

# **STRATEGIC PLAN** 2019/2020-2023/2024





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#### ABBREVIATIONS & ACRONYMS

BOD Board of Directors

CAAC Catchment Area Advisory Council

CBD Central Business District

CIDP County Integrated Development Plan

CWIS City Wide Inclusive Sanitation

DMAs District Metered Areas
DWQ Drinking Water Quality

FSM Fecal Sludge Management

FSTP Fecal Sludge Treatment Plant

GIS Geographical Information System

KEWI Kenya Water Institute

KPIs Key Performance Indicators

MOWS Ministry of Water and Sanitation

MAWASCO Malindi Water and Sewerage Company

NRW Non-Revenue Water

NWSA National Water Storage Authority

CWWDA Coast Water Works Development Agency

O+M Operation and Maintenance

PESTEL Political, Economic, Social, Technological, Environmental and Legal

SO Strategic Objectives

SPA Service Provision Agreement

SWOT Strength, Weakness, Opportunity and Threat

WAB Water Appeal Board

WASREB Water Service Regulatory Board

WRA Water Resources Authority

WRUAs Water Resource Users Associations

WSP Water Service Provider
WSTF Water Sector Trust Fund

SUED Sustainable Economic Development

UBSUP Upscaling Basic Sanitation for the Urban Poor



#### **FOREWARD**

Kilifi County Government aspiration in relation to water and sanitation is to ensure the dependent population enjoys basic right to water. This should be achieved through access to clean and safe water in adequate quantities and reasonable standards of sanitation. These aspirations can be realized through efficiently managed Water Services Providers. With current access to water in MAWASCO's area of jurisdiction being 70% and sanitation being 26% there is need for concerted efforts to make right investment to accelerate access to water and sanitation services. Malindi is a tourist destination and

cannot risk having less water and sanitation services. To continue being a preferred tourism destination we should provide world class water and sanitation services.

Kilifi County as a whole is a water stressed county and therefore this calls for prudent and efficient management of existing water resources. For instance, within the coverage area of MAWASCO there is a deficit of 21,000 M³ per day as per 2019 demand levels. To realize vision 2030 and sustainable development goals related to water and sanitation target there is need to think outside the box on the ways to avail more water in addition to what is received from Baricho wells. To this effect the water department and other stakeholders are exploring possibilities of drilling boreholes, extending pipelines and enhancing other sources to meet the growing water demand.

The county utilities have not been performing well over the years and this is demonstrated by WASREB ranking. Therefore, as this strategy provides pathways to transforming the company, I believe in few years down the line, MAWASCO will regain its rightful position. I urge the Board of Directors and the management to institute all relevant measures and initiatives that would turnaround MAWASCO and make it a sustainable entity. My department will extend the necessary support ranging from resource mobilization for infrastructure investment and allowing MAWASCO to operate at arm's length.

On the same breadth, I would like to urge the Board of Directors to play their rightful role in over sighting the company and developing appropriate policies that would catapult MAWASCO to better performance. As primary shareholder of MAWASCO, my expectation is to witness sustained growth in all aspect of the company and such growth can only happen if all of us are aligned to the vision, mission and core values of MAWASCO.

Lastly, I would like to acknowledge and appreciate the support extended to MAWASCO by HE. The Governor Hon. Amason Kingi, the BOD, the management and other key stakeholders. I would also like to pass my gratitude to Kenya Markets Trust (KMT) in facilitating the development of this strategic plan.

COUNTY EXECUTIVE COMMITTEE MEMBER Hon. Mwachitu Kiringi



#### **PREFACE**

Provision of clean, adequate, reliable and convenient water and sanitation services continues to be a paramount priority for the Board of Directors. We are very much cognizant of the constitutional right to water and the standards that have been established to enhance attainment of this fundamental right. We are also very much alive to the fact that as one of the agents of Kilifi County Government, we have an uphill obligation to contribute to the aspiration of the county of achieving universal access to water and sanitation services.

The journey of developing this strategic plan has been quite instrumental in laying foundation for better services delivery to our customers. It is fundamental to note the role our customers play to enhance sustainability of this company. Without "paying customers" MAWASCO wouldn't be a viable entity. As highlighted in the strategic plan, we need to strive hard to increase access to clean and safe drinking water and put additional measures in place to guarantee quality supply.

I would like to rally all the stakeholders of the company especially the management, staff and other Board members behind the revamp vision of the company which aims to position the company as a premiere water and sanitation services provider. This vision cannot be realized unless the key stakeholders are aligned.

As we embark on implementation of the strategy, the board will effectively and efficiently play its role and provide leadership that would enhance better governance. The Board will endeavor develop all the relevant policies and guidelines required to realize this strategic plan and also further engage in resource mobilization to fill the envisaged budgetary deficit.

I would like to thank the management and the staff of MAWASCO for the commitment demonstrated in delivery of services. I would like to give personal commitment to the management that the Board will limit its role to the cardinal functions as stipulated in the code of conduct and board charter and provide the management enabling environment to deliver on its management function.

Last but not least, I would like to remind each and every one of us to our rallying call "**provide** every reason for a smile" and call each one of us to remain faithful to this call.

CHAIRMAN (BOD) Mr. Anderson F. Kasiwa



#### **ACKNOWLEDGEMENT**

Malindi water and Sewerage Company is at a crossroad and this strategic cycle 2019-2024 provides definite solutions to many challenges and opportunities present in our current and future operating context. This strategic plan provides well-articulated and thought out strategies that would witness the turnaround of MAWASCO.

Over the years, we have witnessed mixed fortunes for the company and as management we are fully aware of the hiccups that have contributed

to declining performance of the company. We therefore take this strategic planning cycle to address the underlying operational and governance challenges encountered by the company. I believe the strategies that have been stipulated in this strategic plan will go a long way in revitalizing the company.

This strategic plan 2019-2024, has embraced a different approach from the previous ones by actively engaging key stakeholders in developing the roadmap. Thus, the final product is 100% owned by key stakeholder and MAWASCO itself. Therefore, as management we have bought to every aspect of the strategy and we believe we would be able to deliver the aspiration set-out in the plan.

MAWASCO unlike other Water Service Providers doesn't control its production since we are bulk water purchasers from Coast Water Works Development Agency. This presents a unique challenge in controlling the quality and quantity of water to be supplied. As we embark in implementation of the strategy, we will engage with bulk suppliers to increase our portion and pursue mechanism that will allow us to invest in alternative water sources. However, we will strive to maintain high water quality standards to our customers and we therefore urge the key stakeholders who are involved in infrastructure development to support MAWASCO in realizing this particular objective.

As we embark on rolling out the strategy, I call upon my staff to prepare for the journey ahead and embrace different values as stipulated in the strategy. Successful implementation of the strategy will not adopt business as usual approach and would come with some few changes that would enhance our productivity and efficiency and therefore, I urge my staff to embrace the changes.

Finally, I would like to acknowledge and thank the shareholders of the company, Board of directors, our customers, suppliers and financiers, the National Ministry of Water and Sanitation and other stakeholders. In a special way, I would like to pass my gratitude to Kenya Markets Trust (KMT) who have been very instrumental in facilitating the development of this strategic plan.

MANAGING DIRECTOR Mr. Gerald Mwambire

#### **EXECUTIVE SUMMARY**

#### Rationale

The national policies in Kenya including Constitution of Kenya 2010, Vision 2030 and Water Act 2016, among others, have affirmed access to clean adequate water as a basic human right. In positioning itself to meet this mandate for the Malindi people, Malindi Water and Sewerage Company (MAWASCO) has been preparing Strategic Plans as tools to assist the company in moving forward with this agenda. The company developed a 5 year strategic plan 2019/20-2023/24 which has now been reviewed after two years of business plan cycle ending 30th June 2020. This document is a new revised 3 year strategic plan for the period 2020/21 to 2022/23. This Strategic Planning provides the framework through which MAWASCO will align itself effectively to their operational environments. This Strategic Plan will facilitate sustainable and efficient utilization of the company resources in the delivery of core services and attainment its company goals. The Plan will help MAWASCO position itself strategically in its operational environment by aligning itself effectively to the changes taking place in that environment. This will enable it to effectively discharge its mandate, enhance its performance, meet the expectations of its diverse stakeholder segments and align its projects and activities. The Plan has been developed through a participatory process involving the board of MAWASCO, the management, members of staff and other stakeholders. MAWASCO Strategic Plan looks at how the organization can be improved and how it can provide its services in a reliable way for its customers and its employees.

### The Company and Its Mandate

Malindi Water and Sewerage Company (MAWASCO), is located in Malindi town, in Kilifi County. The utility was incorporated under the Company's Act (Cap 486) of the Laws of Kenya as a public company limited by shares on 24th August 2005 and came into full operation on 1st February 2006. This was as a result of the enactment of Water Act 2002 (repealed by Water Act 2016), which brought about far reaching water sector reforms in Kenya separating water resources management from services delivery. As a water service provider charged with the provision of water and sanitation services in Malindi, MAWASCO has the mandate to provide adequate quality water and proper sanitation services to its customers in the most efficient and affordable way. It's also responsible for the routine maintenance of water and sanitation services infrastructure. The company is engaged purely in providing water and sanitation services to the residents of Malindi, Magharini and Kilifi North sub-counties with an estimated water production of 21,000 m3/ day against a demand of 44,353 m³/day. MAWASCO has a license to supply water to about 8,300km² coverage and with a population of 572,652 persons. As at 2019, the coverage was about 73% for water and 27% on sanitation.

#### **Governance Structure**

MAWASCO has established key governance structure which includes a Board of Directors comprising of members representing various stakeholders drawn from the County Government of Kilifi and other stakeholders. The Board is composed of 10 Directors (6 male and 4 female) including an independent Chairman and one executive director who is also the Managing Director. Four women sit in the Board, thus meeting the minimum of one third gender representation of any of the genders as required by the Constitution of Kenya. They have a wide range of skills and experience and each contributes independent judgment and knowledge to the Board's discussions.

On appointment, each Director is provided with a comprehensive and tailored induction process covering the Company's business and operations and also provided with information relating to their legal and regulatory obligations. All the Directors except the Managing Director and representatives of the County Government are required to submit themselves for re-election in accordance with the Company's Articles of Association. The Board has constituted 3 sub-committees chaired by one director in each, namely Finance, Planning and Administration Committee, Human Resource Committee and Audit and Risk committee. Each committee meets 4 times in one financial year. The Board appoints other committees as and when necessary. WASREB has prepared Governance guidelines for cost effective, efficient and transparent management and operation of water services. Through the guidelines, WASREB communicates clearly on the need for good corporate governance which also satisfies the requirements of the standards set in the Companies Act Cap 486 for the WSPs formed under that Act. Some of the highlights of these guidelines are roles and functions of the Board and Sub-Committees of the board, composition and appointment of the board, compliance and accountabilities as well as guidelines for evaluation on performance and impact of the board.

#### Management

The Company has a total staffing of 209 employees (7 Permanent employees – Management, 152 permanent employees – Unionisable and 47 temporary and contract employees) deployed across various sections in the organization with the productivity ratio of 7 staff per 1,000 (sewer and water) connections. Adequate efforts and resources will be dispensed towards attaining a ratio 5 staff per 1,000 connections by the end of the 3-year business planning period. The company has engaged professionally qualified technical and managerial departmental managers who are steered by a Managing Director.

#### **Key Achievements**

This Strategic Plan has recognized the key achievements of MAWASCO during the preceding Strategic Plan period as well as the major challenges faced. The achievements made are outlined in Chapter 3. Notably, MAWASCO was rated the 30th position out of 87 companies in the overall ranking by the regulator, WASREB. The Company is currently faced with a challenge in provision of its mandate due to the high cost of power as it is mainly a pumping system. This has adversely contributed to the high cost of production per cubic meter of water compared to other water Companies that use gravity systems. The Company is also faced with a challenge on dispensation of its mandate in managing Sewerage Services since Malindi has no established sewerage system. The company is in the process on establishing sanitation infrastructure with support of development partners. The company has a challenge of dilapidated infrastructure. The company has the challenge of providing water to the hinterland of Magarini Constituents nearing 150,000 people.

