TANATHI WATER WORKS DEVELOPMENT AGENCY

STRATEGIC PLAN

2018/19 – 2022/23

Motto: Life starts with water

KENYA VISION 2030

DECEMBER, 2019

Vision Statement

Universal access to adequate, clean & safe water and sanitation.

Mission Statement

To develop, maintain and manage national public water and sanitation infrastructure within our area of jurisdiction to achieve sustainable socio-economic development.

Core Values

- Integrity
- Equity
- Sustainable Development
- Professionalism
- Innovativeness
- Teamwork

FOREWORD

Tanathi Water Works Development Agency (TAWWDA) is pleased to have a Strategic Plan for the years 2018/19-2022/23. The Strategic Plan is a roadmap towards realization of universal access to Water and Sanitation coverage. It articulates our journey towards attaining 80% water coverage, 65% Sanitation coverage and 40% Sewerage coverage in Kitui, Machakos, Makueni and Kajiado Counties, which have a total population of approximately 4,663,612 and land area of 59,639.60Km^2

This Strategic Plan has taken cognizance of the Constitution of Kenya 2010, Kenya's Vision 2030 and the Water Act 2016. The Strategy has been prepared in strict adherence to the fourth Generation Guidelines issued by The National Treasury & Planning and has been aligned to the 'Big Four' Agenda, Medium Term Plans and Medium Term Expenditure Framework 2018-2022.

Implementation of the Strategic Plan is geared towards achievement of universal access to water and sanitation as defined in the Sustainable Development Goal No. 6. The document has been prepared through internal and external engagements of key stakeholders and focuses on six key strategic areas which include;
  a. Water Coverage
  b. Sanitation Coverage
  c. Resource Mobilization
  d. Human Capital Capacity
  e. Information Communication Technology Capacity
  f. Governance, Legal and Institutional Framework

The delivery of water and sewerage infrastructure contained in the Strategic Plan will entirely depend on the financial support from the GoK and other development Partners. I therefore expect closer partnership and collaboration between TAWWDA and all stakeholders in ensuring access to adequate, clean and safe water and sanitation for all.

Thank you all. God bless Kenya.

Kakuta Maimai Hamisi
Chairman of the Board of Directors
Tanathi Water Works Development Agency

PREFACE

Tanathi Water Works Development Agency (TAWWDA) is one of the Eight Water Works Development Agencies in Kenya. The Agency serves Kitui, Makueni, Machakos and Kajiado Counties, first as Tanathi Water Service Board from 4th June, 2008 and currently as Tanathi Water Works Development Agency from 3rd May, 2019. There are many milestones and accomplishments over time that remains vital to us. These include the design of Thwake Multi-Purpose Dam and Reservoir, becoming part of the National Government Major Water Development Project, construction of Masinga-Kitui Water Supply Project and rehabilitation of Yatta Canal. We are proud of this history. We also recognize the foresight shown by National Government through the Ministry of Water, Sanitation and Irrigation in providing for the resources we have to serve our customers today.

Currently, there are a number of challenges facing the Agency; these include providing quality customer service, meeting increasingly strict water quality regulations, meeting water demands of a growing community, finding ways to make better use of existing water resources through storage and water conservation, exploring new water resources, maintaining a skilled and motivated staff, determining groundwater use in the counties within our area of jurisdiction, high standards of waste water collection and disposal and maintaining a healthy and flexible organization to meet future challenges. The Board of Directors, management, and staff developed this Strategic Plan to provide a basis for meeting these challenges.

This Strategic Plan acknowledges the challenges and provides a roadmap towards meeting them. Just as importantly, it allows us to share our plans with our stakeholders who include Government of Kenya, development partners, County Governments, customers, other local agencies, organizations, and regulators. We firmly believe it is an important tool for focusing our energies on. It will help us and future leaders make the types of decisions that will continue the Agency's record of progressive actions. We ask that you use it and participate in it as we move forward.

I therefore take this opportunity to thank the Government of Kenya, TAWWDA Board of Directors, senior management staff, and stakeholders for their support in the process of developing this strategy.

Fredrick Tito Mwamati (P.Eng.Tech)
Ag. Chief Executive Officer
Tanathi Water Works Development Agency

DEFINITION OF TERMS

Term	Definition
Customer	A Customer is a direct beneficiary of TAWWDA services.
Performance Measure	Performance Measures are metrics used to provide an analytical basis for decision-making and to focus attention on what matters most. They answer the question: "How are we doing at the job of meeting our Strategic Objectives?
Perspective	The performance dimensions that TAWWDA intends to use to evaluate its strategic results. Four basic perspectives are traditionally used to evaluate an organization's performance. The appropriate perspectives are determined by the organization's value creating model, the customer value proposition, mission and vision.
Strategic Initiative	Strategic Initiatives are programs or projects that turn strategy into operational terms and actionable items, provide an analytical underpinning for decisions, and provide a structured way to prioritize projects according to strategic impact. Strategic Initiatives answer the question, 'What strategic projects must the organization implement to meet its Strategic Objectives.
Strategic Objective	Strategic objectives are strategy components; continuous improvement activities that must be done for the organization to be successful. They are the building blocks of strategy and define the TAWWDA's strategic intent. Good objectives are action-oriented statements, are easy to understand, represent continuous improvement potential and are usually not 'one-off' projects or activities.
Strategic Result	Strategic Results are the desired outcome for the main focus areas of TAWWDA. Each Strategic Theme has a corresponding Strategic Result.
Strategic Focus Areas	Strategic Focus Areas are key areas in which an organization must excel in order to achieve its mission and vision, and deliver value to customers. Strategic Themes are the organization's "Pillars of Excellence."
Strategy	This is the hypothesis on how the TAWWDA intends to create and deliver value in order to accomplish its vision.
Targets	These are the desired levels of performance for set performance measures
Key Result Area	an activity that is under your control. It is an output of your work that becomes an input or a contributing factor to the work of others.
Outcome	the way a thing turns out; a consequence.
Indicator	a specific, observable and measurable characteristic that can be used to show changes or progress a programme is making toward achieving a specific outcome.

Term	Definition
Activity	a phase, task, operation or other component within an *activity* group.

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LIST OFFIGURES

ACRONYMS AND ABBREVIATIONS

AA	-Articles of Association.
AFD	- AgenceFrancaise De Developpement
AfDB	-Africa Development Bank.
AGM	- Annual General Meeting
APR	-Annual Progress Reports.
ASAL	-Arid and Semi-Arid Areas.
BoD	-Board of Directors.
CBO	-Community Based Organization
CCTV	-
CEO	- Chief Executive Officer
CoK	-Constitution of Kenya
DBMS	-
EACC	-Ethics and Anti-Corruption Commision
EIA	-Environment Impact Assessment.
EMCA	-
EPC-F	- Engineering Procurement Construction and Finance
ESIA	- Environmental Social Impact Assessment
EU	-European Union.
GoK	-Government of Kenya.
ICT	-Information Communication Technology.
IFMIS	-Integrated Financial Management Information Sytems.
IMS	-Information Management System
ISO	-International Standards Organization.
IWRM	-Integrated Water Resources Management.
JICA	-Japan International Cooperation Agency
KAM	-Kenya Association of Manufacturers.
KRAs	-Key Result Areas
KTSWSSP	-Kenya Towns Sustainable Water Supply & Sanitaion Programme
LAN	-Local Area Network.
MDGs	- Millennium Development Goals
MER	-Monitoring & Evaluation and Reporting.
MIS	- Management Information System
MOA	-Memorandum of association.
MTP 3	-Medium Term Plan 3.
MWSI	-Ministry of Water, Sanitation and Irrigation.
NGO	-Non-Governmental Organization

NRW	-Non-Revenue Water
NT	-National Treasury
NWSS	-National Water Services Strategy
PESTEL	-Political, Economic, Socio-cultural, Technological, Environmental and Legal.
PMS	-Performance Management System
PPDA	- Public Procurement and Disposals Act
PPPs	-Public Private partnerships.
PPRA	-Public Procurement Regulatory Authority
QCAs	-QualitatuveComperative Analysis
QMS	-
RAP	-
RFP	-Request For Proposals
RMCs	-Risk Management Co-Ordinators.
SDG	-Sustainable Development Goals.
SPAs	-Service Provision Agreements.
SWOT	-Strengths, Challenges, Opportunities and Threats
TAWSB	-Tanathi Water Services Board
TAWWDA	-TanathiWater Works Development Agency
TNA	-Training Need Assessment.
TOR	-Terms of Reference
UNICEF	-United Nations International Children's Emergency Fund.
WAN	-Wide area Network.
WARIS	-Water records Integrated System.
WASREB	-Water Sector Regulatory Board
WB	-World Bank.
WSBs	-Water Services Boards
WSPs	-Water Service Providers
WSTF	-Water Sector Trust Fund.
WWWDs	- Water Works Development Agencies.

EXECUTIVE SUMMARY

Life starts with water. Water is also a limited resource that mankind should cherish. Water planning and management aims to develop and protect the resource. In TAWWDA, being in an ASAL area with recurrence of prolonged drought and flash floods, water management is of particular importance otherwise water will become a constraining factor in the social-economic development of the country.

The Board of Directors has carefully assessed TAWWDA stakeholders to determine their interests and how they might best be addressed. Our customers are interested in reasonable rates, high quality and reliable water, and maintaining quality infrastructure. The national water regulators are interested in establishing that the Agency is and are able to continue meeting current and evolving water quality, flow demands and standard waste water disposal. Employees are interested in having a secure high quality workplace, pride in excellence and their association with a place that is meeting a foundational need of their community. They care about job stability, job quality, advancement, recognition for a job well done and to be a part of what is going on in the Agency. The development community wants to know what is expected of them to be able to attain water for their developments. Other agencies want partners in planning and cooperation in regional projects.

This Strategic Plan aims to guide both public and private actions in future for ensuring optimum development and management in both water and waste water that benefits both individual and society at large. As earlier mentioned, it is based on the country's Vision 2030 and aligned to the 'Big Four' Agenda which makes this plan a real national plan and not only for TAWWDA.

All of these concerns and interests are considered and addressed throughout this Plan. With the careful study for the Agency into the next five the years, it has become clear that the concerns of each of these stakeholder groups must be included and planned in a deliberate way. This Plan seeks to meet the expectations of all concerned.

FINAL DRAFT

CHAPTER ONE: INTRODUCTION

1.0 Overview

This chapter highlights the background and mandate of the TanathiWater Works Development Agency (TAWWDA) and the global, regional and national development challenges specific to its mandate. It also focuses the Agency's role in the national development agenda including the Kenya's Vision 2030, Third Medium-Term Plan (2018-2022), the 'Big Four' Agenda, Sustainable Development Goals (SDGs) and the African Union's Agenda 2063

1.1 Background

Until 3rd May, 2019, the Agency was operating under Water Act 2002 as Tanathi Water Services Board since 2008. TAWWDAis one of the eight Water Works Development Agencies (WWDAs) established under section 65(1) of the Water Act2016; vide Gazette Notice No. 27 of 26thApril, 2019.TAWWDA is responsible for the development, maintenance and management of National Public water and sewerage works in the Counties of Kitui, Machakos, Makueni and Kajiado covering an area of 59,639.60km² with a population of 4,663,612 people as outlined in Table 1. Currently, the Agency has a bulk water production capacity of 639,683 m³/day and a wastewater treatment capacity of 210,500 m³/day within its area of jurisdiction.

Since its establishment in 2008, the Agency has had two five-the year Strategic Plan cycles with clear objectives and results. The first Strategic Plan for 2008-2013 focused on operationalization of TAWSB as a new institution. The second Strategic Plan for 2013-2018 focused on institutional strengthening of TAWSB and the fifteen (15) Water Services Providers (WSPs) at that time which led to enhanced operational efficiency and sustainability of both the Board and the WSPs.

Table 1: Population per County

(Source: Population census 2019)

S/No.	County	Population	Land Area (Sq. Km)	Population Density (No. Per Sq. Km)
1.	Machakos	1,421,932	5,952.90	239
2.	Kitui	1,136,187	24,385.10	47
3.	Kajiado	1,117,840	21,292.70	52
4.	Makueni	987,653	8,008.90	123
Total		4,663,612	59,639.60	

Figure 1: Map of TAWWDA's area of jurisdiction.

1.2 Mandate and Functions

In terms of section 68 of the Water Act 2016, the powers and functions of the Water Works Development Agency shall be to:-

a) Undertake the development, maintenance and management of the national public water works within its area of jurisdiction;

b) Operate the waterworks and provide water services as a water service provider, until such a time as responsibility for the operation and management of the waterworks are handed over to a county government, joint committee, authority of county governments or water services provider within whose area of jurisdiction or supply the waterworks is located;

c) provide reserve capacity for purposes of providing water services where pursuant to section 103, the regulatory board orders the transfer of water services functions from a defaulting water services provider to another licensee;

d) Provide technical services and capacity building to such county governments and water services providers within its area as may be requested; and

e) Provide to the Cabinet Secretary technical support in the discharge of his or her functions under the Constitution and this Act.

In light of this mandate it is important to note TAWWDA has a road map that clearly articulates areas of focus with clear deliverables.

1.3 Global, Regional and National Development Challenges

Kenya is facing a number of key challenges at the global, regional and national levels which can be categorized as follows:

1.3.1 Global Challenges

1. **Climate Change:** Climate change affects water resources through its impacts on the quality, quantity, timing, form and intensity of precipitation leading to decreased water resources available for water supply, food production and social economic services. The impacts of Climate change have caused an increase in incidences of natural disasters such as floods, droughts, landslides and introduction of micro-organisms in fresh water sources thereby reducing quality. These have led to high stress on the national economy and human health. Climate change impacts on the water sector therefore require innovative adaptation measures to reduce the vulnerability of water systems and water services.

2. **E-Waste:** The rapid technological advancement increases solid and liquid waste generation leading to degradation of water resources.

1.3.2 Regional challenges

Trans-boundary Water Resources: Kenya is both an upstream as well as a downstream country, and shares substantial proportion of water resources with neighbouring countries. These resources are governed by international Law. Kenya's constitution provides for adoption of ratified international law as part of Kenyan domestic law. Kenya has negotiated and signed a number of instruments, which are in the process of ratification, and these will impact on how our trans-boundary water resources are managed. Moreover, international instruments depend on good will of state parties to enforce negotiated instruments through rafts of national legislation in which state parties do to meet Trans-boundary obligations. The Tanathi's Trans-boundary sector has weak technical capacity for trans-boundary water resource management, and development, which needs to be strengthened in order to enhance reasonable utilization to protect national strategic interests.

1.3.3 National Challenges

1. **Population:** Kenya's population was 5.4 million in the year 1948, 10.9 million in the year 1969, 23.7 million in the year 1989, 28.7 million in the year 1999 and 38.6 million in the year 2009. The population per the year 2019 National Census is 47.6 million and will be expected to grow to about 51.6 million by the end of the plan period in the year 2022.
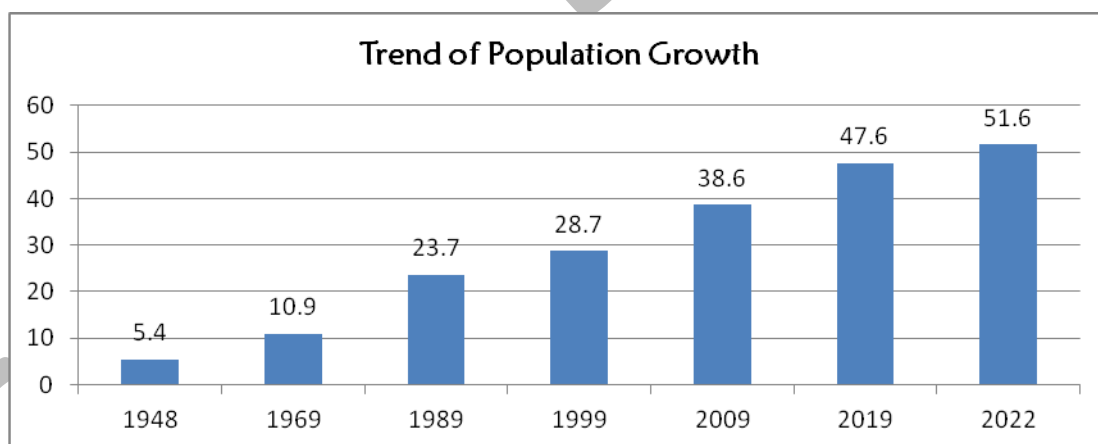
Figure 2:Population growth trends in Kenya

Source: KNBS

As the country is highly dependent on natural resources and in particular agriculture, the growing population will exert considerable pressure on the water resources including encroachment of marginal lands to cater for human settlement.

Figure 3shows positive correlation between population growth and water demand. The total water demand-all sector has been calculated as the minimum water requirements to satisfy the per capita water share based on the water scarcity limit of 1000m³/cap/yr. This is a theoretical per capita water demand that can be used to evaluate the overall water supply level.

Water Demand Against Population
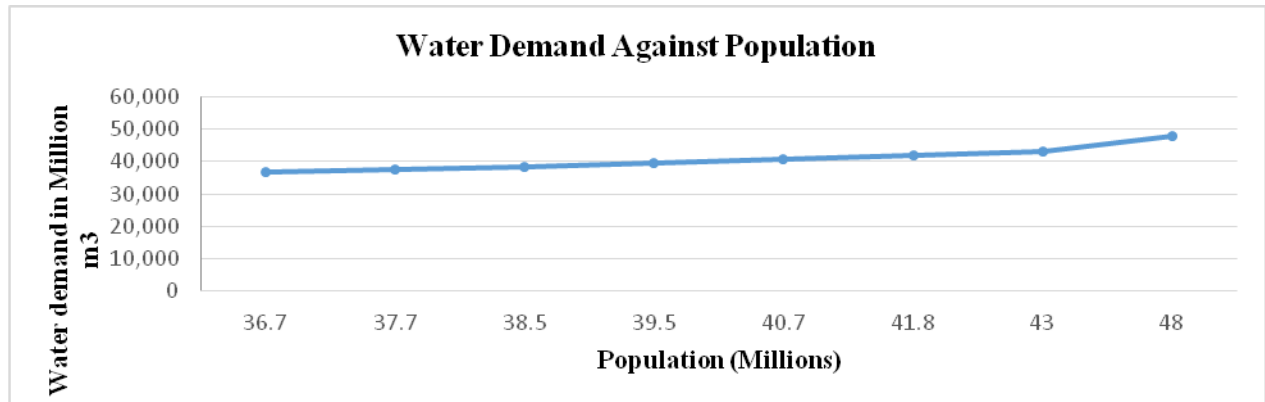
Figure 3:Population growth and total water demand for all sectors
Source: African Ministers' Council on Water (AMCOW) annual reports

2. **Human Settlements:** High population densities are evident in urbanized counties like Nairobi, Mombasa, Kisumu, Kiambu and Nakuru. This exerts a lot of pressure on the quantity and quality of human settlements. The densely populated settlements are often characterized with poor physical planning and low incomes that in turn has led to:
   - Increased informal settlements and low-income urban areas due to rapid rural-urban migration.
   - Declining living standards, polluted air and water resources and unsanitary living conditions.
   - Inadequate provision of water and sanitation services.
3. **Poverty:** According to the 2015/16 Kenya Integrated Household Budget Survey Report, the proportion of population living below the overall poverty line was 36.1%. The Poverty level scoring is based on the Households and individuals whose monthly adult equivalent total consumption expenditure per person is less than KSh. 3,252 in rural and peri-urban areas and less than KSh. 5,995 in core-urban areas. The high levels of poverty have both direct and indirect relationship on the status of the environment and natural resources as the poor are largely victims and causes of natural resource depletion, and environmental degradation due to their dependence on natural resources. In addition, there are large income disparities between regions in the country. This is a challenge, which may undermine realization of the Plan targets and may indeed compel the Board to re-evaluate the sustainability of user charges or community contributions among the poor especially in the Arid and Semi-Arid Land (ASAL) regions.

4. **Non-Revenue Water:** The current levels of Non-Revenue Water stands at 42% with the largest water losses being through illegal connections, leaks due to dilapidated infrastructure and commercial losses (flat rate supply). Small water schemes have inadequate capacity to manage Non-Revenue Water. Having devolved water services, the Board will support counties through capacity building to develop policies and increase investment in the reduction of Non-Revenue Water. The Board will support the counties in improving the sustainability of water supplies and sewerage schemes by providing technical support to reduce NRW, carrying out monitoring of NRW annually and developing and issuing policy guidelines on reduction of NRW

5. **Human health:** Pollution as evidenced by presence of wastewater, heavy metals and agro-chemicals in rivers and water bodies as well as catchment degradation continue to be major challenges to human health.

6. **Pollution and degradation of catchment areas:** Contamination of water resources leads to reduced water available for use. Cleaning water of low quality requires a high amount of energy, which increases the cost of delivering water to the people. Furthermore, degradation of catchment areas has not only reduced flows and quality of water in the rivers but also increased possibility of conflict between upstream and downstream users.

