



Better Markets, Better Lives

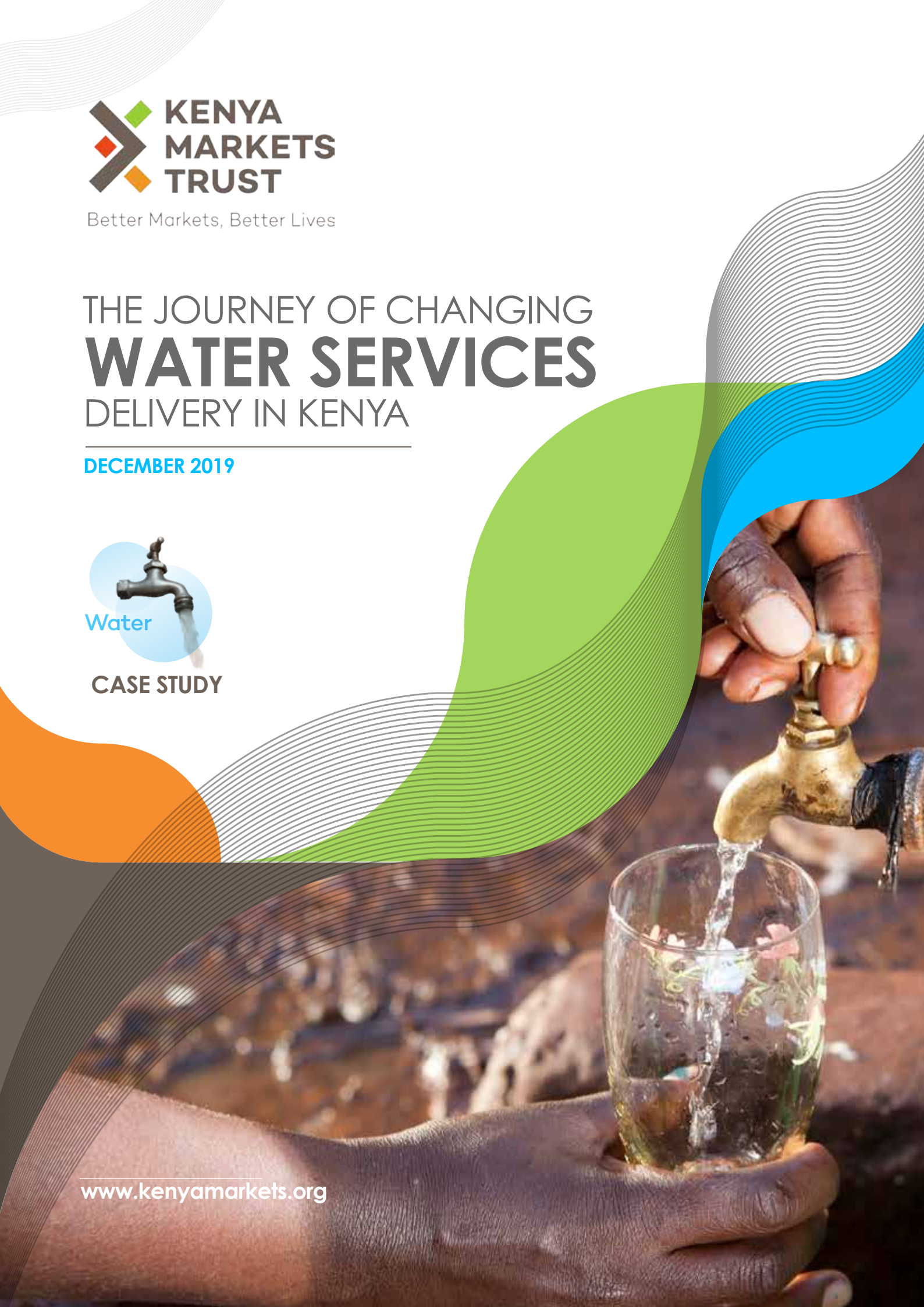
THE JOURNEY OF CHANGING **WATER SERVICES** DELIVERY IN KENYA

DECEMBER 2019



CASE STUDY

www.kenyamarkets.org



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Better Markets, Better Lives

Kenya Markets Trust (KMT) is a Kenyan not-for-profit organisation that specialises in market transformation. We work to stimulate inclusive and resilient growth that will lead to a step-change in the livelihoods of millions of Kenyans. We take a long-term approach, staying true to our vision while adapting to the forces that are shaping the markets we operate within such as climate change and access to emergent technologies.

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In collaboration with

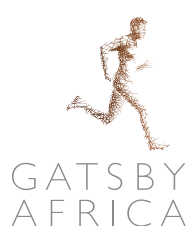


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1.

THE IMPORTANCE OF WATER FOR GROWTH AND POVERTY

a. An effective water sector has the potential to increase growth and reduce poverty

Water is an essential resource, and the strength of the sector has significant impacts on economic growth, health and quality of life. Key industries, including agriculture and energy, rely on water as an input, with 78% of jobs globally being dependent on water.¹ However, constraints that impair development are pressing, as climate change and population growth put ever more pressure on existing systems.

The case for working to strengthen the water sector is clear. Across Sub-Saharan Africa, universal access to improved water and basic sanitation could lead to economic gains of 34.7 billion USD per year.² The

UN calculates a global benefit-cost ratio of 5.5x for improved sanitation and 2.0x for improved drinking water.³ Development impacts of improved access to water are particularly pronounced amongst the poor, and even more so amongst women and children who traditionally collect water. This can involve travelling long distances taking several hours per day, whilst costing significantly more than water from formal piped connections, with water costing up to 10x more for those living in low-income areas (LIAs). Better water access for the poor, therefore, can save time, increase disposable income and improve health.

b. There is urgent action needed before quality water services can be provided in Kenya

Kenya's development blueprint, Vision 2030, targets a 10% GDP growth rate per year from 2012 to 2030. Water plays a fundamental part in enabling this growth, as a necessary input for agriculture, manufacturing and other industries while contributing up to 200,000 jobs. Recognizing this, the government aims to ensure access to improved water and sanitation to all by 2030, in line with Sustainable Development Goal six.

Current access to water is low. Only 26% of the population are served by regulated providers, and the remaining 74% rely on small private operators, community-managed systems, or self-supply. These may be unfit for consumption, unsustainably sourced, and/or highly priced.⁴ There is also pressure from population growth. Kenya's population is set to rise by 27% to 60,470,000 people between 2019 and 2030.⁵ Providing access to all by 2030 will increase water demand significantly. With Kenya already water scarce, this will require utilization of 81% of available water resources, from a current level of 14%.⁶ Significant investments are required. The government

estimates 100 billion KShs (981 million USD) is needed annually.⁷ Current investment is far below this, at approximately 40 billion KShs (392 million USD) per year.

Beyond challenges in meeting this demand, changes in the climate will put significant strain on supply.⁸ Surface air temperatures are rising and average rainfall is expected to both increase and become more erratic. Droughts and floods already cost Kenya 2.4% of GDP per annum⁹, and changing weather patterns will prolong droughts and increase flooding frequency.¹⁰ There is an urgent need to improve the way the water services delivery sub-sector functions.



Access to safe water and improved sanitation services are key pillars for Kenya's development. ~WASREB, Impact 11

“If the business-as-usual approach is maintained in the way water resources are managed, Kenyans will face a 30% gap between available freshwater supply and demand by the year 2030” ~WASREB, Impact 11



¹UNESCO World Water Assessment Program, 2016, Water and Jobs

²Frontier Economics, 2012, Exploring the links between water and economic growth, A report prepared for HSBC.

³UNESCO World Water Assessment Program, 2016, Water and Jobs

⁴Water Services Regulatory Board, 2019, Impact: 11 – 2017/18, Issue No.11

⁵Using the population from the 2019 Census with a constant historical growth rate of 2.2%

⁶Ministry of Environment, Water, and Natural Resources, 2014, National Water Master Plan

⁷Ministry of Environment, Water, and Natural Resources, 2014, National Water Master Plan

⁸European Centre for Development Policy Management (ECDPM), 2011, Analysing governance in the water sector in Kenya, Discussion Paper No. 124

⁹WHO, 2005, Making Water a Part of Economic Development, The Commission on Sustainable Development?

¹⁰Ministry of Environment, Water, and Natural Resources, 2014, National Water Master Plan



2.

WATER SERVICE DELIVERY IN KENYA

a. An overview of the water service delivery sub-sector in Kenya

The water service delivery sub-sector has a number of players each taking on important roles in the sector. Current key actors include:

- WASREB, responsible for issuing licenses for water service provision, regulation and setting tariffs.
- The Water Sector Trust Fund (WSTF), provision of loans and grants to increase water access in underserved areas.
- County governments, responsible for ensuring water access to all, alongside other functions.

- Water Service Providers (WSPs), operate publicly owned infrastructure to provide water delivery services, generating fees from tariffs, new connections, and re-connections.
- The Water Service Providers Association (WASPA), convenes WSPs to discuss regulatory implications and best practice.

The current structure is based on numerous changes in the water sector, particularly since 2002. These have impacted governance and the potential for systemic change, and are summarized below:

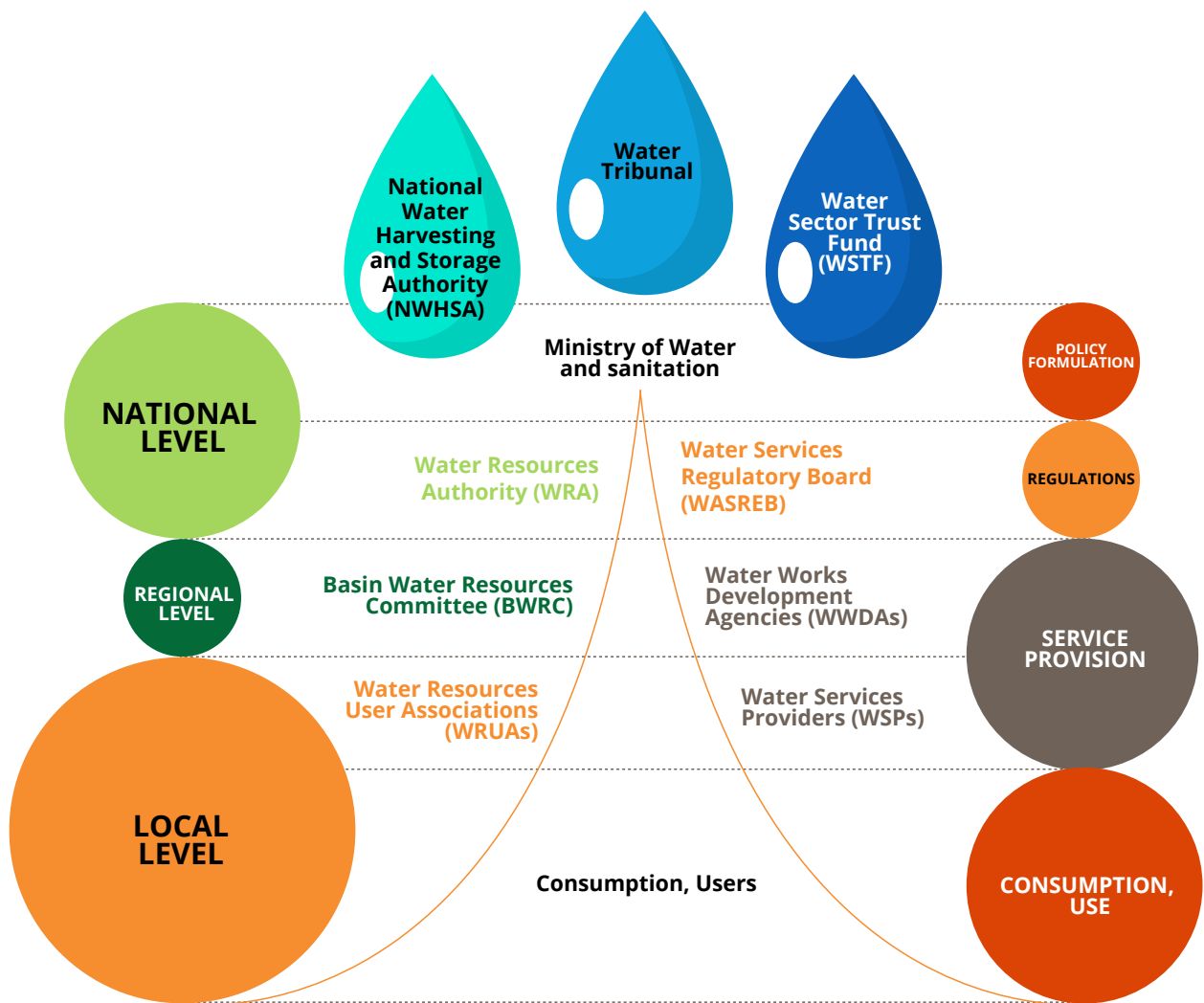


Figure 1 – Key actors within the water sector

THE 2002 WATER ACT

- Separation of water resource management from the delivery of water supply services.
- Separation of policy making from day-to-day administration and regulation.
- Decentralization of functions to lower-level state bodies.¹¹
- Involvement of non-governmental organizations in service provision introducing private sector orientation with companies aiming for financial surpluses.

