Strengthening Utility Partnerships

Fostering Sustainable, Resilient, and Inclusive Sanitation in Kenya

Policy brief
2025

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This policy brief aims to support the Kenyan water sector in actions and partnerships that utility managers and policymakers can develop with regulators, academia, funders, enterprises, and other sector partners to expand and sustain water and sanitation services. This is despite financing gaps, challenges in adopting new knowledge and innovation, and the impacts of climate change. It is based on discussions among water and sanitation experts in Kenya and the region.

http://doi.org/10.55408/eawag:35777

The brief elaborates these five key recommendations for the Kenyan water sector:

1

For Utilities

Formalize partnerships with SMEs, invest in data and digital systems for transparency, establish research and development units for learning, and partner with other utilities for knowledge sharing.

2

For Investors/Donors

Expand focus to fund sanitation project preparation, catalyze innovative finance mechanisms (e.g., blended finance), and improve funding instruments to target different service providers better.

3

For National and County Governments

Enforce the new National Sanitation Policy, formalize sector coordination, develop adaptable funding and subsidy methods, and pursue innovative sanitation financing such as betterment levies.

4

For Research Organizations/ Academia

Co-create research agendas with utilities to provide actionable insights, engage in partnerships for capacity development, and support innovation and evidence-based investment planning.

5

For Sanitation SMEs

Share performance data with utilities, develop scalable and standards-aligned service models, and participate in coordination platforms and sector research.

1. Context

Despite classification as a water-scarce country, Kenya has achieved 70% overall water access, with a planned universal water supply by 2030[1]. Water and sanitation service provision in Kenya is a devolved function, with significant collaboration among national government agencies, including the eight registered water works development agencies (WWDAs), the 47 county governments, and the 92 water (and sanitation) service providers (WSPs) under them. The WWDAs are responsible for developing the large infrastructure and bulk supply. At the same time, WSPs provide most of the water and sanitation services within the counties, under the regulation of the Water Services Regulatory Board (WASREB).

Investment in water has steadily increased over the last 10 years, through direct financing of projects and the successful implementation of flagship programs such as K-WASH, WSDP, and KSEEP[2]. Similarly, in 2022, the Ministry of Water, Sanitation, and Irrigation launched the National Water and Sanitation Investment and Financing Plan, which quantifies the investment needs in the Water and Sanitation sector across all counties. The plan has identified over 2,500 projects with investment needs of approximately KES 882B (USD 6.8B) that are expected to improve overall national water and sanitation access by 2030. These developments indicate the country's increased interest and commitment to advancing water and sanitation coverage, especially for low-income communities.

However, significant challenges persist, particularly in the sanitation space. These include:

- Limited Access and Coverage: Sewer coverage remains low (15%) in most urban areas, with a large majority of households relying on on-site sanitation systems such as latrines and septic tanks, most of which are holding tanks.
- Inadequate Financing: Water Service Providers (WSPs) are mandated to deliver sanitation services but often lack the necessary funding and capacity to scale infrastructure and service delivery. Tariffs are usually inadequate to cover operational costs.
- Climate Change Pressures: Rising operational and maintenance costs and service disruptions due to climate variability place additional strain on utilities' ability to effectively provide necessary services.
- Fragmented Governance and Data Systems: Weak coordination between stakeholders and limited strategic use of integrated data impede planning and evidence-based decision-making.
- Inadequate preparation of projects: Project preparation cycles are long (often 18–24 months), and most sanitation projects lack the documentation and feasibility studies needed to unlock finance.
- Inadequate Conducive National Regulatory and Policy Environment: Private sector involvement and technology adoption that supports the sector to thrive, and appropriately innovate is largely dependent on the environment and government support, which is currently rigid and uncoordinated.