#### Alignment to Operating Environment/Strategic Fit

While building on the recent positive developments, the Plan recognizes that MAWASCO operates in an ever-changing environment influenced by external and internal socioeconomic, legal and political factors, which directly and indirectly impact on its operations. The achievement of the Plan's objectives will largely depend on how MAWASCO enhances its' internal strengths, exploits the existing opportunities, manages

the weaknesses, while controlling those factors that pose a threat to the achievement of planned projects and activities. The SWOT and PESTEL analysis are presented are presented in this Chapter 5. The Risk analysis is outlined in Chapter 7.

### **The Strategic Direction**

This Strategic Plan has identified, through the use of the balanced scorecard framework, key strategic objectives that will drive the implementation of the Strategic Plan over the next three year period. During the Plan period, MAWASCO will focus on four key result areas (KRAs). These strategic themes are (i) Water and sanitation infrastructure development (ii) Operational efficiency and customer service; (iii) financial sustainability, and (iv) Institutional and Capacity Strengthening. Arising from the above strategic themes and the strategic issues that need to be addressed in each thematic area, MAWASCO will pursue the goals and the following Strategic Objectives namely:

#### **Goal # 1: Water and Sanitation infrastructure development**

- 1. Increase access to clean and safe drinking water from 70% to 85% by 2023/24.
- 2. Increase access to sanitation services from 27% to 58% by 2023/24.
- 3. Construction of fecal sludge treatment plant; improve treatment from 1% to 18% by 2023/24.

#### **Goal # 2: Operational efficiency and customer service**

- 1. Increase the hours of supply from 23 to 24 hours per day by 2023/24.
- 2. Ensure drinking water quality compliance with residual chlorine as stipulated by the regulator from the current 83% to 97% by 2023/24.
- 3. Enhance customer awareness on products and services through establishment of customer contact center.

#### **Goal # 3:** Financial sustainability

- 1. Increase collection efficiency as % of budget from the current 76% to 86% by 2023/24.
- 2. Improve % of MAWASCO Sanitation 0&M costs covered from 0% to 8% through sanitation tariff by 2023/24.
- 3. Reduce NRW from the current 28% to 24% by2023/24.

#### **Goal # 4:** Institutional Capacity Strengthening

- 1. Attain two accreditations.
- 2. Develop ten organization policies.
- 3. Enhance continuous improvement across the company.
- 4. Ensure regulatory compliance.
- 5. Establish a risk management plan.
- 6. Improve Governance ranking from the current 67% to 100% by 2023/24Capacity build and develop employee skills.
- 7. Enhance management of employee.
- 8. Establish automation of HRM System.

Based on the strategic plan and in line with the MSL (Minimum Service Level) as per the Licensing application from WASREB, MAWASCO has set targets to be achieved during the planning period. The projections are based on demand, planned infrastructure and tariff charged and conditions of tariff. The improvement standards have been set out in the service provision agreement. MAWASCO will endeavor to continuously improve its

performance. To be in line with sector requirement, MAWASCO will use the sector benchmark indicators used for performance assessment.

#### **Plan Implementation**

Clear strategies and detailed activities have been developed to help in achieving each of the Strategic Objectives. The implementation of the proposed strategies will enhance the institutional capacity of MAWASCO to enable it build synergies to mitigate both external and internal challenges. In particular, the Implementation Matrix provides the actual framework through which the Strategic Objectives will be achieved during the Plan period. Through their operations, MAWASCO departments will translate the strategic goals into reality by developing and implementing departmental Plans which are aligned to the corporate Strategic Plan.

#### Resources

Cost estimates have been outlined for all the activities to be undertaken during the Plan period. These will be financed by both internally generated funds, from the County Government and National Government, through levies and support from development partners, while cost saving measures will be implemented to further strengthen the company's financial resource base. The raising of these resources will require a multipronged approach through tariff financing, central and county government subventions, borrowing from the bond markets as well as from banks, and donor support. The company is fully engaged with these various potential sources of funds with a view to raising enough resources to fund the various development initiatives. In order to meet its mandate, the company has estimated that it requires resources to the tune of Ksh 4,039,181,236 over the next three year period from 2020/2021 to 2022/2023 to finance its capital expenditure and operational requirements. The company has made plans to incur capital expenditure totaling Ksh 2,389,842,847 for CAPEX investments and incur 0&M expenses accumulating to Ksh 1,649,338,389 during the three year planning period. The Plan acknowledges that the ability of MAWASCO to implement its projects depends on the availability of adequate funding. In the event that the available financial resources do not meet the resource requirements of the Plan, then MAWASCO will have to scale down its proposed activities and may therefore, not meet some of the set targets.

#### Monitoring, Evaluation and Reporting

MAWASCO recognizes the importance of Monitoring, Evaluation and Reporting in the achievement of the Plan's intended results. Progressive monitoring will be carried out based on the expected outputs and measurable indicators set out in the performance measurement framework and the detailed implementation matrix. All the departments will be involved in the Monitoring, Evaluation and Reporting process. Quarterly and Annual Monitoring and Evaluation reports of MAWASCO will be submitted to the Managing Director and shared with the Board and subsequently fed into a performance Monitoring and Evaluation System.

# **Chapter 1: INTRODUCTION**

#### 1.1 Background

Malindi Water and Sewerage Company (MAWASCO), is located in Malindi town, in Kilifi County. The utility was incorporated under the Company's Act (Cap 486) of the Laws of Kenya as a public company limited by shares on 24th August 2005 and came into full operation on 1st February 2006. This was as a result of the enactment of Water Act 2002 (repealed by Water Act 2016), which brought about far reaching water sector reforms in Kenya separating water resources management from services delivery.

As a water service provider charged with the provision of water and sanitation services in Malindi, MAWASCO has the mandate to provide adequate quality water and proper sanitation services to its customers in the most efficient and affordable way. It's also responsible for the routine maintenance of water and sanitation services infrastructure. The company is engaged purely in providing water and sanitation services to the residents of Malindi, Magharini and Kilifi North subcounties with an estimated water production of 21,000 m3/ day against a demand of 44,353 m3/day. MAWASCO has a license to supply water to about 8,300km2 coverage and with a population of 572,652 persons. As at 2019, the coverage was about 73% for water and 27% on sanitation.

#### 1.2 Rationale for the strategic plan

Water companies just like any other corporate entity is supposed to have a clear blueprint that would guide its operation. The blueprint should contain the fundamental values and principles that support their utility's policy and operating decisions. MAWASCO just like many other water and sanitation institutions in Kenya has embraced the concept of strategic planning. Some of the compelling reasons for strategic planning at MAWASCO are to:

- align the company's goal with the country's vision 2030 which is aimed to ensure that improved water and sanitation are available and accessible to all.
- be prepared for the future events by focusing on integrating both short- and long-term plans.
- To put in place mechanisms for continuous development and review of policies and frameworks those directly impact the operations of the company.
- reinstate the water supply status to the design capacities of the water systems have been proposed and those that are ongoing.

#### 1.3 General process and approach towards strategic planning

This strategic plan has been created through a participatory process whereby the views of various stakeholders were incorporated. The Management, Board of Directors and staff at Malindi Water and Sewerage Company were consulted during this entire process and their views taken into consideration during the strategic planning process. The strategic planning process adopted the following fundamental steps:

- Conducted training for all the relevant stakeholders on the strategic planning process;
- Assessed the Company's present position by reviewing the just concluded strategic plan cycle (2014-2018);
- Gathered inputs on customer analysis, industry analysis, environmental analysis and general performance of the company;
- Defined the long-term/ aspirations of the company (vision, mission, strategic direction and the mantra):
- Scanned the internal and the external environment (situational analysis);

- Set strategic objectives and matrix;
- Set performance measurement matrix using balance scorecard;
- Developed resourcing plan for the implementation of the strategy;

### 1.4 Organization of the plan

This strategic plan is structured into **nine chapters** which cover various fundamental topics. **Chapter One** is a brief introduction that covers the background of MAWASCO and how it was established. This chapter also highlights the justification for the strategic plan as well as process taken to formulate the strategic plan. The company's mandate has also been briefly discussed in light of water act 2016, sustainable development goals, vision 2030 and county integrated development plan the county integrated development plan. **Chapter two** will highlight the broad description of the company by mainly focusing on water demand, population growth, climate change and environmental protection. **Chapter three** of this strategic plan will focus on the just concluded strategic plan cycle by highlighting the gains, challenges and lessons the company should learn moving forward.

In **chapter four** of the strategic plan the new strategic roadmap for the WSP detailing its Vision, Mission, Core Values and utility Mantra will be discussed. **Chapter five** then elaborates the situation analysis that covers internal and external environment through SWOT and PESTEL. **Chapter six** covers the five strategic objectives formulated under the balance score card framework. **Chapter seven** provides a detailed discussion on risk management related to each of the strategic objectives. **Chapter eight** looks into financing option of the strategic plan and financial resources required for its successful implementation. Finally, **Chapter nine** details the implementation strategy, monitoring and evaluation framework for the strategic plan. Detailed perfo4mance measurement framework and a detailed costed implementation matrix are provided as annexes.

#### 1.5 Water sector reforms and devolution of functions

Kenya water sector reforms commenced after enactment of Water Act, 2002. The Act clearly differentiated the roles of various actors in the water sector – the government, public, private sector, water resource management and water services and supply. It entrenched public participation and involvement in water service and resources management and formulated new institutions. The Water Act 2002 separated Water Resources Management (WRM) from Water Supply and Sanitation (WSS), provided regulation of WSS and further made a distinction between asset holding and development (responsibility of a Water Services Boards (WSB)) from operations and management (responsibility of a WSP).

The Constitution of Kenya, promulgated in August 2010 as the Country's supreme law, brought about fundamental changes in the country's governance framework. A fundamental shift in the 2010 Constitution as compared to the independence constitution is the devolution of functions of government through establishment of a two-tier system of governance comprising of the national and county governments<sup>1</sup>. The responsibility to provide water supply and sanitation services is allocated to County Governments. The function of national public works is assigned to national government but, the county government has the responsibility for county public works.

1 Constitution of Kenya 2010.

Article 43, entrenches water as a constitutional right by establishing a right to 'reasonable standards of sanitation' and 'clean and safe water in adequate quantities and Article 21 which places an obligation on the government to take steps to progressively realize this right.

#### 1.6 Water Act 2016

Water Act 2016<sup>2</sup> repealed the Water Act 2002. The Act was assented to by the President on 16<sup>th</sup> September 2016 and operationalized on 21<sup>st</sup> April 2017, through Legal Notice No. 59 and 60. The Law provides more clarity on institutional roles in the regulation, management and development of water resources and water services. The new Law also aligns the reforms introduced by the Water Act 2002 with constitutional provisions on the human right to water. Table 1 shown below describes the institutions roles and responsibilities under Water Act 2016.