7. **Wastewater management:** Untreated or inadequately treated municipal sewerage is a major source of ground and surface water pollution in Kenya. It is estimated that only about 25% of the urban areas in the country have some form of sewerage collection. During the plan period, the Board will prioritize expansion of sewerage services by construction of new sewerage systems and expanding the existing ones.

8. **Low investment in the water and sanitation sector:** Development of infrastructure for water and sewerage requires heavy capital investment. The funding from the government and development partners fall short of the requirements resulting in a backlog of investments in water services, water storage and sewerage infrastructural development.

9. **Governance:** Water governance has remained a major challenge in Kenya. Adherence to global and regional instruments and policy commitments at national level have not been adequately addressed or coordinated. Globally and Regionally, National policies and interventions often have implications on the trans-boundary water management. It is therefore incumbent upon the Board to play a leading role in the formulation of policies and conventions that are affecting the shared water resources in which Kenya has interest, especially trans-boundary lakes, rivers and aquifers. There is also a need for harmonized sector policies and management practices both nationally and regionally to avoid conflicts. The Board is in the process of operationalizing the Water Act 2016 and it will complete the transition of the Water Sector Institutions to enable them meet their new and expanded mandate.

10. **Data and Information:** The inadequate modern ICT-based systems are a particular challenge to the sector whose technical departments continue to rely largely on manual and paper-based information systems. Data, Information and various

datasets are collected, maintained, managed and disseminated by different agencies within the sector. The key challenges are lack of integration of data management and inadequate technologies to collect, analyze and store data. This makes it difficult to get adequate and reliable data and information for financial and investment planning water sector. There is therefore a need to have an integrated data management system that will be used for data collection, analysis and storage by the sector. During the plan period, the Tanathi will establish and manage an e-water system that will contain up-to-date data required for decision-making.

11. **Capacity:** The Agency current staffing level is 40 officers against an approved establishment of 72 officers resulting in a shortfall of 32 officers. This insufficient human capacity hampers adequate development in the Agency. The sector require highly skilled officer to oversee the various developments being undertaken in the sector.

12. **Inadequate water storage infrastructure development:** The current water storage capacity is 180 Million M^3 while the demand is 4,800Million M^3. The low water storage capacity is attributed to lack of clear policy on water harvesting and storage, which has led to among other factors limited investment in water storage and water wastage due to low off the roof and ground water runoff harvesting and storage.

13. **Cost of compensation for land required for the development of water and sewerage infrastructure:** The rising cost of compensation for land presents a serious challenge to water and sewerage infrastructure development. Beside the escalating cost of land, there is the long timelines for acquisition of such land which potential results into delayed implementation of infrastructure development.

14. **Inadequate mechanism for coordination and collaboration between national and county government:** This has affected planning, development and implementation of investments in cross-county water sources, and bulk water supply infrastructure. The development of water services and sewerage infrastructure as national public water and sewerage works, for subsequent operation by county governments is also faced with challenges relating to absence of a clear handing over mechanism completed projects to WSPs within the various Counties, the management of loan obligations, and operations and maintenance for handed over assets.

15. **Aging sewerage network and low sewerage coverage:** The current National Sewerage coverage is 25%. The sewerage coverage at the Agency's area of jurisdiction stands at 11%. With a huge backlog in maintenance, rehabilitation, upgrading and expansion, the Agency prioritize expansion of sewerage and adoption of alternative technology for waste management.

1.4 The Linkage to National and International Development Plans and Policies

Aligning the Strategic Plan to national and international Acts, policies and plans is fundamental in presenting a united front to addressing various development challenges. Development of water and sanitation infrastructure is heavily influenced by the following;

1.4.1 The Constitution of Kenya, 2010

Articles 43 of the Constitution of Kenya, 2010 entrenches water as a constitutional right by establishing a right to "reasonable standards of sanitation" and "clean and safe water in adequate quantities". The constitution under Article 21 further places an obligation on the government to take steps to progressively realise this right. It is the mandate of the Agency to develop bulk water and sewerage infrastructure that will facilitate access to water and sanitation for all.

1.4.2 Kenya's Vision 2030 and Medium Term Plan (2018 – 2022) III

Under the social pillar of the Vision 2030, economic and social development as envisioned requires plenty of high quality water supplies. The Vision 2030 for water and sanitation is to ensure that improved water and sanitation are available and accessible to all. The goal of the Third Medium Term Plan is to improve access to water and sanitation, have innovative self-financing mechanisms for the sector and adequate investment planning to move the water sector into the path of Vision 2030. The economic, social and political pillars of the vision 2030 are further anchored on infrastructure as one of the key foundation for the Vision. Therefore water and sanitation facilities are a critical impetus to achieving the development initiative of the country. In this respect, about 350,000 new water connections is required annually for universal water access to be realized by the year 2030 as illustrated in the MTP III. Likewise, about 300,000 new sewer connections for urban population (about 3.2 million people) is required annually for universal sanitation access to be reached. In the next five the years, the agency will contribute to the achievement of the Kenya Vision 2030 and its MTP III through investment in development of water and sewerage infrastructure and support to the WSPs to effectively provide last mile connections. The Agency will further target investment to informal settlements and rural areas under its jurisdiction to ensure that no one is left behind. The target will be to increase access to water coverage from the 40% in the year 2017 to 80% by the year 2022, sanitation coverage from 60.7% in the year 2017 to 65% by the year 2022 and sewerage coverage from 11% in the year 2017 to 40% by the year 2022.

1.4.3 Sustainable Development Goals

The critical role of water and sanitation is future given emphasis in the Sustainable Development Goals especial Goal 6 of *"Ensure availability and sustainable management or water and sanitation for all".* Under the eight targets outlined in table 1, universal access to safe and affordable drinking water and management of water resources among other is fundamental to achieving sustainable development. The role of the Agency will be to ensure progressive achievement of these goals through implementation of the various projects.

Table 2: Sustainable Development Goals

SDG TARGET	Sustainable Development Goal 6: Ensure availability and sustainable management or water and sanitation for all.
Target: 6.1	By the year 2030, achieve universal and equitable access to safe and affordable drinking water for all
Target: 6.2	By the year 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
Target: 6.3	By the year 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
Target: 6.4	By the year 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
Target: 6.5	By the year 2030, implement integrated water resources management at all levels, including through trans-boundary cooperation as appropriate
Target: 6.6	By the year 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
Target: 6.7	By the year 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
Target: 6.8	Support and strengthen the participation of local communities in improving water and sanitation management.

Universal access to water and sanitation will progressively be achieved during the period of the SDGs by facilitating development of infrastructure and ensuring that new water and sewer connections are done as part of last mile connection. Last mile connectivity will be undertaken in peri-urban and rural areas to ensure all projects have water connections to households with a collection time of not more than 30mins (round-trip).

1.4.4 The 'Big Four' Agenda

Anchoring the mandate of the Agencyto the 'Big Four' agenda is another critical linkage in progressive achievement of the right to water. The government has highlighted the need to fast track economic recovery by identifying four key priorities of manufacturing, affordable housing, affordable healthcare and food security. As an important enabler, investment in water and sanitation infrastructure will significantly contribute towards achieving these big four agenda as outline in the strategy. The Agencyenvisages its role in supporting the achievement of the 'Big Four' Agenda as depicted below:

- **Affordable Housing-**In order to support the government agenda of 500,000 affordable homes, the agency will develop sustainable water and sewerage infrastructure. In the informal settlements, the Agencytargets to develop dependable sanitation infrastructure to improve levels of sanitation in these areas
- **Affordable health care:** Access to improved water and sanitation services will reduce exposure and minimize cases of water borne diseases and ensure a healthy population
- **Manufacturing:** The government plans to create 1.3 million manufacturing jobs by the year 2022. Access to safe water and improved sanitation will lead to a healthy and strong labor force for manufacturing industries. Reliable water will also reduce the cost of doing businesses and enhance firm profitability especially the water intensive firms.
- **Food Security:** Construction of multipurpose dams will provide the requisite water for irrigation for food security. It is expected that this will be able to contribute to increased production of maize and potatoes as envisaged.

In order to address the national development agenda such as the constitutional requirement, the Kenya Vision 2030, MTP III, the 'Big Four' Agenda, SDGs, Agenda 2063 as well as other national and international, TAWWDA will institutionalize its new roles and accelerate the development, maintenance and management of the National Public Waterworks in line with national and international priorities. The intention of the Agencyis to build a strong institution capable of discharging its mandate effectively. This requires focus on leadership and governance, human and financial resource development and mobilization; technological resources and operational systems.

1.4.5 Africa Agenda 2063

Water is critical to achieving Agenda 2063 development goals and aspirations. Aspiration 1 (18) of Africa we want envisions that Africa shall have equitable and sustainable use and management of water resources for socio-economic development, regional cooperation and the environment.

Towards this, the Agency, during the plan period will domesticate and implement IWRM principles on all the strategies required as per the Water Act 2016 and implement key priority programmes aligned to MTP III which include: implementation of 236 Sub Catchment Management Plans; ground water mapping countrywide; water resources pollution control; trans boundary waters management; water and sanitation infrastructure development; increase water storage per capita.

2.0 Overview

This chapter reviews the performance of the 2013-2017 Strategic Plan highlighting achievements, challenges and lessons learnt. The chapter further provides analysis of external and internal environment using the Strengths, Challenges, Opportunities and Threats (SWOT) and Political, Economic, Socio-cultural, Technological, Environmental and Legal (PESTEL) analytical tools. A stakeholder analysis has also been undertaken to establish the role of each stakeholder in the implementation of the strategy.

2.1 Review of Previous Strategic Plan Implementation

2.1.1 Milestone/Achievements

A review of the Strategic Plan 2013-2017 was done and the Table 3 presents the findings on extent of results achieved during the Plan period and Table 4 presents the budget analysis.

Table 3: Summary of Key achievements /Milestone

Key Result Area	Key Target	Achievements
Institutional strengthening of the TAWWDA and the WSPs	i. To complete institutional establishment of the Board	• 2No. office blocks built • 31No. of vehicles acquired • 192No. computers and computer accessories • 291No. furniture • 31No. office equipments • LAN/WAN acquired. • Approved organization structure by the Board • 82No. of staff recruited competitively
	ii. Put in place appropriate Management Information System (MIS)	• Operational MIS with quickbooks for finance and Nolan ERP for HR & payroll • Operational manuals available and used • Accurate and timely reporting
	iii. To develop a Human Capitals manual	• Developed Human Capitals Policy and Procedures Manual • Developed Career Guidelines • Developed Organizational Structure • Developed Staff Establishment • Developed Finance Manual • Developed Audit Manual • Developed Risk Management Manual • Developed ICT Policy • Developed Whistle Blower Manual • Developed Procurement Manual
	iv. Capacity building of staff of TAWWDA and WSP	• TNA reports done • Various trainings conducted including:

Key Result Area	Key Target	Achievements
		WSPs - NRW reduction, WARIS documentation, proposal development,study tours, team buildin TAWWDA- records management, Sign language, secretaril management, SMC, conduct of meetng and minute taking, risk management, financial management & reporting, corporate governance,Fisrt aid, defensive and Referesher courses for drivers, team building
	v. Capacity building of directors of the Board and WSP	• Various trainings conducted including: WSPs –Corporate governance, Board - corporate governance, audit and risk management & study tours
	vi. Strengthening of sound Governance in the Board and the WSPs within the board area	• 10No. SPAs reviewed • 15No. trainings undertaken on sound Governance • study tour conducted
	vii. To acquire ISO Certification	• Steering committee in place • various trainings conducted • Reports/ generated • Procedure manuals developed
	viii. Develop and implement a communication strategy	• Interactive Web-site • Developed Logo • Newsletters produced • Various Stakeholder meetings/consultations • LAN & WAN infrastructure developed • corporate governance ocnducted • varoius signposts erected • Branding done
	ix. To be in the cutting edge in IT	• Working IT infrastructure in place • 80No. staff trained • Firewals for online security and CCTV for physical security in place • Reports generated by the systems • Modern communication technology methods in place • Reduced paper work and costs
Ensure operational efficiency and sustainability of WSPs	i. Clustering of some WSPs	• Developed the clustering criteria • 5No. schemes identified andclustered : Mwala (Kibauni, Mwala, Wamunyu, Mbiuni), Kibwezi & Makindu, and Nolturesh & Loitoktok, Mbooni, Tanawasco boreholes (de-clustered) • The road map is prepared and adopted • Sensitization to the stakeholders about the rationale for clustering was done • 6No. new AA & MoA's • 10No. SPAs signed
	ii. To support WSPs to reduce their level of UfW from an average of 60% to 40%	• Total amount Ksh. 15,701,000.00 spent by the Agency to Supplement WSPs efforts to improve on metering by buying them meters • 3,195 meters installed by WSPs

Key Result Area	Key Target	Achievements
		4,500 meters are serviced per month for the 15 WSPs - Timely, accurate and regular billing cycle. The billing cycle begins on the 23rd day of every month which ensures timely, accurate issuance of water bills by the last day of the month. - We held quarterly meetings/ trainings (10 No.) on Support WSPs to improve revenue collection so as to improve on O&M% coverage. We also took the Managing Directors, Technical Managers & Commercial Managers to Nyeri Water Company for an exchange visit to learn service and systems efficiency. 15 number of customer awareness campaigns were held during the AGMs. - There was a global increase in revenue collected from 75% to 97% on average for all the 15 WSPs. We also build the capacity of the WSPs by issueing some WSPs with vehicles for both revenue collection, disconnections and repairs of pipelines efficiently Namanga (1 Tiida); Mavoko (1 Ex-Trail, 1No. 16m³ Water Bowzer & 1No. 10 Tonner Canvas Lorry); Oloolaiser (1 Ex-Trail & 1No. 10 Tonner Canvas Lorry); Olkejudo (1No. Double Cab Pickup, 1No. 16m³ Water Bowzer & 1No. 10m³ Water Bowzer); Machakos (2No. Double Cab Pickup); Yatta (1No. Double Cab Pickup); Kitui (3No. Double Cab Pickup, 2No. 16m³ Water Bowzer, 1No. 10m³ Water Bowzer & 1No. 10 Tonner Canvas Lorry); Wote (1No. 10 Tonner Canvas Lorry); Kiambere Mwingi (1No. Double Cab Pickup & 1No. 10m³ Water Bowzer); Mwala (1No. Double Cab Pickup & 1No. 10m³ Water Bowzer) and Nol-Turesh Loitokitok (3No. Double Cab Pickup). - Support WSPs to improve billing through establishing a centralized system. We encouraged all the WSPs to stop manual water billing and to own their billing system or hire the service. - Support WSPs to improve billing through establishing a centralized system. Was not achieved but we tried. - Ensured WSPs regularize all illegal connections through vigorous field work visits. We procured for Kitui WSP leak detectors and pipeline locators. This efforts have increased No. of connections, reduction of NRW and more funds are being collected for these connections. - Mass disconnections are done every two weeks after water bills have been issued for all

Key Result Area	Key Target	Achievements
		the water connections with bills with 3months arrears and above. • We encouraged all WSPs to establish customer care desks and complaint register which have assisted the reduction of customer complaints. • Mount propaganda campaigns • WSPs enforced WASREB rules on fines regarding water theft and Nol-Turesh Loitokitok WSP is an example of WSP who have even taken people to court. • Ensured that WSPs respond to leaks and bursts in a timely manner by building their mobility capacity as indicated above to 9 out of 15 WSPs. • Training of WSPs staff on effective and regular maintenance of the supply system was done for Kitui and Yatta WSP in • NRW reduction achieved is from 60% to52%
	iii. Supervision, compliance, and performance monitoring of WSPs	• Carried out quarterly monitoring and reporting of all WSPs • Ttrained the 15 WSPs on WARIS software application and ensured the yearly reporting • Ensured use of the WARIS software by all the 15WSPs • Enforced compliance to statutory requirements • Cascaded PC to all WSPs
	iv. Introduce an annual merit recognition system for the best performing WSP	• Developed an evaluation criteria • Agreed on the meriting system • Ranked and awarded WSPs the yearly
	v. To Support WSPs to reduce their operational and maintenance cost	• 38 No. of solar panels in use in our community water supplies under the drought programme, water for schools and World Bank Programme Projects. • No windmills had installed so far. • 3 No. power correction capacitors installed in our pumping stations for Kitui, Kiambere Mwingi and Oloolaiser WSP were installed. • 8 WSPs were given water treatment chemicals (1 tonne of Aluminum Sulphate (Alum) and 1 tonne of Calcium Hypochlorite (Chlorine)) shared between them.

Increase access to water and sanitation services and coverage within the Board area from the current 24% and 40% to 50% and 65% for rural and	• Rehabilitation and augmentation of existing WS&S infrastructure	• Water coverage 38% and sanitation coverge 62%
		• Various rehabilitation and/or augmentation plans prepared for 38 districts
		
		• Implementation of various schemes viz;
		  • Masinga-Kitui Water Supply
		  • Kiambere-Mwingi Water Supply
		  • Ikanga -Mutomo Water Supply

Key Result Area	Key Target	Achievements
urban areas respectively for water by 2013		• Umanyi mtito-Andei Water Supply • Matungulu Water Supply • Mutitu / Thua- Kinakoni Water Supply • Migwani Water Supply • Masinga-ikaatine-ikalakala Water Supply • Kajiado Water Supply • Kitui Sewerage • 78No. small dams/pans • 20No. sanitation blocks • Kaiti Water Supply • Kamunyolo Water Supply • Ithekethini Water Supply • Kasaala Water Supply • Kaewa-Masinga Water Supply • Nzeluni Water Supply • Kyalilini- Mulundi Water Supply • Muthale market Water Supply • 288No. Boreholes drilled and equipped
	• Development of new piped WS&S Schemes as follows; • Urban - 3No. • (complete with sewerage system) • Large rural – 4No.	• Identification of the schemes to be developed/implemented in the 4 Counties of Kitui, Machakos, Makueni and Kajiado for WSTF funding and only Kathiani and Mbooni WSPs who didn't benefit out of the 15 WSPs in our Agency area. • 148 project proposals were prepared to WSTF and 59 were funded for water pipeline extensions 284kms, 4,890 meters, 10 Public Sanitation Facilities (PSF), 6 Decentralized Treatment Facilities (DTF) and 3,171 Safisan Toilets. • Iissued 4No. Mobile Treatment Facilities of 25m³/Hour to treat Community Water to each County.
	• In collaboration with stakeholders, develop more than 150 No. Community projects as follows; • 100No.- WSTF • 25 No – NGOs • 25 No - Other stakeholders	• 43No. of Support Organizations and QCAs contracts signed with the Board on 2008/09 to support CBOs in implementation of CPC projects. • 96No. of proposals prepared and submitted to Board and WSTF. • 52No. of piped schemes community water projects were approved and implemented by Tanathi WSB through CPC programme in WSTF, Total community population beneficiaries were 301,405 with total cost of Ksh. 429,171,993. • 50No. Borehole water projects funded by Belgium in Kajiado County at a cost of Ksh. 2M • 21No. Borehole water projects funded by World Bank in Kitui, Makueni, Machakos and Kajiado Counties. • 70No. of Borehole water projects funded by

Key Result Area	Key Target	Achievements
		GOK/UNICEF and implemented by Tanathi WSB through WSTF.
	• Develop and promote water harvesting /conservation structures. This shall include the following large dams; • Umaa dam in Kitui district • Maruba dam in Machakos town • Kiserian dam in kajiado district	• Maruba and Kiserian dams done in collabotaion with National Water Harvering and Storage Authority
Mainstream cross-cutting issues of poverty, gender, environment, HIV/AIDs, and corruption etc which impact on water and sanitation	a) Pro-poor: i) Mapping of the poor in all area	• Identification of the schemes to be developed/implemented in the 4 Counties of Kitui, Machakos, Makueni and Kajiado for WSTF funding and only Kathiani and Mbooni WSPs who didn't benefit out of the 15 WSPs in our Agency area. • 148 project proposals were prepared to WSTF of total cost of Kshs.2,336, 961,711/- to benefit 1,197,643 people. Out of these 59 projects were funded for water extensions/pipeline rehabilitation of 284kms; installed 4,890meters; constructed 25 No. masonry or reinforced concrete or steel elevated tanks of total capacity 5,500m³; 2 tanks were plastic storage tanks totaling 26m³; rehabilitation of 2 masonry tanks of total capacity 450m³, 122 masonry water kiosks were constructed, 8 Public Sanitation Facilities, 8 Decentralized Treatment Facilities and 3,641 Safisan Toilets all at a cost of Kshs. 640,395,612.60 serving 490,734 beneficiaries • Equipped 16No. Borehole water projects drilled under the UNICEF Programme at a cost of Kshs. 63,682,946.58 benefiting 32,000 people under Government funding. • Implemented drought water projects at a total cost of Kshs.231.7m by drilling/ equipping of 6 B/Hs and rehabilitated 17 B/Hs ; we repaired 4 Water Bowzers which had major repairs at General Motors East Africa (GMEA); supplied 10No. 5m³ plastic water tanks, 62No. 5m³ collapsible tanks and 824No. 10m³ water plastic tanks and we trucked water to 993 institutions with 31,887 m³ of water to which benefited 672,456.
	ii) Implementing pro-poor interventions measures for improving service delivery	• 148No. of proposals prepared for Urban towns • 59 No. of water and sanitation projects implemented