This encouraged efficiency gains, but also resulted in different service levels depending on customers' disposable incomes.¹²



“Service delivery levels were much higher in middle and high-income areas, where WSPs could see a much better chance of recouping revenues. The poor had not been targeted previously as WSPs did not see service delivery to the poor as making business sense.”
- WASREB

2010 CONSTITUTIONAL CHANGES

- Inclusion of the right to clean and safe water.
- Devolution of responsibility for water provision to Counties.
 - This devolution created confusion in the market over roles and responsibilities, particularly in who owns and invests in infrastructure. However, overtime this transitional paralysis is becoming clearer.



2016 WATER ACT

- Further enables the participation of the private sector and private finance in the water sector.
- Provides clarity for roles and responsibilities of stakeholders:
 - WASREB gained responsibility for providing guidelines for rural service providers, maintaining the mandate to approve tariffs, monitor water services standards and issue licenses to WSPs.
 - County governments gained statutory responsibility for ensuring water access to all. They became the legal owners of WSPs and infrastructure and can create rural water companies.
 - The Water Sector Trust Fund (WSTF) gained the flexibility to provide commercial loans as well as grants. They can procure funds from the national budget, counties, private finance and grants, among others.
 - WSPs are now the responsibility of counties who have the mandate to provide water services. WSPs are responsible for water services within specified areas and development of county assets.

Despite these positive developments, the sector is still facing challenges. Service levels of WSPs have stagnated over the last ten years, with key performance indicators (KPIs) such as non-revenue

water (NRW)¹³ and coverage rates remaining below WASREB targets. Very few WSPs have reached financial sustainability, and only the largest are able to meet operational and maintenance costs.



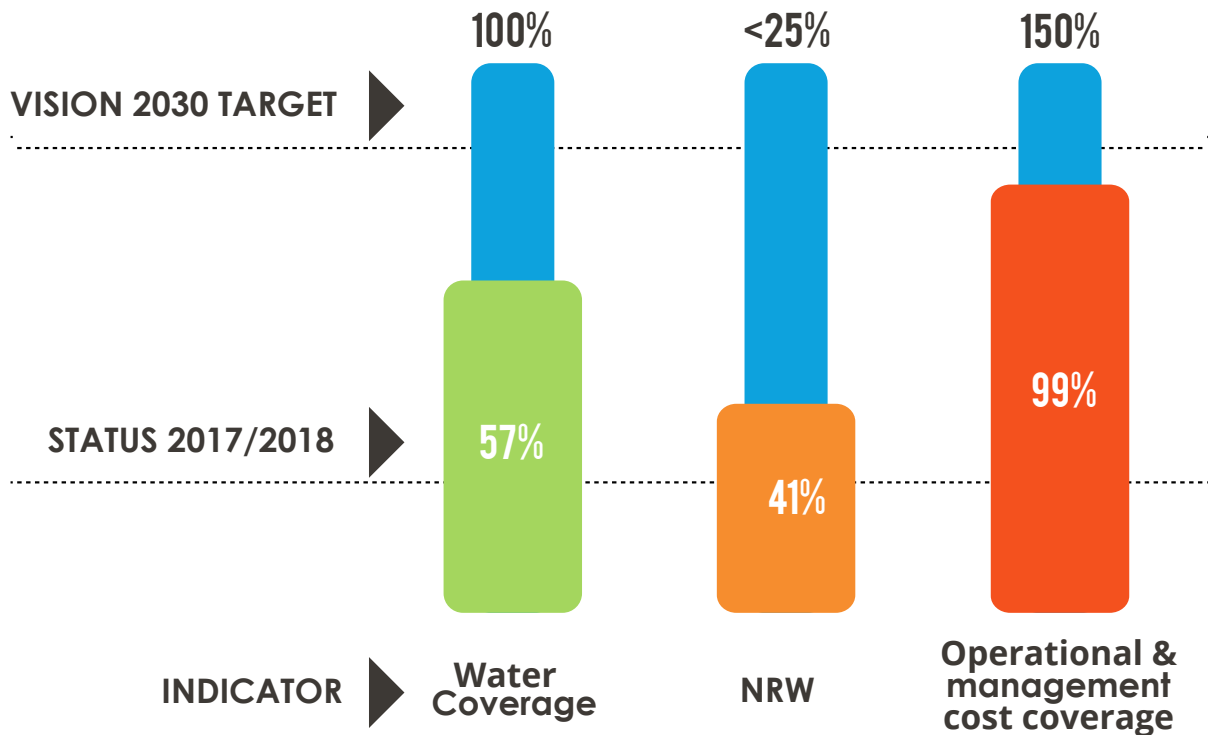
“I call on all stakeholders to realize that good governance and sustainable development are key national values.” - Eng. Robert Gakubia, CEO, WASREB

¹¹Albert Mumma, 2007, Analysis of the Implications of Kenya's Water Act, 2002, for the Rural Poor, CAB International

¹²European Centre for Development Policy Management (ECDPM), 2011, Analysing governance in the water sector in Kenya, Discussion Paper No. 124

¹³Non-revenue water is water that has been produced but has not been billed to the consumer. Losses can be physical, for example through leaks, or apparent, through theft or metering inaccuracies.

Progress towards Vision 2030 targets



Much of the sector remains outside the purview of government. Rural areas are largely unregulated, and water services are provided by a combination of Water User Associations (WUAs) and private operators. Service delivery is anecdotally poor, although little data is available on KPIs. The majority of WUAs are not financially sustainable, with frequent outages of

water access, low levels of asset maintenance and investment and an inability to attract finance: as a result, typically a third of the systems providing water to rural and peri-urban areas are malfunctioning at any given time.¹⁴ With these continued issues faced by the sector, it is clear that there remain binding constraints to growth that have yet to be addressed.

b. Governance structures are not adequately adopted at multiple levels

The evolution of the water service delivery sub-sector has created a clear framework for governance at multiple levels. However, the adoption of these structures is inadequate. Within weaker WSPs, corporate governance is informal with policies and structures that are non-existent or ineffectively implemented. Eventually this leads to a lack of incentives for WSPs and the delivery of low-quality services.

Governance of the relationships linking and/or binding counties, WSP's and stakeholders are weak leading to further constraints. Although devolution in 2010 provided clear roles and responsibilities, interpretation and implementation are still a challenge, due to issues including staff capacity at county levels, political patronage, and struggles to control resources. As a result, there is still confusion, with counties reporting "the distinction between ownership and service

delivery was not very clear". This can leave WSPs without support or capital to invest in services. Models for engaging with private operators are lacking, meaning partnerships that can increase investment and quality of services often fail to meet this potential.

Finally, sector governance is not able to effectively incentivize performance improvements. National regulation relies upon data submitted by WSPs, much of which is hard to verify, calling into question its reliability. With this, WASREB is limited to using data from Urban WSPs in rating sector performance. Outside of urban areas, the situation is worse. Service provision is unregulated and data even less available. The constrained ability to regulate affects government's ability to effectively plan policies or allocate resources, and financiers' ability to assess risk and provide credit.

¹⁴C. Tiwari & A Bonaya, 2016, The Way Forward to Sustainable Rural Water Services in Kenya

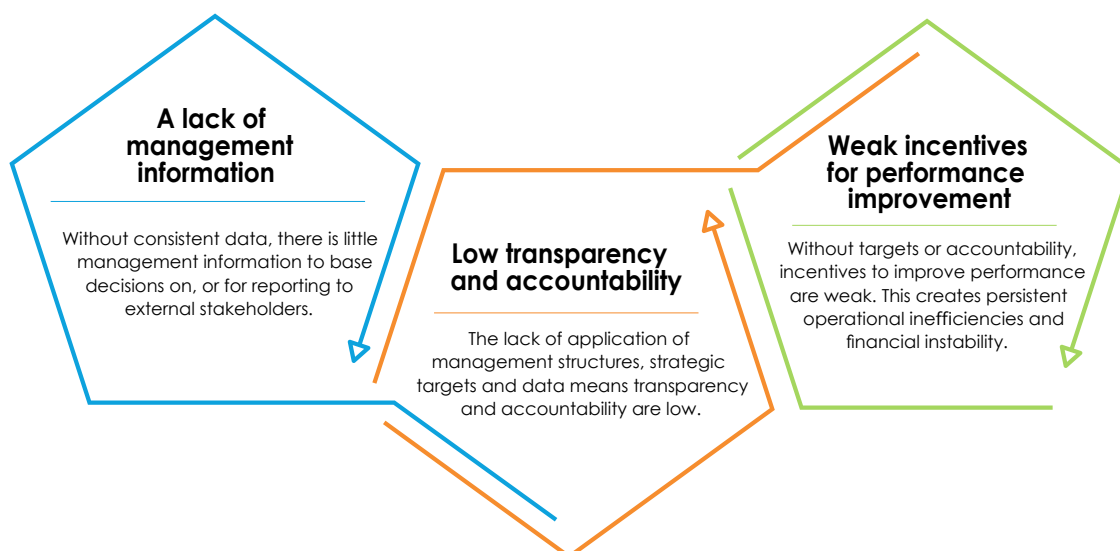


Figure 2 – Interrelated constraints of poor corporate governance

Box 1: Governance definitions

Corporate governance: the system of rules, practices, and processes by which a firm is directed and controlled.

Integrated governance: the formal relationship between organizations that allows them to manage deliverables, risk and process through collaborative business approaches.

Sector governance: the national institutions responsible for setting policy, regulation, and financing.

c. Opportunities for change

Challenges in the Kenyan water sector, centered around governance at different levels, persist for a number of reasons. These are dynamic and context specific, with no single solution to constraints to growth. Some key constraints, however, are common across the sector and these create opportunities for sectoral change.

Working within, and strengthening, existing structures provides opportunities to improve corporate governance within the sector. With clear structures, roles and responsibilities, coupled with data that provides accountability and transparency, organizations will have the incentives and capacity to improve services and financial performance. Institutional players will also benefit, using better information for their own mandates, and so have a role to play in supporting reform. WASREB has significant power to influence WSPs through regulatory and licensing requirements. Other key players include financiers such as the WSTF, who are able to attach conditions upon grants and loans, exerting pressure on WSPs and counties to improve practices.

Whilst the water sector has not traditionally been seen as profit making, commercial viability is now a regulatory focus. This provides further opportunities for change.

To improve commercial viability, WSPs will need to adopt private sector principles. These principles can significantly improve service delivery by reducing losses, increasing connection rates and encouraging private investments. These investments require significant capital, where finance is often not available and actors are not seen as viable businesses. As WSPs begin to formalize, there is an opportunity to increase access to finance and therefore increase their ability to invest. WSPs will need significant capacity building to meet requirements of financial institutions (FIs). FIs will also need to better understand the sector, in order to facilitate entry into a market that is largely untested.

The changing political economy has made the environment a conducive one for organizations trying to bring about systemic change. Reforms aimed at formalizing the sector and increasing commercialization of water service provision have led multiple stakeholders to look for better models. Counties and WASREB, in particular, have had greatly increased mandates, and inadequate capacity to fulfil them. At such times of change, there are opportunities to influence the direction of change towards inclusive markets that work for the poor.

d. Summary of constraints and opportunities facing the water services delivery sub-sector

Constraints	Related opportunities
Poor governance	Governance to be strengthened within and between key stakeholders by supporting models that encourage the uptake of best practice at each level.
Operational inefficiencies	Introducing the right incentives through the introduction of data management systems can lead to better management decisions and strategic planning by WSPs.
Unregulated and underdeveloped rural water services	Through new regulations and guidelines in the rural sector, public actors can better engage with rural operators, providing greater oversight as well as supporting the strengthening of operators' capacities.
Lack of diversified financing options and smarter use of existing sources	With better governance in place, new systems will enable actors to demonstrate credit worthiness. On the supply side, working with the financial sector will increase their ability to assess risk and effectively design and market products in the sector.





3.

KMT'S APPROACH TO STIMULATING SYSTEMIC CHANGE

a. KMT's vision for systemic change

The water sector in Kenya has significant potential for systemic change. KMT selected the water services delivery sub-sector as a focus for intervention, with a vision for: "Provision of water to rural and urban consumers by professionally managed water

service providers operating within a regulatory and governance framework that stimulates competition, better performance and innovation whilst ensuring affordable pricing and access to reliable, potable water for unserved and underserved consumers."

b. KMT's approach to achieving this vision

To achieve this vision, KMT has sought to take a market systems approach to the water services delivery sub-sector, focusing on context-driven solutions that can directly improve, or be complementary to, the existing system. This approach focuses on developing new models for working in the market, which when adopted stimulate behavioral changes within organizations. Successful models are taken to scale by increasing the uptake of models, with the aim of creating systemic change to the benefit of the poor.

