

# IMPACT

ISSUE NO : 18 - 2026

## A Performance Report of Kenya's Water Services Sector - 2024/2025



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## A Performance Report of Kenya's Water Services Sector - 2024/2025



## VISION



Sustainable Water Services for Quality Life.

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## MISSION



To Provide To provide a regulatory environment that facilitates efficiency effectiveness and equity in the provision of water services in line with the human right to water and sanitation.

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## CORE VALUES



Accountability



Responsiveness



Innovation



Integrity



Teamwork

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## FOREWORD

### The Final Stretch to 2030: Delivering Water and Sanitation for All

As we enter the final stretch toward 2030, the imperative to deliver universal access to water and sanitation for all Kenyans has never been more urgent. Importantly, the foundational principles of water management—equity, efficiency, and sustainability require no alteration. These principles must continue to guide the sector as we accelerate efforts toward achieving Sustainable Development Goal 6 (SDG 6). Reflecting the findings of the IMPACT 18 Report, it is clear that while the sector has made significant progress through reforms aligned with the best global practices, key challenges remain.

One of the most persistent challenges remains with Non-Revenue Water (NRW). Despite ongoing interventions, NRW levels have gone higher, undermining operational efficiency, financial sustainability, and water resource conservation. Addressing NRW is not only a technical and operational priority but also an economic and environmental necessity. While emerging innovations are beginning to transform utility operations, they will have a limited impact unless sustained and coordinated action decisively reduces NRW.

This report serves both as a reflection of current performance and a roadmap for the work ahead. Reducing NRW will require a multi-faceted approach that integrates technology, strengthened regulatory enforcement, and active community participation. The path to universal access is clear. We have the regulatory frameworks, the data, and the solutions required to deliver water and sanitation services for all. We now need to accelerate implementation, strengthen collaboration among all stakeholders, and commit unwavering compliance and accountability.

We must confront the reality that gaps in compliance continue to hinder universal access. These gaps result in inequitable service distribution, inconsistent quality, and ultimately, the exclusion of vulnerable populations. However, evidence from the sector demonstrates that WSPs that achieve full compliance consistently outperform their peers. They record higher consumer satisfaction, improved financial viability, and greater resilience to climate-related shocks.

I warmly congratulate those Water Services Providers that have shown real improvement through dedication, discipline, and focus. Your progress proves that excellence is possible. As we reflect on these findings, we must collectively commit to transforming equitable access from a policy aspiration into a measurable reality for every Kenyan.

**Job Chirchir**  
Chairman



## PREFACE

**“High-performing utilities prove that regulatory compliance delivers tangible results.”**

The global community stands at a critical juncture in our collective pursuit of Sustainable Development Goal 6 — ensuring the availability and sustainable management of water and sanitation for all. Recent United Nations reports clearly show that while meaningful progress has occurred, with safely managed drinking water coverage rising from 68% in 2015 to 74% in 2024 and safely managed sanitation increasing from 48% to 58%, billions of people still lack these fundamental services. Globally, 2.2 billion people remain without safely managed drinking water, 3.4 billion without safely managed sanitation, and 1.7 billion without basic hygiene facilities at home. The pace of change is simply not fast enough.

Our water sector mirrors this global reality, a story of steady gains tempered by persistent challenges. Through progressive reforms, we have expanded access to improved water services and seen incremental improvements in water coverage at 72.1% and infrastructure development. Yet, as detailed in this Impact 18 Report, critical bottlenecks remain. NRW continues to go up, now at 48%, representing not only massive economic losses but also wasted precious resources that could serve millions more Kenyans. Sewer coverage lags significantly behind our ambitions, while inequities between urban and rural areas, and across counties, persist, leaving the most vulnerable behind.

This Report offers both a candid diagnosis of where we stand and a practical roadmap for the accelerated action required in the final stretch. It highlights performance improvements by many Water Services Providers (WSPs) that have demonstrated commitment, innovation, and discipline. These high-performing utilities prove that full regulatory compliance delivers tangible results: higher consumer satisfaction, stronger financial viability, and greater resilience to climate shocks and variability.

At the same time, the report underscores that persistent gaps in compliance, operational inefficiencies, and inadequate investment continue to undermine universal access. Addressing NRW aggressively — through technology, smart infrastructure, regulatory enforcement, and active community engagement, is no longer optional; it is an economic, environmental, and moral imperative. The solutions are within our reach. We have policy frameworks, innovations in metering, leakage detection, and wastewater management, and a growing body of evidence on what works. What we now need is unprecedented levels of cooperation, creativity, and commitment across national and county governments, Water Services Providers, regulators, development partners, and communities.

To every Water Service Provider that has shown improvement through sheer determination and focus, I extend my sincere congratulations. As we present the Impact 18 Report, let us shift our collective focus from planning to delivery. Together, through unwavering commitment, innovation, and collaboration between national and county governments, Water Services Providers, regulators, development partners, and communities, we can ensure that by 2030, every Kenyan has access to safe, reliable, and sustainable water and sanitation services.

**Richard Cheruyiot**

**Ag. Chief Executive Officer**



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# ABBREVIATIONS AND ACRONYMS

CWI	Credit Worthiness Index
DWQ	Drinking Water Quality
ESAWAS	Eastern and Southern Africa Water and Sanitation (Regulators Association)
KPIs	Key Performance Indicators
K-WASH	Kenya Water, Sanitation, and Hygiene (Program)
NAWASIP	National Water and Sanitation Investment Plan
NRW	Non-Revenue Water
O&M	Operation and Maintenance
PE	Personnel Expenditure
SDGs	Sustainable Development Goals
SSSPs	Small-Scale Service Providers
UN	United Nations
WASH	Water Sanitation and Hygiene
WASREB	Water Services Regulatory Board
WRA	Water Resources Authority
WSP	Water Service Provider
WSUP	Water & Sanitation for the Urban Populations
WWDA	Water Works Development Agency

## EXECUTIVE SUMMARY

The water services subsector recorded measurable progress in FY 2024/25; however, performance remains uneven and below the pace required to meet national water sector targets for universal access by 2030. The population within regulated service areas increased by 2.1% to 31.6 million, while the number of people served with water grew more rapidly by 5.9% to 22.8 million. Sewer coverage expanded by 5.1% to reach 5.0 million people, and access to sanitation services rose by 3.0% to 29.2 million people. These trends indicate steady improvements in service coverage within the subsector, but they have not yet translated into consistent gains in efficiency, reliability, and financial sustainability.

Performance across utilities further highlights a subsector progressing at two distinct levels. A small group of public utilities including Nakuru Urban, Nyeri, Kisumu, Embu, and Thika, demonstrated strong performance across key indicators such as water quality, hours of supply, metering coverage, and cost recovery. Private utilities, including Tatu City, Kiamumbi, and Runda, continued to outperform most public providers, illustrating the impact of efficient operations, lower system losses, and stronger commercial practices. In contrast, a large number of utilities continue to face operational inefficiencies, weak financial performance, and limited capacity to expand and sustain service improvements.

A persistent underlying challenge within the water services subsector remains the high level of NRW, which stood at 48%. Although water production increased by 9.4%, the volume billed rose by only 2.3%, indicating that a substantial portion of the additional water produced was either lost or unaccounted for. This persistent inefficiency continues to undermine financial viability, constrain service expansion, and limit the benefits delivered to consumers. As a result, per capita consumption remained low at 26.7 litres per person per day, suggesting that increased production has not yet translated into meaningful improvements in service delivery at the consumer level.

Financially, the picture improved but remains fragile. Total sector revenue rose by 14.0% to KSh 32.9 billion, and average operation and maintenance cost coverage improved to 103%. That suggests progress toward sustainability, but the median remained below full cost recovery, meaning more than half of utilities still cannot fully fund their operations from their own revenues. Liquidity is weak across all utility categories, and high personnel costs continue to absorb resources that should strengthen service delivery and maintenance.

Access is expanding, but formal connectivity lags. Water connections grew 1.3% and sewer by 0.9%, both below population growth. More people are reached, but durable household connections are not increasing fast enough. The largest disparities persist in rural, arid, and underserved counties, where service hours are lowest, infrastructure is most underdeveloped, and financial pressures are greatest. Geographic factors continue to significantly influence both access and service quality.

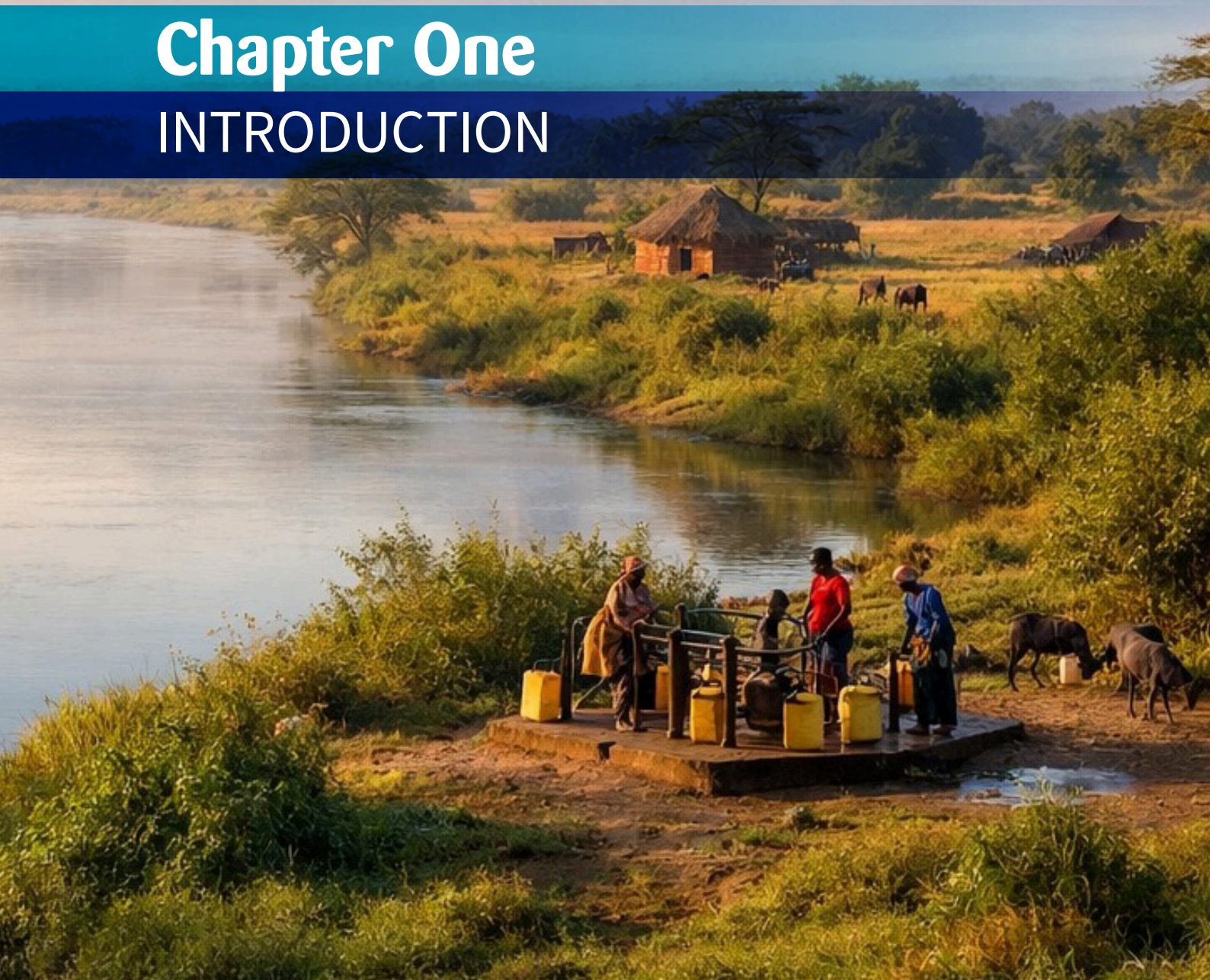
High-performing utilities do not succeed by chance or through excellence in a single area. They consistently maintain water quality, reduce system losses, ensure comprehensive metering, strengthen revenue collection, and uphold strong operational discipline. In contrast, underperforming utilities are characterized by high non-revenue water, low service coverage, weak cost recovery, poor compliance, and unreliable service. These challenges are interconnected, reinforcing one another and making recovery more difficult while widening performance disparities.

The FY 2024/25 results indicate a subsector making progress, but still experiencing significant losses in value, revenue, and time. The top priority is reducing NRW. The subsector must also accelerate new connections, strengthen financial performance, enhance efficiency, and increase investment in rural and underserved areas. With sustained and coordinated action, current progress can be transformed into meaningful momentum toward universal access by 2030.



# Chapter One

## INTRODUCTION



## 1.1 Background and Regulatory Context

The year 2026 marks the beginning of the final four-year stretch to 2030. This period represents a decisive window for achieving universal access to water and sanitation. Although gains have been recorded, significant gaps remain in service coverage, affordability, and service reliability. These gaps disproportionately affect rural communities, informal settlements, low-income households, and vulnerable populations.

Without accelerated implementation, universal access targets may remain out of reach. The past decade has delivered substantial progress in developing policies, strategies, and institutional frameworks; the remaining years must focus on implementation, monitoring, and compliance. Since the sector has sufficient policy direction, the priority is to operationalise existing commitments, strengthen compliance, and accelerate service delivery. The remaining four years, therefore, demand deliberate prioritization of underserved populations to ensure that progress is inclusive and that no one is left behind. This requires targeted investments, strengthened regulatory oversight, and improved accountability across institutions. Progress in this final stretch will therefore be measured not by new policies, but by tangible improvements in access, quality, and sustainability of services.

The final stretch to 2030 calls for results-driven regulation anchored in implementation, monitoring, and enforcement. Existing commitments must now translate into measurable outcomes. Performance must be tracked, gaps identified, and corrective action taken in real time. This requires sustained coordination across national and county governments, the regulator, Water Services Providers, development partners, and communities.

This is a decisive moment. The narrowing window demands urgent collective action. Only by accelerating implementation, improving efficiency, and enforcing accountability can universal access become a reality and national, regional, and global commitments be fulfilled.

## 1.2 The Human Right to Water and Sanitation

Access to safe water and sanitation underpins life, dignity, health, education, gender equality, and economic productivity, and therefore forms a foundation for sustainable development. Therefore, WASH as a human right reinforces that universal access is not only a policy aspiration, but a development obligation requiring coordinated action by governments, regulators, utilities, and partners.

This recognition was formalized by the United Nations General Assembly through Resolution 64/292 (2010), which acknowledged access to safe drinking water and sanitation as a human right essential for the realization of all other human rights.<sup>1</sup> Subsequent resolutions further strengthened this normative framework. Resolution 76/153 (2021) reaffirmed that water and sanitation are integral to the right to an adequate standard of living and closely linked to the rights to health, life, and human dignity, while emphasizing progressive realization and prioritization of vulnerable and marginalized populations.<sup>2</sup> In 2023, additional resolutions reinforced the urgency of accelerating progress. Resolution 77/334 (2023) emphasized the need to strengthen global cooperation and accelerate implementation under the Water Action Decade toward Sustainable Development Goal 6.<sup>3</sup>

Continuing this progression, Resolution 78/130 (2023) further highlighted the importance of universal access to WASH services in health-care facilities. It recognized their role in infection prevention, maternal and newborn health, gender equality, and resilient health systems.

In this context, the final stretch to 2030 requires assessing current levels of access, identifying institutions responsible for delivery, reviewing progress achieved, understanding remaining gaps and risks, and defining priority actions needed to accelerate service expansion.

### 1.3 Normative Standards of the Human Rights to Water and Sanitation

Human rights standards for WASH require that water be available in sufficient quantities. Water must also be affordable, safe, physically accessible, and of acceptable quality for drinking, hygiene, and all domestic uses. Sanitation facilities must be adequate, affordable, safe, and accessible. They must also be culturally acceptable, with special protection for groups such as women, children, persons with disabilities, and those in vulnerable situations. Hygiene services must ensure the availability, affordability, accessibility, and safety of essential items. These items include soap, sanitary products, and handwashing facilities.

Equally important is accountability. Clear roles, responsibilities, and performance standards must guide all institutions and service providers. There must be strong systems for compliance, enforcement, transparency, and public participation. Communities and affected populations must be empowered to demand accountability, raise complaints, and obtain remedies when their rights are violated.

### 1.4 SDG 6 within the 2030 Agenda for Sustainable Development



The 2030 Agenda for Sustainable Development positions water and sanitation at the core of global development efforts, recognizing them as essential enablers of health, education, gender equality, food security, climate resilience, and economic growth. Sustainable Development Goal 6 (SDG 6) seeks to ensure availability and sustainable management of water and sanitation for all by 2030, while reinforcing interlinkages with other goals across the development agenda.

SDG 6 goes beyond access and takes a comprehensive approach, targeting water quality, wastewater management, water-use efficiency, integrated water resources management, and ecosystem protection. It emphasizes community participation, international cooperation, and capacity building for lasting results. These goals show that water and sanitation systems shape environmental, social, and economic outcomes.

### 1.5 Leaving No One Behind: Inclusive, Climate-Resilient and Locally Responsive Service Delivery



#### People at risk:

Women

Children

PWDs

Rural

Informal settlements

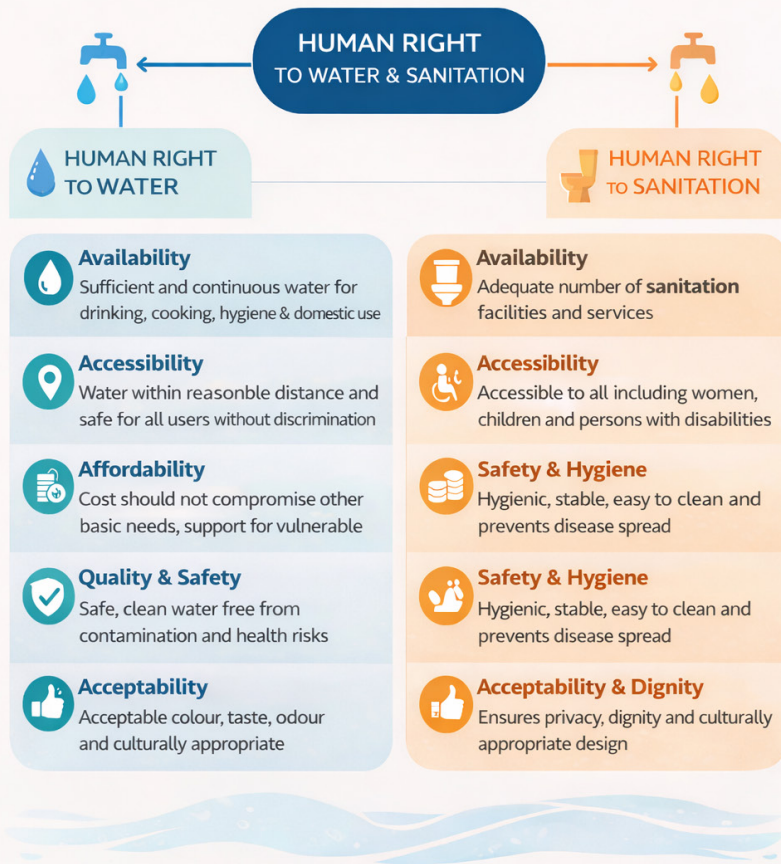
Climate vulnerable

In the final stretch to 2030, achieving universal access requires deliberate efforts to ensure that progress reaches populations that remain underserved. Although the human right to water and sanitation is universal, its realization is influenced by intersecting factors including poverty, gender, disability, age, geographic location, and environmental vulnerability.

These overlapping challenges create compounded barriers that limit equitable access to safe and reliable services.

## Normative Standards of the Human Right to Water and Sanitation

Moving Beyond Access → Ensuring Quality, Equity, Reliability & Sustainability



International human rights instruments reinforce the need for inclusive service delivery. The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) calls for eliminating barriers to women’s access to water and sanitation services. The Convention on the Rights of the Child (CRC) recognizes children’s right to health, including access to safe drinking water and sanitation. The Convention on the Rights of Persons with Disabilities (CRPD) requires that water and sanitation facilities and services be accessible and inclusive. The United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP) further recognizes the rights of rural populations to water, sanitation, and healthy living conditions. These commitments emphasize that service delivery must intentionally address inequalities and prioritize vulnerable populations.

In practice, these inequalities manifest in multiple ways. Women and girls often bear the burden of water collection and face safety risks where sanitation services are inadequate. Children in underserved communities are

more exposed to waterborne diseases and experience school absenteeism linked to inadequate water and sanitation facilities. Persons with disabilities face accessibility challenges where infrastructure is not designed to meet diverse needs. Rural populations and informal settlements frequently experience lower service coverage, limited infrastructure investment, and higher service delivery costs. Addressing these challenges requires targeted investments, inclusive infrastructure design, and affordability mechanisms to remove barriers to access.

Climate change further compounds these inequalities by affecting water availability, infrastructure resilience, and long-term service reliability. Droughts reduce water supply; floods damage sanitation systems, and environmental degradation threatens water sources. These pressures disproportionately affect already vulnerable populations, particularly rural communities, arid and semi-arid areas, and informal settlements. The broader triple planetary crisis of climate change, biodiversity loss, and pollution further emphasizes the need for sustainable and resilient water and sanitation services.

Global frameworks highlight the urgency of climate-resilient approaches. The Paris Agreement calls for strengthening adaptive capacity and resilience to climate-related hazards, including water stress and extreme weather events.<sup>1</sup> The International Decade for Action “Water for Sustainable Development” (2018–2028)

emphasizes integrated water resources management, ecosystem protection, and investment in climate-resilient infrastructure. These commitments reinforce the need to embed climate resilience into planning, financing, and service delivery in the final stretch to 2030.

Recognizing indigenous and community knowledge is also critical for inclusive and sustainable service delivery. Many communities have long-standing water management practices, local governance systems, and climate adaptation strategies that support sustainable resource use. Traditional water harvesting, catchment protection practices, and community-led management models provide locally appropriate solutions, particularly in rural and climate-vulnerable areas. Integrating these approaches with formal service delivery systems can enhance sustainability, improve resilience, and strengthen community ownership.

Leaving no one behind, therefore, requires a combined focus on equity, climate resilience, and locally responsive approaches. This includes prioritizing underserved populations, designing inclusive infrastructure, strengthening climate-resilient service delivery, and recognizing indigenous knowledge systems. In the final stretch to 2030, deliberate and targeted implementation will be essential to ensure that universal access to water and sanitation is achieved in a manner that is inclusive, sustainable, and resilient.

## 1.6 Global Progress Toward SDG 6

Global progress toward SDG 6 reflects steady improvements in access to safely managed drinking water and sanitation services, alongside strengthened policy frameworks and increasing integration of climate considerations into WASH planning. Between 2015 and 2024, access to safely managed drinking water increased from 69% to 73%, with approximately 961 million people gaining access. Over the same period, safely managed sanitation coverage increased from 48% to 58%, benefiting about 1.2 billion people. Policy and institutional progress have also been recorded, with nearly 90% of countries adopting WASH policies and many incorporating safely managed service targets.

Building on these gains, approximately 80% of countries now address climate risks within WASH policies, while women's participation in the sector continues to improve, although leadership representation remains limited. However, despite these advances, substantial gaps remain. Approximately 2.1 billion people still lack safely managed drinking water services, 3.4 billion lack safely managed sanitation, and 1.7 billion lack basic hygiene services.

Furthermore, fewer than 13% of countries report sufficient financial and human resources to implement WASH plans, while institutional fragmentation and limited monitoring of equity and affordability continue to affect service delivery. Together, these factors highlight the need for accelerated action during the final stretch to 2030. Overall, while notable progress has been made in strengthening policies and expanding access, the current trajectory indicates that accelerated implementation, strengthened governance, increased investments, and inclusive, climate-resilient approaches will be required to achieve universal access to water and sanitation by 2030.

Table 1.1: Global WASH Progress Dashboard

Thematic Area	Progress	Current Situation	2030 Target	Required Action
Policy Frameworks	●	Most countries have WASH policies but lack financing, implementation and enforcement mechanisms	Fully resourced and implemented policy frameworks	Move from policy development to implementation, budgeting and accountability
Climate Integration	●	Climate risks increasingly integrated into planning, but implementation remains limited	Climate-resilient WASH systems	Implement drought-resilient, flood-proof and adaptive WASH infrastructure

Thematic Area	Progress	Current Situation	2030 Target	Required Action
Drinking Water Access	●	73% of the global population uses safely managed drinking water; gaps remain in rural areas and informal settlements	Universal safely managed drinking water services	Expand services to underserved areas and improve reliability, quality and continuity
Sanitation Access	●	Only 58% of the population uses safely managed sanitation; unsafe on-site systems remain widespread	Universal safely managed sanitation	Scale non-sewered sanitation, faecal sludge management and safely managed on-site solutions
Institutional Coordination	●	Overlapping mandates across ministries, regulators and service providers affect sector performance	Clear governance structures with defined roles	Clarify institutional responsibilities and strengthen inter-agency coordination
Monitoring & Data	●	Monitoring systems lack disaggregated data on equity, service quality and reliability	Comprehensive SDG 6-aligned monitoring systems	Strengthen data systems to support evidence-based planning and track inequalities
Gender Inclusion	●	Women's participation improving but leadership roles remain limited	Gender-responsive WASH governance	Increase women's representation in leadership and decision-making structures
Equity / Inclusion	●	Vulnerable groups recognized but service gaps persist for rural, poor and marginalized populations	Inclusive universal coverage leaving no one behind	Target investments to underserved populations and remove access and affordability barriers
Hygiene Services	●	1.7 billion people lack basic handwashing facilities with soap and water	Universal access to hygiene services	Scale up handwashing infrastructure, behaviour change programmes and menstrual hygiene management
Financing	●	Less than 13% of countries report adequate WASH financing; heavy reliance on donor funding persists	Sustainable and predictable WASH financing	Increase domestic investment, strengthen cost recovery and leverage blended financing
Human Resources	●	Shortages of technical, managerial and regulatory staff limit service delivery and oversight	Adequate skilled workforce across the sector	Invest in workforce development, capacity building and retention strategies

Source: UN-Water GLAAS 2025; WHO/UNICEF Joint Monitoring Programme.

### 1.6.1 Regional Perspective: Africa - Trends, Gaps and Commitments



Africa has made important commitments toward achieving universal access to water and sanitation, supported by strong continental policy frameworks and human rights instruments. However, progress remains uneven, and the continent is not yet on track to achieve Sustainable Development Goal 6 by 2030. While access to basic drinking water services has improved, advancement toward safely managed water and sanitation-SDG 6-benchmark remains slow. Significant disparities persist between urban and rural populations, across income groups, and among vulnerable

communities. Rapid population growth, climate variability, infrastructure deficits, and financing gaps continue to constrain progress, making the period to 2030 a decisive phase requiring accelerated implementation and improved operational performance.

Regional action on water and sanitation in Africa relies on continental declarations and human rights instruments. These frameworks treat water and sanitation as development priorities and fundamental rights. The African Charter on Human and Peoples' Rights (1981) recognizes the right to a satisfactory environment and makes a clear link between environmental protection, health, and human dignity. The Protocol to the African Charter on the Rights of Women in Africa (Maputo Protocol) builds on this. It emphasizes women's

rights to healthy living conditions, including access to water and sanitation. The African Charter on the Rights and Welfare of the Child (1990) highlights protection of children’s health and well-being through access to basic services. Collectively, these instruments establish a rights-based foundation for water, sanitation, and environmental protection across the continent.





These rights-based commitments are complemented by sector-specific continental declarations. Such declarations have progressively elevated water and sanitation on Africa’s development agenda. The Sharm El-Sheikh Commitments on Accelerating the Achievement of Water and Sanitation Goals in Africa (2008) called for stronger governance, increased financing, and greater accountability for water and sanitation. In the same year, the eThekweni Declaration on Sanitation and Hygiene (2008) emphasized making sanitation a priority, allocating dedicated budgets, and promoting hygiene services. These declarations marked a shift. They recognized sanitation as a core development priority alongside water supply.<sup>1</sup>

The African Union further elevated this priority through the AU Theme of the Year 2026: Ensuring sustainable water availability and safe sanitation systems to achieve the goals of Agenda 2063. This theme underscores the centrality of water security and safely managed sanitation in achieving inclusive growth, climate resilience, and sustainable development across the continent.<sup>2</sup>

Africa has made significant commitments toward universal access to water and sanitation. These efforts are supported by continental policy frameworks and human rights instruments. However, progress is uneven. The continent is not on track to achieve Sustainable Development Goal 6 (SDG 6) by 2030. Access to basic drinking water services has improved. Still, movement toward safely managed water and sanitation—the SDG 6 benchmark—remains slow. Urban and rural populations, income groups, and vulnerable communities still face disparities. Rapid population growth, climate variability, infrastructure deficits, and financing gaps continue to constrain progress. The period to 2030 is decisive and requires faster implementation and better operational performance.

Current estimates show that only about one-third of Sub-Saharan Africa’s population uses safely managed drinking water services. Access to safely managed sanitation is even lower. Hundreds of millions across the continent still lack basic water and sanitation services, especially in rural areas and informal settlements. At current progress rates, achieving universal access by 2030 would require a major acceleration. This is especially needed in sanitation coverage, wastewater management, service reliability, and sustainability of water resources. These trends show infrastructure expansion alone is not enough. It must be paired with better governance, operational efficiency, and protection of ecosystems.

Table 1.2: Africa SDG 6 Progress

Thematic Area	Progress	Current Situation	2030 Target	Required Action
a. Policy Frameworks		Most countries have WASH policies, but implementation and financing remain limited	Fully implemented policy frameworks	Shift from policy development to implementation and accountability
b. Climate Integration		Climate risks recognized but limited adaptation investments	Climate-resilient WASH systems	Invest in resilient infrastructure and diversified sources
c. Drinking Water Access		Basic access improving but safely managed services remain low	Universal safely managed water	Expand piped systems and improve reliability
d. Sanitation Access		Slow progress; reliance on on-site systems with limited sludge management	Universal safely managed sanitation	Scale non-sewered sanitation and FSM
e. Institutional Coordination		Fragmented mandates affect performance	Coordinated governance	Strengthen inter-agency coordination

<sup>1</sup> African Union, *Sharm El-Sheikh Commitments for Accelerating the Achievement of Water and Sanitation Goals in Africa (2008)*; AfricanSan and African Ministers’ Council on Water, *eThekweni Declaration and AfricaSan Action Plan (2008)*; African Union, *AU Theme of the Year 2026: Ensuring Sustainable Water Availability and Safe Sanitation Systems to Achieve the Goals of Agenda 2063 (African Union 2026)*. African Union Commission, *Agenda 2063: The Africa We Want (African Union 2015)*.

<sup>2</sup> African Ministers’ Council on Water (AMCOW), *Africa Water and Sanitation Sector Monitoring and Reporting Framework (AMCOW 2014)*.

Thematic Area	Progress	Current Situation	2030 Target	Required Action
f. Monitoring & Data	●	Limited disaggregated data and service quality tracking	SDG-aligned monitoring	Improve data systems and reporting
g. Equity & Inclusion	●	Rural and vulnerable populations underserved	Universal inclusive access	Target underserved communities
h. Hygiene Services	●	Large population lacks handwashing facilities	Universal hygiene access	Scale hygiene infrastructure
i. Financing	●	Significant financing gap	Sustainable financing	Increase domestic investment and private sector financing
j. Operational Efficiency	●	High NRW, high energy costs, weak asset management	Efficient utilities	Improve efficiency and reduce losses
k. Human Resources	●	Capacity gaps across sector institutions	Skilled workforce	Strengthen capacity building

Source: UN-Water GLAAS 2025; WHO/UNICEF Joint Monitoring Programme.

Regional bodies provide platforms for tracking progress and strengthening accountability. Agenda 2063 sets continental targets for universal access to safe water and sanitation, sustainable water resources management, and climate-resilient infrastructure. The African Ministers’ Council on Water (AMCOW) supports implementation through continental coordination, knowledge sharing, and monitoring aligned to SDG 6.

Monitoring of WASH progress in Africa is undertaken through complementary frameworks, including the WHO/ UNICEF Joint Monitoring Program (JMP), UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), AMCOW SDG 6 regional reporting, Agenda 2063 continental monitoring, and national Voluntary National Reviews (VNRs).

### 1.6.2 Eastern Africa Status

## WATER & SANITATION SERVICES SERVICE COVERAGE ACROSS MAJOR CITIES

Key indicators of population served and water and sewer connections across Nairobi, Eldoret, Mombasa, Nakuru and Kisumu.

INDICATORS	NAIROBI	ELDORET	MOMBASA	NAKURU	KISUMU
Total Population Served	4,382,875	442,288	911,791	576,097	470,118
Total Population in Service Area	5,571,159	527,196	1,386,568	616,509	503,846
Population Served with Sewer Connections	2,572,725	397,403	230,870	164,481	74,311
Population Served with Sanitation Services	5,364,392	527,196	1,336,030	611,010	483,819
Water connections	242,294	71,707	28,075	45,825	49,168
Sewer connections	198,759	32,300	14,785	19,725	16,529

Data source: WASREB 2024/2025

East Africa reflects similar continental trends, with improvements in basic access but slower progress toward safely managed services. Countries across the region continue to face challenges related to rapid population growth, climate variability, infrastructure deficits, and financing constraints. Kenya has made progress in expanding access to water services, particularly in urban areas, but gaps remain in safely managed

sanitation, rural service delivery, and sustainability of water sources. Uganda has relatively high access to basic water services, largely through rural point sources, though safely managed services remain limited due to reliability challenges and inadequate sanitation systems. Tanzania has expanded infrastructure coverage, but utilities face operational efficiency constraints, limited wastewater treatment, and service continuity challenges.

Rwanda has made notable progress in expanding basic access to drinking water, supported by strong governance and sector reforms, although safely managed services remain limited. By contrast, fragile and conflict-affected contexts such as South Sudan and parts of the Democratic Republic of Congo continue to face significant infrastructure deficits, reliance on humanitarian service delivery models, and weak institutional

capacity. More broadly, across East Africa, common challenges include reliance on groundwater abstraction, energy-intensive pumping, high non-revenue water, limited sanitation investment, and weak faecal sludge management systems.

### 1.6.3 Kenya Water and Sanitation Outlook

Kenya's population is estimated at approximately 54 million people, of whom about 31.6 million live within areas served by regulated Water Services Providers (WSPs). Within these regulated areas, approximately 22.8 million people receive water services, 29.2 million receive sanitation services, and about 5.0 million are connected to sewer systems. At the national level, this corresponds to roughly 42% water coverage, 54% sanitation coverage, and 9% sewer coverage. These figures provide a broad national context while underscoring the importance of continued expansion of services, particularly beyond existing formal service areas.

Service levels are notably higher within regulated areas compared to non-regulated areas. In regulated areas—in contrast with non-regulated, predominantly rural or informal areas—coverage reaches approximately 72.1% for water, 92.5% for sanitation, and 15.8% for sewer services. These figures reflect stronger performance for water, sanitation, and sewer services in regulated, predominantly urban locations, relative to similar indicators in less regulated regions. This highlights the key role of regulated WSPs in advancing access to water and sanitation services.

In comparison to regulated areas, overall data points to a differentiated service landscape across the entire service territory. While regulated areas demonstrate relatively high sanitation access and moderate water coverage, sewer connectivity in these areas remains limited, indicating continued reliance on on-site sanitation solutions even where services are regulated. Meanwhile, a significant share of the population remains outside regulated service areas altogether. This reinforces the need for sustained investments and coordinated approaches to progressively expand access and improve levels of service for both regulated and non-regulated populations.

The major urban centres account for a significant share of the regulated population. Nairobi WSP serves the largest population but still has a service gap of approximately 1.2 million people receiving unregulated water access. Sewer connectivity is relatively higher than in other cities, but it remains below half the population. Mombasa WSP records the largest water service gap, with nearly 475,000 people within its service area not receiving regulated water services. Nakuru and Kisumu WSPs demonstrate high water coverage, but sewer connectivity remains low, indicating reliance on onsite sanitation systems. Eldoret shows strong performance across all indicators, including relatively high sewer coverage, suggesting more advanced wastewater infrastructure.

### 1.6.4 Legal, Policy and Regulatory Framework Supporting Universal Access to Water and Sanitation

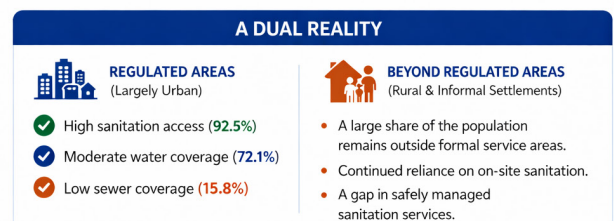
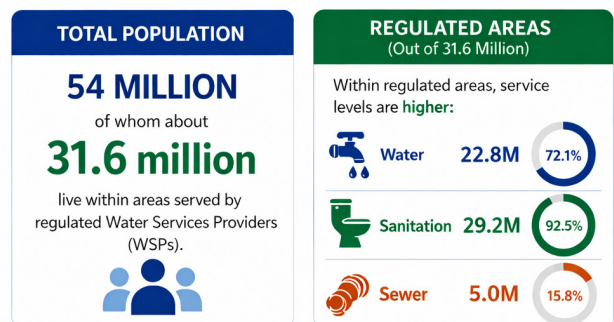
Kenya's journey toward universal access to water and sanitation is guided by a structured constitutional, legal, and policy framework that defines rights, clarifies institutional roles, and supports implementation from the national to the service delivery level.

## Kenya's Regulated Water and Sanitation Services

Snapshot of Coverage and Service Levels (2024)



Kenya's population is estimated at approximately **54 million people**, of whom about **31.6 million** live within areas served by **regulated Water Services Providers (WSPs)**.



The figures highlight the progress made within regulated service areas and the need for sustained investment and coordinated efforts to expand access and improve service levels nationwide.

Table 1.3: Sector Legal and Regulatory Frameworks

Instrument	Year	Details
a. Kenya Vision 2030	2008–2030	Positions water and sanitation as enablers of socio-economic transformation and targets universal access Bottom-Up Economic Transformation Agenda (BETA) aligns with this by prioritizing inclusive water and sanitation investments and climate-resilient infrastructure
b. Constitution of Kenya	2010	Guarantees the human right to water and sanitation and promotes equitable, inclusive and sustainable service delivery
c. National Water Master Plan 2030	2014–2030	Defines long-term water infrastructure priorities and water security planning
d. Water Act	2016	Operationalizes the right through regulated service delivery, licensing of WSPs and WASREB oversight
e. National Water Policy	2021	Guides sustainable water resources management and infrastructure expansion
f. National Water & Sanitation Investment Plan (NAWASIP)	2023	Mobilizes blended financing and prioritizes underserved areas
g. Water Act Amendment	2024	Promotes alternative financing including PPPs for bulk water and sanitation infrastructure
h. Water (Services) Regulations	2025	Strengthen governance, ring-fence revenues and improve accountability and service reliability
National Sanitation Management Policy**15	2026	Supports safely managed sanitation, sewerage expansion and faecal sludge management
i. Kenya Vision 2030	2008–2030	Positions water and sanitation as enablers of socio-economic transformation and targets universal access
j. State Department for Water & Sanitation Strategic Plan	2023–2027	Focuses on infrastructure expansion, partnerships and governance strengthening
k. WASREB Strategic Plan	2023–2027	Strengthens regulatory oversight, service quality and access expansion

Table 1.4: Supporting Cross-Sector Legal and Regulatory Frameworks

Instrument	Year	Details
a. Environmental Management & Coordination Act (EMCA) – NEMA	1999 (Rev. 2015)	Provides environmental safeguards, EIA requirements and pollution control
b. Public Health Act	Cap 242 (Rev. 2012)	Sets sanitation, wastewater management and hygiene standards
c. Public Finance Management Act (PFMA)	2012	Provides budgeting and financial accountability for sector investments
d. Public Procurement & Asset Disposal Act (PPDA)	2015 (Rev. 2022)	Guides transparent procurement of water and sanitation infrastructure
e. Public Private Partnership (PPP) Act	2021	Enables private sector financing for water and sanitation projects
f. Climate Change Act	2016	Promotes climate-resilient water and sanitation infrastructure
g. County Governments Act	2012	Assigns counties responsibility for water service delivery
h. Urban Areas & Cities Act	2011 (Rev. 2019)	Supports urban water and sanitation planning and management

## 1.7 Stakeholder Engagement and Multi-Sector Collaboration in Water Sector

Collaboration with stakeholders remains central to WASREB's mandate and is a key Pillar in its strategic plan. This has enabled the Regulator to strengthen its oversight functions, improve governance at the WSP level, and improve the quality of services in the sector. Through these engagements, WASREB continues to leverage partnerships to attain sector priorities, align the regulatory framework to the environment, and promote operational efficiency.

### 1.7.1 Consumer Engagement Initiatives

#### I. Consumer Clinics

WASREB operationalized Citizen Engagement Standards, providing a structured framework for Water Services Providers (WSPs) to engage consumers through various public participation mechanisms. Consumer clinics have emerged as one of the most effective tools in improving service delivery, with sessions conducted in more than 20 Counties across the country in the year.

Consumer clinics jointly organized by WSPs and WASREB delivered tangible benefits;

- Enhanced Awareness and Empowerment: Consumers gained a clearer understanding of service processes, their rights, and how to engage with WSPs. Feedback received by WASREB showed increased use of formal complaint channels.
- In addition, improved complaint resolution was noted. Direct dialogue strengthened the complaints-handling framework, leading to higher resolution rates within defined Turn-Around Times (TAT) and full compliance (100%) under CAJ complaints handling reporting.
- This, in turn, drove higher consumer satisfaction, as the active implementation of clinics contributed to notable improvements in satisfaction scores based on feedback provided from consumers.
- Moreover, the promotion of equity and participation was evident, as these clinics aligned with devolution and subsidiarity principles by bringing services and accountability closer to the people.
- Finally, utilities that consistently implemented consumer clinics, alongside barazas and door-to-door sensitizations, recorded stronger overall performance in governance and service delivery.

## II. Public Participation

Public participation is a constitutional requirement anchored in Article 10 and Article 174(c) of the Constitution of Kenya, which emphasizes democracy and the participation of the people in decision-making. This requirement is further operationalized under Section 139 of the Water Act, 2016, which requires stakeholder consultation before approval of licenses and tariffs.

Before any license or tariff is approved, WASREB conducts a structured public participation process for 30 days, which is published in newspapers of national circulation, includes physical public meetings, provides opportunities for written submissions, and ensures stakeholder engagement. WASREB has further strengthened this requirement by making zonal/regional meetings mandatory, allowing consumers to participate closer to their areas of service.

The consultations supported licence approvals, tariff reviews, and, in some cases, joint processes recognizing the interlinked nature of licensing and tariff determination. Going forward, WASREB has adopted joint public participation for license and tariff approvals, given the related nature of the two decisions in influencing service delivery outcomes.

During the consultations, it was observed that consumer awareness is improving with stakeholders increasingly understanding their rights, the tariff-setting process, and expected service obligations. Participants were more engaged, asked informed questions, and sought clarification on service levels, cost drivers, and implementation timelines. The regional and zonal meetings were particularly valuable, as they enabled communities to provide views closer to their homes and improved inclusivity in the process.

Public participation explained the sanitation levy proposed in the tariff reviews for Nanyuki and Nakuru. Initially, many stakeholders did not understand why the levy was needed, but the process provided an opportunity to explain its purpose, address concerns, and demonstrate how the levy would support better sanitation services. The consultations highlighted context-specific tariff issues. This was especially true in ASAL counties such as Mandera and Marsabit, where unique consumption patterns exist. These include livestock water use tariffs. Public engagement clarified these differentiated tariffs and made sure local economic and livelihood needs were included in tariff design.

