directors, one (1) secretary who is an *ex-officio* member as listed below.

S/No.	Name	Designation
1	Boniface Mutie Kioko	Chairman of Board
2	Institute of Engineers of Kenya	Director
3	Law Society of Kenya	Director
4	Kenya National Chambers of Commerce & Industry	Director
5	National Council of Non-Governmental Organizations	Director
6	Director of Water	Director
7	Nicky Munguti Roller	Director
8	Stephen Nzioka Mutiso	Director/ Shareholder
9	Onesmus Kiko Miseu	Director/ Shareholder
10	Lucy Njoki Nyaga	Director/ Shareholder/ Secretary
11	Municipal Council of Machakos	Shareholder
12	John Elijah Wambua	Director/ Shareholder

Kenya Gazette Notice No. 9864 dated 13th September 2021, lists the Board of Directors of Machakos Water and Sewerage Service Provider as listed below.

S/No.	Name	Designation
1.	Joel Kiilu (Eng.)	Chairman of the Board
2.	James Kyania Mulwa	Member
3.	Charles Kilonzo Mulela	Member
4.	Francis Njeru Boco	Member
5.	Betty Nduku Mbithi (Ms.)	Member
6.	Catherine Ndunge Nzioka (Ms.)	Member
7.	Daniel Kaveva (Rev.)	Member
8.	Reuben Muange (Mr)	Member

9.	Chairperson, Machakos Municipal Board or the Alternate	Member
10.	Chief Officer or the alternate Water and Irrigation	Member
11.	Chief Officer or the alternate Finance and County Treasury	Member

Table 1: Municipal Council of Machakos Water and Sewerage Company Board of Directors as per Gazette Notice

The taskforce upon conducting its due diligence, noted that the above appointments of the board members are null and void due to the fact that the name of the company as gazetted is not in existence.

The taskforce further noted that, there is a company in existence on paper alone by the name Machakos Water and Sewerage Company. This company only exists on paper and letterheads as orchestrated by the current board and management. Further it was established that the actual existing company with the name Municipal Council of Machakos Water and Sewerage Company is the one being utilized for all operational purposes including; invoicing and banking.

3.3.5 Compliance

The issues of determination for Municipal Council of Machakos Water and Sewerage Company included the following:

a) Ownership

Section 77 of the Water Act, 2016 confers to County Governments the mandate to establish a Water Services Provider which may be a Public limited liability Company owned by the County Government.

A company intending to be licensed as a water services provider is required to submit to the Regulatory Board its memorandum and articles of association that conform to the guidelines developed and approved by the Water Services Regulatory Board.

Review of the status of ownership based on the current CR12 reflects Municipal Council of Machakos as the majority shareholder and not the County Government of Machakos contrary to section 77 of the Water Act, 2016.

b) Board of Directors

Sections 79 and 80 of the water Act, 2016 provides the criteria of appointment of Board Members for public Water Service Providers. After appointment, the companies should update the Board members as required by the registrar of companies in the CR12.

The taskforce found that the Municipal Council of Machakos Water and Sewerage Company Board of Directors are not reflected in the CR12 as currently constituted. *(See annexure)*

c) License

Section 72 of the Water Act, 2016 confers the Water Service Regulatory Board powers which include but not limited to setting license conditions and accredit water services providers with the said license as well as monitoring and enforcing license conditions. All Water Service Providers must therefore apply for new licenses from the Water Services Regulatory Board (WASREB).

It is observed that Municipal Council of Machakos Water and Sewerage Company does not have an operational license from WASREB. The Regulatory body issued an interim license to a nonexistent Machakos Water and Sanitation Company *(See annexure-license)*

D. Ownership of Assets

The Water Act 2016 in Sections 83 and 153 stipulates that ownership of all water assets shall rest with the Water Services Providers who shall hold them on behalf of the public.

Municipal Council of Machakos Water and Sewerage Company presented their asset register and upon inspection by the taskforce, it was found that the County Government of Machakos does not own the assets, including the land on which water infrastructure and equipment are hosted. Upon inquiry, the taskforce was advised that, these assets are still owned by TAWWDA contrary to section 83 and 153 of the Water Act, 2016

3.3.6 Human Resource

Review of records indicated that the company has a total of 65 members of staff of different cadres. It is noted that the company does not have an approved staff establishment and a scheme of service for effective management of personnel functions including recruitment, defining of key competencies, job descriptions, staff placements, remuneration and promotions. This is contrary to the Human Resource Policies and Procedures Manual for Public Service 2016.

Management

The current Managing Director has served for nine (9) years. However there was no evidence that the board had renewed her contract twice as required by Regulation 11 (3) of the Water Services Regulation of 2021 which provides for a term of three (3) years, which may be renewed twice subject to *satisfactory performance*. In addition the CEO has a letter of appointment on permanent and pensionable terms for the position of the CEO which contravenes the WASREB Guideline on appointment of CEOs of Water Service Providers.

Listed below is the current management team for Municipal Council of Machakos Water and Sewerage Company

S/ No	NAME	DESIGNATION
1	Winfred Syombua Mbai	Managing Director
2	George Mumo Kombo	Finance Manager
3	Joseph Mutende Kyulu	Technical Manager
4	Isaak Musya	Technical Manager
5	Elizabeth Mwende Kingoo	Internal Auditor
6	Michael Muchai Njenga	Accountant
7	Simon Nzuva Kimanzi	Human Resource & Administration Manager
8	Benendettah Mwikali Mutio	Cashier
9	Faith Kalekye Kilonzo	Hr/Admin Assistant
10	Joseph Kioko Kimatu	Ag. Commercial Manager

2.4.7 Financials

Based on the report of the audit and financial statement, for the year ended 30th June 2023 (Office of the Auditor General, 2023), a *qualified opinion* was made by the auditors. Issues raised as basis of the opinion, include: -

i) Non-compliance with the public sector accounting standards

ii) Inaccuracies in presentation of the financial statements;

   a. Statement of profit or loss and other comprehensive income
   b. Statement of financial position
   c. Statement of cash flows
   d. Statement of comparison of budget and actual accounts

iii) Unsupported trade and other payables

iv) Long outstanding trade and other receivables

v) Unaccounted for customer deposits

vi) Property, plant and equipment schedule was not prepared in accordance with the public sector accounting standard boards financial reporting templates (fair statement, disclosure and ownership of property, plant and equipment of KES130,768,774.00 could therefore not be confirmed)

vii) Unsupported administrative costs

viii) Misstatement of staff costs

Other issues raised by the Auditors include breach of the law by the management such as; late submission of financial statements, undisclosed ownership of the water company, above allowable Non- Revenue Water, non-competitive appointment of the board chairperson, lack of approved water sales tariffs, irregularities in procurement and poor budgetary controls.

3.3.7 Liabilities

The company has declared current liabilities amounting to KES 132,745,967 which exceed current assets totaling KES 123,908,441.00 (by KES 8,837,526.00). This indicates that the company is technically insolvent.

3.3.8 On-going Projects

i.) Kenya Towns Sustainable Water Supply and Sanitation Program- Machakos Water and Sewer Project, funded by AfDB.

a.) Water Component at an estimated cost of KES 2.06 B (52% complete)

b.) Sewer Component at an estimated cost of KES 0.94 B (46% complete)

ii.) Kathale-Ikulu water project at an estimated cost of KES 17.2 M (at procurement stage).

3.3.9 Proposed Projects

The current management proposed upgrade of existing water and sewer infrastructure so as to meet the needs of customers (currently at 57% and 29% coverage for water and sewerage respectively).

3.3.10 Technology

The company uses both displacement velocity and to a smaller extend Smart meters. Meter reading is done manually and inputted into the billing system. An Enterprise Resource Planning (ERP) system software is used to bill customers.

3.3. 11 Environmental and Social Safeguards

It was observed that the company lacked strategies and structures to support environmentally sustainable operations including climate change adaption and mitigation measures. The study revealed following key deficiencies on:

i. Protection of water resources
ii. Use of alternative clean and renewable sources of energy
iii. Waste management

iv. Risk and disaster management

v. Environmental policy

vi. Grievance/Redress mechanisms for both employees and consumers

vii. Institutions and tools to implement green production

3.3.12 Challenges

The taskforce reports the following challenges with respect to Municipal Council of Machakos Water and Sewerage Company.

1. Old and dilapidated water and sewerage infrastructure
2. Delay in land compensation for commencement of construction of Miwongoni Dam (case with the National Land Commission - NLC)
3. Inadequate own water sources
4. Non-Revenue Water (NRW) at 45% standard is 25%
5. Climate change - reduced availability of surface water/ increased loss of water from reservoirs due to evaporation and siltation; lower water levels in major rivers and streams
6. Pollution of River Mwania
7. Lack of sufficient sewerage system
8. High cost of energy (electricity)
9. Vandalism of water infrastructure

Municipal Council of Machakos Water and Sewerage Company Limited SWOT Analysis

In order to evaluate the company's competitive position, risk and potential, the Taskforce conducted a SWOT analysis for Municipal Council of Machakos Water and Sewerage Company ltd as presented in table 3;

Strengths	Weaknesses
✓ Own office space ✓ A fairly well-established human resource structure ✓ Availability of a sewer system ✓ Donor support for projects ✓ Densely populated service area ✓ Supportive policy environment	• Poor Governance • Old and dilapidated water and sewerage systems • Inadequate own water sources • High Operation and Maintenance Costs • Non-Revenue Water (NRW) at 45%
Opportunities	**Threats**
✓ Large customer base – densely populated area ✓ Fast growing urban setups ✓ New water and sewerage projects – on going (Machakos water supply project) ✓ Availability of forty (40) county boreholes ✓ Unmet demand in the emerging uncovered areas of the sub county ✓ Potential for adoption of ICT in operations ✓ Potential for adoption of renewable energy for pumping and water treatment ✓ Conducive policy and regulatory framework ✓ Revival of Nol-Turesh water project	• Assets not owned by the company • Competition from private water vendors • Water catchment degradation around Maruba Dam • Vandalism of water and sewerage infrastructure

Table 3: Municipal Council of Machakos Water and Sewerage Company SWOT Analysis

The SWOT analysis on Municipal Council of Machakos Water and Sewerage Company reveals that the water company has major weaknesses, facing major threats and therefore is not economically viable.

2.4.15 General Observations

The following observations on Municipal Council of Machakos Water and Sewerage Company were made;

i. The company is providing water services irregularly since they are not licensed by WASREB as the license in place is for Machakos Water and Sewerage Company
ii. The CEO of the water company was not competitively recruited.
iii. The water company is not commercially viable
iv. The County does not own the water company based on the CR12 as provided by the Water Act, 2016
v. The board members were not recruited in accordance with the regulations.
vi. The WSP assets are not owned by the County Government.
vii. Most of the infrastructure is old and dilapidated.

Municipal Council of Machakos Water and Sewerage Company Ltd is not commercially viable. As currently constituted, it cannot be able to meet its mandate. It is therefore Municipal Council of Machakos Water and Sewerage Company Ltd be dissolved and restructured into a cluster.

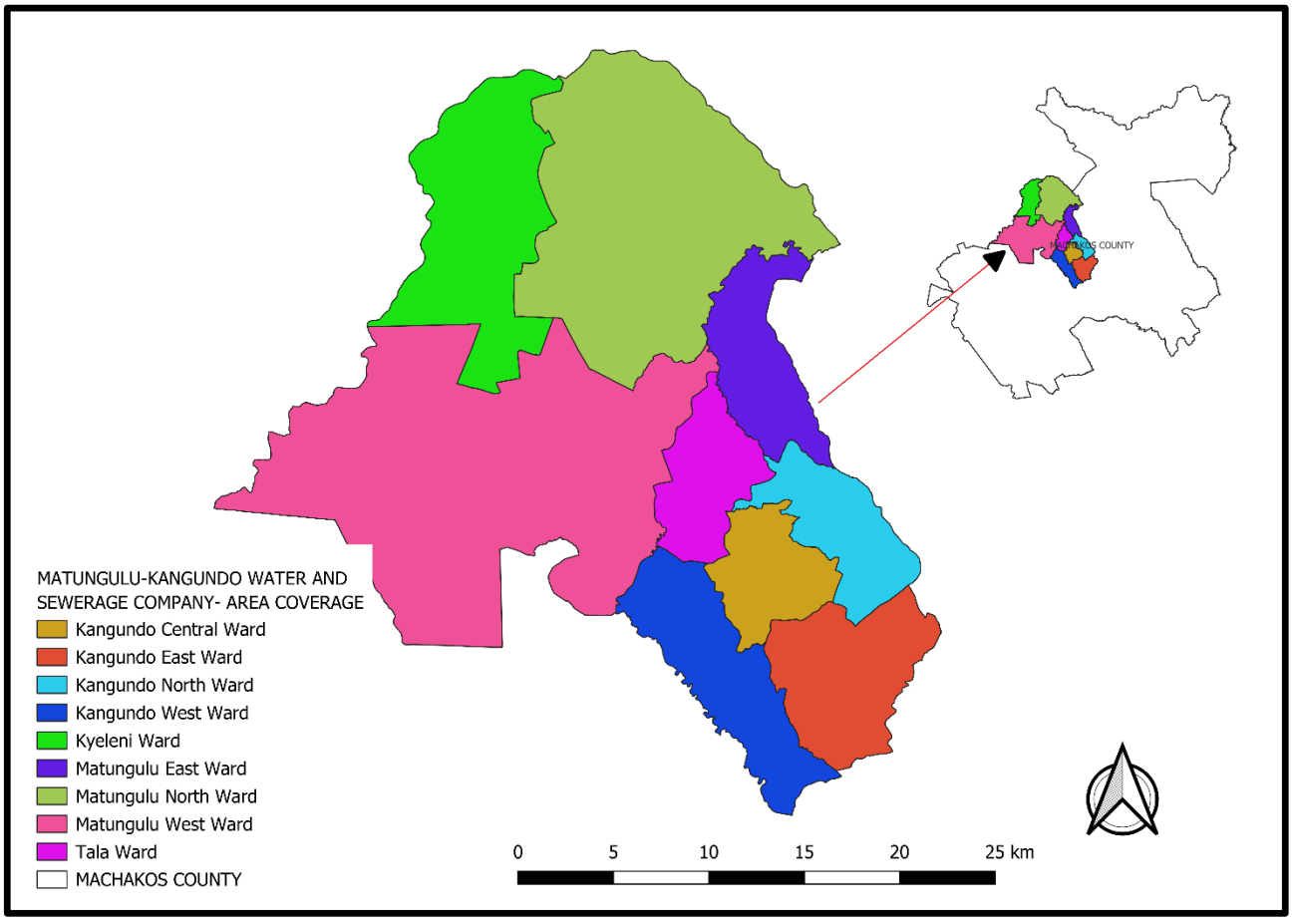
3.4 Matungulu - Kangundo Water and Sewerage Company Ltd

3.4.0 Introduction

Matungulu - Kangundo Water and Sewerage Company (MAKAWASCO) was incorporated on 24th April 2007 under the Company's Act Cap 486 (amended 2015) as a Water Services Provider (WSP). The company operated as an agent of TAWWDA Water Services Board until water was devolved to the County Government after the promulgation of the new Constitution 2010. The main Company office is located in Tala Town with operations offices in Kangundo and Nguluni Towns.

3.4.1 Area of service

Matungulu - Kangundo Water and Sewerage Company (MAKAWASCO) is mandated to provide water and Sewerage services within Matungulu and Kangundo Sub Counties.



Map 4: Matungulu- Kangundo Water and Sewerage Company Service Area

Source: MWSSRT, 2024

3.4.2 Operations

The total water production is 284,700 m^3 per annum against a demand of 1,097,000m^3 per annum 26% coverage. The company has 1,865 active metered water connections and 900 connections remaining inactive.

a.) Water Sources

MAKAWASCO water sources includes two (2) boreholes in Kangundo (18m^3/hr and 20m^3/hr), two (2) boreholes in Tala (12m^3/hr and 8m^3/hr) and one (1) borehole in Nguluni (12m^3/hr). The total water production on a daily basis is 780m^3 against a demand of 3,000m^3/ day (26% coverage). The number of active metered connections is 1,865 and 900 inactive meter connections.

b.) Sanitation

There is no sewerage system in its area of service. Private exhausters serve the area and take the effluent to treatment works at Njiru DTF in the neighboring County of Nairobi.

3.4.3 Governance

According to Kenya Gazette Notice No. 9867 dated September 24, 2021, the following are listed as the Board of Matungulu-Kangundo Water and Sewerage Services Provider: -

S/No.	Name	Designation
1.	Daniel Kimomo Nginga	Chairman of the Board
2.	Samuel Muneene	Member
3.	Magdalene Emma Nthenge	Member
4.	Catherine Mutuku	Member
5.	Edna Mukei Mwania	Member
6.	Chairperson, Tala/ Kangundo Municipal Board or the Alternate	Member
7.	Chief Officer or the Alternate - Water & Irrigation	Member
8.	Chief Officer or the Alternate- Finance & County Treasury	Member

The Board of Directors as reflected in the CR12 dated 30th May 2023 indicates the company has eight (8) directors with the County Government of Machakos registered as a shareholder with two (2) ordinary shares as listed below: -

S/No.	Name	Designation	Shares
1.	Samuel Katumo Muneene	Director	0
2.	Edina Mukii Wambua	Director	0
3.	Magdalena Emma Nthenge	Director	0
4.	Daniel Kimomo Nginga	Director	0
5.	Catherine Mwikali Mutuku	Director	0
6.	Agnes Kambua Muteti	Director	0
7.	Chief Officer in Charge of Water Issues - County Government of Machakos (John Kilonzo)	Shareholder	Ordinary 1
8.	County Executive Committee Member in Charge of Water Issues - County Government of Machakos (George Luka Kioko)	Shareholder	Ordinary 1

Further, a review of the Audit Generals Report for the year ending 30th June 2023 reflects the following as the Directors: -

S/No.	Name	Designation
1.	Samuel Muneene	Acting Chairman of the Board
2.	Margaret Munyiva Muli	Acting Managing Director (Seconded from Department of water)
3.	Wilson Kasimu	Member
4.	Catherine Mutuku	Member
5.	Edna M. Mwanzia	Member
6.	Magdalene Emma Nthenge	Member
7.	Agnes K. Muteti	Managing Director (Left 30, June 2023 and replaced by the Margaret Munyiva Muli)

The former acting CEO left the company on 30th June, 2023 and was replaced by Margaret Muli (seconded by the department of Water) on 21st July, 2023 on acting capacity as the Chief Executive Officer (CEO). The appointment of the board members was not done in accordance with Section 2 (2) of the first schedule of the Water Act, 2016; which states that "The CEO and Board members shall be appointed through an open and competitive process.

3.4.4 Human Resource

Review of records indicated that the company has a total of thirteen (13) members of staff of different cadres. It is noted that the company does not have an approved staff establishment and a scheme of service for effective management of personnel functions including recruitment, defining of key competencies, job descriptions, staff placements, remuneration and promotions. This is contrary to the Human Resource Policies and Procedures Manual for Public Service 2016.

Management

The current management for the company is as listed below

S/No.	Name	Designation	Highest Level of Education
1.	Margaret Muli	Acting Managing Director	Diploma in Water Engineering
2.	Patrick Kimiti	Technical Services Manager	Diploma in Water Technology
3.	Anthony Muema	Accountant	B. Com (CPA K)

3.4.5 Compliance

The issues of determination for MAKAWASCO include the following: -

a. Ownership

Section 77 of the Water Act, 2016 confers to County Governments the mandate to establish a Water Services Provider which may be a Public limited liability Company owned by the County Government.

A company intending to be licensed as a water services provider is required to submit to the Regulatory Board its memorandum and articles of association that conform to the guidelines developed and approved by the Water Services Regulatory Board.

Review of the status of ownership based on the current CR12 reflects that the county government is not reflected as the owner of Matungulu-Kangundo Water and Sewerage Company contrary to section 77 of the Water Act, 2016.

b. Board of Directors

Sections 79 and 80 of the Water Act, 2016 provides the criteria of appointment of Board Members for public Water Service Providers. After appointment, the companies should update the Board members as required by the registrar of companies in the CR12.

The Matungulu-Kangundo Water and Sewerage Company Board of Directors are not reflected in the CR12 as currently constituted. Further the gazettement of this board is not for Matungulu-Kangundo water and sewerage company ltd but for Matungulu-Kangundo Water Service Provider. (*See annexure*)

c. License

Section 72 of the Water Act, 2016 confers the Water Service Regulatory Board powers which include but not limited to setting license conditions and accredit water services providers with the said license as well as monitoring and enforcing license conditions. A company intending to be licensed as a water services provider is required to submit to the Regulatory Board its memorandum and articles of association that conform to the guidelines developed and approved by the Water Services Regulatory Board. All Water Service Providers must therefore apply for new licenses from the Water Services Regulatory Board (WASREB). Section 85 of the Water Act, 2016 has set clear terms on Water Service Providers who negligibly offer water services without a valid operating License from WASREB hence committing an offence and subsequently, their operational officers to be held liable. The taskforce observed that Matungulu-Kangundo Water and Sewerage Company Ltd does not have an operational license from WASREB.

d. Ownership of Assets

The Water Act 2016 in Sections 83 and 153 stipulates that ownership of all water assets shall rest with the Water Services Providers who shall hold them on behalf of the public. Matungulu-Kangundo Machakos Water and Sewerage Company presented their asset register and upon inspection by the taskforce, it was found that the County Government of Machakos does not own the assets, including the land on which water infrastructure and equipment are hosted. Upon enquiry, the taskforce was advised that, these assets are still owned by TAWWDA contrary to section 83 and 153 of the Water Act, 2016

3.4.6 Financial/ Audit Reports

According to the Office of the Auditor General, based on the report of the audit and financial statement, for the year ended 30th June 2023, ***a qualified*** opinion was made by the auditors. Issues raised as basis of the opinion, include: errors in presentation and misstatements of financial statements, long outstanding trade receivables, unsupported trade and other payables, errors in property, plant and equipment (lack of asset register), unsupported customer deposits, material uncertainty related to going concern (financial statements reflected accumulated loss of KES 18,001,125.00 in the year 2023. lack of budgetary control and performance, unresolved prior year matters and excessive Non-Revenue Water at 37%.

3.4.7 Liabilities

The company has declared total liabilities of 11,702,643.00 in the year 2023.