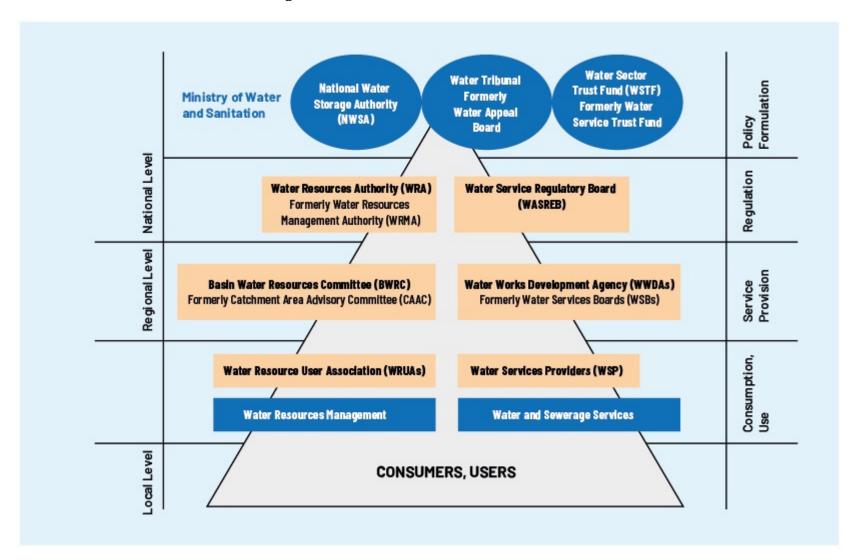
Table 1: Institutions roles and responsibilities under Water Act 2016

	and responsibilities under Water Act 2016
Institutions	Roles and Responsibility
1. Ministry of Water and Sanitation (MoWS)	<ul> <li>Efficient and economical provision of water services</li> <li>Development of national policy</li> <li>Coordination</li> <li>Financing</li> </ul>
2. National Water Storage Authority (NWSA)	<ul> <li>Development of National public water works</li> <li>Maintain and manage infrastructure for Water resource storage</li> <li>Collect, provide information and advise the CS</li> <li>Develop water harvesting policy and enforce strategies</li> <li>Undertake emergency intervention on behalf of national government during drought</li> </ul>
3. The Water Tribunal	Hear and determine appeals by people or institutions affected by decisions from Cabinet Secretary (CS)
4. Water Sector Trust Fund (WSTF)	<ul> <li>Provision of Grants to the counties</li> <li>Assist in financing development and management of water services in marginalized or underserved areas</li> </ul>
5. Water Resource Authority (WRA)	Regulate the management and use of water resources
6. The Water Service Regulatory Board (WASREB)	Regulators in the water sector and oversee policy and strategy implementation that relate to Water and Sanitation services development
7. Basin Water Resource Committee	<ul> <li>Advise on:</li> <li>water resource conservation, use and apportionment;</li> <li>Data collection, analysis and management of Information Systems</li> <li>flood mitigation;</li> <li>Protection of water resources.</li> </ul>
8. Water Works Development Agency (WWDAs)	<ul> <li>They undertake development, maintenance and management of the national public water works</li> <li>Operate water works until responsibility is handed over to the County government</li> <li>Provide reserve capacity to WSPs</li> <li>Provide technical services, support and capacity building to the CGs and WSPs</li> </ul>
9. Water Resource User Association (WRUAs)	<ul><li>Collaborative management of water resources;</li><li>Conflict resolution on use of water resources;</li></ul>
10. Water Service Providers (WSP)	<ul><li>Entitled to provide water in their area of jurisdiction</li><li>Development of county assets for provision of water services</li></ul>
11. Kenya Water Institute (KEWI)	Training, research and consultancy

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2 Water Act 2016

**Table 2: Water sector institutional linkages** 



#### 1.7 Sustainable Development Goal (SDG)

According to United Nation Development Program (UNDP), water scarcity affects more than 40 percent of people around the world, an alarming figure that is projected to increase with the rise of global temperatures as a result of climate change. Water and sanitation are at the very core of sustainable development, critical to the survival of people and the planet. SDG Goal 6 not only addresses the issues relating to drinking water, sanitation and hygiene, but also the quality and sustainability of water resources worldwide. Additionally, women in sub-Saharan Africa collectively spend about 40 billion hours a year collecting water. This significantly impacts their economic opportunities.

By 2030, Goal 6 target to achieve universal and equitable access to safe and affordable drinking water, sanitation and hygiene for all, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes, implement integrated water resources management at all levels and support and strengthen the participation of local communities in improving water and sanitation management. MAWASCO strategic plan is anchored towards contributing to overall universal access to water and sanitation by all by targeting improvement in connectivity to unserved and underserved population within its jurisdiction.

#### 1.8 Vision 2030

Kenya Vision 2030 is the country's development program from 2008 to 2030. This is a national long-term development blueprint to create a globally competitive and prosperous nation with a high quality of life by 2030, which aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment. The Vision is based on four core pillars which include, economic, social and political pillars. These pillars are aligned with moving the economy up the value chain, investing in the people of Kenya, moving to the future as one nation and deploying world class infrastructure facilities and services. Water and Sanitation component of vision 2030 has several fundamental objectives which are to:

- ensure that improved water and sanitation are available and accessible to all;
- increase both access to safe water and sanitation in both rural and urban areas beyond the present levels;
- promote agricultural productivity the area under irrigation and drainage will increase from 140,000 to 300,000 hectares;
- Introduce specific strategies to raise the standards of the country's overall water resource management, storage and harvesting capability.

Some of the key areas of Vision 2030 relevant to MAWASCO undertakings are: to increase water supply and sanitation coverage in both urban and rural areas within Malindi; to mobilize for financial resources to adequately invest in infrastructure for improved water and sanitation services in Malindi area; and to promote agricultural productivity by increasing the area under irrigation and drainage.

#### 1.9 Kilifi County Integrated Plan

According to Kilifi County CIDP 2018-2022, under the development priorities and strategies, the county has planned to increase the proportion of people accessing clean and safe water from 68% to 80% by 2022. To achieve this, the County has proposed to finance infrastructure development (either internally or through national government) to an estimated amount of Ksh. 13 billion.

Improving sanitation services by developing solid waste, water and sanitation infrastructure in major urban centers is a priority in the County water sector, just as it is improvement of water supply in both urban and rural areas through diversification of water sources, drilling boreholes and shallow wells, construction of multipurpose dams and expansion of water pipeline infrastructure. The county of Kilifi has planned to develop and operationalize new water sources by drilling of boreholes and shallow wells especially along the coastal strip and construction of multipurpose dams



# **Chapter 2: COMPANY DESCRIPTION**

#### 2.1 company Background

Malindi Water and Sewerage Company (MAWASCO), is located in Malindi town, in Kilifi County. The utility was incorporated under the Company's Act (Cap 486) of the Laws of Kenya on 24th August 2005 as a public company limited by shares and came into full operation on 1st February 2006. This was as a result of the enactment of Water Act 2002 (repealed by Water Act 2016), which brought about far reaching water sector reforms in Kenya separating water resources management from services delivery.

MAWASCO, pursuant to Section 154 of the Water Act 2016 operates as a county water service provider<sup>3</sup> mandated to serve Malindi, Magharini and Kilifi North sub-counties in Kilifi County, covering a total of 8,300km<sup>2</sup> as per the Service Provision Agreement (SPA) with the Coast Water Services Board and Water Services Regulatory Board (WASREB). The service area spanning 286 Km<sup>2</sup> is divided into six major blocks/areas namely; Malindi Central, Malindi North, Malindi South, Watamu North, Watamu South and Magharini being the new water scheme handed to MAWASCO by the County Government of Kilifi. In order for the company to offer effective and efficient service provision, it has separated its functions into 6 specific areas namely; water supply, O&M, meter reading, billing, disconnections and reconnections.

The utility is classified as a large water service provider with 29,071 registered connections and currently serving 21,197 active connections that includes 20 water kiosks and a number of yard taps. MAWASCO is a bulk water purchaser from the Coast Water Services Board just like the other water utilities in the coast. The companies receive its bulk supply from the Baricho Wells along Sabaki River. MAWASCO has sunk additional boreholes in strategic locations to boost the production in areas where the purchased water is not distributed to.

The company regularly performs well on several key performance indicators set out by the sector regulator and was ranked 30 overall out of 87 WSPs in the recently released performance review of urban water utilities across Kenya under the Impact Report Issue No. 12. To enhance MAWASCO'S efficiency, the senior management team of the Company has been recruited competitively from the job market. Both Directors and senior management staff are bound by code of ethics that encourage ethical conduct, business honestly, integrity, and best practices. Since the Company is run on commercial principles, staff and management are integrated into a competitive and productive environment that is customer-focused and results-oriented.

MAWASCO is a bulk water purchaser and covers both rural and urban areas. In stance where bulk supply doesn't not reach, MAWASCO has drilled several boreholes especially in the rural areas. This has reduced the distance that village community members have to walk to fetch water. In line with improving the accessibility of water to the residents of Malindi, MAWASCO has also established several water kiosks which have really supplemented the distribution of water to an extent that every rural neighborhood is served with clean and quality water from MAWASCO. WASREB granted a License to MAWASCO and the company complies with the Water Act 2016 which enables it to carry out the function of provision of water and sanitation services. MAWASCO, in collaboration with the Kilifi County Government and other stakeholders, has steered a city-wide

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· <del></del>	
3 Water Act 2016	

inclusive plan (CWISP) for sanitation in Malindi. The strategic document provides a comprehensive approaches to sanitation improvement that will ensure all members of the city have equitable access to adequate and affordable improved sanitation services through appropriate systems (sewered and non-sewered) of all scales, without any contamination to the environment along the entire sanitation value chain. Figure 1 shows the map of the coverage area of MAWASCO.

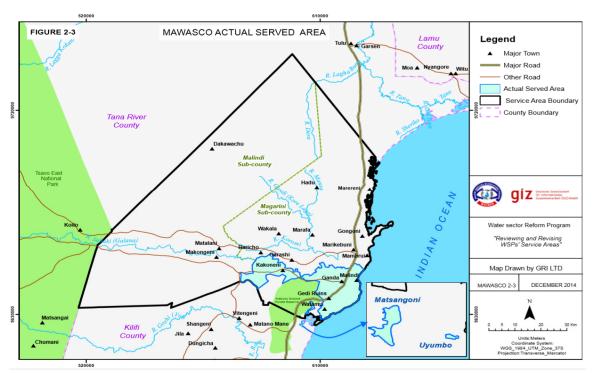


Figure 1: Map of MAWASCO Water Coverage areas:

Source: WASREB - Service area coverage

#### 2.2 Daily water supply and demand analysis

MAWASCO has one main water source, namely Baricho water works located along the Sabaki River but it's usually augmented by a number of boreholes drilled around its service area. Currently, Baricho Sabaki Well Field, which is operated by Coast Water Works Development Agency and the agency sells the water in bulk to 3 utilities. A water supply of 27,000m³/day is directed to MAWASCO. The same source also supplies water to Mombasa, Kilifi and surrounding areas.

Water supply from the Baricho water works has been diminishing over the years due to the prevailing harsh climatic conditions as a result of climate change. As such, MAWASCO has not been able to meet the water demand for Malindi that currently stand at 44, 353 m³/day. In making efforts to supplement the demand gap from the Baricho water supply, the company has established a total of 22 boreholes, 25 dams/pans and 5 shallow wells. Some of these sources are being operated by community themselves and some by MAWASCO itself. Moving forward, a lot needs to be done to meet the daily water demand of the Malindi residence. It is projected that by 2020, the demand will stand at 45,555m³/day, estimated at 46,790 m³/day in 2021, 48,060 m³/day in 2022, and 49,365 m³/day in 2023. As a result, the Baricho Bulk Supply Unit will not be

adequate to serve Malindi and its environs. Table 3 below shows the projected water demand per each category.

Table 3: Water demand projection analysis

Area	2019	2020	2021	2022	2023
	m³	$m^3$	$m^3$	m³	m³
Urban Centres & Peri-Urban Areas	25,893	26,682	27,495	28,333	29,197
Market/Trading Centres	7,989	8,191	8,398	8,610	8,827
Rural Areas	10,471	10,682	10,897	11,117	11,341
Entire MAWASCO WSP Area (including Market Centres & Rural Areas)	44,353	45,555	46,790	48,060	49,365
NRW	28%	28%	27%	25%	24%
Adjusting upward for NRW losses (m³/day)	56,772	58,310	59,423	60,075	61,213

Source: MAWASCO management team

In order to meet the expected water demand of the additional 26,792 m3/day between current production and demand at end of this strategic plan in 5 years, the company has made plans to drilling and equipping of one new borehole at Bungale with an estimated yield of 1, 680 m3/day, equipping and operationalizing one existing borehole at Bungale with an estimated yield 1, 680 m3/day and drilling and equipping of one borehole at Kadzandani with an estimated yield 432 m3/day.

All households in the MAWASCO service provision area are all on onsite sanitation, hence a need to manage collection/conveyance and treatment of the wastewater/fecal sludge. The following interventions have been proposed to ensure all waste is safely managed in MAWASCO area of jurisdiction:

- Construction of 10 ablution blocks.
- Construction of 3 transfer stations.
- Purchase of 3 exhauster truck in the short term.
- Development of rationalized sanitation tariff.
- Construction of 185m3/day waste to value plant.
- Establishment of a sanitation unit and customer contact center.