1 WASREB, IMPACT report – A Performance report of Kenya's Water Services Sector- 2022/23, link

2 K-WASH: Kenya Water, Sanitation and Hygiene Project; CLTS: Community-led Total Sanitation; WSDP: Water and Sanitation Development Project; KSEEP: Kenya Sanitation Enabling Environment Project

These structural barriers underscore the urgent need for strategic, multi-actor partnerships to support achievement of SDG 6. This policy brief explores the significance of establishing and developing these partnerships, using the example of Nakuru Water and Sanitation Company (NAWASSCO). It illustrates how such partnerships can be developed, fostered, and implemented. It is a synthesis of a conference session conducted at the Kenya Water & Sanitation International Conference, held from 24th to 27th June, 2025.

2. Examples and outcomes of partnerships at the utility level

2.1 Introduction to Nakuru Water and Sanitation Company (NAWASSCO)

NAWASSCO is one of Kenya's largest water and sanitation utilities and leverages partnerships to improve, extend and sustain service provision despite the structural barriers stated earlier. It currently has a total customer base of about 49 000 households and serves over 545 000 people in Nakuru County (over 94% of the city's population). NAWASSCO has to -date achieved 31% sewer coverage, with plans to expand this coverage to 45% by 2030. The utility's vision is to be the lead provider of Safely Managed Water and Sanitation Services in Kenya, which underpins its four strategic goals and priorities[3]:

i. Achieve universal access to safely managed water services within the company service area by 2029

ii. Achieve universal coverage and access to safely managed sanitation services within the company service area by 2029

iii. Be and continuously remain the national leader in safely managed water and sanitation services delivery

iv. Continuously develop institutional capacity for effective delivery of safely managed water and sanitation service

NAWASSCO leverages partnerships across four dimensions, as highlighted below:

2.2 Governance and coordination

In December 2018, Nakuru County formally instituted the Nakuru Countywide Sanitation Technical Steering Committee (NACOSTEC) to steer inclusive sanitation initiatives across the county. NACOSTEC brings together county departments (water, health, environment, infrastructure, planning and finance) as well as representatives from the municipal boards, NAWASSCO, Water Resources Users Associations, National Environmental Management Authority, county residents' associations, and academia. Its multisectoral composition enables policy guidance, planning, implementation coordination, monitoring, resource mobilization, and partnership facilitation across both urban and rural areas. The committee features a **two-tiered governance architecture** consisting of an Apex level (county leadership and heads of sanitation agencies) and a **Technical Working Group** for detailed planning and monitoring tasks, all operating under a formal Terms of Reference. The Apex body

3 NAWASSCO Strategic Plan 2024-2029

provides strategic direction, policy alignment, and high-level decisions, while the technical working group oversees technical inputs, data coordination, project alignment, and coherence in interdepartmental implementation.

To enhance county-level coordination, Nakuru City established the Citywide Inclusive Sanitation Committee (NACISC) under the broader NACOSTEC mandate. This city-specific body aligns urban sanitation planning with the county strategy while addressing Nakuru's unique urban challenges. NACISC engages development partners, civil society, private operators, and informal settlement representatives to develop solutions for shared facilities, fecal sludge management, drainage, and resource recovery. NAWASSCO and the sanitation committees actively involve development partners (including the World Bank, VEI/WWX, WSUP, SNV, WRUA groups, and academic institutions) in their governance structures.

TAKEAWAY

By embedding partners into NACOSTEC and NACISC, Nakuru taps into technical expertise, co-financing opportunities, data tools and concepts (such as the Citywide Inclusive Sanitation Planning database), and peer-learning platforms. Such partnerships can foster coordination, ensure continuity in donor-funded activities, and align joint programming with county strategies.

2.3 Service delivery

Nakuru County has **12 privately licensed exhauster operators** contracted to provide wastewater emptying services. The Water Services Regulatory Board has issued formal **permitting and licensing requirements for the operators** under the county's service tariff license, including periodic fees and operational standards. These conditions support enforcement and help formalize service delivery.