KMT's strategy for achieving systemic change has evolved, reacting to the constantly changing macro-contexts. For the majority of KMT's program activities and impacts within this study have resulted from KMT's previous strategy, which was refreshed at the beginning of 2019. During this time, the four interventions have been:

1. Emergence and adoption of service delivery model for water utilities
2. Addressing NRW management in water utilities
3. Market-led approaches for expansion of services to low income consumer
4. Business to business linkages for climate smart, ICT, green financing and technological innovations

KMT's most recent strategy has two strategic intervention areas, divided between rural and urban contexts. These reflect the targeting of governance as a major constraint and impacts are already being seen. These strategic intervention areas are supported by specific interventions, outlined below:

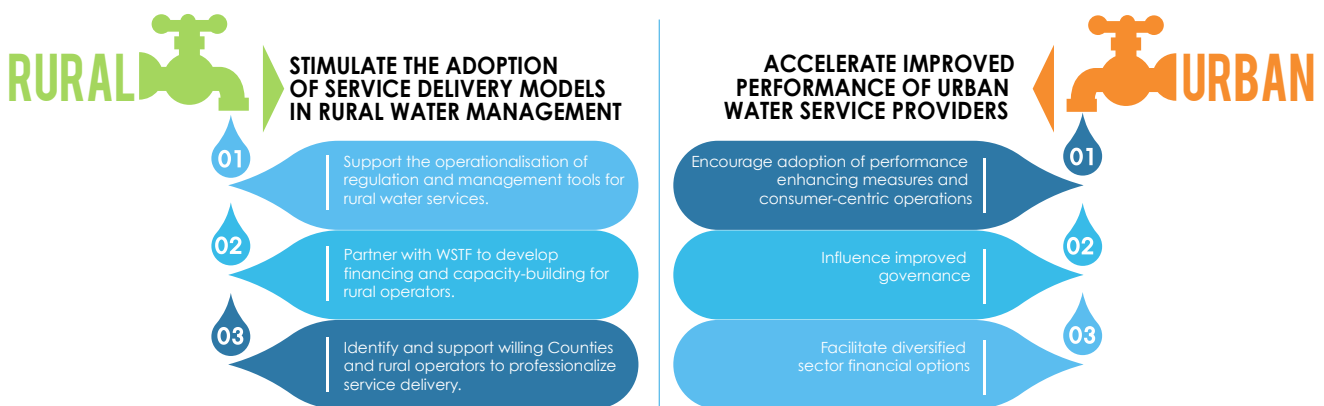


Figure 3 –KMT's key intervention areas

The mode of delivery of interventions has also evolved. Originally, interventions were run by SNV Netherlands and WSUP (Water and Sanitation for the Urban Poor), each working within distinct intervention areas. In 2019, KMT moved delivery in-house, increased its capacity to quickly react to changes in the market.

Taking a market systems approach in the water sector is complicated by the public nature of water. A purely free-market approach is fraught with risks and can lead to inequitable access, meaning careful consideration has to be given to the role of the

public sector.¹⁵ KMT first evaluated the water sector, highlighting potential for growth in the water services delivery sub-sector. Whilst assets are publicly owned and activities regulated by WASREB, there is room for commercial incentives. Profits can be generated through tariffs and connection/reconnection fees, by either public or private companies, creating potential for future private investment. By addressing capacity of both public and private actors, KMT concluded space for interventions taking a market systems approach existed and could be successful.

¹⁵C.Chikozhoa & K.Kujingab, 2017, Managing water supply systems using free-market economy approaches, Physics and Chemistry of the Earth, Volume 100

c. KMT's activity in the sector

KMT have been active in the water sector since 2012. During this time, they have piloted and scaled a number of interventions, each with the end goal of alleviating poverty. These focus on addressing

both technical constraints as well as the underlying governance constraints, both of which have been vital to KMT's work.

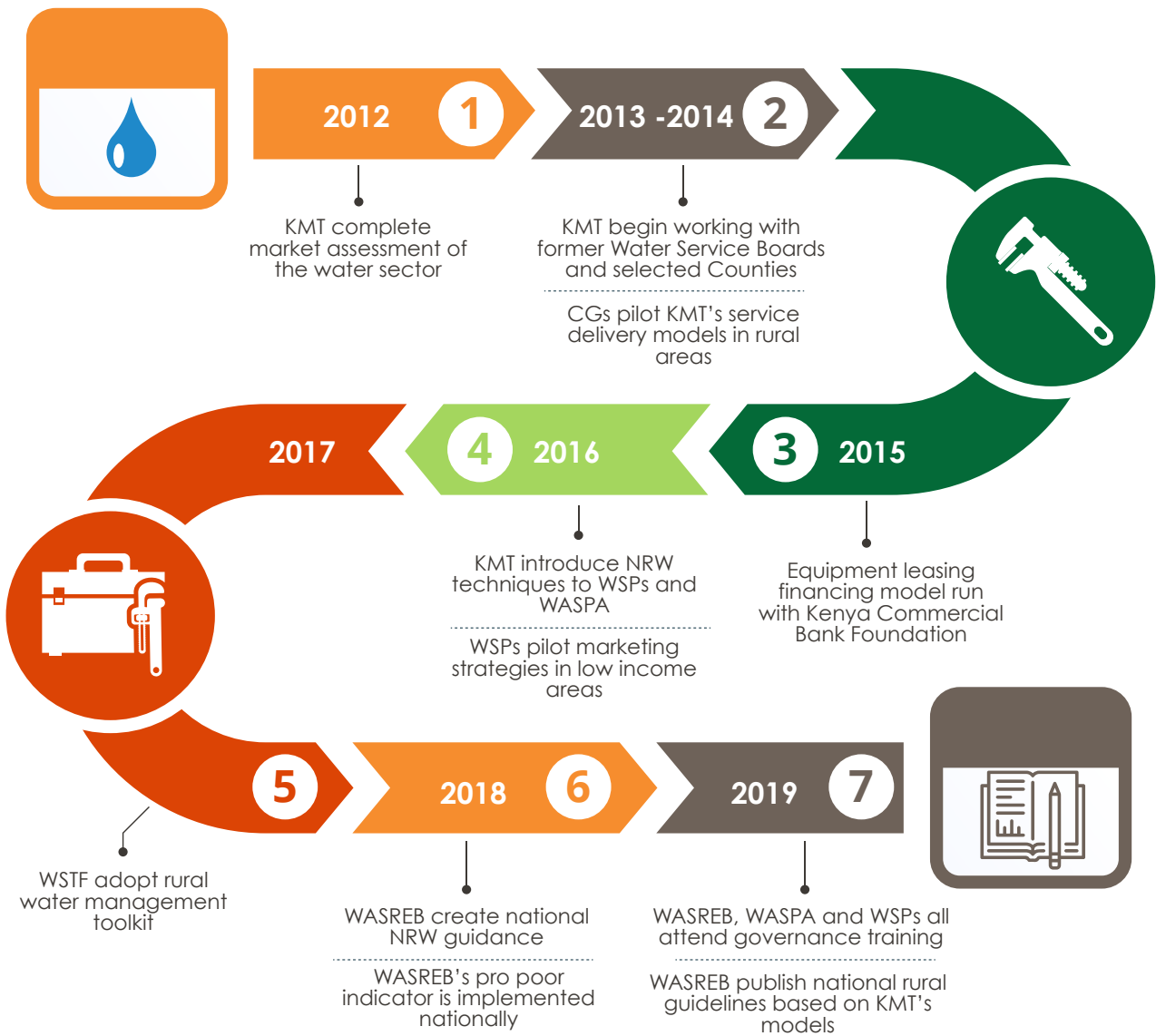


Figure 4 –KMT's activity in the water sector



The following sections contain the broad systemic changes achieved by KMT within that time. Within each section, the intermediate steps to achieving systemic change are explored, outlining the

approaches taken by KMT and the significance of activities at each stage. These systemic changes are summarized below:

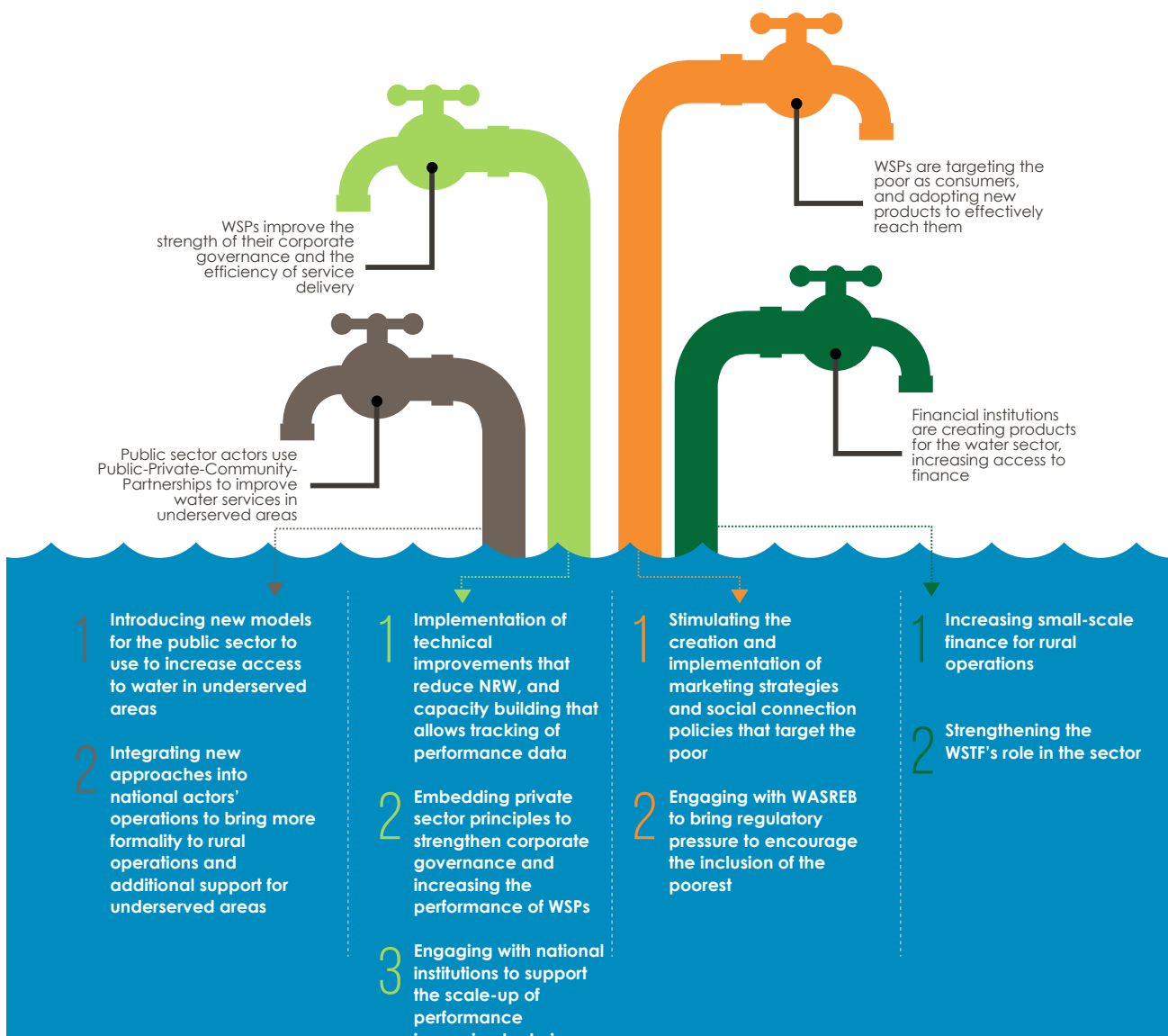


Figure 5 –Systemic changes and KMT's underlying priorities





4.

PUBLIC SECTOR ACTORS USE PUBLIC-PRIVATE-COMMUNITY-PARTNERSHIPS TO IMPROVE WATER SERVICES IN UNDERSERVED AREAS

a. How improved inter-actor governance can encourage the private sector's formal participation and improve service delivery

At the start of KMT's engagement in the water sector, interactions between public bodies and private operators were limited and ineffective, with no clear guidance on how relationships could be formed. Particularly in rural areas, this led to a confusing number of providers and a lack of incentives to improve performance. WUAs - voluntary community-led groups - encourage participation but lack the capacity to adequately manage assets or collect

revenues. Small-scale private operators focus on maintaining supply, but often run outside the purview of the regulator and charge consumers high prices for water of unknown quality. Regulated WSPs do not see the business case for entering sparsely populated areas with revenues too low to justify investment. With expensive and low-quality services, the poor use alternative sources of water, leading to wasted time, poor health and economic losses.

“Lack of data impedes the tracking of the progressive realization of the right to water. There is need for deliberate efforts in rural areas to grow access if national targets are to be realized.” - WASREB

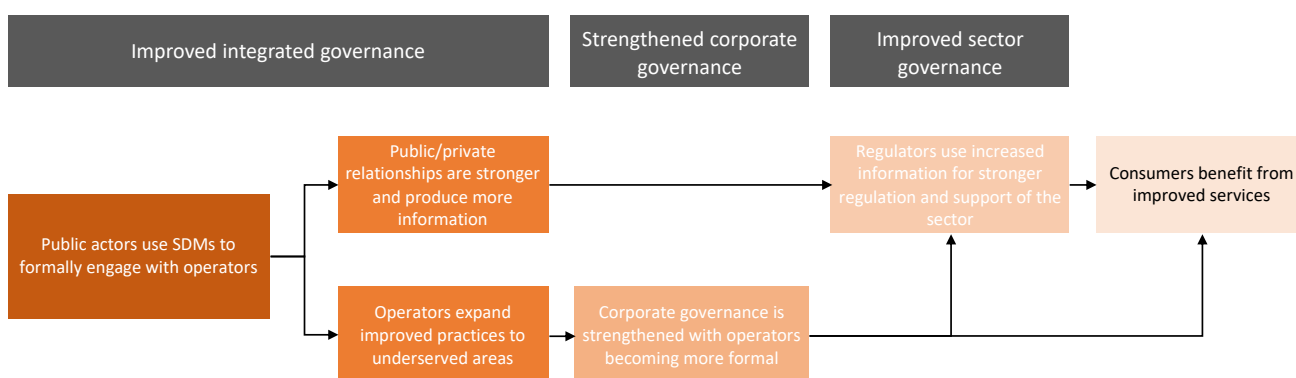


Figure 6 –Figure 6: Strengthening public/private partnership to improve services in underserved areas

KMT is addressing these issues by improving partnership between public bodies and informal operators. The first stage of this has been the development of models to improve the capacity of public bodies to engage with these operators. More frequent interaction has brought greater influence of the public sector, and KMT worked to increase the formality of rural operators, increasing

corporate governance and realizing significant performance improvements. This move towards formalizing relationships and operators has improved transparency and accountability, provided a pathway to increasing sector governance for WASREB and WSTF. KMT is working with both to take the models to scale.

b. Steps towards change

- Introducing new models for the public sector to use to increase access to water in underserved areas

KMT's first step to improving integrated governance was to create models that the public sector could use to engage with third-party operators. KMT developed service delivery models (SDMs) which focus on incentives of both the public sector (who want to provide universal access to water) and of operators

(who provide water delivery services for a fee). By designing different models, KMT built an overall model that could be applied to different contexts, while keeping the core principle of improving access in rural areas by outsourcing water services to competent third parties.