Key Result Area	Key Target	Achievements
		• 59 No. of projects commissioned • 490,734 are the increased number of people served • 300,000 consumer points on Minimum charge tariff
	iii) Lobby the GoK to provide more funding for pro-poor WSS projects	• Prepared 148 position paper on the amount funding required • 59 contacts were established • Kshs. 640m funds were received from WSTF
	b) Gender mainstreaming i) To Implement affirmative action	• Created equal opportunity in recruitment and appointments both in the WSP and in the Board Staff and Board of Directors. • Carried out gender balance sensitization
	c) HIV/AIDS i) Enhance behavior change activities on HIV/AIDS and mitigation measures to counter its impact within the Board ,WSPs and Communities within the Board's area of jurisdiction	• Varoius senzitaization trainings have been conducted on the yearly basis, also including distribution of Information, Education and Communication) (IEC) and malecondoms within the Board ,WSPs and Communities within the Board's area of jurisdiction
	d) Environment i) Ensure the Board and WSPs comply with statutory NEMA and WRA requirements	• Ensured availability of all the relevant guidelines, rules, EIA reports and Acts • Random monitoring of WSPs compliance levels
	ii) Establish stakeholder collaboration networks with agencies (NEMA, WRA, etc) involved with environmental matters	• Organized consultative meetings with relevant agencies to agree on the framework for collaboration • Defined roles and responsibilities for the members
Attain financial sustainability of the Board	i. Broaden the financial base of the Board	• Increased lease fees • Engagement of the MWSI to initiate the process through the NT • Undertook Varoius appraisal missions in the Board area • Developed proposals for funding for Drought Projects, AfDB Loans, KIPPD Grants • Signed funding agreements in place
	ii. Enhance financial sustainability of WSPs	• 15 No. of meetings held (mostly quarterly) • Minutes of the quarterly meetings • Agreed program for RRI especially for revenue collection efficiency, NRW reduction, Lease Fee payment and effective water bills distribution. • 15 WSPs rolled out RRIs • Improved water services activity performance
	iii. Ensure operational efficiency of the WSB	• Prequalified suppliers and contractors annually • Contract for goods and services provision in place • Contracts for outsourced activities including security services, internet, webhosting,

Key Result Area	Key Target	Achievements
		• maintenance of software and hardware • 80No. staff trained on e-communication • Use of an Agcny domicile e-address in place
	iv. Lobby the GOK for more funding to the Board and WSPs projects and programmes	• in the last five the years the Agency mobilised for resources amounting to Ksh. 4.34 Billion through GoK.
	v. Establish institutional and legal framework for Public Private Partnerships	• Sourced for investors to partner with to implement Ndarugu dam at a cost of 46Billion. vi. Partnered with universities within our area of jurisdiction such as Kenyata University, South Eastern Kenys University, Dayster University, Machakos University and Lukenya University in research on best practices when using Public Private Partnerships financing model.
Ensure optimal utilization of available water/optimizing water usage	i. Promote use of water harvesting techniques at the household level and public schools e.g. roof catchments.	• Installation of 130 No. gutters for roof catchment to public schools and dispensaries • Distribution of 500No. Storage tanks of 10m³ to public schools and dispensaries • Drilling and equipping of 9No. Boreholes in public schools • We issued 824No. 10m³ Water Tanks; 10No. 5m³ tanks and 47 collapsible tanks to public schools and dispensaries • under the Drought Programme. • 15 dewatering pumps were given to all the 15 WSPs.
	ii. Create sufficient balancing storage in all areas of water supply	• 1500m³ of storage tank at Tala town • 250m³ of storage tank at Kajiado town • 500m³ of storage tak at Kalimbui

Table 4: Budget Analysis

BUDGET ANALYSIS FOR THE FY 2013/14 - FY 2017/18 - ALLOCATION VS EXPENDITURE										
ECONOMIC CLASSIFICATION	ALLOCATION					EXPENDITURE				
	2013/14	2014/15	2015/16	2016/17	2017/18	2013/14	2014/15	2015/16	2016/17	2017/18
	KShs.	KShs.	KShs.	KShs.	KShs.	KShs.	KShs.	KShs.	KShs.	KShs.
Current Expenditure	18,695,541	18,695,541	21,067,924	24,695,541	54,695,545	125,970,401	132,797,393	141,570,030	176,728,880	187,528,672
Compensation of Employees	18,695,541	18,695,541	21,067,924	24,695,541	54,695,545	63,856,540	68,867,071	63,907,054	71,602,260	72,941,054
Use of Goods and Services	-	-	-	-	-	10,413,509	12,818,811	19,799,724	9,221,843	10,750,584
Current Grants and Transfers	-	-	-	-	-	-	-		-	-
Other Recurrent	-	-	-	-	-	51,700,352	51,111,511	57,863,252	95,904,777	103,837,034
Capital Expenditure	662,313,642	633,785,591	690,000,000	957,985,182	1,243,522,250	562,313,642	633,785,591	591,000,000	857,594,763	1,110,689,123
Capital Grants and Transfers		-	-	-	-		-	-	-	-
Acquisition of Non-Financial Assets	662,313,642	633,785,591	690,000,000	957,985,182	1,243,522,250	555,038,782	533,785,591	591,000,000	857,594,763	1,110,689,123
Other Development	-	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURE	681,009,183	652,481,132	711,067,927	982,680,723	1,298,217,795	681,009,183	666,582,984	732,570,030	1,034,323,643	1,298,217,795

The total budget expenditure of the Tanathi WWDA in the last five the years is Ksh. 4.41 Billion. The total recurrent budget expenditure is Ksh. 0.77Billion and development expenditure is Ksh. 3.64 Billion which represents 17.46% and 82.54% of the total budget expenditure respectively. The Agency's total approved budget amounted to Ksh. 4.34 Billion, which implies that the overall absorption capacity was approximately 100%.
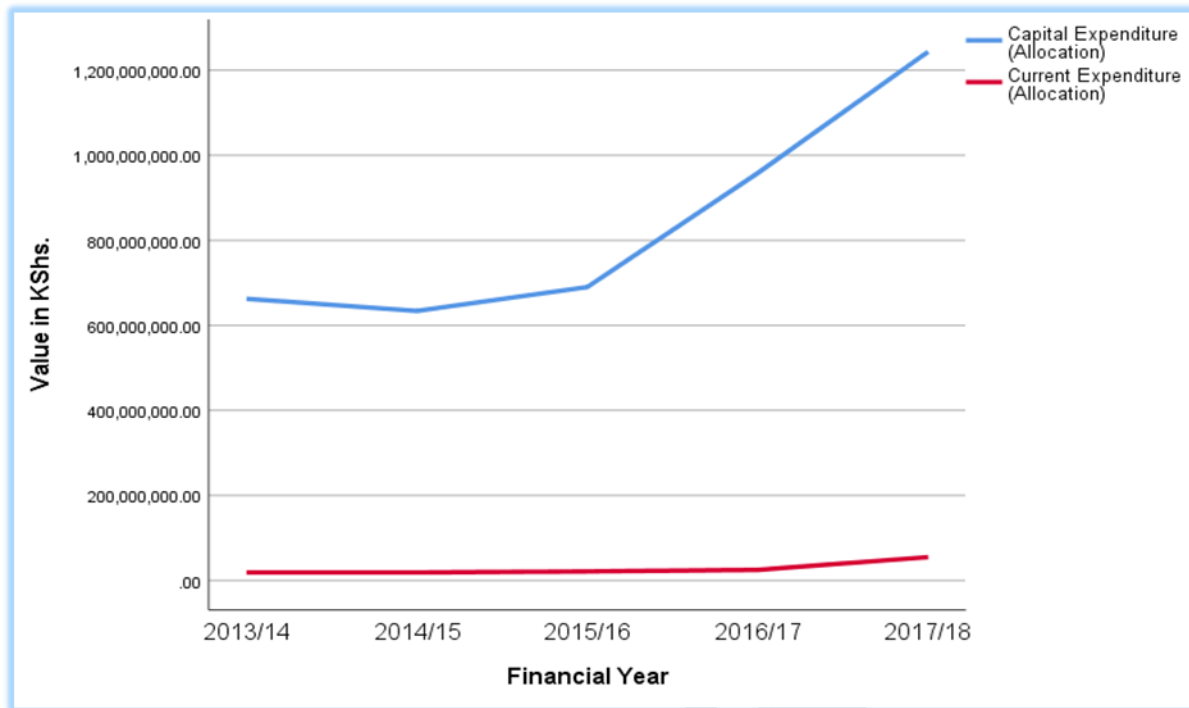
Figure 4: Line graph for Recurrent and Capital Budget allocation
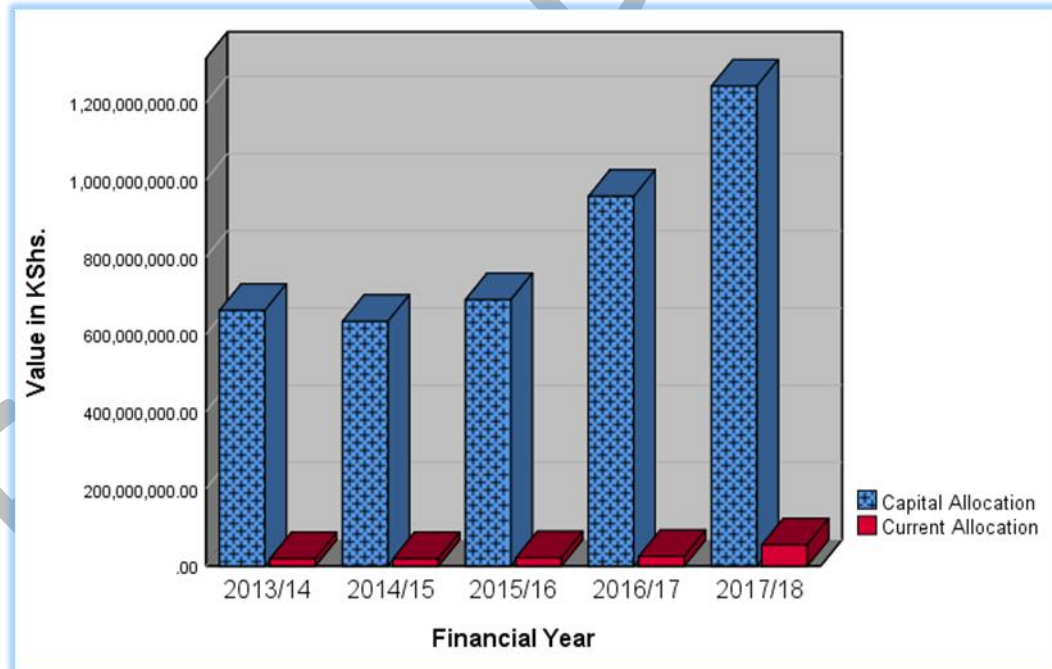
Figure 5: Bar graph for Recurrent and Capital Budget allocation
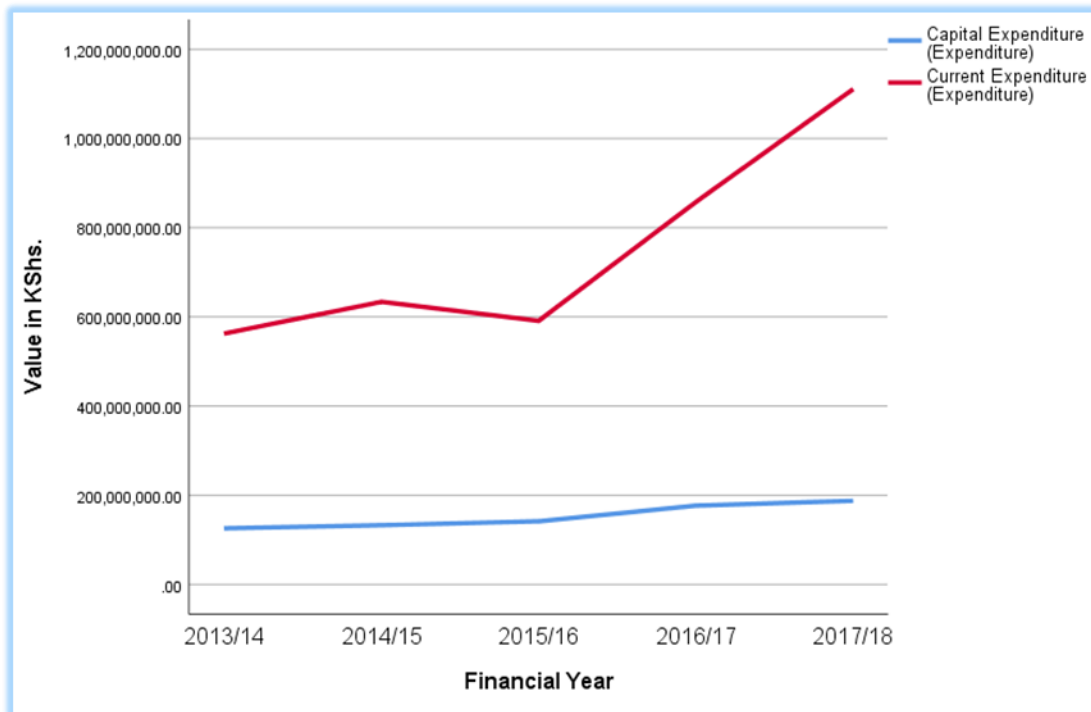
Figure 6: Line graph for Recurrent and Capital Budget Expenditure
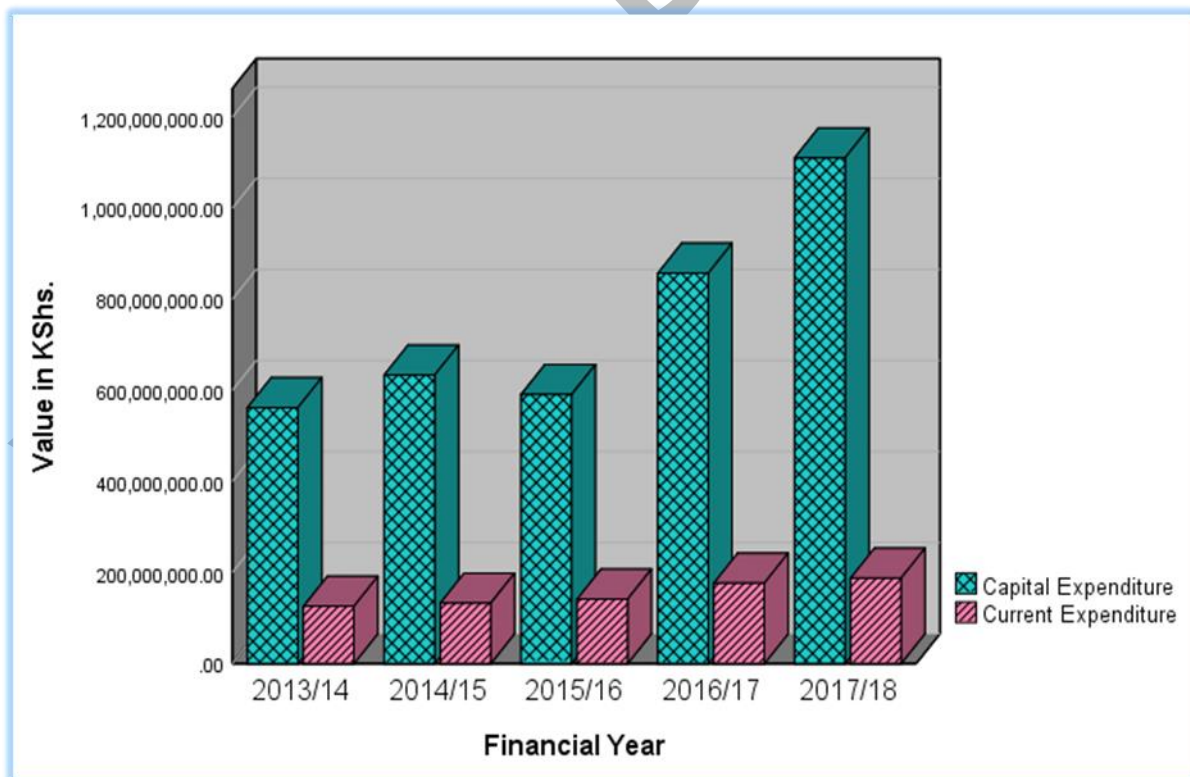
Figure 7:Bar graph for Recurrent and Capital Budget Expenditure
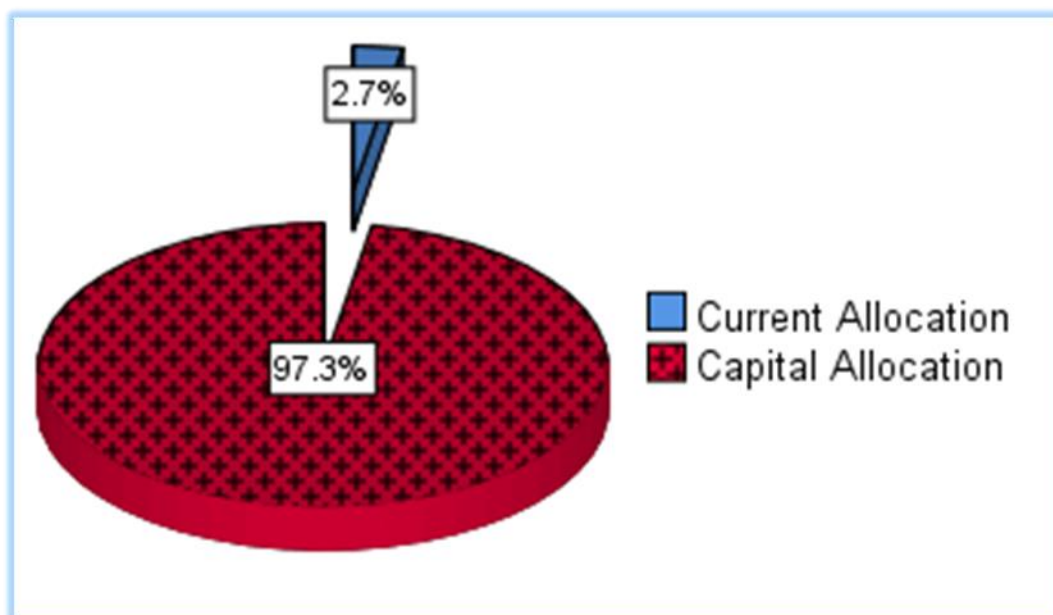
Figure 8: Current and Capital Allocation FY 2013/14
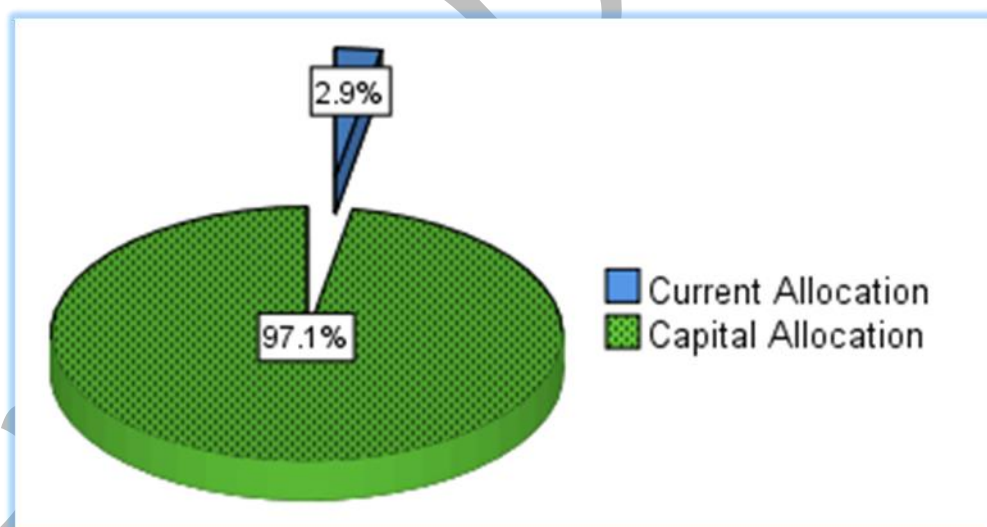
Figure 9: Current and Capital Allocation FY 2014/15
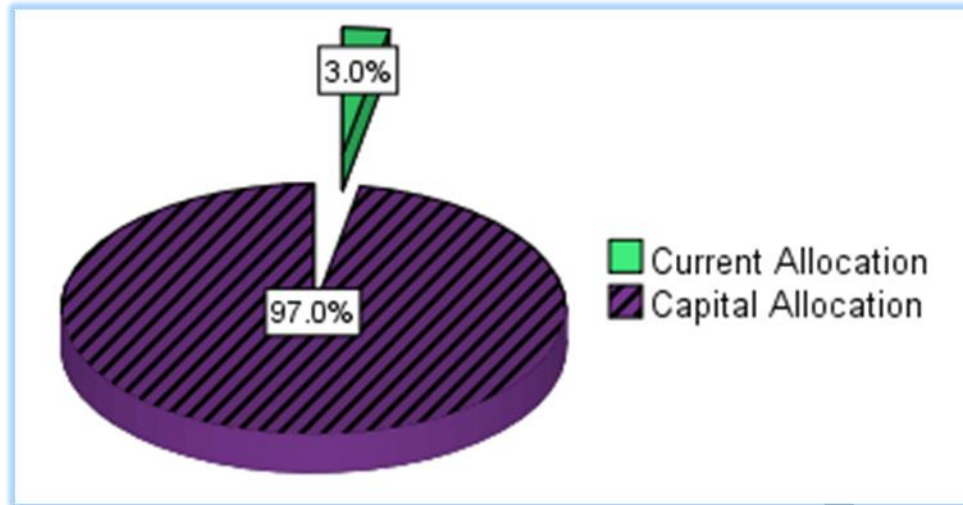
Figure 10: Current and Capital Allocation FY 2015/16
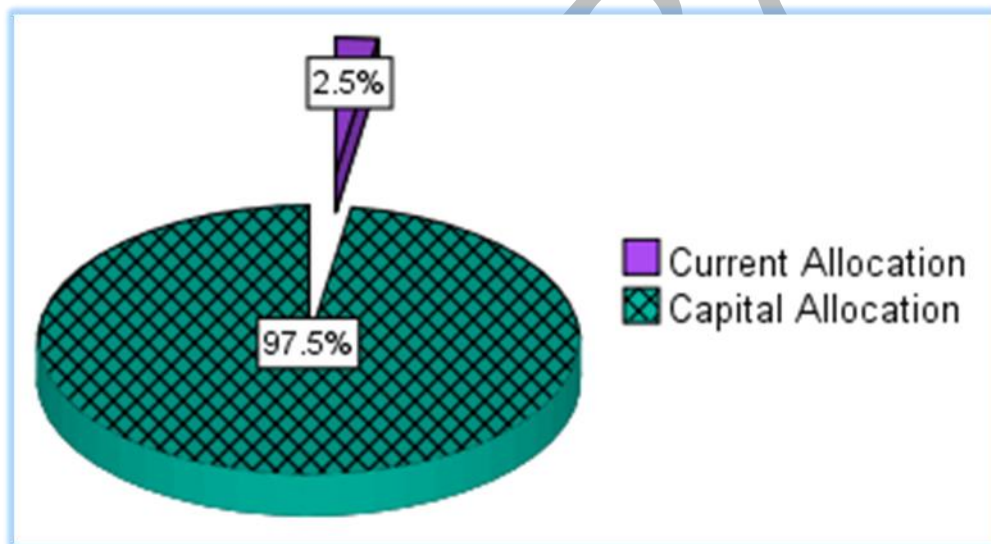
Figure 11: Current and Capital Allocation FY 2016/17
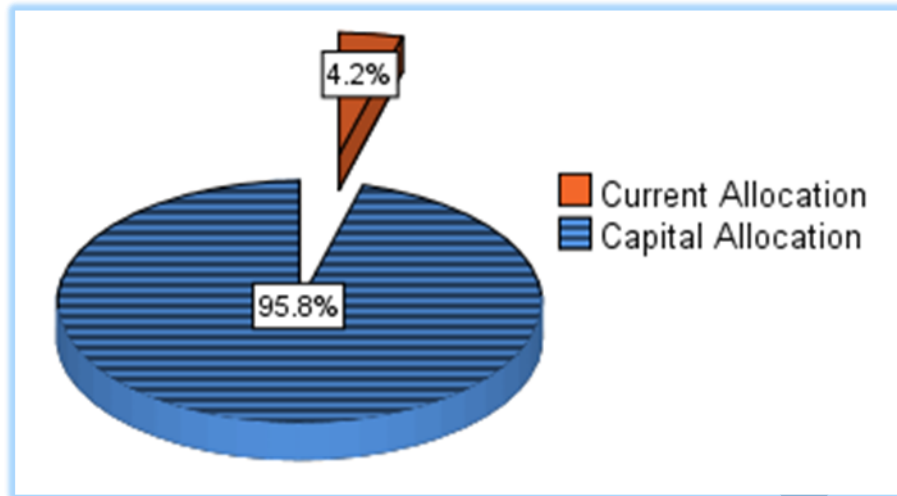
Figure 12: Current and Capital Allocation FY 2017/18
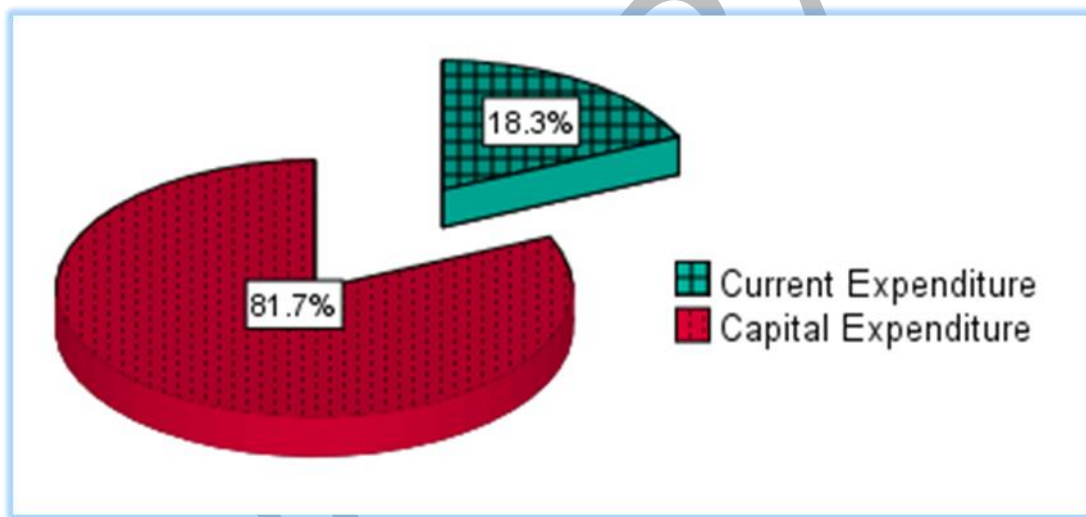
Figure 13: Current and Capital Expenditure FY 2013/14
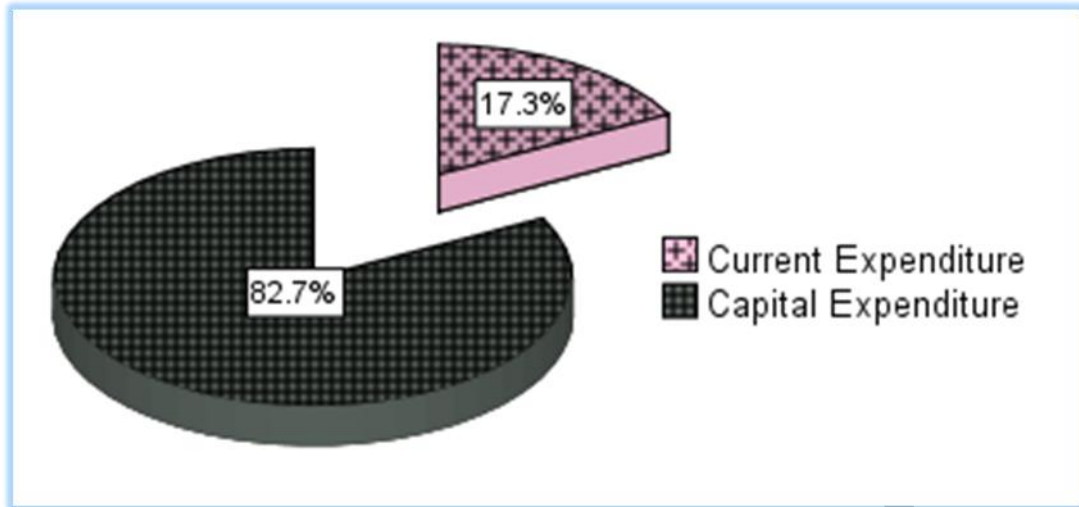
Figure 14: Current and Capital Expenditure FY 2014/15
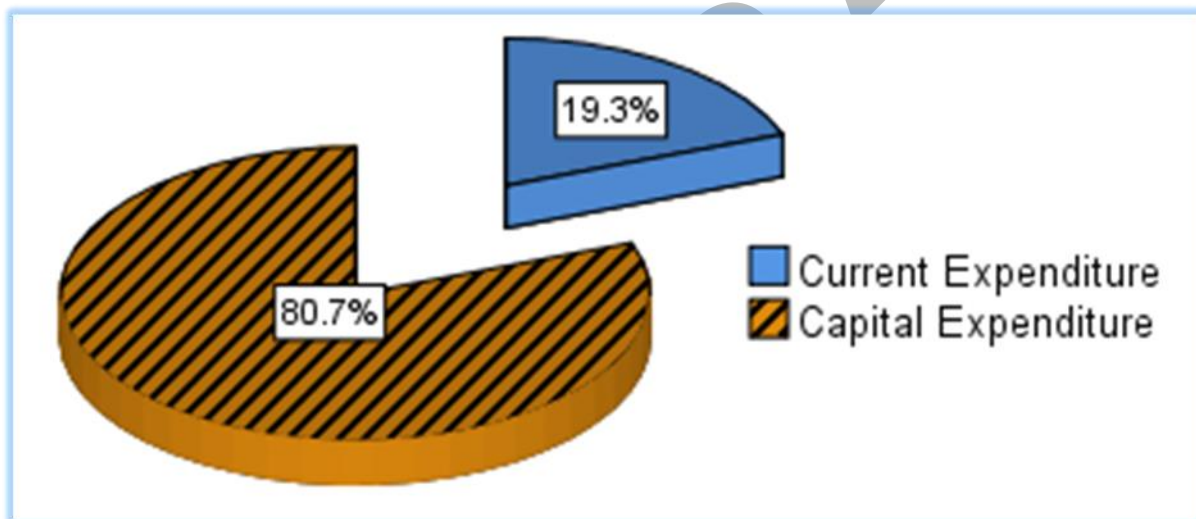
Figure 15: Current and Capital Expenditure FY 2015/16
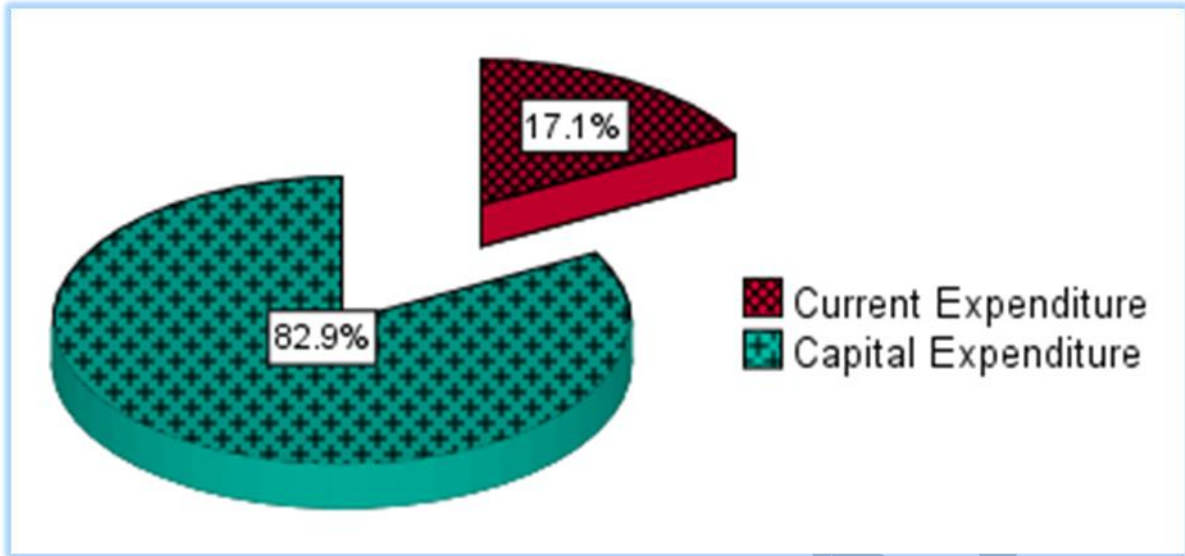
Figure 16: Current and Capital Expenditure FY 2016/17
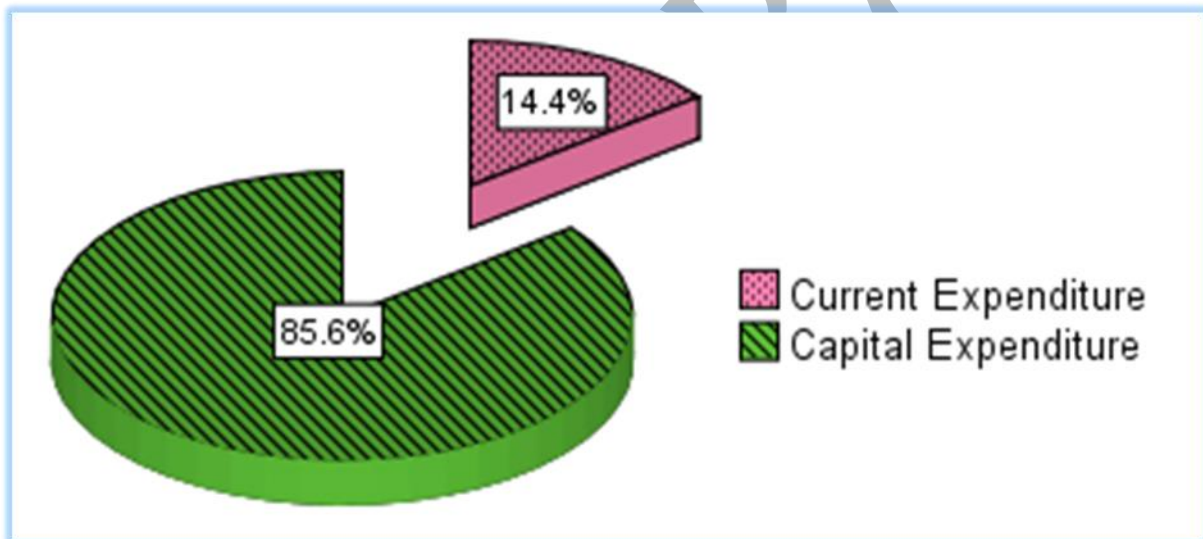
Figure 17: Current and Capital Expenditure FY 2017/18