Some challenges were observed. These included initial resistance to tariff adjustments, logistical constraints in remote areas, and misconceptions about cost-reflective tariffs. However, the engagement, widely publicized and held via regional or zonal consultations, helped address these concerns. This built confidence in the regulatory process.



Consumer engagements during a public forum

### 1.7.2 Stakeholders Engagements

WASREB continued to strengthen its engagement with key actors across the water and sanitation ecosystem—including advocacy bodies, civil society networks, private sector associations, development partners, and regional regulators. These collaborations advance good governance, gender inclusion, innovation, and improved service delivery, ensuring the sector remains responsive to citizens’ needs while aligned with national and international commitments.

#### I. Championing Gender Inclusion in collaboration with WIWAS

The water sector has taken concrete steps toward gender inclusion as a key enabler of equitable, sustainable, and efficient services. This aligns with the national constitution requiring at least two-thirds (33%) gender representation in leadership and WASREB’s guidelines for at least 33% female representation on Water Service Provider (WSP) boards and management.



Women in Water and Sanitation (WIWAS) members

A key driver of this progress is the Women in Water and Sanitation Association (WIWAS), a professional group formed in 2016 that empowers women in the sector. WIWAS strengthens women’s roles in management, decision-making, and technical jobs while promoting gender-responsive policies. Several WSPs saw more women on boards, in senior management, and technical roles such as engineering and meter reading.

Through mentorship, leadership training, and advocacy, WIWAS encouraged qualified women to seek roles traditionally dominated by men. Its work with WASREB, WSPs, and others shifted

mindsets from viewing gender inclusion as a box-ticking exercise to seeing it as vital to resilience, efficiency, and service excellence. As Kenya accelerates efforts toward 2030, sustained gender inclusion, led by groups like WIWAS, will be vital. Empowering women as professionals, leaders, and change agents will help the sector deliver fair, efficient, and resilient water and sanitation services to all Kenyans.

## II. Strengthening Governance & Citizen Participation

WASREB deepened its collaboration with civil society, promoting transparency, accountability, and community-centered approaches. The dialogue with civil society reaffirmed their shared commitment to safeguarding consumer rights under the Water Act, 2016, and ensuring that sector reforms translate into improved service delivery for households nationwide.

## III. Advancing Private-Sector Sanitation Solutions

To strengthen non-sewered sanitation services, WASREB deepened its collaboration with the Association of Private Sector Sanitation Players (APSSA). Discussions addressed specific sanitation value chain challenges and opportunities, such as behaviour change, stakeholder mapping, technology selection, and lobbying for increased investment in sanitation infrastructure. This partnership improves coordination and regulatory oversight and fosters innovation, establishing the private sector as a critical partner in scaling safe and inclusive sanitation solutions.

## IV. Supporting Investment & Regulatory Strengthening

WASREB collaborated closely with development partners to strengthen regulatory expertise and facilitate investment readiness.

This partnership underscored the value of development alliances in advancing inclusive sanitation and improving urban service delivery. WASREB's active engagement with national, regional, and global stakeholders strengthens regulatory impact and drives sector innovation.

## V. Strengthening Water Governance in ASAL Counties

WASREB, in collaboration with UNICEF, convened a high-level Water Governance Dialogue for leaders from Arid and Semi-Arid Lands (ASAL) counties. The Water Governance Scale-Up Programme supported this dialogue. The initiative was set to roll out across ten priority ASAL counties, starting with Garissa, Wajir, Mandera, Marsabit, Samburu, and Turkana.

- The dialogue sought to raise participants' awareness of key water governance performance issues and existing gaps within ASAL counties.
- The dialogue aimed to build consensus among county leadership on the most urgent water governance improvements needed.
- The program intended to secure concrete commitments from county leaders to advance water service delivery improvements.

By engaging leadership and enhancing capacity, the program aims to address persistent water service challenges in ASAL counties and support equitable access as Kenya advances.

## VI. Regional and International Collaboration

WASREB strengthened its regional and international engagements by participating in the inaugural ESAWAS Regulators Association training program—a four day course on WSS regulation that explored foundational regulatory principles, inclusive service delivery, and practical case studies. WASREB hosted benchmarking exchanges with delegations from Lilongwe Water Board (Malawi), Uganda's Umbrella Authorities, and the Ministry of Water and Environment. These engagements fostered knowledge sharing on economic regulation, creditworthiness assessment, regulatory tools, performance improvement planning, and gender mainstreaming. Together, these interactions reinforce regional cooperation, build regulatory capacity, and drive continental progress in WSS regulation.

### 1.7.3 Environment and Climate Resilience

Adopting climate-resilient approaches is essential for safeguarding water resources. The Mau Forest Complex, a critical water tower in Kenya, underpins major river catchments that serve millions of people. Protecting and restoring this ecosystem is necessary for reliable, equitable, and climate-resilient water services amid increasing climate variability and water stress.

The 2025 Mau Forest Complex Integrated Conservation Program, a 10-year multi-stakeholder initiative across Nakuru, Kericho, Narok, and Bomet counties, targets restoration and protection of the Mau ecosystem. By focusing on forest, wetland, and riverine restoration and sustainable livelihoods, these actions aim to strengthen catchment protection, improve water availability, and bolster the resilience of vital water resources.

WASREB is supporting the programme by adopting and restoring 30 hectares of forest cover, in line with its objective to promote sustainable water resource management and climate resilience. Catchment restoration contributes to better water availability, reduced sedimentation, and the durability of water infrastructure investments.

Collaboration among the Kenya Forest Service, county governments, WASREB, and local communities anchors the programme's success. This coordinated strategy enhances conservation, strengthens water security, and delivers environmental and socio-economic benefits, underlining the need to integrate ecosystem protection, climate resilience, and resource management to achieve universal access by 2030.

## 1.8 Technology Adoption

### 1.8.1 Strengthening Utility Data & Digital Systems in Kenya - Africa Utility Data Collaborative (AUDC)

The Africa Utility Data Collaborative (AUDC), spearheaded by WASREB—which is driving sector-wide improvements in data standards and utility reporting in partnership with Athena Infonomics and hosted by AfWASA—is an emerging regional platform designed to transform how water utilities generate, manage, and use data.

The main purpose was to establish a regional data visualization and analytics platform to improve utility performance, which will enable affordable, high quality analytics for utilities, regulators, and sector professionals.

Building on insights from international models and extensive consultations, AUDC aims to provide affordable, high quality analytics. These analytics strengthen digital systems, improve operational decision making, and enable utilities to address persistent sector challenges. Such challenges include high non revenue water, fragmented data systems, weak infrastructure monitoring, and limited customer analytics.

A pilot conducted with eight Kenyan utilities—Malindi, Kisumu, Eldoret, Thika, Nakuru, Nyeri, Isiolo, and Nairobi—confirmed demand for improved data governance, enhanced business intelligence capabilities, and practical digital tools that can translate raw data into actionable insights. As AUDC evolves, it will offer shared digital assets, single source of truth dashboards, an insight as a service desk, targeted training, technology reviews, and peer learning opportunities. The initiative's forward strategy emphasizes strengthening data management and sharing practices, building institutional capacity across both WASREB and utilities, and embedding a culture of evidence based decision making through regular utilities performance reporting. Together, these efforts position AUDC as a catalytic, scalable model for accelerating digital transformation and supporting more efficient, transparent, and customer focused water and sanitation services across the region.

### 1.8.2 Electricity Costs and Energy Efficiency

Electricity costs continue to exert significant pressure on utility operating budgets, particularly for systems reliant on pumping for abstraction, treatment and distribution. During the reporting period, the average

## Roles and Responsibilities of all the stakeholders in the Pilot



Set up a secure channel for data sharing and ensure full compliance with data	Recruit data science talent	Shortlist Utilities for pilot	
Coordinate with the technical steering committee to map use cases	Lead the analysis of the data to applicale into utilities	Timely data transfer	
Co-create work plans and oversee progress of the data science as team and troubleshoot as necessary	Link the data sets to a single dashboard and automate updates	Participate in Data Steering Committee Meetings	
Present key deliverables to the steering committee for feedback	Develop Artificial Intelligence extensions to enable greater engagement by utility staff	Chair the Data steering committee	
Summarize gaps in the underlying data systems and recommend a roadmap for continued analysis	Participate in steering committee meetings	<i>For Specific Utilities</i>	
	Ensure that all data is processed in compliance with applicale data protection	Sharing the data in a responsible, transparent, and timely manner	
	Implementing industry-standard security measures to safeguard data	Participate in Data Steering Committee Meetings and provide feedback	

electricity cost to O&M ratio across the 94 utilities stood at 12.94%, with a median of 8.14%, indicating that more than half of the utilities-maintained electricity costs below this level. Overall, only 51 utilities operated within the recommended benchmark of  $\leq 10\%$  of O&M costs.

To support utilities in managing rising energy costs, WASREB, in collaboration with the World Bank, convened an Energy Efficiency Financing and Contract Management engagement for WSPs under the K-WASH programme. This identified key challenges including high electricity to O&M cost ratios, including inadequate capacity, limited energy audits, ageing and inefficient pumping equipment, weak monitoring of energy consumption limited integration of energy efficiency into operational planning and limited access to finance for energy efficiency investments.

The engagement further emphasized the importance of aligning with the Energy (Energy Management) Regulations, 2025, which require large energy users to dedicate energy managers, undertake periodic energy audits, implement efficiency measures and strengthen energy performance monitoring. Integrated interventions such as pump optimisation, motor upgrades, power factor correction and improved system design were identified as practical measures to reduce electricity costs. Solarization was also discussed as a complementary approach to diversify energy supply.



## 1.9 The Kenya National Water and Sanitation Investment and Financing Plan 2022 – 2030 (NAWASIP)

NAWASIP is structured to support implementation through screened county investments, targeted capital adjustments and sector reform programmes.

Despite the structured financing framework, several gaps remain that could slow implementation of NAWASIP and achievement of universal access by 2030. These include the absence of a dedicated NAWASIP budget line to anchor predictable public financing, weak intergovernmental coordination between national and county governments, and limited operationalization of the Water Sector Inter-Governmental Consultation and Co-operation Framework (WSIGCCF). In addition, many projects lack adequate preparation, feasibility studies and bankability assessments, constraining mobilisation of private and concessional financing. Monitoring systems for tracking financing mobilisation, project implementation and service delivery outcomes also remain fragmented. Addressing these gaps will require strengthening structured government financing mechanisms, operationalising WSIGCCF institutional arrangements, improving project readiness and packaging, enhancing results-based monitoring, and aligning financing, coordination and implementation within an integrated delivery framework to accelerate progress toward universal water and sanitation access by 2030.

Kenya's total investment requirement to achieve universal access to water supply and sanitation by 2030 is estimated at KShs 1,271 billion, representing the full cost of meeting access targets across urban and rural areas. However, the Kenya National Water and Sanitation Investment and Financing Plan (NAWASIP) translates the universal access ambition into a prioritized and structured investment programme of KShs 995 billion, based on screened county projects, targeted adjustments and sector reform programmes.

The KShs 995 billion comprises:

- KShs 882 billion in screened projects submitted by counties
- KShs 25 billion in additional capital adjustments to help counties meet universal WSS targets
- KShs 89 billion for programmes, policy reforms, coordination and capacity building

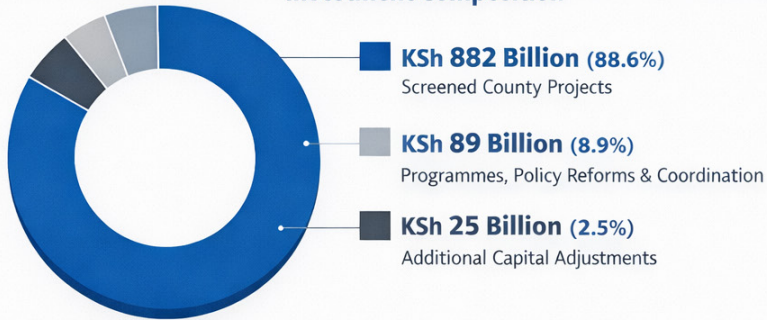
Financing is expected from a mix of private and public-type sources. Private and market-based financing, including Public-Private Partnerships (KShs 313 billion) and commercial borrowing (KShs 82 billion), is projected to mobilise approximately KShs 395 billion. Public-type financing, comprising tax-funded contributions, concessional lending and donor grants, is estimated at approximately KShs 529 billion based on projected fiscal space. Together, these sources amount to about KShs 924 billion, leaving a residual financing requirement of approximately KShs 71 billion.

This balance is expected to be addressed through increased national allocations, enhanced county own-source revenues, utilisation of equalisation and conditional grant mechanisms, and reprioritisation by sequencing and funding the highest-impact projects first.

# KSh 995 Billion

Total Investment Envelope

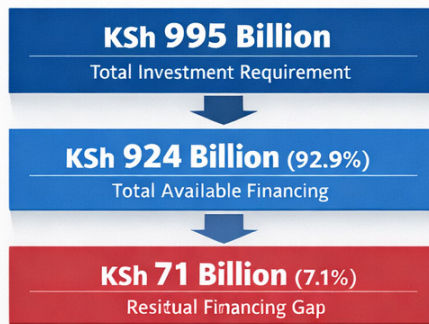
## Investment Composition



## Financing Structure

**KSh 395 Billion (42.7%)**  
Private & Market-Based Financing

**KSh 529 Billion (57.3%)**  
Public-Type Financing



## Closing the Financing Gap

- Increased national allocations
- Enhanced county own-source revenues
- Equalisation and conditional grants
- Project prioritisation and sequencing



# Chapter Two

## SECTOR DEVELOPMENT AND PROGRESS



## 2.1 Introduction

The water services sub-sector is responsible for ensuring equitable access to safe, reliable, and sustainable water supply and sanitation services. It is guided by national policies, regulatory frameworks, and the constitutional right to water. Over the years, the sub-sector has achieved notable progress in policy reforms, infrastructure expansion, and service delivery, while continuing to face challenges in financing, governance, and equitable distribution. This chapter outlines the key focus areas, achievements, challenges, and strategic priorities for the sub-sector.

## 2.2 Policy and Regulation

The water services sub-sector is anchored in the Water Act 2016, which provides the legal framework for the sub-sector. The Water Services Regulatory Board (WASREB) is established to protect consumer rights, including setting service standards and monitoring performance. Regulatory oversight ensures fair tariffs, quality service, and grievance redress mechanisms. However, the effectiveness of accountability, transparency, and coordination mechanisms between national and county governments still requires significant improvement.

## 2.3 Infrastructure Development

Significant investments have been made in expanding water supply networks to underserved rural and peri-urban areas. Climate-resilient infrastructure has become a priority, with initiatives such as rainwater harvesting, solar-powered pumping systems, and drought-resistant technologies being implemented to address climate variability. Treatment plants are being upgraded, and storage capacity is being expanded to meet the growing demand in urban centers. Despite these achievements, the maintenance and sustainability of infrastructure remain pressing concerns.

## 2.4 Service Delivery and Equity

The sub-sector is committed to the progressive realization of universal access to water and sanitation, as enshrined in the Constitution. While urban areas have seen improved coverage, rural communities and informal settlements continue to face inadequate service provision. To address this, efforts are being made to balance urban and rural access with targeted programs for marginalized regions. In addition, a reliable water supply also supports economic uses such as agriculture, industry, and tourism, underscoring the sector's role in national development. Nevertheless, inequities persist, with vulnerable groups often paying higher costs for water from vendors compared to households with piped connections.

## 2.5 Financing and Sustainability

Financing remains a critical challenge for the sub-sector. To address this, innovative financing approaches, including climate funds and blended finance models, are being explored to support infrastructure expansion and resilience projects. Ultimately, closing the funding gap will be essential to achieving universal access.

## 2.6 Performance Monitoring and Accountability

The sub-sector has strengthened monitoring through the Water Regulation Information System (WARIS), which enables reporting and performance tracking of Water Services Providers. In addition, regular inspections and reviews ensure compliance with standards and promote efficiency. As a result, these systems have enhanced accountability, though challenges remain in ensuring that all providers consistently adhere to regulatory requirements.

## 2.7 Consumer Protection and Engagement

Consumer protection is central to water services, and communities are increasingly empowered to participate in decision-making and demand accountability from service providers. To facilitate this, WASREB has established complaint resolution mechanisms. In addition, awareness campaigns promote water conservation, hygiene, and responsible usage. Together, these initiatives foster trust between providers and consumers. Nonetheless, more needs to be done to strengthen engagement in marginalized areas.

## 2.8 Alignment with the Bottom-Up Economic Transformation Agenda (BETA)

From a regulatory perspective, the Implementation Matrix under the Fourth Medium Term Plan signals a significant scale-up in investments in water supply, sanitation infrastructure, drought resilience, and utility efficiency for FY 2024/2025 and FY 2025/2026. The allocations increased from KShs 30.2 billion in 2024/2025 to KShs 33.5 billion in 2025/2026, bringing the total investment for the two financial years to KShs 63.7 billion. These investments are expected to expand urban water access, enhance water storage capacity, improve rural water availability, upgrade sanitation infrastructure, extend services to underserved areas, and reduce non-revenue water, thereby improving reliability, access, and sustainability of water and sanitation services.

Table 2.1: Water Sector Implementation Matrix Budget Summary

Intervention Area	2024/2025	2025/2026	Total
i. Water storage & drought resilience	6.5	7.2	13.7
ii. Rural water supply expansion	5.8	6.3	12.1
iii. Urban water supply projects	8.4	9.1	17.5
iv. Sewerage & sanitation infrastructure	4.9	5.6	10.5
v. Water for underserved areas	2.7	3.1	5.8
vi. NRW reduction & utility efficiency	1.9	2.2	4.1
<b>TOTAL (KSh Billion)</b>	<b>30.2</b>	<b>33.5</b>	<b>63.7</b>

## 2.9 Regulatory Implications for WASREB

From WASREB's perspective, the increased investments present both an opportunity and a regulatory responsibility. It is essential to ensure that the planned infrastructure leads to improved service delivery outcomes. The scale-up in urban water supply and storage investments will require enhanced monitoring of service coverage, reliability, and compliance with service standards. Increased sanitation investments will also require stronger regulation of sewerage services, wastewater management, and safely managed sanitation outcomes.

Investments targeting underserved areas align directly with WASREB's mandate on equitable access and pro-poor service provision. This alignment requires closer monitoring of service expansion in low-income and marginalized areas. Funding for non-revenue water reduction and utility efficiency highlights the need for performance benchmarking, financial sustainability oversight, and tariff compliance monitoring.

For WASREB, this calls for strengthened monitoring frameworks. It also requires enhanced governance oversight of WSPs. These steps will help ensure that infrastructure investments translate into improved performance and progress toward universal access to water and sanitation services.

### Corporate Social Responsibility contributions by utilities

Water Services Providers (WSPs) have made tree planting a central part of their CSR initiatives. These efforts align with the National 15 Billion Tree Growing Campaign (2022–2032) and support the protection of water towers, catchment areas, and riparian zones, which are essential for sustainable water resource management. WSPs, collaborating with WASREB, county governments, the Kenya Forest Service (KFS), and development partners, organize annual tree-planting exercises during Mazingira Day, World Water Day, and national

campaigns. WASREB demonstrates leadership by donating thousands of seedlings (e.g. 2,500 per event) and participating in sector-wide planting activities.

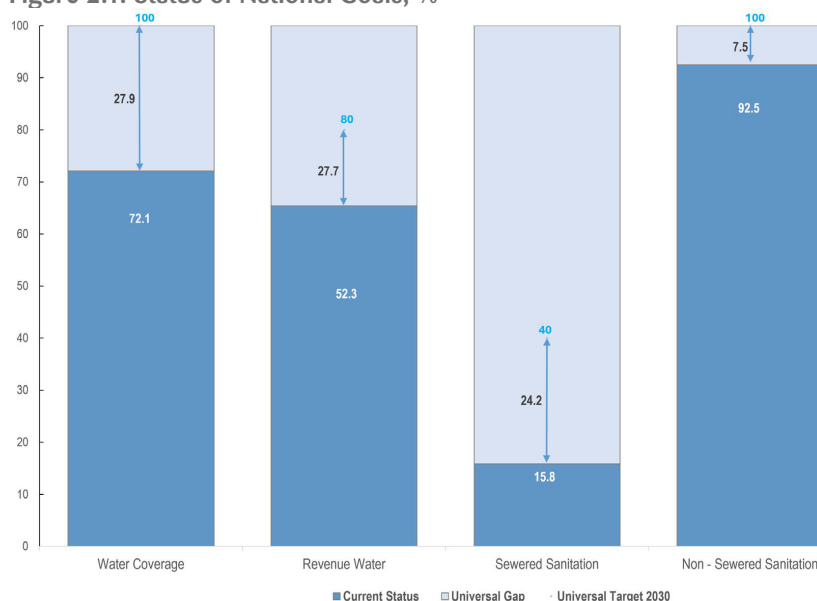
## 2.10 Expanding Access to Water and Sanitation Services

### National trends in urban and rural water access

The total population within the service areas of the 94 regulated WSP's grew by 2.1%, reaching 31.6 million people. In comparison, the number of people actually receiving service from these WSPs increased by 5.9%, or 1.3 million people.

Figure 2.1 presents progress against national targets in three priority areas: increasing service access, reducing system losses, and enhancing cost recovery, as outlined in the National Water Services Strategy (2025–2030). For comparability, all four indicators are normalized to a target of 100%.

Figure 2.1: Status of National Goals, %



The water coverage in regulated areas increased by two percentage points, rising from 70% to 72%. However, the number of people served with sewer increased to 240,701, which represents a marginal change for that group from 15% to 16% of the total population in regulated areas.

Table 2.2: General Data Summary

Parameter	2023/24	2024/25	Variance, No	Variance, %
Total Population in Service Area	30,943,749	31,589,360	645,611	2.1
Total Population Served with Water	21,515,394	22,776,665	1,261,271	5.9
Population Served with Sewer	4,756,578	4,997,279	240,701	5.1
Population Served with Sanitation Services	28,377,696	29,229,291	851,595	3.0
Total Water Produced, m3	461,282,593	504,426,445	43,143,853	9.4
Total Water Billed, m3	258,030,863	263,925,195	5,894,332	2.3
Total Water Billed (domestic), m3	163,134,276	168,476,206	5,341,930	3.3
Total Revenue, Kshs	28,850,537,096	32,880,448,191	4,029,911,095	14.0
Per capita production, l/c/d (using full production)	67.5	70.3	2.8	4.2
Per capita consumption, l/c/d ***	26.6	26.7	0.1	0.3
To no. of connections, water	1,440,369	1,458,849	18,480	1.3
To no. of connections, sewer	408,904	412,674	3,770	0.9

\*\*\* based on population served directly by WSP and excludes the portion of population served by third party providers

During the reporting period, water production increased. However, billed volumes grew less, showing low billing efficiency. The minimal change in per-capita consumption was attributed to a rising population in the service areas of the WSPs and the disproportionately low increase in billed volumes.

## Progress in sanitation service provision

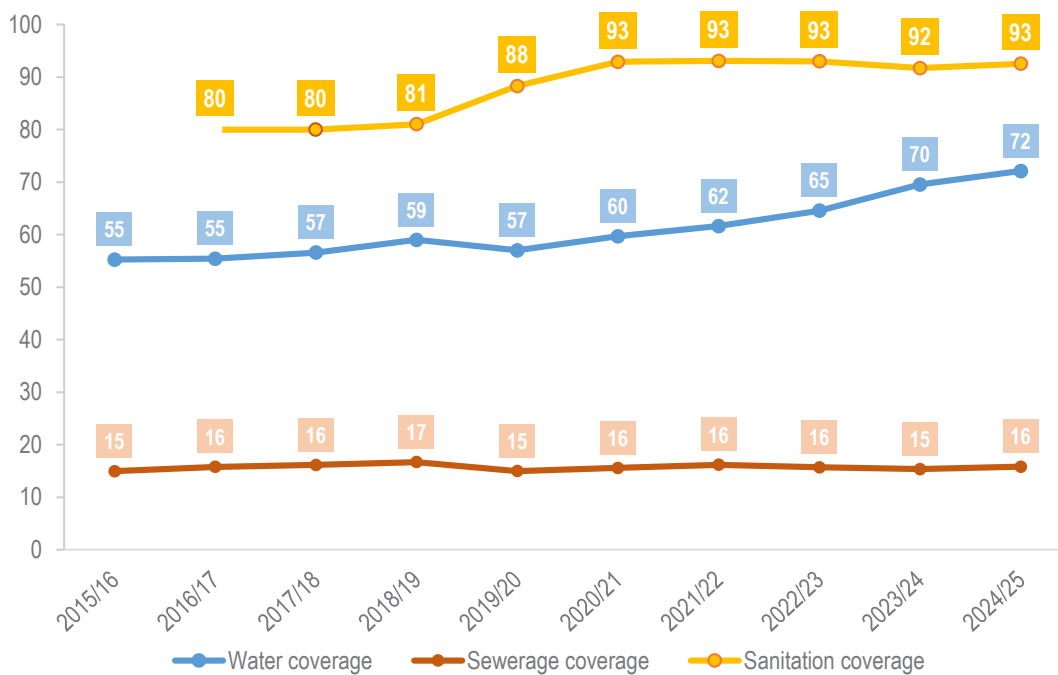
Out of the 32 million people within the service area, 29.2 million are served with basic sanitation services. WASREB has developed an indicator to evaluate utility performance in sanitation, which encompasses both on-site and off-site factors. Details on these are highlighted in Chapter 3 in the Sanitation KPI section. The proposed sanitation services key performance indicators framework for the water sector will be used to monitor the targets set for achieving universal sanitation coverage in Kenya. The framework aligns with the constitutional and existing frameworks for monitoring sanitation performance at the global, regional, national, and sector levels. This KPI incorporates sewered and non-sewered sanitation solutions to encourage greater utility engagement in comprehensive sanitation management.

## 2.11 Formalization of Small Service Providers (SSPs) and community schemes

Formalizing rural and small-scale water services is essential for shifting from fragmented community systems to structured, sustainable, and regulated service delivery. This requires coordinated institutional frameworks, stronger county oversight, minimum service standards, and appropriate financing mechanisms.

WASREB supports this transition by setting standards, licensing providers, and guiding counties in adopting corporatized rural models and delegated management arrangements. Counties are responsible for service area allocation, community engagement, capacity building, and operationalizing financing tools. Overall, formalized service delivery models strengthen governance, improve financial sustainability, and enhance reliability of services in rural and underserved areas.

Figure 2.2: Trend in Water and Sanitation Coverage



## 2.12 Financing the Water and Sanitation Sector

### 2.12.1 Budget Absorption and Project Implementation Performance

Budget absorption measures how much of allocated government funds are spent within a financial year. In FY 2024/2025, the National Government achieved a high overall absorption rate of 92%, spending Ksh. 4.03 trillion of the revised budgets. Recurrent expenditure performed strongest at 94%, development expenditure absorbed 89%, and Consolidated Fund Services reached 91%. However, some MDAs experienced over absorption due to supplementary budget adjustments, highlighting weaknesses in planning and forecasting.

**Table 2.3: National Government Budget Absorption FY 2024/2025**

Expenditure Category	Revised Budget / Expenditure (Ksh. Bn)	Absorption Rate (%)
Gross Expenditure	4,031.11	92
Ministerial Development	545.80	89
Ministerial Recurrent	~1,669.38	94
Consolidated Fund Services	1,815.94	91

Despite strong overall performance, development expenditure lagged because of procurement delays, project readiness gaps, and implementation challenges. In the water sector, this trend persisted: the State Department for Water and Sanitation recorded 91% overall absorption, with recurrent expenditure at 99% and development at 89%. While conservation and transboundary water programmes fully absorbed their budgets, infrastructure programmes underperformed due to implementation delays.

**Table 2.4: Budget Absorption – State Department for Water and Sanitation FY 2024/2025**

Program	Absorption Rate (%)
General Administration, Planning and Support Services	98
Water Resources Management	100
Water & Sewerage Infrastructure Development	90
Sanitation Infrastructure Development	86
Overall	91

Despite relatively high absorption, project implementation remained low across several development projects, indicating a gap between financial performance and physical delivery of outputs.

**Table 2.5: Project Implementation Status (Selected) for Water and Sanitation FY 2024/2025**

Project	Completion (%)
i. Kenya Water Master Plan	22
ii. Horn of Africa Groundwater Program	15
iii. Kenya Water, Sanitation & Hygiene	0
iv. Tana Water Works Development	79
v. Mbere South Water Supply	9
vi. Karimenu II Dam	4
vii. Athi Water Works Projects	25
viii. Kericho Water Project	35
ix. Lake Victoria North Projects	73
x. Groundwater Assessment	14

The average project completion rate was approximately 28 percent, indicating low implementation progress despite high development absorption. This suggests that funds were released but project execution lagged behind planned timelines. Major projects such as Karimenu II Dam, Horn of Africa Groundwater Programme and Kenya Water, Sanitation and Hygiene Project recorded minimal progress, while Tana Water Works Development and Lake Victoria North projects showed comparatively strong implementation performance.

The water sector's development expenditure recorded absorption of approximately 90 percent, but pending bills estimated at about Ksh. 15 billion were reported, particularly among Water Works Development Agencies. These pending obligations may affect future project implementation and create additional fiscal pressure. Overall, the analysis shows that although budget absorption in the water sector remains high, project implementation performance is moderate to low, highlighting the need to strengthen project preparation, procurement efficiency, monitoring and coordination to improve delivery of water and sanitation infrastructure.

### 2.12.2 Role of PPPs and private sector participation in infrastructure financing

Public-Private Partnerships (PPPs) provide an important mechanism for mobilizing private sector financing and improving delivery of water and sanitation infrastructure. Under PPP arrangements, a private party may design, finance, build, operate and maintain public infrastructure, and is compensated through user fees, government payments, or a combination of both, while assuming significant project risks. PPPs are particularly relevant in the context of shrinking fiscal space and growing infrastructure needs, enabling governments to accelerate project delivery, leverage private capital, and improve lifecycle management of infrastructure assets.

Kenya's PPP framework is supported by a comprehensive legal and institutional structure, including the PPP Act, PPP Directorate, PPP Committee, contracting authorities, and project implementation teams responsible for project preparation, procurement, negotiation, and monitoring of projects. The PPP Directorate serves as the Government's centre of expertise for structuring and delivering PPP projects. Its functions include project screening, technical and financial appraisal, legal advisory, procurement support, contract negotiation, and monitoring and evaluation.

Recent projects in the pipeline include the Sabaki Bulk Water Supply Project; a large-scale Public-Private Partnership (PPP) proposed as a Privately Initiated Proposal (PIP) to address supply deficits in Mombasa and Kilifi Counties. The project involves abstraction of bulk water from the Sabaki/Baricho aquifer, construction rehabilitation and maintenance of treatment facilities, power production, transmission pipelines, storage infrastructure and associated bulk and retail distribution systems to augment supply to the coastal counties. The project is structured under a design-finance-build-operate model, where the private partner mobilises upfront capital, constructs the infrastructure, and operates the system over a long-term concession period to recover investment through bulk water purchase arrangements. The initiative is expected to deliver approximately 80,000 m<sup>3</sup>/day of additional water, aimed at improving supply reliability, supporting population growth, tourism and industrial development, and reducing reliance on expensive alternative sources.

In expanding private sector participation in water infrastructure financing, the regulatory role of WASREB remains central in safeguarding consumer interests while ensuring sustainability of service and investments. As the sector regulator, WASREB is mandated to protect consumer interests and promote both intra- and inter-generational equity in water service delivery. This requires balancing the need to attract private sector investment with the obligation to ensure that water, as a basic human need, remains affordable and accessible to all present and future users.

Under Public-Private Partnership (PPP) arrangements, Section 85(1) requires that no person may provide water services without a licence issued by WASREB. This necessitates balancing the existing licensing regime with a suitable framework for private proponents, particularly regarding licence duration, performance monitoring arrangements, and clearly defined Key Performance Indicators (KPIs) to ensure compliance, service quality, and protection of consumer interests.

Further, under private financing arrangements, tariffs and pricing structures become a critical regulatory consideration. While private investors require predictable revenue streams and reasonable returns to finance, construct, and operate infrastructure, tariff setting must also ensure affordability, minimum service levels, and protection of vulnerable populations. WASREB thus plays a key role in reviewing tariff proposals, approving cost-reflective but socially acceptable tariffs, and ensuring that efficiency gains from private participation are passed on to consumers.

In this light, the regulatory framework is progressing to strike a balance between financial viability and social equity. On one hand, tariffs should support investment recovery, operational sustainability, and appropriate risk allocation for private partners. On the other hand, water services must remain affordable, particularly for low-income households, and aligned with the human right to water, which emphasizes availability, accessibility, quality and affordability.

## 2.13 Operational Efficiency and Service Sustainability

### Operational performance trends among utilities

As a key institution in advancing the right to water and sanitation, the regulator is responsible for ensuring that utilities operate efficiently and that the sector continues to grow. This requires utilities to possess sufficient financial capacity to run their operations, comply with established standards, improve efficiency, and avoid placing unwarranted financial burdens on consumers.

While the sector has introduced performance-based financing to help utilities enhance service delivery, this approach must be supported by strong regulatory oversight. Utilities function within a framework that obligates them to remain accountable to multiple stakeholders. Effectively balancing these expectations promotes transparency and strengthens their operational independence. The established link between accountability and good governance underscores the need for all actors from both levels of government, regulators, financiers, and consumers, to fully execute their respective responsibilities. Ultimately, the degree of accountability depends on stakeholders' ability to enforce both positive and corrective actions.

#### 2.13.1 Energy efficiency improvements and cost reduction initiatives

During the reporting period, utilities recorded an average electricity cost ratio of 12.94% and a median of 8.14%, with only 51 of 94 WSPs operating within the recommended  $\leq 10\%$  benchmark as per the CWI assessment guide. This variation highlights the significant impact of electricity costs on WSP operating budgets.

WASREB notes the relevance of the recently enacted Energy (Energy Management) Regulations, 2025, which require large energy users—including water utilities—to appoint energy managers, conduct periodic audits, implement identified efficiency measures, and strengthen monitoring of energy performance. These regulatory provisions complement ongoing sector efforts aimed at enhancing cost efficiency and establishing more structured approaches to energy management. Several practical measures remain viable for utilities seeking to reduce electricity expenditure. These include pump optimisation, motor upgrades, power factor correction, and improvements in system design. Solarisation also offers a useful complement by diversifying energy supply and reducing reliance on grid electricity, particularly in rural or remote schemes.

Given the sector's continued dependence on grid power in the interim, WASPA—working with other sector stakeholders—will need to maintain advocacy for preferential electricity tariffs as more sustainable and efficient energy solutions are pursued.

#### 2.13.2 Operations and Maintenance (O&M) cost recovery trends

Operation & Maintenance Cost Coverage measure a utility's ability to meet its operational and maintenance expenses using its own internally generated revenue from water, sewer and other billed services. It is calculated as total revenue (excluding grants and subsidies) divided by total operation and maintenance costs. Revenue includes water and sewer billing, other service billing and other income, while O&M costs cover staff, administration, maintenance, levies, fees and direct operational expenses, excluding non-cash items such as depreciation.

Performance thresholds indicate that 100% reflects recovery of O&M costs, 101%–149% indicates coverage of O&M plus debt service and capital investments, while  $\geq 150\%$  represents full cost recovery.

In FY 2024/25, the average O&M Cost Coverage across WSPs improved to 103%, up from 98% in the previous year. This improvement was linked to increased adoption of cost-recovery tariffs (average tariff rising from Ksh 110/m<sup>3</sup> to Ksh 118/m<sup>3</sup>) and support from donor programmes such as K-WASH and WSDP-CLSGI II. However, the median coverage was 98%, indicating that more than half of utilities are still not fully covering O&M costs, and that stronger performance by a few utilities is raising the overall average.

Performance varied by utility size. Very large utilities improved from 105% to 108%, while large utilities recorded the most significant improvement from 87% to 100%. Small utilities posted a marginal 2% increase, whereas medium utilities experienced a 3% decline.

Out of 94 WSPs assessed, 44 utilities (47%) achieved O&M cost coverage of at least 100%, demonstrating financial sustainability, while 50 utilities (53%) remained below full cost recovery, indicating continued reliance on subsidies. Further distribution shows 9% of utilities above 120%, 38% between 100%–120%, 30% between 80%–100%, and 23% below 80%, highlighting persistent financial sustainability challenges across the sector.

## 2.14 Utility Performance Evaluation

### 2.14.1 Analysis of key performance indicators across utilities

Utilities were assessed and ranked based on nine Key Performance Indicators (KPIs) as shown in Table 2.6.

Table 2.6: Progress on Key Performance Indicators

KEY PERFORMANCE INDICATORS	2022/23	2023/24	Trend	2024/25	Trend
Water Coverage, %	65	70	↑	72	↑
Drinking Water Quality, %	90	89	↓	96	↑
Hours of Supply, hrs/day	17	18	↑	18	→
Non- Revenue Water, %	43	44	↓	48	↓
Metering Ratio, %	97	97	→	97	→
Staff Productivity, No. per 1000 Connections	7	7	→	7	→
Personnel Expenditure as % of O+M Costs, %	48	47	↑	44	↑
Revenue Collection Efficiency, %	93	95	↑	94	↓
O+M Cost Coverage, %	95	98	↑	103	↑
Sewered Sanitation Coverage, % *	16	15	↓	16	↑
Sanitation Coverage, % *	93	92	↓	93	↑
* not used for ranking					
<span style="color: green;">■</span> Good <span style="color: yellow;">■</span> Acceptable <span style="color: red;">■</span> Not Acceptable <span style="color: orange;">■</span> Benchmark Varies					

In the current period, six indicators showed improvement- these are Water Coverage, Drinking Water Quality, Personnel Expenditure as % of O&M Costs, O&M Coverage, Sewerage and Sanitation Coverage. Hours of Supply, Metering Ratio and Staff Productivity remained stagnant. Non- Revenue Water and Revenue Collection Efficiency declined.

### Sector-wide trends and improvements

Water Services Providers play a vital role in delivering safe, reliable, and sustainable services. While annual reporting offers a snapshot of utility performance, tracking performance over time provides a deeper and more strategic view of sector progress. It enables stakeholders to assess the effectiveness of interventions, identify persistent challenges, and adjust approaches accordingly.

Long-term monitoring also strengthens accountability by highlighting both consistent performers and WSP's that may require regulatory intervention or targeted support. In recognition of these benefits, the regulator has institutionalized the assessment of utility performance over time. This approach is key to improving sector governance, driving service improvements, and advancing the goal of universal and sustainable access to water and sanitation.

In addition to showing an upward trajectory, the utility must attain a minimum performance score above 50% in both periods. This dual criterion ensures consistent improvements and meets a minimum service quality threshold. By setting these standards, the framework encourages long-term performance gains, reinforces accountability, and supports the broader policy objective of achieving reliable and sustainable water and sanitation services.

## 2.15 Utility Ranking and Regional Benchmarking

### 2.15.1 Comparative analysis of utility performance across regions

The performance framework outlined in Section 3 establishes the maximum attainable score for a utility at 200 points. According to this assessment, Nakuru emerged as the leading utility scoring 171 points, followed by Nyeri and Nanyuki with scores of 170 and 168, respectively. Oloitokitok attained the least points of 16, followed by Nol Turesh with 26 points. The average performance remained unchanged at 44% during the period. Further, the number of WSPs with a score exceeding 50% remained at 36. Table 2.7 displays the top and bottom 10 utilities' overall performance.

Table 2.7: Top and Bottom 10 Utilities

TOP TEN UTILITIES 2024/25		
Rank	Utility	Score (Max 200)
1	Nakuru Urban	171
2	Nyeri	170
3	Nanyuki	168
4	Isiolo	161
5	Kisumu	158
6	Ngandori Nginda	158
7	Embu	154
8	Naivasha	153
9	Thika	150
10	Eldoret	148

BOTTOM TEN UTILITIES 2024/25		
Rank	Utility	Score (Max 200)
81	Kyeni	38
82	Olkejuado	37
83	Marsabit	36
84	Samburu	36
85	Mandera	35
86	Kakamega Rural	35
87	Elwak	29
88	Kapenguria	28
89	Nol Turesh	26
90	Oloitokitok	16

### Identification of top-performing and improved utilities

The evaluation of performance over time recognizes that utilities operate under diverse conditions, which can influence their performance. Consequently, this could hinder certain utilities from quickly ascending to the top. Conversely, despite operating in favourable environments, some utilities may not fully capitalize on this opportunity to enhance their performance. Comparing the current performance of the utility with that of the previous period aims to acknowledge efforts made towards improving performance. To ensure a continuous upward trend and maintain consistent performance improvement, positive changes must be observed for two consecutive years. In the present scenario, the periods under consideration are 2022/23 and 2023/24. Additionally, the utility must achieve a score of at least 50% in both reporting periods.

Table 2.8: Top Improvers and Bottom Losers

TOP IMPROVERS				
	WSP	Score 2023/24	Score 2024/25	Variance
1	Embe	105	123	18
2	Gatamathi	105	123	18
3	Eldoret	131	148	17
4	Limuru	107	123	16
5	Naivasha	139	153	14
6	Embu	140	154	14
7	Ngandori Nginda	145	158	13
8	Murang'a West	115	127	12
9	Kapsabet Nandi	110	122	12
10	Naromoru	111	120	9

BOTTOM LOSERS				
	WSP	Score 2023/24	Score 2024/25	Variance
81	Iten Tambach	88	78	-10
82	Karuri	72	63	-9
83	Kyeni	52	38	-14
84	Kilifi Mariakani	107	92	-15
85	Nyasare	116	101	-15
86	Murang'a Urban	155	138	-17
87	Gatundu	102	84	-18
89	Kiambere Mwingi	87	66	-21
90	Kakamega Rural	63	35	-28
91	Olkejuado	66	37	-29

Embe and Gatamathi recorded the most improvement, followed by Eldoret and Limuru, respectively. Conversely, Olkejuado and Kakamega Rural are the utilities experiencing the most significant declines.

Furthermore, it is worrying that the pace of decline significantly surpasses the pace of progress, presenting an unfavourable scenario for the sector.

## 2.16 An Outlook of Regional Performance

Benchmarking the performance of the largest WSPs within a country is often limited by the absence of comparable peers. In some cases, a country may have only a single utility, reducing opportunities for meaningful intra-national comparison. This constraint makes it difficult to evaluate relative performance and to identify best practices across the sector.

Regional benchmarking plays a critical role in addressing this gap, particularly for large WSP's or those operating as sole providers in their respective countries. While acknowledging the differences in operating environments across countries, benchmarking against similarly sized WSP's in the region offers valuable insights. It enables regulators and WSP's to draw lessons from comparable contexts, fostering performance improvement through shared experiences, innovations, and best practices.