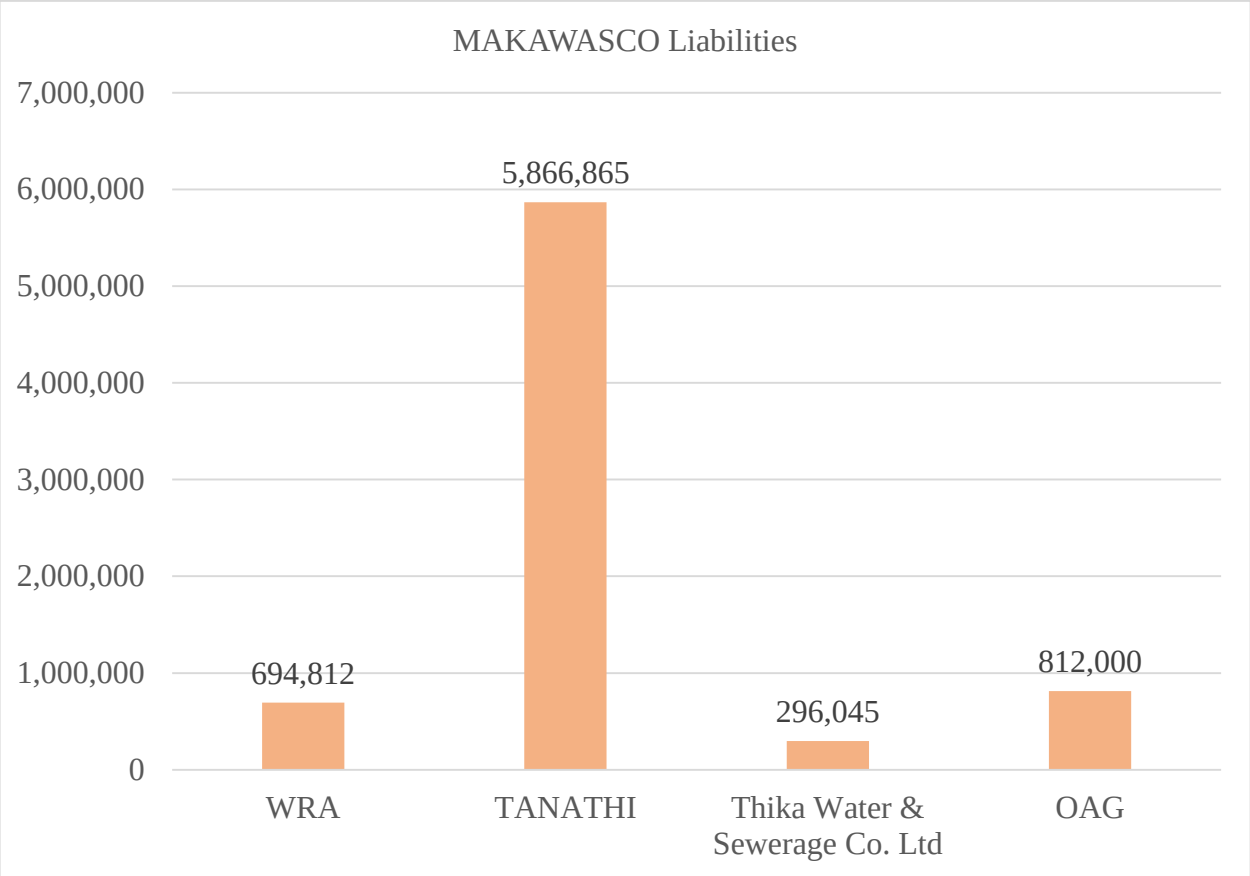


Figure 5: MAKAWASCO Liabilities, Source ***Office of the Auditor General, 2023***

3.4.8 On-going Projects

Currently, Kangundo Water Project is the only ongoing Project for the Company. This project is funded by Water Sector Trust Fund (WSTF) under Urban Project Concept (UPC 8th Call) programme and it entails pipeline extension from Kangundo (Kwa Akamba) to Syanthi Market, installation of 200 consumer meters of assorted sizes, construct two (2) water kiosks, renovation of Ndovoini 'A' pump house and refurbishment of a storage tank. The project is at forty one (41 %) percent.

3.4.9 Technology

The company uses displacement-velocity meters which are costly, have low sensitivity in measurement and require regular calibration. The WSP uses an excel software to bill its customers which is susceptible to manipulation.

3.4.10 Environmental and Social Safeguards

It was observed that the company lacked strategies and structures to support environmentally sustainable operations including climate change adaption and mitigation measures. The study revealed following key deficiencies on:

i. Protection of Kayata spring
ii. Use of alternative clean and renewable sources of energy including solarization water treatment, pumping and distribution of water.
iii. Waste management – Currently no sewerage system.
iv. Risk and disaster management
v. Environmental policy
vi. Grievance/Redress mechanisms for both employees and consumers
vii. Institutions and tools to implement green production

3.4.11 Challenges

The Company faces the following challenges: -

i. Old and dilapidated water and sewerage infrastructure
ii. Non-Revenue Water currently at 37%.
iii. Inadequate water sources leading to rationing
iv. Lack of office building (currently renting)
v. Climate change - reduced availability of surface water/increased loss of water from reservoirs due to evaporation and siltation
vi. Lack of sewerage system
vii. High cost of energy (electricity)
viii. Vandalism of water infrastructure
ix. Damaging of water pipelines by road contractors who are not ready to take responsibility for replacement

Matungulu - Kangundo Water and Sewerage Company SWOT Analysis

To assess the company's competitive position, potential, and risk, the Taskforce performed a SWOT analysis for Matungulu-Kangundo Water and Sewerage Company Ltd, as detailed in Table 4.

STRENGTHS	WEAKNESSES
✓ Availability of water sources (High yield boreholes) ✓ Donor support for projects ✓ Supportive policy environment	• Poor Governance and management • Lack of operating license from WASREB • Key water assets not owned by the company • Inadequate water sources • Negative organizational image • Low technological adoption • High operational expenses (electricity and staff costs) • Weak internal operational and financial controls • Lack of human resource policy • Old and dilapidated water infrastructure • Non-Revenue Water (NRW) at 37%
OPPORTUNITIES	**THREATS**
✓ Densely populated service area ✓ Availability of surveyed ground water within the Ngalalya area ✓ Availability forty (40) potential water sources (county boreholes) ✓ The opportunity to produce affordable water through public private partnership (PPPs). ✓ Unmet demand in the emerging uncovered areas of Kangundo and Matungulu Sub Counties ✓ Potential for adoption of ICT in operations ✓ Potential for adoption of renewable energy for pumping and water treatment ✓ Conducive policy and regulatory framework	• Conflict over water sources (Ngalalya boreholes) • Competition from private and community water vendors • Lack of a sewerage system in Kangundo/Matungulu • Vandalism of water installations • Lack of environmental and social safeguards strategy • Siltation of water sources (dams)

Table 4: MAKAWASCO SWOT Analysis

The SWOT analysis reveals that MAKAWASCO has major governance issues, is facing major threats and therefore not commercially viable.

3.4.12 General Observations

The following observations were made on Matungulu - Kangundo Water and Sanitation Company: -

- The company provides water services irregularly, is headed by an Acting Chief Executive Officer who is a seconded employee from the county department of water.
- The Company is not commercially viable.
- The County does not own the water company as provided in the Water Act, 2016
- Most of the water service provider's infrastructure is old and dilapidated

Matungulu-Kangundo Water and Sewerage Company Ltd is not commercially viable. As currently constituted, it cannot be able to meet its mandate. It is therefore recommended that Matungulu-Kangundo Water and Sewerage Company Ltd be dissolved and restructured in to a cluster.

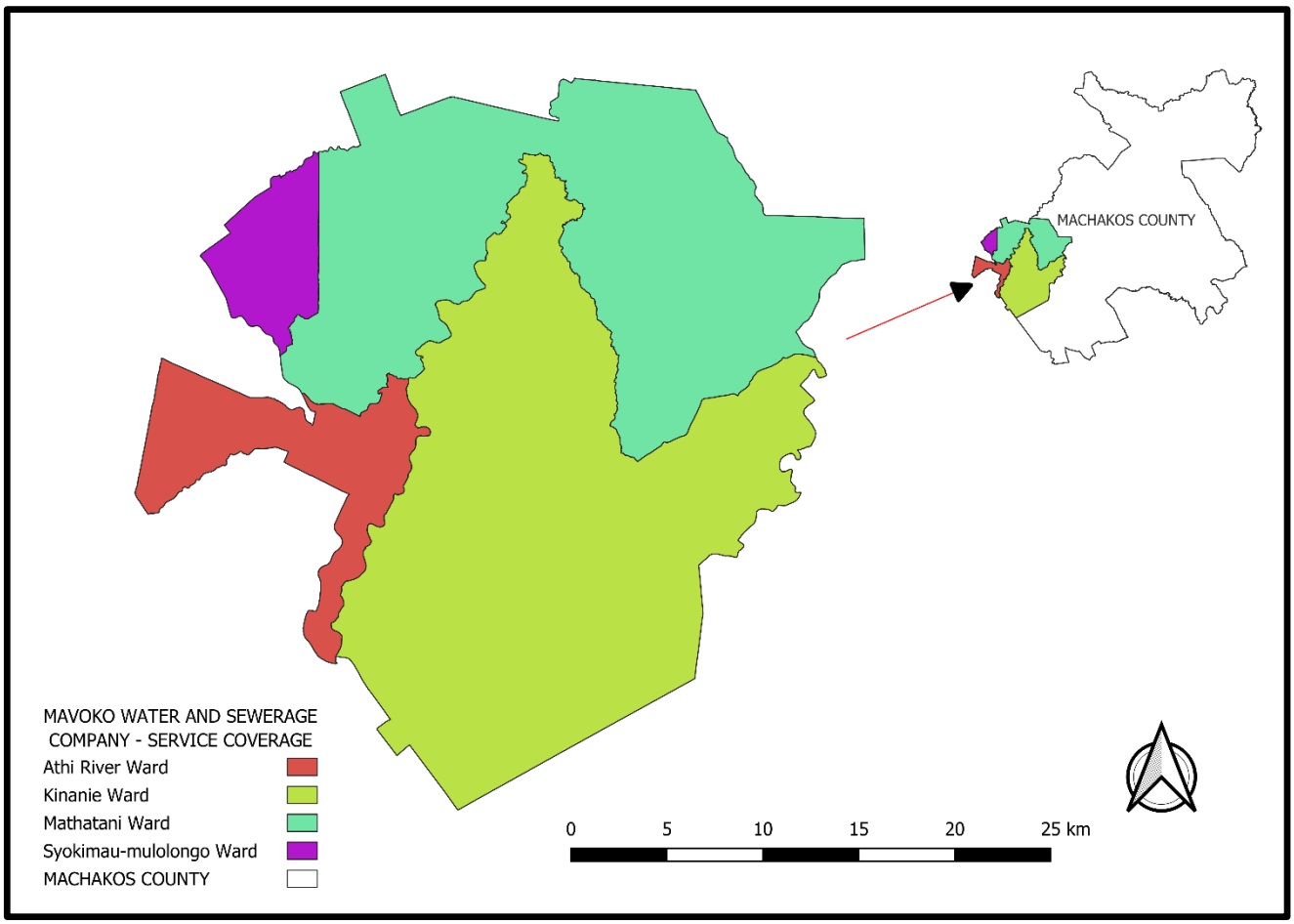
3.5 Mavoko Water and Sewerage Company Ltd

3.5.0 Introduction

Mavoko Water and Sewerage Company (MAVWASCO) was established on 14th May, 2009 under the Companies Act Cap 486 (revised 2015).

3.5.1 Area of Service

The area of service of MAVWASCO is Mavoko Sub County, which includes Mlolongo/Syokimau, Kinanie/ Mathatani, Athi River and Muthwani Wards as regulated by WASREB and the Water Act 2016.



Map 5: Mavoko Water and Sewerage Company Service Area

Source: MWSSRT, 2024

3.5.2 Operations

The company is mandated to provide water and sewerage services within Mavoko Sub County, covering an area of 693 Sq. km. and serving a total population of approximately 645,000 persons. The total company's water production is 8,400m^3 per day with 11,128 active meter connections and 4,000 inactive connections. The current water demand is approximately 100,000m^3 per day hence the company only has a coverage of eight percent (8%).

3.5.3 Water Sources

MAVWASCO sources include; five earth dams (KMC 1 and 2, Portland, Kasuito and Stoni Athi), Nairobi Water Company Line (production of 400m^3 per day and thirteen (13) boreholes.

3.5.4 Sanitation

The company has three (3) main effluent discharge networks (sewer lines) and an additional two (2) subsidiary lines with a total coverage of 55 km and an installed capacity of 800m^3 per day. These include; Mavoko Sub County Pump Station (covers KMC, Shalom and 24-hospital), Edderman Pump Station (which covers both commercial and residential areas along Mlolongo), Valley View Pump Station (which covers residential areas around Signature Mall/ KenChic), KAPA and Sunset Pump stations.

There is one Sewer Treatment Plant operated by EPZA, which consists of biological lagoons and has a capacity of 88,630m^3 per day with a total of 4,666 active connections. In addition, there is an ongoing construction of a new sewer treatment plant in the proposed Leather City located in Kinanie.

3.5.5 Governance

MAVWASCO was registered under the Companies Act (Cap 486) registration number: CPR/2009/3299. A CR12 dated 14th May, 2009 reflects the following as the Directors and Shareholders as listed below;

S/No.	Name	Description	Shares
1.	Evans K. Lagat	Director	0
2.	David Wambua Mila	Director	0
3.	Phillip Musyimi Mwololo	Director	0
4.	Nzau Komu	Director	0
5.	Wisdom Mwamburi	Director	0
6.	Zacharia Onyancha Ogongo	Director	0
7.	Florence Muoti Mwangangi	Director	0
8.	Eng. Kithenya	Director	0
9.	Joseph Mutuku Musau	Director	0
10.	Stella W. Nyamu	Secretary	0
11.	Mirriam Mulei	Director	2
12.	Rhoda Amino Murwa	Director	0
13.	Municipal Council of Mavoko	Shareholder	4,996
14.	The Town Clerk Municipal Council of Mavoko	Shareholder	2
		Total	**5,000**

According to Kenya Gazette Notice No. 9865 dated September 24th, 2021, the following are listed as the Board of Directors of Mavoko Water and Sewerage Services Provider.: -

S/No.	Name	Designation
1.	Philip Mutua Kilonzo	Chairman of Board
2.	Jerusha Susan Omari	Member
3.	James Gitonga Muhoho	Member
4.	Bernard Mutuku Mbai	Member
5.	Rev. Felix Mualuko Daniel	Member
6.	Hekima Ibrahim Mohamud	Member
7.	Florence Kathoki	Member
8.	Chairperson Mavoko Municipal Board/ Alternate	Member
9.	Chief Officer or Alternate - Water & Irrigation	Member
10.	Chief Officer or Alternate - Finance & County Treasury	Member

The Auditor General's report for the fiscal years 2022-2023 noted the following as the Directors currently serving MAVWASCO: -

S/No.	Name	Designation
1.	Philip Mutua Kilonzo	Chairman of Board
2.	Michael Mang'eli	Chief Executive Officer
3.	James Gitonga Muhoho	Board Member
4.	Walter Matini Mochoge	Board Member
5.	Rev. Felix Mualuko Daniel	Board Member
6.	Hekima Ibrahim Mohamud	Board Member
7.	Florence Kathoki Kivevo	Board Member
8.	Antony King'oo Ngunga	Board Member

The appointment of the Board of Directors as Gazetted in September 2021 was not done in accordance with Section 2 (2) of the first schedule of the Water Act 2016; which states that "The CEO and Board members shall be appointed through an open and competitive process". Further it was noted that the gazettement of this board is

not for Mavoko Water and Sewerage Company ltd but for Mavoko Water Services Provider.

3.5.6 Human Resource

Review of records indicated that the company has a total of 80 members of staff of different cadres. It is noted that the company does not have an approved staff establishment and a scheme of service for effective management of personnel functions including recruitment, defining key competencies, job descriptions, staff placements, and remuneration and performance appraisals. This is contrary to the Human Resource Policies and Procedures Manual for Public Service 2016.

Management

The management team of the company is as listed below:

S/No.	Name	Designation	Highest Level of Education
1.	Michael Mang'eli	Managing Director	MBA –Strategic Management
2.	Stella Ndwiga	Finance Manager	Bachelor of Commerce
3.	Jesse Ambundo	Technical Services Manager	Bachelor's degree in Civil Engineering
4.	Jacinta Mbula	Manager Sanitation	Not Available

The current Managing Director has served for fourteen (14) years contrary to Regulation 11 (3) of the Water Services Regulation of 2021 which provides for a term of three (3) years, which may be renewed twice subject to *satisfactory performance*.

3.5.7 Compliance

The issues of determination for Mavoko Water and Sewerage Company include the following:

Ownership

Section 77 of the Water Act, 2016 grants County Governments the authority to establish a Water Services Provider, which may be a public limited liability company owned by the County Government. A company seeking licensing as a water services provider must submit its memorandum and articles of association to the Regulatory Board, ensuring compliance with the guidelines set forth by the Water Services Regulatory Board.

An examination of the current CR12 indicates that the Municipal Council of Mavoko is the majority shareholder, rather than the County Government of Machakos, which is inconsistent with Section 77 of the Water Act, 2016.

License

Section 72 of the Water Act, 2016 confers the Water Service Regulatory Board powers which include but not limited to setting license conditions and accredit water services providers with the said license as well as monitoring and enforcing license conditions. A company intending to be licensed as a water services provider is required to submit to the Regulatory Board its memorandum and articles of association that conform to the guidelines developed and approved by the Water Services Regulatory Board. All Water Service Providers must therefore apply for new licenses from the Water Services Regulatory Board (WASREB). It is noted that Mavoko Water and Sewerage Company Ltd has an operational license from WASREB issued.

3.5.8 Board of Directors

Sections 79 and 80 of the water Act, 2016 provides the criteria of appointment of Board Members for public Water Service Providers. After appointment, the companies should update the records of Board members as required by the registrar of companies in the CR12. It was observed that Mavoko Water and Sewerage Company Board of Directors are not reflected in the CR12 as currently constituted. (*See annexure on Gazette Notice on Appointment of Board of Directors*)

3.5.9 Ownership of Assets

The Water Act 2016 in Sections 83 and 153 stipulates that ownership of all water assets shall rest with the Water Services Providers who shall hold them on behalf of the public.

Upon review of the MAVWASCO asset register, it was determined that the County Government of Machakos does not possess ownership of the assets, including the land housing the water infrastructure and equipment. Inquiries revealed that these assets remain under the ownership of TAWWDA, in contravention of sections 83 and 153 of the Water Act, 2016.

3.5.10 Financial and Audit Reports (KENAO report 2023)

An analysis of the Audit and Financial Statements, for the year ended 30th June 2023 indicates the company had received a ***qualified opinion.*** Some of the issues raised as basis of the opinion, include; Inaccuracies in presentation of the financial statements, long outstanding trade receivables, unsupported trade and other payables. Other key matters highlighted include; budgetary control and performance, unresolved prior year matters and excessive Non-Revenue Water at 51% and Unaccounted for imprest.

3.5.10.1 Liabilities (KENAO report 2023)

The company has declared the following liabilities:

S/No.	Item	Amount (KES)
1.	Deferred Tax Liability	440,603.00
2.	Trade and other payables - long term	40,570,000.00
	Total	**41,010,603.00**

In addition, the Statements of Financial position as at 30th June 2023, reflected Trade and Other Receivables amounting to KES 162,262,144.00 against Customer Deposits of only KES 34,541,003.00.

3.5.11 On-going Projects

Currently, MAVWASCO has three (3) main on-going capital projects:

i. Nairobi Expressway Project which involves relocation of Water and Sewer pipelines funded by Belgium and implemented by AWWDA. By the time of writing this report, the Water component was 60% complete while Sewer component was at 85% completion level.

ii. A Sewer Feasibility Study being undertaken under the Kenya Towns Sustainable Water Supply and Sanitation Program in Mavoko Town

iii. An additional water treatment plant of 10,000m^3 per day under the Mavoko Water Project was complete at the time of writing this report (The project

components include a new modernized water treatment plant & storage tanks in Athiriver, Rehabilitation of Kasuitu and KMC dams , Ground & Elevated storage tanks).

3.5.12 Proposed Projects

Some of the proposed projects in the company's service area include; rehabilitation of the existing water and sewer infrastructure to reduce NRW, and development of a new water and sewer infrastructure networks to cover upcoming and underserved areas such as Katani, Kangundo road, Kyumvi, Joska and Sabaki.

3.5.13 Environmental and Social Safeguards

It was observed that the company lacked strategies and structures to support environmentally sustainable operations including climate change adaption and mitigation measures. The study revealed deficiencies on:

i. Protection of water resources especially the major source which is Athi river.
ii. Use of alternative clean and renewable sources of energy to mitigate the high power bills.
iii. Utilization of waste especially from sewer.
iv. Risk and disaster management
v. Environmental policy
vi. Grievance/Redress mechanisms for both employees and consumers
vii. Institutions and tools to implement green production

3.5.14 Technology

The company uses displacement-velocity meters and smart meters in some areas. It also has an ERP system software for billing its customers. The company has also introduced mobile meter reading (USSD code), incorporation of GIS, use of listening sticks, mass meter testing and has an online portal for meter application and billing.

3.5.15 Challenges

The Company faces the following challenges:

i. Competition from EPZA for water and sewerage services provision
ii. Old and dilapidated water and sewerage infrastructure
iii. Inadequate own water sources leading to a huge gap between demand and supply
iv. Lack of own wastewater treatment plant (current one owned/ managed by EPZA)
v. Lack of own office building (currently renting) leading to high operations costs
vi. Climate change - reduced availability of surface water/ increased loss of water from reservoirs due to evaporation and siltation; lower water levels in major rivers and streams
vii. Water pollution from industries and agriculture - especially the main water sources
viii. Low sewerage system coverage
ix. Over-reliance on electricity resulting in high operational costs
x. Vandalism of water and sanitation infrastructure

3.5.16 MAVWASCO SWOT Analysis

In order to evaluate MAVWASCO competitive position, potential and risk, the Taskforce conducted a SWOT analysis for the company as presented in the table below;

Strengths	Weaknesses
✓ Availability of a water testing lab ✓ New water treatment plant/ infrastructure ✓ A fairly well-established human resource structure ✓ Availability of a sewer system ✓ Donor supported projects ✓ Densely populated service area ✓ Supportive policy environment	• Poor governance practices • Inability to meet water demand • High Cost of electricity • Negative organizational image • Low technological adoption • Poor waste management practices • Low sewer coverage • Key water and sanitation assets not owned by the company • Rented office space
Opportunities	**Threats**
✓ Fast growing urban setup – emerging estates and industrialization ✓ The opportunity to co-produce affordable water through Public private partnership (PPPs). ✓ Unmet demand in the emerging uncovered areas of the sub county ✓ Potential for adoption of ICT in operations ✓ Potential for adoption of renewable energy for pumping and water treatment ✓ Conducive policy and regulatory framework ✓ Revival of Nol-Turesh water project ✓ Suitable hydrogeological features for water harvesting ✓ On-site sewer treatment ✓ Desilting of existing dams to increase capacity ✓ New sewer treatment plant at Leather City to be managed by the County	• Pollution of water sources • Conflict over cross county shared water sources (Nol-Turesh and Nairobi expressway project). • Increased competition from EPZA and private water service providers • Vandalism of water and sewerage infrastructure • Informal and unplanned settlements.

Table 6, MAVWASCO Swot Analysis

The SWOT analysis on MAVWASCO reveals that the water company has major governance issues, is facing major threats and therefore the company is not commercially viable.

3.5.17 General Observations

The Taskforce made the following observations about Mavoko Water and Sewerage Company:

i. The CEO of the water company has exceeded his tenure having served for 14 years.
ii. The County Government does not own the water company based on the CR12 and as provided by Section 77 of the Water Act 2016. The Municipal Council of Mavoko is reflected as majority shareholder.
iii. The County Government does not own the assets of the company. They are still in the books of TAWWDA contrary to Section 83 and 153 of the Water Act 2016.
iv. The company has old and dilapidated infrastructure.

3.5.18 Recommendations

Mavoko Water and Sewerage Company ltd is not commercially viable. As currently constituted, it cannot be able to meet its mandate. It is therefore recommended that Mavoko Water and Sewerage Company ltd be dissolved and restructured in to a cluster.