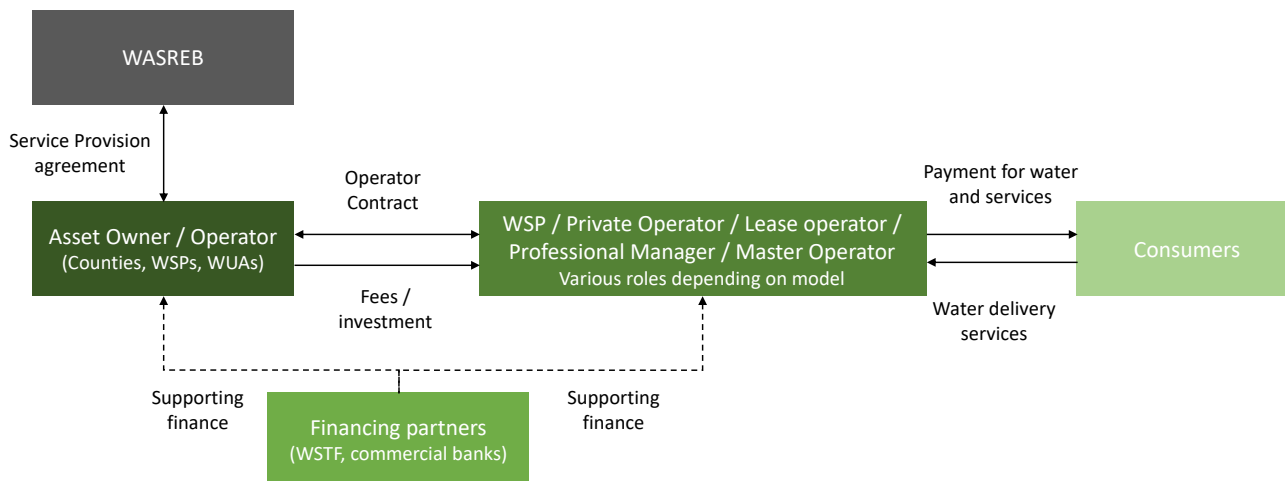


Figure 7 – The underlying functions within the SDMs

Between 2012-2013 KMT partnered with Lake Victoria South/North Water Services Boards, now run by the respective County Governments, to design and run pilots in five counties: Elgon East in Bungoma; Wandiege in Kisumu; Tachasis in Nandi; Navakholo in Kakamega; and Kanyadiang in Homa Bay. These called for private operators to provide water services under a licensing regime/revenue payment model across varying contexts. Operators were attracted

with the potential for generating fees, and in some cases with the inclusion of government investments in infrastructure to strengthen profitability. Counties were able to increase access to water for underserved areas, whilst greater oversight opened the possibility for public support to improve services, collect data on performance, and demand accountability from operators. The three main models are outlined below:

Table 2 –Outline of three main fees models

Model	Key roles	Example
Expansion of Urban WSPs into management of rural utilities	Counties grant WSPs access to rural areas. WSPs take over water services management from informal WUAs. WSPs delegate staff to rural utilities.	Kakamega County: WSP investments in meters, billing systems, line rehabilitation and training. WSP began serving 1,190 households, where previously it was serving none.
Delegation of management to private operators	Counties contract a private operator for operational and maintenance management. WUAs plays a supervisory role. Private operator works with staff of the WUA generate connections and improve revenue collection.	Kisumu County: Private operators engaged to bring services into LIAs. Locally based operator links the WSP to communities and provides oversight, reducing losses and increasing community engagement.
Co-management between public actor and third-party operator	County contracts a private operator to provide professional management services, working closely with the local WUA to build managerial capacity.	Elgon East: Managerial capacity significantly built, meaning previously dysfunctional capital was made operational. Revenues increased by 133%; water supply rose from 3 to 18 hours per day.

■ Integrating new approaches into national actors' operations to bring more formality to rural operations and additional support for underserved areas

The adoption of the SDMs has significantly improved performance and commercial viability in areas that were previously deemed incapable of covering costs. Alongside these, KMT has worked to improve corporate governance, leading to more professional and higher quality services. These rural operators have increased their integration into formal markets, with closer relationships to WSPs, counties and institutional actors.

This proximity of operators to formal partners created opportunities for KMT to work with national institutions to widen the scale of uptake of new models, and to improve sectoral governance. With a model for engaging operators that were previously unknown to institutional players, KMT provided a way to significantly strengthen integrated and sectoral governance, whilst also improving access in underserved areas.

Box 2:

The importance of managerial capacity for performance improvement

In 2012, the 3,000 residents of Elgon East received clean water for only three hours a week. The community resorted to water sourced from rivers and streams, in spite of having a licensed service provider. Elgon East piloted the SDM model to address this, using a committee management model. Whilst this failed, KMT learnt valuable lessons about the importance of managerial capacity in underserved areas.

A second pilot used a co-management approach. Consultants provided professional management services, resulting in business plans, management restructuring management, infrastructure investment, adoption of new technologies and investment in staff. These reforms led to significant improvements. Supply expanded from 3 to 18 hours a day, revenues increased by 133%, and new connections, increased staff motivation and service delivery led to the recognition of Elgon East as the best performing WUA in Kenya. This provides a clear indicator that success in the rural water sector hinges on professional management.

Increasing institutional support through WSTF

To broaden the scale of implementation, KMT worked with the WSTF to present the models to all counties accessing finance from them. This has greatly increased the scale and sustainability of impact. The WSTF has now taken the SDM to 22 counties, with plans for another 7 to be added. The WSTF has

also been heavily involved in engaging WASREB to further expand the SDMs nationally. This included a case study published by WASREB, which outlined performance improvements after a year of application including a reduction of NRW from 47.6% to 33.4%, 2 hours of additional supply per day and average



“We have included the SDM model into our strategy, in order to expose our clients, counties, to better governance structures and improved operating models. The SDM also provides the backbone of financing criteria for new grants and loans to be given. When other counties look for information, we provide all the guidance materials we have and make ourselves available for questions and queries. We’re using lessons learnt to advocate for changes with other institutional players, particularly WASREB. In partnership with KMT, we have advocated for the SDMs to be applied at the national level.”

- WSTF

Box 3:

Increasing access for the poor through the SDM

The involvement of the private sector has significantly increased the level of service delivery in lower income areas. In Kisumu, Master Operators are engaged to provide water to informal settlements. These operators, after initial training by KMT, act as agents of the local WSP, increasing access to water and professionalism of service delivery.

“People of influence are the master operators. We see that NRW is much lower because the master operator is from the community, and so can easily notice illegal connections and busts. Collection efficiency increased to an average of 97%, reaching 100%. Average NRW in places where we have a master operator is 11%. Across the utility it is approximately 38%, so is significantly lower than the average.” - KIWASCO, Kisumu County

Reaching national implementation through WASREB

With engagement from a collaborative effort between KMT, the WSTF and Caritas Switzerland, WASREB has begun the process of disseminating the SDMs nationally, publishing official guidelines for provision of water services in rural and underserved areas in Kenya. This marks WASREB's first venture into regulation of services in the rural sector, an area it has identified as a weakness in its regulatory activities.

“The rural sector is murky, but this is a blueprint of what should happen, marking the regulation for rural operators. Now every County will have a better

understanding of how to manage water service provision.” – Caritas Switzerland

The release of these guidelines will significantly increase the uptake of the SDMs, establishing them as the first official guidance of formalizing water services provision in rural areas. There is potential for this to significantly improve service levels, but for this to be met, KMT and its partners must ensure these guidelines are practical, and that counties, WSPs and rural operators have the capacity and tools to implement them.

Box 4:

Formalization of WUAs using the SDMs

The move towards more formal operations is best seen in Tachasis. After the SDM had been adopted, Tachasis reported decreased NRW, increased revenues, better capacity for data collection and reporting, and more qualified and professional staff. With these changes, KMT was able to assist the organization to gain WSP status, bringing it under regulation. For the new WSP, it provides legal standing and increased access to institutional support, and since licensing, the WSP has accessed multiple loans for investment. Both WASREB and the WSTF see this as a significant success, and KMT supported both to convene peer to peer learning and benchmarking visits to Tachasis.

“In 2012, SNV came in with KMT. We had very little knowledge on the reporting needed. We continued doing our work on the ground but could not report this. In 2013 we employed a technical manager, finance person, commercial person. We also began to understand reporting. Now our technical manager writes up a monthly data report. This collects data on all performance indicators, which was given as a role from KMT, along with templates. This is now 100% owned by the company.”
- Tachasis WSP

c. Lessons learnt

■ The flexibility of the SDMs has led to context driven adoption and increased sustainability

Much of KMT's success in attracting institutional support for the SDMs has been the ability to provide a single resource that outlines adaptable models that can be applied in different contexts, the evidence of which is clear in the variety of ways SDMs have been adopted within the pilots. The success of this approach provides a good example of how interventions can be driven by context from the start, with each variation of the models driven by

the capacity of the implementing partners. It also demonstrates the benefits of encouraging flexibility of approaches to stakeholders. By giving a range of models, stakeholders assess the aspects that work best for them, rather than relying on partners to prescribe set solutions. Greater ownership of models can then lead to innovation, learning within the sector, and sustainability of impact.



“These models are very customizable and so different counties are using the models in very different ways. We have seen a lot of interest and counties are now approaching us directly to understand what other counties are doing.” - WSTF

d. Future focus

■ Increasing formality of operators within the sector will continue to improve governance and performance

To continue formalizing rural operators' activities, barriers need to be addressed. This can be through increasing formal stakeholders' capacity to engage with operators in hard-to-reach areas and by decreasing the costs for operators associated with formalizing their businesses.

KMT has since facilitated WASREB to develop and disseminate guidelines for the provision of water and sanitation services in rural and underserved areas in Kenya, with a goal of increasing integrated governance capacity between counties and operators. WASREB is also at the early stages of developing reduced licensing requirements for suppliers currently outside of regulation. This allows a quicker route to

gaining legal standing for informal operators, provides a stepping-stone towards full licensing, and enhances the information WASREB has on the sector.

Whilst this is a positive development, WASREB have limited capacity for engaging with rural operators. There will be significant value in building the capacity of WASREB to be able to engage effectively in rural areas, or in working to bring in another actor, ensuring that reduced regulatory requirements for these operators results in better regulatory oversight and services. This would also require counties to effectively play their role in adopted the guideline for provision of water services in rural and underserved areas.

■ Improving the strength of contracts within the sector is the next step in forming relationships with private operators

Whilst the SDMs represent a good first step towards building integrated governance, they are still largely informal agreements which offer weak protection for either party. The sector must keep working to improve contracts, to encourage more confidence in their application and greater private sector engagement.

KMT is testing performance-based contracts (PBCs). These offer more formal arrangements with private actors, with scope for incentivizing private investment and high-quality service delivery. In KMT's pilot, a private company has responsibility for water services within an urban area of Murunga South. They will generate profits under a capped amount, and in return will invest in both physical and human capital. Physical capital investments are projected to reach 20 million KSHs (196,000 USD). Human capital investments are centered on the transfer of technology and local

capacity building.

Whilst the market for PBCs is new in the Kenyan water sector, significant earning potential means private sector players are ready to enter. Eight private operators showed interest in the pilot, and with learning increasing sector understanding of PBCs, the WSP expects future interest to be higher. Institutional players are also showing interest. Whilst public-private partnerships have been a focus of the government for a long time, there has been little success to date. WASREB have now approved PBCs as an official engagement model, whilst continuing to closely monitor the developments in Murunga South. KMT will need to continue to work with them to ensure the PBCs potential is met, and that the enabling environment remains positive.



5.

WSPs IMPROVE THE STRENGTH OF THEIR CORPORATE GOVERNANCE AND THE EFFICIENCY OF SERVICE DELIVERY

a. How processes and systems can improve management capacity, corporate governance and commercial incentives for better services

When WSPs rely on basic systems and processes, it is difficult to establish strong corporate governance or incentivize performance improvements. For example, in Tachasis County, the local WSP started with no meters, and so could not know the amount of water produced, used or wasted. This meant they used only flat rates to bill customers and were unable to report reliable data to WASREB. This lack of information reduced accountability at the WSP and sector level, and services were of low quality.