Regional benchmarking by the ESAWAS Regulators Association for FY 2023/2024 is composed of ten members as shown in Table 2.9

Table 2.9: ESAWAS Regulators Association benchmarked members profile summary

Utility	Abbreviation	Country	Areas of operation	Year Established
Nairobi City Water and Sewerage Company	NCW&SC	Kenya	City of Nairobi	2003
Lusaka Water and Sanitation Company	LWSC	Zambia	Lusaka city; Kafue; Chongwe; Luangwa; Chilanga, Chirundu	1989
Dar Es Salaam Water and Sanitation Authority	DAWASA	Tanzania	Dar Es Salaam city; Kibaha; Bagamoyo;	2005
Águas da Região Metropolitana de Maputo	AdRMM	Mozambique	Greater Maputo City	1999
Water and Sewerage Company	WASCO	Lesotho	Maseru + 15 urban centres	2010
Water and Sanitation Corporation	WASAC	Rwanda	Kigali + all urban centres in the country	2014
Régie de Production et de Distribution d'Eau et d'Électricité	REGIDESO	Burundi	Bujumbura + all urban centres in the country	1962
Zanzibar Water Authority	ZAWA	Zanzibar	Zanzibar	2006
National Water and Sewerage Corporation	NWSC	Uganda	Kampala + 217 towns	1972
Lilongwe Water Board	LWB	Malawi	Lilongwe City	1947
Empresa Pública de Águas de Luanda	EPAL	Angola	Municipalities of Luanda Province	1995
Ekiti Water and Sewerage Company Ltd	EKWSC	Ekiti State, Nigeria	Urban areas and small towns of Ekiti State	1997

The focus of the regional benchmarking process is on the largest or solitary national utilities from each country. The ten utilities considered were NCW&SC of Kenya; LWSC of Zambia; DAWASA of Tanzania; AdRMM of Mozambique; WASCO of Lesotho; WASAC of Rwanda; ZAWA of Zanzibar; NWSC of Uganda, LWB of Malawi and EKWSC of Nigeria.

The performance analysis of the ten largest utilities using the ten selected KPIs is summarized in Table 2.10

Table 2.10: Performance Summary of the Utilities in the Ten KPIs

	KPI	NCW & SC	LWSC	DAWASA	AdRMM	WASCO	WASAC	ZAWA	NWSC	LWB	EKWSC
Quality of Services	Water Coverage [10]	79%	94%	78%	42%	59%	80%	89%	81%	90%	2%
	Sewerage Coverage [5]	48%	15%	10%	-	4%	-	12%	15%	5%	-
	Water Quality [15]	95%	97%	85%	100%	75%	100%	92%	100%	99%	87%
	Hours of Supply [10]	7	12	17	15	18	21	14	18	21	8
Economic Efficiency	O&M Cost Coverage [10]	105%	86%	89%	103%	59%	104%	75%	128%	121%	36%
	Collection Efficiency [15]	98%	89%	94%	68%	115%	100%	87%	95%	85%	37%
	Staff Cost vs O&M Costs [5]	63%	45%	31%	33%	33%	24%	33%	42%	32%	72%
Operational Sustainability	Staff/1,000 W&S Connections [5]	7	4	5	4	3	4	2	5	3	16
	Metering Ratio [10]	100%	66%	100%	78%	100%	100%	39%	100%	100%	53%
	NRW [15]	48%	55%	40%	43%	56%	41%	44%	38%	43%	58%

The benchmarking exercise also included a comparative analysis of the best-performing WSP's within each participating country to promote continuous improvement and guard against complacency. The best utilities were assessed from Kenya, Zambia, Tanzania and Rwanda. This approach aims to highlight excellence at the national level and encourage peer learning among high-performing institutions.

Table 2.11: Performance of the best Utilities in the ten KPIs

Utility	Quality of Services				Economic Efficiency			Operational Sustainability		
	Water Coverage [10]	Sewerage Coverage [5]	Water Quality [15]	Hours of Supply [10]	O&M Cost Coverage [10]	Collection Efficiency [15]	Staff Cost as a % of O&M Cost [5]	Staff/1,000 W&S Connections [5]	NRW [15]	Metering ratio [10]
	%	%	%	Hours/ day	%	Ratio	%	Ratio	%	%
Nyeri WSP, Kenya	100%	40.4%	100%	24	120%	110%	55%	4	15.4%	100%
Eastern WSC, Zambia	91.7%	3.8%	98.8%	20	75%	95%	68.2%	5	43.1%	100%
Moshi Urban WSA, Tanzania	65.1%	9.6%	84.2%	24	99%	98%	38.3%	3	23.9%	100%
WASAC, Rwanda	80.4%	N/A	99.9%	21	104%	100%	24.4%	4	41.1%	100%

During the reporting period, Nyeri Water and Sanitation Services Company from Kenya emerged as the best-performing utility in the region.

# Chapter Three

## DETAILED PERFORMANCE REVIEW



### 3.1 Data Integrity and Reporting Compliance: A 20- year Journey

#### Data Submission Trends Among Water Services Providers (2005/06–2024/25)

The journey of data submission by Water Services Providers to WASREB began in FY 2005/06. During this time, data was fragmented and uncertain. Only 25 utilities provided complete data; 33 submitted incomplete information, and another 33 failed to submit anything at all. This showed just how difficult coordinated reporting was in those early years. The system was young; the processes unfamiliar, and a culture of structured reporting had not yet taken root. But over the next two decades, a quiet revolution unfolded.

#### The Early Struggles (2005/06 – 2008/09): Establishing a Reporting Culture

In the first four years, progress was slow but tangible. Complete submissions rose sharply, from 25 to 77, as utilities gradually appreciated the value of structured reporting. Yet non-submissions remained high, ranging between 34 and 50 utilities during this period. This period was mainly about learning the system, training staff, and improving reporting tools. Ultimately, this era marked a shift from a largely manual, inconsistent reporting environment to the beginnings of a more structured and performance driven framework.

#### Turning Point: Compliance Takes Root (2009/10–2011/12)

A notable compliance shift occurred beginning in 2009/10. Complete submissions increased from 90 to 102 within two years. Simultaneously, incomplete submissions dropped to zero by 2010/11, and non-submissions fell to four. This period marks the point at which reporting compliance became mainstream, supported by improved monitoring from WASREB and strengthened accountability among WSPs.

#### Stable and Mature System (2012/13–2019/20)

From 2012/13 onward, reporting became stable and reliable. Most years had over 85 complete submissions, often more than 90. Incomplete submissions were almost always zero, and non-submissions stayed low at between one and seven. This shows that WSPs were comfortable using digital tools like WARIS, WASREB's monitoring had improved, data was being used for planning, and reporting had become a routine part of utility operations.

#### Era of Excellence: Near Perfect Compliance (2020/21–2024/25)

During this period, reporting performance reached its highest levels of compliance. Complete submissions consistently remained between 90 and 95, while incomplete submissions were eliminated entirely each year. Non submissions stayed very low, fluctuating between zero and three utilities. A major milestone was achieved in 2023/24, when all 95 licensed WSPs submitted complete data. This strong performance was sustained in 2024/25, with 94 complete submissions recorded and only two cases of non submission.

A summary of the above trends is presented in Table 3.1 below.

Table 3.1: Data Submission over the years

Status of data submission	Impact 1	Impact 2	Impact 3		Impact 4	Impact 5	Impact 6	Impact 7	Impact 8
	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities
Complete	25	55	72	77	90	100	102	100	91
Incomplete	33	13	12	13	6	0	0	0	0
Non-Submission	33	50	38	34	8	4	1	1	8
Total No. of WSPs	91	118	122	124	104	104	103	101	99

Status of data submission	Impact 9	Impact 10	Impact 11	Impact 12	Impact 13	Impact 14	Impact 15	Impact 16	
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities	No. of Utilities
Complete	86	88	88	88	87	91	90	92	92
Incomplete	2	0	0	0	0	0	0	0	0
Non-Submission	6	6	4	5	7	2	3	2	2
Total No. of WSPs	94	94	92	93	94	93	93	94	94

Status of data submission	Impact 17	Impact 18
	2023/24	2024/25
	No. of Utilities	No. of Utilities
Complete	95	94
Incomplete	0	0
Non-Submission	0	2
Total No. of WSPs	95	96

## 3.2 Performance of Water Services Providers

### A Sector Story Told Through Nine Key Indicators

#### 3.2.1 Introduction

The FY2024/25 performance data submitted by Water Services Providers (WSPs) across Kenya tells a story of sharp contrasts. Some utilities are operating at exceptional standards, with potable and reliable water, strong commercial systems, and stable finances. Others face chronic operational difficulties: high water losses, low coverage, high costs, and financial instability.

To understand why these differences exist, this chapter uses nine KPIs as a structured lens to interpret the FY2024/25 sector performance.

## 3.3 Sector Performance Based on FY2024/25 Data

### 3.3.1 Very Large Public Utilities

This category shows a clear performance divide, with a small group of utilities standing out as top performers. Nakuru Urban (171 points) leads as the best performing public utility in Kenya, followed closely by Nyeri (170 points), Kisumu (158 points), Embu (154 points), and Thika (150 points). These utilities consistently deliver high quality services, marked by full compliance with drinking water quality standards (with only slight exceptions), long daily supply hours of 20–24 hours, and have almost all customers metered. They also earn enough money to more than cover their operation and maintenance costs ranging from 113% to 145%.

Their main challenge remains moderate to high levels of non-revenue water, ranging between 26% and 51%. However, they are able to offset these losses because they collect revenue well, use their staff efficiently, and

maintain reliable water supply. As a result, they continue to perform strongly overall despite these challenges. Kirinyaga, Nairobi, Malindi, Kilifi Mariakani, Bungoma, Kericho, Mombasa show good DWQ but weaker coverage, supply hours, and high NRW of 76%.

With reference to the overall performance scoring, Mombasa (75) and Kericho (78) rank as the lowest performing Very Large utilities. Their weak scores are mainly due to short water supply hours of only 15–18 hours per day, very high-water losses of 59–61%, and high spending on personnel. In addition, their operation and maintenance cost coverage has remained largely stagnant, limiting their ability to improve service reliability and overall performance.

### 3.3.2 Large Public Utilities

This category shows a big difference in performance between utilities. A small group stands out at the top: Nanyuki (168 points), Isiolo (161 points), Ngandori Nginda (158), and Naivasha (153 points). These utilities performed very well because they supplied safe drinking water at all times, provided water for most of the day (between 20 and 24 hours), had most connections properly metered, and collected enough revenue to comfortably cover their operation and maintenance costs. Overall, they demonstrate strong management and reliable water services.

This group falls in the middle of the performance range. Meru, Nyahururu, Tetu, Kiambu, and Murang'a Urban show moderate results, with non-revenue water levels between 32% and 41%. While water supply remains generally reliable, their overall performance is slightly reduced by lower staff productivity compared to the top performers.

This group includes several utilities that are struggling due to serious service and financial challenges. Githunguri (11% coverage), Amatsi (10% coverage), and Busia (13% coverage) serve only a very small portion of their population. Siboi, Gatanga, and Kibwezi Makindu face high water losses and weak financial performance, while Turkana Urban and Mavoko are affected by short water supply hours combined with high nonrevenue water. In addition, Kyeni and Bomet show major service failures, with drinking water quality dropping to between 0–50%, very low coverage, and high personnel costs. Together, these issues point to deep operational and management weaknesses that require urgent attention.

### 3.3.3 Medium Public Utilities

Performance in this category varies a lot, with only a few utilities doing well. Embe (123 points) and Kapsabet Nandi (122 points) stand out from the rest. They provide safe drinking water, serve more than 80% of their population, collect revenue effectively, and earn enough to cover their day-to-day operation and maintenance costs. Overall, they perform much better than most other utilities in this group.

These utilities are among the weakest performers. The utilities show severe and persistent performance problems. Nolitresh has extremely high-water losses of 80% and serves only 19% of its population. Kapenguria performs even worse, with zero compliance in drinking water quality and just 7% coverage. Kirandich also struggles, recording 54% non-revenue water and only 29% coverage. Across all three, the challenges are similar: excessive water losses, very limited service coverage, unreliable hours of supply, and weak revenue collection, which together, point to serious operational and financial difficulties.

### 3.3.4 Small Public Utilities

This category has the widest disparities.

Rukanga (131 points), Naromoru (120 points), Muthambi 4K (117 points), and Tachasis (115 points) recorded relatively good performance overall. Their strengths lie in strong metering levels and the ability to generate enough revenue to cover their operation and maintenance costs. However, their performance is moderated by still noticeable levels of non-revenue water, and Muthambi 4K in particular is constrained by zero compliance with drinking water quality standards despite its otherwise strong results.

Utilities in this category are in critical condition and include Namanga, Wajir, Oloitokitok, Mandera, Elwak, Samburu, Marsabit, and Mbooni. These utilities record low overall performance scores due to multiple weaknesses. These include very poor drinking water quality in several cases (e.g. Namanga 7%, Oloitokitok 0%), low service coverage (notably Oloitokitok at 21%), severe overstaffing (Wajir at 104 staff per 1,000 connections), and weak finances, highlighted by Elwak's low O&M cost coverage of 10%. Together, these poor scores across service, efficiency, and finance significantly limit their ability to deliver reliable and sustainable water services.

### 3.3.5 Private Utilities

Top Private Performers (Outperform All Public WSPs). The three licensed and only private providers assessed clearly outperform all public Water Services Providers. Tatu City (182 points) leads the group, followed by Kiamumbi (170 points) and Runda (166 points). Their strong performance is driven by very low water losses, full compliance with drinking water quality standards, long hours of water supply, high levels of metering, efficient revenue collection, and high staff productivity. Overall, their results demonstrate efficient management and provide a strong example of long-term financial sustainability in the sector.

## 3.4 Key Insights Across All Utilities in FY2024/25

### High NRW is the biggest barrier to sector success

When NRW exceeds 50% as seen in Bungoma (BWASCO), Kericho, Mombasa, Kirandich, Kapenguria, Nol Turesh, operational and financial performance collapses.

### Strong utilities excel across multiple KPIs, not just one

The best WSPs have balanced strengths: DWQ, low NRW, good hours of supply, strong collections, and high metering.

### Regional disparities are rooted in the way the system is structured.

Urban utilities vastly outperform rural/ASAL WSPs due to stronger infrastructure, more stable customer bases, and better financing.

## 3.5 Recommendations for Sector Improvement

**Cut NRW first.** Prioritize leak reduction, district metered areas, meter replacement, and enforcement against illegal connections because NRW remains the single biggest drag on service, revenue, and system efficiency.

**Fix commercial performance.** Modernize billing, strengthen collections, and tighten debt recovery, so utilities convert more of what they produce and bill into actual cash.

**3. Restore financial discipline.** Push utilities toward sustained O&M cost coverage above 100%, align staffing to operational needs, and review weak cost-recovery structures where viability is at risk.

**Target underserved areas with focused capital.** Direct investment to rural, ASAL, and low-coverage service areas where infrastructure gaps, weak water quality, and low connectivity are most severe.

**Strengthen accountability and scale efficiency.** Embed KPIs in performance contracts, reward strong performers, and cluster smaller utilities where shared services can improve management and reduce costs. Overall, the sector's priorities are clear: reduce losses, improve cash collection, strengthen financial sustainability, and concentrate investment where service gaps are deepest.

Table 3.2: General Data on WSPs

PARAMETER  UTILITY	Total Population in Service Area	Total Population Served	Total No. of Connections (active+inactive)	Total No. Active Connections	No. of towns served	Turnover (KSh million)	Total Water Produced in m <sup>3</sup> (000)	Domestic + Kiosks billed volume in m <sup>3</sup> (000)	Total billed volume in m <sup>3</sup> (000)	Non-Revenue Water (%)	Production per capita (l/c/d)	Consumption per capita (l/c/d)	No. of Total Staff	Overall Compliance
<b>Very Large (≥35,000 connections)</b>														
Nairobi	5,571,159	4,382,875	446,171	441,053	1	12,344	215,292	54,350	98,529	54	135	34	2,816	Non-Compliant
Eldoret	527,196	442,288	113,970	104,007	1	1,165	15,411	6,334	9,521	38	95	39	417	Compliant
Mombasa	1,386,568	911,791	92,781	42,860	1	1,116	13,124	3,472	5,080	61	39	10	313	Non-Compliant
Ruiru-Juja	612,388	553,734	75,934	69,644	2	1,910	24,195	9,974	11,927	51	120	49	317	Non-Compliant
Nyeri	159,023	192,125	72,486	55,773	1	705	7,850	4,505	6,410	18	112	64	238	Compliant
Nakuru Urban	616,509	576,997	69,999	65,550	1	1,198	12,458	7,220	9,229	26	59	34	153	Compliant
Kisumu	503,846	470,118	65,697	65,697	1	1,179	11,769	4,302	8,011	32	69	25	301	Non-Compliant
Thika	386,050	350,093	65,685	58,755	1	1,155	15,346	6,332	9,388	39	120	50	272	Compliant
Murang'a South	486,813	375,463	57,235	40,111	1	293	4,304	2,059	2,651	38	31	15	180	Non-Compliant
Kilifi Mariakani	1,081,097	672,010	51,604	38,111	3	618	9,711	3,737	4,829	50	40	15	273	Non-Compliant
Embu	245,211	210,460	50,782	45,802	1	511	6,937	3,377	4,591	34	90	44	218	Compliant
Gatundu	344,539	256,685	46,274	33,842	1	207	3,702	2,008	2,240	39	40	21	139	Non-Compliant
Malindi	596,905	440,375	43,938	27,698	1	771	9,540	4,217	5,562	42	59	26	224	Non-Compliant
Kakamega Urban	448,574	440,942	43,266	38,200	2	376	4,809	1,999	2,856	41	30	12	167	Non-Compliant
Kericho	437,846	164,929	42,000	25,286	2	246	5,138	1,462	2,123	59	85	24	184	Non-Compliant
Othaya Mukurweini	188,502	139,399	38,685	25,286	2	257	5,361	2,317	3,002	44	106	46	136	Non-Compliant
Bungoma (BWASCO)	725,000	414,622	36,980	25,991	1	281	7,501	1,367	1,833	76	50	9	162	Non-Compliant
Kirinyaga	535,563	291,906	36,505	34,335	9	188	5,192	2,017	2,652	49	49	19	159	Non-Compliant
<b>Large (10,000-34,999 connections)</b>														
Nakuru Rural	1,213,934	886,795	34,599	22,087	6	384	7,009	1,377	3,984	43	22	4	131	Non-Compliant
Tavehu	386,026	255,219	33,651	21,061	3	409	5,762	2,228	2,871	50	62	24	240	Non-Compliant
Murang'a Urban	121,223	104,326	33,317	26,520	1	324	4,110	1,901	2,872	30	108	50	176	Non-Compliant
Trans Nzola	454,811	186,266	32,663	20,857	1	318	3,670	1,592	2,022	45	54	23	99	Non-Compliant
Mathira	158,385	98,997	30,997	17,606	1	186	2,054	1,096	1,348	34	57	30	78	Non-Compliant
Nanyuki	136,371	129,705	30,924	29,237	1	385	4,017	1,759	2,977	26	85	37	134	Non-Compliant
Murang'a West	159,553	100,268	29,794	18,635	1	116	2,954	1,224	1,729	41	81	33	87	Compliant
Garissa	154,830	100,199	25,456	16,075	1	307	4,683	2,866	3,183	32	128	78	140	Non-Compliant
Meru	175,270	135,372	24,703	21,046	1	255	3,383	2,020	2,738	19	68	41	113	Non-Compliant
Kwale	724,929	369,138	24,083	15,178	1	243	4,109	1,817	2,132	48	30	13	157	Non-Compliant
Nyahururu	126,409	116,461	23,902	21,978	2	271	2,952	1,055	1,875	36	69	25	115	Compliant
Gusii	881,231	487,260	22,266	21,227	7	267	3,334	961	1,386	58	19	5	141	Non-Compliant
Bomet	457,926	36,891	21,992	5,781	1	74	1,271	235	478	62	94	17	133	Non-Compliant
Sibo	593,624	368,306	20,570	16,692	5	189	2,079	846	1,068	49	15	6	133	Non-Compliant
Ngandori Nginda	89,700	82,271	20,106	16,481	1	101	2,394	1,415	1,684	30	80	47	74	Non-Compliant
Kitui	414,352	325,694	19,882	11,116	1	278	2,520	885	1,349	46	21	7	106	Non-Compliant
Kikuyu	475,491	331,797	18,752	10,737	1	275	2,941	1,341	1,912	35	24	11	87	Non-Compliant
Nithi	152,489	90,671	18,696	12,536	1	117	3,026	770	1,403	54	91	23	84	Non-Compliant
Gatamathi	134,046	118,973	18,682	13,129	1	80	3,209	1,186	1,510	53	74	27	66	Non-Compliant
Tetu Aberdare	84,530	78,711	18,161	13,540	1	80	2,302	1,426	1,517	34	80	50	69	Non-Compliant
Gatanga	192,755	90,204	15,864	11,045	1	77	1,985	933	1,299	35	60	28	85	Non-Compliant
Isiolo	89,300	81,320	15,353	14,602	1	117	2,216	1,117	1,586	28	75	38	63	Non-Compliant
Naivasha	414,235	405,551	15,225	13,120	1	249	2,526	1,372	1,914	24	17	9	65	Non-Compliant
Kiambu	166,505	138,312	15,191	12,309	1	350	3,536	1,908	2,388	32	70	38	78	Compliant
Limuru	316,481	255,549	14,870	14,263	1	211	2,139	980	1,369	36	23	11	91	Non-Compliant
Mavoko	372,777	205,585	18,504	16,199	1	319	1,774	710	1,116	37	24	9	130	Non-Compliant
Homabay	320,801	225,953	12,676	8,913	1	108	1,370	610	818	40	17	7	118	Non-Compliant
Machakos	259,690	178,438	12,629	9,789	1	107	1,012	510	694	31	16	8	73	Non-Compliant
Oloolais	473,212	363,285	12,491	7,059	5	173	1,920	869	940	51	14	7	112	Non-Compliant
Meru Rural	148,214	119,837	12,432	6,258	1	63	1,314	720	830	37	30	16	106	Non-Compliant
Ngagaka	86,627	85,331	12,353	8,970	1	57	1,442	820	953	34	46	26	41	Compliant
Karuri	280,250	205,410	12,150	8,831	1	138	1,784	773	1,028	42	24	10	63	Non-Compliant
Githunguri	242,287	26,678	11,804	3,563	1	48	1,410	436	582	59	145	45	47	Non-Compliant
Amatsi	546,741	56,794	11,393	6,009	1	114	2,523	647	1,414	44	122	31	101	Non-Compliant
Busia	375,345	49,980	11,354	6,788	3	51	459	234	262	43	25	13	74	Non-Compliant
Turkana Urban	48,874	40,993	11,166	10,931	1	79	2,301	712	1,114	52	154	48	76	Non-Compliant
Kyeni	97,629	13,871	11,007	4,246	1	16	676	201	321	52	133	40	24	Non-Compliant
Kibwezi Makindu	298,537	158,683	10,503	6,479	1	100	2,187	772	1,013	54	38	13	86	Non-Compliant
Nyandarua	116,385	70,218	10,486	5,681	1	58	791	401	449	43	31	16	58	Non-Compliant
<b>Medium (5,000-9,999 connections)</b>														
Migori	402,945	101,790	9,358	5,707	7	18	622	349	419	33	17	9	68	Non-Compliant
Chemususu	124,960	30,950	8,395	4,470	1	49	1,778	642	817	54	157	57	56	Compliant
Narok	146,099	112,319	8,390	8,189	1	146	1,292	456	861	33	32	11	100	Non-Compliant
Embe	48,419	40,140	8,156	3,953	1	34	1,053	373	502	52	72	25	38	Non-Compliant
Nol Turesh	168,233	32,065	7,838	5,958	1	47	3,024	549	603	80	258	47	60	Non-Compliant
Kapsabet Nandi	103,546	39,535	7,760	6,198	2	106	1,238	331	774	37	86	23	45	Non-Compliant
Tana	129,577	70,887	7,431	3,395	3	33	685	213	270	61	26	8	66	Non-Compliant
Kiambere Mwingi	184,792	83,621	7,409	3,718	2	46	204	102	160	22	7	3	41	Non-Compliant
Kirandich	54,312	15,645	6,050	4,082	1	29	1,209	475	551	54	212	83	34	Non-Compliant
Murugi Mugumango	34,143	22,194	5,836	5,232	1	19	3,625	1,370	1,496	59	447	169	22	Non-Compliant
Kakamega Rural	843,239	21,533	5,370	3,972	-	16	366	205	228	38	47	26	58	Non-Compliant
Kapenguria	176,146	12,506	5,192	1,935	1	18	1,190	200	275	77	261	44	63	Non-Compliant
Lamu	40,866	29,190	5,150	2,906	2	24	485	229	268	45	46	22	70	Non-Compliant
<b>Small (&lt;5,000 connections)</b>														
Oi Kalou	138,987	78,644	4,573	4,295	1	59	595	286	387	35	21	10	44	Non-Compliant
Iten Tambach	90,837	10,525	4,559	2,397	1	39	731	259	391	47	190	67	39	Non-Compliant
Mandera	142,235	35,882	4,373	2,274	1	17	919	235	495	46	70	18	101	Non-Compliant
Samburu	375,027	24,751	4,348	3,552	6	20	421	247	262	38	47	27	81	Non-Compliant
Oikejudo	196,696	40,328	4,064	864	1	13	304	161	191	37	21	11	39	Non-Compliant
Muthambi 4K	19,441	11,001	3,468	3,191	1	15	729	491	540	26	182	122	14	Non-Compliant
Naromoru	20,166	13,937	3,046	2,792	1	22	359	180	256	29	70	35	25	Non-Compliant
Tatu City	1,737	4,232	2,802	2,802										

### 3.5.1 Understanding the Nine KPIs

Each KPI reveals a specific dimension of utility health. Together, they define the full picture. Table 3.3 below represents the scoring regime, structured around the weighting assigned to each KPI.

Table 3.3: Performance Indicators, Sector Benchmarking and Scoring Regime

KPI CLUSTER	INDICATORS		Sector Benchmarks			Scoring Regime		
			Good	Satisfactory	Poor	Performance	Score	
Quality of Service	1	Water Coverage, %	>90%	80-90%	<80%	≥90%	30	
						≤50%	0	
	2	Drinking Water Quality, %	>95%	90-95%	<90%	≥95%	30	
						≤90%	0	
	3	Hours of Supply, No.	Population >100,000	21-24	16-20	<16	≥20	20
	Population <100,000		17-24	12-16	<12	≤10	0	
Economic Efficiency	4	Personnel Expenditure as Percentage of O&M Costs, %	Large and Very Large Companies	<20%	20-30%	>30%	≥25	15
							≥35	0
			Medium Companies	<30%	30-40%	>40%	≤30	15
						≥40	0	
		Small Companies	<40%	40-45%	>45%	≤40	15	
						≥45	0	
5	O&M Cost Coverage, %	≥150%	100-149%	≤99%	≥150%	25		
					≤90%	0		
6	Revenue Collection Efficiency, %	>95%	95-85%	<85%	≥95	20		
					≤85	0		
Operational Sustainability	7	Non-Revenue Water, %	<20%	20-25%	>25%	≤20%	25	
						≥40%	0	
	8	Staff Productivity (Staff per 1000 Connections), No.	Large & Very Large Companies	<5	5-8	>8	≤5	20
							≥8	0
			Medium & Small (less than 3 towns)	<7	7-11	>11	≤7	20
					≥11	0		
	Medium & Small (3 or more towns)	<9	9-14	>14	≤9	20		
					≥14	0		
9	Metering Ratio, %	100%	95-99%	<95%	100%	15		
					≤80%	0		
<b>Total Maximum Score</b>							<b>200</b>	

Table 3.4 (a): Overall Ranking and Ranking by Category for Publicly Owned WSPs

Indicator	Public Utilities	DMQ (%)	Non-Revenue Water (%)	Water Coverage (%)	Hours of Supply (hrs./d)	Staff Productivity (no. staff/K conns.)	Revenue Collection Efficiency (%)	Personnel expenditures as % of total O&M costs	O&M Cost Coverage (%)	Metering Ratio (%)	Total Score	Ranking by category	Overall Ranking
<b>Very Large</b>													
Nakuru Urban	100	26	93	21	2	97	29	112	100	171	1	1	
Nyeri	100	18	100	24	4	100	48	113	100	170	2	2	
Kisumu	100	32	93	24	5	100	30	105	100	158	3	5	
Embu	100	34	86	23	5	100	49	124	100	154	4	7	
Thika	100	39	91	21	5	96	36	123	100	150	5	9	
Eldoret	96	38	84	23	4	91	51	145	99	148	6	10	
Ruiru-Juja	100	51	90	22	5	83	21	130	100	147	7	12	
Kakamega Urban	99	41	98	21	4	98	52	113	100	145	8	13	
Murang'a South	100	38	77	20	4	100	47	105	100	134	9	17	
Othaya Mukurweini	100	44	74	24	5	89	44	114	100	119	10	29	
Kirinyaga	100	49	55	19	5	95	54	83	100	106	11	33	
Nairobi	96	54	79	9	6	95	55	105	100	104	12	34	
Malindi	100	42	74	24	8	92	31	88	100	104	13	35	
Kiifi Mariakani	100	50	62	18	7	93	35	75	100	92	14	43	
Gatundu	75	39	75	21	4	90	41	89	100	84	15	45	
Bungoma (BWASCO)	93	76	57	21	6	84	31	107	95	84	16	47	
Kericho	100	59	38	18	6	79	60	104	100	78	17	54	
Mombasa	93	61	66	15	7	91	35	100	100	75	18	59	
<b>Large</b>													
Nanyuki	100	26	95	23	5	99	54	126	100	168	1	3	
Isiolo	100	28	91	20	4	100	56	117	100	161	2	4	
Ngandori Nginda	100	30	92	24	4	100	52	114	100	158	3	6	
Naivasha	93	24	98	24	5	98	38	107	100	153	4	8	
Meru	100	19	77	20	5	93	44	109	93	147	5	11	
Nyahururu	100	36	92	23	5	98	54	104	100	144	6	14	
Tetu Aberdare	100	34	93	22	5	91	48	104	100	140	7	15	
Murang'a Urban	100	30	86	24	7	100	52	101	100	138	8	16	
Murang'a West	100	41	63	23	5	98	48	119	100	127	9	19	
Kiambu	94	32	83	21	6	91	34	104	100	126	10	20	
Ngagaka	91	34	99	24	5	91	60	130	99	125	11	21	
Gatamathi	100	53	89	23	5	97	60	100	67	123	12	23	
Limuru	97	36	81	17	6	96	32	92	100	123	13	24	
Nakuru Rural	100	43	73	22	6	99	48	105	99	122	14	25	
Mathira	93	34	63	24	4	93	40	117	100	120	15	27	
Trans Nzola	99	45	41	21	5	81	27	143	100	119	16	30	
Nithi	100	54	59	20	7	100	42	112	100	110	17	32	
Gusii	99	58	55	22	7	95	40	102	100	103	18	36	
Kitui	100	46	79	16	10	90	27	96	100	102	19	37	
Kwale	98	48	51	17	10	100	24	79	100	95	20	39	
Nyandarua	100	43	60	20	10	97	41	86	100	93	21	41	
Githunguri	98	59	11	16	13	92	31	54	100	84	22	44	
Meru Rural	93	37	81	20	17	90	53	101	82	84	23	46	
Homabay	100	40	70	22	13	85	35	90	100	82	24	49	
Sibo	93	49	62	19	8	94	37	89	100	82	25	50	
Gatanga	100	35	47	20	8	87	53	105	94	80	26	53	
Kibwezi Makindu	100	54	53	15	13	100	48	85	100	77	27	57	
Machakos	100	31	69	10	7	77	50	98	100	77	28	58	
Amatsi	93	44	10	21	17	94	36	72	100	75	29	61	
Oloolaiser	92	51	77	18	16	85	52	108	97	72	30	62	
Tavevo	90	50	66	14	11	99	28	83	100	69	31	63	
Garissa	93	32	65	22	9	65	37	103	61	67	32	66	
Karuri	72	42	73	13	7	90	33	103	100	63	33	69	
Kikuyu	89	35	70	12	8	87	34	115	100	56	34	71	
Turkana Urban	33	52	84	8	7	68	49	82	98	50	35	74	
Mavoko	93	37	55	8	8	92	35	107	50	50	36	75	
Busia	93	43	13	15	11	44	60	89	68	39	37	80	
Kyeni	0	52	14	18	6	69	73	95	29	38	38	81	
Bomet	90	62	8	14	23	62	52	48	71	16	39	91	
<b>Medium</b>													
Embe	100	52	83	16	10	96	56	106	100	123	1	22	
Kapsabet Nandi	100	37	38	20	7	96	25	82	100	122	2	26	
Lamu	97	45	71	12	24	100	49	43	100	93	3	40	
Murugi Mugumango	20	59	65	24	4	100	56	87	95	82	4	48	
Narok	93	33	77	11	12	89	36	81	100	81	5	51	
Kirandich	64	54	29	16	8	89	26	35	97	69	6	64	
Kiambere Mwingi	79	22	45	9	11	96	38	47	100	66	7	67	
Migori	100	33	25	9	12	67	22	30	69	62	8	70	
Tana	93	61	55	12	19	72	30	57	53	51	9	72	
Chemususu	49	54	25	22	13	94	42	96	80	40	10	78	
Kakamega Rural	65	38	3	18	15	84	32	51	78	35	11	86	
Kapenguria	0	77	7	10	33	100	40	61	9	28	12	88	
Nol Turesh	75	80	19	15	10	82	76	93	84	26	13	89	
<b>Small</b>													
Rukanga	92	27	65	23	7	98	40	89	100	131	1	18	
Naromoru	93	29	69	22	9	92	27	75	100	120	2	28	
Muthambi 4K	0	26	57	24	4	84	36	n.c.d.	99	92	5	42	
Tachasis	95	24	65	14	9	93	53	105	91	115	3	31	
Nyasare	93	38	74	10	8	95	45	88	100	101	4	38	
Kathiani	80	24	73	10	36	99	45	85	100	81	6	52	
Iten Tambach	93	47	12	17	16	100	48	96	99	78	7	55	
Matungulu Kangundo	24	40	8	15	12	100	26	82	100	78	8	56	
Wote	100	35	29	7	28	89	40	84	100	75	9	60	
Oi Kalou	67	35	67	19	10	91	45	101	100	67	10	65	
Yatta	93	33	67	13	13	71	50	99	100	66	11	68	
Mbooni	100	41	5	10	31	64	68	44	97	50	12	73	
Namanga	7	26	37	8	10	100	52	98	15	48	13	76	
Mwala	53	26	35	8	22	87	62	50	100	42	14	77	
Wajir	78	34	7	17	104	75	53	11	97	40	15	79	
Olkejuado	0	37	21	17	45	81	57	71	98	37	16	82	
Marsabit	93	52	12	3	90	78	59	61	100	36	17	83	
Samburu	98	38	7	7	23	53	69	48	72	36	18	84	
Mandera	69	46	25	18	44	59	22	14	0	35	19	85	
Elwak	37	36	12	14	60	78	51	10	91	29	20	87	
Oloitokitok	0	60	21	8	20	58	56	29	96	16	21	90	

Table 3.4 (b): Overall Ranking for Privately-Owned WSPs

Indicator Private Utilities	DWQ (%)	Non-Revenue Water (%)	Water Coverage (%)	Hours of Supply (hrs./d)	Staff Productivity (no. staff/K conns.)	Revenue Collection Efficiency (%)	Personnel expenditures as % of total O&M costs	O&M Cost Coverage (%)	Metering Ratio (%)	Total Score	Ranking by category	Overall Ranking
Tatu City	100	2	100	24	3	99	13	107	100	182	1	1
Kiamumbi	93	21	99	24	6	100	22	100	100	170	2	2
Runda	100	18	100	18	17	99	27	117	100	166	3	3

Table 3.4 (c): Ranking by WWDA Area

Indicator	DMQ (%)	Non-Revenue Water (%)	Water Coverage (%)	Hours of Supply (hrs/d)	Staff Productivity (no. staff/K conns.)	Revenue Collection Efficiency (%)	Personnel expenditures as % of total O&M costs	O&M Cost Coverage (%)	Metering Ratio (%)	Total Score	Ranking by WWDA	Overall Ranking
<b>Public Utilities</b>												
<b>Athi Water Works Development Agency WSPs</b>												
Thika	100	39	91	21	5	96	36	123	100	150	1	9
Ruiru-Juja	100	51	90	22	5	83	21	130	100	147	2	12
Murang'a Urban	100	30	86	24	7	100	52	101	100	138	3	16
Murang'a South	100	38	77	20	4	100	47	105	100	134	4	17
Murang'a West	100	41	63	23	5	98	48	119	100	127	5	19
Kiambu	94	32	83	21	6	91	34	104	100	126	6	20
Gatamathi	100	53	89	23	5	97	60	100	67	123	7	23
Limuru	97	36	81	17	6	96	32	92	100	123	8	24
Nairobi	96	54	79	9	6	95	55	105	100	104	9	34
Githunguri	98	59	11	16	13	92	31	54	100	84	10	44
Gatundu	75	39	75	21	4	90	41	89	100	84	11	45
Gatanga	100	35	47	20	8	87	53	105	94	80	12	53
Karuri	72	42	73	13	7	90	33	103	100	63	13	69
Kikuyu	89	35	70	12	8	87	34	115	100	56	14	71
<b>Central Rift Water Works Development Agency WSPs</b>												
Nakuru Urban	100	26	93	21	2	97	29	112	100	171	1	1
Nanyuki	100	26	95	23	5	99	54	126	100	168	2	3
Naivasha	93	24	98	24	5	98	38	107	100	153	3	8
Nyahururu	100	36	92	23	5	98	54	104	100	144	4	14
Nakuru Rural	100	43	73	22	6	99	48	105	99	122	5	25
Nyandarua	100	43	60	20	10	97	41	86	100	93	6	41
Narok	93	33	77	11	12	89	36	81	100	81	7	51
Kirandich	64	54	29	16	8	89	26	35	97	69	8	64
Oi Kalou	67	35	57	19	10	91	45	101	100	67	9	65
Chemususu	49	54	25	22	13	94	42	96	80	40	10	78
<b>Coast Water Works Development Agency WSPs</b>												
Malindi	100	42	74	24	8	92	31	88	100	104	1	35
Kwale	98	48	51	17	10	100	24	79	100	95	2	39
Lamu	97	45	71	12	24	100	49	43	100	93	3	40
Kilifi Mariakani	100	50	62	18	7	93	35	75	100	92	4	43
Mombasa	93	61	66	15	7	91	35	100	100	75	5	59
Tavevo	90	50	66	14	11	99	28	83	100	69	6	63
Tana	93	61	55	12	19	72	30	57	53	51	7	72
<b>Lake Victoria North Water Works Development Agency WSPs</b>												
Kakamega Urban	99	41	98	21	4	98	52	113	100	145	1	13
Kapsabet Nandi	100	37	38	20	7	96	25	82	100	122	2	26
Trans Nzoia	99	45	41	21	5	81	27	143	100	119	3	30
Tachasis	95	24	65	14	9	93	53	105	91	115	4	31
Bungoma (BWASCO)	93	76	57	21	6	84	31	107	95	84	5	47
Amatsi	93	44	10	21	17	94	36	72	100	75	6	61
Busia	93	43	13	15	11	44	60	89	68	39	7	80
Kakamega Rural	65	38	3	18	15	84	32	51	78	35	8	86
<b>Lake Victoria South Water Works Development Agency WSPs</b>												
Kisumu	100	32	93	24	5	100	30	105	100	158	1	5
Gusii	99	58	55	22	7	95	40	102	100	103	2	36
Nyasare	93	38	74	10	8	95	45	88	100	101	3	38
Homabay	100	40	70	22	13	85	35	90	100	82	4	49
Sibo	93	49	62	19	8	94	37	89	100	82	5	50
Kericho	100	59	38	18	6	79	60	104	100	78	6	54
Migori	100	33	25	9	12	67	22	30	69	62	7	70
Bomet	90	62	8	14	23	62	52	48	71	16	8	91
<b>North Rift Water Works Development Agency WSPs</b>												
Eldoret	96	38	84	23	4	91	51	145	99	148	1	10
Iten Tambach	93	47	12	17	16	100	48	96	99	78	2	55
Kapenguria	0	77	7	10	33	100	40	61	9	28	3	88
<b>Northern Water Works Development Agency WSPs</b>												
Isiolo	100	28	91	20	4	100	56	117	100	161	1	4
Garissa	93	32	65	22	9	65	37	103	61	67	2	66
Turkana Urban	33	52	84	8	7	68	49	82	98	50	3	74
Wajir	78	34	7	17	104	75	53	11	97	40	4	79
Marsabit	93	52	12	3	90	78	59	61	100	36	5	83
Samburu	98	38	7	7	23	53	69	48	72	36	6	84
Mandera	69	46	25	18	44	59	22	14	0	35	7	85
Elavak	37	36	12	14	60	78	51	10	91	29	8	87
<b>Tana Water Works Development Agency WSPs</b>												
Nyen	100	18	100	24	4	100	48	113	100	170	1	2
Ngandori Nginda	100	30	92	24	4	100	52	114	100	158	2	6
Embu	100	34	86	23	5	100	49	124	100	154	3	7
Meru	100	19	77	20	5	93	44	109	93	147	4	11
Tetu Aberdare	100	34	93	22	5	91	48	104	100	140	5	15
Rukanga	92	27	65	23	7	98	40	89	100	131	6	18
Ngagaka	91	34	99	24	5	91	60	130	99	125	7	21
Embe	100	52	83	16	10	96	56	106	100	123	8	22
Mathira	93	34	63	24	4	93	40	117	100	120	9	27
Naromoru	93	29	69	22	9	92	27	75	100	120	10	28
Oihaya Mukunweini	100	44	74	24	5	89	44	114	100	119	11	29
Muthambi 4K	0	26	57	24	4	84	36	n.c.d.	99	92	14	42
Nithi	100	54	59	20	7	100	42	112	100	110	12	32
Kirinyaga	100	49	55	19	5	95	54	83	100	106	13	33
Meru Rural	93	37	81	20	17	90	53	101	82	84	15	46
Murugi Mugumango	20	59	65	24	4	100	56	87	95	82	16	48
Kyeni	0	52	14	18	6	69	73	95	29	38	17	81
<b>Tanathi Water Works Development Agency WSPs</b>												
Kitui	100	46	79	16	10	90	27	96	100	102	1	37
Kathiani	80	24	73	10	36	99	45	85	100	81	2	52
Matungulu Kangundo	24	40	8	15	12	100	26	82	100	78	3	56
Kibwezi Makindu	100	54	53	15	13	100	48	85	100	77	4	57
Machakos	100	31	69	10	7	77	50	98	100	77	5	58
Wote	100	35	29	7	28	89	40	84	100	75	6	60
Oloolaiser	92	51	77	18	16	85	52	108	97	72	7	62
Kiambere Mwingi	79	22	45	9	11	96	38	47	100	66	8	67
Yatta	93	33	67	13	13	71	50	99	100	66	9	68
Mbooni	100	41	5	10	31	64	68	44	97	50	10	73
Mavoko	93	37	55	8	8	92	35	107	50	50	11	75
Namanga	7	26	37	8	10	100	52	98	15	48	12	76
Mwala	53	26	35	8	22	87	62	50	100	42	13	77
Olkejuado	0	37	21	17	45	81	57	71	98	37	14	82
Nol Turesh	75	80	19	15	10	82	76	93	84	26	15	89
Oloitokitok	0	60	21	8	20	58	56	29	96	16	16	90

Figure 3.1: Assessment of KPIs against sector benchmarks

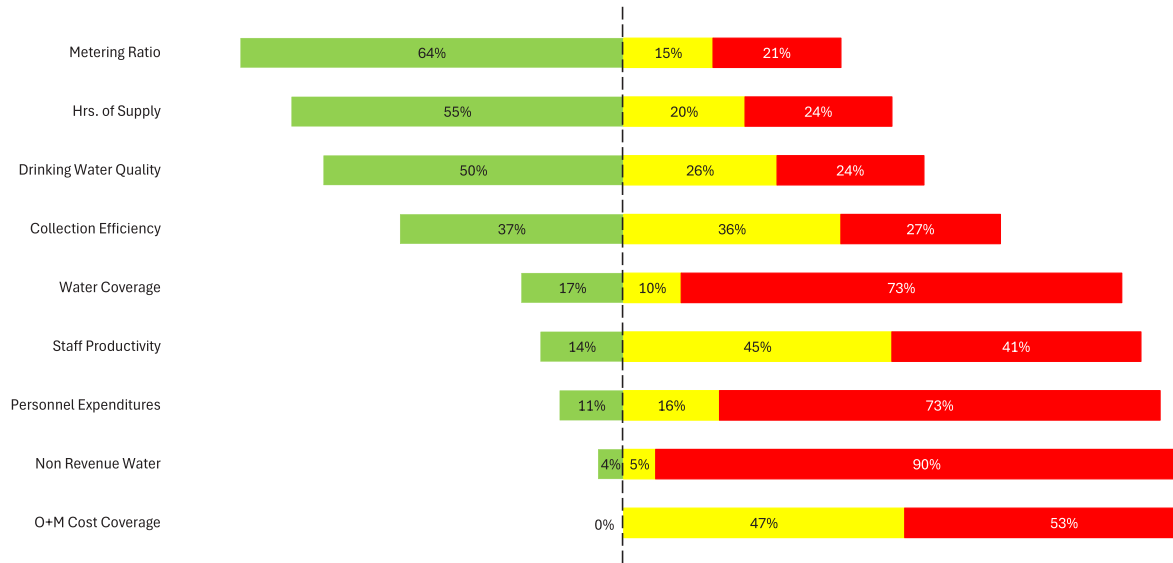


Table 3.5 (a): Performance Over Time of Publicly Owned Utilities

Rank	WSP	Score 2023/24	Score 2024/25	Rank	WSP	Score 2023/24	Score 2024/25
1	Nakuru Urban	167	171	47	Bungoma (BWASCO)	-	84
2	Nyeri	168	170	48	Murugi Mugumango	82	82
3	Nanyuki	163	168	49	Homabay	87	82
4	Isiolo	154	161	50	Sibo	62	82
5	Kisumu	150	158	51	Narok	55	81
6	Ngandori Nginda	145	158	52	Kathiani	100	81
7	Embu	140	154	53	Gatanga	88	80
8	Naivasha	139	153	54	Kericho	71	78
9	Thika	151	150	55	Iten Tambach	88	78
10	Eldoret	131	148	56	Matungulu Kangundo	74	78
11	Meru	143	147	57	Kibwezi Makindu	54	77
12	Ruiru-Juja	145	147	58	Machakos	81	77
13	Kakamega Urban	141	145	59	Mombasa	68	75
14	Nyahururu	127	144	60	Wote	81	75
15	Tetu Aberdare	142	140	61	Amatsi	74	75
16	Murang'a Urban	155	138	62	Oloolaiser	72	72
17	Murang'a South	129	134	63	Tavevo	64	69
18	Rukanga	136	131	64	Kirandich	69	69
19	Murang'a West	115	127	65	Oi Kalou	68	67
20	Kiambu	133	126	66	Garissa	45	67
21	Ngagaka	133	125	67	Kiambere Mwingi	87	66
22	Embe	105	123	68	Yatta	50	66
23	Gatamathi	105	123	69	Karuri	72	63
24	Limuru	107	123	70	Migori	45	62
25	Nakuru Rural	120	122	71	Kikuyu	64	56
26	Kapsabet Nandi	110	122	72	Tana	8	51
27	Mathira	112	120	73	Mbooni	49	50
28	Naromoru	111	120	74	Turkana Urban	22	50
29	Othaya Mukurweini	101	119	75	Mavoko	58	50
30	Trans Nzoia	-	119	76	Namanga	34	48
42	Muthambi 4K	84	92	77	Mwala	42	42
31	Tachasis	112	115	78	Chemususu	47	40
32	Nithi	105	110	79	Wajir	21	40
33	Kirinyaga	110	106	80	Busia	38	39
34	Nairobi	101	104	81	Kyeni	52	38
35	Malindi	111	104	82	Olkejuado	66	37
36	Gusii	101	103	83	Marsabit	36	36
37	Kitui	108	102	84	Samburu	9	36
38	Nyasare	116	101	85	Mandera	35	35
39	Kwale	94	95	86	Kakamega Rural	63	35
40	Lamu	86	93	87	Elwak	12	29
41	Nyandarua	61	93	88	Kapenguria	33	28
43	Kilifi Mariakani	107	92	89	Nol Turesh	27	26
44	Githunguri	92	84	90	Oloitokitok	6	16
45	Gatundu	102	84	91	Bomet	15	16
46	Meru Rural	91	84				

Table 3.5 (b): Performance Over Time of Privately Owned Utilities

Rank	WSP	Score 2023/24	Score 2024/25
1	Tatu City	200	182
2	Kiamumbi	170	170
3	Runda	157	166

Table 3.6: Trend of Utilities Recording Improvement

Year	No. of Utilities	No. of Improvers	% of Improvers	Average Score, %
2019/20	91	47	52	38
2020/21	90	53	59	40
2021/22	92	52	57	44
2022/23	92	47	51	44
2023/24	95	69	73	45
2024/25	94	54	57	47

### 3.5.2 Utility Performance based on Key Performance Indicators

#### a) Water Coverage

Water coverage refers to the share of the population that receives piped water services. In the sector, performance is considered good when coverage exceeds 90% and poor when it falls below 80%. Low water coverage usually points to gaps in infrastructure and forces communities to rely on unsafe or unreliable water sources.