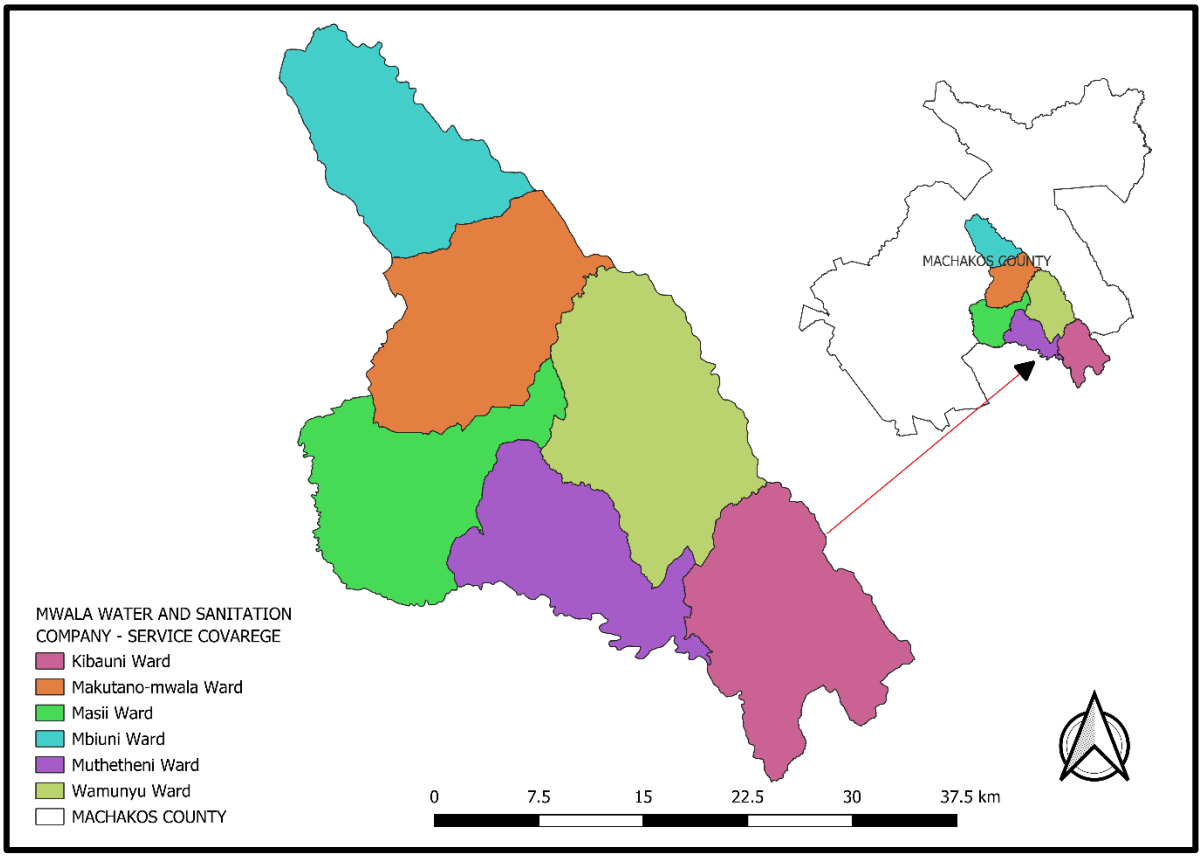
3.6 Mwala Water and Sanitation Company

3.6.0 Introduction

Mwala Water and Sanitation Company Limited was established on 22nd March, 2010 under the Companies Act Cap 486 (Revised 2015). The company is mandated to provide water and sanitation services within Mwala Sub County.

3.6.1 Area of service

The area of operation for Mwala Company includes; Mbiuni, Mwala, Makutano, Masii, Wamunyu and Kibauni Wards. Mwala Water & Sanitation Co. currently serves approximately 93,000 people through 543 water connections. This translates to 34% of the area of coverage for the Company (1,014.5km^2). The estimated population of Mwala Sub County is 267,600 persons.



Map 6: Mwala Water and Sewerage Company Service Area. Source: MWSSRT,2024

3.6.2 Operations

The operations of Mwala Water and Sanitation Ltd includes provision of clean water and sanitation services covered in five (5) schemes:

3.6.3 Water Supply

i) Mbiuni Water Supply

The Scheme is located in Mbiuni/Kathama Ward and covers 50km^2. It was initiated under the Rural Water Supply program [RWS] and was completed and commissioned in 1975.

The source of water is Athi River and raw water is pumped to a conventional treatment system (rectangular horizontal flow with a filter) of 55m^3/hr. It has a total storage capacity of 290 m^3 and a network of 12 distribution lines with 295 metered connections.

ii) Kibauni Water Supply

The Scheme is located in Kibauni/ Ikalaasa Ward and covers 65km^2. It was initiated under the Rural Water Supply program [RWS] and was completed and commissioned in 1981.

The source of water is Athi River and raw water is subjected to a conventional treatment system (composite filtration) of 45m^3/hr. It has a total storage capacity of 500 m^3 and a network of six (6) distribution lines with 73 metered connections.

iii) Wamunyu Water Supply

The Scheme is located in Wamunyu/ Yathui Ward and covers 68km^2. It was initiated under the Rural Water Supply program phase1 [RWS1] and was completed and commissioned in 1975. The source of water is Athi River and the water is subjected to a conventional treatment system (composite filtration unit) of 50m^3/hr. It has a total storage capacity of 450 m^3 and a network of seven (7) distribution lines with 1,250 metered connections.

iv) Mwala Water Supply

The Scheme is located in Mwala/Makutano Ward and covers 68km^2. It was initiated under the Rural Water Supply program phase1 [RWS1] and was completed and commissioned in 1981.

The source of water is River Miu and the raw water is treated on-site by chlorination. The total storage capacity is 350m^3 with two (2) distribution lines and a total of 76 metered connections.

v) Masii Water Supply

The Scheme is located in Masii/ Vyulya Ward and covers 4km^2. It was initiated by National Youth Service while tarmacking Machakos –Makutano road, and was completed and commissioned in 1975. The source of water is a borehole with a yield of 11m^3/hr. The total storage capacity is 400m^3 with two (2) distribution lines and a total of 99 metered connections.

3.6.4 Sanitation

The company has two (2) ablution blocks located in Masii and Wamunyu Markets. The facilities were constructed by WSTF and are under a private operator. MWAWASCO provides metered water to these facilities and charges the operator under a PPP arrangement.

3.6.5 Governance

The Board of Directors as per CR12 dated 22nd March 2010, reflects the following as Directors:

S/No.	Name	Designation	Shares
1.	John Mwangi Mutuva	Chairman of Board/Shareholder	10
2.	Joseph Mutuku Nzesya	Director/ Shareholder	90
3.	Stephen Musyoka Musumbi	Director	0
4.	David Mutua Mbithi	Director	0
5.	Julian Mumbua Ikovo	Director	0
6.	Josephine Ndunge Nzivo	Director	0
7.	Monicah Ndoti Mwangangi	Director	0

According to Kenya Gazette Notice No. 9868 dated 13th September 2021, the following are listed as the Board of Directors for Mwala Water and Sanitation Company : -

S/No.	Name	Designation
1.	Dr. Benjamin Munywoki Musau	Chairperson
2.	David Mutua Mbithi	Member
3.	Monicah Mwangangi	Member
4.	Joseph Mutinda Kasimolo	Member
5.	Julian Mumbua Ikovo	Member
6.	Stephen Musyoki Musumbi	Member
7.	Josephine Ndunge	Member
8.	Chief Officer or the Alternate – Water & Irrigation	Member
9.	Chief Officer or the Alternate – Finance & County Treasury	Member

The Auditor General's report for the fiscal years 2022-2023 reflects the following as the Directors serving MWAWASCO: -

S/No.	Name	Designation
1.	Stephen Musyoka Musumbi	Chairman
2.	Joshua Muema Muthini	Member
3.	Joseph Mutinda Kasimolo	Member
4.	David Mutua Mbithi	Member
5.	Josephine Ndunge Nzivo	Member
6.	Monicah Ndoti Mwangangi	Member
7.	Julian Mumbua Ikovo	Member
8.	Moses M. Nzuki	Managing Director/ Secretary to the Board
9.	CECM-Finance County Government of Machakos	Member
10.	CECM- Water County Government of Machakos	Member

3.6.6 Human Resource

Review of records indicates that the company has a total of 18 members of staff of different cadres. The company lacks a human resource policy, does not have an approved staff establishment or a scheme of service for effective management of personnel functions including recruitment, definition of key competencies, job descriptions, staff placement, remuneration and promotions.

This is contrary to the Human Resource Policies and Procedures Manual for Public Service 2016.

MWAWASCO management is as listed below;

S/No	Name	Designation	Highest Level of Education
1.	Moses Nzuki	Managing Director	Diploma in Plant Engineering
2.	Phylis Matheka	Finance & Administration Manager	Bachelor of Commerce
3.	Peter Mwasuna	Technical Services Manager (Seconded from the County)	Diploma in Water Engineering
4.	Lucia Kavivya	Accountant	CPA III

3.6.7 Compliance

The issues under review for MWAWASCO include the following:

Ownership

Section 77 of the Water Act, 2016 confers to County Governments the mandate to establish a Water Services Provider which may be a Public limited liability Company owned by the County Government.

Review of the status of ownership based on the current CR12 reflects Joseph Mutuku Nzesya (90 shares) and John Mwangi Mutuva (10 shares) as the only shareholders and not the County Government of Machakos contrary to section 77 of the Water Act, 2016.

a) Board of Directors

Sections 79 and 80 of the water Act, 2016 provides the criteria of appointment of Board Members for public Water Service Providers. After appointment, the companies should update the Board Members as required by the registrar of companies in the CR12.

The taskforce found that the Mwala Water and Sanitation Company Board of Directors are not reflected in the CR12 as currently constituted. Further the taskforce noted that the gazettement of this board is not for Mwala Water and Sanitation Company ltd but for Mwala Water Services Provider.

(*See annexure on Gazette Notice*)

b) Management of Water Service Providers

Chief Executive Officers of WSPs are required to serve for a term of three (3) years, which may be renewed twice subject to satisfactory performance in line with Regulation 11 (3) of the Water Services Regulation of 2021.

MWAWASCO CEO has been in office since 2010. Initially in an acting capacity and confirmed in the year 2017. The taskforce observed that, the managing director has been in office for over ten (10) years and therefore exceeding the stipulated term as per Water Act, 2016.

c) License

Section 72 of the Water Act, 2016 confers the Water Service Regulatory Board powers which include but not limited to setting license conditions and accredit water services providers with the said license as well as monitoring and enforcing license conditions. A company intending to be licensed as a water services provider is required to submit to the Regulatory Board its memorandum and articles of association that conform to the guidelines developed and approved by the Water Services Regulatory Board. All Water Service Providers must therefore apply for new licenses from the Water Services Regulatory Board (WASREB).

Mwala Water and Sanitation Company Ltd does not have an operational license from WASREB.

Section 85 of the Water Act, 2016 has set clear terms on Water Service Providers who negligibly offer water services without a valid operating License from WASREB hence committing an offence and subsequently, their operational officers to be held liable.

d) Ownership of Assets

The Water Act 2016 in Sections 83 and 153 stipulates that ownership of all water assets shall rest with the Water Services Providers who shall hold them on behalf of the public. Mwala Water and Sanitation Company presented their asset register and upon inspection by the taskforce, it was found that the County Government of Machakos does not own the assets, including the land on which water infrastructure and equipment are hosted. Upon enquiry, it was found that these assets are still owned by TAWWDA contrary to section 83 and 153 of the Water Act, 2016

3.6.8 Financials and Audit Report

An analysis of the Audit and Financial Statements, for the year ended 30th June 2023 indicates the company had received a ***qualified opinion.*** Issues raised as basis of the opinion, include; Inaccuracies in the Financial Statements, unsupported customer deposits, un - reconciled revenue, high Trade and other Payables (Ksh 18,544,402) indicating company's inability to pay creditors, doubtful recoverability of Trade and other Receivables, material uncertainty relating to going concern – current year loss from operations Ksh.4, 840,412 and a cumulative loss in revenue reserves of Ksh 25,173,793.

Further, the company had a negative working capital of Ksh 6,884,787, lacked an approved water tariff, had Non-Revenue Water at 27% with under-collection of Revenue and failure to remit statutory deductions.

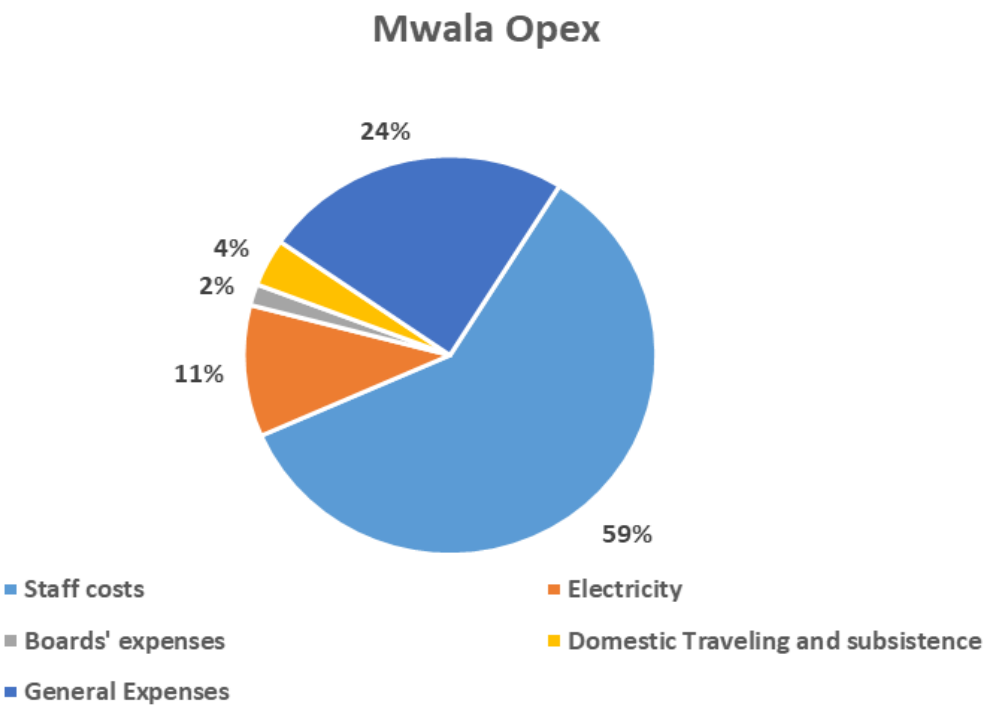


Figure 6: MWAWASCO Opex, Source, Office of Auditor General's report,2023

3.6.9 On -going Projects

It was noted that within the area of service there was an on-going project; the Mwala Cluster Water Supply (Financed by AfDB through Athi Water Works for Kshs 1.4B) at the time of this study.

3.6.10 Proposed Projects

The company had identified and proposed the following projects within the area of service at the time of this study:

i) Replacement of dilapidated pipes.

ii) Extension of 2" pipeline from Tulila to Ngumbau Primary School

iii) Laying of gravity pipeline from Ikalaasa dam along Mivukoni stream for four (4) kms to Kwa King'uyu.

iv) Installation of 10m^3 plastic tanks in all the water kiosks.

3.6.11 Challenges

Mwala Water and Sanitation Company faces several challenges in its service provision. These include outdated and deteriorating water and sewerage infrastructure, insufficient water sources, and an inadequate capacity of the water treatment plant to meet daily demand. Additionally, there is a notable absence of sanitation infrastructure. The company also contends with high energy costs for electricity and expensive chemicals necessary for treating the heavily polluted Athi River water. This is worsened by frequent instances of vandalism targeting water infrastructure, which jeopardizes existing water storage capacity and adversely affects the availability of the water.

3.6.12 MWAWASCO SWOT Analysis

In order to evaluate MWAWASCO competitive position, risk and potential, the Taskforce conducted a SWOT analysis for the company as presented in table 7;

Strengths	Weaknesses
✓ Own office space ✓ Five (5) water supply schemes namely; Mbiuni, Kibauni, Wamunyu, Mwala and Masii covering five wards. ✓ Conducive policy and regulatory framework	• Poor Governance • Inability to attract highly qualified management and technical staff. • Inadequate water infrastructure. • Inadequate working equipment. • Non-Revenue Water (NRW) at 27% • High Operation and Maintenance Costs (electricity and water treatment chemicals) • Old and dilapidated water infrastructure • Lack of a sewerage system in Mwala • Lack of environmental and social safeguards strategy
Opportunities	Threats
✓ Available forty six (46) County boreholes ✓ Unmet demand in the emerging uncovered areas of the sub county ✓ The opportunity to produce affordable water through Public Private Partnerships (PPPs). ✓ Proximity to a large raw water source (Athi River) ✓ Ongoing Mwala Cluster water supply project. ✓ Potential for adoption of ICT in operations ✓ Potential for adoption of renewable energy for pumping and water treatment	• Pollution of the major water source (Athi River) • Competition from private water vendors • Vandalism of water infrastructure • Assets not owned by the company • Encroachment of land for water sources.

Table 7; MWAWASCO Swot Analysis

3.6.13 General Observations

The Taskforce made the following observations on Mwala Water and Sanitation Company: -

i. The Machakos County Government does not own the water company as provided in the Water Act, 2016,

ii. The WSP assets are owned by TAWWDA,

iii. The company provides water services irregularly as it is not licensed by WASREB,

iv. Both the CEO and Board Members of the water company were not recruited through a competitive process as required by Section 77 of the Water Act 2016,

v. As pointed out by the last Audit Report for the year Ended 30th June 2023, the company has a material uncertainty relating to it being a going concern,

vi. The water service provider's infrastructure is old and dilapidated,

vii. The company has very high operation and maintenance costs.

viii. The water source, Athi River, is highly polluted, leading to health concerns.

Mwala Water and Sanitation Company is not owned by the Machakos County Government as stipulated by the Water Act, 2016, and its assets are held by the Tana and Athi Rivers Development Authority (TAWWDA). Additionally, the company operates without a license from the Water Services Regulatory Board (WASREB), leading to irregular water service provision. Recruitment practices for the CEO and Board Members did not adhere to the competitive process required by Section 77 of the Water Act, 2016. The latest Audit Report for the year ending June 30, 2023, raised concerns about the company's ability to continue as a going concern.

Further, it was noted that the company's infrastructure is outdated and in poor condition, resulting in high operational and maintenance costs. The primary water source, Athi River, is significantly polluted, posing serious health risks. Collectively, these issues collectively impact the effectiveness and reliability of the company's water services.

3.6.14 Environmental and Social Safeguards

It was observed that the company lacked strategies and structures to support environmentally sustainable operations including climate change adaption and mitigation measures. The study revealed deficiencies on:

i. Protection of water resources especially the major source which is Athi river.
ii. Use of alternative clean and renewable sources of energy leading to high power bills.
iii. Risk and disaster management
iv. Environmental policy
v. Grievance/Redress mechanisms for both employees and consumers
vi. Institutions and tools to implement green production

3.6.15 Recommendations

Mwala Water and Sanitation Company ltd is not commercially viable. As currently constituted, it cannot be able to meet its mandate. The Taskforce therefore recommends that Mwala Water and Sanitation Company ltd be dissolved and restructured into a cluster.

3.7 Yatta Water Services Company Ltd



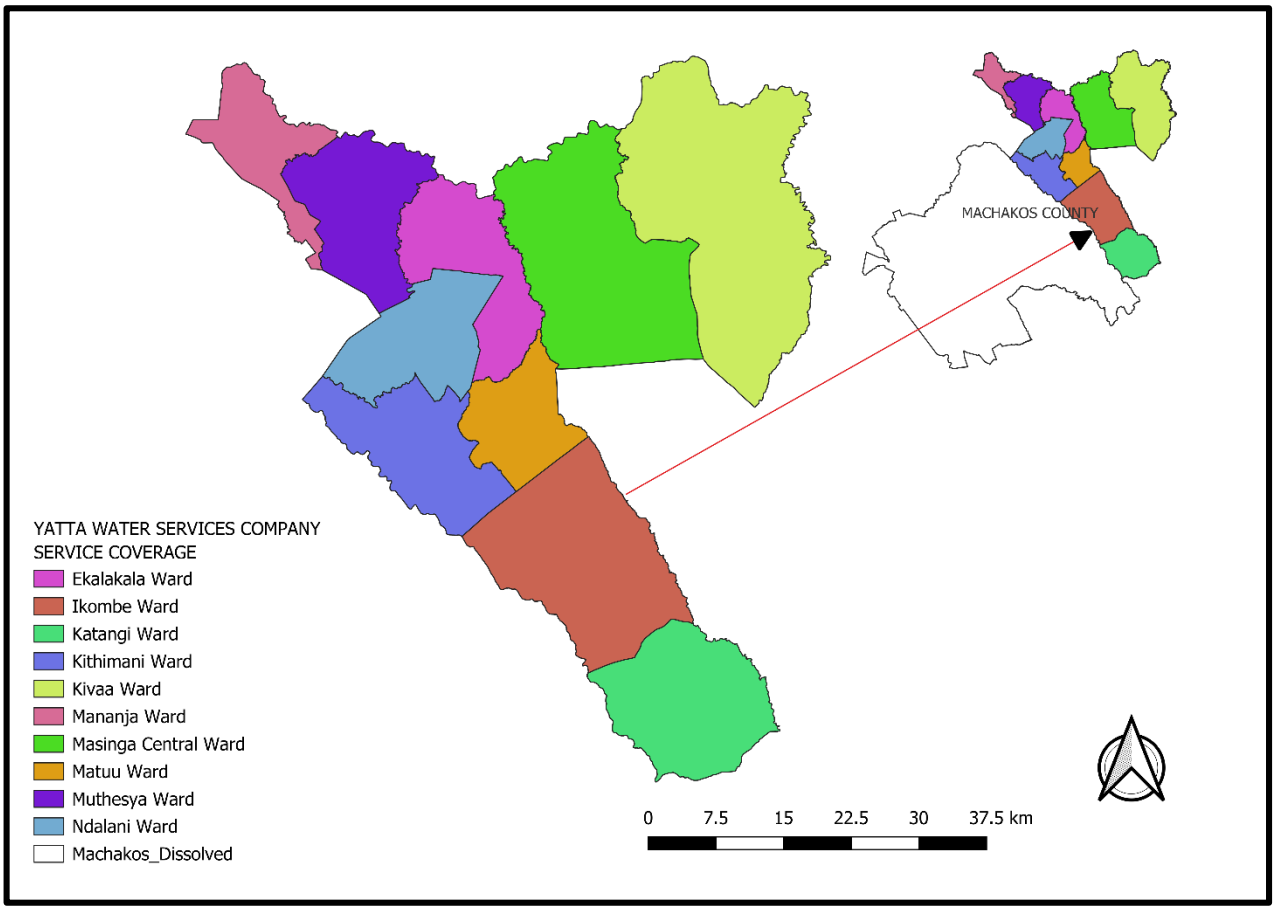
3.7.1 Introduction

Yatta Water Services Company Limited (**YAWASCO**) is a limited liability company incorporated on 27th July 2006 under the Companies Act Cap 486 (revised 2015). The company was created through a merger between Matuu Water Supply and the Yatta Canal and is mandated to provide water and sewerage services. The company took over from Matuu Water Supply a self-help project initiated in the 1970s to supply water to various institutions within Matuu town and its environs.

3.7.2 Area of service

The company is mandated to provide water and sanitation services within Yatta Sub-County, which includes Matuu and its environs as regulated by WASREB, covering an area of 700 sq. km. and serving a total population of approximately 110,000 persons. However, the current extent of the company's distribution network covers only 150 km^2 and a population of 60,000 people. The company further covers Ikombe, Ndalani and Katangi wards in Yatta Sub-county and also gives water services to some parts of Masinga Sub-county. The larger part of Masinga Sub-county including Ekalala, Masinga Central and Kivaa wards are served by Kitui Water and Sanitation Company (KITWASCO). This has caused water conflicts within the communities due to poor

service delivery by KITWASCO. The local people have petitioned the County Government of Machakos to be served through YAWASCO since the source of water is Masinga dam located in Machakos County.