KMT has worked to solve these issues by stimulating multiple changes in the market, which have ultimately strengthened performance and governance. They first involved the introduction of technical improvements to WSPs through training and capital investments.

This built KMT's credibility within the market and allowed them to form relationships with stakeholders. KMT then worked with WSPs to strengthen corporate governance through private sector principles. For example, metering was the early focus in Tachasis, reducing losses, increasing revenues and generating data. This quickly developed into wider change, and data is increasingly used as a management tool for strategic planning and performance reporting.

Finally, KMT targeted development within sector governance to embed changes nationally. By being adopted by institutional actors such as the WSTF and WASREB, models have begun to reach significant scale. The enabling environment has also developed, and WASREB are using regulatory changes to

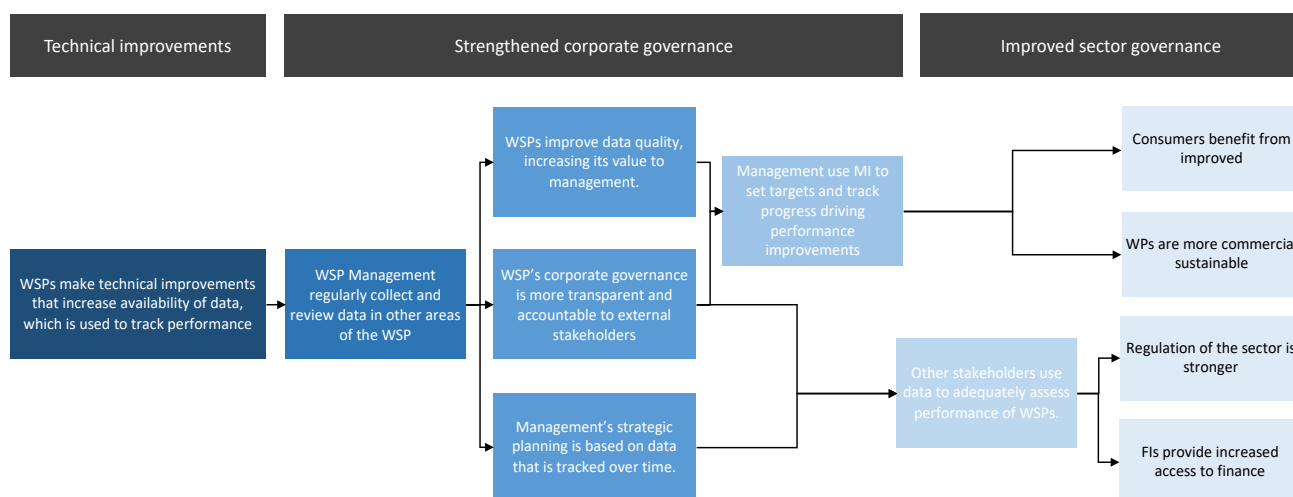


Figure 8 – Using technical improvements to spark strengthening of corporate governance

b. Steps towards change

■ Implementation of technical improvements that reduce NRW, and capacity building that allows tracking of performance data

The first intervention implemented by KMT was to introduce a number of techniques for reducing NRW. Whilst these were not new, KMT's approach ensured WSPs had the capacity to collect and analyze related performance data. WSPs began to value data as management information that could be used to track progress and plan for the future. These changes, particularly in data use, are a significant first step to WSPs becoming more effective, laying the foundations for broader changes in the sector.

These technical improvements also allowed KMT to quickly demonstrate their value to stakeholders.

By implementing tried and tested techniques in an effective way, whilst building the capacity of WSPs to run these themselves, KMT positioned itself as an effective and trusted partner. This meant that, from an early stage, KMT had good access to, and influence with, WSP leadership.

WSPs have applied four main techniques in relation to their capacities and objectives. These include increased metering, GIS mapping, automated billing systems and the establishment of district metered areas.

• Increasing metering

Intervention	Meters installed/replaced and meter readers trained on proper reading and recording
Impacts	WSPs can track water use, understand water losses and accurately bill customers Revenues are more closely linked to levels of service delivery
Challenges	Some meters in the market are poor quality, with guidance now available to WSPs
Behavior shifts	WSPs are using accurate metering data to assess impacts of other interventions WSPs are investing in their own metering recognizing the commercial benefits



“When we started with KMT, we had around 300 connections, and no metering was done. Connections are now 934, of which 90% are metered. Metering is the key to the change. New connections began appearing and we were able to assess how much water was being used. Once this information was being gathered, we had confidence in being able to collect revenues from the water supplied.” - Tachasis WSP

• GIS Mapping

Intervention	GIS mapping used to track location of key infrastructure and connections
Impacts	WSPs better understand their network and their knowledge gaps
Challenges	Where institutional memory is lacking, it is very difficult to locate all pipes
Behavior shifts	WSPs use data to identify areas for expansion or investment In some cases, GIS is used to map KPIs across areas giving improved performance data

“KMT has helped to map all pipes, which means we are able to see where all of our lines are using software. This map helps us in planning future projects. Using the GIS mapping, each zone also has the number of people and the number of connections. The process is now to identify, through revenues, where potential issue areas are, highlighting where there may be busts.” – Nanyuki WSP



• Automated billing systems

Intervention	Introducing new billing system that generates bills centrally, deliver these via text and allows mobile payments direct into a central account
Impacts	Operational costs are significantly lower with less staff time needed and fewer complaints Increased transparency and accountability with accurate and timely data
Challenges	Heavy support in a one-off investment brings into question the ability to replicate
Behavior shifts	Data allows WSPs to quickly identify issues and take quick corrective action, either by challenging staff or avoiding customer debts building up to unmanageable levels Bills that are transparently produced and paid create higher customer satisfaction Accurate reporting signals systems maturity to FIs, increasing access to credit



“A new billing system now means that customers can pay for their bills via mobile and has increased our ability to collect payments. Bills to consumers in general have increased, and customers perceptions have changed. They are now accepting these bills and paying using their phones.” - Isiolo WSP

“Complaints from customers about inaccuracy of bills are lower because after payment we use a bank. Now the company goes direct to the bank to see who has paid, which is more efficient.” - Tachasis WSP

• Establishing District Metered Areas (DMAs)

Intervention	Introducing DMAs using existing metering and GIS mapping, which allow monitoring of all inflows and outflows within a designated area
Impacts	WSPs have in-depth and timely data on water supply/use for monitoring and planning
Challenges	Management capacity and infrastructure is vital, with some pilots failing due to this
Behavior shifts	Gradual increases in use of data has led to WSPs with high capacity implementing systems that accurately track water supply / use and quickly identify issues Where successful, the model is being expanded independently



“The impact of DMAs has been huge. Now, we are able to identify where we are losing water, and the scale of these losses. In establishing the extra two zones, the process was completed in house, with the skills that we learnt from KMT. We have now begun using Open data kit where you can submit field data to a common server. This allows data to be uploaded via smartphone from the field, and the board regularly reviews this data to assess progress against the strategy.” – NAWASCO

Box 5:

Increasing customer satisfaction with service

By improving service levels, WSPs have increased commercial viability. They have also built relationships with their customers, who are increasingly satisfied with water services. This is having multiple effects, and in some cases is leading to increased economic activity in local communities.

“Before, there were exaggerated bills and late bills. The WSP was quick to disconnect, but very late to inform why you had been disconnected. The water supply could easily be off for 1 to 2 weeks. Without water for 2 weeks, you don’t know why you’ve paid. But now, we are happy. Since then, there has been large improvement. I’m now requesting a second connection to extend my carwash. I am operating three machines, and so need another line for more water. Five years ago, this would not have been possible. Much more water is available now.”

■ Embedding private sector principles to strengthen corporate governance and increasing the performance of WSPs

The second behavioral shift in the market has been the adoption of private sector principles and strengthening of corporate governance. KMT have stimulated this by building upon WSPs’ collection and use of high-quality data in relation to specific practices. By encouraging the organization wide collection of data, KMT has helped WSPs to gain improved information across their operations on which to base more strategic decisions. KMT’s credibility in the sector has also been important, giving access and influence to introduce changes at the board level of WSPs.

KMT’s implementation of governance changes had two main focus areas. KMT first began working with WSPs to support the development of practical strategies, based on WSPs’ context, objectives and data. Second, by subsequently supporting the operationalization of these strategies, KMT built the capacity of WSPs to identify and solve structural gaps. Throughout this was a focus on institutionalizing the use of data as a management tool, with boards using data more consistently and in a greater number of areas.

To institutionalize the use of data for WSP-wide decision making, KMT provided consulting services to management teams to assist them in creating clear strategic plans, with measurable goals, collectable data and transparent reporting. KMT input was

limited to coaching during the process and providing feedback on final versions. This WSP led process has driven solutions that fit within current operating structures, meaning that WSPs own the strategy.

• Building organizational structures

Strategies require supporting organizational structures, and KMT has provided further consultancy services to WSPs with the aim of encouraging formal structures. Examples include new NRW departments and the strengthened customer care of finance departments with decisions of which to pursue based on the strategic objectives set and weaknesses identified by the WSP. Clear structures

are significantly strengthening corporate governance. Strategic objectives are delegated to set departments, who are held accountable by the collection of accurate data. Greater specialization of departments is also increasing capacity across WSPs, who are recruiting based on specific skills, thereby increasing innovation and service delivery.

Improving governance

These two developments are having significant impacts on both corporate and sectoral governance. Corporate governance is more formal, with structures and policies that measure progress towards clearly set objectives that are transparently reported. This brings performance improvements, reducing NRW, increasing revenues and providing better services. These are all good for business, with the financial sustainability of WSPs greatly enhanced. Broad managerial changes have gone deeper, and WSPs have, for the first time, begun to make decisions based on the returns they will see, rather than on what is available from the government or donors.

Sectoral governance benefits from the increased amount of high-quality data. WASREB better understands the sector, providing improved accountability information for policies. There is better information for financial institutions, who can now begin to understand risks within the sector. This, with the improved financial health and reporting capacity of WSPs, is leading to some being able to access finance for the first time, a vital step if the water sector is to meet the macro-level funding requirements for future service delivery.



The approach to creating the strategic plan was different with KMT. This time, the strategy was developed by us. This started on the ground, came to the management team, stakeholder teams and then the consultants from KMT only came at the end to finalize the plan. This means that the document is ours, and we own the content. We might not need any consultants anymore.”
– IWASCO WSP

Box 6:

Increasing efficiency to decrease pressure on water resources

The impact of these measures on efficiency of delivery is clear. NAWASCO piloted their first DMA in 2016, and across every efficiency indicator, the DMA has seen greater improvements than in the WSP. One of the most significant results is that revenues have increased whilst production of water has fallen, due to decreasing NRW rates. The WSP has moved from producing 18,000 m³ per day to 15,000 m³, with targets to reach 12,000m³. This is reducing costs and decreasing pressure on water resources, an outcome that will be more and more important in water stressed areas.

“We noticed that even as production decreases, there is no change in revenues, and so why should we produce more? No-one is complaining that they do not have water, and so we will continue to decrease the amount of water produced, and decrease our NRW.” - NAWASCO

	Pilot DMA area	NAWASCO Total
Amount of water produced (m ³)	- 14%	+ 5%
Volume of water billed (m ³)	+ 57%	+ 2%
Value of water billed (KSHs)	+ 25%	+ 1%
Total revenue from water billed (water only)	+ 19%	- 3%
NRW	- 14%	+ 5%

■ Engaging with national institutions to support the scale-up of performance improving techniques

The improvements in performance of WSPs have demonstrated the value of supporting behavioral changes. Alongside the broader changes in the political economy, KMT leveraged success to engage influential stakeholders in the market. This has been a gradual evolution, and KMT have used various avenues to share their work, for example by jointly sponsoring the Kenya Water Week Conference 2016.

Having demonstrated the potential for change, KMT worked with institutional actors to increase their understanding of these changes, and of what is required to support them. In improving corporate governance with WSPs, the work with WASREB and WASPA has been most significant, enabling KMT to influence national practice and increase the support to WSPs.

For example, KMT and WASREB jointly undertook an NRW audit. This assessed nine WSPs' capacity to implement best practices and identifying what additional steps were required for individual WSPs and at a national level. WASREB have continued to work with KMT to design initiatives for improving performance. This demonstrated a significant change in WASREB's activities, taking a more supportive role in the market. WASPA has also been engaged by KMT, to build their ability to bring together WSPs and increase adoption of improved models. By working more closely with WASREB, WASPA are playing a key role for capacity building of WSPs. These activities included:

• NRW guidance

With KMT technical assistance, WASREB completed an NRW audit which showed existing techniques were not well prioritized. WASREB revised national guidance materials, with additional prioritization of actions.



“The standards now have a clear sequence of activities. They focus on the basics first, the things that all WSPs can do to reduce NRW without investing significant amounts of money. After the revision of the standards we are hoping for better uptake and improved sector

• National corporate governance templates

To improve WSPs' ability to improve corporate governance and access to finance, WASREB has created business planning templates. This is in recognition that governance is the critical issue for many WSPs. WASREB is also partnering with KMT and WASPA to provide training on governance to both WSPs and counties, having developed a governance indicator to track performance over time.