Figure 3.2: Water Coverage by WSP category, %

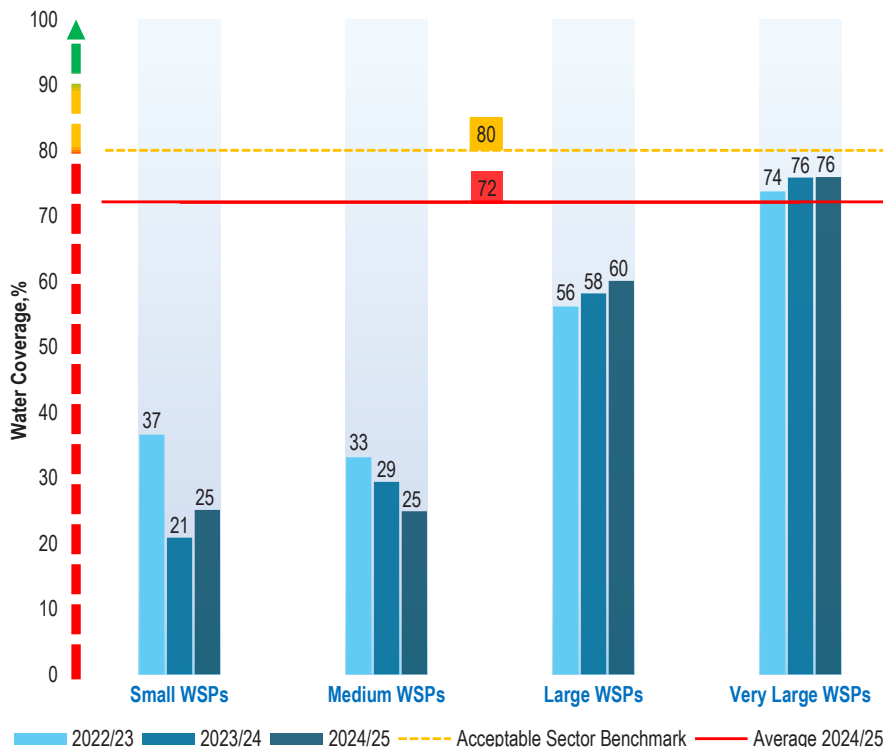
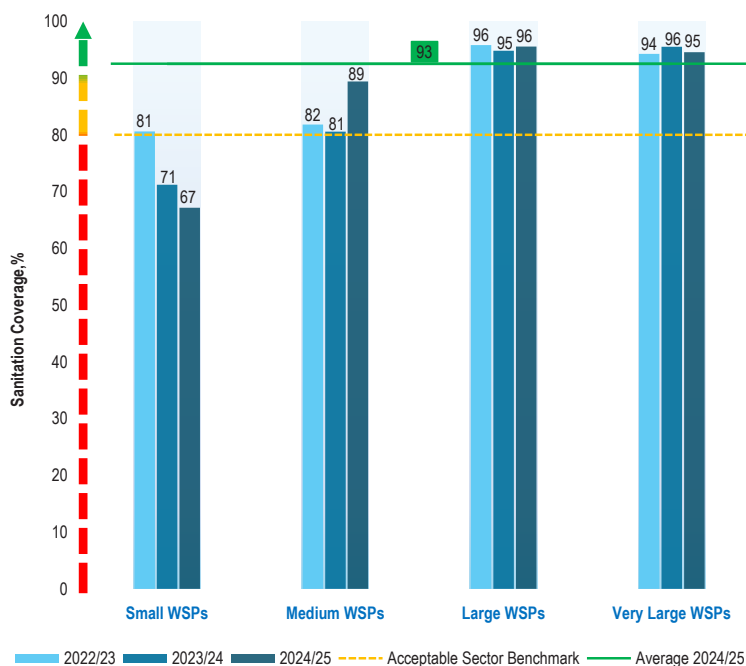


Figure 3.2 shows that water coverage increases steadily with utility size. Very large utilities consistently serve a much higher proportion of the population than smaller ones across all three years. Small and medium utilities record low and, in some cases, declining coverage, remaining well below the 72% sector average for 2024/25 and far under the 80% acceptable benchmark. This indicates ongoing challenges in expanding infrastructure and services at these utility levels. Large utilities show gradual improvement, reaching about 60% coverage in 2024/25, but they still do not meet sector expectations. Very large utilities perform better, exceeding the sector average and nearing the benchmark at 76%, although they are yet to achieve acceptable or good performance.

Overall, the pattern highlights widening disparities by utility size and underscores the need for targeted support to improve water coverage, especially among small and medium utilities.

## b) Sanitation Coverage

Figure 3.3: Sanitation Coverage by WSP category, %

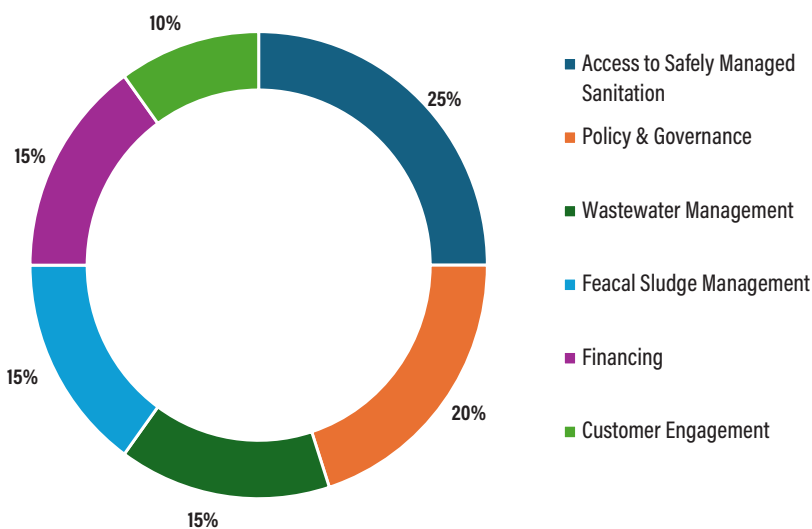


The indicator on sanitation coverage considers the proportion of population with access to basic sanitation. The sector registered a slight improvement moving from 92% in the previous report to 93% in 2024/25. In terms of people served, an additional 851,595 people got access to safely managed services.

### The Sanitation KPI

Considering the objectives in the National Sanitation Management Policy, there is a fundamental need for the sector to move with speed and establish sanitation performance beyond just access. Subsequently, the regulator rolled out comprehensive assessment of sanitation across the entire sanitation chain.

Figure 3.4: Thematic Areas in the Sanitation KPI

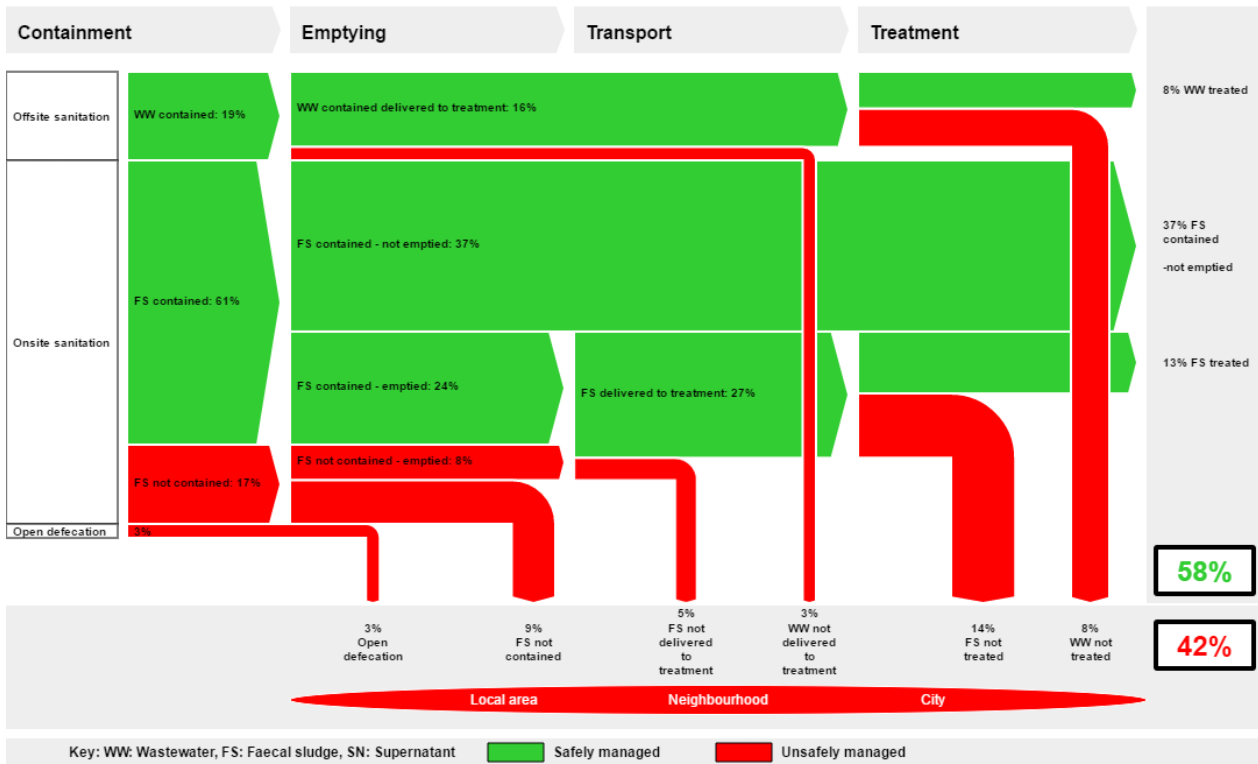


This assessment was through administration of key sanitation performance indicator tools to allow reporting. The regulator envisages that sanitation KPI will harmonize both sewerage and non-sewerage sanitation services and strengthen the principles of citywide inclusive sanitation. The sanitation KPI also seeks to track the progressive realization of human rights to reasonable sanitation through various components including access to safely managed sanitation, wastewater management, faecal sludge management, policy and governance, financing and customer engagement on sanitation issues.

### Initial Insights from Sanitation KPI

Data was compiled for 75 utilities whose sanitation datasets were sufficiently populated. This represented 80% of utilities in the reporting period. However, it was observed that most of the inputs to the dataset were modelled estimates especially for inputs domiciled outside the WSP operational data. To assess the outlook of safely managed sanitation, an initial level sanitation flow diagram (SFD) was modelled from the aggregated sanitation indicator data.

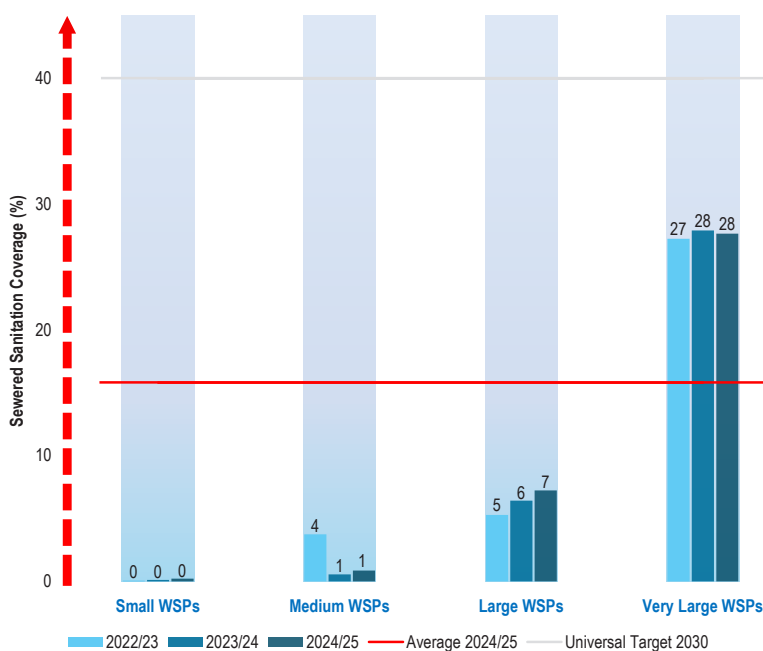
Figure 3.5: Initial Level SFD



From the SFD, the impression that only about 58% of sanitation is safely managed underpins the need for effective management of sanitation components from containment to treatment. The extent of safely managed sanitation indicates the risk profile for public health and environmental risks. The slow progress in sewerage coverage demystifies the fundamental need to embrace options under non-sewered sanitation that guarantee safely managed sanitation. The public sector must continue aligning to the provisions of the national sanitation management policy which opens the place of non-sewered sanitation in the water sector.

### c) Sewered Sanitation Coverage

Figure 3.6: Sewered Sanitation Coverage, %



Performance on access to sewerage sanitation registered one percentage point increase to 16% compared to 15% in the 203/24 reporting period. The impact was an additional 240,701 people got access to sewerage sanitation services. Analysis by WSP sizes category established that despite the largest market share being taken by the very large category, the performance remained relatively the same i.e. 28%. The large category registered a marginal increase of one percentage point.

Table 3.7: Top WSPs with sewerage coverage above universal target

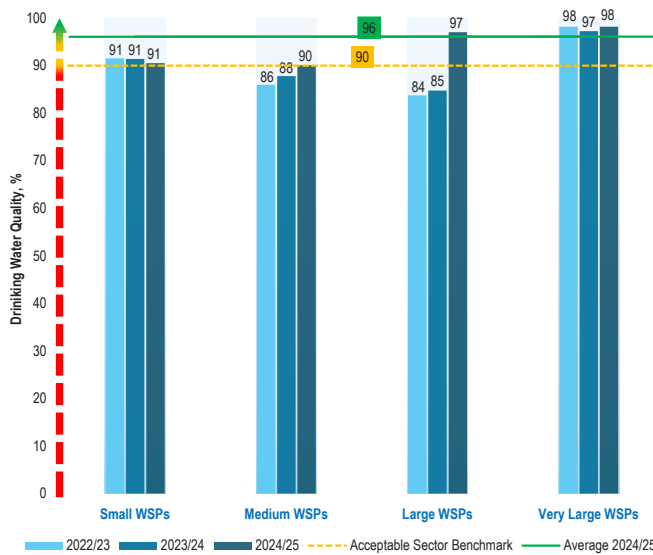
WSP	Thika	Nanyuki	Nairobi	Nyeri
2023/24	68	50	48	40
2024/25	68	57	46	42

Considering that the universal sewerage coverage is 40% by year 2030, the sector has a significant gap to close. Whereas closing this gap will require additional investment, there is a need to improve the efficiency of performance of the existing sewer systems. In the prevailing status of sewerage infrastructure, only less than 10% of wastewater delivered for treatment is safely treated.

### d) Drinking Water Quality

Indicates whether water supplied meets health standards. Benchmark: Good if >95%, poor if <90%.

Figure 3.7: Drinking Water Quality, %



High DWQ indicates effective treatment and surveillance; low DWQ signals risk.

On this KPI, Medium-sized utilities remain the weakest performers despite improvement.

Large utilities showed the most improvement (84% → 97%).

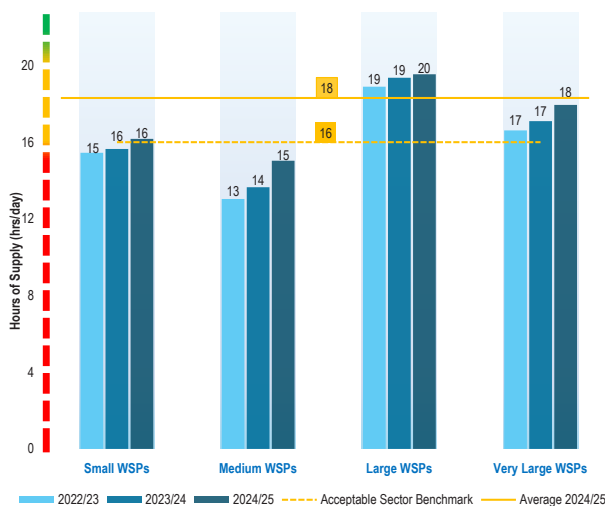
Small utilities are stable at 91% but stagnant.

Very large utilities consistently deliver excellent quality (>97%).

### e) Hours of Supply

Hours of Supply measures how reliably and consistently water is available each day. Good performance is defined as 21–24 hours of supply for large populations (over 100,000 people) and 17–24 hours for smaller populations. Low supply hours indicate problems such as water scarcity, limited production capacity, or high non revenue water.

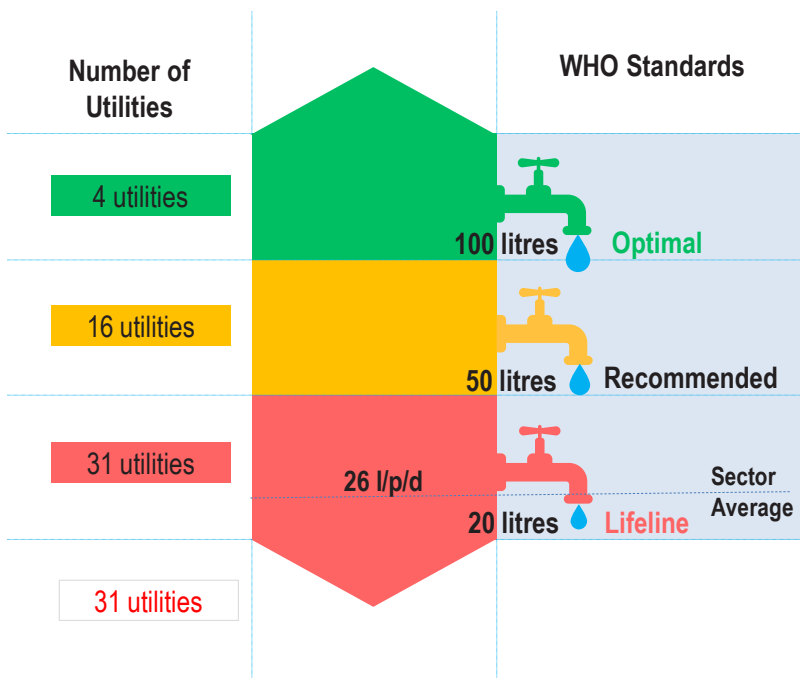
Figure 3.8: Hours of Supply, hrs/day



As a measure of quality of services, availability and reliability of water supply is a key driver for realization of human rights to access water services. The average hours of supply during the reporting period were 18 hours per day, indicating intermittent service across most service areas. While hours of supply reflect progress toward continuous supply, reliability gaps remain, particularly for small and medium utilities where supply was below the sector’s benchmark for utilities in this category.

## Per Capita Consumption

Figure 3.9: Per Capita Consumption



Regarding per capita consumption, the average per capita consumption was 26 liters per person per day, which was significantly low compared to the recommended (see figure 3.9) per capita consumption benchmarks. The current national per capita consumption indicated that despite long supply hours, factors such as intermittent distribution within zones, storage limitations, and network inefficiencies are limiting factors for actual water use.

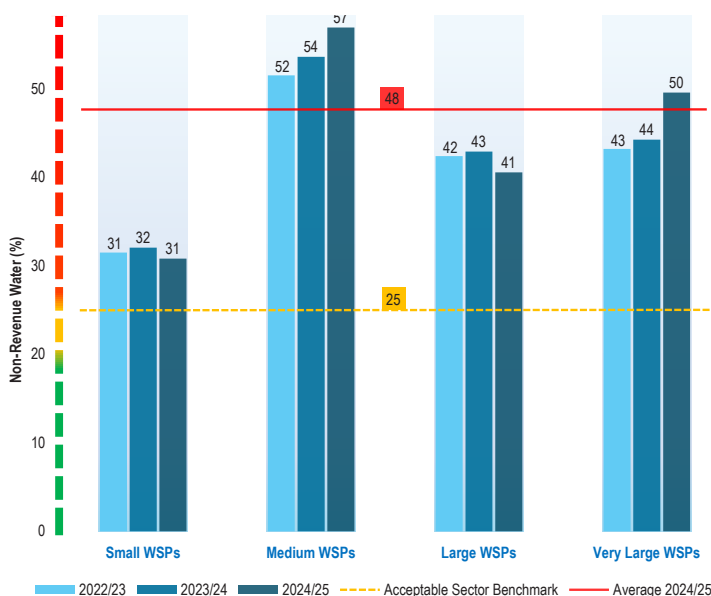
The dimension on per capita consumption implies that improvements in hours of supply alone do not automatically translate

into adequate consumption, and therefore targeted efforts are needed to enhance distribution equity, reduce losses, and ensure that increased service availability results in improved access for all consumers. Technically, the current per capita of 26 liters per person could move to 49 liters per person if the sector losses were 20% and all other factors constant.

### f) Non-Revenue Water

This refers to the water produced but not billed due to leaks, theft, meter errors, or poor billing.

Figure 3.10: Non-Revenue Water, %



High NRW erodes revenue and weakens service continuity. As per the chart above, NRW remains unacceptably high across all utility categories and exceeds the acceptable benchmark in every case. Small utilities recorded NRW levels above 31 percent, which is well into the poor performance range. Medium utilities' performance was the worst, with NRW rising sharply from 52% to 57%, reflecting severe physical losses and weak commercial controls. Overall, NRW performance is deteriorating rather than improving. Only Large utilities show slight progress, while Small, Medium, and Very Large utilities either stagnate or worsen. As a result, the sector average has risen to

48% in 2024/25, nearly double the acceptable limit, clearly indicating widespread operational and commercial inefficiencies. This demonstrates that current NRW reduction strategies are ineffective. The persistently high NRW directly reduces revenue, constrains investment in system maintenance and expansion, and poses a risk

to long-term service reliability. The observed trends point to systemic failures in leak detection and repair, metering accuracy, billing and collection systems, control of illegal connections, and pressure management.

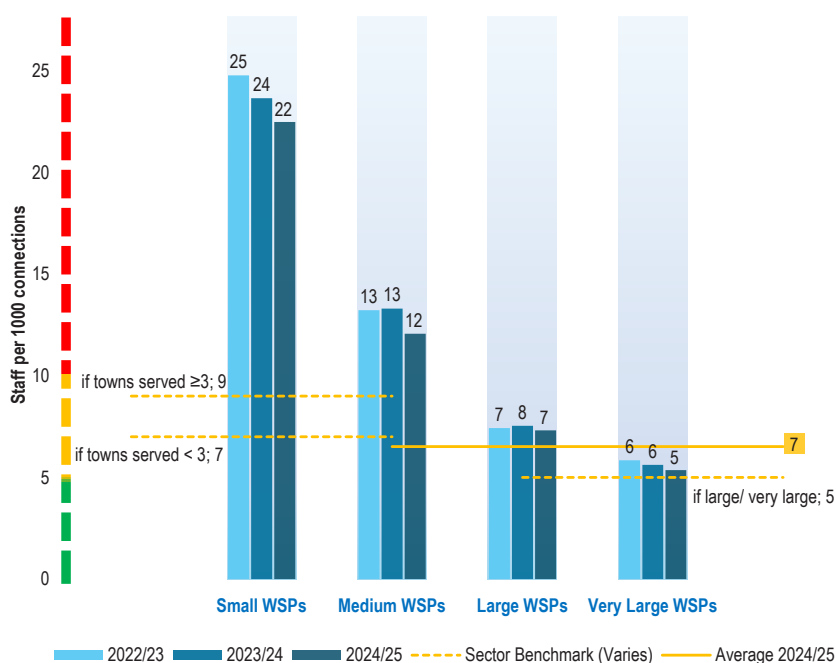
Figure 3.11: Non-Revenue Breakdown



### g) Staff Productivity

Staff productivity measures the number of staff required to measure 1000 active connections. Benchmark: For large companies, good if <5 staff per 1000 connections; thresholds vary by company size. High ratios indicate overstaffing and inflated payrolls.

Figure 3.12: Staff Productivity, staff/1000 connections



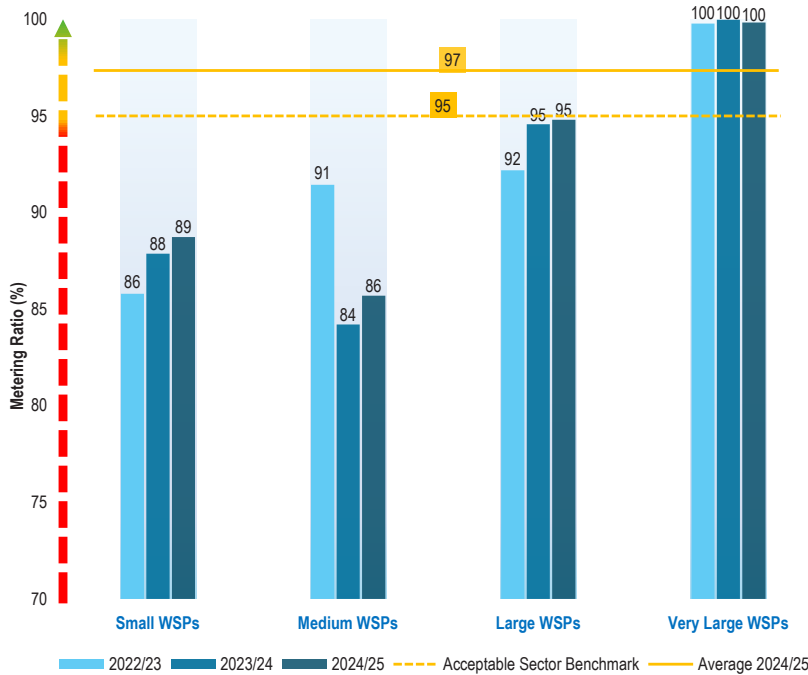
The chart shows a gradual improvement in staffing levels (staff per 1,000 connections) across all system sizes from 2022/23 to 2024/25, with clear differences by category. Small systems remain the most staff-intensive, though staffing has reduced from about 25 to 22, aligning more closely with the sector benchmark for towns serving three or more towns. Medium systems show a modest decline from about 13 to 12 staff per 1,000 connections, moving closer to acceptable levels but still slightly above

the benchmark. Large and very large systems consistently have the lowest staffing levels, remaining stable at around 7 and 5 staff respectively, which aligns well with sector expectations for larger utilities. Overall, the trend suggests improving efficiency over time, particularly in small and medium-sized systems, while large and very large systems are already operating within acceptable staffing benchmarks.

### h) Metering Ratio

Shows what proportion of customers are metered. Benchmark: Good if 100%, poor if <95%. Low metering drives NRW and poor billing accuracy.

Figure 3.13: Metering Ratio, %



The chart shows that metering ratios improve steadily with system size and over time. Small systems have made gradual progress, increasing from the mid 80 percent range to about 89 percent, but remaining below the acceptable sector benchmark of 95 percent. Medium systems show some fluctuation, dropping in 2023/24 before recovering to around 86 percent in 2024/25, also remaining below the benchmark. Large systems perform better, improving to meet the 95 percent benchmark by 2023/24 and maintaining this level in 2024/25. Very large systems perform the strongest, achieving full or near full metering at 100 percent and exceeding both the acceptable benchmark and the 2024/25 sector average.

Overall, the results indicate improving metering performance, with larger systems leading and smaller systems needing further improvement.

### i) O&M Cost Coverage

Operation and maintenance costs measure the utility’s ability to cover its operational and maintenance costs using its own generated revenue from water, sewer and billing for other services.

Operation and maintenance cost coverage is calculated as:

$$OCCR = \frac{\text{Total revenue which excludes grants and subsidies}}{\text{Total Operation and Maintenance Cost}}$$

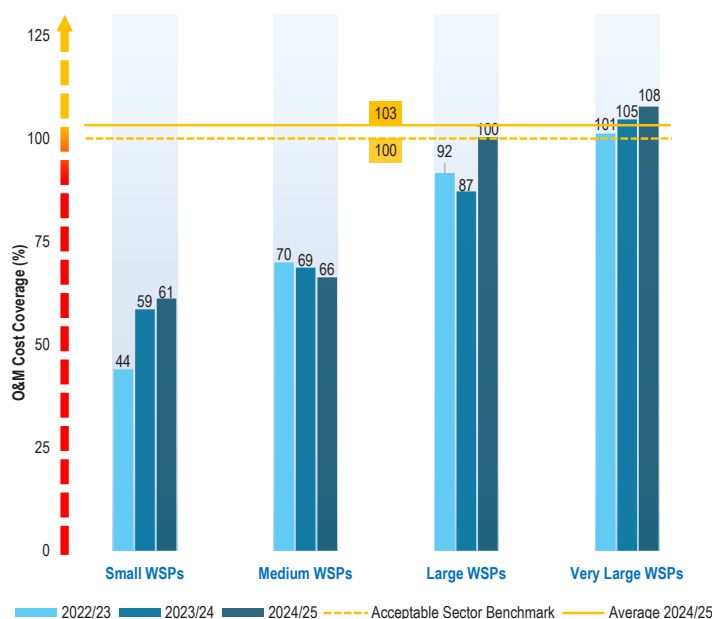
Total Revenue includes Revenue from water billing, Revenue from sewer billing, Billing from other service and other incomes. To achieve financial sustainability, WSPs must exceed the threshold ratios as outlined in Table 3.8

Table 3.8: O&M Cost Coverage Components

Cost Component	O&M Cost Coverage
O&M Cost	100%
O&M Cost + Debt Service + Capital Investments	101%-149%
Full cost Recovery	>= 150%

Total operation and maintenance costs include staff costs, Administration costs, Maintenance costs, levies and fees and direct operational costs. It excludes non-cash items such as depreciation and provisions. This indicator is a key benchmark for financial sustainability since its own revenue from water and sewer services are stable and predictable compared to grants and subsidies. Furthermore, a high OCCR is an indicator of high creditworthiness which could enable water utilities to obtain financing from the commercial banks.

Figure 3.14: O&M Cost Coverage, %



In the financial year 2024/25, the average OCCR across all the WSPs was 103 % which was an improvement from the previous financial year where average OCCR was 98% The improvement can be attributed to

1. Increase in the number of WSPs achieving cost recovery tariffs from 40 to 60 as evidenced by a rise in the average tariff from KShs105/m3 to KShs 119/m3
2. Implementation of Donor programs such as KWASH and WSDP-CLSGI II which targeted improvement in operation cost coverage.

The median OCCR was 98%, indicating that more than half of the utilities were yet to achieve full cost recovery. While the sector’s average OCCR stood at 103.33%, the median of 98% reveals that performance by a few

utilities has masked widespread financial sustainability challenges across the sector. This national improvement was largely attributed to the very large utilities, whose coverage increased from 105% to 108%. Large utilities recorded the highest increase from 87% to 100%. The small category recorded a marginal increment of 2% while the medium category saw a decline of 3%.

Table 3.9: OCCR breakdown for WSPs

Threshold	No of WSPs	Proportion
>120%	8	9%
100%-120%	36	38%
80% - 100%	28	30%
<80%	22	23%

Of the 94 WSPs assessed, 44, 47% of the utilities achieved full O&M cost coverage (OCCR ≥ 1.0) demonstrating financial capacity to cater for operational and maintenance costs. 50, 53% of the utilities recorded values below 100%, indicating continued dependency on grants or subsidies. Further breakdown on OCCR performance is in Table 3.10. The list below indicates the top ten performers and the bottom ten performers in OCCR.

Table 3.10: Top ten performers and the Bottom ten performers in OCCR

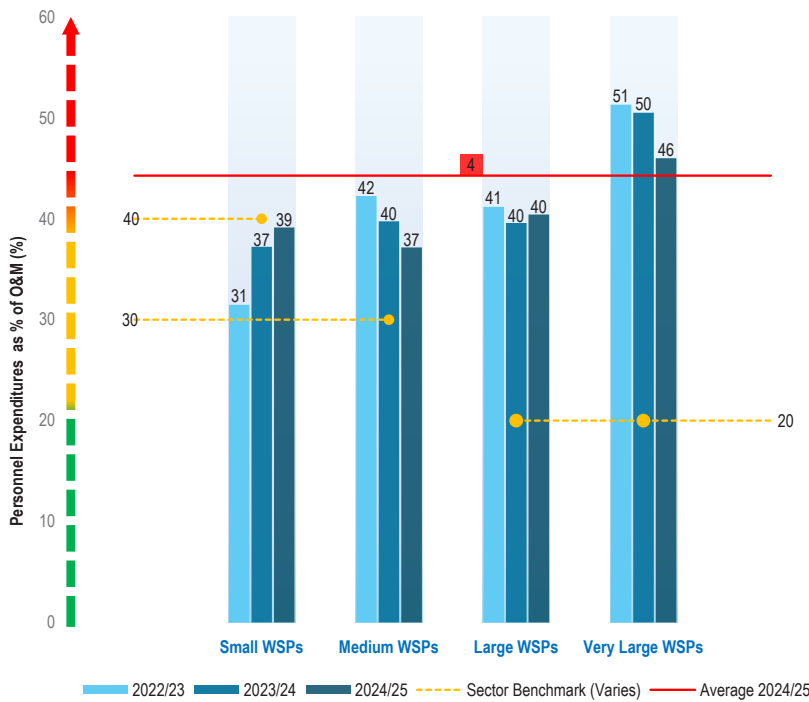
Top 10			Bottom 10		
1	Eldoret	145	81	Bomet	48
2	Trans Nzoia	143	82	Kiambere Mwingi	47
3	Ngagaka	130	83	Mbooni	44
4	Ruiru-Juja	130	84	Lamu	43
5	Nanyuki	126	85	Kirandich	35
6	Embu	124	86	Migori	30
7	Thika	123	87	Oloitokitok	29
8	Murang'a West	119	88	Mandera	14
9	Mathira	117	89	Wajir	11
10	Isiolo	117	90	Elwak	10
10	Naromoru	111	91	Olkejuado	66

To enhance OCCR, WSPs must operate with justified tariffs, improve billing efficiency while reducing NRW, and implement cost reduction measures such as energy efficiency interventions and process automation.

### j) Personnel Costs as a proportion of O&M costs

Personnel Costs as a proportion of O&M costs measures the share of operational expenditure that goes to salaries, wages, allowances, and contribution by the employer to statutory deductions. The sector benchmark guides what is considered an optimal balance for each size category.

Figure 3.15: Personnel Costs as a proportion of O&M Costs, %



Personnel costs remain one of the most dominant expenditures for water utilities, yet FY 2024/2025 brought encouraging signs of improvement. The average personnel cost ratio across 94 utilities dropped to 44%, down from 47% the previous year – a shift driven largely by efficiency gains among very large and medium utilities, which trimmed their ratios by 4% and 3% respectively. The large categories did not record a change. Small utilities saw an increment by 2%

Of the 94 utilities only 24 maintained personnel costs within the recommended benchmark as per the respective category size threshold. On the other hand, 70 utilities exceeded their respective benchmarks

indicating constrained operating budgets or potential overstaffing.

Table 3.11: Proportion of WSPs meeting Personnel Cost Sector Benchmarks

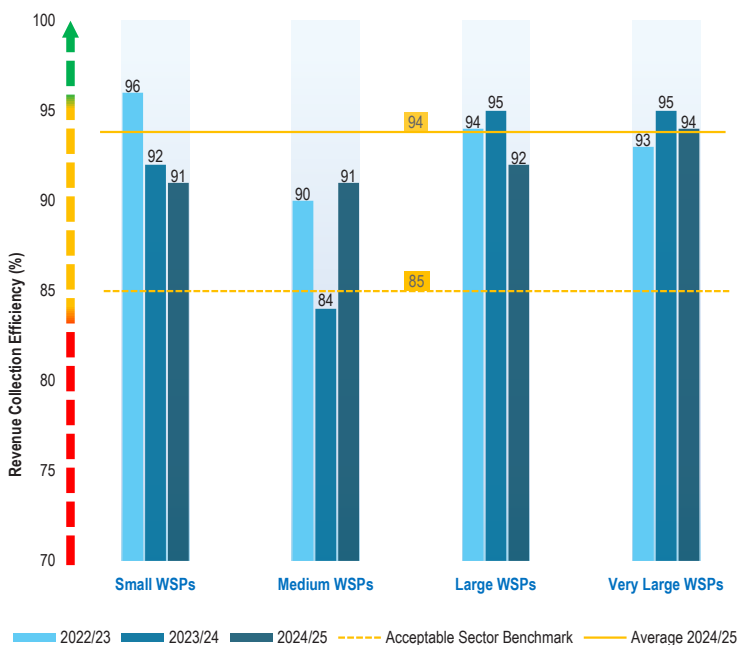
Utility Size Number	Average performance (%)	Sector benchmark (%)	Proportion of WSPs meeting Sector benchmarks
Very Large (18)	42	<30	11% (2 WSPs)
Large (39)	44	<30	10% (4WSPs)
Medium (13)	41	<40	54% (7WSPS)
Small (24)	45	<45	46% (11 WSPs)

Utilities that breach personnel cost benchmarks must carry out systematic workforce audits, enforce strict recruitment controls, and match staffing levels to actual service delivery demands. In parallel, utilities must restructure their spending to ensure adequate allocation toward essential non-staff expenditures such as maintenance, chemicals, and energy. Achieving this balance ultimately hinges on utilities’ ability to grow their revenue streams through stronger billing practices, reduced non-revenue water, and tariff adjustments that accurately reflect the cost-of-service delivery.

### k) Revenue Collection Efficiency

Revenue Collection Efficiency tracks how effectively a utility converts its billing into actual cash — measuring the share of invoiced revenue that is ultimately recovered from customers.

Figure 3.16: Revenue Collection Efficiency, %

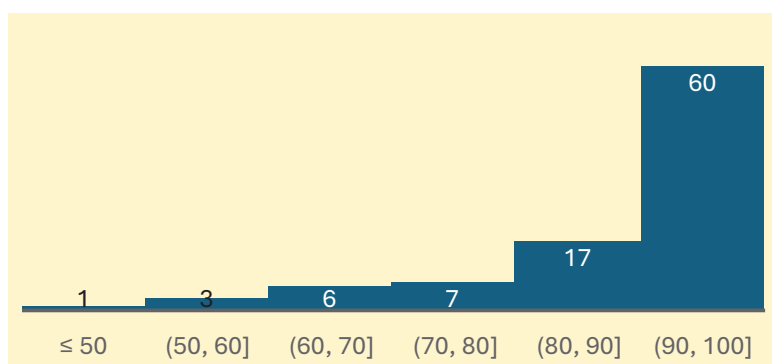


Where a utility lands on this metric reveals more than just financial performance. A collection efficiency greater than 95% signals tight billing controls, disciplined enforcement, and a customer base that is both willing and able to pay. Sustained shortfalls on the other hand point to systemic billing inaccuracies, inadequate debt collection policies, and eroded customer satisfaction.