Map 7: Yatta Water Services Company Service Area

Source: MWSSRT

3.7.3 Operations

The Matuu water treatment plant is situated 50km from the intake at Thika River and draws raw water from the Yatta Canal which is taken through a conventional treatment process before being pumped into Matuu town's 225m^3 elevated steel tank, a distance of 1.8 km. The water then flows by gravity to the distribution lines in Matuu town and its environs with a distribution network of 55km.

The total daily water production for the water company stands at 2,300 m^3 against a water demand of 5,000 m^3. The company declared a 34% ratio of NRW caused by both physical and commercial losses. This exceeded the threshold set by WASREB at 25%. The auditor general however, established a 35% NRW ratio for Yatta Water Services Company in the year ended 30th June 2023.

The company has 1,814 water connections with 1,780 connections remaining active.

a.) Water Sources

The main source of water is the Yatta canal which has an intake in the Thika River. Other sources of water within the YAWASCO area of service include rain water harvesting, shallow wells and two storage water pans.



Masinga dam intake





Yatta Canal intake, Thika river

Sanitation

The company does not have sewerage infrastructure in its area of service.

3.7.4 Governance

Yatta Water Services Company Ltd provided a CR12 dated 27th July, 2006 to the Taskforce reflecting only two (2) Directors/ Shareholders, namely Stephen Mwallyo Mbondo and Joshua Kiilu Mwonga. It was observed that the County Government of Machakos was not reflected as a shareholder.

(See annexure CR12 for YAWASCO)

Board of Directors

Upon examination of the Auditor General's report for the financial year 2022-2023 it was noted that there were nine (9) Directors serving Yatta Water Services Company as listed below;

S/No	Name	Designation
1	Albanus Muthama	Chairman of the Board
2	Augustus Mboya	Managing Director
3	Stephen Mbondo	Member
4	Michael Muthama	Member
5	Joseph Muli	Member
6	Margaret Mwamisi	Member
7	Antonillar Wambua	Member
8	Stephen Ndwiki (Representing Chief Officer water)	Member
9	Beth Kioko	Member

It was noted that the Board of Directors had been gazetted for Yatta Water Services Provider instead of Yatta Water Services Company the registered name of the company.

3.7.5 Human Resource

A review of records indicates that the company has a total of 29 employees of different cadres.

The company lacks a human resource policy and in addition does not have an approved staff establishment and a scheme of service for effective management of personnel functions including recruitment, definition of key competencies, job descriptions, staff placement, remuneration and promotions.

This is contrary to the Human Resource Policies and Procedures Manual for Public Service 2016.

Management

The management team of the company includes the CEO, Commercial, Technical and Human Resource Managers as well as the Procurement Officer and Accountant as listed below;

S/No.	Name	Designation	Highest Academic Qualification
1.	Augustus Mboya	Managing Director	Masters of Arts in Economics
2.	Damaris Mbiu	Commercial Manager	Bachelor's Degree in Business Management (Procurement)
3.	Paul Mutuku	Technical Services Manager	-
4.	Monica Mutunga	Accountant	B. Com (Finance)
5.	Leperlyn Mwende	Procurement Officer	-
6.	Peninah Kivindyo	Human Resources Manager	Diploma in Water Engineering

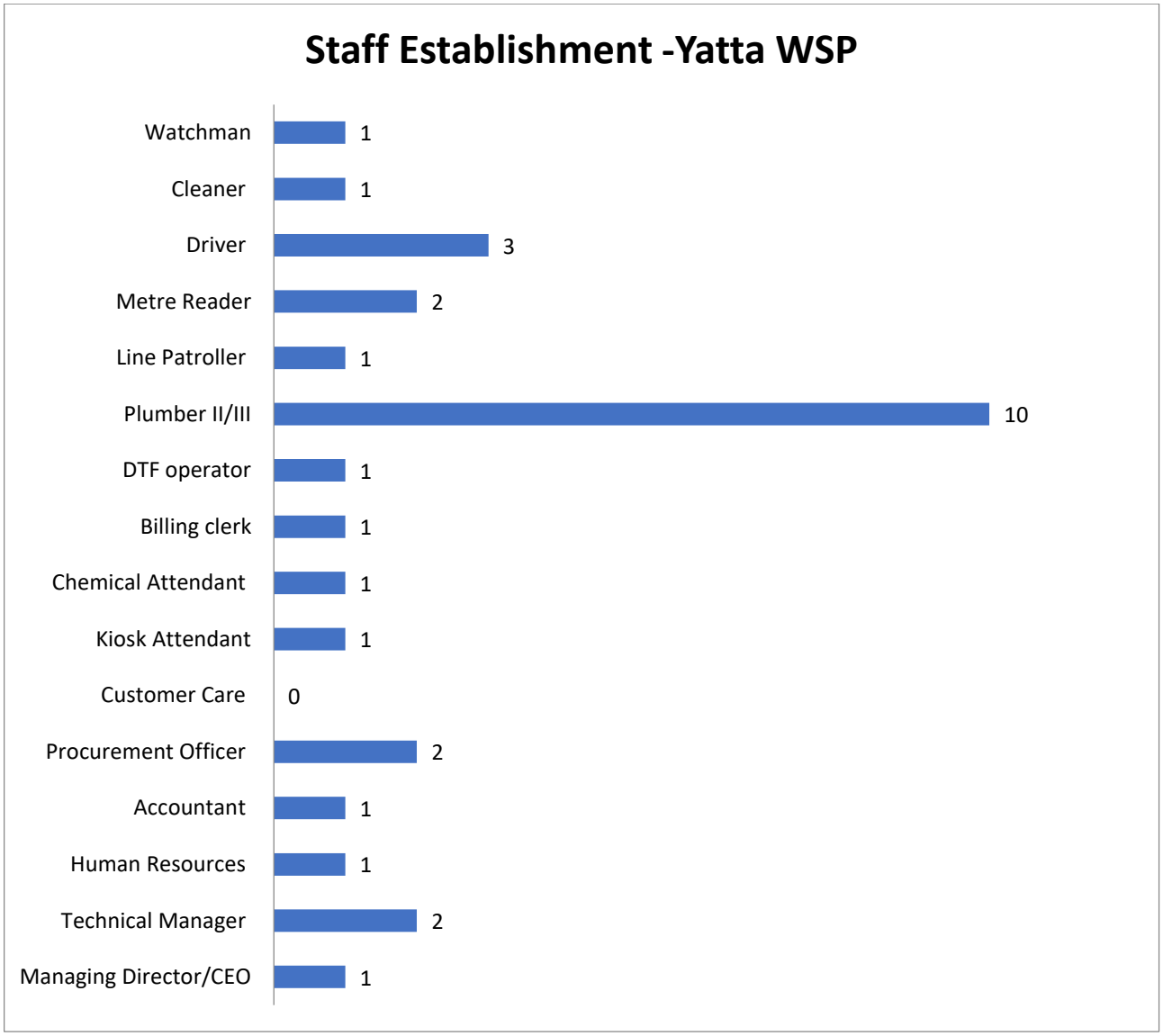


Figure 7: YAWASCO Staff Establishment

It was noted that the current CEO has served in an acting capacity for over ten (10) years and also has a letter indicating that he has been confirmed as Managing Director on permanent and pensionable terms (*See annexure*), contrary to Regulation 11 (3) of the Water Services Regulation 2021 which provides for a term of three (3) years, which may be renewed twice subject to satisfactory performance.

3.7.6 Compliance

The Task force focused on four main issues of compliance concerning Yatta Water and Sanitation Company as follows:

a. Ownership

Section 77 of the Water Act, 2016 confers to County Governments the mandate to establish Water Service Providers which may be Public Limited Liability companies or otherwise. It was established that legally the County Government of Machakos does not own Yatta Water and Sanitation Company against the requirements of the Regulator. The Memorandum and Articles of Association held by YAWASCO indicate that the company is owned by the defunct Town Council of Matuu. The OAG report for 2021 noted that an AGM held on 26th June 2015 resolved to have the company transfer shares owned by the Town Council of Matuu to the County Government of Machakos. However, the CR12 of the company reflects only two shareholders, namely Stephen Mwallyo Mbondo and Joshua Kiilu Mwonga, hence the company is still not owned by the county government of Machakos.

Board of Directors:

Section 79 and 80 of the Water Act 2016 provides the criteria for appointment of Board Members for Water Services Providers. It was observed that this section was not upheld in respect of Yatta Water Services Company as the appointment of the board members was not done competitively in accordance with Section 2 (2) of the first schedule of the Water Act 2016.

b. Management of Water Service Providers

Managing Directors of WSPs are required to serve for a term of three (3) years, which may be renewed twice subject to satisfactory performance in line with Regulation 11 (3) of the Water Services Regulation of 2021. Additionally, all persons employed by WSPs are public officers and subject to the laws governing the conduct of public officers. It was observed that the Managing Director has served for more than three (3) years without performance management review and reappointment procedures being adhered to.

c. License

All Water Service Providers are required to apply for licenses from the Water Services Regulatory Board (WASREB. The company did not have an operating license from the regulator hence not compliant. It's the responsibility of all Water Service Providers to adhere to the guidelines set by WASREB so as to meet the threshold as per Sections 74 and 90 on licensing.

YAWASCO negligibly offers water services without a valid operational license from WASREB, hence committing an offense as per Section **85** of the **Water Act, 2016**. This also posed a challenge in tariff determination for various clusters of consumers within its area of operation. Therefore, regulation of tariffs was neither standardized nor implemented by YAWASCO.

d. Ownership of Assets

The Water Act 2016 Section 83 stipulates that ownership of the assets of the Water Service Providers shall rest with the respective County Government that will hold it in trust of the public/ its citizens

The management of Yatta Water and Sanitation Company presented their asset register but the County Government of Machakos was not listed as owner of any of the assets including the land on which water infrastructure and equipment are hosted, contrary to Sections 83 and 153 which confirms the transfer of functions, assets, liabilities, obligations, agreements and other arrangements to County or Cross-County Water Service Providers.

3.7.7 Financials/Audit Reports

Section 129 of the **Water Act, 2016** stipulates that every body corporate established under the Act to keep proper books and records of account of income, expenditure, assets and liabilities. Within a period of three months after the end of each financial year, the annual accounts of the body corporate are required to be submitted to the Auditor General in respect of the year together with: -

a. Statement of the income and expenditure of the body corporate during that year; and
b. Statement of the assets and liabilities of the body corporate on the last day of the financial year.

The audit report for the FY 2022/2023 noted the following on account of compliance and effectiveness in use of public resources: -

i) The company does not meet the service standard on ratio of Non-Revenue Water (NRW) at 25%.

ii) The company had not applied for a new Water Tariff from WASREB since 30th June 2012.

iii) Irregular procurement of security services

iv) Irregularities in the management of the board of directors (irregular appointment of the board)

v) Late remittance and/ or non - remittance of statutory deductions

vi) Failure to file returns with the Registrar of Companies

vii) Unaccounted for customer deposits

viii) unsupported and unvalued property, plant and equipment,

ix) Unsupported administrative costs

x) Expenditure in excess of approved budget [an over expenditure of Ksh 17,965,680.00 (68%) of total budget was noted in the FY 2022/2023

On effectiveness of internal controls, risk management and governance the auditor observed: -

i) Weak revenue accountability – the company did not have a policy on revenue management, thus, revenues from water from kiosks sales were not banked intact.

ii) Lack of human resource policy documents

In addition, the Auditor noted that YAWASCO had long outstanding trade and other receivables; unsupported expenditure on staff incentives; unsupported inventories; material uncertainty related to going concern and lacked an updated asset register.

Based on the above report and financial statements, for the year ended 30th June 2023 the Office of the Auditor General gave a **qualified opinion** implying that although by and large the financial transactions were recorded and are deemed to be in agreement with the accounting record, there were cases where the auditor was not satisfied with the veracity of noted issues.

Review of the audit reports together with relevant responses established that the company in its presentation and disclosures of financial statements depicted a financial position that reflected current liabilities of **Ksh 15,533,608.00** against current assets of **Ksh 5,383,847.00** resulting in a negative working capital of **Ksh 10,149,761.00** implying the company was technically insolvent and therefore not able to meet its financial obligations.

3.7.8 Liabilities and Debts

The company liabilities at the time of review were as presented in figure 8;

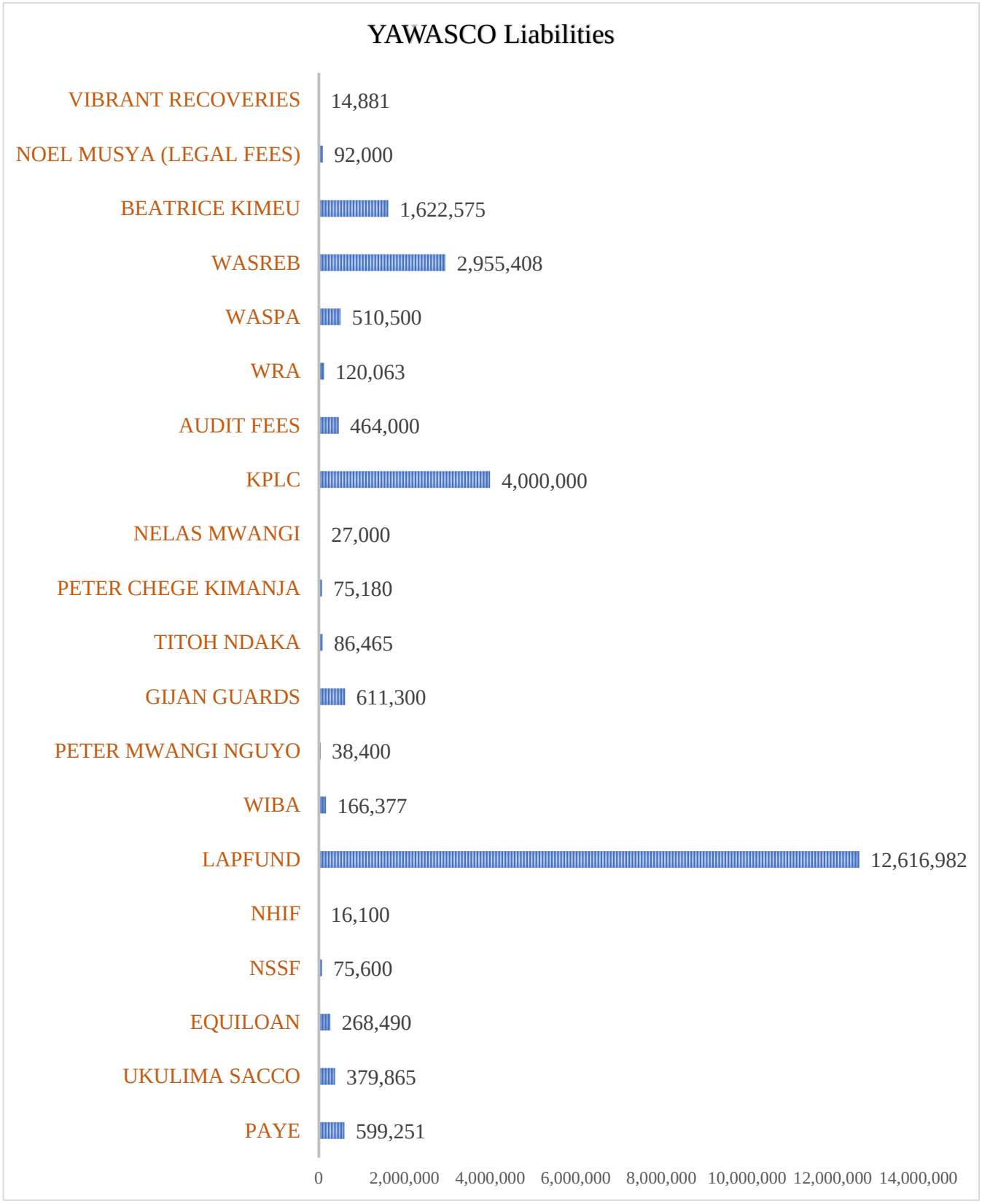


Figure 8: YAWASCO List of Liabilities- Source YAWASCO Financial Statements as at June, 2023

3.7.9 Debts

The water Company also declared debts worth 25,760,838. This is reflected as shown in figure 9;

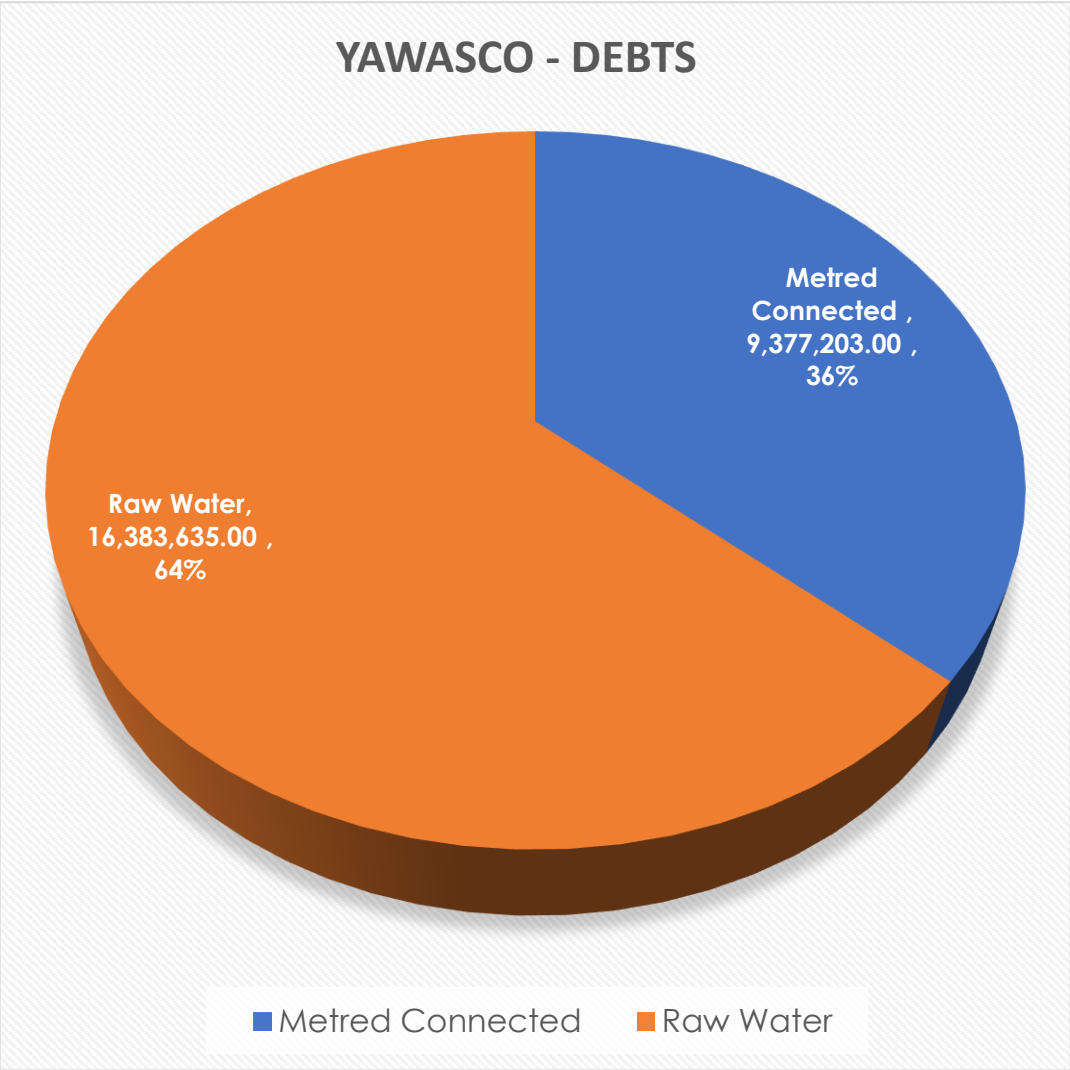


Figure 9: YAWASCO Debts Source Yawasco Finacial Statements as at June, 2023

3.7.10 Ongoing Projects

It was established that the company had one major stalled project within its service area - The NYS-Matuu Last Mile Connectivity Water Project funded by African Development Bank, the Kenya Government through TAWWDA and AWWDA with a budget of KES 220M. The scope of the project included a 4,500m^3 treatment works; one (1 No.) elevated steel tank with a capacity of 180m^3; a 225m^3 masonry tank; 33km reticulation pipeline; two (2 No.) staff quarters and two (2 No.) pump houses.
At the time of this study, the project was at 50% completion and had stalled. The project was designed to cover the areas of NYS, Kithimani, Sofia, Parts of Matuu and Kivandini Markets and was being implemented by BMK Private Ltd Joint Venture Contractors.

3.7.11 Proposed Projects

At the time of the study it was noted that the company has the following project Proposals.

i. Desilting of Yatta canal
ii. Proposed Yatta dam to provide sustainable water supply to Yatta canal.
iii. Installation of both bulk and normal smart meters to enable the metering of raw water supplied to farmers for irrigation along the Yatta canal and treated water for domestic use.
iv. The Proposed Masinga Water Second intake and distribution line to Masinga by TAWWDA approximate budget Ksh 500M

3.7.12 Technology

The company uses displacement-velocity meters which are costly, have low sensitivity in measurement and require regular calibration. The WSP uses an excel software to bill its customers which is susceptible to manipulation.

3.7.13 Environmental and Social Safeguards

It was observed that the company lacked strategies and structures to support environmentally sustainable operations including climate change adaption and mitigation measures. The study revealed deficiencies on:

i. Protection of water resources especially the Yatta Canal
ii. Use of alternative clean and renewable sources of energy leading to high power bills.
iii. Risk and disaster management
iv. Environmental policy
v. Grievance/Redress mechanisms for both employees and consumers
vi. Institutions and tools to implement green production

3.7.14 Challenges

i. Inadequate water sources.
ii. Siltation of the Yatta Canal
iii. Old and dilapidated water infrastructure
iv. High Operation and Maintenance Costs (e.g., high cost of energy - electricity bills of amounting to about Ksh 650,000.00 per month)
v. High Non-Revenue Water (NRW) at 35% against regulators standard of 25%
vi. Competition from private water vendors for water services provision.
vii. Climate change induced challenges - reduced availability of surface water/ increased loss of water from reservoirs due to evaporation and siltation; lower water levels in major rivers and streams
viii. Lack of a sewer system.
ix. Vandalism of water infrastructure.

3.7.15 Yatta Water Services Company SWOT Analysis

In order to evaluate YAWASCO competitive position, potential and risk, the Taskforce conducted a SWOT analysis for the company as presented in the table below;

Strengths	Weaknesses
✓ Own office space ✓ Availability of a key water source (Yatta Canal) ✓ Conducive policy and regulatory environment	• Poor Governance • Lack of regulation on the abstraction of water from the Yatta canal • Lack of human resource policy • Inadequate water sources (Thika River) • Long outstanding receivables • Huge Trade and other payables • High Non-Revenue Water (NRW) at 35% • Low technological adoption • High operational expenses (electricity and staff costs) • Old and dilapidated water infrastructure • Lack of a Sewerage infrastructure. • Lack of environmental and social safeguards strategy • Frequent Cutoff drains wash off along the Yatta canal
Opportunities	**Threats**
✓ Proximity to large water sources (Masinga Dam, Athi and Thika rivers) ✓ Potential to produce affordable water through Public private Partnerships (PPPs). ✓ Availability of forty (40) County Governments boreholes as additional sources of water ✓ Increasing demand due to urbanization. ✓ Potential for adoption of technology in operations ✓ Potential for adoption of renewable energy for pumping and water treatment ✓ Donor projects support.	• Conflict over cross county water supply (KITWASCO) • Competition from private water vendors • Water catchment degradation along the Thika River • Siltation of the Yatta Canal • Vandalism of water infrastructure • Assets not owned by the company • Lack of operating license from WASREB • Encroachment on land reserve for water resources.