NAWASSCO's service delivery model is guided by the national regulator's (WASREB) delegation guidelines, which enable the utility to **contract private sector exhauster services** rather than operate them directly. These partnerships are governed by memoranda of understanding that define roles, pricing, performance expectations, and oversight mechanisms. This approach decentralizes emptying services while ensuring compliance with public health and environmental standards.

NAWASSCO also supports **small and community-based service providers** ranging from manual emptying to local sludge collection via formal MoUs. These providers handle sludge collection and transport from informal settlements to a designated resource recovery plant. This inclusive approach promotes pro-poor service coverage while formalizing informal networks and improving monitoring and accountability.

NAWASSCOAL Ltd, established in 2018 as a wholly-owned subsidiary of NAWASSCO, operationalizes **circular sanitation through resource recovery.** It processes fecal sludge into **fuel briquettes and biochar**, marketed under the MakaaDotcom brand and ikomizizi seed ball brands. NAWASSCOAL currently produces approximately 20 metric tonnes per month and has sold over 700 metric tonnes, significantly contributing to circularity and waste reduction in Nakuru and its surrounding areas.

TAKEAWAY

Through a hybrid model combining licensed private operators, SME integration, and a specialized circular economy subsidiary, WSPs can establish an **inclusive service delivery architecture** that balances regulation, service coverage, and sustainability. Such structures also provide a replicable blueprint for scaling sanitation services in other counties.

2.4 Peer-to-peer and development partner engagement

NAWASSCO, along with two other neighboring utilities—Nakuru Rural Water and Sanitation Company and Naivasha Water and Sanitation Company—are beneficiaries of a peer-to-peer collaboration through the WaterWorX program (2017–2026), coordinated by VEI B.V. This multi-utility partnership offers exposure to international best practices, performance benchmarking, and technical mentorship based on proven models, enabling improvements across critical areas such as fecal sludge management, non-revenue water, asset management, climate resilience, information management systems implementation, and pro-poor service delivery structures.

Through water operator partnerships (WOP), the utilities have received tailored peer-to-peer support focused on agreed work streams that enhance service performance. Key tracks include FSM processes, non-revenue water reduction, GIS-based asset mapping, and water safety planning aligned with WHO/IWA guidelines. This hands-on engagement helps utilities develop institutional maturity and evidence-based operational planning, which is essential for scalable sanitation service delivery. The water operator partnerships model has also prioritized resource mobilization and investment readiness; staff across NAWASSCO and peer utilities have been trained in proposal writing, stakeholder management, and project financing techniques.

These skills enable teams to structure sanitation and water infrastructure projects that attract support from development partners such as the AfDB, EU, World Bank, WSTF, and SNV. Utility teams subsequently develop projects aligned with county and national priorities, strengthening prospects for partnerships and blended financing.

TAKEAWAY

The WOP experience extends beyond capacity building to fostering an enabling governance environment with centralized leadership. Local WOP facilitation involves County Executive leadership, inter-utility coordination, and alignment with regulatory bodies like **WASREB** and **WRA**, ensuring clarity in mandates and stakeholder engagement, and thereby enabling integrated planning across water and sanitation service providers. By replicating and scaling the WOP-led peer learning and investment readiness approach, WSPs **can catalyze sustainable sanitation PPPs across Kenyan counties**, strengthening utility capacity, and unlocking opportunities such as interest in pro-poor investments.

2.5 Academic and research collaboration

In 2023, **NAWASSCO** and **SANDEC–EAWAG** initiated the **PREF4WASH–Kenya** collaboration, embedding academic practice within local urban sanitation contexts[4]. PREF4WASH, a global water, sanitation, and hygiene research network, aims to align **practice, research, and funding** activities to provide context-driven solutions and strengthen organizational capacity across utilities in Kenya.