“The questions we ask are, “Why is it one institution is doing better?” And if so, can we create a platform for learning, so that all may improve their performance?” - WASPA



• Performance improvement plans

WASREB have created performance improvement plans for WSPs. These aim to encourage struggling WSPs to integrate more strategic thinking into their operations, providing greater clarity and accountability when compared to previous policies. KMT is also working directly with selected WSPs - in Isiolo, Nanyuki, Kakamega and Malindi - to strengthen the culture of performance setting and measurement. These have used templates that set 100-day targets.



“Utilities are developing performance improvement plans, which previously have been missing. These ensure that the utility is giving clear steps to WASREB about what actions it is going to take to improve performance in the next period.” - WASREB

c. Lessons learnt

■ To target governance, KMT first needed to tackle technical improvements

One of the key lessons from KMT's work comes from observing the shift in the focus of interventions. Initial interventions targeted technical improvements, demonstrating KMT's credibility, vital for successful relationships with private companies. Using learning from these interventions, KMT's regular strategic reviews highlighted governance issues common across all stakeholders. As a trusted partner, KMT successfully engaged WSPs to bring in company-wide changes to behavior. The results of these

then provided examples for others and highlighted successful models to supporting institutions.

This final shift to institutional level players is the most significant for systemic change but was only possible due to the credibility KMT built. Rather than addressing governance head-on, it has been more effective in this case to start with on-the-ground technical issues before moving to the higher levels of governance.

■ Start-up capital is necessary to bring changes to WSPs

A second lesson has been the need for capital investments that facilitate operational changes within WSPs. The water sector is a capital intensive one, with significant amounts of infrastructure required for the extraction, treating and delivery of water. Clear models for improving governance and operational efficiency have increased the appetite and capacity for change. However, WSPs current low credit worthiness and limited understanding of financing means they are unable to access finance with which to make investments.

Typically, programs using a market systems approach tend to focus on soft skills. Funding capital for infrastructure is avoided, except in rare cases for a demonstrative effect. KMT's approach has been different, and there has been frequent funding of last mile infrastructure within different pilots. These have been deemed appropriate due to the capital requirements of the sector, and the inability of WSPs to access it. Without investment, WSPs would remain

constrained by access to capital regardless of any continued development in managerial capacity. Capital investments by KMT have now led to new models for the market, an increase in the will and skill of partners, and stronger evidence for the viability of investments in the water sector.

This success is not given, and there are examples of other projects providing capital which has gone to waste. To reduce this risk, KMT conducted assessments on the ability of WSPs to manage assets, whilst providing additional managerial capacity building. For example, KMT provided IWASCO with meters, pipes and a billing system. Capacity building alongside these physical investments has led the WSP to establish and successfully run a pilot DMA, going on to create a further two independently. Here, supporting capital investment with capacity building enabled significant improvements and catalyzed further investments.

d. Future focus

■ Continued strengthening of governance for sector wide performance improvements will require

For the continued improvement of performance through strengthened corporate and sectoral governance, the development of effective dissemination channels for best practice and learning is necessary. Without these, changes will only occur where there is tailored support, an inefficient way of producing sectoral change. Better channels of dissemination will increase the rate at which successful techniques, models and mentalities reach WSPs and other, informal providers of water services.

KMT have begun targeting interventions here, bringing in institutional partners to provide scale and sustainability. WASPA, WASREB and the WSTF are collaborating to provide water sector governance training. WASREB is also developing guidance

materials and training to help management of water services. This will be increasingly important as counties grow in their capacities post-devolution, becoming more involved in the delivery of water services.

There is a risk, however, that WASREB are not able to fully fulfil this market supporting role. WASREB have limited capacity and presence, meaning the role of other supporting actors is important. KMT is working with WASPA to strengthen its internal capacity and increase WASPA's own internal governance. Importantly, to ensure WSPs' ability to have some influence into the direction of the sector, KMT is also supporting WASPA's capacity for advocacy and communication.



6.

WSPs ARE TARGETING THE POOR AS CONSUMERS, AND ADOPTING NEW PRODUCTS TO EFFECTIVELY REACH

a. Why specific targeting of the poor is needed within urban areas

The urbanization rate in Kenya is growing rapidly and 40% of this population live in registered LIAs. The real number, however, is expected to be much higher given the challenges faced in mapping these. This population have much to gain from improved access to water, with services currently far below the standard seen in higher incomes areas.

KMT, through WSUP, worked with WSPs to create incentives for the provision of services to LIAs. These

models increase their capacity to offer differentiated products that are accessible to the poor. This is increasing WSPs performance and understanding of customers, leading to more connections and revenues. KMT, via WSUP, also supported WASREB to create additional incentives for providing services to the poor by introducing a new regulatory performance indicator. Whilst currently optional, this has brought pro-poor services to the attention of the whole sector.

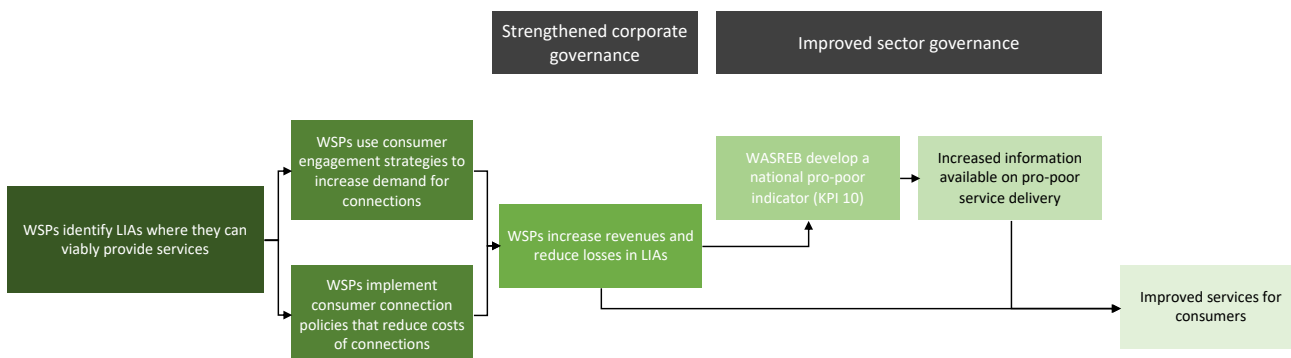


Figure 9 – Introducing new models for the effective targeting of consumers in LIAs

b. Steps towards systemic change

■ Stimulating the creation and implementation of marketing strategies and social connection policies that target the poor

LIAs have typically had high NRW and low revenues, presenting a problem for WSPs looking to maximize surpluses. WSPs already understand that individual metered connections are the best way to reduce NRW, however a model for encouraging these with poor consumers was missing. KMT worked with WSUP to develop a commercially viable model for providing water to LIAs, using a social connection policy. These make connections more affordable for the poor and provide revenue growth for WSPs. Through these policies, WSPs are providing water to LIAs at a

profitable rate and increasingly see the poor as part of core business. This shift is important for the long-term improvement of services to the poor.

Social connection policies helped to establish LIAs as potentially viable markets. However, for increased uptake KMT worked further with WSPs to strengthen consumer engagement. At this stage, KMT supported the development of marketing strategies specifically targeted at consumers in poor areas in Mombasa, Nakuru, Naivasha, Nairobi, Kisumu and Malindi counties.

Increasing coverage with social connection policies

A social connection provides short-term finance for connections, anchored to a landlord, with payments spread across 6 – 12 months. These policies have significantly increased the number of direct connections demanded in LIAs. Benefits for the poor are wide-ranging. Improving water access improves

health and reduces time required for water collection. Income is also saved, with water from individual connections cheaper than from kiosks. WSPs are increasing revenues and reducing NRW, and their perceptions of consumers in LIAs is changing.



“A social connection policy was introduced in 2016 with the assistance of KMT through WSUP. This means a connection is affordable. The benefits for consumers are improved access to water, saved time, easy bills and cheaper tariffs. The benefits to NAWASCO are easier billing, lower tariffs and reduced NRW. Consumers in LIAs do have the money and ability to pay for water. The perception that they cannot pay is not true.”
- NAWASCO

Consumer outreach targeted at the poor

Marketing strategies directed at the poor are built on how to best engage, through locally based channels. This helps change the perceptions of low-income consumers who have a long tradition of self-reliance for water. These have been effective, for example in

Nakuru, after KMT/WSUP supported a pilot, the WSP retrained 37-meter readers to become agents in their local areas. Since 2018, agents have achieved 738 additional connections, and the WSP has designated a distinct budget for marketing in LIAs in the future.



“The marketing strategy developed with KMT has been a fantastic model to demonstrate commercial viability of supplying water to LIAs. The marketing strategy has been different in some places. In Malindi, WSP marketers were trained and then sent to LIA areas to increase demand for water services. A low-income consumer zonal office has been established in Kinburu, which increases focus on gaining revenues. In Nakuru, the WSP moved to meter readers being trained as marketers. In Kisumu WSP, they used kiosk operators to increase coverage to LIAs.” - WSUP

“The number of customers has increased by approximately 3,000. This has been caused by the marketing work, where guys are specifically marketing to LIAs. They ensure the residents can see the benefits of having individual connections. This increases revenues, improves service delivery and then impacts the health of the local community.” – KIWASCO WSP

■ Engaging with WASREB to bring regulatory pressure to encourage the inclusion of the poorest

With access to water now a constitutional right, WASREB have increasingly pushed WSPs to adopt inclusive approaches. Having built models that have established the poor as a viable market, WSUP and KMT partnered with WASREB to develop a new KPI to stimulate their adoption. These were tested with large WSPs, before WASREB introduced the KPI into national regulatory reporting.

This indicator is currently optional, but has created a fundamental shift in sectoral governance, creating regulatory pressure to provide services to all consumers. Currently, 36 WSPs are reporting against

the KPI, whilst many more are trying to understand how to begin. WASREB is further encouraging this shift by requiring WSPs to have a pro-poor coordinator. This means that in WSPs across the country, there is a consistent and material focus on the poor, rather than simply focusing on NRW and revenues. Increasing access to LIAs is becoming part of day-to-day operations for WSPs, and WSUP/KMT's model is a tool for WSPs seeking to do this in a commercially viable way. WASREB is also reducing barriers to reporting, by redesigning data collection systems to encourage WSPs to register LIAs and provide specific disaggregated data.



“WASREB's work to entrench this a core service is working. The indicator has brought more emphasis onto the pro poor, and has brought resources into the pro-poor departments of the utilities. People are now beginning to understand what this department means, and they sometimes call to ask how we run our pro-poor department.” – KIWASCO WSP

c. Lessons learnt

■ The poor can be viable market for WSPs implementing pro-poor approaches

Findings from external studies indicate that the poor are often willing to pay significantly more than current tariffs if they are guaranteed a level of water supply that meets their expectations.¹⁶ This echoes a significant finding from the work of KMT, that the poor can be a viable market for WSPs. Where WSPs have successfully targeted LIAs, through social connection policies and marketing, they have seen a significant return on investment. These returns are through more connections and lower NRW, both of

which increase profit per connection. The difference in KMT's work is that this lesson is demonstrated clearly through the performance improvements WSPs have already achieved. This is important for businesses in the Kenyan water sector, who want to see a working example of a model that brings commercial returns before investing themselves. The findings from KMT's work will be vital as more WSPs look for ways to supply water in LIAs.



“We can now say that poor people are better at paying [than before]. Because of this, LIAs are now showing to be an area of growth for the WSP. We are now an income generating department.” – NAWASCO WSP

“Social connection policies are close to 100% returns [on the microcredit offered]. For a WSP, you get more personal connections and revenues increase. There are going to be more people getting the commodity, and they are more likely to consume more. – KIWASCO WSP

d. Future focus

■ More infrastructure is needed before more WSPs report against WASREB's pro-poor indicator

WSPs' focus on the poor has been significantly increased due to the introduction of a national pro-poor indicator and the need for a designated coordinator. Despite this, many WSPs still do not report on the KPI for two main reasons: either they have no registered LIAs to report against, or they do not know how to report against the indicator. Further, there is relatively little information on what the stipulated pro-poor coordinator role entails, or how to conduct the data collection/analysis that is required for reporting.

WASPA is taking a role here, encouraging those at the forefront of LIA service delivery to share best practices. This role is important but can be developed further, for example, by training also being offered to non-member WSPs. WASREB's engagement during the development of best practice training materials will

also be important, to ensure techniques are recognized and endorsed. The WSTF is supporting, by mapping new LIAs for WSPs. The pace of this mapping, however, is slow, and for WSPs to be effectively judged against each other needs to have been conducted in all regulated areas. The WSTF could be further supported, by bringing in other stakeholders to help in mapping and maintaining records. In both cases, there is a potential role for a development partner to provide guidance.

Finally, community engagement could prove a constraint to the growth of connections, with self-reliance still prevalent. Community engagement strategies need to be strengthened using KMT's experience with successful schemes, and disseminated through existing channels, such as WASPA or WASREB.