From the SWOT analysis, it is concluded that Yatta Water Services Company ltd is not commercially viable.

3.7.16 Observations

It was noted that: -

i. The company provides water services without the requisite license by WASREB.

ii. The CEO of the water company was not competitively recruited and has exceeded his tenure.

iii. The Yatta Water Services Company is not commercially viable.

iv. The County Government of Machakos is not reflected as a shareholder of the company contrary to Water Act, 2016.

v. The board was not competitively recruited as stipulated by regulations governing the sector.

vi. The assets of the Yatta Water Services Company are owned by TAWWDA

vii. The company's water infrastructure is old and dilapidated

viii. The water company has only one water source (Yatta canal) which is silted reducing the available water to the company.

ix. Environmental safeguards were lacking.

3.7.17 Recommendations

It is observed that Yatta Water Services Company ltd is not commercially viable and as currently constituted, it cannot be able to meet its mandate. The Taskforce therefore recommends that Yatta Water Services Company ltd be dissolved and restructured into a cluster.



YAWASCO Property





Masinga – Kitui Water Treatment plant

CHAPTER FOUR: PUBLIC FEEDBACK AND VALIDATION

4.0 Introduction

In order to ensure compliance with the Articles 10, 232 of CoK 2010, sections 77,78 of the Water Act, 2016 and, the County Government Act, 2012, the taskforce conducted public participation with the aim of informing, involving and obtaining public input and feedback. Prior to public engagement, a public notice for participation and request for memoranda was published in the print media (*See annexure, Public Participation Notice*).

The taskforce engaged diverse participants in all the sub counties of Machakos County. This inclusive approach gathered input from the various stakeholders and detailed qualitative information on; Performance and Restructuring of the Public Water Service Providers, the Machakos Water and Sanitation Bill, and the Machakos Water and Sanitation Master Plan.

4.1 Stakeholder Mapping

After conducting literature review and consulting with key informants', the taskforce mapped stakeholders and categorized them into; water users, National Government, WASREB, TAWWDA, AWWDA, KITWASCO, County Water department, Local Political Leadership, Civil Society Organizations, the Private Sector, Business Community, Religious Institutions, special interest groups including persons enabled differently and other groups that may be affected by the implementation of the task force report.

The task force developed a stakeholder analysis matrix seeking to answer the following fundamental questions: -

a) Who are the key stakeholders?

b) What are the interests of these stakeholders?

d) Which stakeholders will be affected by the water reforms?

f) Which stakeholders will require differentiated approaches for effective stakeholder engagements and information dissemination?

g) Which stakeholders wields power and influence to affect the reforms?



Photo 6 Public Participation Machakos Sub County, Source MWSSRT, 2024

4.1.1. Stakeholder Identification

The taskforce considered the following factors in stakeholder identification:

4.1.1.1 Affirmative action

Gender

Article 10 of the Constitution provides for National Values and Principles of governance. It highlights such principles as equality, equity, inclusiveness and non-discrimination. These principles provide an anchorage for gender equality. Further, **Article 27 (1)** provides that every person is equal before the law and has the right to equal protection and benefit; Article 27 (3) provides that women and men have the right to equal treatment including the right to equal opportunities in political, social, economic and cultural spheres.

In line with the above provisions, gender was a key factor in determining stakeholder participation in the Water Sector Reforms. The stakeholder identification and analysis process was gender responsive and geared to determine how and when women and men stakeholders were involved; and to address existing gender gaps in participation and decision-making in the Sector reforms.

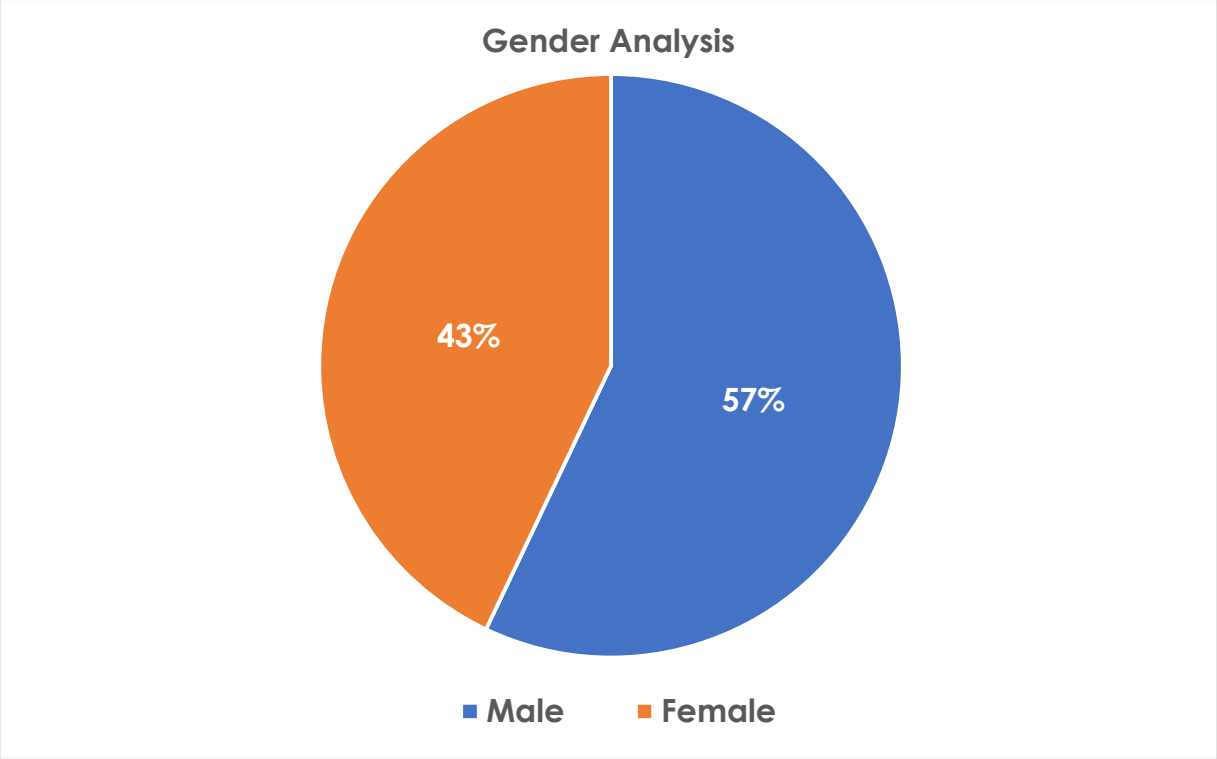


Figure9: Public Participation – Source,Public Participation Attendance List

The aggregate number of individuals engaged in the public participation amounted to seven hundred and eighty (780) persons, forty-three (43%) percent of whom were female and fifty seven (57%) percent male.

Disability

Article 27 of the CoK, 2010 entitles every person to equality before the law and prohibits direct or indirect discrimination on any ground including disability. Subject to this, stakeholder identification and analysis was done to ensure that persons with disabilities participated in the consultative processes. This required purposeful targeted invitations to ensure the representation of the disabled persons within the community and other vulnerable groups in addition to general community consultations.

Further, it became important to rely on other consultation methods that did not require physical participation in meetings such as emails and presentations of memoranda to ensure groups that would not physically be present at meetings were able to participate.

Age

The differentiated age of the participants was considered as depicted in the table below:

Age Bracket	Male	Female	Total
18-35	202	144	**346**
35-60	476	406	882
60+	212	120	**332**
Total	**859**	**670**	**1560**

Table 8: Differentiated Age Groups in the Public Participation

Differentiation of age groups are presented in figure 11.

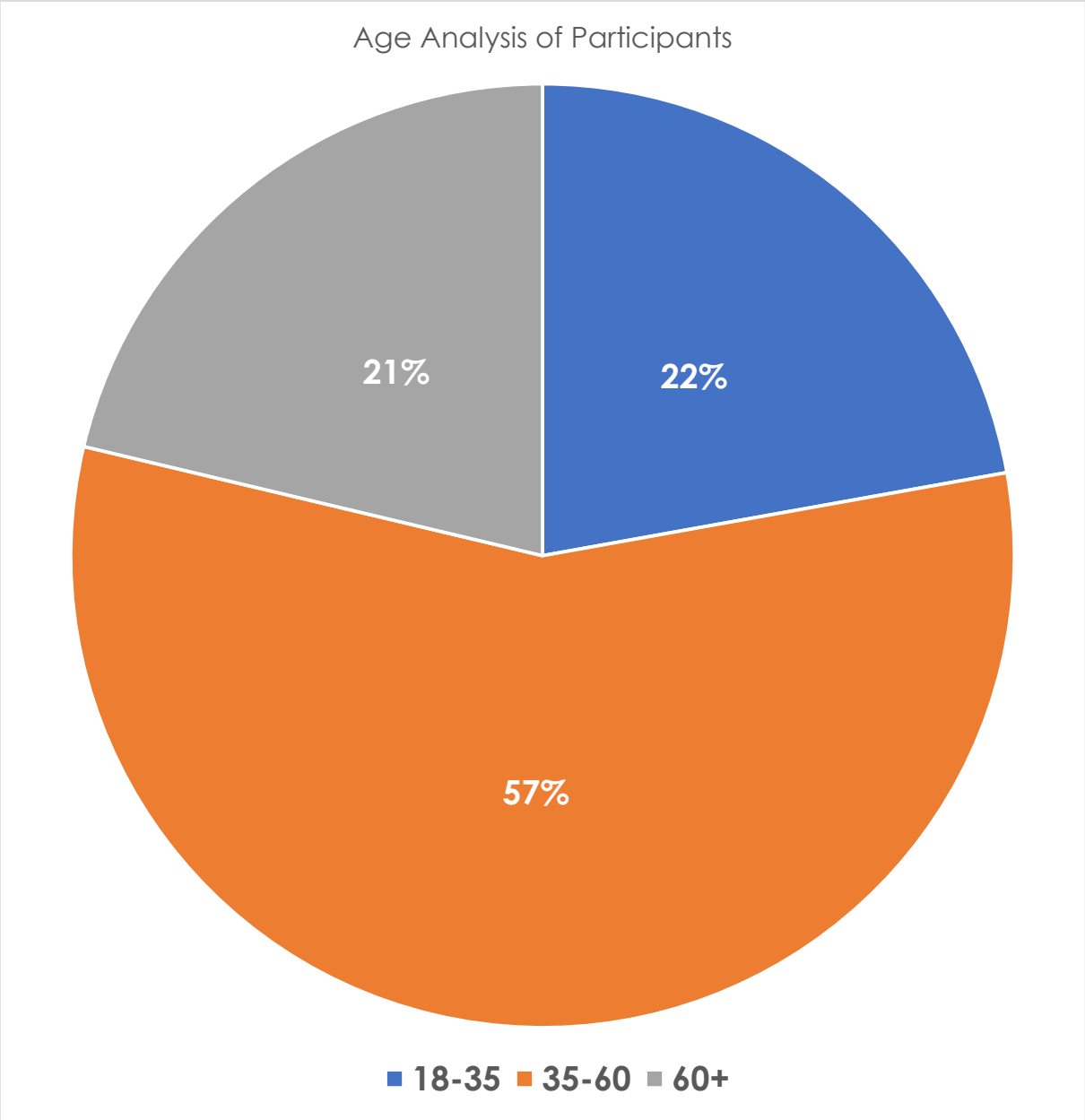


Figure 10: Differentiated Age Groups in the Public Participation

4.1.1.2 Sector Interests

Stakeholders were also segregated by their sectors of representation among these; business communities, religious organizations, water sector representatives of WRA, WRUA, NEMA, Water Vendors and Department of Water. The table below depicts the sectors from which stakeholders were selected.

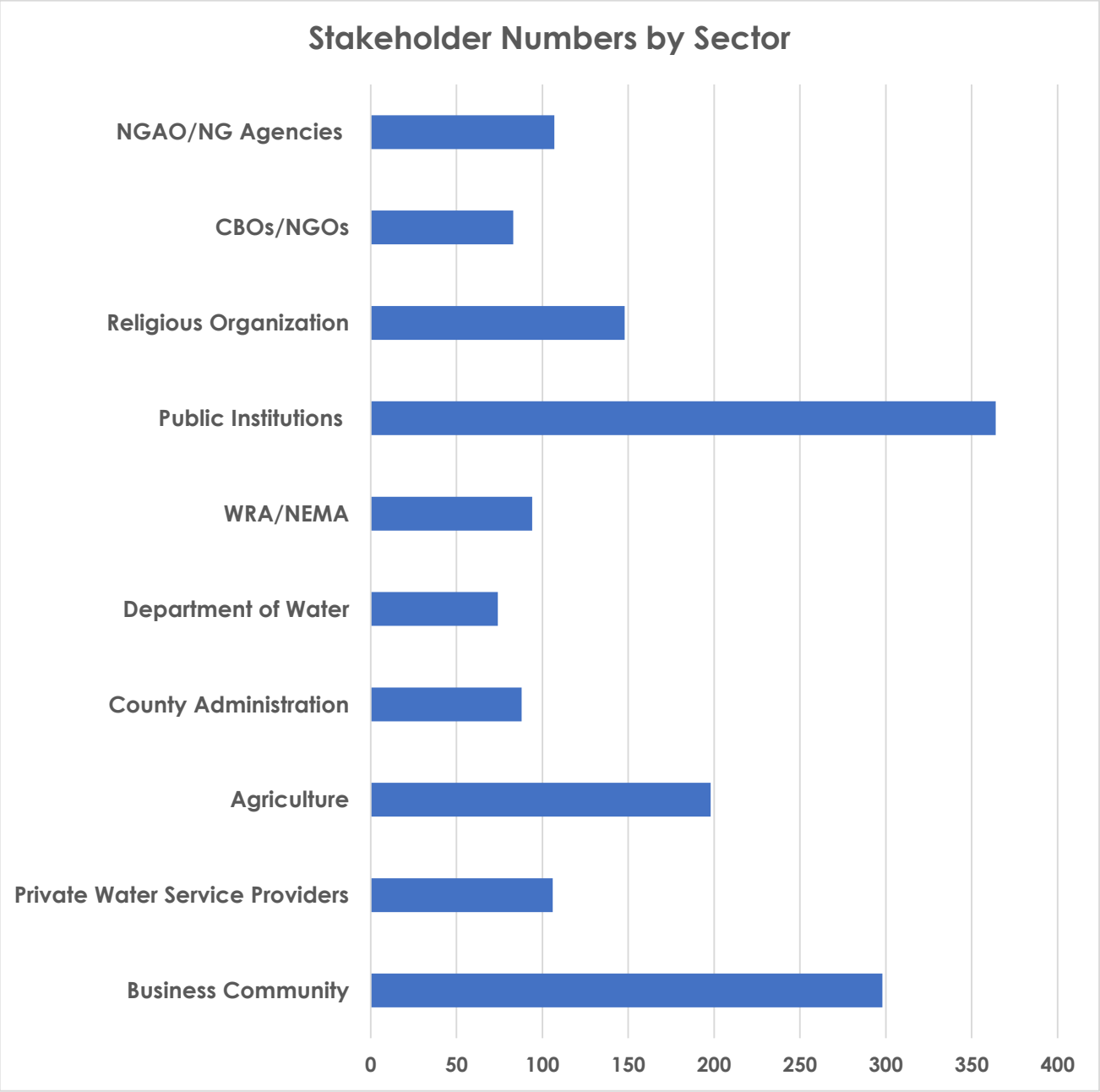


Figure 11: Sector Interests Representation, Source, Public participation Attendance , MWSSRT, 2024

4.1.1.3 Regional Balance

Each ward in the County was represented at the public participation in-line with the Machakos County Public Participation Act, 2014.

The table below presents relevant *stakeholder mapping*

Stakeholder Name	Role of the Stakeholder	Stage of Engagement	Engagement strategy
County Department of Water	Baseline information Liaison with other agencies Facilitation of the task force	Throughout	Proactive teamwork and consultations
National Government	Coordination of government agencies in the water sector	Throughout the term of the task force	Meetings
The county Government of Machakos and County Multi-Sectorial committee	Coordination with different departments - Leading the process of stakeholder identification and mobilization	Planning and implementation stage	Proactive Consultations Formed a sub-committee responsible for stakeholder identification and mobilization with the relevant departments targeted the GDU, Dept. of Water, Finance social welfare, decentralized Units, Citizen Engagement -Had regular meetings
Public Water and Sanitation Service Providers	Provision of water and sanitation services	Planning Implementation stage	Meetings Data collection Provision of documents and reports

Private Sector	Provide information and feedback.	Planning and Implementation	Meetings and memoranda
Civil Society	Provide information and feedback.	Planning and Implementation	Meetings and memoranda
Political Leadership	Policy guidance	Throughout the process	Meetings Document review
Local Community and affected Persons (PAPs) Business community, Religious Organizations and Public Institutions	Information and Feedback	Throughout the process	Meetings Public Participation Memoranda

Table 9: Stakeholder Regional Balance Representation, Source MWSSRT, 2024

4.2 Principles for Stakeholder Engagements

The Key principles guiding the stakeholder engagements included;

Interactive Consultations, Differentiated needs and requirements of stakeholders, Equitable and non-discriminatory

Transparent, Respectful and free of intimidation and coercion, Confidentiality, Timing and Documentation.

4.3 Forums and Methods for the Engagement

The taskforce ensured that the consultation meetings were tailored to the stakeholder analysis and engagement plan. A combination of key considerations applied at this stage were;

i. The TORs considered a large geographical area (The whole of Machakos County) thus consultations and discussions were held in different locations at the sub county level to enable attendance by as many stakeholders as possible.

ii. Separate conversations were needed with different wards in consideration of people who were less able to express their views in a larger forum.

iii. There was temporal or practical considerations to when and how consultations were held.

iv. For persons who were unable to attend the gatherings the task force invited memoranda through public notice in a daily newspaper and a dedicated email address provided to receive such memoranda via machakoswatertaskforce@gmail.com.

4.4 Public feedback based on Sub County

The key highlights of the Public Participation exercise that took place between 15th and 22nd January, 2024 as advertised in the daily papers are captured and presented below;

4.4.1 Kalama Sub County



i. Kalama Sub County is not served by any Public Water Service Provider.
ii. There is inequitable distribution of water to the residents.
iii. The residents unanimously agreed that the County should vacate the free water policy in favor of a user pay policy that will ensure sustainable water service provision.
iv. The residents demanded a swift implementation of the Water Sector Reforms.
v. The residents proposed the Machakos Sub County water service provider should expand its service area to include the Sub County.
vi. The residents proposed that the current WSPs management of Municipal Council of Machakos Water and Sewerage Company be overhauled.
vii. The residents requested for rehabilitation of the broken down boreholes.

viii. The residents reported encroachment of springs which was breeding conflict among users and requested for spring protection.

ix. Kola Ward residents proposed the restructuring of all the water companies in the county to make them viable and improve their performance by exploiting economies of scale

x. Kalama residents requested construction of a dam along kya Munyuu river.

xi. The residents further requested for desilting of Lumbwa dam



4.4.2 Kangundo Sub County



Kangundo residents;

i. Proposed that the County Water and Sanitation Bill should provide for an emergency fund to address water shortage especially during severe drought.
ii. Requested for rehabilitation of the broken down boreholes
iii. Proposed that the Water Bill gives a wider definition of County projects to include all public water infrastructure within the county or the community such as projects done by CDF, TAWWDA in line with Schedule IV of the Constitution of Kenya 2010.
iv. Unanimously agreed that the County should vacate the free water policy in favor of a user pay policy that will ensure sustainable water service provision
v. Proposed the survey, demarcation and issuance of title deeds for all water resources.

vi. Advocated for equitable access to public water services.



4.4.3 Kathiani Sub County



Kathiani Residents;

i. Urged the County Government to enact legal provisions to regulate water utilization within the community.
ii. They called for measures to protect riparian land and public water sources from encroachment and contamination from farm chemicals and industrial waste. They further recommended fencing of water bodies for safety of livestock and children.
iii. Unanimously agreed that the County should vacate the free water policy in favor of a user pay policy that will ensure sustainable water service provision
iv. Requested for the desilting of Muuoni dam and raising of the embankment wall in order to increase the Dam capacity.
v. Requested for rehabilitation of the broken down boreholes
vi. Recommended change of management in Kathiani WSP as they observed that the current management had stayed for a long period hence the company had become like a family business with relatives managing the company.

vii. Proposed that the County Government should provide water services to churches and other related institutions.

4.4.4 Machakos Sub County



Photo 7, Public Participation Machakos Sub County, Source MWSSRT, 2024



Photo 8, Public participation, Machakos Sub County, Source WSSRT

Machakos Sub county residents

i. Advised that, the current WSP does not meet the demand for water hence most of them depended on private water vendors who supply water using boozers at high cost.
ii. Requested for desilting of Maruba Dam which is the main source of water for the area. They further requested the County Government to pursue the implementation of Miwongoni Dam which they noted had been delayed due to land compensation issues.
iii. Observed that sewerage system was only within the town with the rapidly growing suburbs depending on private exhausters. They requested for expansion of the sewerage system to cover the entire municipality.
iv. Advised that there was plenty of untapped water resources especially on Iveti hills where natural springs which produce a lot of water have not been harnessed hence requested the County Government to explore this opportunity.
v. Proposed strengthening of existing laws to deter vandalism which they suggested be considered as economic sabotage. They cited vandalism of sewer line at Yimitheu where people open and block sewer lines for illegal irrigation purposes.

vi. Unanimously agreed that the County should vacate the free water policy in favor of a user pay policy that will ensure sustainable water service provision
vii. Called for the County Government to enact laws facilitating rainwater harvesting and the regulation of water tariffs for private water vendors.
viii. Requested for rehabilitation of the broken down boreholes
ix. Proposed that Municipal Council of Machakos Water and Sewerage Company be restructured so that it can be able to meet its mandate.

4.4.5 Masinga Sub County





Photos9 and 10 Masinga Public Participation, source WSSRT,2024

Masinga residents:

i. Proposed the formation of a new water company named Masinga Water Company to serve the sub county. Further, Masinga Central and Kivaa wards residents expressed displeasure at the rampant water conflicts and proposed the formation of an independent water company in place of KITWASCO as it did not address their water needs.
ii. Proposed the termination of the free water practice in favor of a user pay policy with a tariff set by the regulator to ensure sustainable water services.
iii. Requested to be detached from the Water Supply line serving KITWASCO by being provided with their own dedicated line from Kamuthumba. Further proposed for construction of a distribution tank at Kangonde hill which would supply both Masinga and Yatta sub counties via gravity.
iv. Complained and requested for the completion of the stalled Masinga – Ekalakala water supply project by TAWWDA.
v. Envisioned a boost in local economy, reduction in corruption and additional employment for technical and non-technical personnel with the restructuring of the public WSPs.
vi. Requested for rehabilitation of the broken down boreholes and drilling of more boreholes.
vii. Called for regulation of water services to improve on water quality.
viii. Proposed for construction of a dam in Muthesya
ix. Proposed for inter basin transfer as a solution to water scarcity in Muthesya and Ndithini wards
x. Proposed for reticulation of water from Muri farm dam.