#### 2.3 Projected population growth versus water coverage

MAWASCO's areas of supply for water and sanitation service comprises of Malindi, Magarini and Kilifi North sub-counties. Table 4 shown below describes the projected analysis of population categories served by MAWASCO in its area of jurisdiction.

Table 4: Projection for populaces served by MAWASCO

Area	2019	2020	2021	2022	2023
	# of people				
Urban & Peri-Urban Areas	189,279	196,021	203,003	210,233	217,721

Market/Trading Centers	57,635	59,687	61,787	63,987	66,266
Rural Areas	325,738	337,340	349,355	361,798	374,685
Total	572,652	593,048	614,145	636,018	658,672

#### 2.4 Climatic conditions and rainfall patterns

Malindi is a town on Malindi Bay at the mouth of the Galan River, lying on the Indian Ocean Coast of Kenya. It is 120 km northeast of Mombasa. Malindi has a tropical dry savanna climate with an average annual temperature of 26.3°C and an annual average rainfall of 1094 mm. The driest month is February with 6mm of rain while the greatest amount of precipitation occurs in May; with an average of 293 mm. March is the warmest month of the year. The temperature in March averages 28.°C. The lowest average temperature in the year occur in July, when it is around 24.6°C.

#### 2.5 Environment and climate change adaptation proposition

Global warming and other unpredictable climatic conditions are the causes of the diminishing water sources not only in Malindi but all over the country and the world at large. MAWASCO plans to place itself in the forefront to ensure environmental conversation by mainly cooperating with environmental stakeholders who include NEMA and WRA. MAWASCO has plans to enforce environmental issues by mainly using innovative mitigation measures which includes: increasing forest cover, protecting catchment areas by planting trees; adopting renewable energy technologies such as solar pumps; influencing policies and actions that will help combat climate change and awareness creation.

The County Government of Kilifi is creating a quick and active response to issues related to climate change. For instance, the County government is increasing the proportions of forest cover by strengthening environmental protection and rehabilitation of degraded forests especially in hotspots, rangelands and along river banks. The government has also focused on rehabilitating and conserving water catchments while they mitigate against the effects of soil erosion through structured capacity building programs aimed at inculcating a sense of environmental stewardship and behavior practices towards environmental conservation by local communities. Kilifi County Government has also instituted deliberate measures to ensure that existing extractive mineral resources are exploited in an environmental and sustainable manner. In addition, the Government has also targeted degraded water catchments for rehabilitation, conservation and protection.

#### 2.6 Water resources and water supply services

The main source of water for MAWASCO is a number of deep wells located along river Sabaki. Water production is the responsibility of Coast Water Works Development Agency who then sell in bulk to MAWASCO an average volume of water of of 21,000 m³/day. The estimated water demand is expected to grow to approximately 49,365m³/day by 2023 and therefore additional water resources ought to be explored.

#### 2.7 Legal structure and ownership

#### 2.7.1 Ownership

MAWASCO is an agent of Kilifi County government and the primary shareholder is the County Government. The company's sole mandate is to provide adequate water and sanitation within Malindi, Kilifi North and Magharini sub-counties as its areas of jurisdiction.

#### 2.7.2 Composition of the Board

MAWASCO has established key governance structure which includes a Board of Directors comprising of members representing various stakeholders drawn from the County Government of Kilifi and other stakeholders. The Board is composed of 10 Directors (6 male and 4 female) including an independent Chairman and one executive director who is also the Managing Director. Four women sit in the Board, thus meeting the minimum of one third gender representation of any of the genders as required by the Constitution of Kenya. They have a wide range of skills and experience and each contributes independent judgment and knowledge to the Board's discussions. On appointment, each Director is provided with a comprehensive and tailored induction process covering the Company's business and operations and also provided with information relating to their legal and regulatory obligations. All the Directors except the Managing Director and representatives of the County Government are required to submit themselves for re-election in accordance with the Company's Articles of Association.

The Board has constituted 3 sub-committees chaired by one director in each, namely Finance, Human Resource and Audit and Risk. Each committee meets 4 times in one financial year. The Board appoints other committees as and when necessary. WASREB has prepared Governance guidelines for cost effective, efficient and transparent management and operation of water services. Through the guidelines, WASREB communicates clearly on the need for good corporate governance which also satisfies the requirements of the standards set in the Companies Act Cap 486 for the WSPs formed under that Act. Some of the highlights of these guidelines are roles and functions of the Board and Sub-Committees of the board, composition and appointment of the board, compliance and accountabilities as well as guidelines for evaluation on performance and impact of the board.



# **Chapter 3: STRATEGIC CYCLE 2014-2019 PERFORMANCE**

### 3.1 Performance on water services delivery

Water service providers are licensed and regulated by Water Service Regulatory Board (WASREB). The regulator has set nine key performance indicators to assess the performance of utilities. These KPI measure three broad categories i.e. quality of services, economic efficiencies and operational sustainability. A review of MAWASCO past performance was undertaken on the basis of nine KPIs. These include Non-Revenue Water (NRW) reduction, metering ratio, and hours of supply, water coverage, drinking water quality (DWQ), staff productivity, revenue collection efficiency, O+ M Cost Coverage and personnel expenditure as a percentage of O+ M Costs. The overall performance of the water services sector based on the 9 KPIs is then published by the regulator on annual impact report(s).

MAWASCO have been performing poorly over the last two years. According to the Water Service Regulatory Board (WASREB) Impact Report issue no. 12/2019, MAWASCO has been ranked 30 out of 87 WSPs in Kenya. The company was ranked by WASREB having acquired a rating of good in the indicators of hours of supply, revenue collection efficiency and metering ratio. MAWASCO is categorized as a large WSP i.e. utility with combined water and sewer connections of 10,000-34,999.

Drinking water quality (DWQ), Non-Revenue Water (NRW), O+M Cost Coverage, Personnel expenditures as % of total O+M costs, staff Productivity (no. staff/1000 connections.) and water coverage remained at unacceptable level against WASREB sector benchmarks. This is according to the WASREB Impact Report issue 11. The performance of MAWASCO in this report indicates that there is need for the Company to place prudent measures to address these issues. For instance, drinking water quality (DWQ) measures if the water supplied is potable. This is a critical performance indicator since it has direct impact on the health of consumers. To address these issues, MAWASCO plans to increase access to clean and safe drinking water and sanitation services through construction of new water sources, water expansion networks and sanitation networks. In order to improve the drinking water quality MAWASCO plans to construct security fences at Adu booster station, Baricho boreholes wellified, Dakacha, Kadzandani, Ramada, Kwa-Mwadori and Kamale Tanksites. This will improve the security and safety of the water supply sources.

Table 5: MAWASCO Performance4 for 2018/2019

	Indicator	WASREB score Impact Report 2018/19	Remarks
1	Drinking Water Quality (DWQ)	85%	Non-Acceptable
2	Non-Revenue Water (%)	28%	Non-acceptable
3	Water Coverage (%)	70%	Non-Acceptable
4	Hours of Supply (hrs./d)	23	Good
5	Staff Productivity (no. staff/1000 connections.)	9	Non-Acceptable
6	Personnel expenditures as % of total O+M costs	41%	Non-acceptable

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<sup>4</sup> WASREB Impact Report 2019

7	Revenue Collection Efficiency (%)	103%	Good
8	O+M Cost Coverage (%)	97%	Non-Acceptable
9	Metering Ratio (%)	92%	Good

#### 3.2 Performance on sanitation services delivery

MAWASCO has committed to venture in sanitation service provision. There is a lot of considerable time and resources from partners and MAWASCO at least in the last few years that have undergone in building a sanitation pipeline for Malindi. MAWASCO plans to carry out the following activities to support Sanitation.

- WSDP current funding on 10 Ablution blocks, exhauster, FSTP.
- Transform Project objectives.
- CWIS plan development and implementation.
- Prospective SUED investment/support.
- Prospective Connective cities support.
- WSTF UBSUP support etc.
- Formulation of legal, regulatory and monitoring framework e.g. Support/Participation in formulation of EHS Policy and Bill, FSM Regulations, Standards and SOPs for urban sanitation etc.
- Clarity of sanitation mandates and roles; coordination, compliance and enforcement.
- Enabling environment for private sector involvement in provision of sanitation service e.g. MPEs, VTOs, sanitation enterprises etc.
- MAWASCO institutional restructuring and capacity enhancement on sanitation services provision.

#### 3.3 Key achievements

The utility performance during the last strategic cycle was poor as out of 9 KPIs performance, only four indicators on non-revenue water, hours of supply, collection efficiency and O+M coverage showed some progress. Table 6 shown below table illustrates the performance of all the 9 KPI's during the reported period.

Table 6: MAWASCO Performance 5 for 2018/2019

KPI	2013	2014	2015	2016	2017/18	2018/19
NRW	25%	29%	30%	27%	31%	28%
Water coverage	89%	85%	83%	79%	79%	70%
Hour of supply (#)	22	24	22	22	21	23
Staff productivity (#)	5	7	6	8	9	9
Revenue Collection efficiency	97%	92%	92%	96%	101%	103%
O&M cost coverage	101%	98%	102%	82%	82%	97%
Metering ratio	100%	100%	91%	100%	100%	92%

It's worth noting that the utility improved on collection efficiency but on the contrary, O&M cost coverage dropped. This is very critical to utility performance sustainability as they are not able to meet all their operational costs despite collecting more than what they bill. In this strategy, the utility should really emphasize on operating cost reduction techniques and this will include NRW

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reduction and staff related cost reduction. The utility should also expand and reach out to unserved and underserved customers for high revenue bills.

#### 3.4 Review of strategic cycle 2014-2019

Non-Revenue Water (NRW), O&M Cost coverage and water coverage remained at unacceptable level against WASREB sector benchmarks. MAWASCO has put in place prudent measures to address this through employment of NRW reduction strategies – District Metered Areas (DMAs) mapping, training staff on NRW, data collection and analysis, use of technologies and Geographic Information Systems (GIS) and use of smart meter for large consumers. With the increasing demand of water, MAWASCO has been drilling new boreholes to augment the Baricho water production. This can demonstrated by the number of hours of supply which has remained at acceptable levels despite the increase in population. MAWASCO recently took-up a new service area that was under the operation of the WUA and this has negatively impacted on water coverage percent. To improve on coverage, MAWASCO plan to increase lobbying and advocacy through the county to speed up the construction of additional boreholes and pipelines in the un-served and underserved areas to augment water production. Table 7 shown below provides an overview of achievement of strategic objectives during 2018-2019 cycle.

Table 7: Review of the strategic objectives

	Remarks
1. Increase the coverage	The utility constructed and laid 473.16 km of
area by investing in new	new pipeline to reach out to more customers
sources & increasing the	but due to the increased service area
existing pipe network	(introduction of Magarini), the water coverage
from the current 575 km	reduced from 89% to <b>70%</b> . This rating is
to 900 km by 2019	classified as not acceptable by WASREB.
2. Reduce non-revenue	NRW has remained a big challenge and this is
water from the current	as a result of the new rural areas that have been
29% to 24 % by	introduced to the MAWASCO service area. The
2023/24.	utility made efforts to develop DMAs,
	installation of smart meters, PRV's and
	implementation of the NRW reduction
	strategies (PIP) and the NRW increased from
	31% to <b>28%.</b> This rating is classified as not
	acceptable by WASREB.
3. Increased staff	Staff productivity has moved from good to not-
productivity by trainings,	acceptable. This shows that implementation of
PMS, develop staff	performance contracts is not in place and this
competence and proper	results in hiring of the un-required personnel.
recruitment mechanisms.	

# Non-acceptable Acceptable

#### 3.5 Lessons learnt

From the word go, the development of the previous strategic plan was never internalized by management and staff of the MAWASCO and therefore its implementation was never done as required. No one took charge to give guidance and influence critical decisions in particular that

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were required to speed up processes of project implementation, counter climate change and build resilience coupled with environmental protection. There is still room for improvement especially in expanding its core-mandate in order to widen revenue base, expand business and financing opportunities. The utility should not be confined only in provision of safe water for drinking and sanitation but develop avenues for expanding water as an input for production (irrigation and manufacturing) as Kenya aim to move to middle income country through implementation of big four agenda and Vision 2030. In setting strategic objectives, the utility realized that there is need to find ways of engaging with different stakeholders' i.e. County government, Ministry of Water and Sanitation, Water Development agencies and others to pursue infrastructure development which is very critical to realization of company vision.