2.1.2 Challenges Faced

i. Little focus on water infrastructure development as opposed to water resource and sanitation management

ii. Land acquisition issues for large infrastructure projects

iii. Inadequate funding of the planned programs and projects

iv. Increased peri-urban and satellite towns has led to increased demand for water and sanitation services.

v. Inadequate enforcement of laws, policies, strategies and regulatory guidelines

vi. Effects of climate change and associated extreme weather events threaten sustainable water resources development. This results in substantial reallocations towards mitigation and adaptation

vii. Slow career progression and hence gaps in succession management

viii. ISO standards 90001:2008 were changed before we attained certification

ix. County Governments interference on payment of licensee remuneration and loan repayment

2.1.3 Lessons Learnt

i. There is a need to increase investment on water resources, and sanitation management.

ii. Project sites should be acquired and cordoned off early to reduce compensation claims which arise during project commencement. Further there is need to improve collaboration with The National Treasury & Planning, National Land Commission and project affected persons.

iii. Resource mobilization strategies are essential to support implementation of programmes and projects

iv. There is a need for master planning to meet increased demand for water and sanitation services arising from peri-urban and satellite towns

v. Collaborative framework between the national and county governments is essential for sustainable water resource and sanitation management

vi. On climate change effects, there is need to allocate more resources for improvement of capacity to forecast extreme events and mitigation of their effects

vii. Adequate Institutional capacity development is critical for effective implementation of a Strategic Plan

2.2 Environmental Scan

2.2.1 Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

Strengths

Strengths are characteristics of an organization that give it an advantage over others

Table 5:Strengths

S/No.	Strength	Strategic Implication	Strategic Response
1.	Institutional and Legal frame work	• Legally Established and recognized water sector institutions • Separation of roles: policy, implementation and regulation	Operationalization of the Act
2.	Skilled Human Capital	Domestication of SDG 6 in national plans	Budgeting towards universal access
3.	Clear mandate as per Water Act 2016	Mandates and Functions clearly spelt out	Comply to the provisions of the constitution and Executive order
4.	Good work environment	Collaboration/ partnership	Operationalization of the signed MoU

Weaknesses

Weaknesses are characteristics of an organization that place the business or project at a disadvantage relative to others

Table 6:Weakness

S/No.	Weakness	Strategic Implication	Strategic Response
1.	Inadequate funding to reach universal access to water and sanitation	Ksh.10Billion required annually against average allocation of Ksh 0.1 Billion	Mobilize external resources of Ksh.10 B annually
2.	Inadequate technical staff	Limited capacity to implement programmes	• Increase staffing to reach approved establishment • Capacity building initiatives
3.	Old dilapidated water and sewerage infrastructure	frequent infrastructure breakdowns	• Last mile connectivity to new infrastructure
4.	High Non Revenue Water (at 54%)	WSPs losing about Ksh.637 million annually	• Target to reduce by at least 4% annually
5.	Weak M&E and reporting framework	Unreliable information system especially in rural areas to guide proper planning	Collect and digitize real time data at all levels
6.	Poor debt recovery	Non payment of current loans in time affecting future funding	• Put in measures to ensure timely repayment of loans

Opportunities

Opportunities are elements in the environment that the Board could exploit to its advantage

Table 7: Opportunities

S/No.	Opportunities	Strategic Implication	Strategic Response
1.	Good will from Development partners	Increased funding for programmes/projects	Request for funds from development partners
2.	Situated in Asal area	Potential to a attract donors/funding	Potential to attract donors and government funding
3.	Water as an enabler to 'Big Four' Agenda	Opportunity for increased funding	Completion of water projects to support manufacturing, affordable housing, Nutrition and food security and universal health care
4.	High water demand and sanitation services	A big percentage of population is under served	Potential to attract donors and government funding
5.	Human Right to Water and Sanitation	Progressive realization due to huge capital investments	support universal access to water and sanitation services

Threats

Threats are elements in the environment that could cause trouble for an organization

Table 8: Threats

S/No.	Threat	Strategic Implication	Strategic Response
1.	Climate change	Dwindling water resources due to droughts and damage to water and sewerage infrastructure due to floods	Build resilience and disaster preparedness and response in planning
2.	High public debt	Impact on sharing of national revenues which affects project implementation	Austerity measures on expenditures and cost efficiency
3.	High population growth	- Increased demand and abstraction of water resources - Pollution of water resources - Water Catchment degradation	- Formulate water regulations and guidelines - Lobby for laws that provide for protection of water catchment areas - Advice on water catchment areas - Enhance water harvesting and storage

2.2.2 Political, Economic, Social, Technological, Environmental and Legal (PESTEL) Analysis

This PESTEL Analysis looks at the factors within the operating external environment that are political, economic, social, technological, environmental or legal in nature and their implications to the work of the TAWWDA. Table 9 below; present Political, Economic, Social, Technological, Environmental and Legal (PESTEL) Analysis for the TAWWDA.

Table 9: PESTEL Analysis

External Environment	Factor	Strategic Implication	Strategic Response
Political	Change in political leadership	Change in Government policies and priorities of impacting on the functioning of the Agency	The Agency should be able to adapt to the new changes when it occurs.
	devolution of water and sanitation services	disputes in sharing water resources within counties	Develop and implementation framework of collaboration
Economic	High public debt	Increased interests leading to reduced funds allocated to water sector	Alternative sources of financing
	Increased Taxation	High cost of imported equipment and technical services on water and sanction projects	• Increase research to enhance innovation • Seek for tax exemptions
Social	High population growth	• Increased demand and abstraction of water resources • Pollution of water resources • Water Catchment degradation	• Enhance water harvesting and storage • Develop and implement water regulations and guidelines
	Increased urbanization	Increased demand for water resources and sanitation services	Mobilise resources and provide adequate funding for water and sewerage projects
Technological	Improved technological development and advancement	Ease in prospecting for and monitoring water and sanitation services	• Continual capacity building and adoption of new water technologies
Environmental	Climate Change	• Land degradation, drought, floods and desertification • Decrease in water resources	Development and implementation of contingency /adaptation/mitigation plans, and capacity building Sustainable water resources use management
	Pollution of water resources	Compromised water quality	• Enhance water quality monitoring • Improve water quality

External Environment	Factor	Strategic Implication	Strategic Response
			laboratory services • polluter pays principle
Legal	Water Act 2016	Inconsistencies and gaps in the Act	Identify inconsistencies and propose amendments of the Act
	Transboundary Cooperative Frameworks and Treaties	Modalities of sharing transboundary water resources	Comply and implement provisions of ratified regional laws and regulations

2.2.3 Stakeholder Analysis

Stakeholders have certain expectations which should be fulfilled by the Tanathi WWDA in the execution of its mandate. The following is the outcome of the Agency's stakeholder analysis.