Unlike top-down academic approaches, PREF4WASH emphasizes **research rooted in real-world utility challenges**, such as sanitation levies, sector partnerships and financing, and institutional preparedness, tailored to Nakuru's priorities under NAWASSCO's Research Agenda (e.g., operationalizing of sanitation levies under climate stress). This ensures that research outputs are immediately actionable, enabling NAWASSCO to pilot innovations such as climate-adaptive sanitation levies, inclusive financing models, and improved service delivery tools.

PREF4WASH–Kenya unites NAWASSCO, WSUP, FINISH Mondial universities (Meru, Egerton, Strathmore, JKUAT), the Water Sector Trust Fund, and EAWAG–SANDEC to create a research-practice link that involves policymakers, funders, and utilities nationally. This national network makes sure research results guide utility planning, county sanitation plans, and national policies, while fostering multi-agency cooperation to expand innovations beyond Nakuru.

The platform supports **graduate-level research** co-supervised with academic and utility partners to develop real-time, practically oriented deliverables, such as methodologies for sanitation levy implementation adapted for climate variation, which NAWASSCO plans to replicate across other urban utilities. By embedding research within utility operations, PREF4WASH not only builds local evidence but also nurtures future sanitation professionals and integrated academic–utility collaboration.

TAKEAWAY

By supporting partnership platforms that build sector know-how like PREF4WASH, **service providers can ensure that sanitation interventions are driven by relevant evidence, utility capacity is strengthened, and cross-sector collaboration promoted.** Ultimately this will inform investments in sustainable sanitation.

2.6 Technology and data partnerships

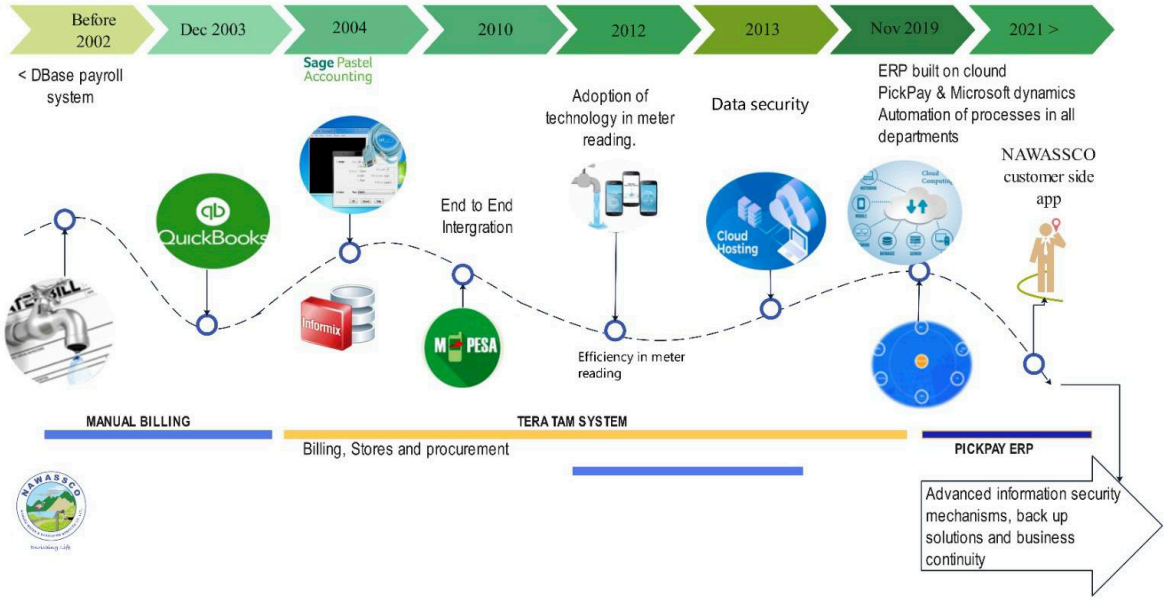
NAWASSCO began its digital journey with **basic accounting and billing tools**, shifting from manual payroll systems to platforms like **QuickBooks** and **Sage Pastel.** These early systems established basic **financial transparency,** billing accuracy, and procurement management. This has laid the groundwork for **transaction-level data digitization**, crucial for attracting investment and measuring performance across sanitation service chains.