¹⁶UN World Water Development Report, 2019

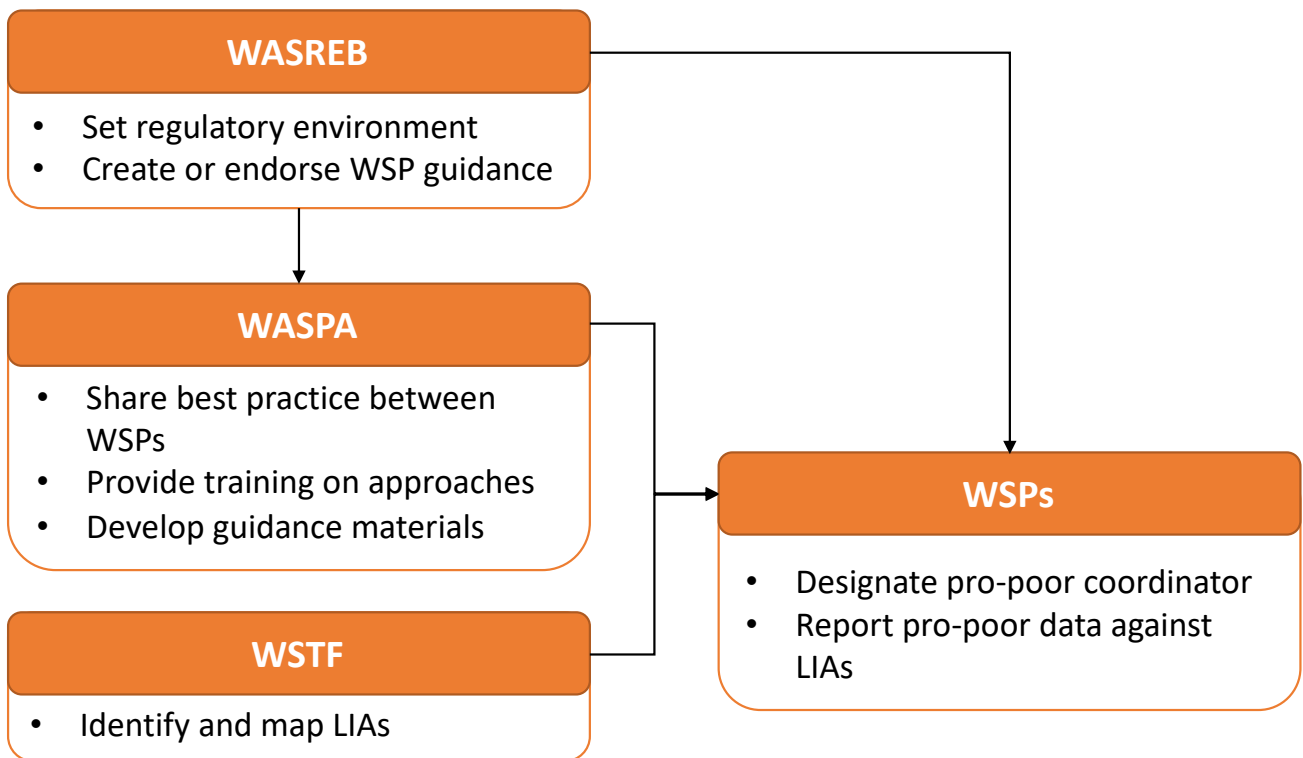


Figure 10: Increasing incentives for WSPs to target the poor

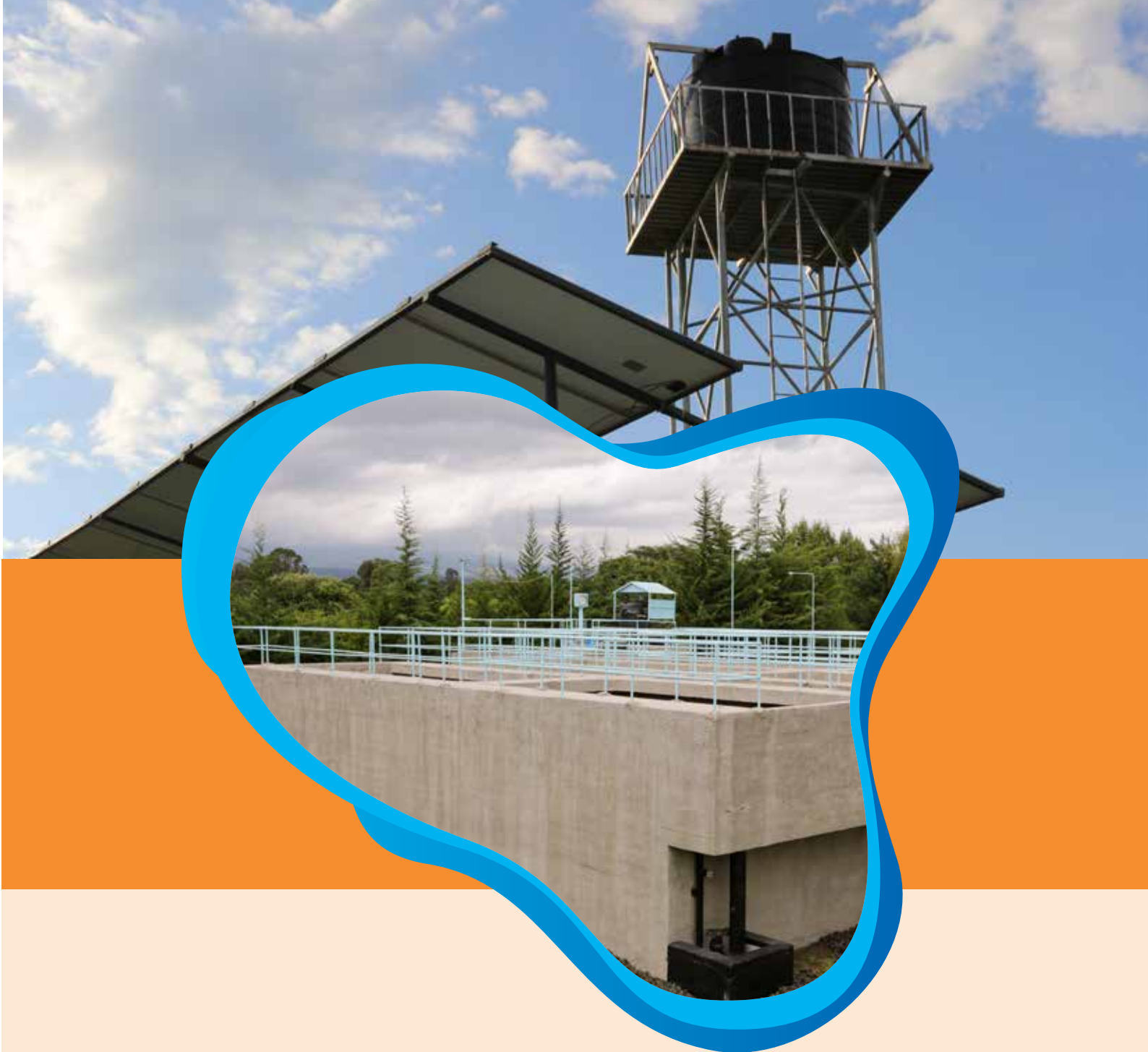
■ Financing options for social connection policies need to be made available

Social connection policies are effective at increasing water access in LIAs whilst increasing revenues for WSPs. However, implementation is constrained by access to finance. WSPs do not have the resources to provide credit to the poor, and wider adoption is predominantly where donor funding has created revolving funds. Neither are consumers in LIAs able to access micro-credit for connections from other sources. For long-term sustainability, WSPs need access to finance in order to pass credit on to customers in LIAs.

For this finance to be granted, lessons from the pilots run by selected utilities need to be clearly articulated into materials that can be used by WSPs. With this, WSPs will have the capacity to run inclusive models whilst also being aware of how to access finance to support them. For supply of finance, specific financial products need to be designed and tested, through supporting actors including the WSTF or commercial banks to understand the sector.







7.

FINANCIAL INSTITUTIONS ARE CREATING PRODUCTS FOR THE WATER SECTOR, INCREASING ACCESS TO FINANCE

a. The water sector is capital intensive, but access to finance is limited

The water sector requires significant physical infrastructure to function efficiently. The high capital costs of infrastructure are a frequent constraint, with providers in both rural and urban areas lacking resources. Without being able to finance these investments, service providers are unable to bring infrastructure up to a level that allows for commercial viability, and so remain reliant upon external financing even for daily operations.

KMT's work to formalize the way WSPs and rural operators work has strengthened both corporate governance and the capacity for data collection and

reporting. With these changes, KMT has supported the emergence of bankable organizations able to reliably report strong financial performance. Finance for the sector, however, is not readily available. To address the supply of appropriate financing, KMT have worked with commercial and institutional financiers to develop products suitable for the investment in water supply. This has been through highlighting the opportunities to financiers, addressing concerns about actor's ability to repay, and in helping financiers to understand the requirements of both formal and informal service providers.



“Traditionally WSPs have not been seen as profit generating to be able to pay back finance. A lot of banks have not focused on lending to the sector. Corporate governance is a big issue, and sustainability is another.” – Family Bank

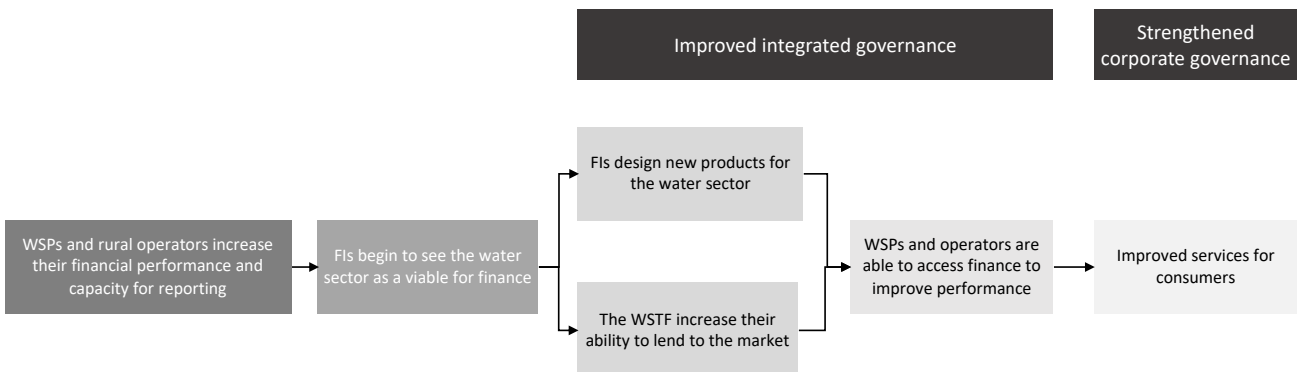


Figure 11 – Supporting the transfer of information to increase access to finance

b. Steps towards change

■ Increasing small-scale finance for rural operations

KMT's work has resulted in models that have shown the potential for significant increases in revenue and positive returns on investment. However, operators in rural locations remain significantly constrained in making these investments. To increase access to small operators, KMT partnered with Kenya Commercial Bank (KCB) Foundation to pilot an equipment leasing model for meters. This was made possible through the proven returns on investment that meters quickly provide, and KCB Foundation's greater confidence in rural operators. Meters are provided directly to an operator or WSP, who begins repayment after an initial grace period.

First run in 2016, the pilot resulted in five rural projects accessing finance worth 3.9 million KSHs (38,300

USD). This has resulted in mixed success. One utility has been able to fully pay back the loan in the allotted time and has subsequently begun negotiations for a much larger loan. Of the remaining four loans, three are still actively being repaid, whilst one has not been paid at all. As of September 2019, KCB Foundation had only recouped 28% of their loans. Whilst this model is not yet ready for scale, the pilot has generated significant learning, and KCB are planning to apply lessons learnt within a second round of financing. Importantly, it has proven that providing finance to rural areas has the potential to be viable, if financial institutions are able to identify WSPs that have the ability to finance loans.

Box 7:

Increasing access to finance in Tachasis

Tachasis have grown from a WUA, to a WSP, seeing significant changes in its ability to access finance. With KMT support, the WSP has steadily improved its internal processes and governance, most significantly in billing, bringing greater transparency to the revenues it collects.

“All revenue was not channelled through the bank and most of our payments were in-kind, where we collected maize from farmers at the harvest. We incorporated as a business in 2013, at which point we began using banking services. This has enabled the bank to assess the rates of turnover and revenues. KCB gave us finance for 200 meters, which has been fully paid back. We are now looking at buying 1,000 meters, for meter replacement and for increased coverage. Ten years ago, finance would not have been possible because our banking system was not up to standard.” – Tachasis WSP

■ Strengthening the WSTF’s role in the sector

WSTF’s new mandate led KMT to partner in the development of its 2018–22 strategic cycle, focused on enhancing sustainability. KMT provided consultants to work on a communications strategy, resource mobilization strategy and investment policy. This has increased the WSTF’s ability to raise funding, provide a greater range of products, and engage with rural communities, ultimately increasing finance for the development of water services in underserved areas. These measures have also made the organization more transparent, clarifying the processes they follow in administering finance to prospective borrowers.

A resource mobilization strategy was created with support of KMT. This targets government and donor

funding, commercial finance, guarantee products and a water levy to provide an additional KSHs 31.9 billion (312 million USD) in funding for the WSTF by 2022. KMT has also worked with the WSTF to update their investment policy after enactment of the Water Act 2016 increased their mandate. As a result, the WSTF has changed its approach to financing the sector, moving away from 100% grants and making commercial loans for the first time, worth approximately 713 billion KSHs (7 million USD) since January 2019. As these measures are operationalized, changes will give the WSTF a broader funding base, with long-term sustainability for the financing of the water sector.

c. Lessons learnt

■ There is still a significant way to go before commercial finance is utilized by WSPs.