# **Chapter 4: STRATEGIC ROADMAP**

The strategic roadmap for MAWASCO comprises of Vision, Mission, Core Values, Mantra and strategic objectives. These were developed after thorough analysis of the current strategic cycle, situation analysis using SWOT and PESTEL, and key stakeholder's consultations. The Vision is anchored on the wider dream and aspiration the utility intends to realize looking into distance future. Based on this mandate and the wider aspirations, MAWASCO has set its strategic roadmap.

#### 4.1 Vision

MAWASCO Vision statement:

"A premiere water and sanitation service provider"

#### 4.2 Mission

MAWASCO Mission statement:

"To enrich the quality of life of our customers through provision of clean, safe, reliable, sufficient and high-quality water and sanitation services in sustainable approaches that exceed our stakeholders' expectations".

#### 4.3 Core values

Our core values are fundamental principles and beliefs guiding our operations. They will act as a link between the organization culture and the social systems. MAWASCO wants to be identified by the society it is serving with the beliefs as highlighted by its core values. MAWASCO core values abbreviated as 'CIITE' which are shown below:

- I. **Customer Focus:** We are committed to meeting our customer's needs and expectations.
- II. **Innovativeness:** We encourage creativity and ingenuity within our mandate.
- III. **Integrity:** We are committed to a culture that promotes honesty, transparency, accountability, professional ethics and zero tolerance to corruption.
- IV. **Teamwork:** We promote unity of purpose.
- V. **Excellence:** We are committed to timely delivery of high quality services that exceeds our stakeholder's expectations.

#### 4.4 Mantra

**Provide every reason for a smile** was developed by utility staff to act as drive of the organization internal motivation.

#### 4.5 Customer value proposition

User consultation, measuring whether the consumers served are involved in the decision-making process and effectiveness of methods of sharing information with consumers is one of the key good governance indicators. MAWASCO runs on commercial principles, staff and management are integrated into a competitive and productive environment that is customer-focused and results-oriented. The Company is also working on acquiring ISO 9001 certification to ensure the consumers on the quality management systems adopted within the company. MAWASCO is committed to ensuring that all stakeholders receive water regularly and efficiently while at the same time ensuring the water reaching the customers is of the highest quality.

# **Chapter 5: SITUATION ANALYSIS**

## 5.1 SWOT analysis

The functional environment of MAWASCO is determined by internal and external dynamics which have an influence on current and future utility activities. An analysis of the internal environment was carried out in order to identify factors within MAWASCO that may influence performance positively (strengths) or negatively (weaknesses). The analysis was undertaken through a review of the Company's value chain and support services. Table 8 shown below describes the results of MAWASCO SWOT analysis.

### **Table 8: SWOT Analysis**

Strengths	Opportunities
<ul> <li>Availability of treated water from sources.</li> <li>A relatively sound and functional distribution infrastructure.</li> <li>Exclusivity of water supply in the region (Monopoly).</li> <li>Well trained and skilled workforce</li> <li>Good stakeholder relationship.</li> <li>Operating at arm's length with the shareholder.</li> <li>Loyal customer base.</li> <li>Institutionalized O&amp;M processes and ownership.</li> <li>Learning organization.</li> <li>Strong brand name to outside world.</li> <li>Positive institution reputation – partners and donors.</li> </ul>	<ul> <li>Willingness to absorb and embrace technology and innovation.</li> <li>Strong brand to access funding, donors and partners.</li> <li>Dedicated collaboration with county government on infrastructure development.</li> <li>Refocus the utility on sanitation services.</li> <li>Diversification of products and services e.g. bottled water, exhausters.</li> <li>Untapped opportunity among development partners.</li> <li>Full set of board of directors.</li> <li>Water Act 2016 allows for public private partnerships.</li> <li>Research, innovation and development</li> <li>Expansive area of untapped customers – expanding into unserved areas in both water and sanitation services.</li> </ul>
Weaknesses	Threats
<ul> <li>Sectional dilapidated infrastructure and inadequate sanitation service provision.</li> <li>Non-updated and non-existing policies.</li> <li>Undocumented SOP and best practices in both water and sanitation value chains.</li> <li>Lack of documentation and clarity on career progression.</li> <li>Inadequate consumer feedback mechanism.</li> <li>Lack of FSM ownership/plan, existing WWMP covers less than 35% of population.</li> <li>&gt;75% of waste is not safely managed impacting Malindi's environment and economy.</li> <li>47% of households have income below 10,000 KES/month, and unable to afford full cost of adequate sanitation facilities and services.</li> <li>Existing capacity and corresponding financing resources for professional FSM service delivery is low.</li> </ul>	<ul> <li>Over reliance on one supply source</li> <li>Overlapping legal framework</li> <li>Climate related risks e.g. flooding and droughts</li> <li>Emerging self-water supply</li> <li>Dwindling tourisms that negatively affects the water demand</li> <li>Political leadership change at the County has resulted in a high turnover at utility management</li> </ul>

# 5.2 Political, Economic, Socio-Cultural, Technological, Environmental and Legal (PESTEL) analysis

The functional environment of MAWASCO is determined by internal and external dynamics which have an influence on current and future utility activities. An analysis of the internal environment was carried out in order to identify factors within Malindi Water and Sewerage Company that may influence performance positively (strengths) or negatively (weaknesses). In addition, Opportunities, Threats (OT), political, social, economic, technological, environmental and legal (PESTEL) factors was carried out to assess its most immediate operational and external environment. The analysis was undertaken through a review of the Company's value chain and support services. Table 9 shown below describes the PESTEL factors.

**Table 9: PESTEL Factors** 

Factor	Implication to MAWASCO
Political Factors	
County /National Government influence	<ul> <li>Political interference in Company Operations in terms of governance structures (appointment of the BoD).</li> <li>Responsible with passing legislation and policies that can work to the Company's advantage/disadvantage.</li> <li>Support in Resource mobilization.</li> <li>Political stability /instability as a result of cyclic electioneering.</li> <li>Push from the County Government to employ "our people".</li> </ul>
Government Policy	<ul> <li>Regulation of the water tariff - capping of water prices.</li> <li>Consumer protection in the tariff structure.</li> <li>Positive to the pro-poor customers.</li> <li>Cross subsidizing of the cost from other customers.</li> </ul>
Labour Law	Wage guidelines - Government guidelines.
Tax Policy	Taxing of the production inputs e.g. fuel levy.     Electricity costs increasing the unit production costs
<b>Economic Factors</b>	
Economic growth in regard to Gross Domestic Products (GDP).	Improvement of overall income levels of the businesses and residents with improved GDP
Diversified Funding sources	<ul> <li>Mitigating over-reliance on tariff funding only</li> <li>Availability of funds for infrastructure development and efficiency improvement in service provision.</li> </ul>
Interest Rates Entry of Low cost competitors	<ul> <li>Determine ability to borrow and invest in expansion.</li> <li>Low cost competitors bringing about undue competition as consumers search for alternative sources.</li> <li>Diversification of products to cater for emerging trends of competition.</li> </ul>
Unemployment rates	<ul> <li>Reduced buying ability from the consumers.</li> <li>Increased crime - theft of meters and vandalism of installations, illegal water consumption; High O&amp;M cost for the utility.</li> </ul>
Inflation/ Disposable Income	<ul> <li>Increased cost of living that impacts negatively on the profitability of the company.</li> <li>Reduces financial outlay of consumers.</li> <li>Affects the customers buying trends.</li> </ul>
Exchange Rates	<ul> <li>Un-certainty in project implementation cost.</li> </ul>

Factor	Implication to MAWASCO
Social Cultural	
Factors	
Population Growth rate	Mushrooming of informal settlements demanding for water and
	sanitation services.
	Stretched production/distribution capacity.
	Increased business and financial gain towards payment for water and
	sanitation services.
	Increase in coverage with extension infrastructure.
	Provide room for research on what is conventional.
Population demographic :	Minority middle age with the buying capacity.
• Age	Majority young unemployed class with no buying power.
• Income	Low income young people who are a prone to infrastructure vandalism
<ul> <li>Gender</li> </ul>	Minority middle class not willing to pay for water and sanitation
<ul> <li>Level of education</li> </ul>	services.
	Women driving water and sanitation services.
	The educated class are fewer but more interested in getting connected.
Lifestyle	Shift in lifestyle and taste.
	People conscious of health and yearning for clean and safe water.
	Shift in preference for bottled water.
Cultural barriers and	Sanitation - Belief in sharing of toilets by relatives.
beliefs	Embracing of diversification in our products – briquettes.
	Water based sanitation due to religious beliefs has led to increase in
	consumption.
Population mobility	Local tourism growth leading to booms in holiday seasons.
Crosscutting issues	HIV/AIDS prevalence.
	Drug addiction / Alcoholism- leading to vandalism of the installation.
Un-planned settlements	They lead to encroachment of way leaves and construction on top of
	pipelines.
	Spaghetti pipelines leading to increased losses.
Technological Factors	
communication	Increased speed in communication either way.
Efficiency	Increased efficiencies in processes.
Fraud	Increased cases of fraud and e theft.
Disquiet with staff	Low staff morale on new technology.
Dynamisms in	Investment costs tend to lost overnight with new discoveries.
technology	
Legal Factors	•
Legal framework	Presence of legal frame work specifying roles, mandate, regulation.
Conflicting /	Uncoordinated and overlapping directives and controls.
Overlapping Roles	
Reporting Structure	Varied reporting requirements.
Ecological Factors	
Reduced supply and	Reduced catchment areas leads to reduced water supply hence reduced
Revenues	sales.
Development of	There is a requirement to dispose waste in an appropriate way hence
sewerage system	creating a source of income for the Company – increase revenue.
Vandalism	<ul> <li>There is increased vandalism by pastoralist to provide water to their</li> </ul>
, anamioni	There is increased validatism by pasteranse to provide water to their

Factor	Implication to MAWASCO	
	animals during dry seasons – leads to loss.	

#### 5.3 Organization staffing

To enhance MAWASCO'S efficiency, the senior management team of the Company has been recruited competitively from the job market. Both Directors and senior management staff are bound by code of ethics that assures consumers of due diligence in keeping with the Company's goal of strengthening its corporate governance. Since the Company is run on commercial principles, staff and management are integrated into a competitive and productive environment that is customer-focused and results-oriented. MAWASCO has engaged a highly experienced management team under the leadership of a Managing Director, have been involved in the development of the strategic and business plan and will be involved during the implementation of the business plan. The corporate management team is composed of the Managing Director, and Financial Manager, the Commercial Manager, the Technical Manager, and the Internal Audit Manager. This section include profiles of the management team, highlighting their qualifications and professional background, and role and responsibilities in daily operations and in developing and implementing the business plan. The Company has in place a proposed organizational structure expected to support the achievement of the MAWASCO objectives in the projected 3 years of operations. MAWASCO is divided into various functional groupings to ensure there is a focus on various core activities. They include the Technical department, Finance department, Commercial department, Human resource department and the internal audit department.

# **Chapter 6: STRATEGIC OBJECTIVES**

#### 6.1 Strategic Objectives

MAWASCO strategic objectives were formulated using the balance score card framework. The framework summarizes four key perspectives areas; financial internal, customer, learning and growth perspectives. MAWASCO strategic objectives were formulated using the balance score card framework. The framework summarizes four key perspectives areas; financial internal, customer, learning and growth perspectives. The goals are described in table 10 below.

**Table 10: Goals of the Company** 

Goal 1	Goal 2	Goal 3	Goal 4
Water and	Operational efficiency and	Financial	Institutional Capacity
sanitation	customer service	sustainability	Strengthening
infrastructure			
development			

These goals are then broken down into objectives with broad action plans that can be used to benchmark our water utility practices. By isolating the services/outcomes we can then establish measurements to track how successful we are at achieving the goals. The goals are described below:

#### Goal # 1: Water and sanitation infrastructure development

The core mandate of MAWASCO is to provide clean and safe drinking water and sanitation services to its customers. This can be attained by development of appropriate water and sanitation infrastructure and improving operational efficiencies. In order to facilitate large projects, MAWASCO is planning to seek funding from institutions such as the Kilifi County Government. The company aspires to achieve equitable and financially sustainable access to safely managed sanitation for all, aiming at ensuring clarity in mandates and market with a focus to make Malindi the cleanest coastal town in addition to creating jobs and build local capacities to have a thriving sanitation economy.