4 Call For Research Concept Notes From On-Going Graduate Students Based In Kenya, link

NAWASSCO has additionally deepened its digital infrastructure by 1) introducing **end-to-end system integration,** linking billing, meter reading, and customer service, 2) integrating **mobile money (M-PESA)** for payments, thereby expanding customer accessibility and reducing revenue leakage, and 3) adopting **digital meter reading** tools to improve efficiency and reduce human error in consumption tracking. These steps have strengthened **real-time service delivery monitoring**, improved data accuracy, and facilitated early moves toward performance-based planning. NAWASSCO has also responded to rising cybersecurity needs by embedding cloud-based data security protocols. This implementation of systems has included: 1) cloud hosting for customer and operations data, and 2) deployment of a modular ERP system co-developed with PickPay and Microsoft Dynamics, enabling automation of processes, including procurement to customer relationship management.

Finally, NAWASSCO launched a **customer-side mobile app**—enabling real-time fault reporting, service request tracking, and mobile bill payments.

NAWASSCO DATA MANAGEMENT SYSTEMS JOURNEY



TAKEAWAY

NAWASSCO's example underscores the role of **integrated digital systems in improving transparency, operational efficiency, and customer engagement.** WSPs can adapt this model to **scale digital transformation**, particularly in sanitation service delivery and investment readiness. Digitization improves efficiency thus saving resources. It also promotes transparency boosting investment confidence, consequently contributing to improved utility performance. Scaling digital performance is only a means and not an end in itself especially for basic service provision.

3. Recommendations and call to action

From the synthesis of national dialogues and stakeholder conversations during the session and engagements afterwards, the following recommendations are proposed across the different sector players:

Utilities:

- Explore means to formalize commercial partnerships with SMEs through vendor contracts.
- Establish research and development units or integrate research into strategic planning for ongoing organizational learning and adapting
- Invest in interoperable data platforms, knowledge management and citizen-based mapping to enhance evidence generation for informed decision making
- Leverage digitalization to enhance transparency in customer services and financial management, which are important indicators of investment readiness
- Partner with peer utilities for mutual learning locally, regionally, and internationally

Investors/Funders:

- Ensure that funding/financing includes allowance for project preparation, as utilities operate on limited financial resources.
- Catalyze innovative finance mechanisms, e.g., guarantees to drive implementation of "shovel-ready" investments or result-based financing
- Explore means to fund utility-SME partnerships, data infrastructure technologies, and mutual value research to enhance the broader sanitation ecosystem gains
- Improve funding instruments by better targeting service providers in line with their contexts

National/County governments:

- Fully implement the Sessional Paper No. 7 of 2024 on National Sanitation Management Policy, which has since been approved by both the Cabinet and Parliament. This policy could revolutionize the sanitation sector by focusing on the Sanitation value chain, institutional arrangements, private-sector participation, sector coordination, and ensuring that no one is left behind.
- Explore innovative mechanisms to embed sanitation financing within infrastructure projects or through betterment levies[5]
- Institutionalize sector coordination and regulatory alignment for sector growth
- Establish flexible mechanisms for mediating financial flows from donors to utilities based on the economic and financial capability performance of utilities.
- Participate and promote research at the nexus of engagements between utility, regulator, development agencies, and other sector players
- Promote a well-meaning balance of sanctioning and compliance support in regulation at the county level

5 A betterment levy is a value-capture tool where property owners contribute to the cost of public infrastructure improvements that raise their land values. These have been most prevalent in Bogotá, Colombia, where such levies ("contribución de valorización") have financed roads, drainage, and sewerage projects, raising over US$1 billion, with charges scaled by benefit and capacity to pay; link