4.4.6 Matungulu Sub County



Photo 11, Public Participation Matungulu Sub County source, WSSRT,2024

Matungulu sub county residents:

i. Reported water service conflicts between Ng'alalya/Manza CBOs with MAKAWASCO in provision of water services within the area. These conflicts have adversely affected Tala area which does not have enough water sources despite the installation of Ng'alalya supply line. They proposed that the water services by the CBOs be taken over by the County Government in order to ensure equitable supply of water within the sub county.

ii. Called for the County Government to regulate water use and protect riparian lands and water sources from encroachment and contamination. They further recommended fencing of water sources for safety purposes.

iii. Urged the County Government to enact a County Water and Sanitation Bill for effective water governance.

iv. Proposed clustering of the WSP to enhance water governance within the sub county.

v. Proposed use of modern water technology in irrigation to control water wastage.

vi. Requested for rehabilitation of the broken down boreholes

4.4.7 Mavoko Sub County



Photo 11, Mavoko Public Participation ,Source WSSRT,2024

Mavoko Sub county residents:

i. Valley view estate (*with more than 450 residents*) in Mlolongo complained that they have not been connected to piped water since 2017 in spite of a supply line in the area.

ii. Complained that private water vendors had monopolized supply of water in Mavoko area and were charging the service at exorbitant cost.

iii. Informed that the sewer treatment plant (STP) at Valley View estate was handed over to Mavoko Water & Sewerage Co. Ltd (MAVWASCO) in 2019 and complained that though they are charged Ksh 705 per cubic meter by the WSP, no treatment of the effluent has been done since then. Further, during the rainy season, the system clogs and overflows creating a health hazard.

iv. Requested for installation of additional DTFs to complement the sewer system in the area.

v. Mlolongo/Syokimau residents requested for rehabilitation of the broken down boreholes in both Kiungani and Mwananchi Roads.

vi. Hoped that after the completion of the Belgium funded water project (Kenya Towns and Municipalities Water Supply Project) that the Company would expand its network.

vii. Requested for expansion of the sewer system in Mavoko

viii. Complained of poor water quality which they said was salty and high in fluoride. They proposed that all private water vendors be sub licensed by the WSP to ensure quality and affordability.

ix. Requested for new water kiosks to be constructed and non-operational ones revived.

x. Proposed that they could be connected from the water point at gateway mall opposite the SGR whose source is the Nairobi Water supply line.

xi. Proposed for restructuring of MAVWASCO as a company including change in management which they cited had overstayed and had integrity issues.

xii. Petitioned the County Government to implement measures to curb pollution of water sources from agricultural activities, industries, commercial, and residential establishments.

xiii. Observed that private exhauster operators discharge effluent into rivers especially during the rainy season.

4.4.8 Mwala Sub County



Photo 12, Public Participation Mwala Sub county Source , WSSRT,2024

Mwala sub county residents:

i. Proposed for the establishment of a sewer system for Masii Town and construction of new public toilets in Masii ward.
ii. Called for protection of water sources from encroachment and destruction by surveying and fencing of all water resources.
iii. Requested for equity in distribution of water to households at affordable rates.
iv. Recommended the solarization of County Government-developed boreholes to reduce on high electricity costs.
v. Recommended recruitment of more staff for the water company.
vi. Requested all boreholes drilled by the county government be handed over to the water company to improve their sources of water and revenue base.
vii. In Muthetheni ward were of the opinion that water projects in the area could be run by local groups under the supervision of the water department.

Photo 1: Masii Ward FGD

viii. Wamunyu ward demanded for transparency in the manner in which Mwala Water Company was being managed.

ix. Requested for more funding of water infrastructure by both the County and National Governments.

x. Recommended that the water company forms schemes for each ward which are answerable to the main company at the Sub County level.

xi. Proposed the County Government department of water to supervise the water companies.

xii. Suggested ownership of all WWDA developed water projects be vested in the department of water.

xiii. Suggested the vacation from the free water practice as it did not assure them sustainable supply due to the delay in repair of broken boreholes and water systems hence proposed a user pay system with the tariff for water pegged at Ksh 2 per 20 litres.

xiv. Requested for regular water treatment at all water points to ensure water quality standards are met.

xv. Proposed for the construction of toilets at all water points (boreholes and dams).

xvi. Complained that the Department of solid waste management did not have enough staff to manage the public toilets in Mwala town.

xvii. They recommended the conversion of electricity and diesel pumps into solar powered installations.

xviii. Kibauni ward – recommended use of solar power energy for all County water projects and especially the KIAKA water project managed by the Mwala water company.

xix. Proposed that the restructured water company should absorb all the employees of the current scheme and also employ more local staff.



Photo 13, Public Participation Mwala Sub county Source, WSSRT,2024

4.8.9 Yatta Sub County



Yatta Sub county residents:

i. Complained about the encroachment of Yatta Canal and unregulated irrigation upstream leading to water shortage downstream including Matuu town.
ii. Decried loss of business due to lack of water and connection to the supply despite having paid a connection fee to YAWASCO.
iii. Requested for desilting and rehabilitation of Mekilingi dam.
iv. Demanded disbandment of the current board of directors and management of Yatta Water Company and appointment of a new team with an independent oversight committee.
v. Recommended regulation of Sand harvesting activities and emphasized the need for construction of sand dams and weirs.
vi. Recommended vacation from the free water practice to a user pay system for sustainable water supply.
vii. Requested for repair and rehabilitation of the many broken down boreholes in the area to improve access to clean water.

viii. Kamuthambya and Kalandini requested for a major abstraction of water from Athi River for irrigation.

ix. Kithimani residents requested for a borehole to be drilled at Silanga Kwa Jimmy as proposed in the CIDP.

x. Demanded for measures to protect Athi river from pollution.

xi. Requested for construction of a dam at kwa Ndolo in Ndalani Ward.

xii. Recommended automation of water billing system to reduce revenue leaks

xiii. Recommended for regulation of water rationing schedule in Matuu town and its environs.





4.5 COUNTY WATER AND SANITATION SERVICE SWOT ANALYSIS

Following a situational analysis for each WSP and public feedback, the taskforce conducted a SWOT analysis of the county water and sanitation services. The analysis is presented in table

STRENGTHS	WEAKNESSES
✓ Supportive political and policy environment ✓ Existing water and sanitation assets (Dams, Boreholes, Canals, Plant and equipment, sewer systems). ✓ Well distributed County Water projects.	• Poor governance in WSPs • Old and dilapidated water and sewerage systems in majority of the water schemes • High operational and maintenance costs (electricity bills) • High NRW at an average of 45% against standard of 25% • Low sewer coverage • Low technological adoption • Lack of environmental and social safeguards strategy for the WSPs • Inadequate budget allocation
OPPORTUNITIES	**THREATS**
✓ Strategic location of the county between two water basins(Athi and Tana) ✓ Large customer base including Fast growing urban setups – emerging residential areas and industrialization. ✓ Large outlay of raw water sources (dams, rivers and boreholes) ✓ The opportunity to co-produce affordable water though partnership with other WSPs and private sector (PPPs). ✓ Potential for expansion into unserved areas of the county ✓ Potential for technological adoption – use of ERPs, smart meters, listening sticks and water resource mapping GIS. ✓ Potential for adoption of renewable energy for pumping and water treatment ✓ New sewer treatment plant at Leather City to be managed by the County ✓ Conducive legal and regulatory framework	• Climate change. • Pollution of water sources (Athi and Thika rivers). • Water catchment degradation along the major rivers including sand harvesting. • Siltation of key water sources (Dams and the Yatta canal) • Conflict over cross county shared water sources (Nol-Touresh, Nairobi expressway project and KITWASCO in Masinga). • Increased competition from EPZA, community and private water supplies. • Vandalism of water and sewerage infrastructure • Limited control and ownership of key water assets

Table 2: County Water and Sanitation Service SWOT Analysis , Source MWSSRT,2024

CHAPTER FIVE: GENERAL FINDINGS

After analyzing the information gathered from the WSPS, engagement with the stakeholders including public participation and conducting SWOT analysis, the taskforce made the following key findings.

5.0 Governance

5.1 Board of Directors

5.1.1 Composition

The regulators guideline provides that the appointing authority should ensure boards of directors to water companies comprise members with a professional mix and are independent to the extent that no individual or group of individuals or interest can skew decision making to the detriment of the company welfare and objectives.

5.1.2 Size

The guidelines provide for a maximum of five (5) members for small companies which shall include two from County Government executive while medium sized companies shall have a maximum of seven (7) members where two shall be from the County Government executive. Analysis of the WSPs did not find any of these companies to have met the threshold of a very large WSP in line with the regulators guideline though they had appointed between seven (7) and eleven (11) members to the board of directors.

5.1.3 Background of the Directors

The companies have their boards of directors appointed from the communities from which they provide services and thus are able to minimize conflict. It was observed that the current boards of the WSPs did not perform effective oversight as per the aspirations of article 174 of the Constitution.

5.1.4 Eligibility

The guidelines provided by the regulator require that all persons appointed to the Board shall have a minimum of a Bachelor's degree from a recognized university and

a minimum of seven years working experience in their core professions as eligibility criteria. The taskforce observed that most of the appointed directors in the boards did not satisfy this criteria.

5.1.5 Competitive Appointment

Sections 79 and 80 of the water Act, 2016 provides the criteria of appointment of Board Members for public Water Service Providers. In addition, **the criteria set by WASREB** requires that Board appointments be transparent and competitive with vacant positions advertised in the media and on the website of the WSP.

The taskforce found that appointments of the current boards was not done competitively.

5.1.6 Service charter

Boards should ensure the creation of a comprehensive service charter to guide them since they play a crucial role in promoting transparency, accountability, quality assurance, customer satisfaction, and continuous improvement ultimately contributing to efficient and effective service delivery.

The taskforce noted that only MAVWASCO, Municipal Council of Machakos Water and Sewerage Company and KAWASCO had established a Service Charter with their customers.

5.1.7 Strategic Plan

WASREB Corporate Governance Guidelines outline the mandate for all Water Service Provider Boards to endorse five-year strategic plans. This requirement underscores the importance of establishing long-term visions, allocating resources effectively, managing risks, and monitoring performance, engaging stakeholders, ensuring regulatory compliance, and improving service delivery.

The taskforce found that, apart from MAVWASCO and Municipal Council of Machakos Water and Sewerage Company all other water service providers did not have strategic plan.

5.1.8 Board Members Term.

Regulations 10 (3) of the Water Regulations 2021, as well as the corporate guidance by WASREB 2019, stipulates that, the board members shall serve for one term of three years renewable once. Both instruments are in tandem with Mwongozo code of governance for state corporations.

The current boards were gazetted on 24th September, 2021 Vol. CXXIII—No. 197 Gazette Notice No; 9864, 9865, 9866, 9867, 9868 and 9869 hence their term will expire on 24th September, 2024. These boards were all gazetted erroneously as the gazette notice was done for: Mavoko Water Service Provider; Machakos Water Service Provider; Mwala Water Service Provider; Yatta Water Service Provider; Kathiani Water Service Provider and Matungulu-Kangundo water Service Provider.

These board of directors should have been gazetted for: Mavoko Water and Sewerage company Ltd; Municipal Council of Machakos Water and Sewerage Company; Mwala Water and Sanitation Company; Yatta Water Services Company; Kathiani Water and Sanitation Company Ltd and, Matungulu-Kangundo Water and Sewerage Company.

5.2 Ownership

Section 77 of the Water Act, 2016 confers to County Governments the mandate to establish a Water Services Provider which may be a Public limited liability Company owned by the County Government.

Review of the status of ownership based on the Articles of Association, Memoranda and as indicated in the current CR12s of these companies, the County Government of Machakos is not reflected as the majority shareholder of these companies.

5.3 Licensing

Mavoko Water and Sewerage Company has a valid operating license from WASREB effective from 15th January, 2024 to 14th January,2029 . Municipal Council of Machakos Water and Sewerage Company does not have a valid operational license from WASREB as the Regulatory body issued an interim license to a nonexistent Machakos Water and Sewerage Company (See annexure-license). All other WSPs do not have operating licenses from the Regulatory body contrary to Section 72 of the Water Act, 2016 as they had not met the criteria for licensing.

5.4 Human Resource

5.4.1 Policy

All the Six (6) Water Service Providers are required to adopt the WASREB HR Policy Guidelines. After a thorough scrutiny of the documents shared and upon conducting interviews with the Water Service Providers, it was noted that none complied with the guidelines.

5.4.2 Organogram

All the Six (6) WSP have organograms based on the positions they have and not the approved guidelines.

5.4.3 Grading System.

A Grading system helps a company to establish a hierarchy of positions and provides a framework for determining salary levels, career progression, and other aspects of workforce management. This is emphasized by WASREB Guidelines, 2019 (See annexure).

The taskforce found that, only MAKAWASCO had a grading system in place.

5.4.4 Scheme of Service.

A Scheme of Service is a framework or structure that defines the Hierarchy, Grades, Roles, and Responsibilities within an organization. It is commonly used in the public sector, including Government Agencies, to establish the classification, remuneration structure for employees and career growth path. For Water Service Providers, WASREB has provided guidelines on the same.

5.4.5 Staff Benefits.

Employee benefits in an organization include Paid Annual leave, House Allowance, Health and Safety Regulations, Social Security Contributions and NHIF. Staff benefits are an important part of the overall compensation package offered by employers and can play a significant role in attracting and retaining talent. They can also contribute to a conducive work environment that boost employee's morale therefore yielding positive returns and enhanced productivity. It was observed that some of the WSPs had implemented staff benefit schemes.

There were delays in remittance of statutory deductions for employees though already charged to their pay slips.

5.4.6 Performance Appraisal

Performance appraisal is the evaluation or review process used by organizations to assess and evaluate the job performance of employees. This allows managers to provide employees with feedback on their performance, highlighting strengths and areas for improvement. It helps set performance goals and objectives for employees and align them with the overall goals of the organization. It typically involves a formal review of an employee's performance over a specified period.

All the WSPs do not have a performance appraisal system in place hence making it difficult to track employee performance. This leads to low productivity, overall poor performance of the company and subjectivity in promotions of employees.

5.4.7 Salary Bands.

WASREB has provided guidelines on salary bands for WSPs to help determine the compensation for employees based on their job roles, responsibilities, skills, and experience within their organization. These guidelines categorize these companies based on number of active connections **(Very Large >35,000, Large <10,000, Medium > 5,000 and Small <5,000).**

MAVWASCO had approximately 15,000 active meter connections, Municipal Council of Machakos Water and Sewerage Company approximately 6,000, YAWASCO and MAKAWASCO have approximately 1,000 each, MWAWASCO approximately 2,664, and KAWASCO approximately 500.

Based on the WASREB guidelines, MAVWASCO is classified as a large WSP and the salary for the CEO is within the salary band. Further, while Municipal Council of Machakos Water and Sewerage Company is classified as a medium sized WSP and YAWASCO as a small-sized WSP, their CEOs receive compensations meant for a large WSP. All the other CEOs are within their Salary bands.

5.4.8 Staff Training.

It is the obligation of the WSP to offer training opportunities to all its staff to enhance their work performance and personal development. Training and development of the company staff should be directed towards achieving sufficient trained Human Resource to meet the company's requirements both in the interim and in the future. Staff training programs are tailored to the specific needs of the organization and its employees. There should be continuous and flexible training allowing for adjustments based on feedback and changing organizational needs.

None of the WSPs had developed staff training plans though it was observed that some of the staff in the companies had participated in training programs organized by partner organizations.

With regards to Human Resource Practices and Management, the existing Water Service Providers in Machakos County fall short of the WASREB guidelines and industrial best practices as outlined by the relevant laws of Kenya. This has led to HR malpractices, negligence and lack of appropriate skill pools which undermines the overall performance of the WSPs.

5.5 Financials

Section 129 of the Water Act 2016 provides that every body corporate established under this Act shall cause to be kept all proper books and records of account of the income, expenditure, assets and liabilities. The 2022/2023 FY reports of the Auditor General makes **a qualified opinion** on all the six (6) public WSPs.

The auditor's opinion raised issues that included errors in presentation and misstatements of financial statements, long outstanding trade receivables, unsupported trade and other payables (liabilities), errors in property, plant and equipment (lack of asset register), unsupported customer deposits, misstatement of customer deposits, material uncertainty related to going concern, lack of budgetary control and performance, failure to remit statutory deductions, unresolved prior year matters and excessive Non-Revenue Water (NRW) above allowable maximum of 25%.

An analysis of the companies' financial statements for the FY 2022/2023 is presented in table 16.

STATEMENT OF INCOME OR LOSS FOR THE SIX WSPs PERIOD ENDING JUNE 30th, 2023

PARTICULARS	MWAWASCO	KAWASCO	YAWASCO	MAVWASCO	MCMACHWASCO	MAKAWASCO	TOTALS
Sales Revenue	8,184,640	10,432,645	27,952,272	191,579,014	102,778,857	15,119,721	**356,047,149**
Operating Costs							
Staff costs	6,930,950	4,870,246	12,423,904	92,359,589	62,775,274	7,127,344	**186,487,307**
Electricity	1,241,289	590,196	3,419,933	21,358,883	17,876,724	2,403,404	**46,890,429**
General & Operations Expenses	2,825,549	9,130,500	10,285,249	95,979,135	96,724,077	2,822,735	**217,767,245**
Depreciation	1,496,247	3,021,646	2,429,714	16,090,017	967,367	1,513,935	**25,518,926**
Boards' expenses	201,000	722,000	905,100	9,909,811	3,707,399	1,087,663	**16,532,973**
Domestic Traveling and subsistence	449,800	441,450	2,096,100	8,460,763	1,894,130	948,486	**14,290,729**
Rent	111,500	0	0	1,443,397	60,000	254,730	**1,869,627**
Lease Fee	0	0	0	0	0	682,366	**682,366**
Water Agents Commission	0	0	0	0	0	503,685	**503,685**
Decrease in provision for doubtful debts and connection fee	(231,283)	0	0	0	0	0	**(231,283)**
Total Operating Expenses	**13,025,052**	**18,776,038**	**31,560,000**	**245,601,595**	**184,004,971**	**17,344,348**	**510,312,004**
Net Income(Loss)	**(4,840,412)**	**(8,343,393)**	**(3,607,728)**	**(54,022,581)**	**(81,226,114)**	**(2,224,627)**	**(154,264,855)**

Table 16: Statement of Income or Loss For the Six WSPs Period Ending June 30th, 2023

An analysis of the income and expenditure of the six WSPs as presented in table 16 depicts the following: -

1) The revenue generated by the WSPS is low due to lack of cost- reflective tariffs in line with the guidelines of the regulator.
2) The companies have inherent governance and operational inefficiencies leading to the huge number of inactive metered connections and related high percentage of NRW.
3) Non-adherence to the regulators guidelines on Human Resource Policy and Procedures Manual has resulted to high staff costs.
4) High production cost on electricity amounting to over 10% of overall Operating cost.
5) **Unjustifiable high expenses in domestic travel and subsistence costs.**
6) Combined losses of up to Ksh 154 Million annually from operations.
7) Huge exposure on Trade Receivables (debtors) in all the companies as customer deposits cover only 18% of total outstanding debts.
8) Huge outstanding Trade Payables (creditors) in all Six WSPs as a result of non - payment to service providers.
9) High operations and maintenance cost.

Based on the above financial analysis, it can be concluded that the six (6) WSPs are technically insolvent and therefore not commercially viable.

5.6 Assets

5.6.1 Assets Ownership

The **Water Act 2016** in **Sections 83** and **153** stipulates that ownership of all water assets shall rest with the Water Service Providers who shall hold them on behalf of the public. A review of the asset registers for these companies found that these assets are still owned by TAWWDA including Dams, Treatment plants and other key infrastructure.

In addition, the values reflected in the financial statements for these Assets could not be ascertained hence negating the credibility of the financial statements as noted by the Auditor in the audit report for **2022/2023 FY.**

5.6.2 State of the Assets

Most of the WSPs infrastructure such as Tanks, Treatment Works, Pumps and Distribution Pipelines were old and dilapidated. Maintenance of these Assets was poor with no evidence of any preventive maintenance records.

Most of the Dams have not been fenced hence have been encroached and have no title deeds.

In Yatta, it was noted that private individuals had encroached on Yatta Canal Land which is reserved for cut off drains leading to frequent siltation of the canal.

5.7 Technology

It was observed that the WSPs had low modern Technology adoption in their operations. There was no standard ERP for billing, invoicing and reporting. The companies do not have data security policies and backup system hence exposing the companies to high risk of data loss and tampering.

Most of the WSPs did not have smart meters except for Mavoko which had a few in place. Use of leak detectors to manage and reduce Non-Revenue Water was only being utilized in MAVWASCO. The companies have not adopted use of renewable energy in pumping and water treatment processes leading to high electricity bill consequently contributing to unsustainable operating costs.

5.8 Public Participation and Feedback

The county-wide public consultation process revealed the following: -

5.8.1 Free Water Policy

At the outset of devolution, the county embraced a free water supply policy with the intention of enhancing access to clean and affordable water for all residents. This involved allocating water resources to community groups to manage and operate. However, feedback from the public informed that, this approach had encountered sustainability challenges.

Furthermore, feedback from various public forums across the county highlighted challenges of dilapidated water and sewer infrastructure, delays maintenance resulting in frequent water leaks, bursts and service interruptions. Due to escalating costs of maintenance and financial constraints which had resulted in low response in maintenance of water and sanitation installations, the public proposed a shift from the free water policy to cost sharing model ensuring the water user access the services at a reasonable fee.

5.8.2 Water Quality

Participants from all sub counties reported experiencing water quality issues which underscores the need for enforcement and monitoring by relevant government agencies. The public raised concerns on the quality of water being supplied by private vendors, citing high fluoride levels in some areas. There were concerns on the effluent discharged by industries especially in Athi River, Mlolongo and Syokimau areas, affecting the water quality for downstream users leading to health risks. Mavoko, Matungulu, Mwala and Yatta water users experience water contamination



Part of Athi river in Mwala Subcounty

from river Athi. Some areas reported contamination resulting from anthropogenic activities near water sources. There were also complaints on the poor quality water supplied by private water vendors. The participants proposed implementation of stringent measures for regulating the private water vendors.



Part of Athi river polluted by industries

5.8.3 Water Supply

There was a significant disparity between water supply and demand. Due to poor management, the public water service providers supply only 10% of the total demand, while the rest (90%) is met by private water vendors who charge unregulated rates. Despite investment by the county government and other development partners including TAWWD and WSTF, the current management of these existing WSPs have not been able to expand their distribution network to meet the high demand for water and sewer services.

In the allocation and distribution of the available water, instances of conflicts have arisen in certain areas, with reported allegations of corruption and unethical conduct among officials of the water service providers.

It was observed that the larger part of Masinga Sub-County including Ekalakala, Masinga Central and Kivaa wards are served by Kitui Water and Sanitation Company (KITWASCO). This has caused water conflicts within the communities due to poor service delivery by KITWASCO including reported inflated water bills. The local residents petitioned that they need to be served by the County Government of Machakos through YAWASCO since the source of water is Masinga dam located in Machakos County.

In Matungulu Sub County, the public reported incidences of water conflicts between CBOs operating Ng'alalya and Manza water supply projects and MAKAWASCO. This has negatively impacted on water supply to Tala and Kangundo areas. The public proposed that Ng'alalya be operated by MAKAWASCO on behalf of the County Government and Manza water supply be regulated by MAKAWASCO.

It was found that Kalama Sub County is underserved. The Municipal Council of Machakos Water and Sewerage Company does not serve this area. This was occasioned by the Nol-Turesh Water project failure back in 2012. The public requested the County Government to look into modalities of providing water in the area.