Table 10: Stakeholder Analysis

Stakeholder	Stakeholder Expectation	Agency's Expectation
Public/citizenry Active participation	• Active participation • Enhanced awareness in the sector • Efficient and effective services • Transparency and accountability in the service delivery • Enhanced awareness in the sector	• Regular feedback on our services • Responsive citizenry • Compliance with laws and regulations. • Ownership and sustainability of projects
TAWWDA Staff	• Efficient and effective Human Capital services; • Objective, Participatory and fair appraisal • Conducive work environment. • Career development, growth and retention. • Sense of belonging. • Recognition and motivation. • Teamwork. • Coaching and mentorship. • Equal opportunity in employment.	• Improved productivity • provision of necessary skills and manpower • Exhibit good image of the Board • Efficient and timely services to the citizens and stakeholders • Adherence to policies, rules, and regulations of the Board; • Efficient utilization of resources allocated
Contractors, Suppliers and Consultants	• Prompt payment for services rendered, goods delivered and works done • Clear specifications for goods and works and clear TOR's • Professional and effective project management • Procurement process which is transparent and accountable as well as Fair competition • Affirmative action on 30% access to government procurement opportunities for youth, women and Persons With Disabilities	• Efficient, effective and timely delivery of goods and services. • High standards of technical works undertaken, goods and services supplied that meet contractual obligations • Competitive and fair pricing
Professional bodies	• Compliance by technical staff through registration and renewal of membership • Provide opportunities for continuous	• Improved standards of technical expertise and professional management in the sector

Stakeholder	Stakeholder Expectation	Agency's Expectation
	professional development	• Partner in the implementation of development projects and programs. • Improved innovation, research and development; and policy analysis
Non-State Actors such as NGOs, Civil Societies, CBOs and others	• Participation in the Agency's policies, projects and programs development. • Provision of quality services	Improve methods of collaborations by signing of MOU's that ensure serious commitment
Development partners and international organizations	• Transparency and Accountability • Compliance with financing agreements • Public awareness of projects • Fiduciary discipline and compliance • Communicating Project's progress • Efficient use of Resources • Achievement of planned outputs and outcomes of projects implemented • Involvement in stakeholder consultations in planning for the sector • Timely payment of subscription fees.	• Support specific programs whose implementation is coordinated by the Ministry. • Timely disbursement of promised resources;
Media	• Timely, Accurate and reliable information • Awareness of the Board's mandate and activities • Accurate information • Continuous engagement	• Enhanced awareness, information documentation and effective communication. • Fair and responsible coverage
County Governments	• Policy guidance on , water, sanitation and land reclamation • Partnership in implementation of devolved functions in water, sanitation and land reclamation • Capacity building on water, sanitation and land reclamation • Technical advisory and support • Capacity building and technical assistance • Consultation- planning, budgeting and project implementation.	• Proper implementation of policies, legislation and regulations for both levels of Governments. • Partnership in implementation of national programs and projects. • Timely and Quality provision of, water and sanitation services to the public. • Share data and information on their achievement on water and sanitation
Private Sector	• Increased involvement in Public Private Partnerships (PPPs) for water, sanitation and Land reclamation services provision. • Provide enabling environment and incentives For business • Involvement in policy formulation in the sector	• Increased funding for prioritized PPPs projects in water and sanitation • Play their rightful role in sector growth • Compliance with laws, regulations and best business practices
Tanathi Water Works Development Agency	• Implementation of the policies, plans and programmes • Compliance with set budgets • Provide technical advice on priority investments	• Compliance with set standards
The National	• Compliance with PFM Act	• Transprarency, Acountability,

Stakeholder	Stakeholder Expectation	Agency's Expectation
Treasury	• Financial probity • Adherence to donor conditions • Accountability • Prudence in budgeting	Value for money and prudence in Financial Manageement
BOD	• Board Charter • Board Facilitations • Compliance with Mwongozo • Board Performance Appraisal • Board Induction and Training • Policy compliance and implementation • Communication and feedback from management • Financial probity • Delivery of organizational mandate	• Corporate Governance in the management of TAWWDA Resources
Regulatory Authorities	• Compliance with the set standards and regulations.	• Compliance with Regulatory standards
National Land Commission	• Information on land identified for acquisition • Facilitate the land acquisition process	• Fast track land acquisition for timely project implementation
Local Administration	• Communicate the Agency's activities that impact their local communities • Continuous engagement	• SupportTAWWDA in implementation community through resolving community disputes that may arise
Communities	• Communicate the Agency's activities • Create awareness on planned projects and the treatment of project affected persons • Continuous community engagement and consultation	• Support TAWWDA in project identification and in implementation process
Religious Groups/ Civil Societies	• Consultation and engagement	• Support in stakeholder and public participation
Politicians	• Involvement in planning of projects within their areas • Provision of water and sanitation services within their areas • Continuous engagement during project implementation	• Support in resource mobilization and community acceptance of projects
Consumer	• Provision of reliable and quality water and sanitation services within their areas • Extend services to unserved areas • Set affordable tariffs • Public engagement and participation	• Timely payment of bills to enable timely payment of loans and meeting operational and maintenance costs.

CHAPTER THREE: STRATEGIC MODEL

3.0 Overview

This chapter presents the strategic model that set out the Vision statement, Mission statement, Overall goal, core values and guiding principles that guide the implementation of this Strategic Plan. It also outlines the Key Result Areas (KRAs) that inform the focus areas for implementation of the strategic objectives and strategies

3.1 Vision Statement, Mission Statement, Overall goal, Core Values, Motto and Guiding Principles

Tanathi WWDA will be guided by the following strategic foundations over the planning period:

3.1.1   Vision Statement
Universal access to adequate, clean & safe water and sanitation.

3.1.2   Mission Statement
To develop, maintain and manage national public water and sanitation infrastructure within the Agency's area of jurisdiction to achieve sustainable socio-economic development.

3.1.3   Overall Goal
To increase water and sanitation coverage.

3.1.4   Core Values
TAWWDA core values include the following:
- **Integrity** - The Agency will conduct its affairs in serving the public in an honest manner upholding highest degree of responsiveness to the aspirations of the public it serves.
- **Equity** –The Agency will allocate Water resources fairly according to need, value to economy and efficient usage, mindful of the marginalized and vulnerable groups. Cross-county equity will apply in sharing water resource.
- **Sustainable Development -** The Agency will pursue development in the area of jurisdiction that satisfies the needs of the present generation without compromising the capacity of future generations, guaranteeing balance between economic growth, care for the environment and social well-being.
- **Professionalism** –The Agency will execute its mandate and engage their stakeholders with due care, skill and competence.
- **Innovativeness -** The Agency will commit to being creative in service delivery.

- **Teamwork** -The Agency will relentlessly pursue timely attainment of targeted results at all levels through high level coordination, networking and collaboration with all staff, stakeholders and the public.

3.1.5 Motto
Life starts with water.

3.1.6 Guiding Principles
Governance and management of the Agency will be guided by the national values and principles set out in articles 10, 43, 60, 69 and 232 of the Constitution of Kenya, 2010. More specifically, the following principles will apply:

a. **Intergovernmental and Institutional collaborative effort:** The Agency and County governments will work in a consultative and collaborative manner with a clear coordination framework to promote the objectives of TAWWDA, taking into account the distinct mandates of each; incorporating recognition of concurrent and overlapping areas of jurisdiction.

b. **Integrated planning and resource management:** The Agency will take into account different and competing interests of groups, sectors and the needs of the environment. Planning for water service and resource management will be integrated.

c. **Respect for human rights:** Every Kenyan has a right to clean and safe water in adequate quantities, and to reasonable standards of sanitation. The Agency will take into account the needs and rights of riparian communities as well as guaranteeing access rights to other users of surface and ground water.

d. **Equity and inclusivity:** Water resources will be allocated fairly according to need, value to economy and efficient usage while being mindful of the marginalized and vulnerable groups. Cross-county equity would apply in sharing water resource.

e. **Consumer protection:** The Agency will implement measures that will ensure the water is available, accessible, affordable, reliable, sustainable, and in the right quality, quantity and time, while being mindful of marginalized and vulnerable groups.

f. **Efficiency and value for money:** Every effort will be made in maximizing output per unit of public resource, and in maximizing the expected outcome(s) across the value chain.

g. **Ring fencing:** Revenues generated from water charges, fees and tariffs will be used for the purpose of promoting Water Activities only.

h. **User pays principle:** The recognition of water resources as an economic and social good, and the application of the most efficient pricing model to ensure full cost coverage while meeting the social, economic and environmental costs.

3.2 Key Result Areas (KRAs)

In line with Agency's Vision and Mission statements, Six Key Result Areas which reflect its responsibilities in the realization of Kenya's Vision 2030, Third Medium Term Plan (2018-

2022) and 'Big Four' Agenda have been identified and will be the pillars of this Strategic Plan. The Key Result Areas are:

KRA 1: Water Coverage

The Agency will increase percentage of access to safe water from 40% in the year 2017 to 80% by the year 2022 within its area of jurisdiction (Kitui, Machakos, Makueni and Kajiado Counties). This will be done through implementation of projects and programmes funded by GoK and development partners.

KRA 2: Sanitation Coverage

The Agency will increase the percentage of population with access to improved sanitation from 60.7% in the year 2017 to 65% by the year 2022 within its area of jurisdiction. This will be achieved through improvement of onsite-sanitation facilities in both urban and rural areas and construction of new sanitation facilities in selected towns. In addition, the Agency will increase the percentage of urban population with access to sewerage system connection from 11% in the year 2017 to 40% by the year 2022 within its area of jurisdiction. This will be realized through improvement of sewerage facilities in major towns within Kajiado, Machakos, Makueni and Kitui Counties, augmentation of sewerage facilities in various towns and construction of new sewerage systems/infrastructure across the region.

KRA 3: Resource Mobilization

To effectively deliver on its core mandate, the Agency will focus on mobilizing adequate resources . The Agency will build strong relationships with stakeholders and develop framework to guide investment, planning, and entrench sustainable resource mobilization. To achieve this, the Agency will initiate resource mobilization strategies with the goal to raise Kshs. 108.6 Billion by the year 2022.

KRA 4: Human Capital Capacity

Human capital capacity will be enhanced in order to deliver on the Strategic Plan. This will entail enhancing staff competencies, improving working environment, performance management, succession management and knowledge management.

KRA 5: Information Communication Technology Capacity

The Agency recognizes Information Communication Technology (ICT) as an enabler of process change. Use of ICT will be enhanced by adoption of Information Management Systems and modern ICT infrastructure. This will be done through implementation of Integrated Information System with a centralized Database running on modern ICT infrastructure.There will be a synchronized automation of all the processes hand in hand with continuous improvement of ICT knowledge, skills and innovation.

KRA 6: Governance, Legal and Institutional Framework

Effective leadership and governance processes are vital for the Agency to thrive in a complex and rapidly changing environment. The outcome of this strategic plan is

therefore dependent on effective leadership at the Board and Management level. This will also be necessary for a stronger intergovernmental relationship in the development and provision of water and sanitation infrastructure. Governance structure determines direction and achievement of optimal performance outcomes. The objective of the Agency will be to put in place corporate governance systems that regulate and oversee corporate conduct, consider the interest of both internal and external stakeholders, ensure responsible behavior by the Agency and achieve the maximum level of efficiency and productivity.

3.3 Strategic Objectives and Strategies

The following are the strategic objectives which will guide the Agency realize its mandate during the planning period:

1. Increase water coverage from 40% in the year 2017 to 80% by the year 2022.
2. Increase sewerage coverage from 11% in the year 2017 to 40% by the year 2022.
3. Increase sanitation coverage from 60.7% in the year 2017 to 65% by the year 2022.
4. Increase funding base from Kshs 4 Billion.to Kshs **108.6 Billion** to spur implementation of this Strategic Plan by the year 2022.
5. Improve Human Capital Management to enhance Performance.
6. Enhance use of technology by continuous investment in Information Management System (IMS) and ICT infrastruture to have Agency's operations fully automated by the year 2022.
7. To strengthen leadership and governance for efficient and effective delivery of services.

The strategic elements of the Agency have been summarized in the following matrix:

Table 11: Strategy Matrix

Key Result Areas	Strategic Objectives	Strategies
1. Water Coverage	Increase water coverage from 40% in the year 2017 to 80% by the year 2022	1. Increase water supply for affordable housing and manufacturing as a driver of the 'Big Four' Agenda 2. Increase water supply for food security as a driver of the 'Big Four' Agenda 3. Develop new water sources to increase production by 283,400m³/day by the the year 2022 4. Develop water treatment works for 6 major towns within the Agency's area of coverage to increase treatment works capacity by 46,800m³/day by the the year 2022 5. Rehabilitation of 5No. existing water supply schemes for major towns to increase supply by 56,500m³/day by the the year 2020 6. Develop new Bulk water transmission and distribution infrastructure by 660km by the the year 2021 7. Support County Governments and WSPs in the reduction of NRW in major urban areas from 54% to 38% by the the year 2022
2. Sanitation Coverage	Increase sewerage coverage from 11% in 2017 to 40% by the year 2022.	1. Develop and extend new trunk sewers and sewer reticulation by 600km in major urban areas by the the year 2021 2. Develop new sewage treatment infrastructure to increase capacity by 111,500m³/day
	Increase sanitation coverage from 60.7% in the year 2017 to 65% by the year 2022.	1. Increase access to adequate sanitation in urban areas from 3,410,290 people to 3,660,290 people
3. Resource Mobilization	Increase funding base from Kshs4 Billion to Kshs 108.6 Billion to spur implementation of this Strategic Plan by the year 2022.	1. Develop Resource mobilization strategy 2. Formulate a 15 the year water and sanitation master plan 3. Participate in the MTEF and Annual Budgeting Process 4. Engage Development Partners for grants and Concessional Loans for resource leveraging 5. Develop framework for loan repayment and payment of licensee Remuneration arrears by Water Service Providers.
4. Human Capital Capacity	Improve Human Capital Management to enhance Performance	1. Review performance management systems 2. Enhance Youth Employment 3. Develop/review Human Capital management strategy 4. Strengthen Human Capital development 5. Culture and attitude change

Key Result Areas	Strategic Objectives	Strategies
		6. Enhance Knowledge management 7. Improve work environment 8. Succession management 9. Mainstream cross-cutting issues of gender, disability, alcohol & drug abuse and HIV /AIDS which impact on water and sanitation
5. Information Communication Technology Capacity	Enhance use of Technology by continuous investment in Information Management System (IMS) and ICT infrastructure to have Agency's operations fully automated by the year 2022.	1. Review ICT Policy framework. 2. Develop ICT infrastructure. 3. Adopt modern Management Information Systems 4. Enhance ICT security
6. Governance, legal and institutional framework	Strengthen leadership and governance for efficient and effective delivery of services.	1. Monitoring, Evaluation and Reporting 2. Maintain statutory and regulatory compliance 3. Enhance institutional integrity and anti-corruption measures 4. Review and strengthen instruments of governance in the organization 5. Acquire ISO 9001:2015 certification by the year 2022

CHAPTER FOUR: IMPLEMENTATION AND COORDINATION FRAMEWORK

5.0 Overview

This chapter addresses issues on human capital and financial resource needs relating to the implementation of the Strategic Plan. The section evaluates financial and Human Capital constraints, sources of funds, results of capacity assessment, analysis of current organizational structure and functions, capacity development strategy, cost implications, the organizational chart and elaborating changes made to implement the Strategic Plan. The section also illustrates responsible teams for implementing the various aspects of the Strategic Plan.

5.1 Structure of the Organization

TAWWDA undertook reorganization of the all functions in the organization with a view to aligning its activities to the Water Act and further inform the Strategic Plan for the period 2018-2022 and its implementation. The Agency revised the organization structure and its establishment to determine an optimum staffing levels to implement the plan for the five the year period. The Agency's organization structure is designed according to the core mandates, with support departments and units providing ancillary services.

The Agency's Board of Directors has delegated its day to day operations to management headed by the CEO. TAWWDA is organized into two (2) Departments; and three (3) Divisions headed by Chief Managers and Managers respectively. The Department and Divisions are as follows:
   i.   Infrastructure Development Department;
   ii. Corporate Services Department;
   iii. Supply Chain Management Division;
   iv. Legal Services and Corporation Secretary Division; and
   v.   Internal Audit Division.

5.1.1   The Board of Directors (BoD)

The leadership of TAWWDA is entrusted to a Board of Directors headed by the Chairperson. The Board reports to the Cabinet Secretary Ministry of Water, Sanitation and Irrigation who is the appointing authority. The Board is responsible for providing strategic leadership and oversight to Management. Specifically, the Board is mandated to undertake the following:
   1. Provide leadership in the management of the organization and in particular articulating the goals of the organization and planning how these goals will be achieved;
   2. Ensure that good Corporate Governance is integrated at all levels of the organization;

3. Provide guidance to management in the development of policy in key result areas of the organization; approving policy and ensuring management compliance with the Board's approved policy;
4. Approve organizational structures and staff complement;
5. Monitor management and corporate performance against the Strategic Plans and Budgets approved by the Board.
6. Nurture positive relations with Stakeholders;
7. Ensure compliance with statutory and regulatory framework for the organization.

5.1.2 Office of the Chief Executive Officer

The day to day operation of the Agency is delegated to Management headed by the Chief Executive Officer who is responsible for providing leadership in formulation, promotion and implementation of strategies and policies of the Agency in line with its mandate. The Chief Executive Officer is supported by Departmental Heads, Senior Managers and Officers. The Chief Executive Officer on behalf of management reports to the Board of Directors. The Management has the responsibility of implementing the Strategic Plan and reporting to the Board on the progress towards the achievement of the planned activities. Management set the strategic goals of the organization and make decisions on how the overall organization will operate.

The CEO is also responsible for the overall management, provision of strategic leadership, and chief advisor to the Board.

5.1.3 Infrastructure Development Department

The Infrastructure Development Department is headed by the Chief Manager, Infrastructure Development, answerable to CEO, for the coordination and management of Planning and design, project management, water resources development, and water utilities management functions. The Department comprises four (4) Divisions namely:-

  i.   Planning and Design;
  ii.   Project Management;
  iii.   Water Resources Development; and
  iv.   Water Utilities Management.

5.1.3.1 Planning and Design Division

The Planning and Design Division is be headed by Superintendent Engineer, Job Grade TAWWDA 3 who is answerable to the Chief Manager, Infrastructure Development for the following functions:

  i.   carrying out reconnaissance surveys;
  ii. data collection and processing;
  iii. carrying out feasibility studies, investigations, data collections, analysis and designs on construction;

iv. carrying out preparation of TORs & RFPs;
v. financial and economic analysis;
vi. evaluation of tenders;
vii. project planning and developing designs;
viii. liaising with other departments on project EIAs, ESIAs and RAP; and
ix. planning and designing water and sewerage structures.

5.1.3.2 Project Management Division

The Project Management division is headed by Superintendent Engineer, Job Grade TAWWDA 3 who is answerable to the Chief Manager, Infrastructure Development for the following functions:

i. supervising works and services;
ii. preparing and presenting progress reports and Projects;
iii. supervising construction works and measurements;
iv. determining and preparing payment certificates;
v. monitoring and evaluation of quantity and quality of ongoing/completed works;
vi. preparation of rehabilitation/augmentation of water and sewerage systems; and
vii. storing information for improvement.

5.1.3.3 Water Resources Development Division

The Water Resources Development Division is headed by Superintendent Geologist/ Hydro geologist, Job Grade TAWWDA 3 who is answerable to the Chief Manager, Infrastructure Development for the following functions:
i. carrying out hydro-geological, geo-technical and geophysical surveys on water projects;
ii. supervising the ground water development like drilling, equipping and maintenance of boreholes; and
iii. collecting and storing water resources data.

5.1.3.4 Water Utilities Management Division

The Water Utilities Management Division is headed by Superintendent Engineer, Job Grade TAWWDA 3 who is answerable to the Chief Manager, Infrastructure Development for the following functions:

i. providing technical services and capacity building to County Governments and WSPS within its jurisdiction;
ii. monitoring and evaluating WSPs;
iii. contracting new WSPs;
iv. carrying out drought mitigation programmes; and
v. enforcing Service Provision Agreements (SPAs) with WSPs.

5.1.4 Corporate Services Department

The Corporate Services Department is headed by the Chief Manager, Corporate Services, answerable to the CEO for coordination and management of the finance and accounts, Human Capital and administration, ICT, strategy, compliance and communication functions. The department comprises the following Divisions:

     i.   Finance and Accounts;
    ii.   Human Capital and Administration;
   iii.   Strategy, Compliance and Corporate Communication; and
   iv.   Information Communication technology.

5.1.4.1 Finance and Accounts Division

The Finance and Accounts Division is headed by a Manager, Finance and Accounts Job Grade TAWWDA 3 who is answerable to the Chief Manager, Corporate Services.Responsible for financial planning, analysis, budgeting, maintenance of an asset register, and debt management.