#### Goal # 2. Operational efficiency and customer service

The business and revenue model of MAWASCO is consumer oriented and thus driving customer satisfaction goes in line with the growth of the company. MAWASCO recognizes the role customers play; not only in paying their bills but also a bouncing-board for bettering water and sanitation services. In order to become a leading utility in service MAWASCO has therefore a paradigm shift in order to incorporate customer relationship in their management.

#### **Goal # 3: Financial sustainability**

Financial viability is important in ensuring the deliverance of sustainable services and therefore looking to implement operations through tariffs, transfers, taxes/user fee to ensure sustainability in service provision. MAWASCO is willing to partner with various donors.

# Goal # 4: Institutional Capacity Strengthening Internal (process) perspective

The growth of MAWASCO can only be attained by having the right enablers such as good workplace policies and operational manuals. This can be followed by flexible application of these processes and procedures to enable the Company to operate with a predictable

environment that would promote competitiveness, compliance with regulatory regime and meeting international standards. MAWASCO will strive to provide appropriate tools and equipment for staff to execute their role and responsibility effectively. Similarly, MAWASCO will provide a favorable work environment that would promote staff productivity. MAWASCO will proactively engage all stakeholders to promote corporate governance and adopt prudent management discipline in the administration of company's affair. From its technical operations, customer relations, financial management and stakeholder engagement, MAWASCO will embrace continuous improvement as a means of providing excellent services.

#### Learning and growth perspective

A Company is only as good as its staff and thus investing in staff capacity, motivation and reward becomes very critical in delivery of excellent services. MAWASCO will develop performance management systems, staff development policies and pursue initiatives that would promote effective internal and external communication. To provide 21st century-based services, MAWASCO will foster innovation in services and product development. The company will create conducive environment for adoption of latest technologies and equipment in delivery of water services. This will not only better water and sanitation services to customers but all introduce efficiency and hence contribute to operational efficiencies. Table 11 shown below highlights each perspective, strategic objective and specific objectives:

Table 11: Perspective areas and strategic objectives

Goal	Strategic Objective	Specific objectives
Water and sanitation infrastructure development	Increase access to clean and safe drinking water from 70% to 85% by 2023/24.	<ul> <li>Increase length of pipeline to unserved areas from 1,116 km to 1,220 km by 2023/24.</li> <li>Increase purchase of bulk water volume by 8,000 m³ per day by 2023/24</li> <li>Connect an additional 24,000 households to water services.</li> <li>Improve security and safety to both the water supply installations and operations/guards.</li> <li>Provide additional water storage reservoir in Magarini and Watamu area.</li> <li>Increase access to toilets/emptying/treatment services to low income households.</li> <li>Invest in 2 additional sources of water in Bungale and Kadzandani.</li> </ul>
	Increase access to sanitation services from 27% to 58% by 2023/24.	<ul> <li>Construct 10 ablution blocks in high transient locations.</li> <li>Purchase 1 exhauster truck in 2021 and organize emptying services.</li> <li>Construction of fecal sludge treatment plant.</li> <li>Improve treatment from 1% to 18% by 2023/24.</li> <li>Construction of 100 toilets at the household's level.</li> <li>Establishment of a Sanitation Function &amp; Procurement of equipment.</li> </ul>

Goal	Strategic	Specific objectives
	Objective	<ul> <li>Institutional restructuring and capacity enhancement on sanitation services provision and enhancing staff capacity and training the staff.</li> <li>Carry out a detailed feasibility, designs and construction of Waste to value treatment plant with a capacity of 185 m3/day FSTP at Sabaki.</li> <li>Implement the CWIS plan.</li> <li>Carry out prospective SUED investment /support.</li> <li>Support the prospective Connective cities.</li> <li>Seek WSTF UBSUP support etc.</li> <li>Formulation of legal, regulatory and monitoring framework e.g. Support/Participation in formulation of EHS Policy and Bill, FSM Regulations, Standards and SOPs for urban sanitation etc.</li> <li>Seek clarity of sanitation mandates and roles; coordination, compliance and enforcement.</li> <li>Enabling environment for private sector involvement in provision of sanitation service.</li> </ul>
Financial perspective	Improve financial sustainability to cover all operational costs and attain 112% O&M cost recovery by 2023/24.	<ul> <li>Increase in billing from the current Ksh 436m to Ksh 784m by 2023/24.</li> <li>Increase collection efficiency as % of budget from the current 76% to 86% (in line with tariff).</li> <li>Improve % of MAWASCO Sanitation 0&amp;M costs covered from 0% to 88% through sanitation tariff by 2023/24</li> <li>Improve credit worthiness ranking from the current B to A class.</li> <li>Reduce NRW from the current 28% to 24% by 2023/24.</li> </ul>
Customer Perspective	Provide quality water and sanitation services that meet and surpass our customers and other stakeholders' expectations	<ul> <li>Increase the hours of supply from 23 hours per day to 24 hours per day by 2023/24.</li> <li>Conduct annual customer satisfaction surveys.</li> <li>Ensure drinking water quality compliance with residual chlorine as stipulated by the regulator from the current 90% in year 2019/20 to 97% by 2023/24.</li> <li>Enhance customer awareness on products and services through establishment of customer contact center.</li> </ul>
Internal (process) perspective	Fortify and internalize Organizational capacity and process	<ul> <li>Attain two accreditations.</li> <li>Develop ten organization policies.</li> <li>Enhance continuous improvement across the company.</li> <li>Ensure regulatory compliance.</li> <li>Establish a risk management plan.</li> </ul>

Goal	Strategic Objective	Specific objectives
		• Improve Governance ranking from the current 70% in year 2018/2019 to 85% by 2023/24.
Learning and growth perspective	Develop and enhance knowledge management, effective communication and employee satisfaction.	<ul> <li>Capacity build and develop employee skills.</li> <li>Enhance management of employee.</li> <li>Establish automation of HRM System.</li> <li>Attract and retain talent.</li> <li>Identify and maximize on employee skill set.</li> <li>Foster innovation and creativity.</li> <li>Carry out employee satisfaction survey.</li> </ul>





## **Chapter 7: RISK MANAGEMENT**

MAWASCO is aware of known and unknown factors that might hinder the achievement of strategic objectives. The factors can be internally or externally construed. These risks are discussed in the context of situational analysis (SWOT) and PESTEL. Table 12 shown below discusses the risks and mitigation strategies related to MAWASCO.

**Table 12: Risk and Mitigation strategy** 

Risk Category	Description	Consequences	Likelihood	Potential impact	Mitigation
Climate	Flooding	Damage to infrastructure Damage to infrastructure and concerns for water supply include damage to infrastructure from flooding, and Sanitation concerns include damage and loss of services from floods and reduced carrying capacity of waters receiving wastewater.	Possible	Catastrop	Engage Coast Water Works Development Agency to flood proofing the intake and other infrastructure. Invest in alternative source
	Pollution	Changes in the water quality of water sources and within distribution of water.	Possible	Catastrop hic	Integration of measures of climate resilience into water safety plans, as well as improved accounting and management of water resources.
	Water and sanitation services contribute to greenhouse gas emissions.		Possible	Catastrop hic	Choice of wastewater treatment technologies, improved pumping efficiency, use of renewable sources of energy, and within-system generation of energy offer potential for reducing emissions.
	Drought	Low volumes of water at the source and loss of water sources due to declining rainfall and increasing demand,	Possible	Moderate	Invest in alternative source Investment in water storage is a long-standing need for dealing with current climate variability Greater attention and research are required to understand, plan for, and adapt to climate change in water and sanitation services.
Operational	High NRW	Low consumption per capita Affect commercial viability	Possible	Major	Invest in NRW reduction strategies
	Complacency	Staff collusion	Possible	Major	Undertake staff culture change
	Underperform ance	Low performance of the company	Possible	Moderate	Implement robust performance management system

Risk Category	Description	Consequences	Likelihood	Potential impact	Mitigation
	COVID 19 Pandemic	Suspension of disconnections due to unpaid bills during the pandemic affected the collection efficiency.  Low collection efficiency and high level of debts due to collapsed SMEs / tourist hotels and the directive and noncompliance to contractual terms	Possible	Major	Scale down the operations Cut down on costs
		Low collection efficiency and high level of debts due to collapsed SMEs/tourist hotels and the directive and noncompliance to contractual terms Delay in meeting commitments	Possible	Major	Scale down the operations Cut down on costs Seek external support from GoK and other DPs. Seek moratorium on the finance obligations
		Impact on service provision due to COVID 19. There will be changes in demand for and Access to Services.	Possible	Major	MAWASCO will need a plan to reduce the negative impact of the pandemic on its operations and to ensure continuation of services wherever possible.  MAWASCO must also prepare for the specific disruptions that could be faced during the pandemic.
		Supply Chain Disruption	Possible	Major	Planning is required to ensure that critical supplies are determined and stockpiled (to avoid stock outs), alternate suppliers are identified. In addition, there needs to be an adequate supply of disposable tissues, hand sanitizers and handwashing supplies.
		Employee Absenteeism	Possible	Major	Strategies to manage staffing shortages including canceling non-critical activities will need

Risk Category	Description	Consequences	Likelihood	Potential impact	Mitigation
					to be developed.  Procedures will need to be established to allow for the redeployment of staff from non-urgent activities to essential services, or drawing on additional workers such as recent retirees or volunteers.
		Communication will be critical to an effective response to the pandemic.	Possible	Major	Strategies should also be developed for communicating with staff and community stakeholders about changes to, or disruptions in, services.
		Education and training	Possible	Major	Staff and consumers should also be oriented in infection control precautions and, where applicable, the proper use of personal protective equipment
		Reduced availability of critical elements for operations, such as chemicals for water treatment, fuel for water pumps, or spare parts.	Possible	Major	Seek external support from GoK and other DPs. Seek moratorium on the finance obligations.
Finance	Non- volumetric billing or pricing	Affect commercial viability High NRW level	Almost certain	Major	100% metering and billing on consumption
	Low billing and collection level	Affect commercial viability	Possible	Major	100% billing and >95% revenue collection
	Low creditworthin ess	Limited access to alternative finance	Possible	Major	Improve the creditworthiness of the company Increase the O&M cost recovery level of the utility
		Deferment of critical investments to meet the more urgent necessity of	Possible	Major	Seek external support from GoK and other DPs. Seek moratorium on the finance obligations

Risk Category	Description	Consequences	Likelihood	Potential impact	Mitigation
category		funding emergency responses. This is affecting areas such as the expansion of services, asset rehabilitation, and other capital expenditures.		mpace	
	COVID 19 Pandemic	Loss of revenue estimated at 30- 40% during the months of March and April 2020.	Possible	Catastrop hic	Seek external support from GoK and other DPs. Seek moratorium on the finance obligations
Political	Interference by county govt.	Paralyzing the operation of the company Poor service delivery	Possible	Catastrop hic	Compliance to regulatory requirement Cultivating good r/ship with CG Operating at arms-length from the county
	Interference by politicians		Possible	Major	Compliance to regulatory requirement
Consumer	Unwilling to pay for water services	Low commercial viability	Possible	Major	Aggressive consumer awareness
	Using illegal and by-pass connection	High NRW	Possible	Major	Targeted consumer education Aggressive disconnection
	Poor perception on quality water	Low commercial viability	Possible	Moderate	Aggressive consumer education
Governance	Weak BoD supervision and guidance	Lack of better policies and strategies Management capture	Possible	Major	Thorough induction of the BoD Implementation of performance management framework
	Partisan BoD	Misaligned priorities	Possible	Major	Adherence to corporate code of conduct
Technologic al	Use of old technologies	Low levels of efficiencies	Possible	Moderate	adopt new technologies in front and back-end processes
Regulatory	Failure to acquire license and tariff adjustment	Low commercial viability Non-compliance to regulatory regime	Unlikely	Moderate	Full regulatory compliance Time application for license and tariff adjust
Legal	Conflict between National and County Government legalization	Paralysis in the operations of the utility	Possible	Major	Appropriate alignment to National and county govt. legislation.