5.8.4 Sewer System Development

Majority of towns and market centers in the County lack sewer infrastructure, with the exception of Machakos and Mavoko towns which have a limited sewerage system. Mlolongo and Syokimau residents expressed dissatisfaction for lack of sewer infrastructure in their areas reporting that this deficiency poses significant health risks to the residents.

Machakos Sub County residents requested for the expeditious completion of the sewer component of the ongoing Kenya Towns Sustainable Water Supply and Sanitation Program being implemented in Machakos Municipality.

In addition, it was noted that TAWWDA has completed the construction of a new sewerage facility in Athi River's proposed Leather City but was yet to hand it over to the County Government.

5.8.5 Encroachment on Water and Sewer Resources:

Encroachment onto land designated for public water resources and infrastructure was evident, such as the occupation of land reserved for cut-off drains along the Yatta Canal and the upstream of Muuoni Earth Dam, where farmers have encroached the reservoir for cultivation purposes. This has led to the silting of both Yatta Canal and Muuoni Earth Dam, significantly reducing their capacities. The public petitioned the County Government to desilt and fence off these water resources and enforce laws on riparian zones.

In Machakos town, it was noted that some individuals had encroached the way leave, blocked the Yimitheu Sewer line, and are utilizing the untreated sewer for farming endangering the health of the consumers. In Mavoko it was reported that private exhauster operators dump sewerage in open sewer manholes.

It was further noted that the County Government did not have titles deeds for the land where water sources have been developed. Further, it was reported that some of the boreholes that were developed by the County Government were done on private land initially with the consent of the owners who have since fenced them off and utilize them as private boreholes.

5.8.6 Stalled projects.

During the public engagements, it was reported that there were about 53 capped and unequipped boreholes which required minimal additional investment for completion and commissioning. In addition, it was reported that there were stalled water projects which were being implemented by the National Government through TAWWDA and AWWDA such as: Miwongoni Dam under Kenya Towns Sustainable Water and Sanitation project, Masinga-Ekalakala water project and NYS-Matuu-Kitui Last-Mile Water Connectivity project.

5.9 Stakeholder engagement

The taskforce established that TAWWDA was in the process of implementing projects in the county namely; Masinga Second Intake, Thwake Dam and NYS-Matuu-Kitui Last mile water project, Kenya Towns Sustainable Water Supply and Sanitation Program being implemented in Machakos and Mavoko Municipalities among others. (*See annexure-TAWWDA projects in Machakos County*).

TAWWDA informed the Task force that there were proposed revisions to the **Water Act, 2016** aimed at enabling **WWDAs** to obtain licenses for delivering water services at the primary level, particularly in cases where resources span several counties. This would resolve the conflict between **KITWASCO** and Masinga residents.

WASREB provided the taskforce with an update on the Licensing status of the Six WSPs in Machakos County. It was found that only MAVWASCO and Municipal Council of Machakos Water and Sewerage Company had met the Criteria set by the Regulatory Body albeit, only MAVWASCO has a valid operational License.

The regulator provided recommendations and measures to address the above situation including clustering in order to achieve economies of scale and make the WSPs commercially viable. There was also need for the County Government to come up with an investment strategy for the clustered WSPs.

5.10 County Water and Sanitation Legal Framework

The County Government of Machakos requires a legislative framework to address governance of the water sector. The County Government had in the year 2014 enacted the Machakos County Water and Sanitation Act. However, it was observed that this Act was never operationalized and was superseded by the enactment of the National Water Act 2016, hence there is no county legal framework on water and sanitation.

5.11 Water and Sanitation Masterplan

A County Water and Sanitation Masterplan could not be developed due to financial and time constraints. However, baseline data was collected from stakeholders and the general public regarding potential water projects and proposed locations for their development. This information is available (read; in the form of written, audio visual and memoranda) in the Department of Water. Further, a review on the National Water Masterplan, 2030 was conducted with a focus on Machakos County. The data collected will inform future study on development of a Machakos County Water and Sanitation Masterplan. Development of the Masterplan will require a mix of skills including surveyors for mapping, hydro-geological surveyors, physical planners, water, sanitation and irrigation experts and social/ environmental analysts.

CHAPTER SIX: RECOMMENDATIONS

6.1 Restructuring and Governance Arrangements

This report adapts the clustering definition provided in the Water Act 2016, Water Regulation 2021 and WASREB guidelines (*Ref; Guideline on Clustering of WSPs, 2018*) which provides that, in order to realize sustainable and commercially viable water services in counties, clustering of WSPs is an important strategic step. It is also a great opportunity for the County Governments and the water sector to fulfill their mandates in sustainable provision of water and sanitation services and universal access. A viability assessment of the existing WSPs in the County identified the systemic strengths, weaknesses, opportunities and threats.

The Six WSPs were assessed based on the aspects presented in table 17

HR and Administration	Staffing norms, staff training and development, Performance appraisal, institutional organogram and occupational safety and Staff welfare.
Commercial	Meter reading, billing, revenue generation and collection and customer service.
Finance and Procurement	Accounting, tariffs, debt management, credit management, cash flow and audit.
Technical	Assets inventory, operations and maintenance, infrastructure development, quality control and risk management
ICT	IT and data management systems
Environment and social safeguards	Material safety data sheets, climate vulnerability, green energy, cleaner production, waste management, energy efficiency and grievance redress mechanisms

6.1.1 Strategic Rationale for Clustering

The assessment of the existing WSPs was based on **technical, economic and social aspects** and **potential viability**. This included staff productivity and mix of skills, number of systems to be combined, geographical scope and proximity, socio-economic setup of the area, current extent of coverage based on number of connections, inclusion of underserved areas and subsidies from the County Government. Other factors considered included;

- NRW levels
- Operational inefficiencies leading to poor service delivery
- Inequalities in development and investment in water sector
- Regional imbalance in participation of water service planning and decision making
- Centralized information management system
- Human resource capacity

After a thorough and in-depth analysis based on SWOT and Financials, it was concluded that clustering the Six (6) WSPs into one WSP would enable the County Government achieve its mandate of provision of clean, and safe water in adequate quantities and reasonable standards of sanitation to the residents of Machakos.

The taskforce therefore recommends clustering of the six (6) WSPs into one (1) single entity. This will reorganize and consolidate service provision for optimized resource allocation and utilization while streamlining operations leading to cost-effectiveness and commercial viability. The proposed organizational structure envisions a centralized governance and management system that enables aligned and standardized service delivery across the county with better coordination, skills mix, oversight and accountability leading to transparent, efficient and effective services.

6.1.2 Board of Directors

The taskforce recommends for the dissolution of the existing boards of directors of the six (6) WSPs and formation of one board of directors in line with the regulators guidelines. The proposed WSP is classified as a large company under the WASREB guidelines and hence shall comprise nine (9) board members whose selection shall ensure regional/sub county balance among other criteria.

6.1.3 Human Resource Management

A well-structured **organizational structure** is fundamental for the efficient execution of institutional duties. Periodic evaluation and adjustment of the organizational structure is imperative to ensure alignment with strategic objectives delineated in the strategic plan. Drawing from the findings of the various HR aspects of the existing public water service providers, the taskforce recommends that the proposed company adopts and adheres to the **WASREB HR Policy Guidelines** across all facets of HR management.

All employees of the six WSPs will be absorbed by the proposed WSP at their existing grades and salaries and their jobs are guaranteed. At the change-over date a circular will be issued to all employees outlining their transition to the new WSP. It is envisaged that no staff will lose their benefits and, pension shall be administered in the existing schemes. An evaluation of all serving departmental managers shall be carried out in order to advice the new board on which candidates to appoint. Lower rated candidates shall either take over other positions in the clustered WSP or leave the institution on their own and are compensated with a one-time down payment.

All staff who are members of a union will remain unionisable. Further payroll administration/management will continue at the stations until the transition is complete. All existing employee remittances shall continue to be effected. Upon transition every employee shall be bound by the code of conduct as per the HR policy manual.

Within a period of one year, the proposed WSP shall undertake a job evaluation that will lead to staff harmonization (salaries, structures, job descriptions/specifications). To achieve this the WSP will be expected to hire the services of a HR consultant in consultation with the County Government, WASREB and SRC.

The proposed WSP shall develop and implement an organizational structure (See proposed structure in **Figure 13**) that accurately delineates the organizational roles and reporting relationships within the organization. Further, it shall adopt a salary scaling system that is in line with the WASREB HR guidelines.

Additionally, the establishment of a **grading system** in alignment with regulatory guidelines, shall be prioritized together with the implementation of a performance appraisal system to assess and monitor employee performance, ensuring alignment with the company's objectives and performance goals.

This system will also aid in identifying **staff training gaps** and **needs**, facilitating the tailoring of training programs to specific organizational requirements and recruitment of qualified staff to fill identified gaps. The HR department should proactively identify and cultivate partnerships with relevant institutions to establish continuous training programs for enhanced capacity building.

Based on the feasibility study which included data collection, review of relevant policy documents, bench marking, public participation, stakeholder engagement and guided by WASREB model HR policy guidelines for WSPs, the task force proposes the organogram in figure 13.

Effectively, harmonization of HR payrolls, commercial, financial and technical operations shall be under one management.





The proposed **Machakos County Water & Sanitation Company (MACHWASCO)** will be structured as *shown in Figure 13.*

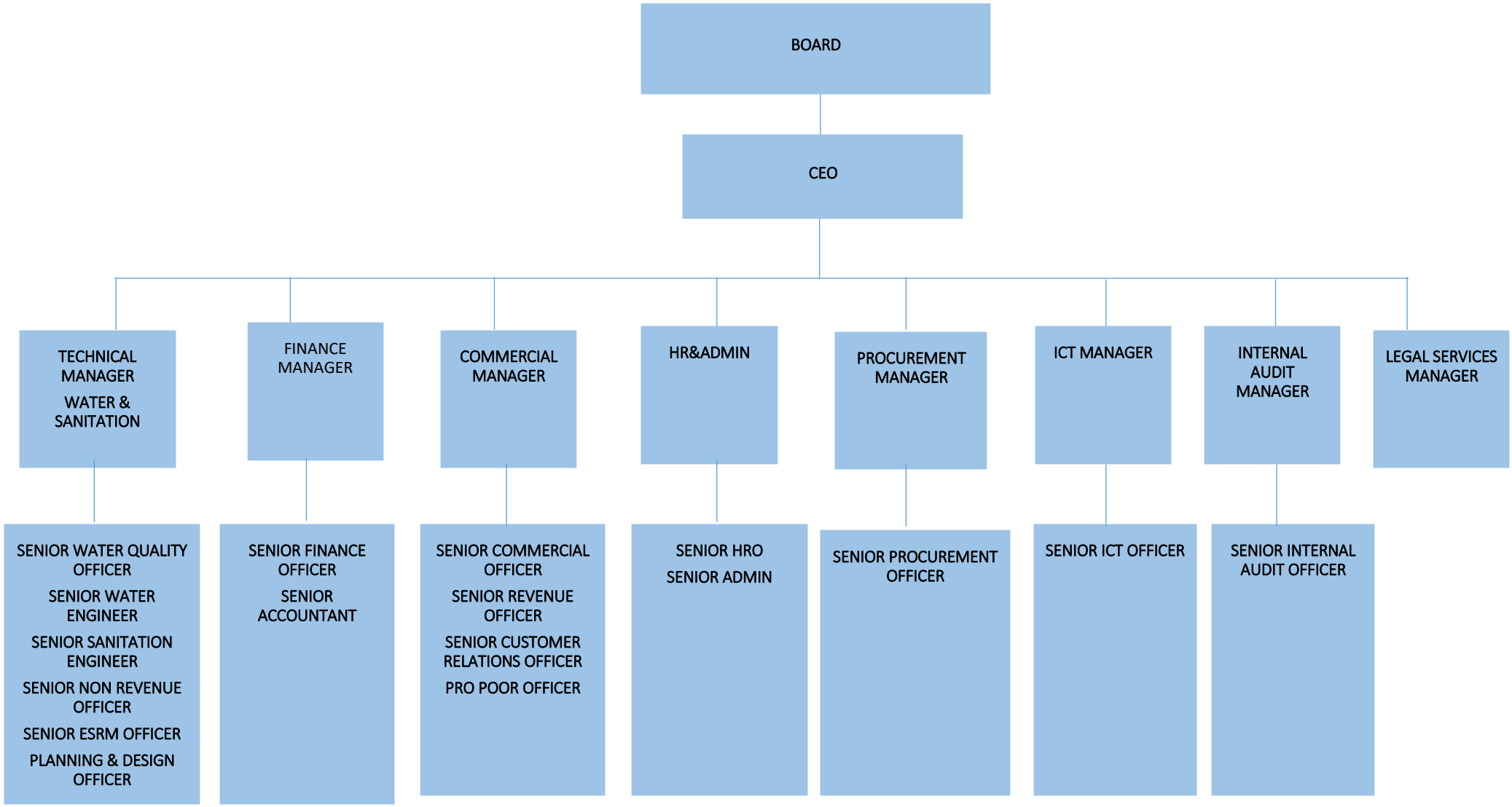
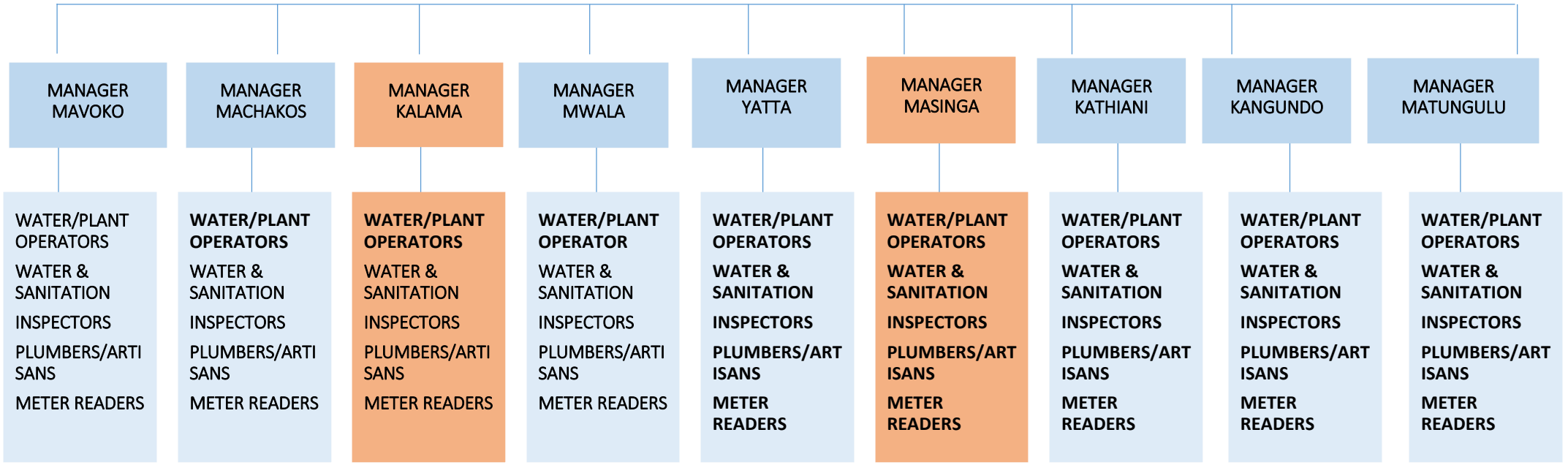


Figure 12: Proposed MACHWASCO Organogram


MANAGER MAVOKO
MANAGER MACHAKOS
MANAGER KALAMA
MANAGER MWALA
MANAGER YATTA
MANAGER MASINGA
MANAGER KATHIANI
MANAGER KANGUNDO
MANAGER MATUNGULU
WATER/PLANT OPERATORS
WATER & SANITATION
INSPECTORS
PLUMBERS/ARTISANS
METER READERS
WATER/PLANT OPERATORS
WATER & SANITATION
INSPECTORS
PLUMBERS/ARTISANS
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INSPECTORS
PLUMBERS/ARTISANS
METER READERS
WATER/PLANT OPERATORS
WATER & SANITATION
INSPECTORS
PLUMBERS/ARTISANS
METER READERS



Masinga Dam

The taskforce further recommends the head office of the proposed WSP to be at the current Municipal Council of Machakos Water and Sewerage Company offices in Machakos.



6.1.4 Transfer of County Government boreholes to Proposed WSP:

It is recommended that boreholes developed by the County Government should be handed over to the proposed WSP for management and operation. Arrangements should be made to handover the boreholes developed by Water Works Development Agencies and other donors to the County Government. In order to take full advantage of this additional water source, the proposed WSP should invest in water bowsers to serve areas which are not connected to the network.

6.2 Proposed WSP Financial Projections

The proposed WSP will have better management which will enable it to reduce on NRW and enjoy economies of scale due to size. In addition, the WSP will have additional sources of water from boreholes handed over by the county government. Financial projections for the proposed WSP are as per tables 35 and 36.

PROJECTED STATEMENT OF PROFIT OR LOSS FOR PROPOSED WSP

PARTICULARS	Existing WSPs	One Company Option	Delta	Assumptions
Operating Revenue	**356,047,149**	**356,047,149**	**-**	
Additional Revenue County borehole water. (50%)		105,705,000	105,705,000	Additional Revenue County borehole water. (50%)
Additional Revenue reduction of NRW to 25%.		105,278,558	105,278,558	Additional Revenue reduction of NRW to 25%.
Additional Revenue from sewer charges on borehole water.		20,412,577	20,412,577	Additional Revenue from sewer charges on borehole water.
Total Revenue		587,443,283	231,396,134	
Operating Costs				
Staff costs	186,487,307	186,487,307	-	Maintain Salaries. savings to be derived by new company on HR reforms later
Electricity	46,890,429	46,890,429	-	Maintain Power costs
General & Operations Expenses	217,767,245	195,990,521	(21,776,725)	Target only 10% reduction though will enjoy greater economies of scale in order to compensate for additional costs on Borehole water.
Depreciation	25,518,926	25,518,926	-	Maintain Depreciation
Boards' expenses	16,532,973	7,080,000.00	(9,452,973)	Reduce to one board
Domestic Traveling and subsistence	14,290,729	7,145,364.50	(7,145,365)	Reduce by half in one company
Rent	1,869,627	311,604.50	(1,558,023)	Seek smaller office for current
Lease Fee	682,366	-	(682,366)	Not anticipated
Water Agents Commission	503,685	-	(503,685)	Not anticipated
Total Operating Expenses	510,543,287	469,424,152	(41,119,136)	
Net Income(Loss)	(154,496,138)	118,019,132	272,515,270	
Grants from partners	176,469,755	88,234,878		Assume company receives half of the grants
Grand Total	**21,973,617**	**206,254,009**		**Plough back for Development**

Table 35: Consolidated Financial Projections

PROJECTED BALANCE SHEET FOR THE PROPOSED WSP

Assets	CURRENT SIX WSPs	PROPOSED WSP
Non-current assets	**Ksh**	Ksh
Property, plant and equipment	**286,402,502**	**286,402,502**
Intangible Assets	**250,155**	**250,155**
Total non-current assets	**286,652,657**	**286,652,657**
Current assets		
Inventories	**11,113,757**	**11,113,757**
Trade and receivable	**358,797,128**	**358,797,128**
VAT Tax recoverable	**1,131,550**	**1,131,550**
Short-term deposits	**11,035,336**	**11,035,336**
Bank and cash balances	**6,632,399**	**169,361,999**
Deferred Tax	**9,352,371**	**9,352,371**
Tax Recoverable	**5,552,235**	**5,552,235**
Total current assets	**403,614,776**	**566,344,376**
Total Assets	**690,267,433**	**852,997,033**
Equity and liabilities		
Capital and Reserves		
Ordinary share capital	**500,040**	**500,040**
Revaluation reserve	**4,329,731**	**4,329,731**
General Reserves	**24,748,969**	**24,748,969**
Retained earnings	**(50,361,193)**	**112,368,407**
Capital and Reserves	**301,378,294**	**301,378,294**
Total	**280,595,841**	**443,325,441**
Trade and other payable Long Term	**213,565,990**	**213,565,990**
Trade and other payables	**132,149,359**	**132,149,359**
Refundable customer deposits(Customer deposits)	**62,377,567**	**62,377,567**
Deferred Income	**41**	**41**
Provisions	**1,578,635**	**1,578,635**
Total	**409,671,592**	**409,671,592**
Total Equity and Liabilities	**690,267,433**	**852,997,033**

Table 36: Proposed Balance Sheet for the Proposed WSP

6.2.1 Financial Analysis and Implications of Clustering

In order to make the proposed WSP commercially viable, additional revenue generation and reduction in operating costs and NRW will be key performance indicators.

6.2.1.1 Revenue Generation

County Government developed boreholes and sewer Charges

The task force proposes the handing over of County Government developed boreholes to the proposed WSP. This will generate additional revenue of approximately Ksh 105 Million. The projection has assumed the proposed WSP sells only **50%** of the additional Borehole water (Refer to table 35 on page 147).

In addition, Mavoko and Machakos Municipalities which have existing sewer systems, will generate an additional revenue of **Ksh 20 Million** from the newly acquired borehole water sewerage charge.

Non-Revenue Water

It is projected that with improved governance and management, the new WSP should be able to work on the current inefficiencies and reduce NRW to the regulator standard of max 25%. This will enable the WSP to realize additional revenue of approximately Ksh. 105 Million (See table 35).

6.2.1. 2 Economies of Scale and Cost Savings

Reduction of General and Maintenance Costs

A large company can leverage marketing and administrative costs over a larger customer base, reducing the per-customer cost and achieve a lower O & M correlation per cost coverage. Based on increased purchasing volume, the company may negotiate better deals with suppliers, resulting in lower unit costs for essential supplies such as pipes, meters, treatment chemicals and other operational items.

The proposed water company can achieve significant cost savings by consolidating their purchasing power, which can be reinvested into improving infrastructure and enhancing service delivery. This strategic approach to procurement not only reduces costs but, also ensures a more efficient and sustainable operations, ultimately benefiting both the company and its customers. Based on this, the analysis assumes an initial reduction in general and operation expenses by approximately **ten percent (10%)** resulting in annual savings of approximately **Ksh 21 Million.** Though the savings are expected to be much higher, the projection has taken in to account increase in O&M related to the new borehole volume.

Reduction in Board Expenses

ITEM	NUMBER	COST (KSH)	ANNUAL	TOTAL (KSH)
Chairman	1	80,000	12	**960,000**
Board Members	9	20,000	4	**720,000**
Sub - Total				**1,680,000**
Extras (seminars and workshops)				**5,400,000**
Grand Total				**7,080,000**

Table 37:Proposed Board expenses

The current WSP boards incur **Ksh 16 Million annually** as board expenses. This includes; Retainer fee for board chairman, board sitting allowances and other board general expenses. Reduction of these boards from the **current six (6)** to **one (1)** will lead to savings of approximately **Ksh 9 Million annually.**

Domestic Traveling and subsistence

The taskforce noted very high expenditure on domestic travel and subsistence in all the six WSPs. The model assumes that under the proposed WSP with proper management and oversight, these expenses can be reduced by **fifty percent (50%)** generating further saving of approximately **Ksh 7 Million.**

6.2.1.3 Energy Costs

It is projected that power costs will remain unchanged in the first year of operation despite the transfer of county-owned boreholes to the proposed company, given that they are already powered by solar energy. However, it is anticipated that there will be a gradual reduction in costs with the projected investments in solar energy by the government in subsequent phases (refer to table 16).