5.1.4.2 Human Capital and Administration Division

Human Capital and Administration Division is headed by a Manager, Human Capital and Administration, Job Grade TAWWDA 3 who is answerable to the Chief Manager, Corporate Services.The division is responsible for developing, reviewing and implementing Human Capital and administration systems, policies and procedures that support realization of goals and objectives of the organization.

5.1.4.3 Strategy, Compliance and Corporate Communication Division

The Strategy, Compliance and Corporate Communication Division is headed by a Manager, Strategy, Compliance and Corporate Communication Job Grade TAWWDA 3 who is answerable to the Chief Manager, Corporate Services for Corporate Planning & Strategy, Compliance, Risk Management & Quality Control and Corporate Communication. The division is responsible for coordination of strategy development, corporate performance management, corporate research and monitoring and evaluation of programmes and projects.

It is also responsible for the management of the corporate communication, public relations and the TAWWDA branding to enhance service delivery.

5.1.4.4 Information Communication Technology (ICT) Division

The Information Communication Technology Division is headed by a Manager, Information Communication Technology Job Grade TAWWDA 3 who is answerable to the Chief Manager, Corporate Services for ICT infrastructure development, ICT system administration and security. The division is responsible for overseeing all ICT operations of the organization and advising the management and the board on the formulation, development and implementation of ICT policies and procedures. It is also responsible for preparation and maintaining a comprehensive information management system for

posterity. It also ensures linkage of the Information system with the developed infrastructure.

5.1.5   Supply Chain Management Division

The Supply Chain Management Division is headed by a Manager, Supply Chain Management Job Grade TAWWDA 3, who is answerable to the CEO, for general procurement, stores management and disposal of assets. The division is charged with the responsibility of overseeing the overall management of the Procurement function, offering technical advice on procurement issues and ensuring compliance with procurement policies, rules and regulations.

5.1.6   Corporation Secretary and Legal Services Division

The Corporation Secretary and Legal Services Division is headed by a Corporation Secretary and Legal Services Manager, Job Grade TAWWDA 3 who is answerable to the Board on all Board secretarial matters and to the CEO on all legal matters.

The role of Corporation Secretary is to provide guidance to the Board of Directors on their duties and responsibilities and on matters of governance, undertake Board induction andtraining, updating the Board and Committeecharters, prepare the Board workplans, evaluation, and audit and Implement the code of conduct and ethics. The division is also responsible for ensuring compliance with all relevant statutory and regulatory requirement, and offer legal advisory to the management on legislation.

5.1.7   Internal Audit Division

The Internal Audit Division is headed by Manager, Internal Audit, Job Grade TAWWDA 3 who shall be answerable functionally to the Board through the Audit, Risk, Governance and Compliance Committee and administratively to the CEO. The division is responsible for the provision of independent and objective assurance by bringing a systematic, disciplined approach to evaluation and improvement of the effectiveness of risk management, control and governance process.

5.1.8   TAWWDA's Organizational Structure

The current organizational structure for the TanathiWater Works Development Agency is shown in Annex III. The Agency is aligning it's to the mandate and new functions as per Executive order No. 1 of 2018 and Water Act 2016.

5.2 Staff Establishment

The Agency's s major strength is in its Human Capital. This plan will focus to build staff capacity and provide a good working environment for their service delivery

The Agency's current total number of staff is 40 against an authorized establishment of 72 staff, resulting in a variance of 32 staff. Out of the 40 in post, technical officers constitute 40% of staff while shared services 60%.

The Agency has proposed establishment of 77 staff, out of which 40 are already in post, this gives a variance of 37. Out of the proposed 77 staff, technical services has proposed 47 staff while shared services 30 staff giving a percentage of 61% for technical and 39% for shared services.

The breakdown is as summarized in Annex IV.

5.3 Human Capital Strategies

The Agency will put in place Human Capital strategies to develop its staff so as to effectively deliver on its mandate. This will entail: Enhancing staff competencies, improving working environment, enhancing performance management, succession management and enhancing knowledge management

5.4 Financial Resources

Tanathi WWDA will mobilise funds mainly from Gok through the exchequer releases and from Development Partners for grants and loans through PPPs , EPCF and other funding models. The Agency will also engage Water Service Providers through Counties for payment of arrears in Licensee remuneration and also funds for loan repayment.

5.4.1   Financial Resource Requirements

The Agency will require KShs. **108.6 Billion** to fully implement this Strategic Plan over a period of five the years . The projected resource requirement for the KRAs is   shown in Table 12.

Table 12: Financial Requirements of the Strategic Plan as per Key Result Area

Key Result Area	The Financial year (In Ksh. Millions)					
	Printed Estimates 2018/19	Requirements				Total
		2019/20	2020/21	2021/22	2022/23	
KRA 1: Water Coverage	2,680.00	5,840.00	17,713.00	26,022.00	29,522.50	**81,777.50**
KRA 2: Sanitation Coverage	10.00	1,016.50	5,363.00	11,485.00	8,126.00	**26,000.50**
KRA 3: Resource Mobilization	1.35	3.35	107.85	108.85	9.85	**231.25**
KRA 4: Human Capital Capacity	27.30	39.60	55.30	67.30	75.90	**265.4**

		72.50	19.20	14.50	14.00	125.20
KRA 5: ICT Capacity	5.00					
KRA 6: Governance, Legal and Institutional Framework	29.10	36.25	29.50	29.25	30.70	154.80
Total	2,752.75	7,008.20	23,287.85	37,726.90	37,778.95	108,554.65

5.4.2 Resource Gaps

The funding of the programs and projects will come from the Government of Kenya (GoK) through the exchequer releases, Water Service Providers and Development Partners. TAWWDA requires KSh. **108.6 Billion** to implement the Strategic Plan over the five the year period. It is projected that Ksh. 17.86 Billion will be total financial allocation by GoK, Kshs 24.97 Billion from Development Partners and Kshs 6.1 Billion from Kenya Towns Water Supply and Sanitation Programme. This leaves a funding gap of Ksh. **59.7 Billion** which will be mobilized from Development Partners.Table 13 summarizes the resource requirements and deficits.

Table 13: Summary of Resource Gap - FY 2018/19 to FY 2022/23

Expenditure	2018/19 Estimates in Ksh. Millions	Projected Requirement in Ksh. Millions				Projected Allocation in Ksh. Millions			
		2019/20	2020/21	2021/22	2022/23	2019/20	2020/21	2021/22	2022/23
Recurrent	58	197	200	230	250	120	200	230	250
Development	1,275	1,070	8,048	15,781	16,655	1,070	8,048	15,781	16,655
Subtotal (MTEF)	1,333	1,267	8,248	16,011	16,905	1,190	8,248	16,011	16,905
Recurrent Deficit/Funding gap	129	77	-	-	-	77	-	-	-
Development Deficit/Funding gap	-	-	-	-	-	-	-	-	-
Total Deficit/ Funding Gap	129	77	-	-	-	77	-	-	-

5.4.3 Resource Mobilization Strategies

The Agency will mobilize resources from different sources including GoK, Development Partners,and from Water Service Providers through the county Governments. The Agency will develop resource mobilization strategy, formulate 15 year master plan , collaborate with Deveoplment Partners ,develop framework for loan repayment and payment of

arrears in licensee remuneration as well as participating in thebudgeting process of GoK. These strategies will be employed to attain financial sustainability both in the operations and in the infrastructure development. The identified sources of financing available to finance operations and capital expenditure are indicated in the Table 14:

Table 14:Sources of Funds

No	Source of Funding	Summary of how it will be Realized
1.	GOK	Through the Medium Term Expenditure Framework and the Annual Budgeting process, the Agency will mobilise financial resources to fund the operations and implementation of capital projects to reach underserved and unserved areas. The agency will continue working with the Ministry of Water, Sanitation and Irrigation and The National Treasury and Planning to attain financial sustainability.
2.	Development Partners	TAWWDA will seek for donor support from Development Partners to obtain grants and concessional loans.The Agency will also pursue other models of financing including Public private partnership, Engineering Procurement Construction and Finance (EPCF) in development of water and sewerage infrastructure. This will be attained through continuous engagement and collaboration of the Development Partners.
3.	Licensee Remuneration in arreas for WSPs	TAWWDA has accumulated arrears in Licensee Remuneration from Water Service Providers totaling to Kshs 229million. The Agency will develop framework for recovery of the arrears. The Agency will continously engage County Governments and seek for advice and direction from Ministry of Water, Sanitation and Irrigation.
4.	Loan repayment	As per the Water Act 2016, Water Service Providers shall not be required to pay any fee for use of the public assets for provision of Water Services other than repayment of loan acquired for development of those assets. TAWWDA will engage the Counties and Water Service Providers to enter into an agreement for loan repayment. The agreement will be in force until such a time full repayment of the Loan is done.For new projects, the Agency will install Master Water Metres and sell water in bulk to WSPs until such a time the entire loan is repaid. The new Projects include; Machakos Water Supply, Mwala Water Supply and Matuu Water Supply. The Agency will also seek for intervention on this matter from the Ministry of Water, Sanitation and Irrigation.

5.4.4 Risk analysis and mitigation measures

This section analyses risks which could affect the corporate performance in terms of implementation of planned activities in the organization strategy. The risks are analysed in the context of the probability of their occurrence, likely impacts and mitigation strategies. They include risk relating to the long-term performance of the organisation as well as medium term. Table 15 gives risk framework.

Table 15: Summary of the Risk Framework

Risk	Consequence of Risk	Category	Impact	Mitigation Measures	Responsibility
Project sustainability	Funded projects may not achieve the intended objectives	High	High	i) Enhanced appraisal and implementation process ii) In-depth analysis of the results of the Operations Monitoring and learning iii) Communicate with Counties and WSPs on steps to take to operationalise non-functioning infrastructure and follow-up	CEO, CM-ID, CM-CS
Re-organization of government and policy changes	Disorientation of operations	Medium	Medium	Strengthen adherence to policy implementation and Effective articulation of Ministry's mandate	BOD/CEO
Failure to reach targeted population with water andd sanitation services	Failure to achieve mandate and objectives	High	High	Continuously carry out, progress review, resource mobilisation and financing mechanisms	CEO
Climate Change	i) Declining water levels ii) Conflict with upstream users iii) High cost of water infrastructure development	High	High	i) Climate change adaptation and mitigation measures ii) Cross-Counties water sharing agreements	BOD, CEO
HighStaff turnover	i) Loss of institutional memory ii) Low performance iii) Reducedstaff morale	Medium	High	i) Develop a career progression guidelineto retain competentstaff ii) Introduce various	CEO

Risk	Consequence of Risk	Category	Impact	Mitigation Measures	Responsibility
				incentives to motivate and retain staff	
Non-Compliance with Laws, Regulations and financing agreements	i) Costly litigation ii) Termination of financing agreements iii) Corporate reputation affected	Medium	High	i) Regularly review contracts to ensure compliance. ii) Carry out compliance audits iii) Compliance with Laws & Regulations	CEO/CM-CS/M-LS&CS
Inadequate and delayed exchequer funding	i) Conflicts with PAPs ii) Delay in completion of projects iii) Low staff morale iv) Cancellation of signed agreements	Medium	High	i) Pursue alternative financing streams ii) Sustain existing Partnerships	CEO
Governance, leadership challenges and corruption	i) Low Development Partners' goodwill ii) Reduced funding iii) Low political support iv) Corporate reputation affected, image	High	High	i) Entrenchment of corporate governance mechanisms, ii) Continuous staff training and implementation of the ethics and anticorruption measures	BOD, CEO
Low absorption of allocated funds	Failure to achieve the desired mandate	Medium	High	i) Engage with the Ministry and development partners on timely allocation of funds ii) Carry out periodic analysis of the fund's absorption rate iii) Enhanced capacity in technical departments	CEO, CM-CS.CM-ID

4.4.1   Risks Monitoring System

The Agency will establish a Risk Monitoring System for mitigating the impact of risks. The components of the System are to be: TAWWDA risk management policy and plan to guide the development and operationalization of the system in the Departments and Divisions.

Risk Management Committee composed of all Heads of Departments & Divisions, to be chaired by the Chief Executive Officer. The Committee's main responsibility will be to consider and adopt risk management measures and report on the same.

A Risk Management Coordinators (RMCs) to harmonize and oversee the risk management activities in all Departments and Divisions. These activities include risk identification; risk assessment; as well as the development and implementation of appropriate mitigation measures. Another critical activity for the RMC will be the development of early warning indicators for risks on its radar.

CHAPTER FIVE: MONITORING, EVALUATION AND REPORTING

5.0 Overview

This chapter outlines the monitoring, evaluation and reporting framework for the Strategic Plan. It gives the main outputs/outcome indicators and indicators for national monitoring of the MTP III 2018-2022. The chapter provides the basis of identification of annual targets for inclusion in Performance Contract of TAWWDA. The chapter also outlines the institutional set up for monitoring, evaluation, learning and frequency of reporting.

5.1 Monitoring, Evaluation, and Reporting

The Agency is expected to establish an M&E unit to coordinate and provide technical support to various components of M&E. The monitoring and evaluation system at the Agency will include;

1. Project implementation units (PIUs) - the PIUs will be responsible for technical support of the M&E committee and ensure provision of monthly progress reports and data to support the committee.
2. Monitoring and Evaluation Committees- Reporting to management and the BoD, the committee will be responsible for development, validation of data and operationalization of M&E framework, plans, and M&E policies and backstopping of PIUs. It will also coordinator monitoring and progress reporting to different stakeholders or agencies. It will undertake the development of M&E tools, policies, standards and guidelines to facilitate effective implementation of M&E activities and utilization of resources.Finally, the committee will purpose to and undertake various evaluation studies to determine the projects impact or value money.

The key documents that will provide the basis for M&E will include the Strategic Plan, annual performance contracts, annual work plans, annual budget and expenditure review, staff appraisal reports and project progress reports. The reports generated from M&E exercises will be widely shared with both internal and external stakeholders through various communication channels such as mails, social media, and stakeholders' forum.

The strategic plan will be reviewed annually to ensure that necessary changes are effected and the organization remains on track in implementation of its activities. Mid-term and end term evaluation will also be undertaken to determine effectiveness, efficiency, sustainability, relevance and equity in projects being implemented. These will inform future planning.

5.2 Monitoring Methodologies

Monitoring of the Strategic Plan 2018-2022implementation is meant to continuously and periodically check progress against set targets and to determine whether activity implementation is on course towards achievement of set objectives and goals. The Agency will adopt various logical frameworks for the various projects against which results will be reported.

Programme/ projects monitoring will be undertaken to cover the following elements:

Table 16: Programme/ projects monitoring

Monitoring type	Description	Frequency
Compliance monitoring	For the various projects, monitoring will be undertaken to check. i. Cost ii. Time iii. Quality	Quarterly
Process monitoring	Monitoring progress of the project towards the intended results. This kind of monitoring will measure the inputs, activities and outputs.	Quarterly
Performance monitoring	Site meetings, follow ups	As scheduled
Annual Operations Monitoring	The Annual OperationMonitoring Exercise is premised on project follow-up, which focuses upon the post-commissioning phase in order to assess and increase long-term sustainability.	Annual
Impact/Outcome monitoring	i. Direct impacts (early on) and eventual outcomes (somewhat later) ii. Consequences direct or indirect of the results.	Annual

5.2.1 The components of a project monitoring and evaluation system Section

The Agency's M&E system has six main components. These six components help to ensure that M&E is relevant to the project. Each is considered briefly below:

The main components of a project M&E system

1. Clear statements of measurable objectives for the project and its components.
2. A structured set of indicators covering: inputs, process, outputs, outcomes, impact, exogenous factors and cross-cutting factors.
3. Data collection mechanisms capable of recording progress over time, including baselines and a means to compare progress and achievements against targets.

4. Where applicable, building on data collection with an evaluation framework and methodology capable of establishing causation (attribution).
5. Clear mechanisms for reporting and use of M&E results in decision making.
6. Sustainable organizational arrangements for data collection, management, analysis and reporting.

5.3 Review of the Strategic Plan

Midterm review: To be undertaken internally by the year 2020

End term evaluation: To be undertaken externally by the year 2022.