Average Revenue Collection Efficiency dropped slightly in 2024/25 to 93.82 from 94.57 in the previous period. Collection efficiency painted a mixed picture across utility categories in FY 2024/2025. While medium utilities stood out with a commendable 7% improvement, the gains were offset by declines across the remaining categories — large utilities recorded the steepest drop at 3%, while very large and small utilities each slipped by 1%.

small utilities each slipped by 1%.

Figure 3.17: Distribution of Revenue Collection Efficiency Performance



Low revenue collection efficiency points to systemic failures that erode customer trust and delay the realization of revenues billed. Utilities ought to enhance their billing efficiency and promptly address customer complaints to enhance the willingness of consumers to pay their bills on time. They should also adopt clear debt enforcement mechanisms.

### l) Comparison of Average Tariff and Unit Costs

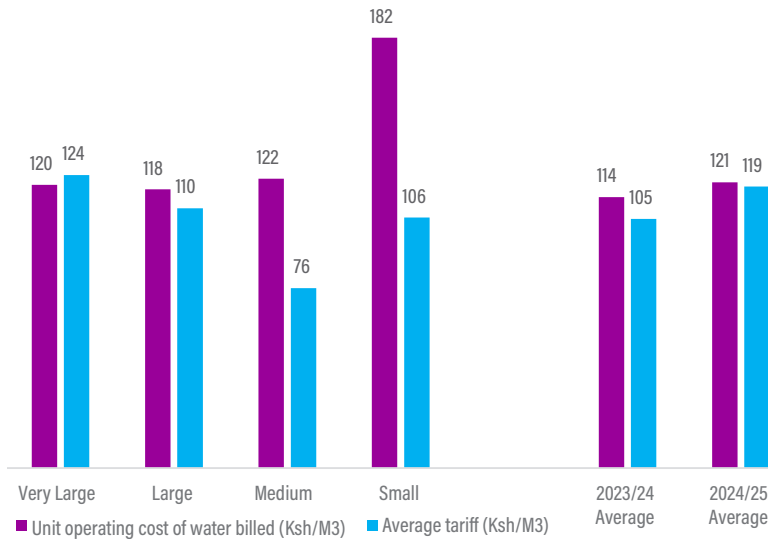
The comparison between the average tariff and the unit cost of service highlights two distinct scenarios: one in which the business is self-sustaining, and another in which it is not.

The comparison shows whether the tariff fully recovers the actual cost of producing and delivering each unit of water. When the average tariff exceeds the unit cost, the utility can cover operational costs, maintain assets, and service debts. If the unit cost remains high, the utility often relies on subsidies, experiences deteriorating infrastructure, and faces worsening service levels.

A small and narrowing gap signals a credible path to sustainability. In contrast, a large and widening gap indicates the utility is deferring costs to future customers, assets, and tariff reviews.

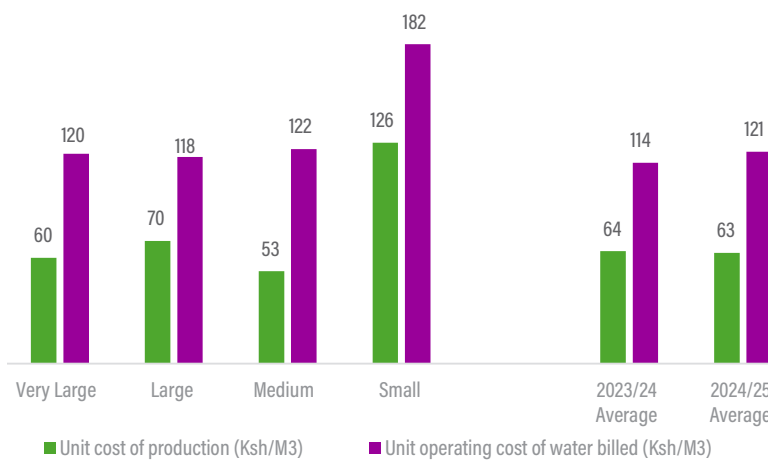
In the reporting period 2024/25, the average tariff increased from Ksh105/m<sup>3</sup> to Ksh119/m<sup>3</sup>. This is a 13% increase over the previous period. The unit cost of water billed rose by 5%, from Ksh114.36/m<sup>3</sup> to Ksh120.61/m<sup>3</sup>.

Figure 3.18: Tariff Cost Comparison - Unit operating cost of water billed



The fact that average tariffs grew at 13%, more than double the 5% rise in the unit cost of water billed, is a positive sign of improving financial self-sufficiency across the sector. This convergence has dramatically narrowed the cost recovery gap from KShs 9.36/m<sup>3</sup> to just KShs 1.61/m<sup>3</sup>, signaling that utilities are making meaningful progress toward full cost recovery. While the sector has not yet crossed the sustainability threshold, the trajectory is firmly in the right direction, and a targeted tariff adjustment in the next review cycle could close the remaining gap entirely.

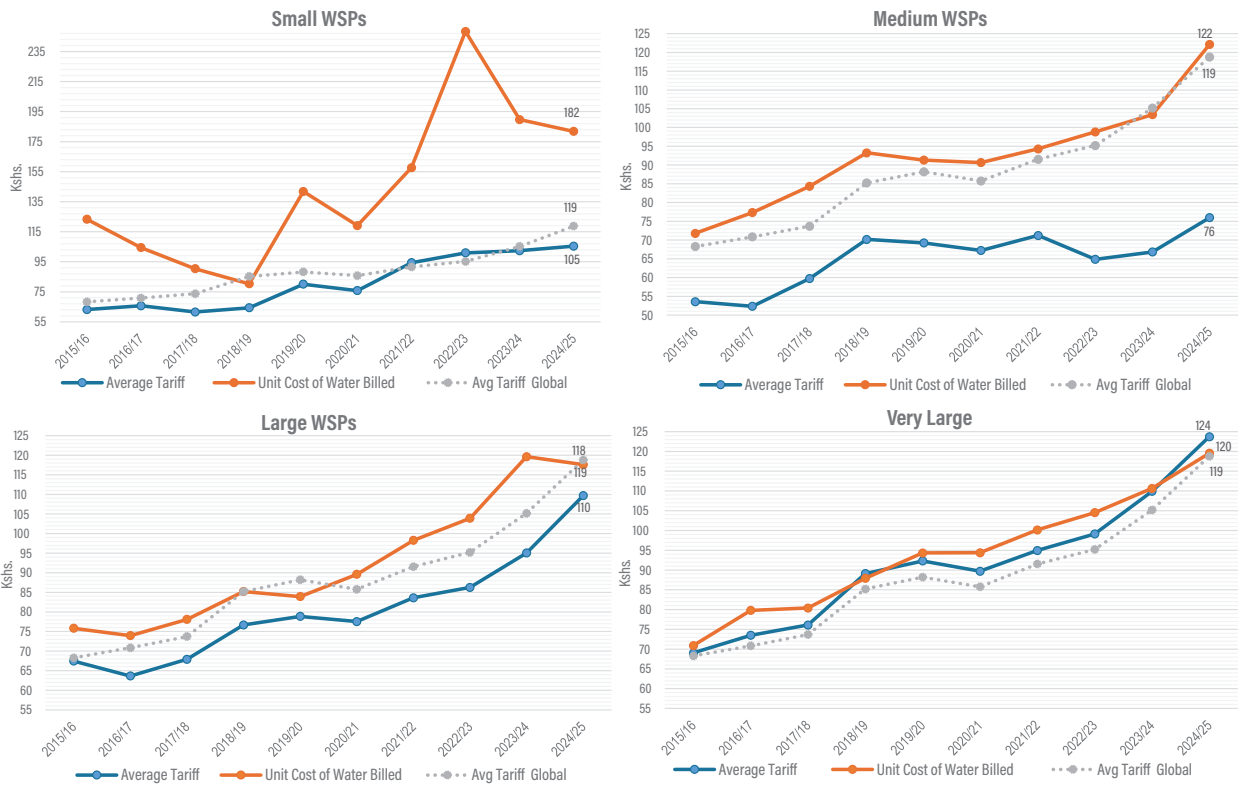
Figure 3.19: Tariff Cost Comparison – Unit cost of production



The gap between the unit cost of water produced and the unit cost of water billed serves as a pointed measure of operational efficiency, reflecting how much additional cost is absorbed between the point of production and the point of billing. A widening gap signals that water losses, distribution inefficiencies, and unmanaged operational costs are consuming an increasing share of resources before revenue can even be recovered. In 2024/25, this gap widened from KShs 44.21/m<sup>3</sup> to KShs 50.71/m<sup>3</sup>, a deterioration of KShs 6.50/m<sup>3</sup> that points to deepening inefficiencies across the sector.

This trend is a concern. While tariff adequacy is improving on one front, the gains risk being quietly eroded by a distribution and loss management challenge that is growing faster than it is being addressed.

Figure 3.20: Trends in Average Tariff and Unit Cost of Water Billed (Ksh/M3)



**m) Electricity Costs Ratio**

The electricity cost ratio shows how much of the total operational spending goes to the energy used for water abstraction, treatment, and distribution.

Building on this measure, electricity expenditure continues to exert significant pressure on utility operating budgets. During the reporting period, the average electricity cost ratio across the 94 utilities stood at 13%. The median was 8%, indicating that more than half of the utilities had an electricity ratio of less than 8%.

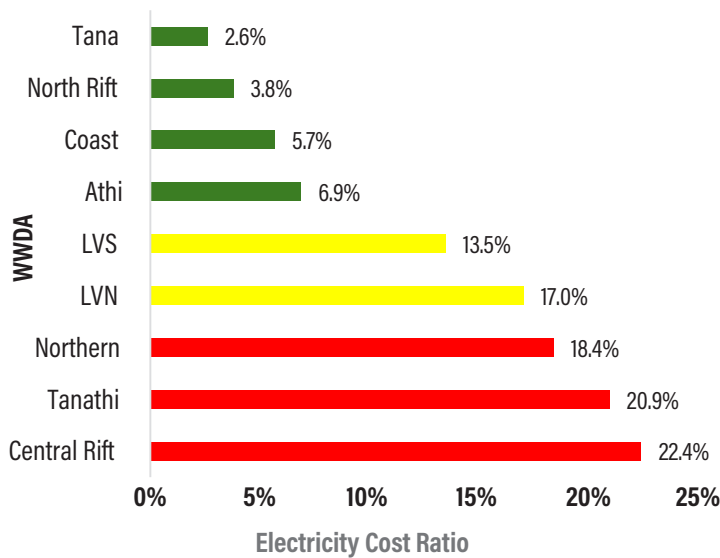
Thresholds (%)	Below >>10	10-20	20-40	>40%
No of WSP	51	20	19	4

Of the 94 utilities, 51 maintained electricity costs within the recommended benchmark of ≤ 10% of O&M costs. Four water recorded electricity cost ratios above 40%, reflecting heavy reliance on pumped systems and exposure to high energy tariffs. These utilities are: Kirandich, Migori, Kapenguria, and Garissa.

**Electricity cost ratio per region**

Utilities under Tana water works had the lowest electricity cost ratio at 3%, while utilities under the Central Rift Water Works agencies and Tanathi’s Water Works had the highest electricity cost ratio at 21%.

Figure 3.21: Electricity Cost Ratio per WWDA



The variation in electricity cost ratios across water works agencies is fundamentally shaped by topography and water source availability. Tana Water Works recorded the lowest ratio. This directly reflects central Kenya’s high-altitude highland terrain. Here, gravity does the heavy lifting, and pumping is largely unnecessary. At the other extreme, Central Rift and Tanathi’s agencies both register 21%. This is due to the energy demands of pumping water across the broken Rift Valley terrain. It is also linked to lifting it from deep basement rock aquifers in the semi-arid lower eastern plains. Northern Water Works (18%) faces a similar challenge, with its arid counties almost

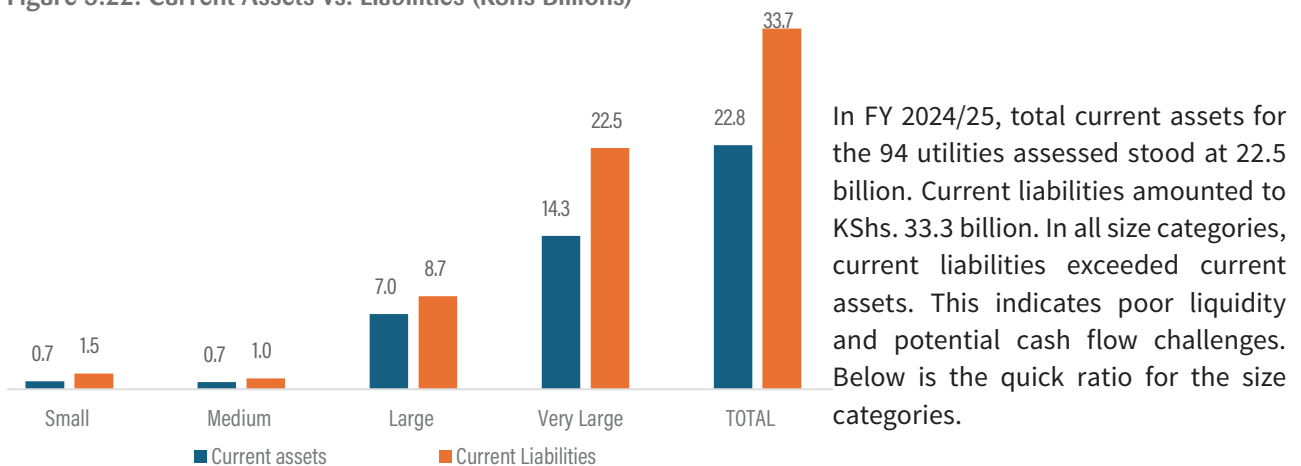
entirely reliant on energy-intensive borehole extraction across remote, sparsely populated terrain.

To address high electricity costs, utilities under the Central Rift and Tanathi should conduct mandatory energy audits every four years. They must also implement integrated efficiency interventions. These should include pump optimization, motor upgrades, and power factor correction, instead of isolated fixes. Capacity building for technical staff is needed. This, together with regulatory compliance and sound financial management, will help attract funding for these capital-intensive measures. Utilities should also pursue solarization to diversify energy supply and reduce costs. WASREB and WSTF must coordinate actively to align stakeholders, mobilize resources, and sustain interventions over time.

**n) Liquidity of WSPS**

Liquidity reflects a utility’s ability to meet short-term obligations. It is commonly measured by the ratio of current assets to current liabilities. While a ratio above 1 suggests good liquidity, this can be misleading if much of the current assets are tied up in unrecoverable customer debt. Effective liquidity management, therefore, depends not just on asset levels but also on the quality and convertibility of those assets into cash.

Figure 3.22: Current Assets vs. Liabilities (KShs Billions)



In FY 2024/25, total current assets for the 94 utilities assessed stood at 22.5 billion. Current liabilities amounted to KShs. 33.3 billion. In all size categories, current liabilities exceeded current assets. This indicates poor liquidity and potential cash flow challenges. Below is the quick ratio for the size categories.

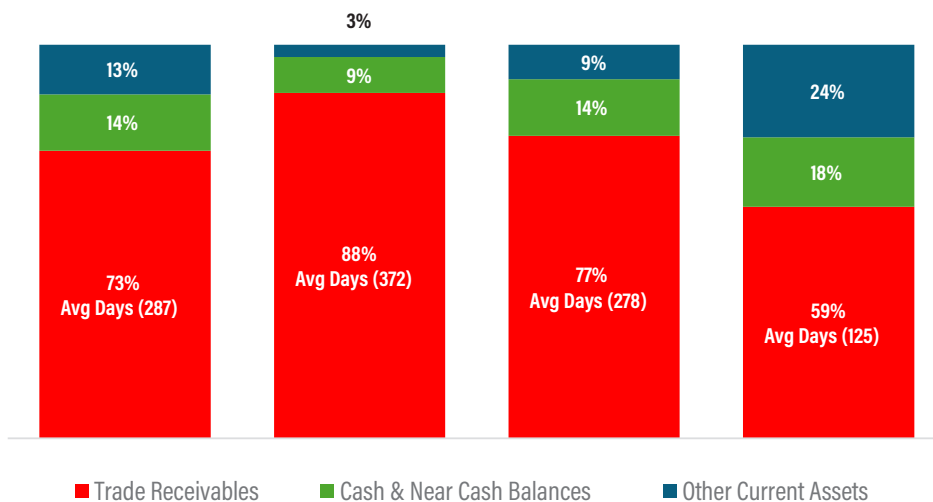
Table 3.12: Quick Ratio per WSP Category

Size Category	Small	Medium	Large	Very Large	National Average
Quick Ratio	0.50	0.67	0.81	0.63	0.68

A major contributor to this weak liquidity position was the high proportion of trade receivables within current assets, a significant share of which remained uncollected beyond the sector's 60-day benchmark. Medium-sized utilities recorded the longest collection period, averaging 371 days, while very large utilities had the lowest debtor days, indicating a relatively stronger revenue collection performance.

This prolonged recovery period significantly undermines liquidity, as revenue remains tied up in overdue payments. To improve liquidity, WSPs should strengthen revenue collection mechanisms, enforce stricter credit controls, and prioritize active debt recovery. They should also regularly monitor receivables and align billing systems with cash flow targets to reduce exposure and enhance financial stability.

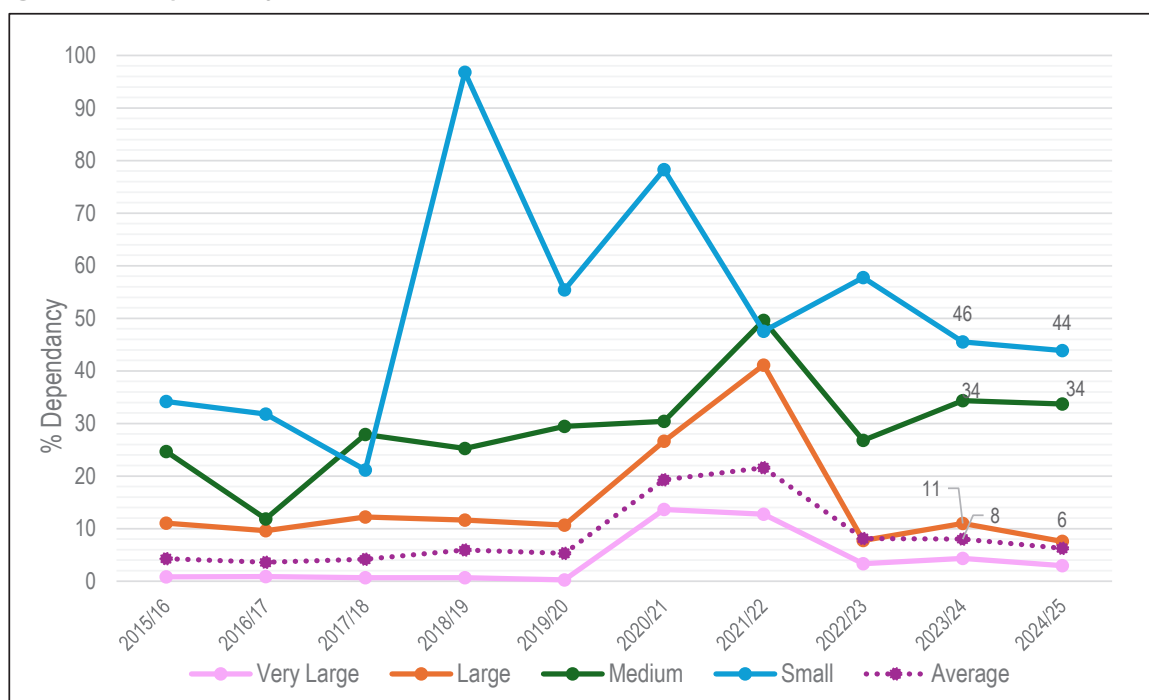
Figure 3.23: Distribution of Current Assets per WSP Category



### o) Grant dependence

Every grant a water utility receives means internal revenue cannot yet sustain operations. Grant dependence shows the share of total costs covered by subsidies and donor support, not the utility's income. A high ratio means the utility relies on unpredictable, unsustainable funding. As a financial metric, it shows if a utility moves toward self-sufficiency or relies on outside aid.

Figure 3.24: Dependency



Grant dependency declined from 8% to 6% on the national average. All utility size categories recorded a reduction between FY 2023/24 and FY 2024/25, signaling encouraging progress toward financial self-sufficiency across the sector. Notably, smaller utilities continue to rely more on subsidies and grants than their medium and larger counterparts. This reflects the persistent funding gap that characterizes smaller service providers and highlights the need for targeted support mechanisms to accelerate their transition toward greater financial independence

### 3.5.3 Credit Worthiness Index

The drive toward universal water and sanitation access under SDG 6 is colliding with a stubborn fiscal reality. Public funding is tightening precisely as capital requirements are expanding. For water and sanitation providers, this tension makes diversification of financing no longer optional but existential. Commercial loans, blended finance structures, and public-private partnerships present credible pathways to bridging the sector's investment gap. Yet none of these doors open without a key: demonstrable creditworthiness, or a utility's proven capacity to meet its debt obligations consistently and reliably.

When lenders and investors evaluate a utility, they are not taking its word for it. They are running the numbers. They scrutinize historical financial performance, revenue stability, debt ratios, and cash flow adequacy to build a picture of lending risk. Utilities that present consistent revenue streams, disciplined financial controls, and lean operations are rewarded with favorable terms. Those carrying the weight of operational inefficiencies, weak financial governance, or grant dependency find themselves either shut out of credit markets or facing borrowing conditions that make financing counterproductive. In this context, creditworthiness is not merely a financial metric. It is the gateway to capital and a powerful internal reform catalyst. It compels utilities to sharpen governance and operational discipline in pursuit of investment readiness.

To add rigor and consistency to this assessment, a Creditworthiness Index has been created. It follows standard credit rating scales, from AAA to BB. The index uses 23 key financial and operational measures from verified WARIS data and audited financial statements for 2023/24. This gives a clear benchmark for comparing utilities. The tool shows exactly where utilities miss investment-grade status—and what they need to do to achieve it.

Table 3.13: CWI Scoring Parameters

Score	Indicative Credit Worthiness Level	Description
> 85	Creditworthy probably AAA category	Denotes the lowest expectation of default risk. Assigned only in cases of exceptionally strong capacity for payment of financial commitments. Highly unlikely to be adversely affected by foreseeable events.
71 to 85	Creditworthy probably AA category	Denotes expectations of very low default risk. Very strong capacity for payment of financial commitments. Not significantly vulnerable to foreseeable events.
61 to 70	Low-Creditworthy, probably in A category	Denotes expectations of low default risk. Capacity for payment of financial commitments is considered strong. Capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings. In a credit rating, this definition is equivalent to an A rating.
51 to 60	Low-Creditworthy, probably in BBB category	Indicates that expectations of default risk are currently low. Capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity. In a credit rating, this definition is equivalent to a BBB rating.
41 to 50	Low-Creditworthy, probably in BB category	Indicates an elevated vulnerability to default risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial flexibility exists which supports the servicing of financial commitments. In a credit rating, this definition is equivalent to BB rating.
31 to 40	Lower-Creditworthy, probably in B category	Indicates that material default risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is vulnerable to deterioration in the business and economic environment. In a credit rating, this definition is equivalent to B rating.
≤ 30	No Rating awarded	Indicative of substantial to exceptionally high risk of default.

94 WSPs were assessed for creditworthiness in the financial year 2024/25. WSP and their performance are presented in Table 3.14.

Performance of creditworthiness improved for the second year in a row, recording an average of 39.3 from 37.2 in 2023/24 and 35.5 in FY 2022/2023. The improvement was primarily driven by better performance in economic efficiency indicators such as O&M coverage, personnel expenditure, and average tariff differential. The pace of improvement remains modest as the score of 39.3 still falls outside the threshold required to attract commercial financing. The gains would have been more pronounced had operational efficiency kept pace with financial discipline. Persistent weaknesses in service delivery metrics – including non-revenue water levels that average at 48% undermine the financial progress made.

Table 3.14: CWI Rating for WSPs

Rank	WSP	2023/24		2024/25		Variance	Rank	WSP	2023/24		2024/25		Variance
		Score	Rating	Score	Rating				Score	Rating			
1	Isiolo	54	BBB	67	A	13.3	49	Oloolaiser	21	NO RATING	37	B	15.6
2	Thika	58	BBB	66	A	7.4	50	Bungoma (BWASCO)			36	B	
3	Nyeri	59	BBB	64	A	4.5	51	Chemususu	47	BB	35	B	-11.9
4	Nanyuki	61	BBB	63	A	2.9	52	Garissa	51	BB	35	B	-15.8
5	Ngandori Nginda	48	BB	63	A	15.0	53	Kathiani	50	BB	35	B	-15.3
6	Ngagaka	56	BBB	62	A	6.7	54	Mombasa	42	BB	34	B	-8.2
7	Nakuru Urban	59	BBB	62	A	3.1	55	Sibo	30	NO RATING	33	B	2.8
8	Othaya Mukurweini	39	B	62	A	22.5	56	Kitui	22	NO RATING	32	B	9.7
9	Meru	61	A	62	A	0.6	57	Matungulu Kangundo	31	B	31	B	0.3
10	Murang'a West	59	BBB	61	A	2.1	58	Kwale	32	B	31	B	-0.8
11	Naivasha	56	BBB	61	A	5.3	59	Turkana Urban	19	NO RATING	30	NO RATING	11.4
12	Nithi	47	BB	61	A	13.9	60	Kapenguria	36	B	30	NO RATING	-6.1
13	Mathira	63	A	61	A	-1.7	61	Wote	33	B	30	NO RATING	-3.6
14	Eldoret	48	BB	61	BBB	12.8	62	Murugi Mugumango	30	NO RATING	29	NO RATING	-1.1
15	Embu	53	BBB	60	BBB	7.5	63	Amatsi	20	NO RATING	29	NO RATING	8.9
16	Kakamega Urban	63	A	60	BBB	-3.0	64	Machakos	32	B	29	NO RATING	-3.0
17	Kisumu	51	BB	59	BBB	7.9	65	Narok	31	B	29	NO RATING	-2.8
18	Kikuyu	34	B	57	BBB	23.1	66	Tavevo	38	B	28	NO RATING	-9.7
19	Trans Nzoia			55	BBB		67	Kiambere Mwingi	26	NO RATING	28	NO RATING	2.8
20	Tachasis	49	BB	54	BBB	4.7	68	Naromoru	35	B	27	NO RATING	-7.8
21	Oi kalou	41	BB	53	BBB	11.9	69	Homabay	23	NO RATING	27	NO RATING	3.9
22	Ruiru-Juja	61	A	53	BBB	-8.1	70	Mwala	27	NO RATING	26	NO RATING	-0.6
23	Nyahururu	40	B	53	BBB	12.3	71	Kyeni	43	BB	26	NO RATING	-17.3
24	Kiamumbi	35	B	53	BBB	17.5	72	Yatta	37	B	25	NO RATING	-11.9
25	Nakuru Rural	50	BB	52	BBB	2.2	73	Elwak	8	NO RATING	25	NO RATING	17.2
26	Murang'a Urban	55	BBB	51	BBB	-3.9	74	Nyasare	43	BB	24	NO RATING	-18.3
27	Runda	61	A	51	BB	-10.6	75	Nyandarua	25	NO RATING	24	NO RATING	-0.3
28	Tetu Aberdare	51	BB	49	BB	-1.4	76	Marsabit	22	NO RATING	24	NO RATING	2.2
29	Tatu City	61	A	49	BB	-11.9	77	Busia	15	NO RATING	23	NO RATING	8.6
30	Kiambu	46	BB	49	BB	3.6	78	Malindi	41	B	23	NO RATING	-17.6
31	Murang'a South	49	BB	49	BB	0.0	79	Olkejuado	37	B	23	NO RATING	-13.6
32	Gatamathi	31	B	48	BB	16.9	80	Githunguri	32	B	23	NO RATING	-9.4
33	Nairobi	51	BB	48	BB	-3.5	81	Nol Turesh	20	NO RATING	22	NO RATING	2.0
34	Mavoko	36	B	47	BB	10.6	82	Mandera	21	NO RATING	21	NO RATING	-0.6
35	Gatanga	28	NO RATING	45	BB	16.9	83	Wajir	8	NO RATING	21	NO RATING	12.5
36	Kapsabet Nandi	39	B	44	BB	5.3	84	Kilifi Mariakani	27	NO RATING	20	NO RATING	-7.1
37	Gusii	34	B	44	BB	10.1	85	Tana River	24	NO RATING	18	NO RATING	-5.3
38	Meru Rural	35	B	44	BB	8.9	86	Samburu	28	NO RATING	17	NO RATING	-10.6
39	Karuri	33	B	44	BB	10.6	87	Migori	12	NO RATING	16	NO RATING	4.4
40	Embe	29	NO RATING	43	BB	14.7	88	Lamu	18	NO RATING	16	NO RATING	-1.6
41	Kibwezi Makindu	36	B	39	B	3.5	89	Kakamega Rural	18	NO RATING	16	NO RATING	-1.7
42	Limuru	41	BB	39	B	-2.1	90	Kirandich	13	NO RATING	11	NO RATING	-1.4
43	Namanga			39	B		91	Bomet	9	NO RATING	10	NO RATING	1.4
44	Rukanga	38	B	39	B	0.8	92	Mbooni	9	NO RATING	10	NO RATING	0.8
45	Gatundu	37	B	39	B	1.7	93	Oloitokitok	3	NO RATING	9	NO RATING	5.6
46	Kericho	37	B	39	B	1.7	94	Two Rivers	46	BB	n.d.	NO RATING	
47	Kirinyaga	32	B	38	B	5.8	95	Tuuru	41	BB	n.d.	NO RATING	
48	Iten Iambach	33	B	37	B	3.6	96	Muthambi 4k	30	NO RATING	n.c.d.	NO RATING	

The analysis also considered the most improved and declined WSPs during the reporting period. Kikuyu was the most improved due to improved cost coverage and a reduction in debtors' days, while Nyasare recorded

the greatest decline due to a decline in the cost coverage ratio and increased NRW. The five most improved and five highest decliners are presented in Tables 3.16 and 3.17, respectively.

Table 3.15: CWI Performance Summary

Score	>85	71-85	61 - 70	51 - 60	41 - 50	31 - 40	<= 30
Rating	AAA	AA	A	BBB	BB	B	No RATING
2023/24	0	0	6	9	21	29	29
2024/25	0	0	13	13	14	18	35

Table 3.16: Creditworthiness Assessment Top Improvers

Rank	WSP	2023/24		2024/25		Variance
		Score	Rating	Score	Rating	
1	Kikuyu	34	B	57	BBB	23.1
2	Othaya Mukurweini	39	B	62	A	22.5
3	Kiamumbi	35	B	53	BBB	17.5
4	Elwak	8	NO RATING	25	NO RATING	17.2
5	Gatamathi	31	B	48	BB	16.9
6	Gatanga	28	NO RATING	45	BB	16.9

Table 3.17: Creditworthiness Assessment Bottom Losers

Rank	WSP	2023/24		2024/25		Variance
		Score	Rating	Score	Rating	
86	Kathiani	50	BB	35	B	-15.3
87	Garissa	51	BB	35	B	-15.8
88	Kyeni	43	BB	26	NO RATING	-17.3
89	Malindi	41	B	23	NO RATING	-17.6
90	Nyasare	43	BB	24	NO RATING	-18.3

### 3.5.4 Sector Financing

Kenya loses more than 0.9% of its GDP annually to inadequate water access. Approximately 20 million Kenyans lack access to basic drinking water, 34 million lack basic sanitation, and 33 million lack basic hygiene. To address this, the Government of Kenya launched the National Water and Sanitation Investment Plan (NAWASIP) in 2022, with the goal of achieving universal access to water, sanitation and hygiene (WASH) by 2030

Table 3.18: Scale of Investment Required

Total Investment Required (NAWASIP 2022–2030)	<b>995 billion</b>
Annual Financing Needed	<b>Ksh 100 billion/year</b>
Annual Financing Currently Mobilised	<b>~KShs 40 billion/year</b>
Current Financing Gap	<b>~KShs. 60 billion</b>

NAWASIP requires an annual investment of Ksh approximately 100 billion. However, Kenya currently mobilizes only about Ksh 40 billion per year, less than half the needed amount, leaving a persistent annual shortfall of approximately Ksh. 60 billion.

Table 3.19: Breakdown of NAWASIP Annual financing

Source	FY 2024/25 Annual
Government (National Treasury)	KShs. 30.4B
Others (Partners, donors, private sector)	Ksh. 4B
Water Tariffs (WSP Revenue for Water investment)	Ksh. 6B
Water Tariffs (WSP Revenue for Water investment)	Ksh. 6B
<b>TOTAL MOBILISED (est.)</b>	<b>~KShs 40B</b>
<b>FINANCING GAP</b>	<b>60B/year shortfall</b>

## Opportunities for Commercial Banks

NAWASIP acknowledges that public resources alone cannot close the financing gap. Commercial banks are well-positioned to help bridge the deficit through the following opportunities:

- **Lending to Water Services Providers (WSPs):** As of 2022/23, 83 WSPs now hold a credit rating of 'B' or above—an impressive increase from 64 in the prior period, demonstrating their readiness for bank financing. Regulatory innovations like the WSP Creditworthiness Index and targeted lending toolkits—jointly developed by WASREB and the World Bank—remove barriers and signal a powerful moment for banks to step up.
- **Results-Based Financing (RBF):** Banks, including KCB, Sidiya Bank, and Housing Finance, are already active in the RBF programme, backed by a 50% USAID guarantee. Equity Bank, Family Bank, and Co-operative Bank have expressed interest in expanding the pool for syndicated and blended finance products.
- Moreover, the World Bank's Kenya WASH Programme (2024–2030, US\$458M) actively supports 33 WSPs in developing bankable project proposals and facilitating business-to-business introductions between utilities and commercial lenders. This support enables WSPs to access commercial financing, improve service delivery, and strengthen financial sustainability, with a target of leveraging US\$8M in commercial financing.
- **Non-Sovereign Borrowing:** The Government is developing a policy framework enabling WSPs to borrow on a non-sovereign, non-guaranteed basis, opening a new, scalable channel for commercial credit without contingent liability to the national government.
- **Capital Market Instruments:** Kenya's pension funds hold an estimated Ksh 1.5 trillion, and insurance companies hold Ksh 500 billion. Commercial banks can intermediate these pools through green bonds, infrastructure bonds, and structured water finance facilities aligned to ESG mandates.
- **Non-Revenue Water (NRW) Financing:** With NRW losses nearing 50% of water produced, banks can unlock measurable returns by financing efficiency upgrades—like metering and pipeline rehabilitation, under performance-based contracts. This is not just a lending opportunity; it is a chance to drive real sector-wide transformation and demonstrate environmental stewardship.

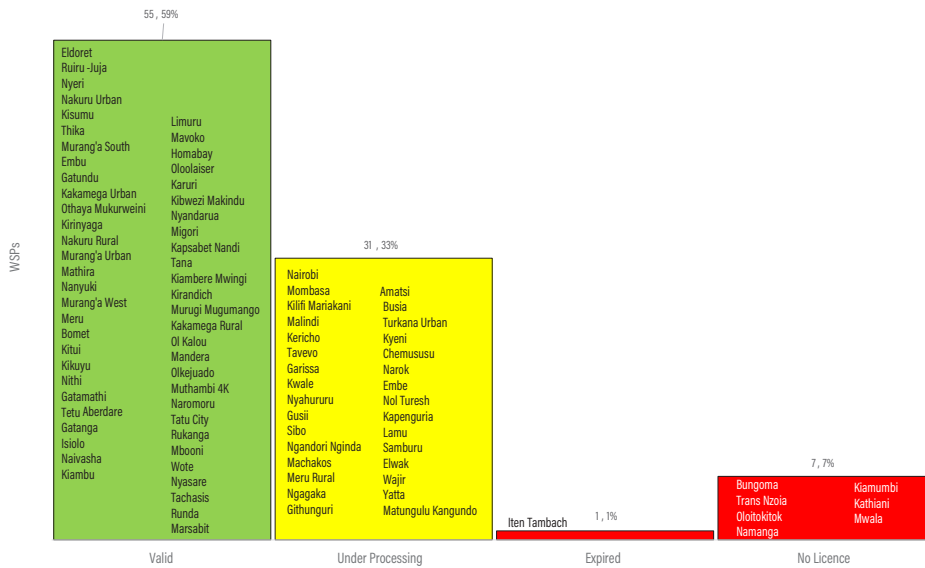
### 3.5.5 Compliance Status of Utilities

As Kenya enters the final stretch toward the Vision 2030 goal of universal access to water and sanitation, regulatory compliance by water utilities has emerged as a foundational determinant of sector performance. Evidence from WASREB's annual Impact Reports consistently shows that compliant utilities deliver better service outcomes, achieving improved water coverage, stronger financial sustainability, and more reliable supply. Compliance drives the governance discipline, operational rigor, and financial accountability that enable utilities to progressively meet their targets and attract the investment needed to expand services. During FY 2024/25, compliance was evaluated against four key parameters: validity of licenses and tariffs, timely submission of reports through WARIS, and payment of regulatory levies.

#### I. License Compliance Status

All utilities must operate under a valid WASREB license, as required by section 85 of the Water Act. The license sets service delivery targets to drive performance improvement. Meeting these targets is a clear path to achieving Vision 2030 goals.

Figure 3.25: License Compliance Status as at June 2025



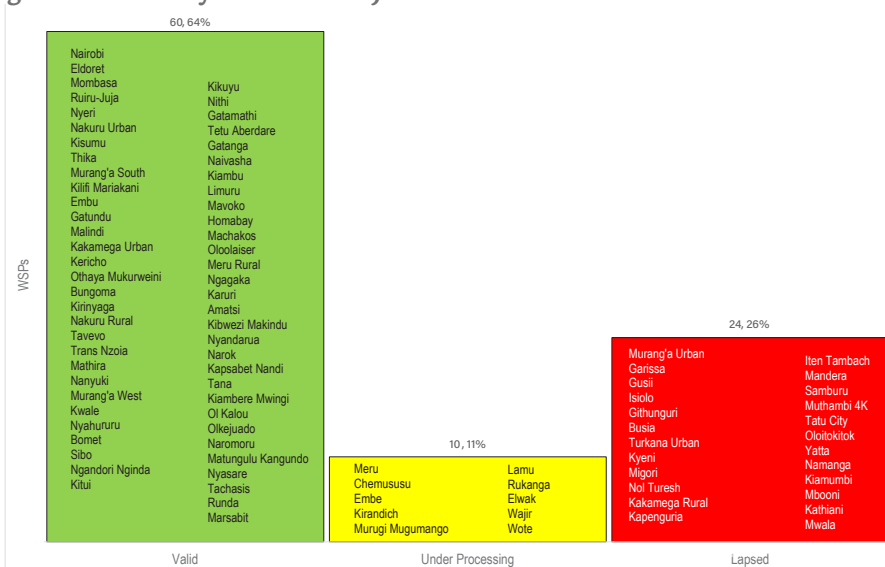
All utilities are required to have a valid license, yet some operate without a valid or current one and have not applied. In FY 2024/25, a total of 55 utilities held valid licenses, while 31 license applications were under processing. This brings the number of utilities that were either compliant or in the process of attaining compliance with licenses to 86, compared to 79 in the previous financial year.

### II. Tariff Compliance Status

Section 158 mandates county governments and Water Services Providers to enforce tariffs gazetted by the regulator. These approved tariffs are essential for utilities to maintain financial sustainability by covering core operational costs and funding service expansion.

In FY 2024/25, 60 utilities operated under approved tariffs, with 10 applications pending. This outpaces the prior period, when only 40 utilities had valid tariffs and 25 awaited approval. As a result, the count of utilities with expired tariffs dropped from 30 to 24.

Figure 3.26: Validity of Tariff as of June 2025

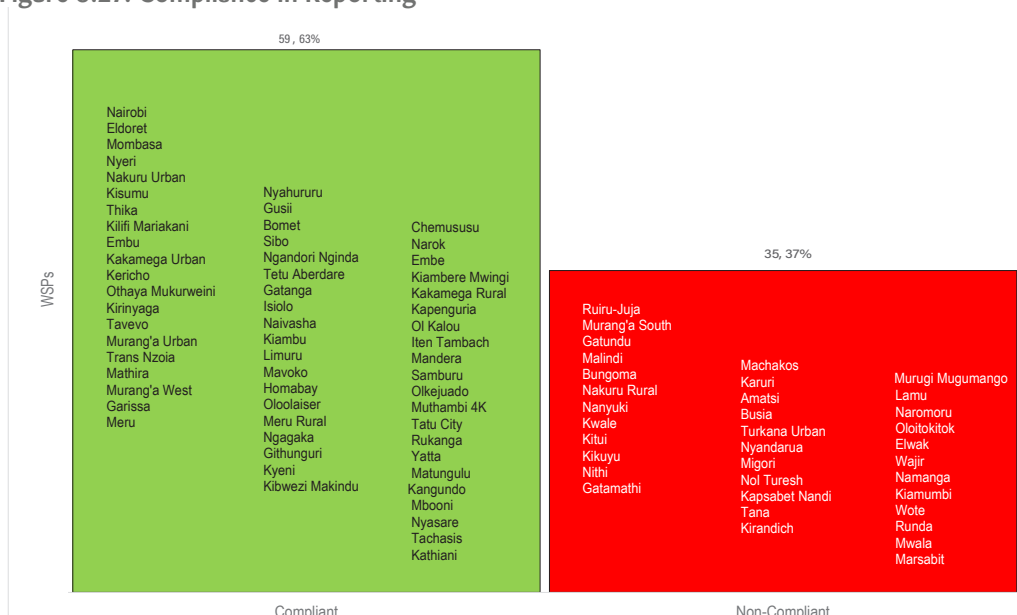


### III. Reporting Compliance Status

Timely data submission is required for regulatory compliance. It allows ongoing monitoring and evaluation of Water Services Providers. Meeting reporting deadlines makes sector data available for decision-making, benchmarking, and accountability. Late or missing data may result in regulatory enforcement.

59 utilities submitted data to WARIS on time. 35 did not submit data by the deadline.

Figure 3.27: Compliance in Reporting



WASREB reporting requirements requires utilities to submit the following key reports:

1. Monthly Water Quality reports
2. Quarterly MNE reports
3. Quarterly Tariff Implementation
4. Quarterly NRW reports
5. Annual Financial Statements

#### 3.5.6: Governance Assessment

The assessment shows that Very Large and Large WSPs always outperform Medium and Small WSPs in all governance areas. This reflects stronger institutional capacity, more established systems, and higher compliance levels out of the total utilities assessed, 89 WSPs successfully reported during the period, providing a comprehensive basis for evaluating governance performance across the sector.

On the other hand, seven WSPs, Naromoru, Migori, Kapenguria, Nol Turesh, Tuuru, Namanga, and Two Rivers (private) did not submit reports. The absence of reporting from these utilities presents a notable gap in sector oversight and accountability, as it limits the completeness of the assessment and constrains comparative analysis. This emphasizes the importance of strengthening compliance with reporting requirements, while also addressing underlying capacity or operational challenges that may hinder timely data submission. The assessment in this section, therefore, presents the outcome of the 88 successfully evaluated WSPs.