### **Chapter 8: FINANCING THE STRATEGIC PLAN**

Financing for the capital expenditure and operations & maintenance comes from taxes, transfers, tariffs, surcharge/levy, household level financing and repayable finance. Taxes refer

to budgetary allocations from national or county government, transfers are funds provided by foreign governments, and tariffs are the fees paid by users. Repayable finance groups together commercial and concessional financial products that allow governments or service providers to expand or improve infrastructure or other inputs. In a sustainable financing scenario, tariffs cover operational costs, and taxes and repayable finance are used for asset development. Kenya has not yet achieved a sustainable financing model for developing and maintaining water services, thus key to sector transformation will be ensuring a sufficient supply of public and private financing options for water service providers and asset developers.

Implementation of this strategic plan will require resources which will be mobilized by the MAWASCO from various sources. Innovative financing models entailing exploring bond financing under Kenya Pooled Water Fund (KPWF) which is an initiative under the Kenya Innovative Finance Facility for Water (KIFFWA) should be explored. MAWASCO will also aim to improve its key performance indicators in particular the NRW which translate to more revenue generation for the utility and improved credit-worthiness. The following are some of the financing options to be explored to finance the strategy;

#### 8.1 Market and commercial financing

At the moment, it would not be wise for MAWASCO to only rely on conventional financing to finance its operations and capital expenditure as this may not be adequate. As the financial health/credit worthiness of MAWASCO improves, the company will consider exploring repayable financing for operations and capital expenditure. The company will borrow resources from the bond market, commercial banks, blended financing and social impact investment.

#### 8.2 Investment by County Government

The Constitution of Kenya-2010, devolved water services to the county government and thus the County Government is fully responsible for service provision and county public works. For full realization of this strategic plan, MAWASCO will work closely with Kilifi County Government through the county's ministry of Water, Environment and Natural Resources and other relevant county ministries for capital investment and resource mobilization from development partners.

#### 8.3 Development Partners

Investment requirements for water supply and sewerage infrastructure are normally very high but with low return rates. There are a few private organizations that are willing to invest in large WSS projects because of lack of awareness of investment opportunities in this field. MAWASCO will seek donor support, particularly for development of water and sewerage infrastructures in areas with inadequate services and connectivity through grants and concessional loans.

#### 8.4 Public financing through surcharge/Levy

The company has the opportunity to finance investment in the low income areas through sanitation surcharge. This term refer to any inclusion of a sanitation charge within a water bill: this may be either a sanitation levy or a sanitation services charge (i.e. a sewerage charge or an onsite sanitation charge). The sanitation levy is a

surcharge applied on domestic and non-domestic water bills, which may or may not be ring-fenced for disbursement in low-income areas.

#### 8.5 Water sector Trust Fund

Malindi Water and Sewerage Company will partner and collaborate with WSTF in particular in financing underserved and enhancing connectivity in low-income areas. This will aim to improve level of services for the poor within MAWASCO jurisdiction. In addition, MAWASCO will partner with WASREB in already developed pro-poor assessment tool and implementation strategy by institutionalization of pro-poor functions within the organization.

#### 8.6 Household level water and sanitation financing

Household level water and sanitation financing effectively leverages funding for social outcomes by facilitating more efficient investments from government and development partners. The landlords/homeowners invest in tertiary network extensions and connections (both water and sanitation).

#### 8.7 Ring-fencing of revenue

According to section 131 of Water Act 2016, all funds collected for water services by the licensed water services providers holding county or national public assets on behalf of the public through water services bills and other sources, shall be used entirely for the purpose of covering costs for the provision of water services and asset development according to regulations made by the Regulatory Board. MAWASCO will endeavor to ring-fence revenue generated from the water services delivery and invest it back for service expansion. Table 13 shown below provides an overview of financing scenarios for each of the strategic objective.

**Table 13: Financing scenarios** 

Expenditure	Total	World Bank funded	Internally Funded	CG	CWWDA	WSTF	User fees
	Ksh	Ksh	Ksh	Ksh	Ksh	Ksh	Ksh
Total buildings costs for water works	81,387,500	-	-	6,387,500	75,000,000	-	-
Total building costs for sanitation works	245,000,000	245,000,000	-	-	-	-	-
Total buildings and civil works costs	326,387,500	245,000,000	-	6,387,500	75,000,000	-	-
Cost of Plant and Machinery -Water	1,385,335,34 7	1,090,319,0 00	127,516,347	52,500,000	-	115,000,000	-
Cost for Plant and Machinery - Sanitation	537,500,000	-	-	-	537,500,000	-	-
Total cost for plant and machinery	1,922,835,34 7	1,090,319,0 00	127,516,347	52,500,000	537,500,000	115,000,000	-
Total cost of computers and related equipment's	4,020,000	-	3,020,000	-	-	-	1,000,000
Total cost of office equipment's,	50,800,000	-	50,800,000	-	-	-	-

Expenditure	Total	World Bank funded	Internally Funded	CG	CWWDA	WSTF	User fees
furniture and fittings							
Total cost of vehicles and trucks	65,300,000	65,300,000	-	-	-	-	-
Total cost of intangibles- Software's	20,500,000	-	20,500,000	-	-	-	
Total CAPEX costs	2,389,842,84 7	1,400,619,0 00	201,836,347	58,887,500	612,500,00 0	115,000,00 0	1,000,00 0
Operational expenses	541,568,957	_	541,568,957	-	_	_	_
Staff cost	826,962,798	-	826,962,798	-	-	-	-
Depreciation on PPE	269,899,887	-	269,899,887	-	-	-	-
Amortization on intangible assets	10,906,747	-	10,906,747	-	-	-	-
Total operating expenses	1,649,338,38 9	-	1,649,338,38 9	-	-	-	-
Total costs	4,039,181,23 6	1,400,619,0 00	1,851,174,73 6	58,887,500	612,500,00 0	115,000,00 0	1,000,00 0

Source: MAWASCO's Implementation Matrix

#### 8.8 Sustainability of Investments / Infrastructure

Financial sustainability for any business is dependent upon among other measures the business ability to generate sufficient revenues to meet its financial obligations. MAWASCO is no exceptional and therefore for the company to realize its goal of attaining financial sustainability, the company will employ the strategies on revenue management that MAWASCO will employ in order to attain financial sustainability. The company plans to install solar powered systems in the boreholes. The company will ensure availability and sustainable management of water and sanitation for all in line with the Sustainable Development Goal # 6. The SDG identifies the following targets: it will aim to achieve universal and equitable access to safe and affordable drinking water for all and also achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity by 20230

# Chapter 9: STRATEGY IMPLEMENTATION, MONITORING AND EVALUATION

#### 9.1 Implementation of the Plan

The plan will be implemented over the next five years (2019-2023). A performance measurement framework will be used as a measure of measuring implementation progress towards set target on key performance indicators which is attached as annex 1. Detailed implementation plan and activities for each strategic objective are presented in Annex 2. In identifying the progress and impact made towards realization of its objectives, MAWASCO intends to periodically monitor this plan. Guided by the principle of stakeholder consultation and engagement, this plan will be monitored in collaboration with stakeholders in the water sector. In summary, the monitoring and evaluation will be conducted so as to;

- Measure progress and effectiveness of the activities.
- Assess efficiency of MAWASCO and its services (that is cost effectiveness)
  - Identify any weaknesses in the implementation with a view of suggesting the necessary adjustments to the activities for optimum success of the strategic plan.
- Enhance horizontal and vertical accountability as well as accountability to consumers.
- Identify challenges and lessons learnt.

Monitoring and evaluation will be guided by 5 key criteria namely;

- **Progress:** The extent to which the activities of the strategic plan are achieving the original objective and if on course.
- **Effectiveness:** The extent to which the strategic objectives are being achieved taking into account the absolute significance. This will measure how far are the objectives being met? Has revenue of the company increased? Are the services offered by the company valued by the consumer?
- **Efficiency:** What is the cost of achieving the objectives? This will measure how economically resources and inputs are converted to results. For example, funds, expertise, time etc.
- Relevance: The extent to which the objectives and activities of the strategic plan are consistent with customers and stakeholders' requirements, MAWASCO's needs, county government priorities and the water sector policies.
- Impact: The positive and negative, primary and secondary long-term effects produced by the intervention of the strategic plan which can be directly or indirectly, intended or unintended.
- **Sustainability:** A measure of the continuation of benefits from the strategic plan beyond the cycle. The probability of long-term benefits and the resilience to risk of the overall gains continues over time.

Monitoring and evaluation of the impact of the project shall involve the use of both qualitative and quantitative indicators. Impact can be indicated through qualitative assessments, for example, based on interviews with people based in collaborating institutions, stakeholders and communities. Quantitative indicators such as the number of staff trained, computers purchased, work policies in place, monthly revenue flows, customer satisfaction levels, poor areas served will be used to reveal the projects' productivity. More importantly the specific

targets set out in this document will be evaluated annually in order to examine whether the services of the company are reaching the intended target groups.

On annual basis, there will be an internal evaluation of the company. This will be based on empirical data available within the company, interviews with company staff, collaborating partners, consumers and others affected through the activities to be carried out. The evaluation will also take into account the quantitative indicators and should acknowledge the eminent changes in objectives and priorities resulting from the learning process. The overall success of these activities will be based on the company's ability to meet set targets and achieve the desired impact within the designated period.

#### 9.2 Linking M&E to Performance Management and Staff Appraisal

For the implementation of the Plan to be effective, the M&E will be an integral part of the MAWASCO's performance management system; and will be linked to staff appraisal and reward. Officers that meet or exceed their plan targets will be considered for commendation and reward.

**Annex 1: Performance Indicators and Measurement Framework** 

Strategic Objective	Measures	Baseline (2018- 2019)	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Increase the	% increase in water access	70%	73%	75%	80%	83%	85%
coverage area and access to	Length of pipeline to unserved areas (km)	1,116	1,139	1,175	1,192	1,206	1,220
clean and safe	Number of consumer connections expanded	29,071	33,871	38,671	43,471	48,271	53,071
drinking water	Increased volume of bulk water purchase	21,000	22,500	24,000	26,000	28,000	29,000
services	Optimize production in Bungale m3	550	1,100	1,100	2,500	3,000	3,800
	Increase production in Kadzandani m3	240	240	240	300	550	830
	Increase water storage at Dakacha m <sup>3</sup>	1,000	0	500	0	0	0
	Increase water storage at Kakuyuni m³	1,250	0	5,000	0	0	0
Increase the coverage	% increase to improved sanitation coverage	26%	27%	29%	31%	39%	58%
area and access to	% of population with improved sanitation	30%	34%	38%	42%	46%	50%
sanitation	% of pro-poor access	26%	28%	30%	32%	34%	35%
services	% of open defecation	5%	5%	5%	4%	4%	4%
	% of fecal sludge that is safely emptied and transported	11%	15%	19%	23%	27%	30%
	% of waste safely treated	1%	5%	10%	12%	15%	18%
	% of MAWASCO Sanitation O&M costs covered	N/A		0%	5%	7%	8%
	Increase in billing (Ksh m)	436	436	615	656	720	784
	% increase in collection efficiency as %age of Budget	76%	78%	80%	82%	84%	86%

	0&M cost recovery	91%	93%	96%	100%	106%	112%
	% increase in functional meters	92%	93%	94%	95%	96%	97%
	Measures	Baseline (2018- 2019)	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
	Staff per 1000 connection	9	7	6	6	6	5
	Improve Credit worthiness ranking	В	BB	BBB	BBB	A	A
	% reduction in NRW	28%	27%	26%	25%	25%	24%
	% reduction in dormant accounts	7,874	6874	5874	4874	3874	2874
Provide	Increase in Hours of supply	23	23	23	24	24	24
quality water and	No. of customer satisfaction surveys	1	1	1	1	1	1
sanitation services	Increased Drinking water quality	81%	85%	90%	93%	95%	97%
that meet and surpass our customers and other stakeholder sexpectatio ns.	% of Reduced customer response & complaints resolved	80%	82%	84%	86%	88%	90%
Fortify and internalize Organizatio	Adoption of Total quality management	2	3	4	5	6	7
nal capacity and	No. of accreditation for Internal Processes	0	0	0	1	0	0
processes	No. of accreditation for Customer Engagement	0	0	0	0	1	0
	Number of policies to be reviewed and developed	3	3	4	3	0	0
	Adopt Continous improvement practice	continuous	continuous	continuous	continuous	continuous	continuous
		0		1	0	1	+