ANNEXURES

Annex I: Implementation Matrix

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
Strategic Objective 1: Increase access to safe water from 40% in the year 2017 to 80% by the year 2022																
Key Result Area: Water Coverage																
Expected Outcome: Increased access to safe and adequate water																
Increase water supply for affordable housing and manufacturing as a driver of the 'Big Four' Agenda	Construction of Mavoko water supply infrastructure- 2.7 B	Additional water supply Mavoko,Athi River,Syokimau and Mlolongo, with 17,000m³/day to serve 250,000 people	% of completion	100%	35%	75%	100%	-	-	680	700	470	-	-	1,850	CM-ID/ Supt. P&D/ Supt. PM
	Design and Construction of Ndarugu 1 Dam infrastructure-46B	storage capacity of 225 Million M³ for Syokimau, Mlolongo, Kitengela, and parts of Nairobi (Utawala, Outer Ring road) by the year 2022 for Water supply of 160,000m³/day to serve 1.5 Million people	% of completion	100%	10%	25%	50%	75%	10%	640	1,600	3,200	6,400	9,600	21,440	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
Increase water supply for food security as a driver of the 'Big Four' Agenda	Design and Construction of Yatta Dam project -8B	a storage capacity of 30Million M³ by the year 2022 to supply 50,000m³/day of water for irrigation of 120Ha of land in Support of food security	% of completion	100%	5%	10%	30%	50%	100%	200	500	1200	2400	4,200	8,500	CM-ID/ Supt. P&D/ Supt. PM
Develop new water sources to increase production by 283,400m³/day by the year 2022	Construction of Namanga dam and intake works	Water Supply to 30,000 people for Namanga Town and its environs by the year 2022 with 6000m³/day	% of completion	100%			10%	70%	100%	-	-	200	2000	2000	4,200	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Olooloitikosh Dam	A storage capacity of 34Million M³ of water to supply 500,000 people in Kitengela and Kajiado towns with 45,000m³/day of water by the year 2022	% of completion	100%	5%	10%	20%	55%	100%	100	100	2000	2000	2000	6,200	CM-ID/ Supt. P&D/ Supt. PM
	Consruction of Ilbisil water supply	Additional capacity of 2500m³/day of water by the year 2021	% of completion	100%		10%	60%	100%		-	120	720	360	-	1,200	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of Oloshooibor dam	supply Magadi town with 2000m³/day of water by the year2021	% of completion	100%		10%	55%	100%		-	150	825	525	-	1,500	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Miwongoni dam	storage capacity of 2.7 Million M³ and intake works of 10,000m³/day by the year 2021 for Machakos town	% of completion	100%		10%	55%	100%		-	25	65	160	-	250	CM-ID/ Supt. P&D/ Supt. PM
	Designs and construction of Mwania Dam	increase storage by 7.5 Million M³ and intake works of 20,000m³/day by the year 2022 for Machakos town	% of completion	100%	3%	10%	50%	75%	100%	50	200	1150	1000	2000	4,400	CM-ID/ Supt. P&D/ Supt. PM
	Construction of new intake works for Matuu town	Production of 4600m³/day at Thika River/Yatta Canal by the year 2021	% of completion	100%			40%	100%		-	-	100	50	-	150	CM-ID/ Supt. P&D/ Supt. PM
	Construction of new intake works for Wote town	Production of 1200m³/day at Kaiti river by the year 2021	% of completion	100%			60%	100%		-	-	50	30	-	80	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of new intake works for Mwala and Masii areas	Production of 6500m³/day by the year 2021	% of completion	100%		20%	70%	100%		-	20	180	20	-	220	CM-ID/ Supt. P&D/ Supt. PM
	Construction of intake works for Kiambere-Mwingi water supply project	Production of 5600m³/day by the year 2021	% of completion	100%		10%	50%	100%		-	150	600	750	-	1,500	CM-ID/ Supt. P&D/ Supt. PM
	Design & Construction of Kitimui Dam	increase water storage by 3.8 million M³and intake works of 6000m³/day to serve 34,000 people in Kitui by the year 2022	% of completion	100%			20%	50%	100%	-	-	200	1800	1200	3,200	CM-ID/ Supt. P&D/ Supt. PM
	Design and construction of Mutomo water supply and sanitation project	increase water storage by 2.5Million M³ and produce 10,000m³/day of water to serve 80,000people in Mutomo and Ikutha towns and their environs by the year 2022	% of completion	100%			25%	65%	100%	-	-	400	1600	150	3,500	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Design and Construction of Wanyama Water Supply project	Production of 4,000m³/day to serve 21,000 people in Kenol and Kathiani areas by the year 2021	100% completion	100%	5%	30%	75%	100%	100%	-	60	180	600	360	1,200	CM-ID/ Supt. P&D/ Supt. PM
	Design and construction of Kilome-mikuyu Water supply project (KweVose Dam)	Production of 9,000m³/day of water to serve 67,000 people in Kilome, Kasikeu, Konza and Nunguni towns by the year 2022	100% completion	100%	10%	50%	75%	100%	100%	-	50	700	750	750	2,250	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Nguni water supply project	Production of 2,000m³/day of water produced to serve 19,000 people by the year 2021	% of completion	100%			15%	55%	100%	-	-	50	200	150	400	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Ikoo Valley Dam Water Supply Project	Production of 10,000m³/day of water to serve 150,000 people in Mutitu, Mikuyuni, Zombe, Kyamatu, and Voo Markets by the year 2022	% of completion	75% completion		7.5%	37.5%	55%	75%	-	300	1200	700	800	3,000	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Drilling, equipping and pipeline extensions of 250No boreholes	Production of additional 16,000m³/day of water by the year 2022	No of Boreholes	250 No	50	50	50	50	50	600	600	600	600	600	3,000	CM-ID/ Supt. Geologist
	Construction of 250No small dams and water pans	Production of 100,000m³/day of water by the year 2022	No of small dams	250 No	50	50	50	50	50	400	400	400	400	400	2,000	CM-ID/ Supt. P&D/ Supt. PM
	Rehabilitation and desilting of existing 10 No medium size dams	Increase water production by 25,000m³/day by the year 2022	No of dams	10 No			2	4	4	-	-	10	20	20	50	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Mulima dam to supply	Supply Mbooni and Tawa town to produce 4000m³/day of water b y the year 2022	% of completion	40%					40%	-	-	-	-	480	480	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Kinze dam	supply Kisau town to produce 2000m³/day of water	% of completion	50%					50%	-	-	-	-	750	750	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
Develop water treatment works for 6 major towns with the Agency's area of coverage to increase treatment works capacity by 46,800m³/day by the year 2022	Construction of water treatment plant for Namanga Town and its environs	Treatment works of 6,000m³/day by the year 2022	% of completion	100%				33%	100%	-	-	-	100	200	300	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 10,000m³/day water treatment plant for Kajiado and Kitengela town	Treatment works of 10,000m³/day by the year 2022	% of completion	15%					15%	-	-	-	-	67.5	67.5	CM-ID/ Supt. P&D/ Supt. PM
	Construction of water treatment plant for Mavoko water supply project in Athi River	12,000m³/day treatment works by the year 2019	% of completion	100%		60%	100%			-	200	300	-	-	500	CM-ID/ Supt. P&D/ Supt. PM
	Construction of water treatment works for Machakos town	10,000m³/day treatment works by the year 2021	% of completion	100%			45%	100%		-	-	100	200	-	300	CM-ID/ Supt. P&D/ Supt. PM
	Construction of new treatment works for Mwala and Masii towns	6,500m3/day Water Treatment plant by the year 2022	% of completion	100%			40%	100%		-	-	100	150	-	250	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of new treatment works for Matuu town 4200m³/day capacity	4,200m³/day Water Treatment plant by the year 2022	% of completion	100%		10%	60%	100%		-	25	125	100	-	250	CM-ID/ Supt. P&D/ Supt. PM
Rehabilitation of 5 No existing water supply schemes for major towns to increase supply by 56,500m³/day by the year 2020	Expansion and rehabilitation of existing Kajiado water supply system	Produce additional 3500m³/day of water by the year 2020	% of completion	100%						-	-	100	150	250	500	CM-ID/ Supt. P&D/ Supt. PM
	Rehabilitation of existing Machakos water supply treatment works	improve capacity by 5000m³/day by the year 2021	% of completion	100%			60%	100%		-	-	20	30	-	50	CM-ID/ Supt. P&D/ Supt. PM
	Rehabilitation of Kitui Town water supply system phase 1 and 2 through Last mile connectivity	increase water supply by 3000m³/day by the year 2021	% of completion	100%			35%	100%		-	-	130	170	-	300	CM-ID/ Supt. P&D/ Supt. PM
	Rehabilitation of Nolturesh pipeline and Nzai tank	Improve production by 15,000m³/day by the year 2022	% of completion	100%		3%	12%	60%	100%	-	40	160	600	700	1,500	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Rehabilitation of Emali, Sultan, Salama water supply system	Improve production by 5,000m³/day by the year 2022	% of completion	100%		5%	25%	75%	100%	-	75	375	750	300	1,500	CM-ID/ Supt. P&D/ Supt. PM
Develop new Bulk water transmission and distribution infrastructure by 660km by the year 2022	Construction of 85km distribution lines for OngataRongai and Ngong town	85km distribution lines by the year 2021	% of completion	100%	10%	25%	75%	100%		-	-	100	350	400	850	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 45km pipeline distribution lines for Ngong town	45km pipeline by the year 2021	% of completion	100%		20%	75%	100%		-	100	375	25	-	500	CM-ID/ Supt. P&D/ Supt. PM
	Extension of 30km transmission and distribution lines for Loitoktoklast mile connectivity	30km pipeline by the year 2021	% of completion	100%		15%	65%	100%		-	67	293	90	-	450	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 70km pipelines for Namanga Town and its environs	70km pipelines by the year 2022	% of completion	100%			20%	50%	100%	-	-	80	120	200	400	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of 60km distribution pipelines for Kajiado Town and its environs	60km distribution pipelines by the year 2022	% of completion	100%				40%	60%	-	-	-	100	200	300	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 115km pipelines for Mavoko area, Athi River, Syokimau and Mlolongo	115km pipelines by the year 2021	% of completion	100%		20%	60%	100%		-	160	480	160	-	800	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 30km pipeline from Nolturesh to Ithumba areas and surroundings	30km pipeline by the year 2021	% of completion	100%		5%	55%	100%		-	8	90	52	-	150	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 120km transmission and distribution lines in Machakos town	120km transmission and distribution lines by the year 2021	% completion	100%		30%	50%	100%		-	120	180	200	-	500	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 40km pipeline for Matuu town and its surroundings under last mile connectivity	40km pipeline by te year 2021	% completion	100%		20%	50%	100%		-	50	100	50	50	250	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of 50km pipeline for Kiambere-Mwingi phase 2 last mile connectivity	50km pipeline constructed by the year 2021	% completion	100%			10%	40%	100%	-	-	45	135	270	450	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 20km pipeline for Migwani phase 2 Water supply system	20km pipeline constructed by the year 2021	% completion	100%				50%	100%	-	-	-	60	60	120	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 25km pipeline for Masinga-Ikalakala-Ikaatine water supply system	25km pipeline constructed by the year 2021	% completion	100%		5%	50%	100%		-	5	45	50	-	100	CM-ID/ Supt. P&D/ Supt. PM
Support WSPs and county Governments in the reduction of NRW in major urban areas from 54% to 38%	Training of 12 No WSPs technical staff and County staff on NRW management yearly	12 No Trainings	No of Trainings provided	12 No Trainings		3	3	3	3	-	5	5	5	5	20	CM-ID/ Supt. WUM
	Provision of NRW equipment to 12No WSPs through funded programmes by the year 2020	NRW equipment	No. of NRW Equipment provided	12	1	2	3	3	3	10	10	10	10	10	50	CM-ID/ Supt. WUM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
				Sub-Total 1						2,680	5,840	17,713	26,022	29,523	81,777.5	
Strategic Objective2: Increase sanitation coverage from 11% in the year 2017 to 40% by the year 2022																
Key Result Area: Sanitation Coverage																
Expected Outcome: Enhanced accessibility to Sewearge services																
Develop and extend new trunk sewers and sewer reticulation by 550km in major urban areas.by the year 2022	Construction of 75km trunk sewers and laterals for Ngong Town	75Km constructed by the year 2022	% completion	100%			10%	45%	100%	-	-	180	820	800	1,800	
	Construction of 60km trunk sewers and laterals for OngataRongai	60Km constructed by the year 2022	% completion	100%			10%	45%	100%	-	-	150	675	675	1,500	
	Construction of 60km trunk sewers and laterals for Kajiado Town	60Km constructed by the year 2022	% completion	100%			5%	50%	100%	-	-	65	715	520	1,300	

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of 120km trunk sewers and laterals for Mavoko(AthiRiver, Mlolongo, Syokimau)	120Km constructed by the year 2021	% completion	100%			5%	45%	100%	-	50	200	2130	2120	4,500	
	Construction of 80km trunk sewers and laterals for, Kitengela	80Km constructed by the year 2022	% completion	100%		5%	10%	45%	100%	-	140	420	1680	560	2,800	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 45km trunk sewers and laterals for Namanga Town and environs	45Km constructed by the year 2022	% completion	100%			25%	65%	100%	-	-	200	680	120	1,000	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 60km trunk sewers and laterals in Machakos town	60Km constructed by the year 2021	% completion	100%		10%	30%	10%		-	110	440	550	-	1,100	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 25km laterals for Kitui town under last mile connectivity	25Km constructed by the year 2021	% completion	100%			40%	100%		-	100	150	-	-	250	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of 30km sewers and laterals for Mwingi town	30Km constructed by the year 2021	% completion	100%			40%	100%		-	-	120	180	-	300	CM-ID/ Supt. P&D/ Supt. PM
	Construction of 65km laterals for Tala /Komarock town under last mile connectivity	65Km constructed by the year 2021	% completion	100%		15%	65%	100%		-	120	520	160	-	800	CM-ID/ Supt. P&D/ Supt. PM
Develop new sewage treatment infrastructure to increase capacity by 111,500m³/day	Construction of new sewage treatment works for Machakos town	12,500m³/day capacity by the year 2021	% completion	100%	5%	35%	100%			-	22.5	100	128	-	251	CM-ID/ Supt. P&D/ Supt. PM
	Construction of new sewage treatment works for Kajiado town	10,000m³/day capacity by the year 2022	% completion	100%			10%	45%	100%	-	-	40	220	140	400	CM-ID/ Supt. P&D/ Supt. PM
	Construction of new sewage treatment works for Ngong town	12,500m³/day capacity by the year 2022	% completion	100%			10%	45%	100%	-	-	55	302	193	550	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of new sewage treatment works for OngataRongai	15,000m³/day capacity by the year 2022	% completion	100%			5%	55%	100%	-	-	30	360	240	630	
	Construction of new sewage treatment works for Masii town	3500m³/day capacity by the year 2021	% completion	100%		3%	37%	100%		-	9	128	183	-	320	CM-ID/ Supt. P&D/ Supt. PM
	Construction of new sewage treatment works for Athi River, Mavoko township, Mlolongo, Ngong and Kitengela	35,000m³/day capacity by the year 2022	% completion	100%		5%	35%	65%	100%	-	275	2200	1375	1650	5,500	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Sewerage system and treatment works for Wote, Makindu, Kibwezi Towns	25,000m³/day capacity of waste water by the year 2022	% completion	100%				45%	100%	-	-	-	675	825	1,500	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Sewerage system and treatment works for Matuu Town	10,000m³/day of wastewater by the year 2022	% completion	100%			5%	40%	100%	-	-	20	160	220	400	CM-ID/ Supt. P&D/ Supt. PM

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Construction of sewage treatment works	2,400m3/day for Mwingi town by the year 2021	% completion	100%			40%	100%		-	-	60	90	-	150	CM-ID/ Supt. P&D/ Supt. PM
	Construction of Sewerage system and treatment works	15,000m3/day of wastewater by the year 2022 for Tala/Komarock	% completion	100%		20%	50%	75%	100%	-	170	255	382	43	850	
Strategic Objective3: Increase sanitation coverage from 60.7% in the year 2017 to 65% by the year 2022																
Key Result Area: Sanitation Coverage																
Expected Outcome: Enhanced accessibility to Sanitation services																
Increase the number of people in urban informal settlements accessing adequate sanitation by 250,000	Construct 50No sanitation blocks in 10 small towns by the year 2021	50 No sanitation blocks constructed	No of blocks	50No.	5	10	15	10	10	10	20	30	20	20	100	CM-ID/ Supt. P&D/ Supt. PM
				Sub-Total 2						10	1,017	5,363	11,485	8,126	26,001	
Strategic Objective 3: increase funding base from Kshs 4 Billion to Kshs 108.6 Billion to spur implementation of this Strategic Plan by the year 2022.																

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
Key Result Area: Resource mobilization																
Expected Outcome: Increased funding from Kshs 4 Billion to Kshs 108.6 Billion																
Formulation of a 15 The year Master Plan	Develop of a 15 year Master Plan in the Counties	A 15 the year Master Plan	2No. reports for water and sanitation	100%	-	-	50%	50%	-	-	-	100	100	-	200.0	CM CS/ M, SCCP
Developing resource mobilization strategy.	Develop and implement Resource Mobilization strategy	Resource Mobilization Strategy	1No. strategy in place	100% Complete	-	100%	-	-	-	-	0.5	-	-	-	0.5	CM CS/ M, SCCP
	Establish Resource mobilization unit	Resource mobilization unit	Unit established	1No	-	1	-	-	-	-	1	4	4.5	5	14.5	CM CS/ M, SCCP
Participating in the MTEF and annual Budgeting Process	Lobbying to enhance exchequer funding to Kshs	MTEF Reports Annual Budgets	Increase budget allocation to Kshs	Kshs	-					1	1	2	2	2	8.00	CM CS/ M, SCCP
	Increase absorption of internally and externally generated funds to 100%	Budget Variance reports	100% budget absorption	100%	100%	100%	100%	100%	100%	0.05	0.05	0.05	0.05	0.05	0.25	CM CS/ M, SCCP
	Enhance financial reporting	Development of quarterly and Annual financial Reports	% of compliance	100%	100%	100%	100%	100%	100%	0.1	0.1	0.1	0.1	0.1	0.50	CM CS/ M, SCCP
	Develop cost saving strategies	Cost Saving strategy	% of completion	100%	100%	100	100	100	100	-	0.5	--	-	-	0.50	CM CS/

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
						%	%	%	%							M, SCCP
Engagement of Development Partners for Grants and Concessional Loans	Develop 25. No of proposals	Number of Proposals developed and funded	Proposals developed and funded	25 No	5	5	5	5	5	0.2	0.2	0.2	0.2	0.2	1.00	CM CS/ M, SCCP
	Collaboration with donors and Partners	Mobilise Kshs through partners and donors	Kshs raised through partners and Donors	Kshs						-	-	0.5	1	1.5-	3.00	CM CS/ M, SCCP
Develop framework for Loan Repayment and Payment of licensee remuneration arrears by water service providers	Implement framework on Loan Repayment by Water Service Providers	Raise Kshs 60Millon for Loan repayment	Amount of debt recovered	Kshs 60Million	-	-	20	20	20	-	-	0.5	0.5	0.5	1.50	CM CS/ M, SCCP
	Implement framework on Payment of Licensee remuneration in arrears by Water Service Providers	Collect Kshs 150Million arrears in Licensee remuneration from Water Service Providers	Licensee remuneration collected	Kshs 150 Mllion	-	-	50	50	50	-	-	0.5	0.5	0.5	1.50	CM CS/ M, SCCP
				Sub-Total 3						1.35	3.35	107.85	108.85	9.85	231.25	
Strategic Objective 4. Improve Human Capital Management to enhance Performance																
Key Result Area: Human Capital Capacity																
Expected Outcome: Highly productive staff																

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
Review performance management systems	Review and implement a policy framework for performance management	Performance management policy framework	Performance Management Policy Framework Developed	1No		1				-	0.5	-	-	-	0.50	CM,CS/ M, HR &A
	Cascading and implementation of the performance contracting	Performance contract	No. of signed PCs	71No	13	13	15	15	15	15	15	15	15	15	75.00	CM,CS/ M, HR &A
	Implement performance-based rewards and sanctions	Rewards and sanctions	No. of staff evaluated	68No	40	46	52	59	68	0.2	0.2	0.2	0.2	0.2	1.00	CM,CS/ M, HR &A
	Establish baseline and annual performance levels	Baseline and annual survey reports	Performance levels (%)	100%	100%	100%	100%	100%	100%	0.3	0.3	0.3	0.3	0.3	1.50	CM,CS/ M, HR &A
Enhance Youth Employment	Implement internship and apprenticeship programme	Youths placed on internship and apprenticeship	No. of Youth recruited for internship, and apprenticeship	25No	5	5	5	5	5	3	3	3	3	3	15.00	CM,CS/ M, HR &A
	Develop and implement policy on volunteer services	policy on volunteer services	Policy on volunteer services developed	1No			1			-	-	1	-	-	1.00	CM,CS/ M, HR &A
		Volunteers engaged in the service delivery	No. of Volunteers engaged	3No			1	1	1	-	-	0.6	0.6	0.6	1.80	CM,CS/ M, HR &A

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
Develop/review Human Capital management strategy	Develop a Human Capital master plan	HR Master Plan	HR Master Plan developed	1No			1			-	-	2	-	-	2.00	CM,CS/M, HR &A
	Develop/review Human Capital policies, guidelines and instruments	Human Capital policies, guidelines and instruments	No. of Human Capital policies, guidelines and instruments developed/reviewed	15No	3	3	3	3	3	3	3	3	3	3	15.00	CM,CS/M, HR &A
Strengthen Human Capital Development	Undertake competency and skills audit	Competency and skills audit report	No. of competency and skills gaps identified	5No	1	1	1	1	1	0.2	0.2	0.2	0.2	0.2	1.00	CM,CS/M, HR &A
	Undertake training impact assessment of learning and training programmes	Training impact assessment report	No. of training programmes assessed	5No	1	1	1	1	1	0.2	0.2	0.2	0.2	0.2	1.00	CM,CS/M, HR &A
	Monitor and evaluate implementation of training policy	M&E report for the training policy	% of compliance with training policy	100%	100%	100%	100%	100%	100%	0.2	0.2	0.2	0.2	0.2	1.00	CM,CS/M, HR &A
Culture and Attitude change	Conduct Change Management programmes to instill public service culture and attitude	Culture and Attitude change	Citizen perception index (%)	100%			50%	100%		-	-	2	3	-	5.00	CM,CS/M, HR &A
	Induction programmes	Induction programmes	No. of officers	28No	0	6	6	7	9	-	1.2	1.2	1.4	1.8	5.60	CM,CS/M, HR &A

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
			inducted													
Enhance Knowledge management	Establish Knowledge management system	Knowledge management system established	% of knowledge management	100%			30%	60%	100%	-	-	1	2	2	5.00	CM,CS/ M, HR &A
Improve working environment by 5% each the year	Offices rehabilitated	Offices rehabilitated	% of officers rehabilitated	100%	100%	100%	100%	100%	100%	2	2	2	2	2	10.00	CM,CS/ M, HR &A
	Offices maintained	Offices maintained	% of officers maintained	100%	100%	100%	100%	100%	100%	1	1	1	1	1	5.00	CM,CS/ M, HR &A
Succession management	Staff promoted	Staff promoted	% of staff promoted	100%	100%	100%	100%	100%	100%	0.2	0.2	0.2	0.2	0.2	1.00	CM,CS/ M, HR &A
	21 staff recruited	21 staff recruited	No. of staff recruited	28No	0	6	6	7	9	-	7.2	14.4	22.8	33.6	78.00	CM,CS/ M, HR &A
Mainstreaming cross-cutting issues of marginalization, gender, disability, and HIV /AIDS which impact on water and sanitation	Implement affirmative action on Gender mainstreaming	1/3 of either gender engaged	No. of Female staff recruited	9No	0	2	2	2	3	-	1.2	2.4	3.6	4.8	12.00	CM,CS/ M, HR &A
	Implement affirmative action on Disability mainstreaming	5% PWDs engaged	No. of PWDs recruited	4No	0	1	1	1	1	-	1.2	2.4	3.6	4.8	12.00	CM,CS/ M, HR &A
	Implement affirmative action on engagement with marginalized groups	Engaged <30% of either ethnic group	No. of staff recruited	28No	0	6	6	7	9	-	1	1	1	1	4.00	CM,CS/ M, HR &A
	Enhance behavior change activities	Awareness creation and	No. of	20No	4	4	4	4	4	1	1	1	1	1	5.00	CM,CS/ M, HR &A

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	on HIV/AIDS and mitigation measures to counter its impact within the staff, their families and stakeholders	sensitization	trainings													
	Ensure compliance with statutory NEMA and WRMA requirements	• to assign a specific staff to coordinate environmental matters • Ensure availability of all the relevant guidelines, rules, EIA reports and Acts • Random monitoring of compliance levels	Stakeholders acceptance & goodwill	100%	100%	100%	100%	100%	100%	1	1	1	1	1	5.00	CM,CS/M, HR &A
Sub-Total 4										27.3	39.6	55.3	67.3	75.9	265.4	
Strategic Objective 5.To increase use of Technology by continuous investment in IMS (Information Management System) and ICT Infrastuture to have Agency's operations fully automated by the year 2022																
Key Result Area: Information Communication Technology Capacity																
Expected Outcome: Fully automated & paperless Agency																

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target						Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5		Y1	Y2	Y3	Y4	Y5		
To Review ICT Policy framework	Engage ICTA on Review of ICT policy.	Revised ICT policy	Policy documents	1 No.	-	-	-	1	-		-	-	-	0.5	-	0.50	CM,CS/M,ICT
Develop ICT infrastructure	Purchase of new ICT Equipment.	Modern ICT Equipment in good working conditions.	-2 no.servers -50 no.Laptops /tablets -20 no. Desktops -5 no.\heavy duty printers -2no. Cameras -2 no. projectors -2no.TVsets -1no.PABX -1 no.10 KVA UPS -2no.Safe - 2No Scanners -1No Plotter	91 No.	16	17	18	20	20		5	10	10	10	10	45.00	CM,CS/M,ICT
	Upgrade of LAN/WAN infrastructure	SMART communication for both voice and data	-Optimum LAN/WAN	100%	-	-	100%	-	-		-	-	4.2	-	-	4.20	CM,CS/M,ICT
	Website Development	Updated website	User friendly and interactive	100%	100%	100%	100%	100%	100%		-	-	1	-	-	1.00	CM,CS/M,ICT