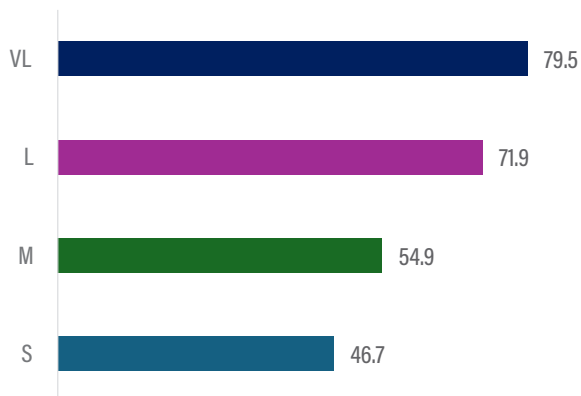
WSP governance performance is evaluated across six core parameters. Each parameter is scored according to defined criteria. The total score provides an overall governance rating and shows the level of compliance, institutional maturity, and system effectiveness.

Each indicator category assesses performance across several parameters, each scored from 0 to 3. A score of 3 means strong or full compliance with established, functional, and consistent systems. A score of 2 shows moderate or partial compliance, meaning systems exist but are applied inconsistently or need strengthening. A score of 1 means weak or minimal compliance, where systems are inadequate or poorly carried out. A score of 0 shows non-compliance or absence, with no evidence of systems or structures.

Table 3.20: Governance Parameters

Indicator	What it Assesses	Ideal Score	Weight
Information and Control Systems	i. Board expenditure ii. Approved annual budget aligned to the tariff. iii. Stakeholder engagement	12	10
Service Standards	i. Service charter ii. Customer satisfaction surveys iii. Complaint management system	12	10
User Consultation	i. Publishes information to the public on its website. ii. Budget & implementation of consumer engagement initiatives	12	10
Human Resources	i. Human Resource policy ii. Competitive Recruitment iii. Competencies and diversity of the Corporate Management Team	16	10
Financial Management	i. Approved tariff & ii. Meets statutory obligations. iii. Approved procurement plan and budget iv. Integrated financial (accounting) and commercial (billing) management system. v. Latest Auditor General's report /Opinion	28	10
Utility Oversight / Supervision	i. Board Composition – No. ,professional mix, gender. ii. Board Training iii. Staggered appointment of Board Members iv. Board & committee meetings. v. Well-constituted Audit/risk committee vi. Annual AGM undertaken. vii. Pro-poor policy	40	10
<b>Total</b>		<b>120</b>	<b>60</b>

Figure 3.28: Governance Performance by WSP Category



Overall governance performance improves progressively across WSP categories, with very large utilities recording the highest average score, followed by large and medium utilities, while small utilities show comparatively lower performance.

This pattern indicates that governance maturity strengthens with utility size; smaller and medium utilities may still be developing governance systems and therefore require continued support and monitoring, while larger utilities demonstrate more established governance practices.

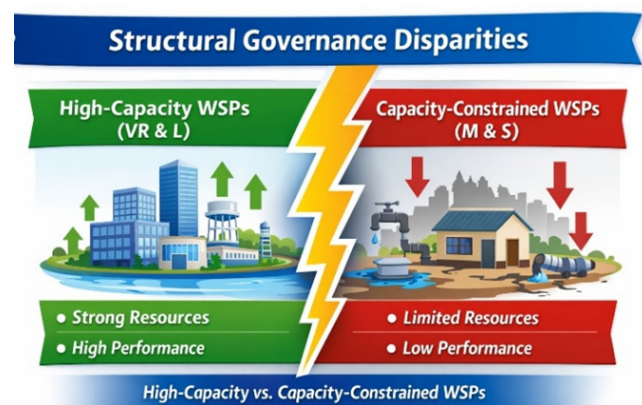
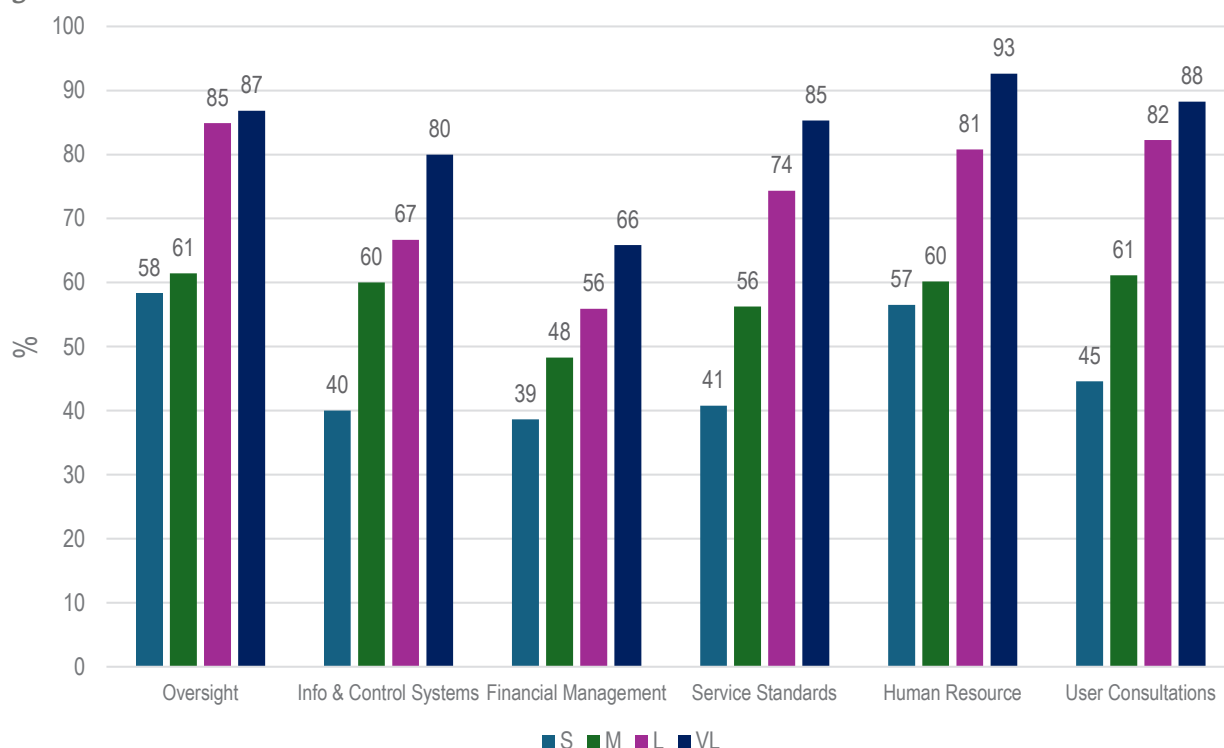


Figure 3.29: Governance Performance Across the Six Parameters



Governance performance across the six parameters shows a clear and consistent improvement as utilities increase in size from small to very large. Very large utilities generally demonstrate stronger governance across all areas, followed by large and medium utilities, while small utilities record comparatively lower performance. This pattern suggests that governance maturity strengthens with institutional size, reflecting greater technical capacity, more formalized systems, and stronger oversight structures.

Utility oversight and supervision are strong, especially at larger utilities with established boards, committees, training, and oversight. Information and control systems also improve with utility size, indicating that larger utilities are more likely to have structured budgeting processes, internal controls, and stakeholder engagement mechanisms in place.

Financial management shows steady improvement across utility categories, reflecting progress in tariff compliance, fulfilment of statutory obligations, procurement planning, integrated financial systems, and audit outcomes. However, compared to other parameters, financial management remains an area that requires continued strengthening across the sector, particularly among smaller utilities. Service standards improve with size. Larger utilities implement service charters, customer surveys, and complaint systems. Smaller utilities often use less formal methods, which can affect consistency and responsiveness.

Human resource governance is strong across all utility sizes. This reflects HR policy adoption, competitive recruiting, and a growing focus on diversity and skills in management teams. User consultation also improves with size. Larger utilities lead in consumer engagement, information sharing, and facilitating stakeholder participation. These findings show the need to help smaller utilities build governance capacity. It is also important to monitor and strengthen governance in all utilities according to the Corporate Governance Standards 2024.

### Top Ten and Bottom Ten Governance Performers

The governance assessment reveals a distinct performance divide between the top ten and bottom ten ranked Water Service Providers (WSPs), underscoring the critical role of institutional capacity in driving sector outcomes.

The top ten governance performers have mature and well-integrated governance frameworks. These are marked by effective board oversight, professional management, strong financial discipline, and high regulatory compliance. These utilities consistently show operational efficiency, transparency, and accountability. This

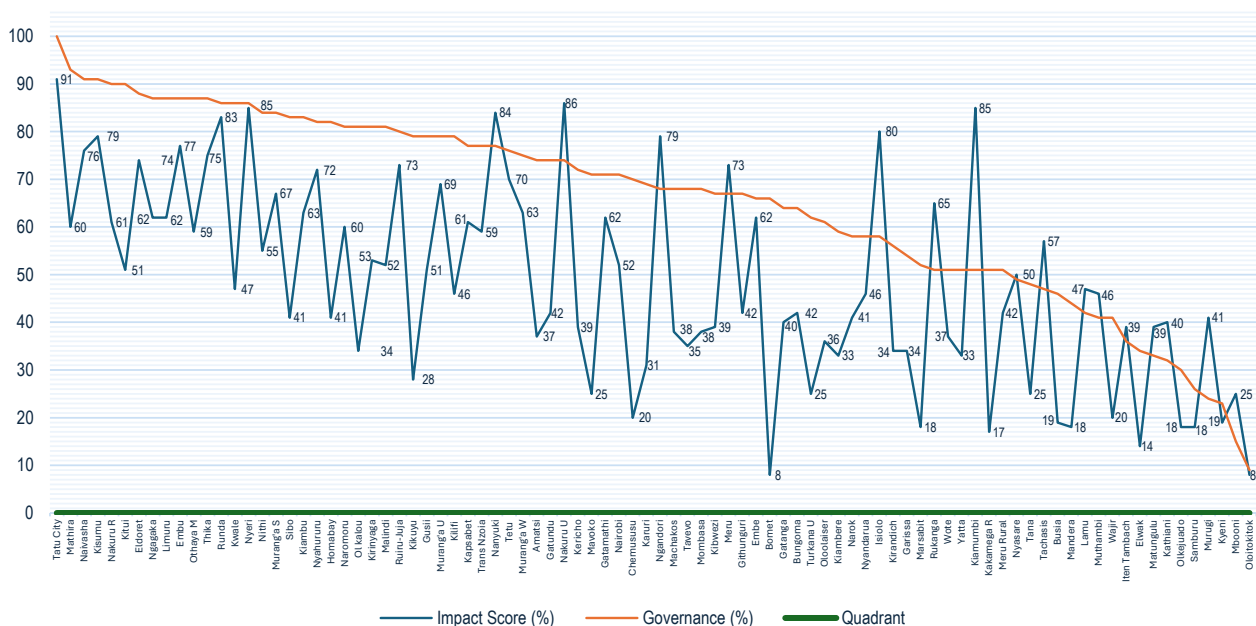
translates into reliable service delivery and strong performance. Their strategic direction aligns with execution, making them sector benchmarks and best-practice models.

The bottom ten governance performers have systemic weaknesses, such as limited board functionality and capacity-constrained management. They also face weak financial controls and low regulatory compliance. These challenges lead to inefficiencies in service delivery, poor transparency, and lower stakeholder confidence. The persistence of these gaps highlights the need for targeted interventions, capacity building, and stronger oversight. Overall, the ranking shows that strong governance is foundational, not incidental. Bridging the gap between top and bottom performers is critical for equitable, reliable, and sustainable water service provision in all counties.

Table 3.21: Top 10 and Bottom 10 Utilities in Governance

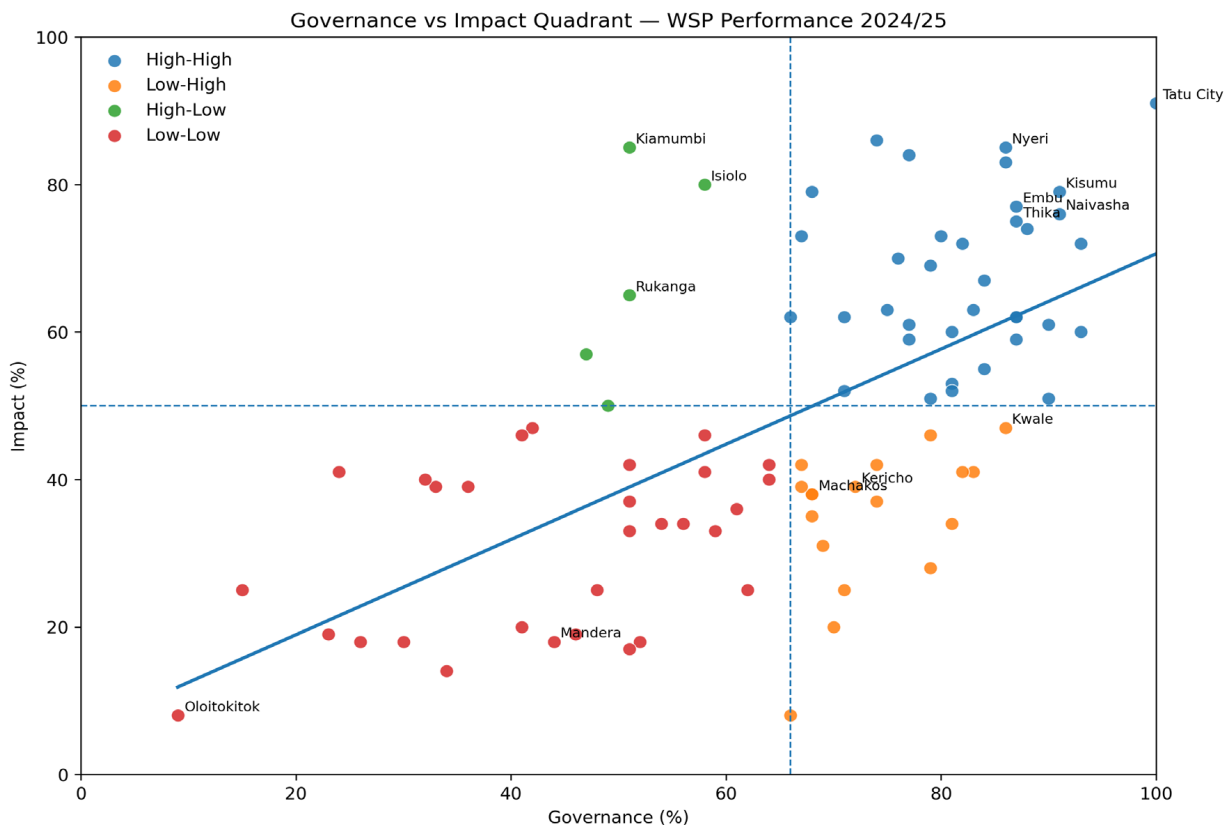
TOP 10 WSP IN GOVERNANCE			BOTTOM 10 WSP IN GOVERNANCE		
No.	Utility	Rank	No.	Utility	Rank
1	Tatu City	1	1	Iten Tambach	79
2	Mathira	2	2	Elwak	80
3	Naivasha	3	3	Matungulu Kangundo	81
4	Kisumu	3	4	Kathiani	82
5	Nakuru Rural	5	5	Olkejuado	83
6	Kitui	5	6	Samburu	84
7	Eldoret	7	7	Murugi Mugumango	85
8	Ngagaka	8	8	Kyeni	86
9	Limuru	8	9	Mbooni	87
10	Embu	8	10	Oloitokitok	88

Figure 3.30: WSP full Governance assessment score table



The trend shows a correlation between governance and performance among utilities. Utilities with more robust governance structures tend to achieve stronger operational and service delivery outcomes. This highlights governance as a critical driver of utility effectiveness.

Figure 3.31: Governance Vs WSP Performance



The data also reinforces that utility performance functions as a lagging indicator, while governance acts as a leading indicator. Improvements in governance—such as strengthened oversight, clearer institutional arrangements, and enhanced decision-making processes—typically require time before their effects become visible in service delivery metrics.

Consequently, some utilities (low-high) may display strong governance performance yet still record a modest IMPACT score. These utilities are likely to improve as governance reforms mature and translate into operational gains. Within this context, the Low Impact / High Governance quadrant warrants particular attention. Utilities in this category have laid the necessary governance groundwork and are therefore well-positioned to progress into the High Impact / High Governance quadrant over time. Close monitoring and targeted support will be essential to ensure that these governance investments yield the expected performance improvements and do not stall or regress into the Low Impact / Low Governance category.

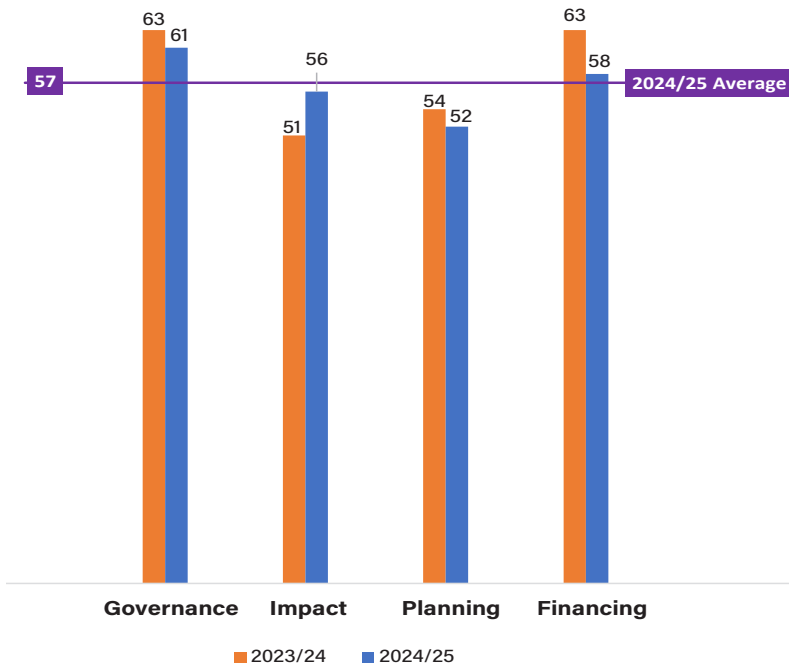
Conversely, utilities located in the High Impact / Low Governance quadrant present an intriguing dynamic. These include: Isiolo, Rukanga, Kiamumbi, Nyasare, and Tachasis. Despite weaker governance ratings, these utilities demonstrate comparatively robust performance results. This pattern suggests that some may be small-scale or informal systems, where effective service delivery is enabled by factors not fully captured in conventional governance assessments. Localized management approaches, community accountability structures, streamlined operational models, or context-specific practices may be compensating for the absence of more formal governance arrangements.

For such utilities, rigid application of governance frameworks designed for large or complex urban systems may be counterintuitive. Instead, they may benefit from proportionate governance frameworks tailored to the realities of small-scale providers. Their performance indicates that functional, informal mechanisms are already at work—such as simplified decision chains, locally grounded oversight, less complex supply chains, and operational practices adapted to the community environment. This finding might indicate the need for context-sensitive governance approaches across the sector. Governance expectations should be calibrated to utility size, complexity, and operational context.

Governance directly correlates with impact. Utilities with strong governance outperform others. Track governance by Corporate Governance Standards 2024 and recognize that better governance should lead to improved service delivery over time.

### 3.5.7: Pro-Poor Service Delivery Strategy and Assessment

Figure 3.32: Performance in Pro-poor Parameters



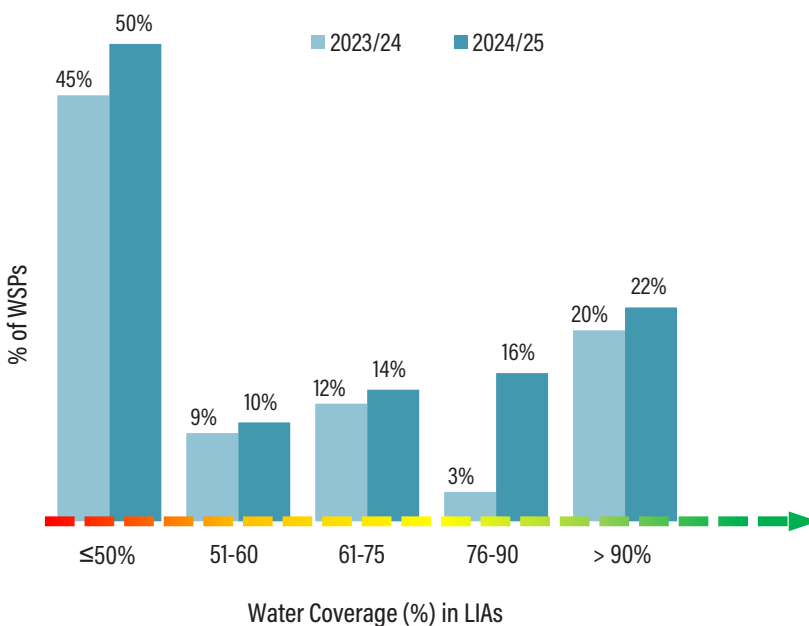
In FY 2024/25, 67 utilities reported poor performance. This marks an increase of six utilities compared to the previous reporting period. Despite this progress, the overall average pro poor performance remained stagnant at 57%. At the sub indicator level, only the impact sub indicator improved, rising from 51% to 56%. This improvement indicates increased access to services for underserved populations within the utilities' service areas.

Sector data indicate a marginal improvement in water coverage within low-income areas (LIAs) during the review period. The proportion of WSPs reporting coverage levels of 76–90% increased notably, while those

achieving above 90% coverage registered a slight rise, reflecting gradual progress toward expanded service provision in some jurisdictions.

Despite these gains, half of the WSPs (50%) continue to report coverage levels below 50%, up from 45% in the previous year. This highlights the persistence of significant service gaps and underscores the slow pace of improvement among lower-performing utilities.

Figure 3.33: Water Coverage in Low Income Areas



The middle coverage bands (51–60% and 61–75%) recorded only marginal growth. This suggests limited movement of WSPs from low to moderate service levels.



COUNTY WATER KIOSK



## Chapter Four

### WATER SERVICES IN THE COUNTIES

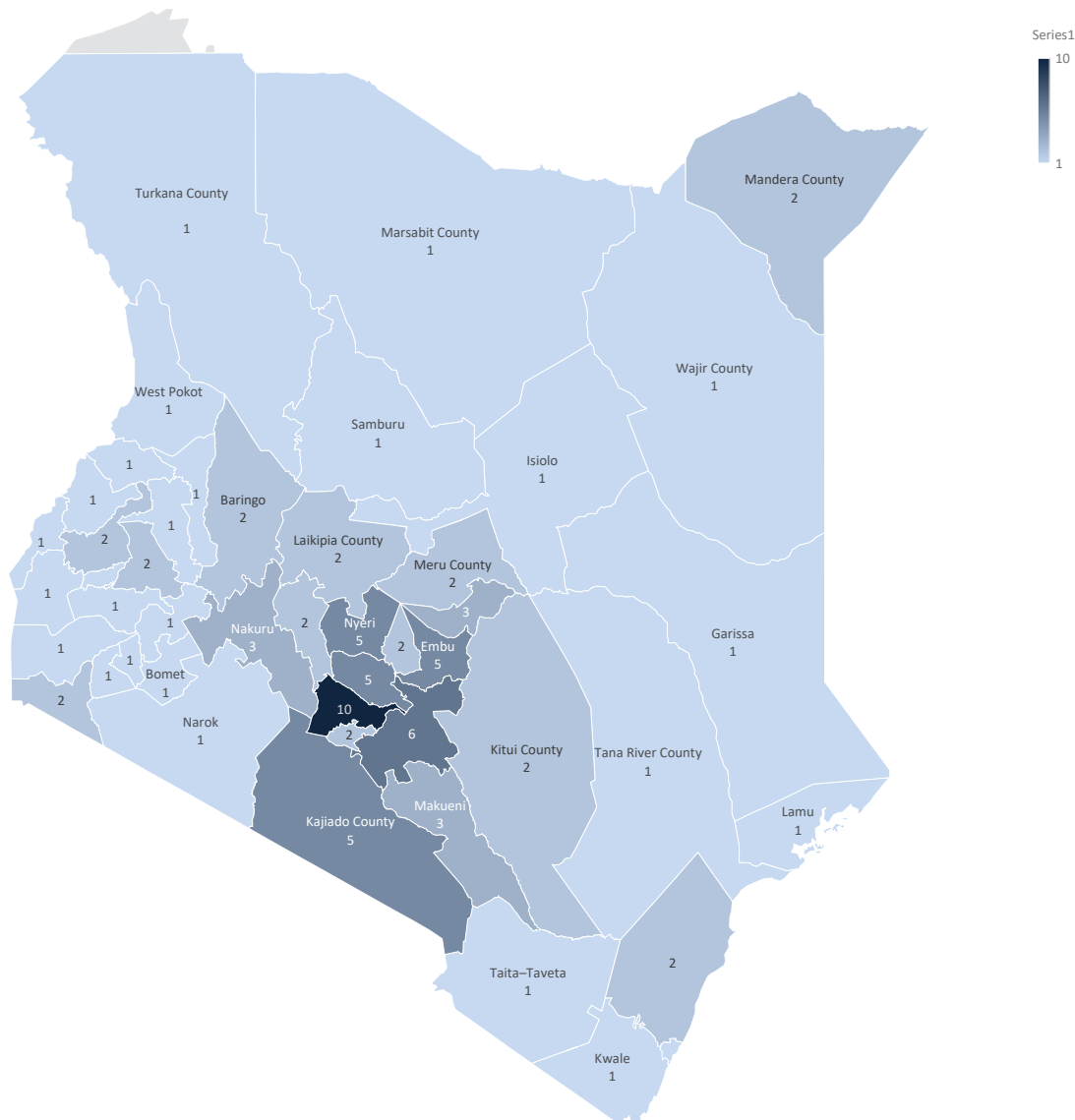
## 4.1 Water Services Distribution

Access to clean and safe water is recognised as a basic human right under the Constitution of Kenya, 2010. Responsibility for water supply and sanitation service provision rests with the country's 47 established counties.

The situation of water services in the counties is presented based on data from both public and private regulated utilities. The data also includes Small-Scale Service Providers (SSSPs) within the service area of utilities.

To further illustrate this distribution, Figure 4.1 gives an overview of the number of utilities established and distributed in the counties.

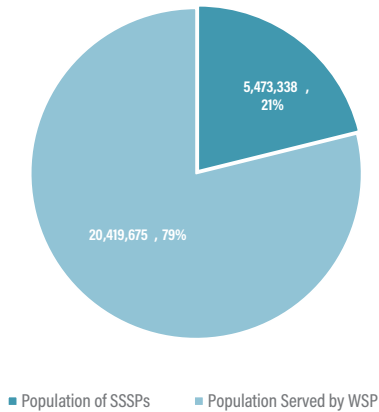
Figure 4.1: Distribution of Number of Water Utilities by Counties



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© OpenStreetMap

26 counties are served by one regulated utility each. Meanwhile, Kiambu County is served by the highest number of regulated utilities at 10 (eight public and two private), followed by Machakos with six WSPs. During the reporting period, Bungoma and Trans Nzoia counties reported as two separate utilities, unlike the previous period. Additionally, the only cross-county WSP is Gusii Water and Sanitation Company, which serves Kisii and Nyamira counties, though these have also begun the process of de-clustering.

### 4.1.1 Regulation within Service Areas



The population in the entire service area of regulated utilities is 31.6 million out of the total national population of 54 million. This is 58.5% of the population, with a marginal decrease from 59%, reported in the previous period. The increase in population is attributed to the growth in the service area of the formalized utilities. The population of the Small-Scale Service Providers within the regulated area of 759,636 was also included. The 2016 Water Act aligns the water sector with the Constitution’s primary objective of devolution. The Act recognizes that water interrelated functions are a shared responsibility between the national government and the county government. It also gives priority to the use of abstracted water for domestic purposes over irrigation and other uses. With the constitution of Kenya 2010, the Water Act 2016 has obliged county governments to put in place

measures to provide water services to rural areas that are considered not commercially viable. The measures referred to include the development of point sources, small-scale piped systems, and standpipes, which meet the standards set by WASREB and which may be managed by the community associations, public benefits organizations, or a private person under a contract with the county government.

#### County compliance with regulatory mandates

County water services are required to be provided through licensed Water Services Providers (WSPs). Operating any water service without a valid WASREB license constitutes a violation of the Water Act. Counties are therefore obligated to establish commercially viable WSPs that function independently and at arm’s length from county governments. 45 WSPs recorded an O&M of greater than 100%, of which Kiambu, Meru, Embu, and Nyeri counties had more than half of the WSPs.

Persistent compliance gaps undermine county water service delivery and regulatory alignment. High non-revenue water, reflecting physical and commercial losses and metering inefficiencies, erodes WSPs’ financial viability. Weak sanitation monitoring and political interference in operations further undermine compliance, autonomy, and efficiency. Poor financial ring-fencing, inadequate data reporting, and delayed tariff reviews threaten transparency, sustainability, and effective monitoring in county water services. Strengthened governance, improved monitoring, and enhanced financial discipline are essential for sustainable delivery.

## HIGH NON-REVENUE WATER

# 48% WATER LOST

<p><b>Inadequate Sanitation Monitoring</b></p>	<p><b>Political Interference in WSPs</b> Muranga / Machakos</p>		
<p><b>Incomplete Data Sets Across Value Chain</b></p>	<p><b>Poor Financial Ring-Fencing</b></p>	<p>Approx. 3% of sector revenue is surplus &amp; taxed <b>(244m)</b></p>	<p><b>Inadequate Data Reporting</b> <b>&lt; 100%</b></p>
<p><b>Resistance to Tariff Reviews</b> Nyeri / Makeni / Nakuru / Nyandarua / Meru</p>	<p><b>Governance Challenges</b> Frequent Leadership Changes Kakamega</p>	<p><b>Weak Compliance Culture</b> Reporting Mombasa / Malindi / Kilifi / Kwale / Tavevo</p>	

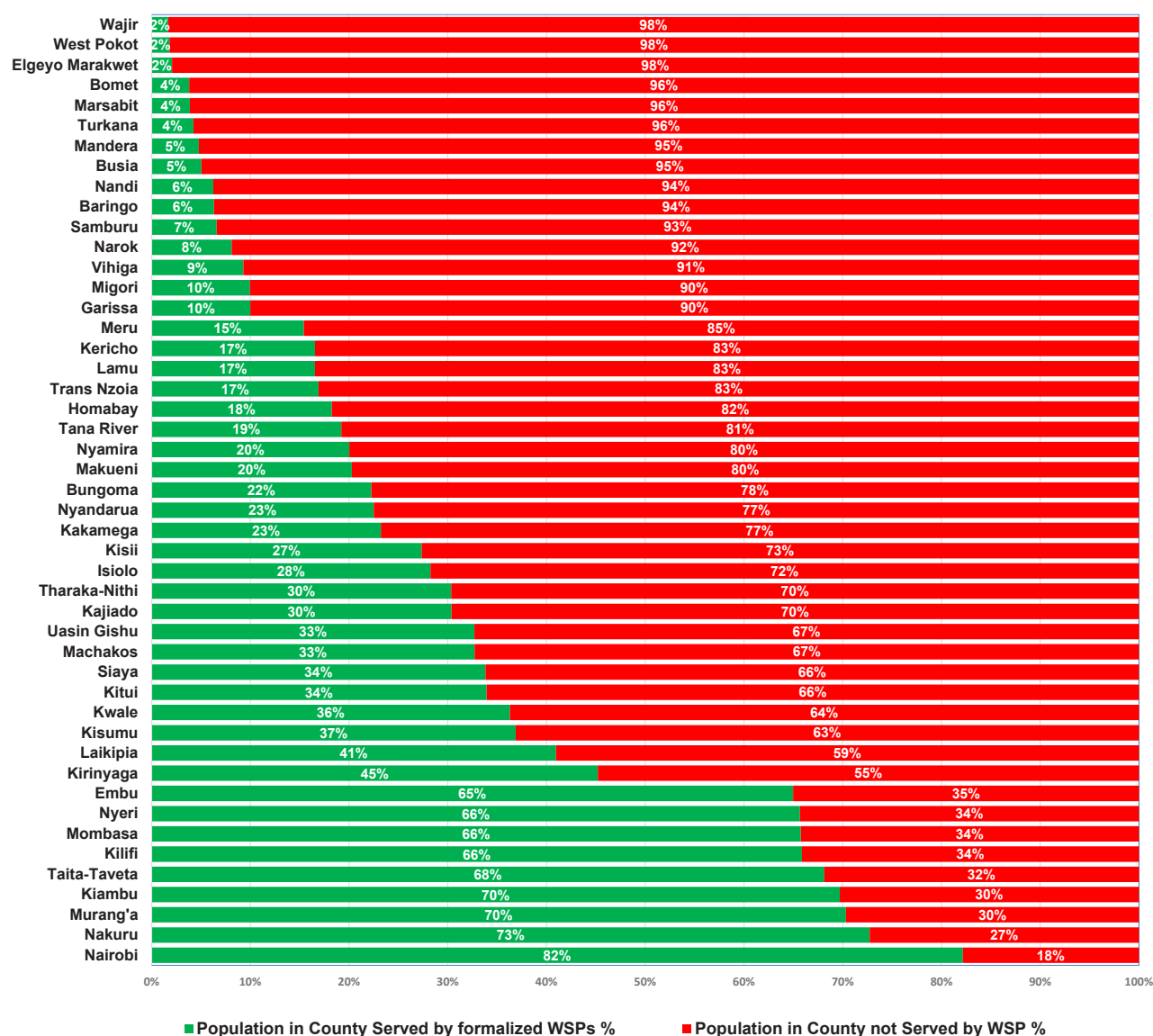
These challenges continue to impact service delivery and financial sustainability in the water sector.

### 4.1.2 Access to Water and Sanitation Services

#### County-by-county analysis of water and sanitation coverage

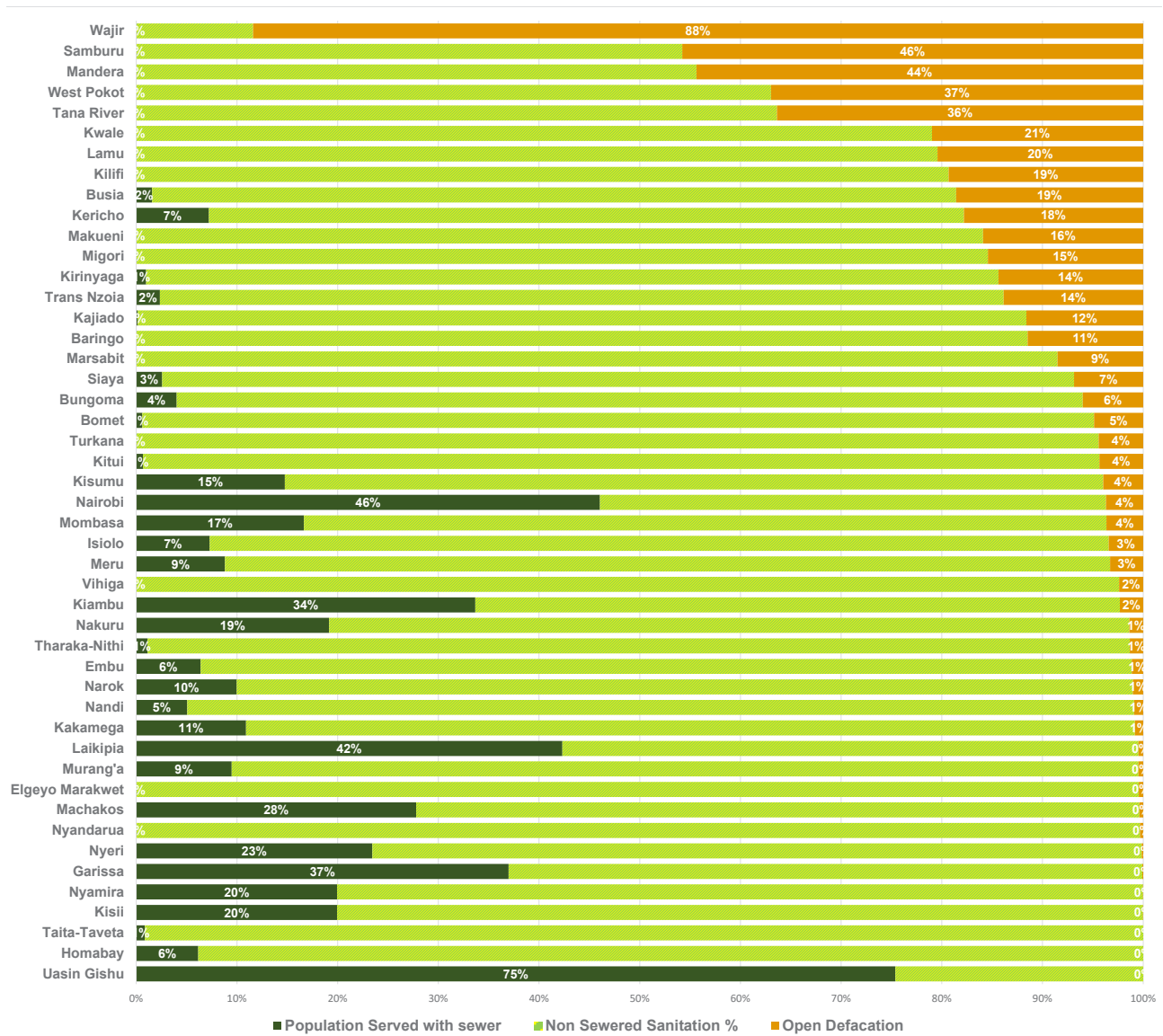
Access to water services shows significant variation across Kenya’s 47 counties. The national population was estimated at 54 million. Of this population, only 31.6 million resided within the service areas of the 94 Water Services Providers (WSPs), and approximately 22.8 million people received water services, including 3.1 million served by small-scale and traceable third-party providers. This indicates that disparities in service coverage remain substantial.

Figure 4.2: Water Coverage within all counties



Total Sanitation, on the other hand, is reported at 93%, with most of the counties above the acceptable range of 80% basic sanitation coverage. The lowest sanitation coverage is in Makueni (Mbooni WSP –34%), Mandera (Elwak –21%), Kajiado (Olkejuado WSP –24%), and Wajir (Wajir WSP- 12%) counties. Sewerage coverage is stated as being present in 26 out of the 47 counties, which is said to represent 16% of the population. An estimated 14 million people reportedly use shared sanitation facilities, reflecting 46% of the population and impacting privacy and hygiene, while approximately 0.36 million (7%) are estimated to openly defecate. Operational efficiency of the systems is described as below 20% for collection, transportation, and disposal. Only 21 out of 47 counties are noted as relying on onsite sanitation.

Figure 4.3: Sanitation Coverage within all counties



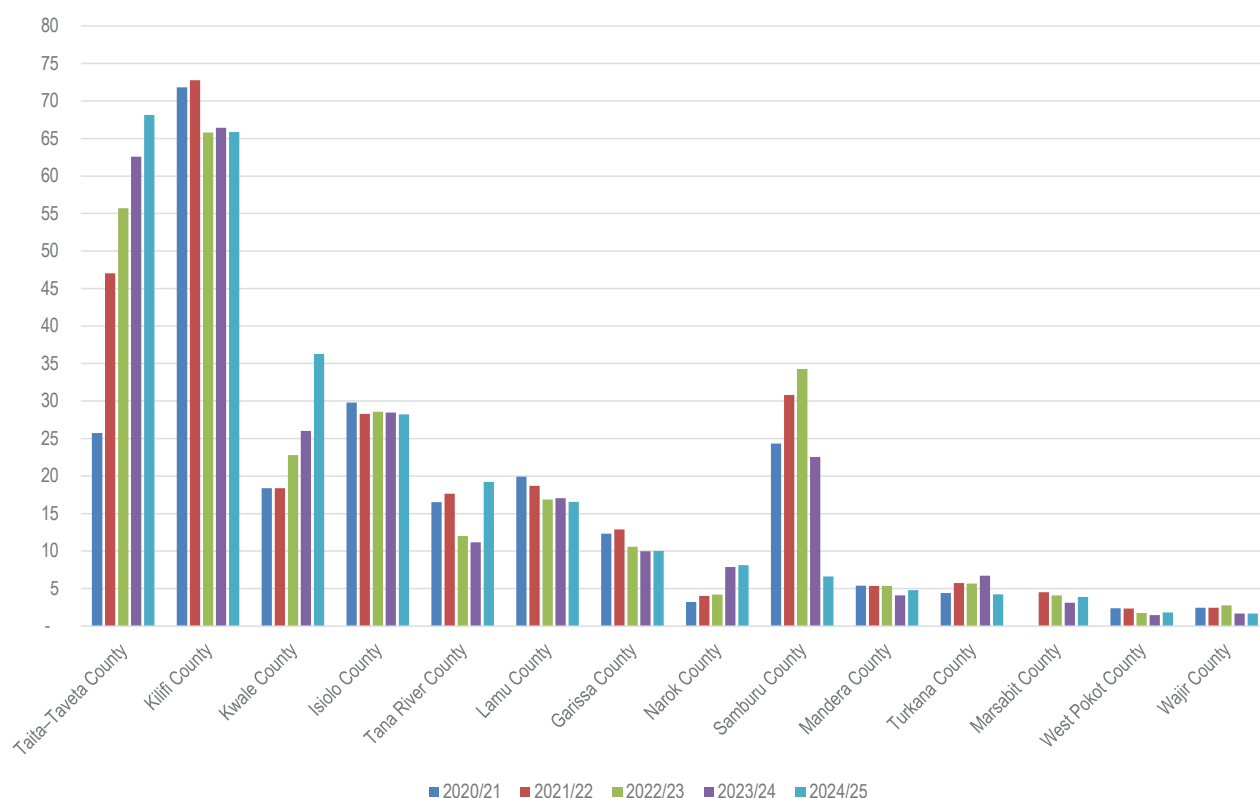
### Urban and rural disparities in service access

WASREB will develop a stepwise progression towards implementing its Guideline for the management of rural water and sanitation services. This will also allow the regulator to track the progress of counties towards compliance.

As a way forward for improving services in marginalized areas, more sensitization and capacity building are required in the process of forming Water User Associations (WUAs) and recommending them to potential financiers to foster development. Partnerships to build the capacity of SSSP operators on key issues such as governance, tariff setting, water quality assessment, etc., are also important. WASREB will develop a simple framework for tariff setting for small systems, which SSSPs can approve and tailor to meet their specific needs.

There is a growing need to enhance guidelines to take into account multi-use water systems. For example, a community borehole that serves as a water supply, irrigation source, and animal watering point requires a framework for the shared resource. Consequently, the 14 counties identified as marginalized have reported persistent low coverage in water services.

Figure 4.4: Comparison in aggregated coverage for marginalized counties for the past 5 years



### Strategies for improving service delivery in informal settlements

Strengthening water service delivery in informal settlements calls for coordinated technical, institutional, financial, and community-led strategies. It would be worth noting that WASREB continues to do pro-poor assessment of the utilities. Out of a total utility budget of Kshs 40.4 billion, Kshs 2.1 billion (5%) has been dedicated to supporting pro-poor initiatives. Through the assessment, utilities continue to be aligned with the Pro-Poor Water and Sanitation Services Guidelines requirement on allocation of at least 30% of the utility budget to pro-poor initiatives.