6.2.1.4 Cost of salaries and wages

The current six (6) WSPs have a combined workforce of 234 employees with a total annual wage bill of **Ksh 186,487,307.** The proposed WSP will absorb initially the entire workforce in the six (6) WSPs. Whereas there will be significant changes in both governance and management, any savings accrued from this will only be realized in the future after the proposed WSP conducts full human resource rationalization and harmonization (refer to table 16 and annex list of staff).

6.3 Operating Income and Grants from Partners

Based on the above projections, the taskforce anticipates that the proposed WSPs will be able to turnaround the current loss of Ksh 154 Million being made by the Six WSPs and become commercially viable generating an income of approximately Ksh 74 Million from operations. Further, receipts from partners of grants averaging Ksh 176 Million annually (if received) should be channeled towards development of water infrastructure and operational support by the proposed WSP.

6.4 Debt Collection

Available data indicates that the six WSPs had outstanding Trade Receivables of approximately Ksh 358 Million and trade payables of approximately Ksh 345 Million. These are material items that require attention and it is recommended that the proposed WSP conducts a thorough audit of both the receivables and trade payables to ascertain their eligibility. Subsequent to this, the proposed WSP should engage a debt collector to assist in recovering eligible outstanding trade receivables which should help pay eligible outstanding trade payables.

6.5 Operational Analysis and Implications of clustering

In addition to the financial gains accruing from clustering highlighted above, the following operational implications will also be realized;

i. **Operational Efficiency:** Consolidating operations will allow better utilization of resources via standardized operations, reducing redundancy and optimizing the use of equipment and personnel. Automation of processes by the proposed WSP is envisaged to improve employee productivity and enhance internal controls.

ii. **Funding Advantage:** The consolidated balance sheet of the new WSP will be more appealing to donors and development partners for funding, increasing the likelihood of securing financing for water and sanitation projects. The new entity will have a broader customer base and serve a larger geographic area, which will make it more eligible for funding from government grants, development agencies and international donors who prioritize projects with high impact and wider reach. Furthermore, the pooling of expertise and resources in the clustered entity will enable it to undertake more ambitious and impactful water and sanitation projects, which aligns well with the funding criteria of various financing institutions.

iii. **Technological Advancements:** It is projected that the proposed WSP will have the resources to invest in advanced technologies and other systems that improve management and operational efficiency. This may include advanced water treatment technologies, digitization and mapping of existing infrastructure, automation and data analytics. The proposed WSP should invest in a common ERP for; Billing, Financial reporting, HR management, logistics and network including supply chain and customer relationship management. In addition, investment in GIS,smart meters, leak detectors and smart water kiosks should be prioritized.

iv. **Distribution Networks:** The proposed WSP will invest and maintain an expanded water and sanitation distribution network. This will improve on customer outreach and service, generate more revenue and help the County meet SDG 6.

v. **Regulatory Compliance:** The standardization of operations and resources will enhance compliance efforts and ensure consistent adherence to regulatory requirements across all service areas. This standardized approach will enable better oversight and monitoring of compliance activities, reducing the likelihood of gaps in control or in regulatory adherence.

Moreover, the pooling of expertise and resources will enable the new company to invest in specialized compliance staff, training programs, and monitoring technologies. This will enhance the capacity of the company to navigate complex regulatory landscapes, and stay abreast of evolving regulatory requirements.

vi. **Innovation:**

Investment in innovation can help a business to set itself apart from its competitors and become the market leader. Innovation can help reduce wastage and costs within an organization. Innovation in customer service leads to faster response time, personalized interactions and proactive issue resolution. This in turn contributes to higher levels of customer satisfaction and a positive overall perception of the organization.

The clustered WSP will be expected to invest in innovative methods to improve on customer service leading to overall organizational performance.

vii. **Risk Management:**

Clustering the WSP will mitigate on risk across a larger customer base and geographic area. This will be enhanced by the ability of the WSP to put in place effective emergency response strategy.

6.6 Social – Economic Implications

The availability and accessibility of water are intrinsically linked to social economic development which include economic progress and human wellness. Clustering of the WSPs in the county shall have significant social impacts including improvements to the well-being of various community groups. The proposed WSP will address critical issues like; access to adequate clean water, sanitation, sewerage services, healthcare access and social services.

The anticipated social impacts of the new WSP include:

Enhanced access to water and sanitation services: The new WSP will have a better outreach leading to improved access to adequate clean water which will benefit all county citizens.

Improved quality of life: The enhanced access to water will lead to improved quality of life, better health outcomes, increased education attainment, reduced prevalence of disease, enhanced housing quality, improved water infrastructure, and safer living environments.

Equity and inclusion: The clustering of the six (6) WSPs will promote greater social equity by introducing measures that reduce disparities in access to clean, adequate water in urban and rural areas including marginalized populations. It is expected that the county government and the proposed WSP will implement pro poor water and sanitation programs. For example, it is expected that the county government will invest in development of water projects within marginalized areas. The new company will operate and maintain these water resources and provide services at subsidized rates.

Economic Impacts:

Water provides many types of important benefits including; commodity benefit, waste assimilation benefits, aesthetic benefit, recreational benefit, fish and wildlife habitats.

Sector-Specific impacts of clustering include:

Water Infrastructure: The new WSP is expected to invest in expansion of water infrastructure this includes; upgrading the current water treatment facilities, expanding water supply networks and repairing aging pipelines.

Increased Construction Activity: Improved access to water will boost construction sector leading to creation of job opportunities.

Long-Term Efficiency Gains: Improved infrastructure can enhance water delivery efficiency, reducing waste and operational costs.

Agriculture: Improved access and management of water has direct impact on agriculture and food security. Enhancing water use efficiency potentially increases crop yields and reduces production costs especially along the Yatta canal in Yatta, Kamu and Kauti irrigation schemes in Mwala and Kathiani sub counties respectively.

Utilities and Service Providers: The proposed company will benefit from economies of scale and standardized processes. The proposed WSP will be more appealing to funding and is likely to attract highly qualified personnel. This has not been achieved by the existing WSPs.

Impact on Government Finances

The water sector reforms and the clustering of the WSPs will provide the government with the opportunity to effectively invest more in development of; water resources (desilting, rain and surface water harvesting, drilling of new boreholes), expansion of the water networks, water treatment infrastructure. This will entail budgetary adjustments from the current Kes 468M (for water and sanitation programs) and Kes 137M (conditional grant for climate adaptation actions) allocated in the FY2024/25 budget and allocate more resources to the water and sanitation sector.

6.7 Environmental Implications

Environmental benefits of sustainable water use practices contribute to the protection of local ecosystems. The management of the proposed WSP shall put in place environmental policies and develop strategies with structures to support environmentally sustainable operations including protection of water resources, use of alternative clean and renewable sources of energy, waste management and risk/disaster management. Further a Grievance/Redress mechanisms shall be implemented to address employee and customer conflicts including the recruitment of a Social and Environmental Risk Manager (see Organogram).

6.8 Legal implications

The new WSP will be anchored on the proposed Machakos County Water and Sanitation Bill 2024 which is aligned to the National Water Act 2016 and its subsidiary regulations.

Creation of a new legal entity to be registered in compliance with the Companies Act, 2015 and in line with WASREB guidelines. The registration of the new company will precede the dissolution of existing WSPs. The new company will automatically inherit the assets and liabilities of the six WSPs. The existing six WSPs will be dissolved at a special general meeting by the shareholders through a resolution.

The new company will absorb all the existing employees of the current WSPs including their remuneration and benefits.

The new clustered company shall apply for a new operating license and tariff according to the tariff guideline by WASREB putting into consideration the new service area.

The new company will develop mechanisms for dispute resolution especially on water rights and usage.

The County government of Machakos will jointly with the State Department of Water and Sanitation and TAWWDA facilitate the transfer of water assets from **TAWWDA** to the County Government of Machakos in line with the **Water Act 2016** in **Sections 83** and **153.** The proposed WSP shall harmonize the asset registers of the six WSPs into one.

Training and capacity building of the management of the new WSP as per WASREB guidelines and procedures.

6.9 Transfer of Assets

It is recommended that the County government of Machakos works jointly with the State Department of Water and Sanitation and TAWWDA to facilitate transfer of water assets from **TAWWDA** to the County Government of Machakos in line with the **Water Act 2016** in **Sections 83** and **153.** The proposed WSP shall harmonize the asset registers of the six WSPs into one.

6.10 Enact Machakos County Water and Sanitation Bill

The taskforce drafted a Water and Sanitation Bill for Machakos County in line with the **Water Act 2016**. It is recommended that this **draft bill** be forwarded to the County Executive Committee for review and approval then onward to the County Assembly for enactment.

6.11 Tariff

The new clustered company shall apply for a new tariff according to the tariff guideline by WASREB putting into consideration the new service area. To facilitate this, the management will provide to the regulator both business and capital work plans and any other information that may be required by the regulator for compliance.

6.12 County Government Subsidy for proposed WSP

It was noted that the WSPs had high pending electricity bills leading to high operational costs. In order to ensure the proposed WSP starts its production unhindered under a new management, the taskforce recommends that the County Government subsidizes the proposed WSP by settling pending electricity bills. This is in line with WASREB guidelines on clustering of 2018 (clause 4.1.5).

6.13 Strategic Plan

It is recommended that the proposed WSP develops a Strategic plan. This will ensure that the organization sets its priorities, focuses its energy and resources to strengthen operations and ensure that employees and other stakeholders are working toward common goals. Further this plan will establish agreements around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment on provision of water and sanitation services.

Key amongst the objectives of the company should be adoption of technology in its operations. This will entail automation of processes including utilization of a Centralized Management Information System (MIS) that will ensure real-time monitoring, evaluation and aid in decision-making.

The Plan should set clear Objectives and Goals on how to ensure the company invests in a common ERP for Billing, Financial reporting, HR management, logistics and product network including supply chain and customer relationship management. Further, investment in Smart meters, Leak detectors and automated water kiosks should also be prioritized.

The proposed WSP should come out with clear strategies on adoption of renewable energy in its operations especially in pumping of water and sewerage as a cost reduction initiative and climate change adaptation measure.

It was noted that part of the current water infrastructure is old and dilapidated. Further, some of the county Government developed boreholes are not equipped, while others are broken down.

Additionally, investments in renewable energy sources, watershed protection, rainwater harvesting, water recycling initiatives, and climate-resilient infrastructure, should be considered. These measures if implemented, will reduce operating costs.

To support the above, the County Government should develop a water and sanitation investment strategy to support the new WSP to reach the underserved areas. This should ideally be a phased financing strategy over the strategic plan period.

6.14 Title deeds

This feasibility study established that the County Government does not have title deeds for the water assets including Dams, Yatta Canal, boreholes and springs. It is therefore recommended that the County Government should survey and demarcate all water resources in the county.

6.15 Masinga Water Supply

TAWWDA advised that in order to resolve the existing water supply conflict between Masinga residents and KITWASCO, the **National Government** had allocated **Ksh 500 Million** for the construction of a second intake line in Masinga Dam to serve Masinga Sub County. The taskforce recommends the County Government to pursue the implementation of this project on a priority basis and that KITWASCO ceases to offer Water Services in **Masinga Sub County** and hands over this function to the proposed WSP.

6.16 Water Quality Assurance

WSPs are obligated to ensure water quality monitoring through regular sampling and submission to Kenya Bureau of Standards (KEBS) for issuance of water quality certificate. It was observed that water quality testing is costly and most of the WSPs do not comply with the set standard. It is therefore recommended that the County Government establishes its own water quality laboratory, which will serve both public and private WSPs.

6.17 Sanitation

Machakos County is rapidly developing through urbanization but has sewer systems only in Mavoko and Machakos Municipalities. There is a huge opportunity for the provision of sanitation services within the County urban areas. It is therefore recommended that the proposed WSP invests in Decentralized Treatment Facilities (DTFs) in all major towns and market centers of Machakos County for provision of sanitation services.

Public Private Partnerships (PPPs) are key in development of sanitation infrastructures, which are capital intensive. The proposed WSP jointly with the County Government should pursue PPPs for projects such as Sewerage and Waste Water treatment and recycling for irrigation, while the sludge by-product can be converted into charcoal briquettes, fertilizer and energy. This will create new business opportunities and employment for the citizens.

6.18 Water Projects

Annual current demand for water in the County stands at approximately 5.1 Million cubic meters against available 1.2 Million cubic meters. In order to satisfy the demand, the taskforce recommends that all stalled water projects being undertaken by both the County and National Governments be completed and those proposed implemented expeditiously in order to increase water supply.

(See annexure on ongoing projects)



The following ongoing/ proposed water and sanitation projects were noted by the taskforce; ***(See annexure on Sanitation projects)***

6.19 Key Recommendations are summarized below:-

1) **Restructure the Six** Machakos County WSPs by clustering them **into ONE** Water Service Provider namely **MACHAKOS COUNTY WATER AND SANITATION COMPANY LTD**.
2) **Shift from free water policy** to a **cost-sharing system** based on regulator tariffs.
3) **Transfer management** of **all County water boreholes and dams** with treatment plants from the Water department **to the new WSP**.
4) **Transfer Assets** currently held by TAWWDA **to the County Government** which in-turn hands over to the Proposed WSP for custody on behalf of the Public as per **Water Act 2016**.
5) **Enact Machakos County Water and Sanitation Act** in line with Water Act 2016.
6) Pursue and **secure title deeds** for all Water Resource Assets in Machakos including Water Offices, Dams, and Springs, Weirs, Canals, Boreholes and Storage Tanks.
7) **Resolve** the Water Supply conflict in **Masinga Sub County** by ensuring the implementation of the second intake in Masinga dam (project being undertaken by TAWWDA) and transfer Water and Sanitation services in this area from KITWASCO to Machakos County.
8) Facilitate **desilting** of the **Yatta Canal** and Muuoni **Earth Dam** in Kathiani Sub County.
9) Establish a County **Water Testing Laboratory** in order to ensure Water Quality.
10) Negotiate for TAWWDA to hand over the Sewerage treatment plant in the Proposed Leather city to the County Government of Machakos.
11) Negotiate for completion of Water and Sanitation Projects being undertaken by the WWDAs in the County.
12) Develop water sector investment incentives to attract investments in the water sector through PPPs frameworks.
13) Operationalize sub-licensing of private commercial and community water projects by the new WSP in line with the Water Act 2016.

14) County Government to facilitate the **completion of a County Water and Sanitation Master plan**

6.20 Decision Making Process

After a thorough and comprehensive feasibility study including benchmarking, situational analysis, public participation and stake holder engagement, two options for clustering were considered;

Option1: Clustering the six companies into two (2) companies one for urban areas and one for rural areas;

Option 2: Clustering all the companies into one WSP.

COMPERATIVE ANALYSIS

TYPE OF COMPANY	REVENUE (Kshs)	O&M COST (Kshs)	PERSONNEL COST (Kshs)	O&M % TO REVENUE	STAFF COST% OF O&M
Rural WSP	61,689,278	80,936,721	31,352,444	76.22%	38.74%
Urban WSP	294,357,871	429,606,566	155,134,863	68.52%	36.11%
Clustered WSP	587,443,287	469,424,152	186,487,307	125.14%	39.70%

According to WASREB guidelines, full cost recovery is reached when the revenue covers about 150% of O&M cost.

The analysis in table 18 which was tabulated on the basis of key performance indicator of revenue, operations and maintenance cost and staff costs, a full cost recovery will be realized when the six (6) WSPs are clustered in to one entity. It is important to note that the percentage of staff cost to the total O&M is projected to be **thirty nine percent** (39%) at the inception of the new WSP and progressively decline as the revenue collection improves.

SNO.	COMPONENTS	TWO COMPANIES OPTION RURAL AND URBAN	ONE COMPANY OPTION CLUSTERED COMPANY
1	Revenues	The revenues will remain constant. Rural company will not be sustainable The gap between the urban and rural company will continue to widen	The company will leverage more revenue streams thereby generating more revenue.
2	Personnel • Skills mix	Will have skills duplication and increase costs for the rural company may not afford experts e. g Water and sanitation engineers	Creation of synergy and optimization of skills
3	Economies of scale • Bargaining power • Purchasing discounts • Donor Funding • Personnel cost	Lower bargaining power Their combined volumes will not give them economies of scale	Higher bargaining power Will enjoy economies of scale Lower O & M per connection ratio
4	Standardization of operations	Will have different vision hence different business processes	Will have one vision and hence faster business processes and workflows
5	Technology	Low technology uptake due to affordability	Will leverage on economies of scale
6	Commercial viability	Will not be commercially viable simply by combining small rural WSPs due to market size and locational economic setup; rural company may not be able to support pro poor initiatives.	Will leverage on market size and locational economic setup
7	Governance	Will have two distinct boards making it harder to govern	Will have one board with a streamlined governance

After a comparative analysis of the two options and consultations with key stakeholders, there were more benefits accruing from clustering into one (1) company. The taskforce therefore recommended formation of one (1) WSP. **A decision was thereafter made by the county government to cluster the six WSPs into one company**. (*See the comparative analysis above*).

CHAPTER SEVEN: TRANSITION PLAN

7.1 Proposed Restructuring of the WSPS

The clustering of the companies will be guided by Section 97 (2) of the Water Act 2016, Water Regulations 2021 and WASREB guidelines on clustering (2018). The taskforce recommends the following steps in the transition of the clustering: -

NO.	ACTIVITY	DELIVERABLE	TIMELINE	ACTOR
1.	Handover of the Task force Report Process	Handover report	October, 2024	County Executive
2	County Executive to meet with each WSPs Board, CEO and Management staff to inform them of the upcoming clustering, benefits expected to accrue from it, transition period and most importantly assure them that **there will be no job losses**	Report on WSP engagement	October – 2024	County Executive
3	Special General Meeting - The current WSPs to hold SGM and pass resolution for dissolving current WSPs and formation of the Clustered WSP.	Minutes of Shareholders Resolution	October, 2024	County Executive
4	Based on the Shareholders Resolutions in the Special General Meeting, approve the clustering.	CECM Water	October, 2024	County Executive
5	Governor appoints Interim (Caretaker) CEO and committee to oversee the transition to the new WSP.	Caretaker CEO	October, 2024	Governor
6	Register a new WSP by the name Machakos County Water & Sanitation Company.	Certificate of incorporation	November, 2024	County Attorney
7	Appointment of new Board of Directors	Gazette Notice	November, 2024	Governor
8	The new Board Recruits substantive CEO for the new WSP	New Board	December, 2024	Board
9	The new WSP to apply for operation license and tariffs from WASREB.	Operation License	January, 2025	New CEO
10	Enactment of Machakos County Water and Sanitation Act 2024.	Machakos County Water and Sanitation Act,2024	December, 2024	Machakos County Assembly

CHAPTER EIGHT: MONITORING, EVALUATION AND LEARNING

8.1 Proposed Monitoring, Evaluation and Learning

Monitoring and evaluation is an important tool that enables an organization to assess the effectiveness of its strategies, identify areas of improvement to ensure that it meets its goals and objectives.

The matrix below is proposed to guide the County Government in monitoring key reform parameters of the proposed Water Service Provider. The progress will be tracked over the short term (up to 3 years), medium term (up to 5 years) and long term (over 5 years).

Program	Sub Program	Outcome	Outcome indicator	Baseline		Mid Term Target	End Term Target	Reporting Responsibility
				Value	Year			
Revenue Generation	Water Supply	Increased water resources	Number of County Government developed boreholes handed over	0	2024	150	300	CECM Water
	Development of Sewer	Increased sewer connections	Number of eligible households connected to sewer line	MKS 600 MVK 4,700	2024	1,000	3,000	CEO
	Operations	Reduce NRW	Percentage of compliance	34%	2024	30%	25%	CEO
	Service Innovation	Enhanced customer satisfaction	Increased revenue	0%	2024	50%	75%	CEO
Operating Expenses	Power Cost	Reduction in Power Bill	• Number of Solarized projects • Energy audits	Ksh 47 million	2024			CEO
	Maintenance cost	Reduction in Maintenance cost	Bulk Procurement of Supplies Preventive Maintenance	Ksh 218 Million	2024	Ksh 200Million	Ksh 174Million	CEO

Program	Sub Program	Outcome	Outcome indicator	Baseline		Mid Term Target	End Term Target	Reporting Responsibility
				Value	Value			
Operating Expenses	Board expenses	Reduction in Board Expenses	Number of Board sittings	KSh 16 Million	2024	Ksh 10Million	Ksh 7Million	CEO
	Foreign and Domestic travel	Reduction in Travel Expenses	Number of Trips	Ksh 14 Million	2024	Ksh 10Million	Ksh 7Million	CEO
Working Capital Management	Trade Receivables	Reduction on Outstanding trade debts	Amount of Money Recovered from debtors	Ksh 358 Million	2024	Ksh 200 Million	Ksh 50 Million	CEO
	Trade Payables	Reduction on outstanding payables	Amount of Money Paid to creditors	Ksh 450 Million	2024	Ksh 350 Million	Ksh 200 Million	CEO
Human Resource	Leadership Supervisory and Coordination	Increased efficiency and effectiveness in service delivery	Performance contracting for CEO and Departmental heads	0	2024	19	All Managers	Board/CEO
	Policy Formulation	Effective service delivery	Number of policies developed	0	2024	3	5	CEO
	Scheme of Service	Grading System	Number of schemes of service developed	0	2024	9	15	CEO

Program	Sub Program	Outcome	Outcome indicator	Baseline		Mid Term Target	End Term Target	Reporting Responsibility
				Value	Value			
Human Resource	Salary Bands	Established job groups	0	2024	1	1	CEO	Salary Bands
	Capacity Building, Training, Research and Development	Staff Training and Internships	Number of Staff trainings and Internships conducted	0	2024	100	300	CEO
	Performance Appraisal	Staff Evaluation Reports Prepared	Number of Evaluation reports prepared	0	2024	100	300	CEO
	Staff Benefits	Staff benefit schemes	Number of staff benefiting from schemes	0	2024	100	300	CEO
	Payroll management	Capacity building programmes for payroll staff	Number of programmes done	0	2024	3	3	CEO

Program	Sub Program	Outcome	Outcome indicator	Baseline		Mid Term Target	End Term Target	Reporting Responsibility
				Value	Value			
Technology Adoption	WAN	Increased efficiency in service delivery	Number of branches connected to the WAN	0	2024	9	9	CEO
	ERP	Increased efficiency and effective controls in operations	Automated Finance, Customer Relationship Module, HRMS, Operations(Meter reading) and Procurement modules installed.	0	2024	3	5	CEO
	Data center and Email Server System	Increased efficiency in communication and data security	Number of servers installed Number of emails users	0 0	2024	1 100	1 250	CEO
	Intercom System	Improved departmental/Branch communication	Number of telephony installed and working	0	2024	9	18	CEO
Regulatory Compliance	Operational License	Approved License /Tariff	Operational License an tariffs from WASREB	0	2024	2	2	CEO

Program	Sub Program	Outcome	Outcome indicator	Baseline		Mid Term Target	End Term Target	Reporting Responsibility
				Value	Value			
Regulatory Compliance	Yatta Canal	Protected Yatta Canal	Approved Regulations for Yatta Canal Management	0				
	Risk Management	Identification of risks	% of level of Risks identified	0 %	2024	50%	100%	CEO
Strategic Plan	Medium and Long term Strategies	Strategic plan in place	Number of strategies implemented	0	2024	3	5	CEO
Water Quality	Sublicensing	Potable water	Number of private WSPs licensed	0	2024			CEO
	Water testing lab	Commissioned laboratory	Number of tests done					
Projects	Water	Dams and Boreholes	Number of dams with treatment works Number of operational borehole reticulated.	0	2024			CEO
	Sanitation	Treatment plant/ DTFs	Number of Treatment plants and DTFs commissioned	0	2024			CEO

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