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
			website													
Adoption of modern Management Information Systems	Installation of integrated system to automate all the Agency's operations and upgrade of other office applications.	Automated processes.	Integrated ERP Software(Oracle)with modules, -Finance & Accounts, HR & Payroll, Project Management and Supply Chain. -Other modules to be developed are, Filemovement, FleetManagement, Biometrics, Risk system &Analytics.	100%	100%	100%	100%	100%	100%	-	62.5	-	-	-	62.50	CM,CS/M,ICT
	System Intergraton	Information Managemement System(IMS) &DataBase Management System(DBMS)	Intergrated System	100%	100%	100%	100%	100%	100%	-	-	1	1	1	3.00	CM,CS/M,ICT

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
Enhancement of ICT security	Put in place Cyber-Security measures. -Firewall installation and upgrades. - Applications security to keep Software & Hardware free from threats. -Information security for integrity and privacy of data storage. -Operational security for ICT processes for handling protection of data assets. -Disaster recovery and business continuity -End-user education for addressing unpredictable cyber factors.	Safety of data &information and ICT infrastructure.	-Upgrade of Cyber-roam. Firewall. -Insurance of ICT equipment and infrastructure. -Use of antivirus -Off-site backup contract -Physical Fire proof Safes -Upgrade of CCTV System. -System & user manual for users and In-house systems operations sensitization	100%	100%	100%	100%	100%	100%	-	-	3	3	3	9.00	CM,CS/M,ICT
				Sub-Total 5						5.0	72.5	19.2	14.5	14.0	125.20	

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
										0	0	0	0	0		
Strategic Objective 6. Strengthen leadership and governance for efficient and effective delivery of services																
Key Result Area: Governance, legal and institutional framework																
Expected Outcome: Strengthened governance structures and optimal compliance for efficiency.																
Monitoring, Evaluation and Reporting	Appointment of Project implementation units (PIUs)	Project implementation units (PIUs) in place	Appointment letters	100No	20	20	20	20	20	-	-	-	-	-	-	
	Project implementation units (PIUs) trainings on reporting	Annual trainings reports	Training certificates	5No	1	1	1	1	1	-	-	-	-	-	-	
	Appointment of Monitoring and Evaluation committee	Monitoring and Evaluation committee in place	Appointment letters	1No	1					-	-	-	-	-	-	
	Monitoring and Evaluation committee trainings	Annual trainings reports	Training certificates	5No	1	1	1	1	1	-	-	-	-	-	-	
	Development of M&E tools	M&E Tools developed	M&E Tools in place	1No		1				-	0.15	-	-	-	0.15	
	Develop policies, standards and guidelines	policies, standards and guidelines developed	policies, standards and guidelines in place	10No		10				-	5	-	-	-	5.00	
	Compliance monitoring	Compliance monitoring report	Level of compliance	20No	4	4	4	4	4	5	5	5	5	5	25.00	
	Process monitoring	Process monitoring report	No of Monitoring	20No	4	4	4	4	4	5	5	5	5	5	25.00	

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
			reports													
	Performance monitoring	Performance monitoring report	No of reports	20	4	4	4	4	4	5	5	5	5	5	25.00	
	Annual Operations Monitoring	Annual operations report	No of Report	5	1	1	1	1	1	2	2	2	2	2	10.00	
	Impact/Outcome monitoring	Annual Impact report	No of report	5	1	1	1	1	1	3	3	3	3	3	15.00	
Maintain statutory and regulatory compliance	Sensitization of staff on relevant laws and regulations	Trainings conducted	No. of trainings	5	1	1	1	1	1	0.10	0.10	0.10	0.10	0.10	0.50	
	Prepare compliance reports on asset development to the Water Services Regulator	Reports submitted	No. of reports	20	4	4	4	4	4	-	-	-	-	-	-	
	Prepare and submit annual financial statement to the Kenyan National Audit Office by 30th September every the year	Reports submitted	No. of reports	5	1	1	1	1	1	-	-	-	-	-	-	
	Carry out a governance compliance audit	Legal and Governance Audit Report	Level of compliance	100%	100%	100%	100%	100%	100%	5	5	5	5	5	25.00	
	Prepare and implement a statutory and regulatory compliance	Compliance template in place	No. of templates	1		1				-	0.10	-	-	-	0.10	

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	template															
	Prepare quarterly performance report to the Board and Treasury	Compliance reports prepared	No. of reports	20	4	4	4	4	4	-	-	-	-	-	-	
	Prepare quarterly compliance report to PPRA, EACC, NT	Compliance reports prepared	No. of reports	20	4	4	4	4	4	-	-	-	-	-	-	
Enhance institutional integrity and anti-corruption measures	Undertake corruption risk mapping	Risk mapping report	No. of reports	5	1	1	1	1	1	1	1	1	1	1	5.00	
	Promote competitive bidding through sensitization of staff on the PPDA 2015	Training conducted	No. of trainings	5	1	1	1	1	1	1	1	1	1	1	5.00	
	Sensitize staff on Chapter 6 of the constitution and implementation of Chapter Six of the Kenya Constitution on Leadership and Integrity	Training conducted	No. of trainings	5	1	1	1	1	1	1	1	1	1	1	5.00	

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Develop corruption reduction strategy by identifying corruption risks and putting in place a risk mitigation guidelines and ensure compliance.	corruption reduction strategy developed	No. of strategies	1		1				-	-	-	-	-	-	
	Undertake a survey to determine corruption perception index of the Board by putting in place mitigation measures to eradicate corruption on the basis of indentified risks.	Corruption perception survey conducted	No. of surveys	5	1	1	1	1	1	1	1	1	1	1	5.00	
	Review and update the institutional anti-corruption policy every 2 years to ensure mitigation of operational risks.	Policy reviewed	No. of reviews	2		1			1	-	0.5	-	-	0.5	1.00	

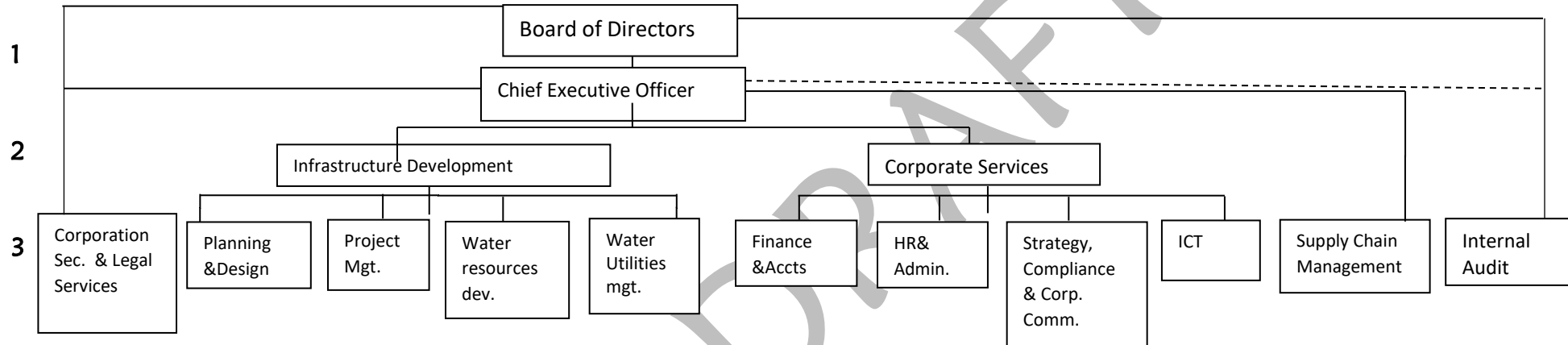| Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Undertake corruption risk management through the Corruption Prevention and Oversight Committee	Committee formed	Appointment letters	1	1					-	-	-	-	-	-	
	Submit quarterly reports on the adherence with the code of ethics and anti-corruption policy through the Corruption Prevention and Oversight Committee	Reports submitted	No. of reports	20	4	4	4	4	4	-	-	-	-	-	-	
Review and strengthen instruments of governance in the organization	Observe and cascade the code of ethics for staff and Board of Directors every 2 years	Code of ethics cascaded	No. of times cascaded	2		1		1		-	-	-	-	-	-	
	Streamline internal checks and balances through reviewing finance manual every 2 years	Reviewed finance manual	No. of reviews	2		1		1		-	0.1	-	-	0.1	0.20	

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
	Publicize all procurement information and other information relating to implementation of projects by publishing in TAWWDA website and GoK portal	Information published	Compliance level	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-	
Acquire ISO 9001:2015 certification by the year 2022	Identify the reasons why the Agency want to become ISO 90001:2015 accredited	Improved awareness	Accreditation needs report	1		1				-	0.20	-	-	-	0.20	
	Purchase a copy of the standard	Standards Copy purchased	No. of copies	1		1				-	0.50	-	-	-	0.50	
	Define Strategy	Quality Policy and Objectives report	No. of reports	1		1				-	0.20	-	-	-	0.20	
	Hire QMS consultant	Consultant engaged	Contract document	1		1				-	0.2000	-	-	-	0.20	
	Identification of processes	List of processes	List of processes	1		1				-	0.10	-	-	-	0.10	
	Training of ISO champions and auditors	Staff trained	No. trained	25		10	15			-	0.10	0.10	-	-	0.20	
	Develop documentation	Scope of the Quality Management System, a Quality	No.of reports	4			4			-	-	0.20	-	-	0.20	

Strategy	Activity	Expected Output	Output Indicators	Target for 5 the years	Target					Budget (Mn)					Total Budget (Mn)	Responsibility
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5		
		Policy, Quality Objectives and a Procedure for the control of outsourced processes														
	Implement the QMS	QMS implemented	Level of implementation	100			60	40		-	-	0.10	0.10	-	0.20	
	Carryout Pre-assessment audit	Pre-assessment audit	Audit report	1				1		-	-	-	0.05	-	0.05	
	Identify Nationally accredited body and get certified	ISO Certified	ISO Certificate	1					1	-	-	-	-	1	1.00	
				Sub-Total 6						29.10	36.25	29.50	29.25	30.70	154.80	

Annex II: Monitoring and Evaluation Framework

Key Result Area	Outcome	Key Performance Indicator	Baseline	Target	
				Mid-Term Period Target	End of Plan Period Target
Water Coverage	Increased access to safe and adequate water	% of Households with access to Water	40%	68%	80%
		Production Capacity of Water (M³/Day)	47,880 M³/Day	549,508 M³/Day	646,480 M³/Day
Sanitation Coverage	Enhanced accessibility to sanitation services	% of Households with Access to sanitation.	60.7%	62%	65%
		No. of people with access to adequate and safe sanitation	3,410,290	3,35,290	3,660,290
		% of Households with Access to Sewerage	11%	37%	40%
		Sewerage treatment Capacity (M³/Day)	8,800 M³/Day	138,473 M³/Day	149,700 M³/Day
Resource Mobilization	Increased funding of Kshs	Amount of money mobilized (Kshs)	4Billion	55Billion	108.6Billion
Information Communication Technology Capacity	Fully automated and paperless Agency	Automation Level	52%	65%	70%
Human Capital Capacity	Highly Productive staff	Performance score	70%	82%	95%
Governance, legal and institutional framework	Improved compliance	Compliance level	64%	87%	95%

Annex III: Approved Organization Structure

1	Board of Directors Chief Executive Officer
2	Infrastructure Development · Corporate Services
3	Corporation Sec. & Legal Services · Planning &Design · Project Mgt. · Water resources dev. · Water Utilities mgt. · Finance &Accts · HR& Admin. · Strategy, Compliance & Corp. Comm. · ICT · Supply Chain Management · Internal Audit

Designation	Job Grade TAWWDA	Approved Number	In -post	Variance	Proposed Number	Proposed Establishment				
						2018/19	2019/20	2020/21	2021/22	2022/23
Chief Executive Officer	1	1	0	1	1	0	1	1	1	1
Assistant Office Administrator/ Senior	6/5	1	1	0	1	1	1	1	1	1
Driver/ Senior	8/7	1	1	0	1	1	1	1	1	1
Office Assistant /Senior	10/9	1	1	0	1	1	1	1	1	1
Sub Total		4	3	1	4	3	4	4	4	4
Infrastructure Development Department										
Chief Manager, Infrastructure Development	2	1	1	0	1	1	1	1	1	1
Project Accountant /Senior /Principal	6/5/4	1	1	0	2	1	2	2	2	2
Project Driver/ Senior/Principal	9/8/7	4	4	0	4	4	4	4	4	4
Project Assistant Office Administrator /Senior/Principal	8/7/6	1	0	1	1	0	0	0	0	1
Sub Total		7	6	1	8	6	7	7	7	8
Planning and Design Division										
Superintendent Engineer	3	1	0	1	1	0	0	1	1	1
Engineer/Senior /Principal	6/5/4	5	3	2	5	3	4	4	4	4
Assistant Engineer /Senior/ Principal	8/7/6	2	0	2	2	0	0	0	0	1

Designation	Job Grade TAWWDA	Approved Number	In -post	Variance	Proposed Number	Proposed Establishment				
						2018/19	2019/20	2020/21	2021/22	2022/23
Environmentalist/Senior/ Principal	6/5/4	0	0	0	1	0	0	0	1	1
Sociologist/Senior/ Principal	6/5/4	0	0	0	1	0	0	1	1	1
Sub Total		8	3	5	10	3	4	6	7	8
Project Management Division										
Superintendent Engineer	3	1	0	1	1	0	0	1	1	1
Engineer/Senior /Principal	6/5/4	7	3	4	7	3	4	4	5	5
Assistant Engineer /Senior/ Principal	8/7/6	2	0	2	2	0	0	0	0	1
Sub Total		10	3	7	10	3	4	5	6	7
Water Resources Development Division										
Superintendent Geologist /Hydro-geologist	3	1	1	0	1	1	1	1	1	1
Hydro-geologist /Geologist/ Senior /Principal	6/5/4	4	0	4	2	0	0	1	2	2
Assistant Hydro-geologist /Geologist /Senior/ Principal	8/7/6	2	0	2	2	0	0	0	0	1
Sub Total		7	1	6	5	1	1	2	3	4
Water Utilities Management Division										
Superintendent Engineer	3	1	0	1	1	0	0	1	1	1
Engineer/Senior /Principal	6/5/4	2	0	2	2	0	1	1	1	1
Water Utilities Officer / Senior /Principal	6/5/4	3	3	0	3	3	3	3	3	3
Water Utilities Assistant/	8/7/6	1	0	0	1	0	0	0	0	0

Designation	Job Grade TAWWDA	Approved Number	In -post	Variance	Proposed Number	Proposed Establishment				
						2018/19	2019/20	2020/21	2021/22	2022/23
Senior/Principal										
Sub Total		7	3	4	7	3	4	5	5	5
Corporate Services Department										
Chief Manager, Corporate Services	2	1	1	0	1	1	1	1	1	1
Finance and Accounts Division										
Manager, Finance and Accounts	3	1	0	1	1	0	0	1	1	1
Accountant /Senior /Principal	6/5/4	1	2	-1	1	2	1	1	1	1
Accounts Assistant/Senior/ Principal	8/7/6	1	0	1	1	0	0	0	0	1
Sub Total		3	2	1	3	2	1	2	2	3
Human Resource and Administration Division										
Manager, Human Resource and Administration	3	1	1	0	1	1	1	1	1	1
Human Resource Officer/Senior/Principal	6/5/4	1	0	1	1	0	1	1	1	1
Administration Officer/Senior/Principal	6/5/4	1	1	0	1	1	1	1	1	1
Fleet Officer /Senior/Principal	6/5/4	0	0	0	1	0	0	0	1	1
Driver/ Senior/Principal	9/8/7	3	3	0	3	3	3	3	3	3
Office Assistant /Senior	10/9	1	1	0	1	1	1	1	1	1
Records Management Officer /Senior/Principal	6/5/4	1	0	1	1	0	0	0	0	0
Records Management Assistant/ /Senior/Principal	8/7/6	1	2	-1*	1	2	2	2	2	2

Designation	Job Grade TAWWDA	Approved Number	In -post	Variance	Proposed Number	Proposed Establishment				
						2018/19	2019/20	2020/21	2021/22	2022/23
Security Officer/ Senior / Principal	8/7/6	0	1	-1*	1	1	1	1	1	1
Sub Total		**9**	**9**	**0**	**11**	**9**	**10**	**10**	**11**	**11**
Strategy, Compliance and Corporate Communication Division										
Manager, Strategy Compliance and Corporate Communication	3	1	0	1	1	0	1	1	1	1
Compliance and Risk Management Officer/Senior/Principal	6/5/4	2	0	2	2	0	0	0	0	1
Planning, Research and Innovation Officer/Senior/Principal	6/5/4	3	0	3	3	0	0	0	1	1
Corporate Communication Officer/Senior/Principal	6/5/4	1	0	1	1	0	0	0	1	1
Customer Care Assistant /Senior/Principal	9/8/7	1	0	1	1	0	0	0	0	1
Sub Total		**8**	**0**	**8**	**8**	**0**	**1**	**1**	**3**	**5**
Information Communication Technology (ICT) Division										
Manager, ICT	3	1	1	0	1	1	1	1	1	1
ICT Officer/Senior/Principal	6/5/4	0	0	0	1	0	0	0	0	1
ICT Assistant /Senior/Principal	8/7/6	1	1	0	1	1	1	1	1	1
Sub Total		**2**	**2**	**0**	**3**	**2**	**2**	**2**	**2**	**3**
Corporation Secretary and Legal Services Division										
Corporation Secretary and Legal Services Manager	3	1	1	0	1	1	1	1	1	1
Para-Legal Clerk/Senior/Principal	8/7/6	1	0	1	1	0	0	0	0	1

Designation	Job Grade TAWWDA	Approved Number	In -post	Variance	Proposed Number	Proposed Establishment				
						2018/19	2019/20	2020/21	2021/22	2022/23
Sub Total		2	1	1	2	1	1	1	1	2
Supply Chain Management Division										
Manager, Supply Chain Management	3	1	1	0	1	1	1	1	1	1
Supply Chain Management Officer Senior/Principal	6/5/4	0	3	-3*	1	3	3	3	3	3
Supply Chain Management Assistant Senior/Principal	8/7/6	1	1	0	2	1	1	1	1	1
Sub-Total		2	5	-3	4	5	5	5	5	5
Internal Audit Division										
Manager, Internal Audit	3	1	1	0	1	1	1	1	1	1
Internal Auditor /Senior/principal	8/7/6	1	0	1	1	0	0	0	1	1
Sub Total		2	1	1	2	1	1	1	2	2
TOTAL		72	40	32	77	40	46	52	59	68

Annex V: Projected Revenues by Source (2018-2022)

No	Source of Funding	Summary of how it will be Realized	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL
1	GOK	Through the Medium Term Expenditure Framework, and the Annual Budgeting process, the Agency will mobilise financial resources to fund the operations and implementation of capital projects to reach underserved and unserved areas. The agency will continue working with the Ministry of Water& Sanitation and Irrigation and The National Treasury to attain financial sustainability.	333	490	8,798	12,561	16,540	38,722
2	Development Partners	TAWWDA will seek for donor support from Development Partners to obtaion grants, concessional loans, The Agency will also pursue other models of financing including Public private partnership, Engineering Procurement Construction and Finance (EPCF) in	1,000	700	12,450	20,450	35,365	70,015

No	Source of Funding	Summary of how it will be Realized	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL
		development of water and sewerage infrastructure. This will be attained through continuous engagement and collaboration of the Development Partners.						
3	Loan repayment	As per the Water Act 2016, Water Service Providers shall not be required to any fee for use of the public assets for provision of Water Services other than repayment of loan acquired for development of those assets. TAWWDA will engage the Counties and Water Service Providers to enter into an agreement for loan repayment. The agreement will be in force until such a time full repayment of the Loan is done. For new projects, the Agency will install Master Water Metres and sell water in bulk to WSPs	106	106	106	106	106	530

No	Source of Funding	Summary of how it will be Realized	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL
		until such a time the entire loan is repaid. The new Projects include; Machakos Water Supply, Mwala Water Supply and Matuu Water Supply. The Agency will also seek fo intervention on this matter from the Ministry of Water, Sanitation and Irrigation						
4	Licensee Remuneratio n in arreas for WSPs	TWWDA has accumulated arrears in Licensee Remuneration from Water Service Providers totaling to Kshs 229 million. The Agency will develop framework for recovery of the arrears. The Agency will continously engage County Governments and seek for advice and direction from Ministry of Water, Sanitation and Irrigation.	-	-	75	75	79	229
Total			1,439	1,296	21,479	33,192	52,090	109,496