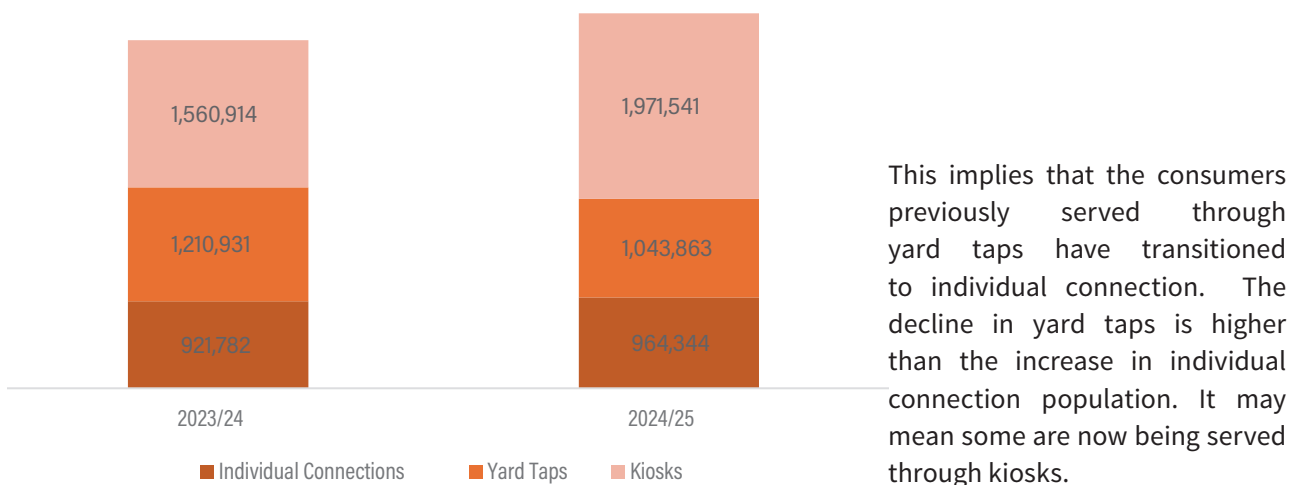
Table 4.1 Counties with WSPs that met the LIA threshold

County Name	Population in LIA, No.	Population Served in LIA with water services, No.	Utility Budget for LIA, Kshs
Busia	2,179	5,754	16,397,160
Embu	33,507	1,622	6,670,000
Garissa	25,817	16,326	30,000,000
Kakamega	110,761	109,674	116,000,000
Kericho	19,794	18,581	12,113,714
Kiambu	65,966	35,129	35,296,092
Kisii	240,765	4,427	3,500,000
Kisumu	304,229	279,212	321,203,208
Kwale	20,990	20,035	150,000,000
Lamu	12,642	8,009	11,938,952
Machakos	37,873	29,925	16,789,198
Mandera	66,906	15,562	28,688,599
Migori	17,192	3,642	6,040,000
Murang'a	28,923	20,522	23,491,714

County Name	Population in LIA, No.	Population Served in LIA with water services, No.	Utility Budget for LIA, Kshs
Nakuru	969,729	899,789	349,137,045
Nandi	42,295	2,784	8,178,250
Nyeri	127,961	125,096	300,420,000
Siaya	67,722	63,443	44,870,000
Tharaka-Nithi	2,199	1,787	2,860,831
Trans Nzoia	72,725	19,306	1,000,000
Uasin Gishu	36,545	23,027	3,303,493

An analysis of service through the kiosks and yard taps across the different consumer categories shows that while the number of people served through individual connections and kiosks increased, the population relying on yard taps declined.

Figure 4.5: Comparison of the different consumer categories' population changes within the LIAs at counties



## 4.2 County Strategies for Water Services Development

### Integration of water services in County Integrated Development Plans (CIDPs)

Integrating water services into County Integrated Development Plans (CIDPs) ensures that county-level investments in the water sector are aligned with broader development objectives. Aligning these plans with key national frameworks—such as WASREB KPIs, the Water Act 2016, MWSI priorities, and Vision 2030—supports effective budget allocation for water and sanitation projects, strengthens compliance with regulatory requirements, enhances coordination among departments including water, health, and urban planning, and improves counties' capacity to secure funding from both development partners and the national government.

All the 47 counties include water supply and sanitation programmes in their CIDPs, because county water planning is anchored in County Integrated Development Plans linked to county water master plans, reflecting the devolved units responsibility for water service provision. These projects are typically organized under sectoral headings such as Water and Sanitation, Environment and Natural Resources, or Infrastructure and Urban Development, depending on the county's administrative structure and planning framework. Across counties, the planned interventions share common characteristics and focus areas. They include drilling and equipping of boreholes to expand access in underserved areas, construction and extension of water supply pipelines to improve distribution networks, and development or upgrading of water treatment plants to enhance water quality. Counties also prioritize sewerage systems to improve sanitation coverage, construction of water pans and small dams to support water storage—particularly in arid and semi-arid regions—and implementation of non-revenue water (NRW) reduction programmes aimed at improving operational efficiency, minimizing losses, and strengthening the financial sustainability of water service delivery. These interventions collectively

demonstrate a consistent national planning pattern in which counties use CIDPs as the primary vehicle for expanding equitable, reliable, and sustainable water services.

Specifically, the counties that featured water programmes and projects in their CIDPs include Makueni, Kitui, Machakos, Kiambu, Kirinyaga, Kajiado, Nakuru, Elgeyo-Marakwet, Siaya and Narok.

**Table 4.2: Spotlight on selected counties CIDP programmes on water**

WWDA	County	Selected programmes/projects included in CIDP
Tanathi	Makueni	Integrated Water Harvesting, Storage, Treatment & Distribution, Urban and Rural Water Governance
Tanathi	Kitui	Water infrastructure development
Tanathi	Machakos	Water supply expansion & dams
Athi	Kiambu	Water connectivity prioritized
Tana	Kirinyaga	Provide sustainable urban center liquid waste management services
Tanathi	Kajiado	Increase access to safe and affordable water for domestic, agriculture and institutional consumption
Central Rift	Nakuru	County-wide development including utilities
North Rift Valley	Elgeyo-Marakwet	Water supply programmes
Lake Victoria South	Siaya	Infrastructure & service delivery including water
Central Rift	Narok	Resource-based development including water

#### 4.2.1 County water policies and legal frameworks

The Water Act 2016 establishes the legal basis for county governments to manage water services, focusing on ensuring access and sanitation in underserved areas. The Water Services Regulatory Board (WASREB) oversees compliance with standards for quality, cost, and customer service, and provides guidance on clustering Water Services Providers to boost efficiency.

The County Governments Act 2012 outlines the functions and powers of county governments, emphasizing the need for sustainable water service delivery policies. Additionally, WASREB has issued specific guidelines to maintain water service standards in rural and underserved areas, aiming to professionalize and formalize their operations, ensuring sustainable investment and the progressive realization of the right to water. Regular performance benchmarking by WASREB helps ensure regulation compliance and identifies areas for improvement.

If county water policy and legal frameworks are unavailable, the Rural water services rollout can proceed as guided by Legal Notice 54, Water Service Regulations, 2025. It would be worth noting that the counties are required to align the County Policies, County Water Strategies, and the respective County Acts with the Water Act 2016.

#### Implementation of the Kenya Water, Sanitation and Hygiene (K-WASH) program

The K-WASH Program is a Program-for-Results (PforR) initiative targeting 33 Water Services Providers (WSPs) across 19 counties. Under Result Area 3, where WASREB plays a central role, the program seeks to strengthen compliance with regulatory requirements and improve utilities' operational cost coverage through performance-based incentives. To qualify for the initial disbursement of Kshs 45 million, participating utilities must demonstrate compliance with the following conditions: possession of a valid tariff and operating license, an approved Performance Improvement Action Plan (PIAP), a board compliant with WASREB standards, a performance contract with the county government, and publication of the latest audited financial statements on the utility's website. In addition, utilities that fully achieve the Operational Cost Coverage Ratio (OCCR) targets set out in their PIAPs are eligible for additional performance-based financing of up to Kshs 87 million, thereby directly linking funding to measurable improvements in financial sustainability and regulatory compliance.

### 4.2.2 Utility Operational Efficiency at County Level

#### a) NRW monitoring

Non-revenue water (NRW) represents the volume of water produced but not billed to consumers as a result of losses arising from leaks, illegal connections, or metering inaccuracies. High NRW levels weaken the financial stability of Water Services Providers and reduce the overall effectiveness of water supply systems. During the reporting period, however, NRW performance varied considerably across counties, with levels ranging from 23% in Meru to 77% in West Pokot. According to sector guidelines, NRW levels below 20% are considered optimal, those between 20% and 25% acceptable, and any value exceeding 25% unacceptable. Notably, 16 counties recorded NRW equal to or greater than 50%.

Figure 4.6: Non-Revenue Water Within the Counties

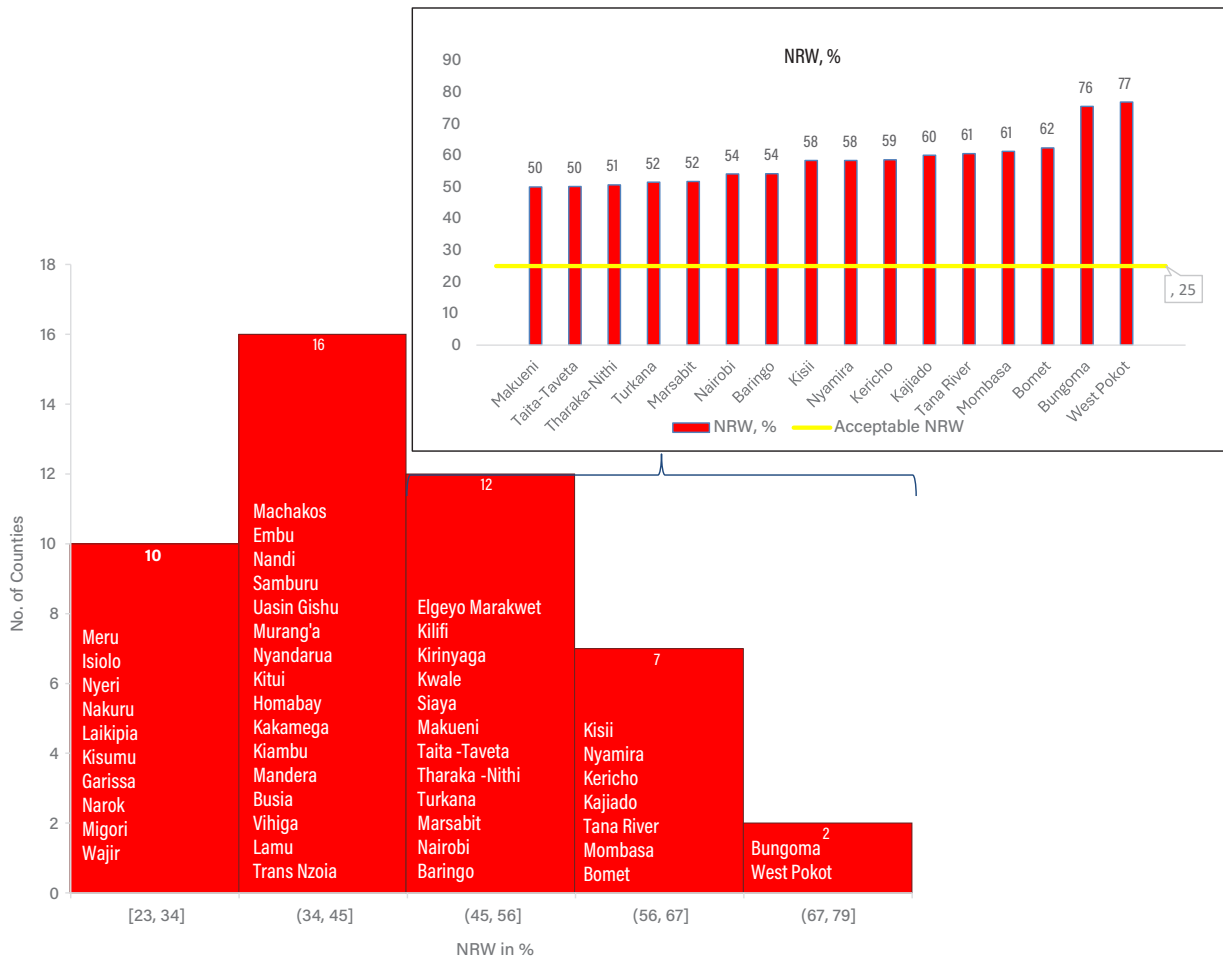


Table 4.3: The Five Stages of NRW and Recommended Reduction Measures

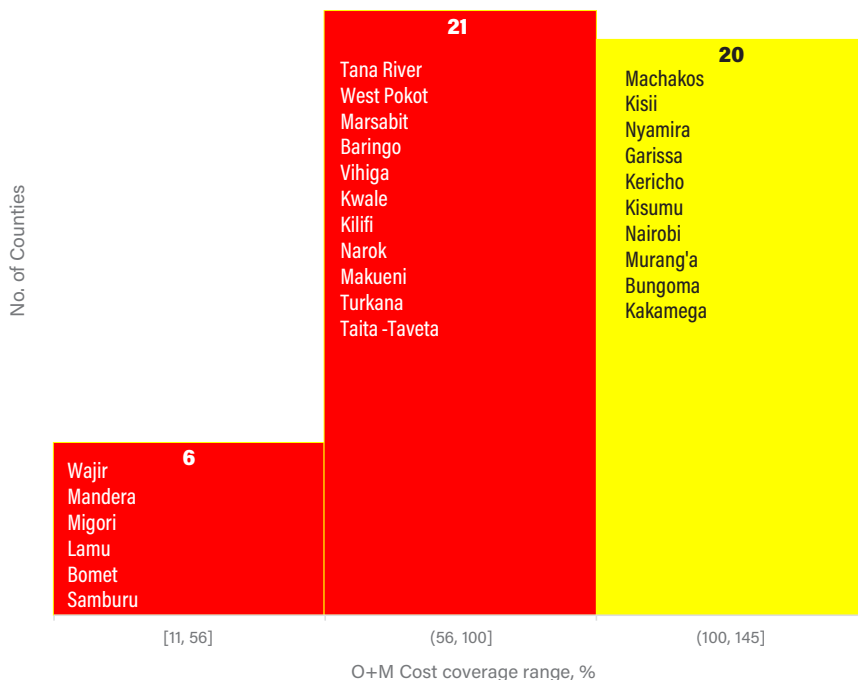
Stage (Zone)	NRW Range	Recommended Measures (GIS and NRW Monitoring being constant)
1 (Red)	≥ 40% or unreliable	- Accurate functional production meters (tested & calibrated) - Elimination of major commercial losses incl. illegal consumption - 100% metering and CIS to eliminate unbilled customers - Timely repair of burst, surface leaks and overflows
2 (Yellow)	30% < NRW < 40%	- Intensify Stage-1 measures through routines - Zoning and establishment of functional district metered areas - Pressure management and reduction underground leaks; priority areas - Mapping and monitoring of burst and leakages - Upgrade Pipe materials and fittings to recommended standards - Minimize commercial losses; meter reading, billing handling errors
3 (Green)	24% < NRW ≤ 30%	- Intensify Stage-2 measures through routines - Reduction of underground leaks - Replacing pipes in bursts and leaks prone areas (mapped in stage 2)
4 (Blue)	20% < NRW ≤ 24%	- Intensify Stage-3 measures - Accelerate and complete pipe replacements
5 (Purple)	NRW ≤ 20%	- Intensify Stage-4 measures - Maintain facilities and skills to sustain the achieved low NRW

Source: Non-revenue water management guidelines 2022 – Volume 1 Guidelines

### b) O&M cost recovery performance

Operational performance varied greatly across counties. Many Water Services Providers (WSPs) could not recover their full Operations and Maintenance (O&M) costs. Some counties, such as Mandera, had an average recovery rate as low as 11%, the lowest observed. Of the 47 counties, 25 had water WSPs that achieved O&M cost recovery rates above 100%. Among these, Garissa County had the highest recorded rate at 103%. The remaining 22 counties did not reach full O&M cost recovery.

Figure 4.7: O&M cost recovery performance



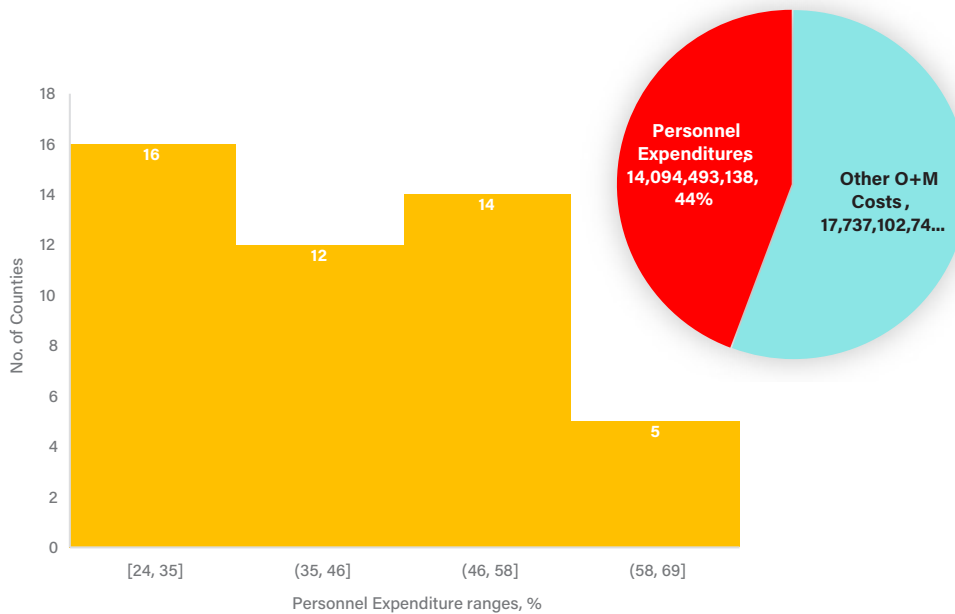
Low Operations and Maintenance (O&M) cost-recovery weakens water service sustainability by limiting providers' ability to maintain infrastructure, ensure reliable service, improve efficiency, and expand coverage. Ongoing revenue shortfalls also increase reliance on outside funding and jeopardize financial and operational stability.

The analysis of county-level water service performance included an analysis of personnel expenditure as a proportion of total Operations and Maintenance (O&M) costs.

## Personnel Expenditure trends

Across many counties, personnel expenditure exceeds these normative and desired benchmarks, resulting in elevated recurrent cost burdens that weaken the financial resilience of Water Services Providers (WSPs). To address this challenge, achieving compliance with these benchmarks necessitates systematic workforce optimization, improved labor productivity, and rigorous personnel cost management to restore operational efficiency and long-term service sustainability.

Figure 4.8: Personnel expenditure within counties



This high figure, 44% PE as a percentage of O&M is unacceptable.

## Monitoring of county financial flows to utilities

In the period under review, the water sector faced major financing challenges. The sector received Ksh 82.1 billion for water supply, sanitation, and environmental protection as per the Office of the Controller of Budget National Government Implementation Review Report 2024/25. Despite this funding, more money was needed to meet demand and fix infrastructure issues. These notable gaps contribute to experienced difficulties in achieving universal access to water and sanitation services in Kenya. The figure below depicts the funding by the national government and other development partners.

## 4.3 Implementation of Kenya Rural Water Regulations

### Progress in the rollout of rural water regulation

The Guideline for the provision of water and sanitation services to rural and underserved areas in Kenya is a crucial regulatory tool that has the potential to improve rural water services significantly. To see this improvement, uptake of the Guideline by the Kenyan county governments must progress. Through this progression, the Guideline can be strengthened through iterative adaptation based on reflective learning from implementation. Fundamental to the rollout of regulation in rural areas of Kenya is the institutional coordination between counties and national regulators, national consensus on the strategy, and the county governments having a clear water policy and legal framework. This will clarify the county's vision for rural water and the water sector, including a commitment to ongoing support for the water sector.

## Status of rural water regulation in counties with rural WSPs

### 4.3.1 Formalization of Rural, Underserved and Small-Scale Service Providers – Service Delivery Models, Requirements and Financing

Formalizing service provision in rural areas, underserved settlements, and for small-scale providers needs a coordinated institutional, regulatory, and financing framework. This helps shift from fragmented community-managed systems to sustainable, regulated service delivery. Steps include allocating clear service areas and integrating small providers into licensed arrangements. It is also necessary to strengthen county oversight, set minimum service standards, and introduce performance monitoring. Structured community engagement is key to transitioning assets and management. Capacity building and professionalizing operations are required, as is developing a cost-reflective, pro-poor tariff framework. Establish financing mechanisms to address the cost-recovery gap in rural areas. Better data collection, reporting, and benchmarking are essential for oversight and ongoing improvements. Together, these actions expand regulation to underserved areas, strengthen governance, and support sustainable, equitable delivery of water and sanitation services.

### 4.3.2 Role of WASREB

WASREB plays a central role in formalizing and regulating rural, underserved, and small-scale water service provision in Kenya. Sections 72(1)(a) and (p), read with section 94(3) of the Water Act, mandate WASREB to set standards and provide guidance to County Governments on the provision of basic water services in rural and marginalized areas. In rural contexts, WASREB develops regulatory frameworks and guidelines to support structured service delivery. These include the Guideline for the Provision of Water and Sanitation Services to Rural and Underserved Areas (2019), licensing frameworks for small-scale service providers, and tariff-setting guidelines.

WASREB also licenses Water Services Providers, including rural providers. It sets minimum service standards to ensure quality, reliability, and affordability. Through systems such as WARIS and MajiData, WASREB collects operational data to monitor performance. This data helps to guide tariff reviews and support benchmarking of rural and small-scale providers. Additionally, WASREB supports county governments and service providers through capacity building, reporting templates, and technical guidance. This support helps facilitate the transition from community-managed schemes to regulated service provision. The Board further promotes stakeholder coordination and advocates for sustainable financing mechanisms, including cost-gap subsidies. WASREB also encourages professionalization through corporatized and aggregated rural service delivery models. These roles position WASREB as a key institution in expanding regulation to rural and underserved areas. WASREB ensures sustainable, accountable, and equitable water service delivery.

### 4.3.3 Challenges experienced by Rural Schemes

Rural water schemes in Kenya are often unaffordable and unsustainable because of high service delivery costs. Decentralized systems, complex asset ownership, and multi-use water systems together increase operational and maintenance expenses, forming the core barrier to both affordability and sustainability.

Additionally, rural areas often have low population densities, resulting in higher per capita costs and limited economies of scale. Revenue collection is another challenge, as tariffs are typically set at low levels to ensure affordability, but this restricts the funds available for maintenance and operations. High levels of non-revenue water due to leaks, theft, or inefficient systems further exacerbate financial constraints.

The lack of professional management is a significant barrier, as many rural water schemes are managed by community-based committees or individuals without technical expertise, resulting in poor governance, inadequate maintenance, and minimal monitoring and accountability. Funding and investment are insufficient, leaving a cost-recovery gap between affordable tariffs and the real cost of reliable service.

Subsidies and funding mechanisms are often short-term and unpredictable, with limited access to private sector finance, constraining sustainable investment in rural water services. Community engagement challenges, such as legacy asset ownership issues and resistance from communities, complicate the transition to regulated service provision. Policy and governance gaps, including misalignment between national and county governments and unclear roles, create inefficiencies in planning, development, and management. Addressing these challenges requires coordinated efforts to professionalize service delivery, establish cost-gap subsidization funds, strengthen monitoring and accountability, align policies across government levels, and ensure effective community engagement and stakeholder collaboration for the long-term sustainability of rural water schemes.

#### 4.3.4 Role of County Governments in Rural Water Services

County governments are central to the success of rural water regulation in Kenya. Their leadership, coordination, and commitment are essential for improving access, quality, and sustainability of rural water services, while ensuring inclusiveness and compliance with constitutional rights to water and sanitation.

County governments are the primary function owners of water and sanitation services in rural areas, as mandated by Schedule 4 of the Constitution of Kenya. They are responsible for overseeing Water Services Providers operating within their jurisdictions and for ensuring compliance with regulatory requirements and service standards set by the regulators. In this role, counties are also tasked with allocating service provision areas for rural water systems, which involves mapping service areas and rationalizing overlaps in order to avoid duplication and wastage of resources. To support this function, WASREB's geospatial MajiData system is intended to assist counties in documenting and mapping small-scale water systems.

Counties, led by County Executive Committee Members for water affairs and County Water Directors, are required to spearhead the collection of operational data from rural Water Services Providers and to submit aggregated monitoring information to WASREB, ideally through the Water Regulatory Information System (WARIS). Beyond data collection, counties are expected to lead capacity development efforts aimed at professionalizing rural water service delivery. This includes training personnel in water and sanitation management, establishing effective management structures, and adopting appropriate technologies to improve operational efficiency.

Counties must engage communities about new service arrangements, address concerns, and foster acceptance for the shift from community-based to regulated provision. They ensure genuine consultation, prevent elite capture, and respect past community contributions.

To strengthen service delivery, counties are encouraged to establish corporatized entities to manage rural water services or to facilitate other service delivery models that are appropriate to the local context. In all cases, counties must ensure a clear separation between ownership and management of service delivery, while holding Water Services Providers accountable for sustainable and efficient operations. Counties are also responsible for monitoring and evaluating rural water service delivery, taking corrective actions where necessary, addressing community concerns, and documenting lessons learned for sharing with WASREB to inform improvements in the regulatory framework.

In addition, counties must develop a clear vision, policy, and legal framework for rural water services that aligns with the national policy framework and the provisions of the Water Act, 2016. Where county-specific frameworks are not yet in place, counties may proceed using guidance provided under the Water (Services) Regulations, 2025 (Legal Notice No. 54 of 2025). Finally, counties are expected to facilitate sustainable funding mechanisms by establishing and operationalizing cost-gap subsidization funds to address the financial challenges of rural water service delivery. They must also support tariff-setting processes, ensure public acceptance of tariffs, and build partnerships with donors, non-governmental organizations, and private sector actors, while ensuring alignment with government priorities and avoiding governance-related risks.

Table 4.4: Combined Service Delivery Models and Formalization Requirements

Service Delivery Model	Where Applied	Institutional Arrangement	Situation Where This Might Apply
WSP takes over small water system	Within WSP service area	Existing licensed WSP absorbs scheme	Small community scheme located within an existing WSP service area but lacking technical and financial capacity
WSP delegates responsibilities to WUA	Within WSP service area	Delegated management under WSP oversight	Functioning community scheme where WSP retains oversight, but local management remains beneficial
WSP contracts private operator	Within WSP service area	PPP / management contract	Scheme requiring operational efficiency or specialized expertise not available within WSP
WUA becomes a WSP	Within WSP service area	Community provider formalized and licensed	Strong and organized WUA capable of operating independently under regulation
County establishes Rural WSP (RWSP)	Outside WSP service area	County corporatized rural provider	Rural areas not covered by existing WSPs requiring structured service delivery
RWSP takes over small water system	Outside WSP service area	Rural WSP aggregates schemes	Multiple fragmented rural schemes requiring aggregation for sustainability
RWSP delegates to WUA	Outside WSP service area	Hybrid community-professional model	Community-managed schemes requiring professional oversight but retaining local involvement
RWSP contracts private operator	Outside WSP service area	Rural PPP arrangement	Remote rural schemes needing specialized operations or investment
WUA becomes WSP (outside area)	Outside WSP service area	Independent rural provider	Isolated rural scheme capable of operating independently where no WSP exists

### 4.3.5 Counties Implementing Rural Guidelines

Counties that have initiated implementation of rural water service provider models include Garissa, Isiolo, Kakamega (licensed and operational), Meru (licensed and operational), Laikipia, Makeni, Marsabit, Turkana, Uasin Gishu (established but yet to be licensed) and Nakuru (licensed and operational). Most counties are still in the process of operationalizing rural providers, with Kakamega, Meru and Nakuru showing the most advanced implementation.

Table 4.5: Financing Mechanisms Supporting Formalization

Financing Instrument	Purpose	Status
1. Consumption levy (3%)	Address cost recovery gap	Not yet operationalized
2. County subsidization funds	Support underserved areas	Proposed but not operational
3. National contingency fund	Support utilities	Proposed
4. Results-based financing	Performance-based support	Limited for rural providers
5. Tariff setting (2023 guideline)	Cost-reflective sustainable tariffs	Operational
6. Household contributions	O&M sustainability	Applicable
7. Private sector financing	Infrastructure and operations	Emerging
8. Donor / partner support	Start-up financing	Ongoing (K-WASH, STAWI, WKWP)

### K-WASH Program

The K-WASH Program is a Program-for-Results (PforR) initiative targeting 33 Water Service Providers (WSPs) across 19 counties. Under Result Area 3, where WASREB plays a central role, the program seeks to strengthen compliance with regulatory requirements and improve utilities' operational cost coverage through performance-based incentives.

KWASH targeted counties with utilities that were least compliant with regulatory requirements. These include: Mandera, Garissa, Samburu, Turkana, Baringo, Migori and Kapenguria. Others with moderate level of compliance such as Vihiga, Makeni and Narok were also in the list. The success of the programme to date is assessed primarily by the number of utilities that have fully complied with the five defined regulatory requirements. In addition, success is evaluated based on measurable progress toward regulatory compliance, particularly whether utilities have submitted applications for tariffs and licences, and the extent to which the programme is supporting and accelerating the completion of these regulatory processes.

Of the 33 utilities under KWASH, 27 utilities developed performance improvement action plans (PIAPs). The PIAPs enabled the utilities conduct a self-diagnosis of their poor performance and formulate interventions that would help them improve their performance with emphasis on improving their cost coverage. The program is designed in such a way to incentivize achievement of their OCCR targets thereby improving the financial well-being of these utilities which have been struggling.

Formalization requires WASREB to expand regulation to non-conventional providers, develop simplified licensing frameworks, introduce rural performance indicators, and strengthen monitoring of small-scale providers. It also requires coordination with counties on service area allocation, corporatization of rural providers, tariff approvals, and implementation of financing mechanisms. These service delivery models provide structured pathways for transitioning community-managed schemes into regulated service provision, improving service reliability, strengthening governance, and supporting progressive realization of universal access to water and sanitation.





## **Chapter Five**

### **CONCLUSION AND WAY FORWARD**

## 5.1 Conclusion

Kenya's water and sanitation sector is at a critical juncture. Recent progress shows that regulatory oversight, targeted investments, and improved utility performance are delivering tangible results. Expanding service coverage, improved efficiency, and stronger governance indicate the sector is advancing toward national and global commitments.

However, this progress remains uneven and insufficient to achieve universal access by 2030 without a significant acceleration in implementation. Persistent disparities between urban and rural service levels, slow progress in sanitation coverage, and high levels of Non-Revenue Water continue to undermine sector performance. These challenges highlight a critical reality: the sector is no longer constrained by policy limitations, but by gaps in execution.

This report confirms that strong governance, enforced regulation, and disciplined utilities drive results. Weaknesses in any area stalls progress. Success by 2030 now depends on the sector's ability to turn commitments into sustained, measurable improvements.

## 5.2 Strengthening Governance and Accountability

Governance remains the most critical driver of performance across Water Services Providers. Utilities that demonstrate strong leadership, transparent management practices, and adherence to regulatory requirements consistently deliver better outcomes in service provision, financial management, and customer satisfaction. To drive meaningful change, all stakeholders must urgently reinforce accountability at both the utility and county levels. Regulatory agencies should rigorously enforce compliance with licensing conditions, tariff implementation, and reporting obligations. County governments must step up oversight of utilities, ensuring investments align with sector priorities and that governance structures are effective. Immediate action from all parties is essential to achieve lasting progress.

Without strengthened governance, continued investments in infrastructure will not translate into sustainable improvements in service delivery.

## 5.3 Ensuring Sustainability of Sector Investments

Significant investments have been made in water and sanitation infrastructure across the country. While these investments have contributed to expanding service coverage, their long-term sustainability remains at risk due to weaknesses in asset management and maintenance practices.

The sector must twin infrastructure expansion with sustainability of existing and developed systems. This requires strengthening asset management frameworks, ensuring adequate allocation of resources for operations and maintenance, and improving financial discipline within utilities. Sustainable infrastructure is not defined by its construction, but by its continued functionality and reliability over time. Failure to protect and maintain existing assets will erode the gains made and increase the cost of future interventions.

## 5.4 Driving Utility Efficiency and Financial Health

Operational inefficiencies remain a major barrier to sector performance. Excessive water losses, irregular billing, and poor revenue collection undermine utilities' ability to function sustainably and reinvest in service enhancements. Utilities must shift toward efficiency-driven operations by enhancing metering and billing accuracy, strengthening revenue collection, and optimizing operational costs like energy consumption to achieve financial sustainability. Utilities that are financially viable are better positioned to maintain infrastructure, expand services, and attract investment. Strengthening financial health is therefore not only a utility-level priority but a sector-wide imperative.

## 5.5 Strengthening Climate Resilience and Water Security

Climate variability now presents one of the most significant threats to water service delivery. The increasing frequency of droughts, variability in water sources, and surging demand for water are placing unprecedented, immediate pressure on existing systems. The sector must adopt a more resilient and forward-looking approach to water resource management. This includes scaling up investments in water storage infrastructure, strengthening protection of water catchments, and integrating climate risk considerations into infrastructure planning and design. Water security can no longer be treated as a long-term goal; it is an immediate priority that demands prompt, coordinated action to underpin the sustainability of all sector gains.

## 5.6 Strategic Priorities Toward 2030

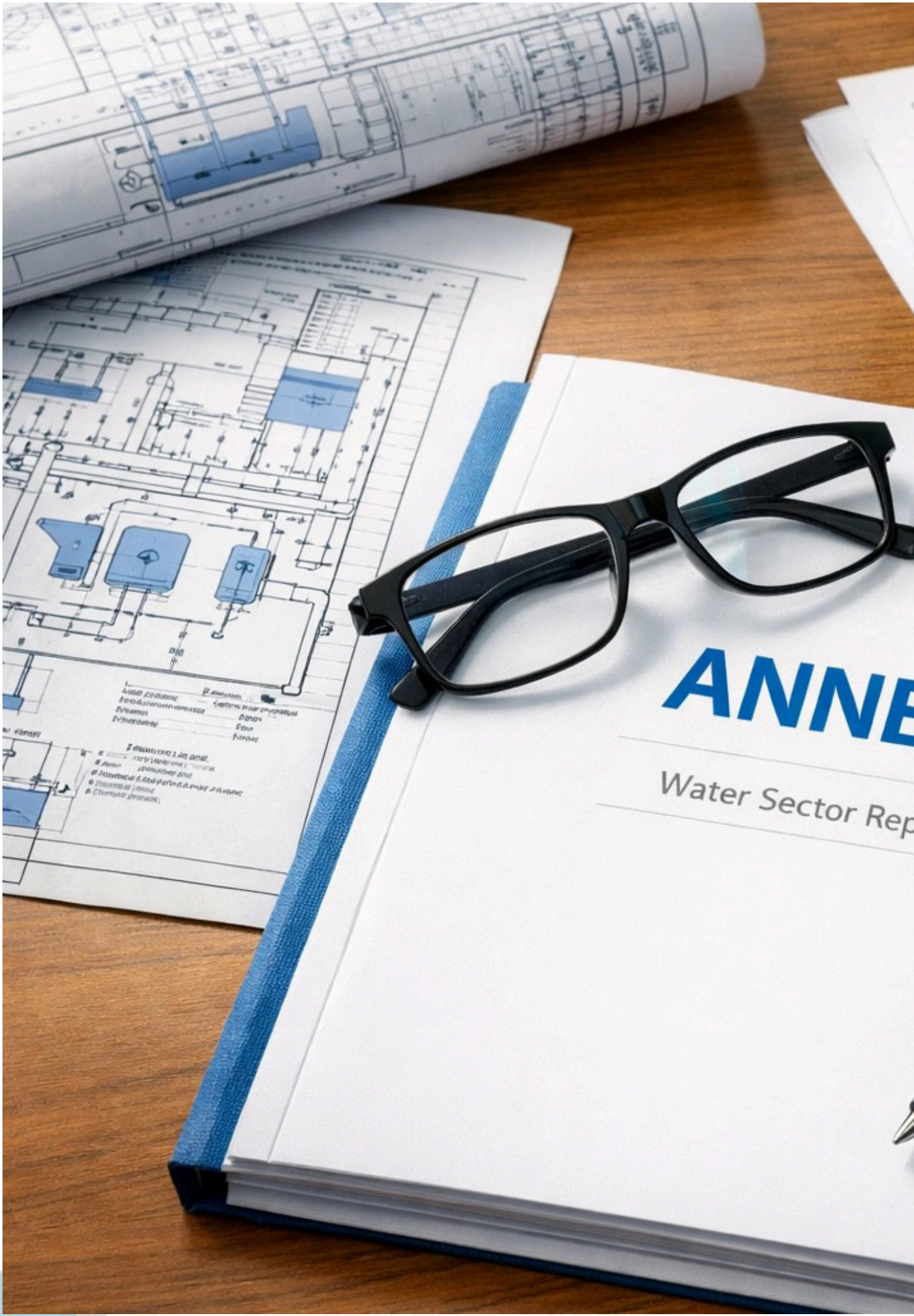
Achieving universal access to water and sanitation services by 2030 will require a decisive shift from gradual progress to accelerated and results-driven implementation. The sector must focus on closing persistent access gaps, particularly in underserved rural areas and informal settlements, while simultaneously scaling up sanitation services, including faecal sludge management systems.

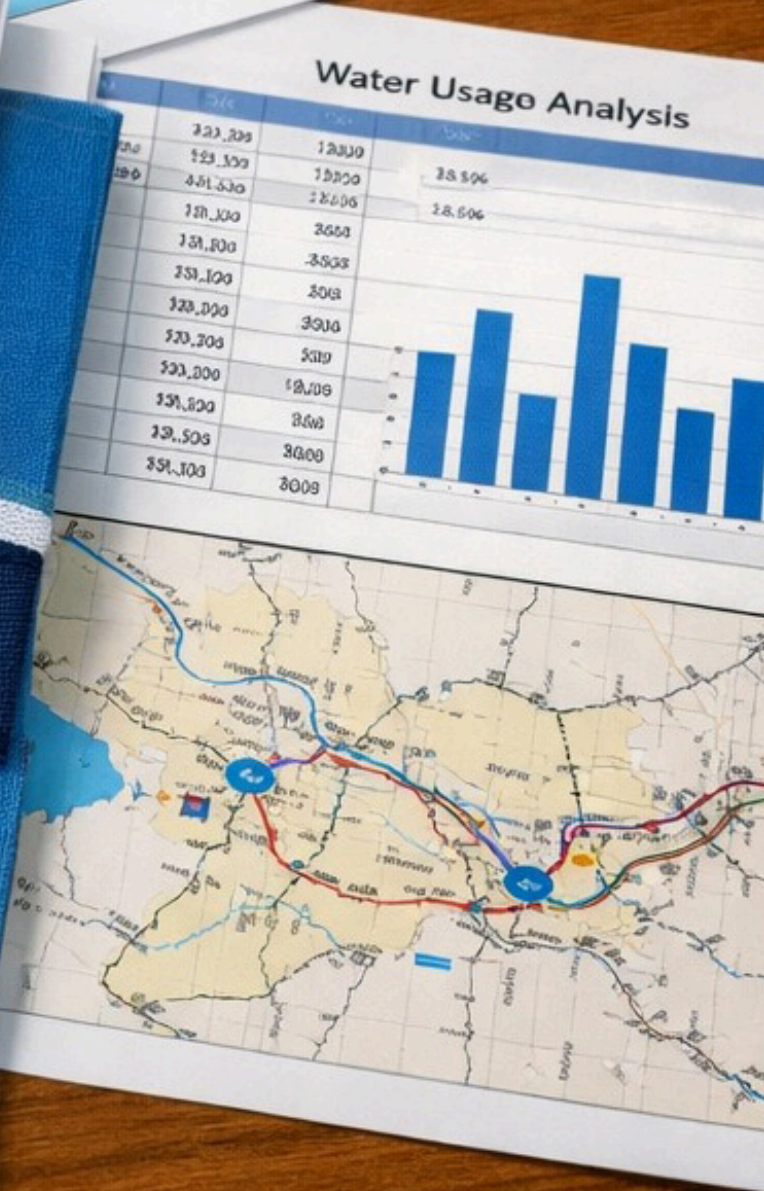
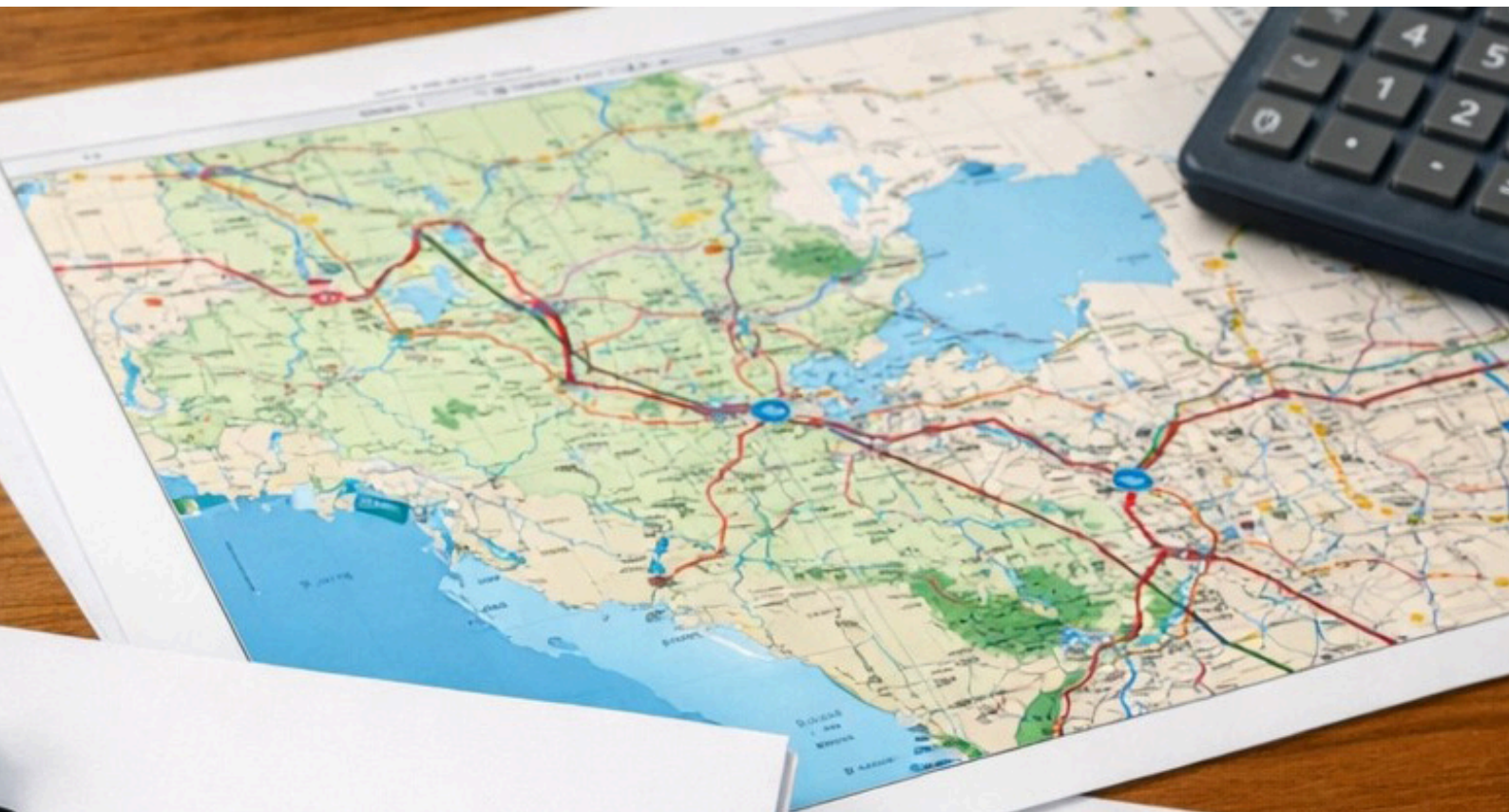
Strengthening governance and accountability across utilities and counties will be critical in ensuring that investments translate into improved service delivery. At the same time, improving operational efficiency and financial sustainability will enable utilities to function effectively and attract much-needed financing.