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Accessing finance for WSPs has only recently become a possibility, where previously they were constrained by poor governance and low creditworthiness. This means the market is still nascent, with a large number of WSPs who cannot meet the requirements of the financial sector, and FIs who do not understand sectoral risks. Despite this, commercial banks are developing interest. KCB has already run a pilot for financing projects in rural areas, and Family Bank have designed a water sector specific product, which lent 120 million KSHs (1.18 million USD) between April – September 2019. Whilst these have been backed by guarantees from other partners, and are not purely market led, they still represent significant changes in FIs behavior towards the sector.

A current binding constraint is that WSPs do not legally own any of the assets they manage, and this means they are not able to give any collateral to banks offering loans. Currently, the only solution has been to leverage cash guarantees from development partners, but this is not a long-term solution. Therefore, it is not enough to build capacity of operators whilst

fundamental blocks to finance exist. Solutions could focus on changes in laws for the sector, or in building more sustainable ways of providing cash guarantees, for example through the WSTF.

The capacity of WSPs to manage loans is also still under question, affecting both the supply and demand for finance. Only 8 WSPs have O&M recovery rates over 120%, the rate at which WSPs may begin to be able to service debt. Political interference also continues to disrupt the sector. For example, Family Bank issued a loan to one WSP in 2017, which still has not been disbursed due to political changes within the county. This increases the risk of lending to the water sector, limiting supply. Further work is also needed on the demand side. WSPs need to understand the financing options in the market, how to meet requirements and manage loans. Once this knowledge is available, demand will increase from organizations in the sector, prompting greater focus on solving the constraints to access to finance in the sector.



“One of the constraints is that there’s been a lot of political interference. We actually approved a facility for Murunga South in 2017, but to date we have not dispersed it. This gives us cold feel to put our money out there with low confidence about recouping it.”
– Family Bank

d. Future focus

■ Attracting bond finance for the water sector

With increasing formality of the sector, there is the potential to use more sophisticated debt instruments to increase available finance. As WSPs becoming more bankable, the sector needs to find ways of attracting more investment, with levels still far below those targeted by the Government of Kenya. Bond financing for infrastructure investments is common in some industries but has never been used in Kenya for the water sector. However, with the growing maturity of the sector, it was included as one of KMT’s recommendations for funding options. The idea of pooled debt being issued as an infrastructure bond

has also generated significant interest from both the Kenyan and Netherlands Government.

The Kenya Pooled Water Fund is the product of this evolution of thought and represents the first innovative capital market financing. This is being done through a new bond being offered to the market, which will be the first infrastructure bond offered for the water sector in Kenya. KMT’s support has made it possible for two WSPs to produce detailed technical design and tender documents that can attract finance, however continued guidance will be required from both KMT and other supporting actors.



8.

KMT's IMPACT

Since 2011 there have been significant changes as a result of, and complementary to, the work completed by KMT and other implementing partners. Between 2010 and 2018, the market has seen WSP turnover grow by 62%, and active connections by 55%. Recorded NRW has dropped from 47% to 41%, and the number of staff employed by WSPs has risen from 7,818 to 10,988. Political support has translated to continued developments in sectoral governance and significant reforms, whilst government spending has risen from 38.6 billion KSHs between 2010/11 to 52.9 billion KSHs in 2018/2019. From interventions in the water sector, KMT has contributed to these changes, and recently reported the following developmental impact:

- 103,981 households accessing clean and safe drinking water.
- 3.68 million USD in savings for the poor.
- 8.21 million USD of investments mobilized, of which 81% is public and 19% private.
- 78 market actors engaged, with 64 improving performance.

Underlying this impact has been significant change in the sector. KMT have brought 27 innovations to partners in the water sector, including equipment

leasing models, performance improvement plans, service delivery models, performance-based contracting, paperless billing and bond financing for infrastructure investments. This has created behavior changes at the grass-roots level, with numerous examples of improved performance that have laid the foundations for engagement with increasingly influential stakeholders.

WASREB, the WSTF and WASPA have supported the uptake of KMT models at a national scale. WASREB have taken an increasingly supportive role in the market, providing guidance on NRW reduction, the development of public-private partnerships in rural areas and on pro-poor approaches to water service delivery. The WSTF has changed its approach to financing to be more relevant for the sector, whilst acting as a scale-agent for the SDM in rural areas. WASPA have supported member to adopt beneficial practices, whilst increasingly taking on a role as a central coordinator for WSP viewpoints.

By working within a sector that is undergoing significant structural changes, KMT has had the opportunity to significantly influence the direction of development. To date, this work has successfully achieved four main systemic changes to the benefit of the poor, with these changes likely to be sustained and scaled-up by actors in the sector.

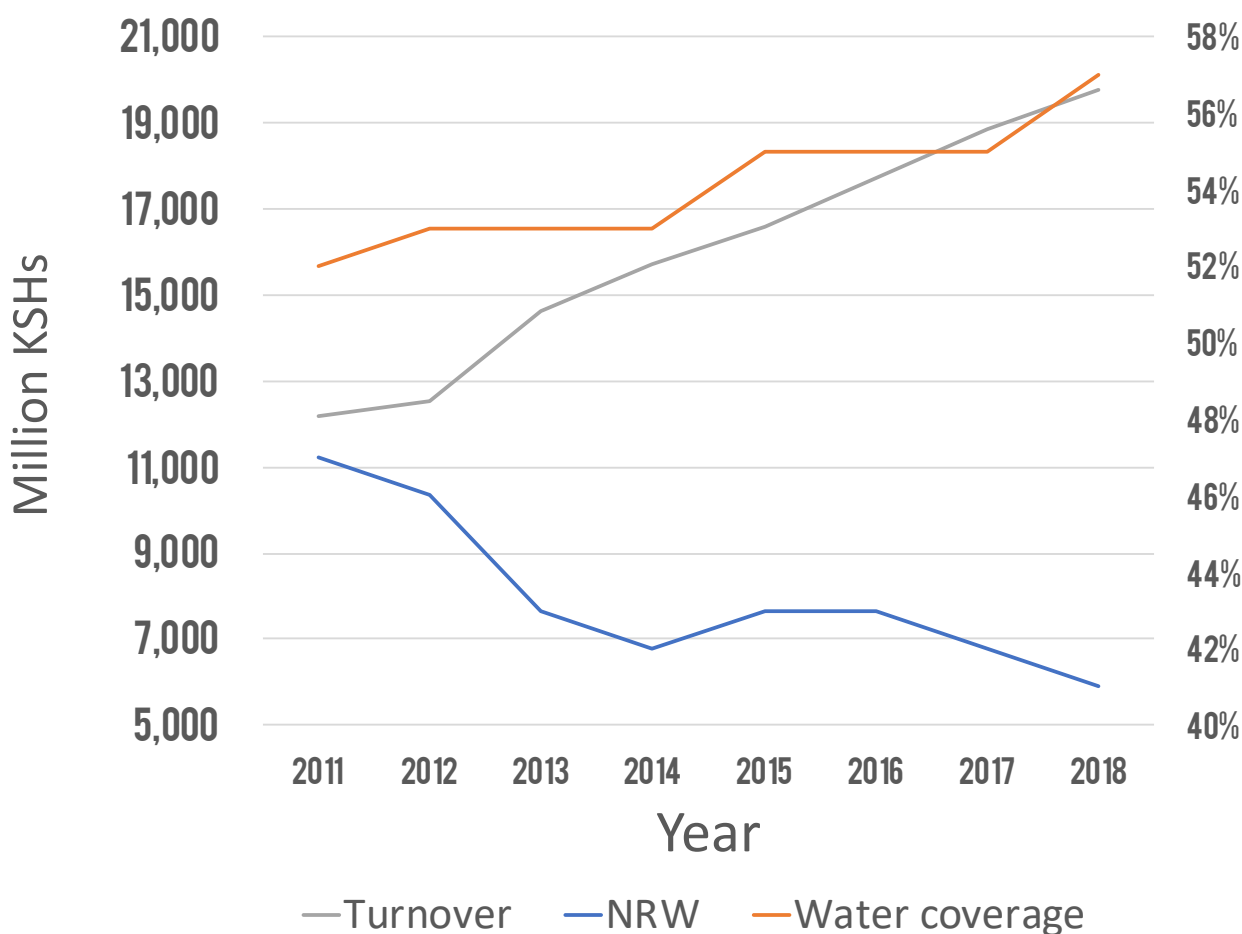


Figure 12 – Progress of select KPIs in the water sector



9.

SYSTEMIC PATHWAYS FOR A TRANSFORMED WATER SECTOR

Despite the growth seen in the water sector, there is still a significant proportion of the population without access to clean and safe water, whilst the majority of service providers continue to need large subsidies from the government and donors. KMT's work has

created significant change within the market, and there are clear pathways for these to continue to impact the sector, improving outcomes for the poor. The key pathways are outlined below:

Professionalization of service provision and regulation in rural areas to increase quality and sustainability

KMT have designed and tested models that have increased the professionalism of services in rural areas. These have strengthened corporate governance within rural operators, integrated governance between the public and private sector, and sectoral governance by increasing the information available to institutional players.

To continue along this pathway, there needs to be greater uptake of commercial models in rural areas encouraged by institutional players in the market. WASREB is key here, who have the capacity to create a conducive environment by providing support for the uptake of models in rural areas and creating regulations that recognize the constraints faced by informal providers within the current system. The WSTF also has a large role to play, by continuing to roll-out models for rural service delivery.

Technical assistance will be important for successful implementation, and the WSTF will need to expand its capacity to be able to provide this. To facilitate capital investments in support of new business models, financial institutions will need to develop a greater understanding of the water sector in rural areas, enabling them to lend to the sector.

KMT also has a role to play, and has identified the following key areas for continued development:

Support the operationalization of regulation and management tools for rural water services

Partner with the WSTF to develop financing and capacity-building component for rural water utilities

Identify and support counties and large-scale rural water utilities to professionalize service delivery

Increasing the adoption of performance improving measures to achieve operational efficiency within WSPs

By implementing technical improvements, WSPs have demonstrated the ability to significantly improve operational efficiency. Whilst the sector is still relatively informal, continued work is required to support adoption of technologies and models, giving the tools to managers to be able to drive performance improvements. Players with the ability to effectively reach numerous WSPs will need to take a leading role, with WASPA, WASREB and financial institutions all

with roles. WASPA will need to build its capacity as a key player for convening WSPs, sharing best practice and for acting as an advocate for WSP interests to WASREB. WASREB should continue to improve the guidance they give to WSPs.

In support of these actors, KMT is working to encourage the increased adoption of efficiency and performance by enhancing processes, technologies and consumer-centric operations.

Improving governance at each level

Proper governance is critical for sustainability. Good governance at all levels, from regional utilities to national water institutions, is the heartbeat of sustainable water services provision. To create this, stakeholders must target a variety of aspects, including: good supervision and oversight; stakeholder engagement; prudent financial management; integrity and accountability; robust performance management; information and control systems; good service

standards and arms-length operating for WSPs. A continued focus on strengthening governance across the sector will be the foundation for future growth.

KMT has begun to work with stakeholders to build governance capacity within WSPs, WASPA and WASREB. This work will continue as KMT initialize a model for governance strengthening that can be continued beyond the life of the program.

Increasing the variety of financial products available within the water sector

The variety of financial products available to actors in the water sector is very low, despite improving financial performance. The sector in Kenya remains dependent on tariffs and transfers for funding. Using other countries as models, increasing the use of repayable finance through a variety of financial products available to the sector can bring development of the sector, resilience to shocks, and contribute to meeting the governments' targets for investment.

One key stage will be further strengthening WSPs' financial health. Support for this can come through institutional actors, such as WASREB, WASPA and the WSTF who can encourage the uptake of best practice through a mix of technical assistance and supporting policies. Second, financial institutions need to improve their knowledge of the sector. This

is underway in some cases. For example, in Family Bank who have designed a water specific product. However, for finance to be available at scale, the general understanding needs to be greatly increased. Once the sector is understood, finance will be made available to actors in the water sector, enabling increased investment and growth. Finally, WSPs need the capacity to meet the requirements for financial products, and to manage finance once obtained. The issue of collateral needs to be addressed as a binding constraint, through either change in law or by building alternative solutions.

KMT is targeting the continued development of alternative financing, building upon the work already completed within lease financing agreements, PBCs and water specific products from commercial lenders.

Ensuring future water resources are enough to satisfy increasing demand

Whilst access to water is increasing, there is growing pressure on resource management. In some cases, this is already critical. In Isiolo County, river flows have been for the last seven years. After major drought in 2010, two additional river intakes were proposed to provide an additional 6,000m³ per day. Work was completed in 2016, however one source has now dried up, and the second can only be used for 2,250m³ a day. With demand at approximately 10,000m³, the WSP has a significant deficit to overcome, and it remains unknown if even the current extraction rate is sustainable.

As water delivery services continue to reach more of the population, water resource management will become ever more pressing. Whilst efficient delivery of water plays a significant role in reducing pressure on water resources, there is also significant need for more sustainable management of water resources to ensure supply for the system. This includes increased data for decision makers, the uptake of resilient technologies, and better management systems within regulatory organisations. A greater focus needs to be put onto this area of the market by all stakeholders.









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