Research organizations/Academia:

- Co-create mutually beneficial research agendas with utilities to inform their strategic goals and operations while extending scientific understanding
- Provide actionable insights for utility planning and partnership dynamics through knowledge brokering
- Engage in structured internships and technical partnerships for current and future capacity development
- Support innovation research initiatives by bringing in new knowledge, and knowledge translation.
- Support utilities in establishing investment priorities informed by evidence

Sanitation SMEs:

- Generate and share customer satisfaction and performance data with WSPs for more robust awareness of pain points and prioritization of interventions
- Develop scalable models that align with public sector standards and complement utility operations
- Expand participation in structured platforms for coordination
- Participate and contribute to applied research that builds sector capacity and unlocks opportunities for improving sector performance.

4. Conclusion

In Kenya's urban sanitation sector, the ability of water service providers to scale inclusive, resilient, and sustainable services increasingly depends on robust partnerships among public, private, and academic actors. Utilities still face persistent financing gaps and capacity constraints, particularly in developing commercially viable, investment-ready sanitation projects. Instruments such as the African Development Bank's Africa Urban Sanitation Investment Initiative (AUSII) and the African Water Facility (AWF) provide critical support through blended finance, guarantees, and technical assistance. These partnerships can help utilities not only access capital but also structure innovative, cost-recoverable service models that appeal to external investors.

Equally, partnerships with SMEs and knowledge institutions are essential to catalyzing decentralized, climate-smart solutions and embedding innovation into utility operations. Innovative models from SMEs, such as container-based sanitation services offered by Fresh Life, have demonstrated viable pathways for utilities to expand inclusive, climate-resilient sanitation. Through formal agreements with utilities such as KIWASCO, ELDOWAS, NCWSC, and Lusaka Water in Kenya and Zambia, Fresh Life complements utility efforts toward universal coverage, enabling service delivery to over 300,000 people daily across four cities. Embedding such models within structured partnerships—such as PPPs, paid service contracts, and technical collaborations—can help utilities adopt

Citywide Inclusive Sanitation (CWIS), particularly non-sewered solutions. Policy reforms that integrate CWIS into county plans, utility mandates, and national strategies are crucial for creating an enabling environment for scale.

Furthermore, integrating SMEs through structured procurement and incentivizing research collaboration, such as through platforms like PREF4WASH, can improve evidence-based planning and performance.

However, governance is key. It needs to be prioritized if the utilities are to deliver on their current and emerging mandates, such as the non-sewered sanitation responsibility.

For them to be efficient, the Senate will need to propose and develop guidelines for utility management and leadership.

As a way forward, future conference sessions and research should explore how utilities and other sector stakeholders can establish and maintain mutually beneficial value partnerships. Such capabilities across different levels of the sector ecosystem are essential to unlocking low-hanging opportunities for sustaining and scaling water and sanitation services.

About the Session

The conference session was convened by Eawag and African Development Bank in collaboration with NAWASSCO, Fresh Life, Open Capital, and APHRC, in the context of the Kenya Water and Sanitation International conference organized by Water and Sanitation Services Providers Association (WASPA, Kenya). The session consisted of approximately 50 participants with different stakeholders from the water sector represented.
We acknowledge the financial support of African Development Bank which made the session possible.

How to cite this Brief:

This brief may be cited as follows:

Wainaina G. K., Chirwa M.J., Mukherjee D., Ombara R., Kigen, C., Mururi E., Manyasi A., Mwalugongo W., Mugomi M., Kabubu, G., Wanjohi, T. (2025) Strengthening Utility Partnerships - Fostering Sustainable, Resilient and Inclusive Sanitation in Kenya. Policy. Eawag. DOI: http://doi.org/10.55408/eawag:35777

Contributing organizations:

Swiss Federal Institute of Aquatic Science and Technology-Eawag, African Development Bank, Open Capital, Fresh Life, APHRC, NAWASSCO