	Regulatory compliance	35	10	8	6	4	2
	Risk Management plan	0	1	0	0	0	0
	Governance ranking	60%	65%	70%	75%	80%	85%
Strategic Objective	Measures	Baseline (2018- 2019)	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Develop and	Capacity build and develop employee skills	JE conducted			Conduct JE		
enhance knowledge managemen		JE Implementation Report	JE Implementat ion Report	JE Implementation Report	JE Implementation Report	JE Implementat ion Report	JE Implementat ion Report
t, effective communica tion and employee		No existing policy	Draft policy developed	Training policy Approved by BOD			Revised TP
satisfaction.		No TNA conducted	TNA report			TNA report	
		No Training Development Program		Developed training program			
		No Succession plan	0	1	0	0	0
	Enhance the management of Employee performance	Manual PM system		Automation of PM system			
		Performance evaluation for staff on contract	Annual performance setting and evaluation for level 4 & above	Annual performance setting and evaluation for all levels	continuous	continuous	continuous
	Automation of HRMI system	HRMIS Audit Partially done		HRMIS Audit report			

	Manual HRM system		Acquire & Automate HRMIS			
Attract and retain talent	Proposed adjustments on T&C	Proposed adjustments on T&C	Proposed adjustments on T&C	Proposed adjustments on T&C	Proposed adjustments on T&C	Proposed adjustments on T&C
	Existing HR policy	Review of existing HR Policy				
	No award program	Establish an Award program				
	TOT program not existing		Establish TOT program	TOT program report	TOT program report	TOT program report
Identify and maximize on employee skill set	Skills Audit Conducted					Skills Audit report
Foster innovation	No existing Research unit			Established Research Unit		
Employee satisfaction	0	1			1	

# **Annex 2: Detailed Implementation Plan**

		Expenditure	Year 2020/21	2021/22	2022/23	Total	World Bank funded	Internally Funded	CG	CWWDA	WSTF	User fees
	#	Building and Civil works	Ksh	Ksh	Ksh	Ksh	Ksh	Ksh	Ksh	Ksh	Ksh	Ksh
1	1	Construct security fence at Adu booster station, Baricho boreholes wellfied, Dakacha, Kadzandani, Ramada, Kwa-Mwadori and Kamale tanksites (seek funding support from CGK)	-	1,700,000	2,430,000	4,130,000			4,130,000			
2	2	Construct staff house for operator at Adu booster station and Ramada tanksite (seek funding support from CGK)	-	2,257,500	-	2,257,500			2,257,500			
3	3	Acquire land and construct additional 5000m3 reinforced concrete storage tank to increase water supply for Kakuyuni (seek funding support from Development partners)	-	-	75,000,000	75,000,000				75,000,000		
		Total buildings cost for water works	-	3,957,500	77,430,000	81,387,500			6,387,500	75,000,000		
4	4	Construction of ablution blocks	125,000,000	-	-	125,000,000	125,000,000					
5	5	Construction of a sludge handling facility	-	120,000,000	-	120,000,000	120,000,000					
		Total cost for sanitation works	125,000,000	120,000,000	-	245,000,000	245,000,000				-	
		Total buildings and civil works costs	125,000,000	123,957,500	77,430,000	326,387,500	245,000,000	-	6,387,500	75,000,000	-	
6		Plant and Machinery				-						
7	10	Small & Major Ultra sonic Meters	22,500,000	-	-	22,500,000		22,500,000				
8	11	Small Consumer meters	7,656,667	-	-	7,656,667		7,656,667				
9	12	Replacement meters	2,400,000	-	-	2,400,000		2,400,000				
10	13	Procure smart meters	4,800,000	-	-	4,800,000		4,800,000				
11	14	Procure bulk meters	328,000	-	-	328,000		328,000				
12	15	Msoloni - Keresha Distribution	-	6,503,691	-	6,503,691		6,503,691				

		Expenditure	Year 2020/21	2021/22	2022/23	Total	World Bank funded	Internally Funded	CG	CWWDA	WSTF	User fees
13	16	Keresha - Gahaleni distribution	-	4,987,990	-	4,987,990		4,987,990				
14	17	Malindi Gongoni line	235,666,667	235,666,667	235,666,667	707,000,000	707,000,000					
15	18	Watamu Area line	109,000,000	109,000,000	-	218,000,000	218,000,000					
16	19	Consumer Pipes valves fittings	55,819,000	-	-	55,819,000	55,819,000					
17	20	Procure a generator Set	1,500,000	-	-	1,500,000	1,500,000					
18	21	Increase connections from 200 to 400 per month	-	19,200,000	19,200,000	38,400,000		38,400,000				
19		Construct DN200mm 17km water distribution pipeline Gongoni - Marereni (seek funding support from CGK)	-	-	115,000,000	115,000,000					115,000,000	
20	23	Intensify surveillance on Illegal connections & identify 2 illegal connections per month	480,000	480,000	480,000	1,440,000		1,440,000				
	24	Procurement of 1 No. Portable Meter Testing kit	-	250,000	-	250,000		250,000				
22	25	Embrace Prepaid Metering - Pilot 3,000 No. Meters in Watamu North	6,000,000	6,000,000	6,000,000	18,000,000		18,000,000				
23	26	Replace & upgrade a problematic & undersize Bungale - Dakacha uPVC pumping main pipeline section through installation of DN200mm HDPE PN16 pipeline (seek funding support from Development partners)	-	-	52,500,000	52,500,000			52,500,000			
24	27	Rehabilitate 5 Communal Water Points quarterly	750,000	750,000	750,000	2,250,000		2,250,000				
25	28	Carry out 100No. Meter replacements per month	4,800,000	4,800,000	4,800,000	14,400,000		14,400,000				
26	29	Reduce no. of estimated bills from the current 10% to 5% by relocating inaccessible meters	840,000	840,000	840,000	2,520,000		2,520,000				
27	30	Reduce no. of estimated bills from the current 10% to 5% by servicing 300No water meters per month	360,000	360,000	360,000	1,080,000		1,080,000				
28	31	New Connections and New Connection backlogs	50,400,000			50,400,000	50,400,000					

		Expenditure	Year 2020/21	2021/22	2022/23	Total	World Bank funded	Internally Funded	CG	CWWDA	WSTF	User fees
29	32	Drilling of 20m3/hr; 200m bgl borehole at Kadzandani to serve Adu, Ramada and Fundisa area to (replace collapsed borehole)	9,000,000			9,000,000	9,000,000					
30	33	Construction of 150m3 masonry storage tank at Kadzandani	3,500,000			3,500,000	3,500,000					
31	34	Network Intensification to boost water supply in Low Income Areas of Malindi	41,800,000			41,800,000	41,800,000					
32	35	Construct 10m3 Water Tanks	3,300,000			3,300,000	3,300,000					
	36	Plant and Machinery for	560,900,333		435,596,667	3,300,000	3,300,000					
		water		388,838,347	, ,	1,385,335,347	1,090,319,000	127,516,347	52,500,000		115,000,000	
33	37	Detailed feasibility, designs and construction of Waste to value treatment plant at Sabaki	450,000,000			450,000,000				450,000,000		
34	38	Construction of 3 No. 120 - 200m3 Transfer Stations in low income areas for Faecal Sludge Management	30,000,000			30,000,000				30,000,000		
35	40	Construct 3 transfer stations	30,500,000	500,000	500,000	31,500,000				31,500,000		
36	41	Support upgrading of pit latrines and toilets in low income areas to meet safe containment and desludging standards.	20,000,000			20,000,000				20,000,000		
37	42	100 households receive results based subsidy of USD 300 annually		3,000,000	3,000,000	6,000,000				6,000,000		san
	3	Plant and Machinery for sanitation	530,500,000	3,500,000	3,500,000	537,500,000	-	-	-	537,500,000	-	
	44	Total cost for plant and machinery	1,091,400,333	392,338,347	439,096,667	1,922,835,347	1,090,319,000	127,516,347	52,500,000	537,500,000	115,000,000	
38	47	Computers and Related Equipment's				-						
39	48	Procure equipment's for contact center	1,000,000			1,000,000						1,000,000
40	49	Procure Laptop Computers	600,000	-	-	600,000		600,000				
41	50	Procure of Desktop Computers	500,000	-	-	500,000		500,000				
42	51	Procure IPADS	560,000	-	-	560,000		560,000				
43	52	Procure Meter Reading Mobile Phones	450,000	-	-	450,000		450,000				

		Expenditure	Year 2020/21	2021/22	2022/23	Total	World Bank funded	Internally Funded	CG	CWWDA	WSTF	User fees
44	53	Procure UPS server	100,000	-	-	100,000		100,000				
45	54	Procure Hard Disk Server	60,000	-	-	60,000		60,000				
46	55	Procure Meter Reading Software	400,000	-	-	400,000		400,000				
47	56	Procure Cyber roam	350,000	-	-	350,000		350,000				
	61	Total cost of computers and related equipment's	4,020,000	-	-	4,020,000	-	3,020,000	-	-	-	1,000,000
48	63	Office equipment furniture and fittings	-	-	-	-						
49	64	Air Condition Replacement	300,000	-	-	300,000		300,000				
50	65	Purchase of lab Equipment's	100,000	-	-	100,000		100,000				
51	66	Total	400,000	-	-	400,000		400,000				
52	67	Furniture	50,000,000	-	-	50,000,000		50,000,000				
	68	Total cost of office equipment's, furniture and fittings	50,800,000	-	-	50,800,000	-	50,800,000	-	-	-	
53	70	Motor vehicles including motor cycles				-						
54	71	Vacuum Exhauster lorry	16,800,000	-	16,800,000	33,600,000	33,600,000					
55	72	Double Cabin pickups lot 1	9,200,000	-	-	9,200,000	9,200,000					
56	73	Motorbikes	5,500,000	-	-	5,500,000	5,500,000					
57	74	Procurement of 6m3 Vacuum Truck	17,000,000		-	17,000,000	17,000,000					
	75	Total cost of vehicles and trucks	48,500,000	-	16,800,000	65,300,000	65,300,000	-	-	-	-	
	7	Intangibles-Software's				-						
58	78	PMS Automated	-	2,800,000	-	2,800,000		2,800,000				
59	79	Mobile Money payment platform	8,000,000			8,000,000		8,000,000				
60	80	Upgrading the billing software to integrate with Smart metering & GIS	1,500,000	100,000	100,000	1,700,000		1,700,000				
61	81	Procure an ERP	-	-	6,000,000	6,000,000		6,000,000				
62	82	Procure a HRMIS	-	2,000,000	-	2,000,000		2,000,000				
	83	Total cost of intangibles- Software's	9,500,000	4,900,000	6,100,000	20,500,000	-	20,500,000	-	-	-	

		Expenditure	Year 2020/21	2021/22	2022/23	Total	World Bank funded	Internally Funded	CG	CWWDA	WSTF	User fees
63	85	Operational expenses	173,016,757	177,270,439	191,281,761	541,568,957		541,568,957				
64	86	Staff cost	248,311,979	275,260,914	303,389,905	826,962,798		826,962,798				
65	87	Depreciation on PPE	85,855,421	88,954,358	95,090,108	269,899,887		269,899,887				
66	88	Amortization of Intangible assets	2,575,582	3,555,582	4,775,582	10,906,747		10,906,747				
67	89	Total operating expenses	509,759,739	545,041,293	594,537,356	1,649,338,389		1,649,338,389				
68	90	Total expenditure	1,838,980,073	1,066,237,141	1,133,964,022	4,039,181,236	1,400,619,000	1,851,174,736	58,887,500	612,500,000	115,000,000	1,000,000



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