The sector must also leverage innovative financing mechanisms, including public-private partnerships and commercial financing, while embracing digital technologies to enhance monitoring, billing, and reporting systems.

## 5.7 Way Forward

The pathway to universal access is clearly defined, but progress must accelerate. The next phase requires stronger accountability, improved performance, and measurable results. The regulator will continue to strengthen enforcement mechanisms, enhance performance monitoring systems, and promote transparency and accountability across the sector. County governments must take a more proactive role in supporting utilities, prioritizing investments, and ensuring alignment with sector policies and regulatory requirements. Utilities, on their part, must demonstrate stronger leadership, improve operational efficiency, and focus on delivering reliable and sustainable services to customers. Development partners and the private sector will remain critical in mobilizing resources, supporting innovation, and strengthening sector capacity. Universal access to safe water and sanitation by 2030 is achievable with sustained commitment, coordinated action, and a focus on results. The final stretch demands urgency, discipline, and accountability for lasting impact for all Kenyans.





## Annex 1: Methodology for Quality of Service KPI's

KPI Cluster	Indicator	Indicator Elements	Computation
QUALITY OF SERVICE	Water Coverage	Population served through individual connections – A	Total No. of active connections × Average household size. Average household size is derived from census data and is unique for each area. Allowed per capita consumption is 20 L/day and 10 L/day for domestic and communal water points respectively.
		Population served through yard taps – B	Total No. of active yard taps × Average No. of households served by a yard tap × Average household size. Allowed range of average number of households per yard tap is 4–10.
		Population served through small MDUs – C	Total No. of active small MDUs × Average No. of households per small MDU × Average household size. Allowed range of average number of households per small MDU is 4–10.
		Population served through medium MDUs – D	Total No. of active medium MDUs × Average No. of households per medium MDU × Average household size. Allowed range of average number of households per medium MDU is 11–20.
		Population served through large MDUs – E	Total No. of active large MDUs × Average No. of households per large MDU × Average household size. Allowed average number of households per large MDU is > 21.
		Population served through kiosks – F	Total No. of taps (depends on kiosk type) × Average No. of people served per tap. Allowed range for kiosks is 100–400 people.
		Number of people served with water services	A + B + C + D + E + F. Sub-population is derived from census data and growth rates applied appropriately.
		Population in service area	Sum population of all sub-locations within the WSP service area.
		Water coverage	Number of people served with water services ÷ Population in service area.
	Drinking Water Quality	Compliance with planned number of residual chlorine tests	$\frac{\sum \text{total number of residual chlorine tests conducted for all schemes within the WSP service area}}{\sum \text{total number of residual chlorine tests planned for all schemes within the WSP service area}} \times 100$ .
		Compliance with residual chlorine standards	$\frac{\sum \text{total number of residual chlorine tests with norm for all schemes within the WSP service area}}{\sum \text{total number of residual chlorine tests conducted for all schemes within the WSP}} \times 100$ .
		Drinking water quality, residual chlorine	$0.6 \times \text{Compliance with planned number of residual chlorine tests} + 0.4 \times \text{Compliance with residual chlorine standards}$ .
		Compliance with planned number of bacteriological tests	$\frac{\sum \text{total number of bacteriological tests conducted for all schemes within the WSP service area}}{\sum \text{total number of bacteriological tests planned for all schemes within the WSP service area}} \times 100$ .
		Compliance with bacteriological standards	$\frac{\sum \text{total number of bacteriological tests with norm for all schemes within the WSP service area}}{\sum \text{total number of bacteriological tests conducted for all schemes within the WSP}} \times 100$ .
		Bacteriological quality	$0.6 \times \text{Compliance with planned number of bacteriological tests} + 0.4 \times \text{Compliance with bacteriological standards}$ .
		Drinking water quality	$0.4 \times \text{Drinking water quality (residual chlorine)} + 0.6 \times \text{Bacteriological quality}$ .
	Hours of Supply	Average number of hours water services are provided per day for all zones within a scheme	Weighted average based on all registered zones, factoring in active connections: $(\text{hrs} \times \text{Number of active connections (zone 1)}) + (\text{hrs} \times \text{Number of active connections (zone 2)}) + \dots$

## Annex 2: Methodology for Economic Efficiency KPI's

KPI Cluster	Indicator	Indicator Elements	Computation
ECONOMIC EFFICIENCY	Personnel Expenditure as a Percentage of O&M Costs	Total personnel expenditures	Sum of personnel expenditures incurred during the reporting period. Includes basic salaries, allowances, wages, gratuity, statutory and pension contributions by employer, subscriptions and training levy, leave, incentives (bonus), and any other personnel expenditure.
		Personnel Expenditure as a Percentage of	$(\text{Total personnel expenditures} / \text{Total O + M}) \times 100$
	Operation and Maintenance Cost Coverage	Total operating revenues A	Sum of billing for water, sewerage, and other services. Billing for other services includes charges on connection and reconnection, illegal connections, meter rent, meter testing, replacement of stolen meters, and exhauster services.
		Total operating expenditures B	Sum of expenses on personnel, BoD, general admin, direct operations, maintenance, and levies/fees. 1. Direct operational expenditures include electricity, chemicals, and fuel for vehicles. 2. Levies and fees include water abstraction fees, WSB fees, effluent discharge fees, and regulatory levy.
		Operation and Maintenance Cost Coverage	$(A / B) \times 100$
	Revenue Collection Efficiency	Total water and sewerage billing amount – A	Total amount of all bills on water and sewerage services during the reporting period for all schemes within the WSP service area.
		Total billing for other services – B	Total of all billing for other services for all schemes within the WSP service area.
		Total billing	A + B
		Total collection	Sum of all revenue collected from all schemes within the WSP service area.
		Collection Efficiency	$(\text{Total Collection} / \text{Total Billing}) \times 100$

## Annex 3: Methodology for Operational Sustainability KPI's

KPI Cluster	Indicator	Indicator Elements	Computation
OPERATIONAL SUSTAINABILITY	Non-Revenue Water	Commercial Losses (Apparent Losses) A	Unauthorized consumption (e.g., illegal connections) + Customer meter reading inaccuracies, estimates, and data-handling errors.
		Physical Losses B	Leakages on transmission and/or distribution pipes + Leakages and overflows at utility storage tanks + Leakage on service connections up to the point of customer use.
		Non-Revenue Water	$(A + B / \text{Volume of water produced}) \times 100$
	Metering Ratio	Total number of active water connections	Sum of all active individual, MDU, yard taps, institutional, schools', commercial, industrial, bulk, and other water connections of all schemes within a WSP service area.
		Total number of active metered water connections	Sum of all active individual, MDU, yard taps, institutional, commercial, industrial, schools', bulk, and other water connections of all schemes within a WSP service area that are metered.
		Metering Ratio	$(\text{Total number of active metered connections} / \text{Total number of active connections}) \times 100$
	Staff Productivity	Total number of staff divided by total number of connections within the WSP service area	Total number of staff in the utility / (Total number of active water connections + Total number of sewer connections).

## ANNEX 4: Components of Drinking Water

Utility	DWQ - Residual Chlorine (%)	DWQ - Bacteriological Quality (%)	DWQ (%)
Nairobi	98	94	96
Eldoret	89	100	96
Mombasa	100	99	99
Ruiru-Juja	99	100	100
Nyeri	100	100	100
Nakuru Urban	100	100	100
Kisumu	100	100	100
Thika	100	100	100
Murang'a South	100	100	100
Kilifi Mariakani	100	100	100
Embu	100	100	100
Gatundu	100	100	100
Malindi	100	100	100
Kakamega Urban	98	100	99
Kericho	100	100	100
Othaya Mukurweini	99	100	99
Bungoma	100	100	100
Kirinyaga	100	100	100
Nakuru Rural	100	100	100
Tavevo	77	100	90
Murang'a Urban	100	100	100
Trans Nzoia	100	99	99
Mathira	100	100	93
Nanyuki	100	100	100
Murang'a West	100	100	100
Garissa	100	100	93
Meru	100	100	100
Kwale	100	96	98
Nyahururu	100	100	100
Gusii	100	99	99
Bomet	100	84	90
Sibo	100	100	100
Ngandori Nginda	100	100	100
Kitui	100	100	100
Kikuyu	82	94	89
Nithi	100	100	100
Gatamathi	99	100	100
Tetu Aberdare	100	100	100
Gatanga	100	100	100
Isiolo	100	100	100
Naivasha	100	100	100
Kiambu	98	92	94
Limuru	98	96	97
Mavoko	100	100	100
Homabay	100	100	100
Machakos	100	100	100
Oloolaiser	100	87	92

Utility	DWQ - Residual Chlorine (%)	DWQ - Bacteriological Quality (%)	DWQ (%)
Meru Rural	100	100	93
Ngagaka	98	94	96
Karuri	99	100	99
Githunguri	95	92	93
Amatsi	99	100	100
Busia	100	100	100
Turkana Urban	100	100	100
Kyeni	100	100	100
Kibwezi Makindu	100	100	100
Nyandarua	100	100	100
Migori	100	100	100
Chemususu	100	100	100
Narok	100	100	95
Embe	100	100	100
Nol Turesh	98	100	99
Kapsabet Nandi	100	100	100
Tana	99	100	99
Kiambere Mwingi	99	100	93
Kirandich	100	100	100
Murugi Mugumango	100	100	100
Kakamega Rural	77	100	90
Kapenguria	100	100	100
Lamu	100	99	99
Ol Kalou	100	100	93
Iten Tambach	100	100	100
Mandera	100	100	100
Samburu	100	100	93
Olkejuado	100	100	100
Muhambi 4K	100	100	100
Naromoru	100	100	98
Tatu City	100	89	99
Rukanga	100	94	92
Oloitokitok	99	100	93
Elwak	100	100	100
Wajir	100	100	100
Yatta	82	94	89
Matungulu Kangundo	100	100	100
Namanga	99	100	100
Kiambiri	100	100	100
Mbooni	100	100	100
Wote	100	100	100
Nyasare	99	100	93
Tachasis	98	92	94
Kathiani	98	96	97
Runda	100	100	100
Mwale	100	100	93
Marsabit	100	100	100

## ANNEX 5: Pro-Poor Assessment

Rank	Utility	Governance (18%)	Planning (16%)	Financing (14%)	Impact (30%)	Total Score	Weighted (%)
1	Kisumu Water and Sanitation Company	18	16	14	30	78	100
2	Nyeri Water and Sanitation Company	18	16	14	30	78	100
3	Naivasha Water and Sanitation Company	18	14	14	30	76	95
4	Murang'a Water and Sanitation Company	18	14	14	29	75	93
5	Kakamega County Water and Sanitation Company	18	13	14	29	74	91
6	Nakuru Water and Sanitation Services	18	14	14	27	73	89
7	Meru County Rural Water and Sanitation Company	14	16	14	26	68	85
8	SiBo Water and Sanitation Company	18	12	12	24	66	83
9	HomaBay Water Company	18	12	12	23	65	84
10	Mathira Water and Sanitation Company	18	12	14	22	64	84
11	Kitui Water and Sanitation Company	18	12	12	23	65	83
12	Nairobi City Water and Sewerage Company	16	13	12	21	62	81
13	Thika Water and Sewerage Company	16	13	12	21	62	81
14	Nanyuki Water and Sewerage Company	18	12	12	21	63	80
15	Bungoma Water and Sanitation Company	18	12	12	21	63	80
16	Mombasa Water Supply and Sanitation Company	18	12	12	21	63	80
17	Kiambu Water and Sanitation Company	18	12	12	21	63	80
18	Nakuru Rural Water and Sanitation Services	16	13	10	21	60	77
19	Meru Water and Sewerage Services Company	16	13	10	21	60	77
20	Ruiru Juja Water and Sanitation Company	16	13	10	21	60	77
21	Murang'a South Water and Sanitation Company	18	10	14	17	59	75
22	Nyahururu Water and Sanitation Company	16	12	12	17	57	72
23	Gusii Water and Sanitation Company	16	12	12	17	57	72
24	Bomet Water Company	16	12	12	17	57	72
25	Embu Water and Sanitation Company	14	14	14	17	59	72
26	Kapsabet Water Services Company	14	14	14	17	59	72
27	Malindi Water and Sewerage Company	14	16	10	17	57	69
28	Isiolo Water and Sewerage Company	14	12	10	17	53	68
29	Mayoka Water and Sewerage Company	12	10	12	17	51	65
30	Kirinyaga Water and Sanitation Company	12	10	12	17	51	65
31	Kwale Water and Sewerage Company	14	10	10	17	51	64
32	Tavevo Water and Sewerage Company	14	10	10	17	51	64
33	Eldoret Water and Sanitation Company	8	10	10	21	49	62
34	Gatamathi Water and Sanitation Company	14	4	10	19	47	60
35	Nithi Water and Sanitation Company	12	4	12	17	45	58
36	Amatsi Water Services Company	14	4	12	21	51	57
37	Tetu Aberdare Water and Sanitation Company	16	10	8	7	41	51
38	Kibwezi Makindu Water Company	10	7	8	19	44	51
39	Yatta Water Services Company	4	7	12	16	39	49
40	Murang'a West Water and Sanitation Company	12	9	10	16	47	47
41	Migori Water and Sanitation Company	12	9	10	16	47	47
42	Ololoisar Water and Sewerage Company	12	9	10	16	47	44
43	Kericho Water Company	6	12	8	13	33	43
44	Kikuyu Water Company	8	12	8	13	33	43
45	Trans Nzoia County Water and Sanitation Company	10	8	11	13	33	43
46	Nyandarua Water and Sanitation Company	12	2	4	13	31	43
47	Limuru Water and Sewerage Company	12	2	4	13	31	42
48	Kilifi Mariakani Water and Sewerage Company	2	2	0	22	29	40

Rank	Utility	Governance (18%)	Planning (16%)	Financing (14%)	Impact (30%)	Total Score	Weighted (%)
49	Olokalu Water and Sewerage Company	2	4	0	21	27	39
50	Narok Water and Sewerage Company	2	4	0	21	27	35
51	Gatanga Water and Sanitation Limited	2	4	0	11	17	35
52	Garissa Water and Sewerage Company	12	4	8	3	27	38
53	Navsare Water Supply Association	0	0	0	19	20	29
54	Elwak Water and Sanitation Company Limited	0	0	0	19	20	29
55	Busia Water and Sewerage Services Company	0	0	0	19	20	29
56	Machakos Water and Sewerage Company	0	0	0	19	20	29
57	Kiamber Mwngi Water and Sanitation Company	0	0	2	16	18	27
58	Othaya Mukurweini Water Company	0	0	4	17	21	27
59	Chemususu Water and Sanitation Company	8	4	4	3	19	22
60	Karuri Water and Sanitation Company	8	4	4	3	19	22
61	Muthambi 4K Water Association	0	8	10	3	21	22
62	Mandera Water and Sewerage Company	8	4	2	4	18	20
63	Iten Tambach Water and Sanitation Company	4	0	4	4	12	16
64	Ngondi Water Consumers Association	7	0	2	3	12	12
65	Wote Water and Sewerage Company	0	2	2	3	7	8

## ANNEX 6: Compliance Assessment

Parameter Utility	Validity of Tariffs as at June 2025	Licensing Status as at June 2025	License Fee Compliance	Reporting Compliance	Overall Compliance
<b>Very Large (≥ 35,000 connections)</b>					
Nairobi	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Eldoret	Valid	Valid	Compliant	Compliant	Compliant
Mombasa	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Ruiru Juja	Valid	Valid	Compliant	Non Compliant	Non Compliant
Nyeri	Valid	Valid	Compliant	Compliant	Compliant
Nakuru Urban	Valid	Valid	Compliant	Compliant	Compliant
Kisumu	Valid	Valid	Non Compliant	Compliant	Non Compliant
Thika	Valid	Valid	Compliant	Compliant	Compliant
Murang'a South	Valid	Valid	Non Compliant	Non Compliant	Non Compliant
Kilifi Mariakani	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Embu	Valid	Valid	Compliant	Compliant	Compliant
Gatundu	Valid	Under Processing	Non Compliant	Non Compliant	Non Compliant
Malindi	Valid	Under Processing	Non Compliant	Non Compliant	Non Compliant
Kakamega Urban	Valid	Valid	Compliant	Compliant	Compliant
Kericho	Valid	Under Processing	Non Compliant	Non Compliant	Non Compliant
Othaya Mukurweini	Valid	Valid	Non Compliant	Non Compliant	Non Compliant
Bungoma (BWASCO)	Valid	No Licence	Non Compliant	Non Compliant	Non Compliant
Kirinyaga	Valid	Valid	Non Compliant	Compliant	Non Compliant
<b>Large (10,000–34,999 connections)</b>					
Nakuru Rural	Valid	Valid	Non Compliant	Non Compliant	Non Compliant
Tavevo	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Murang'a Urban	Lapsed	Valid	Non Compliant	Compliant	Non Compliant
Trans Nzoia	Valid	No Licence	Non Compliant	Compliant	Non Compliant
Mathira	Valid	Valid	Non Compliant	Compliant	Non Compliant
Nanyuki	Valid	Valid	Non Compliant	Compliant	Non Compliant
Murang'a West	Valid	Valid	Compliant	Compliant	Compliant
Garissa	Lapsed	Under Processing	Non Compliant	Compliant	Non Compliant
Meru	Under Processing	Valid	Non Compliant	Compliant	Non Compliant
Kwale	Valid	Under Processing	Non Compliant	Non Compliant	Non Compliant
Nyahururu	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Gusii	Lapsed	Under Processing	Non Compliant	Compliant	Non Compliant
Bomet	Valid	Valid	Non Compliant	Compliant	Non Compliant
Sibo	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Ngandori Nginda	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Kitui	Valid	Valid	Compliant	Compliant	Compliant
Kikuyu	Valid	Valid	Non Compliant	Compliant	Non Compliant
Nithi	Valid	Valid	Non Compliant	Compliant	Non Compliant
Gatamathi	Valid	Valid	Non Compliant	Non Compliant	Non Compliant
Tetu Aberdare	Valid	Valid	Non Compliant	Non Compliant	Non Compliant
Gatanga	Valid	Valid	Compliant	Compliant	Compliant
Isiolo	Lapsed	Valid	Non Compliant	Compliant	Non Compliant
Naivasha	Valid	Valid	Non Compliant	Compliant	Non Compliant
Kiambu	Valid	Valid	Non Compliant	Compliant	Non Compliant
Limuru	Valid	Valid	Non Compliant	Compliant	Non Compliant
Mavoko	Valid	Valid	Non Compliant	Compliant	Non Compliant
Homabay	Valid	Valid	Non Compliant	Compliant	Non Compliant

Parameter	Validity of Tariffs as at June 2025	Licensing Status as at June 2025	License Fee Compliance	Reporting Compliance	Overall Compliance
<b>ty</b>					
Machakos	Valid	Under Processing	Non Compliant	Non Compliant	Non Compliant
Oloolaiser	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Meru Rural	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Ngagaka	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Karuri	Valid	Valid	Non Compliant	Compliant	Non Compliant
Githunguri	Lapsed	Under Processing	Non Compliant	Compliant	Non Compliant
Amatsi	Valid	Valid	Non Compliant	Compliant	Non Compliant
Busia	Lapsed	Under Processing	Non Compliant	Compliant	Non Compliant
Turkana Urban	Lapsed	Under Processing	Non Compliant	Compliant	Non Compliant
Kyeni	Lapsed	Under Processing	Non Compliant	Compliant	Non Compliant
Kibwezi Makindu	Valid	Valid	Non Compliant	Compliant	Non Compliant
Nyandarua	Valid	Valid	Non Compliant	Compliant	Non Compliant
<b>Medium (5,000-9,999 connections)</b>					
Migori	Lapsed	Valid	Non Compliant	Non Compliant	Non Compliant
Chemususu	Under Processing	Under Processing	Compliant	Compliant	Compliant
Narok	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Embe	Valid	Under Processing	Non Compliant	Non Compliant	Non Compliant
Nol Turesh	Lapsed	Under Processing	Non Compliant	Non Compliant	Non Compliant
Kapsabet Nandi	Valid	Valid	Non Compliant	Non Compliant	Non Compliant
Tana	Valid	Valid	Non Compliant	Non Compliant	Non Compliant
Kiambere Mwingi	Valid	Valid	Non Compliant	Non Compliant	Non Compliant
Kirandich	Under Processing	Valid	Non Compliant	Non Compliant	Non Compliant
Murugi Mugumango	Under Processing	Valid	Non Compliant	Non Compliant	Non Compliant
Kakamega Rural	Lapsed	Valid	Non Compliant	Non Compliant	Non Compliant
Kapenguria	Lapsed	Under Processing	Non Compliant	Non Compliant	Non Compliant
Lamu	Under Processing	Under Processing	Non Compliant	Non Compliant	Non Compliant
<b>Small (&lt; 5,000 connections)</b>					
Ol Kalou	Valid	Valid	Non Compliant	Compliant	Non Compliant
Iten Tambach	Lapsed	Expired	Non Compliant	Compliant	Non Compliant
Mandera	Valid	Valid	Non Compliant	Compliant	Non Compliant
Samburu	Lapsed	Under Processing	Non Compliant	Compliant	Non Compliant
Olkejuado	Valid	Valid	Non Compliant	Compliant	Non Compliant
Muthambi 4K	Lapsed	Valid	Non Compliant	Compliant	Non Compliant
Naromoru	Valid	Valid	Non Compliant	Compliant	Non Compliant
Tatu City	Lapsed	No Licence	Non Compliant	Compliant	Non Compliant
Rukanga	Under Processing	Valid	Non Compliant	Compliant	Non Compliant
Oliotoktok	Lapsed	No Licence	Non Compliant	Compliant	Non Compliant
Elwak	Under Processing	Valid	Non Compliant	Compliant	Non Compliant
Wajir	Under Processing	Under Processing	Non Compliant	Compliant	Non Compliant
Yatta	Lapsed	Valid	Non Compliant	Compliant	Non Compliant
Matungulu Kangundo	Valid	Under Processing	Non Compliant	Compliant	Non Compliant
Namanga	Lapsed	No Licence	Non Compliant	Compliant	Non Compliant
Kiambu	Lapsed	Valid	Non Compliant	Compliant	Non Compliant
Mbooni	Lapsed	Valid	Non Compliant	Compliant	Non Compliant
Wote	Under Processing	Valid	Non Compliant	Compliant	Non Compliant

## ANNEX 7: Creditworthiness Assessment Guide

Indicators	Definition	Source	Weight	4	3	2	1	0
<b>Economic Indicators</b>								
Poverty Rate	County poverty rates are derived simply by dividing the total number of poor people in each county in by the total population in each county	KNBS	3	0-20	20-40	40-60	60-80	80-100
<b>Operational Indicators</b>								
Sewerage Coverage	Number of people served with Sewerage Services/ Population of area	WARIS	1	100	90-100	80-90	70-80	<70
Water coverage	Number of people served with Water Supply Services/ Population of area	WARIS	1	100	90-100	80-90	70-80	<70
NRW	Total Volume of Water Lost from Commercial and Physical Losses as a proportion of Water Produced	WARIS	5	<20%	20-30%	30-40%	40-50%	>50%
No of staff per 1000 connections	Number of Staff Members/( Total number of Connections/1000)	WARIS	3	<5	6	7	8	>8
<b>Financial Indicators</b>								
<b>Revenue Indicators</b>								
Total revenue ( Excl Grants)	Total revenue from water & sewerage sales & other income	WARIS	0	N/A	N/A	N/A	N/A	N/A
Revenue Diversification	The difference between the % residential revenue and %institutional	WARIS	6	<10%	10-30%	30-50%	50-70%	>70%
Average tariif Differential	The difference between Average tariff per cubic metre and Production cost per cubic metre.	WARIS	8	>50%	35-50%	20-35%	5-20%	<5%
<b>Cost Indicators</b>								
Total Opex	Total Operational & Maintenance Expenditure	WARIS	0	N/A	N/A	N/A	N/A	N/A
Maintenance costs as % of opex	Total Maintenance Costs divided by total operations and maintenance expenditure	WARIS	3	>8%	6-8%	6-4%	0-4%	>0%
Electricity as % of opex	Total Electricity Costs divided by total operations and maintenance expenditure	WARIS	2	<10%	10-15%	15-20%	20-25%	>25%
Employee Costs costs /Total Opex	The Salary Costs as a % of Total OPEX	WARIS	2	<25%	25-30%	30-35%	35-40%	>40%
Percentage O&M coverage	Total revenue from water and sewerage sales divided by total operations and maintenance expenditure	WARIS	4	>130%	120-130%	110-120%	100-110%	<100%
Grant dependency for opex	The proportion of OPEX financed by income from Grants	WARIS	3	0%	0-10%	10-15%	15-20%	20-25%
<b>Profitability Indicators</b>								
EBITDA/Revenue	Earnings Before Interest Tax, Depreciation & Amortization	WARIS	5	>25%	20-25%	15-20%	10-15%	<10%
Annual Operational surplus /deficit	Total Revenue Less Total O&M Costs incurred	WARIS	0	N/A	N/A	N/A	N/A	N/A
Profit / loss for year		WARIS	0	N/A	N/A	N/A	N/A	N/A
<b>Liquidity &amp; Solvency Indicators</b>								
Liquidity reserves as % of annual operating expenses	Cash & Near Cash Reserves/ Annual Operating Expenses *12	WARIS	5	>25%	20-25%	15-20%	10-15%	<10%
Liquidity ratio	Cash & Near Cash Reserves/ Current Liabilities	WARIS	4	>1.6	1.5-1.6	1.4-1.3	1.2-1.3	<1
Debt Service Coverage Ratio	CFADS/ Total Debt Service (Interest + Principal Repayments)	WARIS	5	>1.8	1.5-1.8	1.3-1.5	1.2-1.3	<1.2
Cash Flow Available for Debt Service	Net Operating Cashflow + Interest Repayments	WARIS	10	>0	<0	<0	<0	<0
Debt:Equity Ratio	Total Debt/Total Equity	WARIS	5	<20%	20-30%	25-30%	30-35%	>35%
Debtor Days: average number of days it takes WSP to collect monies billed	Net billed amount outstanding/ Total annual operating revenues excluding grants and transfers *365	WARIS	5	<45 Days	45-60 Days	60-90 Days	90-120 Days	>120 Day
% Change in debtor days over the last financial year	(Debtor Days in Current Financial Year Less Debtor Days in previous Financial Year)/Debtor Days in Current Financial Year	WARIS	5	>25%	20-25%	15-20%	10-15%	<10%
Consumer bad debt provision% Cash provision for bad and doubtful debts	Cash provision for bad and doubtful debt /Consumer bad debt provision%	WARIS	5	Provision for all debt older than 60	Provision for all debt older than 90 days	Provision for all debt older than 365 days	Ad hoc limited provision	No provision
Billing Ratio	Volume of water Bought/ Volume of Water Produced	WARIS	5	95% and above	93% to 94%	90% to 92%	85% to 89%	Less than 85%
Collection efficiency :Utilities ability to collect billed accounts	Total amount collected as % of the total amount billed	WARIS	5	95% and above	93% to 94%	90% to 92%	85% to 89%	Less than 85%
<b>Total</b>			<b>100</b>	<b>4.0</b>	<b>3.0</b>	<b>2.0</b>	<b>1.0</b>	<b>-</b>

## ANNEX 8: Governance Assessment

UTILITY	Size	Utility Oversight/ Supervision	Information and Control Systems	Financial Management	Service Standards	Human Resources	User Consultation	Totals	% Level of Governance
Tatu City	S	34	10	26	8	12	8	98	100%
Mathira	L	34	10	26	8	12	8	98	100%
Naivasha	L	34	10	21	8	10	8	91	93%
Kisumu	VL	34	10	19	8	10	8	89	91%
Nakuru Rural	L	34	10	20	6	12	6	88	90%
Kitui	L	34	10	18	8	10	8	88	90%
Eldoret	VL	28	10	24	8	8	8	86	88%
Nggaqqa	L	32	10	20	7	10	6	85	87%
Limuru	L	34	10	18	7	10	8	87	89%
Embu	VL	32	10	16	7	12	8	85	87%
Othaya Mukurweini	VL	26	10	21	8	12	8	85	87%
Thika	VL	26	10	21	8	12	8	85	87%
Runda	S	30	10	23	5	10	6	84	86%
Kwale	L	30	10	21	5	10	8	84	86%
Nyeri	VL	30	6	20	8	12	8	84	86%
Nithi	L	34	8	19	3	12	6	82	84%
Murang'a South	VL	30	6	21	9	8	8	82	84%
Sibo	L	32	6	18	5	12	8	81	83%
Kiambu	L	32	6	17	8	12	8	83	85%
Nyahururu	L	32	6	17	7	6	8	82	82%
Homabay	L	32	6	14	8	12	8	80	82%
Naromoru	L	32	8	16	3	12	8	79	81%
Ol Kalou	S	30	8	17	8	12	6	81	83%
Kirinyaga	VL	34	10	14	5	10	6	79	81%
Malindi	L	34	10	13	4	12	6	79	81%
Ruiru Juja	VL	24	10	20	4	12	6	80	82%
Kikuyu	L	34	10	17	8	4	4	77	79%
Gusii	L	34	6	13	8	8	8	77	79%
Tatu City	S	34	10	26	8	12	8	98	100%
Mathira	L	34	10	26	8	12	8	98	100%
Naivasha	L	34	10	21	8	10	8	91	93%
Kisumu	VL	34	10	19	8	10	8	89	91%
Nakuru Rural	L	34	10	20	6	12	6	88	90%
Kitui	L	34	10	18	8	10	8	88	90%
Eldoret	VL	28	10	24	8	8	8	86	88%
Nggaqqa	L	32	10	20	7	10	6	85	87%
Limuru	L	34	10	18	7	10	8	87	89%
Embu	VL	32	10	16	7	12	8	85	87%
Othaya Mukurweini	VL	26	10	21	8	12	8	85	87%
Thika	VL	26	10	21	8	12	8	85	87%
Runda	S	30	10	23	5	10	6	84	86%
Kwale	L	30	10	21	5	10	8	84	86%
Nyeri	VL	30	6	20	8	12	8	84	86%
Nithi	L	34	8	19	3	12	6	82	84%
Murang'a South	VL	30	6	21	9	8	8	82	84%
Sibo	L	32	6	18	5	12	8	81	83%
Kiambu	L	32	6	17	8	12	8	83	85%
Nyahururu	L	32	6	17	7	6	8	82	82%

UTILITY	Size	Utility Oversight/ Supervision	Information and Control Systems	Financial Management	Service Standards	Human Resources	User Consultation	Totals	% Level of Governance
Homabay	L	32	6	14	8	12	8	80	82%
Naromoru	L	32	8	16	3	12	8	79	81%
Ol Kalou	S	30	8	17	8	12	6	81	83%
Kirinyaga	VL	34	10	14	5	10	6	79	81%
Malindi	L	34	10	13	4	12	6	79	81%
Ruiru Juja	VL	24	10	20	4	12	6	80	82%
Kikuyu	L	34	10	17	8	4	4	77	79%
Gusii	L	34	6	13	8	8	8	77	79%
Narok	M	22	6	10	8	4	6	56	57%
Nyandarua	L	16	4	18	4	10	6	58	59%
Isolo	L	22	2	7	7	12	6	58	57%
Kirandich	M	20	6	11	3	10	4	54	55%
Garissa	L	22	2	10	6	6	6	52	53%
Marsabit	S	28	4	8	2	2	6	50	51%
Rukanga	S	26	4	10	1	6	2	49	50%
Wote	S	18	2	10	5	8	6	49	50%
Yatta	S	18	2	8	3	10	8	49	50%
Kiamumbi	S	18	6	4	2	12	0	49	50%
Kakamega Rural	S	22	4	2	5	12	6	49	50%
Meru Rural	L	22	2	14	5	12	6	49	50%
Nyasare	S	10	10	16	3	6	2	47	48%
Tana	M	14	6	17	3	4	2	46	47%
Tachasis	S	18	4	12	3	6	2	45	46%
Busia	L	22	2	8	4	8	2	44	45%
Mandera	S	22	0	6	4	8	2	42	43%
Lamu	M	14	2	8	4	6	6	40	41%
Muthambi 4K	S	14	4	10	3	2	6	39	40%
Wajir	S	24	0	5	2	4	4	39	40%
Iten Tambach	S	16	2	10	4	4	0	36	37%
Elwak	S	4	6	14	3	4	0	31	32%
Matungulu Kangundo	S	4	0	9	3	8	6	30	31%
Kathiani	S	4	2	3	1	8	2	28	29%
Olkejuado	S	14	2	2	1	3	2	24	24%
Samburu	L	6	4	6	2	2	2	22	22%
Murugi Mugumango	M	10	0	3	1	3	0	13	13%
Mbooni	S	6	2	4	3	2	2	9	9%
Kakamega Urban **	VL	n.c.d	n.c.d	n.c.d	n.c.d	n.c.d	n.c.d	n.c.d	n.c.d


## ANNEX 9: General Data on Counties

ID.	County	Population in the County	Utilities in the county	Percentage of County population within service areas of Utilities (%)	Population served		INDICATORS (Aggregated Regulated Utilities)													
					Population served in the county (no.)	Population served in the county (%)	Water Coverage (%)	Drinking Water Quality (%)	Hrs of supply (hrs./d)	Personnel Exp. As % of O+M	O+M cost coverage (%)	Revenue Collection Efficiency (%)	NRW (%)	Staff per 1000 conns. (no.)	Metering Ratio (%)	Sewerage Coverage (%)	Unit cost of water produced (Kshs/m <sup>3</sup> )	Unit operating cost of water billed (Kshs/m <sup>3</sup> )	Average tariff (Kshs/m <sup>3</sup> )	
001	Mombasa	1,386,614	Mombasa	100	911,791	66	66	93	15	35	100	Mombasa: 100	91	61	7	100	17	90	221	215
002	Kwale	1,017,337	Kwale	71	369,138	36	51	98	17	24	79	Kwale: 79	100	48	10	100	0	91	144	111
003	Kilifi	1,688,822	Kilifi Mariakani Malindi	99	1,112,385	66	67	100	21	33	81	Kilifi Mariakani: 75 Malindi: 88	93	47	8	100	0	94	165	129
004	Tana River	368,767	Tana	35	70,887	19	55	93	12	30	57	Tana: 57	72	61	19	53	0	97	214	118
005	Lamu	176,404	Lamu	23	29,190	17	71	97	12	49	43	Lamu: 43	100	45	24	100	0	131	207	81
006	Taita-Taveta	374,601	Tavevo	100	255,219	68	66	90	14	28	83	Tavevo: 83	99	50	11	100	1	86	172	135
007	Garissa	1,001,970	Garissa	15	100,199	10	65	93	22	37	103	Garissa: 103	65	32	9	61	37	76	94	96
008	Wajir	853,275	Wajir	23	14,357	2	7	78	17	53	11	Wajir: 11	75	34	104	97	0	1,265	1,732	197
009	Mandera	1,053,366	Mandera Ewak	25	50,516	5	19	55	16	35	12	Mandera: 14 Ewak: 10	67	42	51	40	0	468	650	69
010	Marsabit	607,803	Marsabit	31	23,518	4	12	93	3	59	61	Marsabit: 61	78	52	90	100	0	486	752	459
011	Isiolo	288,004	Isiolo	31	81,320	28	91	100	20	56	117	Isiolo: 117	100	28	4	100	7	47	63	70
012	Meru	1,656,309	Meru Meru Rural Tuuru	20	255,210	15	78	99	20	46	107	Meru: 109 Meru Rural: 101 Tuuru: n.d.	92	23	8	90	9	71	83	69
013	Tharaka-Nithi	408,296	Nithi Murugi Mugumango Muthambi 4K	50	123,866	30	60	65	21	45	104	Nithi: 112 Murugi Mugumango: 87 Muthambi 4K: n.c.d.	98	51	6	99	1	28	51	51
014	Embu	664,915	Embu Ngandori Nginda Ngagaka Kyenji Embe	85	432,073	65	85	94	23	52	120	Embu: 124 Ngandori Nginda: 114 Ngagaka: 130 Kyenji: 95 Embe: 106	97	35	5	96	6	56	74	84
015	Kitui	1,206,391	Kitui Kiambere Mwingi	50	409,316	34	70	95	14	30	84	Kitui: 96 Kiambere Mwingi: 47	91	40	10	100	1	233	315	220
016	Machakos	1,643,284	Mavoko Machakos Yatia Matungulu Kangundo Kathiani Mwala	59	537,512	33	59	93	9	41	101	Mavoko: 107 Machakos: 98 Yatia: 99 Matungulu Kangundo: 82 Kathiani: 85 Mwala: 50	86	35	9	73	28	151	220	203
017	Makueni	1,045,706	Kibwezi Makindu Mbooni Wote	57	212,175	20	46	100	13	48	82	Kibwezi Makindu: 85 Mbooni: 44 Wote: 84	96	50	17	100	0	68	129	98
018	Nyandarua	661,466	Nyandarua Ol Kalou	39	148,862	23	59	86	20	43	92	Nyandarua: 86 Ol Kalou: 101	94	40	10	100	0	97	151	131
019	Nyeri	796,192	Nyeri Othaya Mukunweini Mathira Tetu Aberdare Naromoru	77	522,808	66	87	99	24	45	112	Nyeri: 113 Othaya Mukunweini: 114 Mathira: 117 Tetu Aberdare: 104 Naromoru: 75	95	29	5	100	23	74	90	92
020	Kirinyaga	659,483	Kirinyaga Rukanga	83	298,029	45	55	100	19	53	83	Kirinyaga: 83 Rukanga: 89	95	48	5	100	1	48	85	66
021	Murang'a	1,122,209	Murang'a South Murang'a Urban Murang'a West Gatamathi Gatanga	98	789,234	70	75	100	22	51	106	Murang'a South: 105 Murang'a Urban: 101 Murang'a West: 119 Gatamathi: 100 Gatanga: 105	98	38	5	95	9	60	87	83
022	Kiambu	3,072,979	Ruiru-Juja Thika Gatundu Kikuyu Kiambu Limuru Karuri Githunguri Tatu City Kiamumbi	93	2,142,086	70	84	94	20	31	114	Ruiru-Juja: 130 Thika: 123 Gatundu: 89 Kikuyu: 115 Kiambu: 104 Limuru: 92 Karuri: 103 Githunguri: 54 Tatu City: 107 Kiamumbi: 100	90	42	5	100	34	76	120	129
023	Turkana	966,310	Turkana Urban	5	40,993	4	84	33	8	49	82	Turkana Urban: 82	68	52	7	98	0	45	87	70
024	West Pokot	690,987	Kapenguria	25	12,506	2	7	-	10	40	61	Kapenguria: 61	100	77	33	9	0	25	108	58
025	Samburu	374,962	Samburu	100	24,751	7	7	98	7	69	48	Samburu: 48	53	38	23	72	0	102	156	73
026	Trans Nzoia	1,100,998	Trans Nzoia	41	186,266	17	41	99	21	27	143	Trans Nzoia: 143	81	45	5	100	2	81	110	154
027	Uasin Gishu	1,352,957	Eldoret	39	442,288	33	84	96	23	51	145	Eldoret: 145	91	38	4	99	75	68	84	117
028	Elgeyo Marakwet	509,590	Iten Tambach	18	10,525	2	12	93	17	48	96	Iten Tambach: 96	100	47	16	99	0	57	104	94
029	Nandi	968,715	Kapsabet Nandi Tachasis	14	60,580	6	43	99	19	30	86	Kapsabet Nandi: 82 Tachasis: 105	95	35	8	98	5	91	139	110
030	Baringo	737,077	Chemususu Kirandich	24	46,595	6	27	56	19	34	67	Chemususu: 96 Kirandich: 35	91	54	11	88	0	50	106	52
031	Laikipia	601,139	Nanyuki Nyahururu	44	246,166	41	94	100	23	54	117	Nanyuki: 126 Nyahururu: 104	98	30	5	100	42	90	118	121
032	Nakuru	2,569,197	Nakuru Urban Nakuru Rural Naivasha	87	1,868,442	73	90	99	21	34	110	Nakuru Urban: 112 Nakuru Rural: 105 Naivasha: 107	98	29	3	100	19	86	111	116
033	Narok	1,384,696	Narok	11	112,319	8	77	93	11	36	81	Narok: 81	89	33	12	100	10	147	209	160
034	Kajiado	1,513,867	Oloolais Nol Turesh Olkejuado Ololokitok Namanga	62	459,754	30	45	66	15	61	92	Oloolais: 108 Nol Turesh: 93 Olkejuado: 71 Ololokitok: 29 Namanga: 98	82	60	15	87	0	86	160	124
035	Kericho	996,911	Kericho	44	164,929	17	38	100	18	60	104	Kericho: 104	79	59	6	100	7	47	111	108
036	Bomet	968,360	Bomet	47	36,891	4	8	90	14	52	48	Bomet: 48	62	62	23	71	1	128	325	142
037	Kakamega	1,992,114	Kakamega Urban Kakamega Rural	65	462,475	23	89	96	21	50	107	Kakamega Urban: 113 Kakamega Rural: 51	97	40	5	98	11	80	119	116
038	Vihiga	610,623	Amatsi	90	56,794	9	10	93	21	36	72	Amatsi: 72	94	44	17	100	0	68	112	78
039	Bungoma	1,863,274	Bungoma (BWASCO)	39	414,622	22	57	93	21	31	107	Bungoma (BWASCO): 107	84	76	6	95	4	36	143	145
040	Busia	991,558	Busia	38	49,980	5	13	93	15	60	89	Busia: 89	44	43	11	68	2	130	217	186
041	Siaya	1,089,111	Sibo	55	368,306	34	62	93	19	37	89	Sibo: 89	94	49	8	100	3	117	198	168
042	Kisumu	1,274,614	Kisumu	40	470,118	37	93	100	24	30	105	Kisumu: 105	100	32	5	100	15	102	140	142
043	Homabay	1,237,967	Homabay	26	225,953	18	70	100	22	35	90	Homabay: 90	85	40	13	100	6	96	146	113
044	Migori	1,246,899	Mgori Nyasare	35	124,227	10	33	99	9	25	38	Mgori: 30 Nyasare: 88	71	33	11	74	0	99	137	49
045	Kisii	1,334,333	Gusii	49	364,957	27	55	99	22	40	102	Gusii: 102	95	58	7	100	20	87	190	180
046	Nyamira	610,539	Gusii	36	122,302	20	55	99	22	40	102	Gusii: 102	95	58	7	100	20	87	190	180
047	Nairobi	5,352,641	Nairobi Runda Two Rivers	100	4,397,885	82	79	98	9	55	105	Nairobi: 105 Runda: 117 Two Rivers: n.d.	95	54	6	100	46	60	119	121
<b>Total</b>		<b>54,093,633</b>																		

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