Scaling Up Blended Financing of Water and Sanitation Investments in Kenya

Rajesh Advani

Abstract
This note looks at a series of interventions undertaken by the government of Kenya, with support from the World Bank and other development partners, to improve access to commercial finance in the water and sanitation sector. It describes recent sector reforms and innovative financing initiatives, and it draws lessons from interventions that support utility and community water service providers in accessing finance for infrastructure investment.

Development Challenge
Over the past decade, macroeconomic conditions in Kenya have improved, as has the welfare of the general population. However, about 43 percent of the population live below the national poverty line with many in this segment lacking access to piped water, sanitation and other basic services. The Water Services Regulatory Board (WASREB) estimates that 53 percent of the urban population and 49 percent of the rural have access to water. Access to improved sanitation is estimated at 30 percent and sewerage coverage is low at 16 percent.

County-owned water services providers (WSPs) provide services to 51 percent of the population in their service areas and 23 percent of the total population. Communities operate many small piped-water systems in rural and peri-urban areas. Operational and financial performance of providers is mixed, and only about half of 100 licensed WSPs cover operating and maintenance (O&M) costs through user fees, with weaker utilities relying on grants to sustain their operations. There are only two private providers currently recognized by the regulator—Runda and Kiamumbi.

The Kenya Vision 2030 national development plan seeks to make basic water and sanitation available to all by 2030. The annual cost of investment and rehabilitation needed in water supply is estimated at $303 million, and the sector has typically looked to the government of Kenya (GoK) and development partners for its funding. But with a budget allocation of only $193 million, there is a considerable gap in financing.

This gap could be partially filled through private sector lending to utilities, typically for revenue-generating investments with a shorter payback period. However, commercial lending to water utilities is in its nascent phase. Banks still see the sector as financially weak and unable to generate sufficient returns. Moreover, WSPs have limited capacity to provide collateral to secure loans and do not generate sufficient self-financing. Many have only a limited relationship with commercial banks and are not familiar with lending practices and what they would need to do to become creditworthy. These factors increase lending risk considerably. Furthermore, commercial interest rates are high, making it difficult for this source of financing to gain traction without strategic support from the international finance community to lower the weighted cost of borrowing.
Sector Reforms and Financing Initiatives

The Kenya Water Act of 2002 introduced important reforms in the sector, separating responsibilities for asset ownership and operation, creating autonomous utilities and an independent sector regulator, ring-fencing revenues within the sector, and establishing a framework for utilities and other WSPs to move toward cost-reflective tariffs.

Considerable public investment has gone to state-owned Water Services Boards (WSBs) to build and rehabilitate water-resource assets that they manage as well as treatment and distribution infrastructure operated by WSPs. Concessional loans and grants for notable projects include the following:

- African Development Bank (AfDB), World Bank, and European Investment Bank loans for major infrastructure projects, such as Ndakaine dam
- Financing by the International Development Association (IDA) for the Water and Sanitation Services Improvement Project
- Agence Française de Développement, Kreditanstalt für Wiederaufbau (KfW), and AfDB loans to the GoK to support WSBs and WSPs
- Grants from Swedish International Development Cooperation Agency, Japan International Cooperation Agency, the Dutch government, and the European Union for investments in utility and community water supply systems

This low-cost funding is critical for the development of capital-intensive infrastructure assets and is essential to utilities aiming to strengthen their operating and financial performance in order to access commercial finance at a later date.

Access to Loan Finance for Communities and Utilities

In 2007, the World Bank launched a pilot with K-Rep Bank, a Kenyan commercial bank specializing in microfinance lending, to incentivize rural and peri-urban communities to access loan financing to rehabilitate and expand small piped-water systems. Under the Maji ni Maisha loan program, investment projects of up to $200,000 that had potential to cover O&M costs and partially repay loans were identified. Qualifying communities contributed 20 percent of project cost up front, and K-Rep Bank financed 80 percent through a medium-term loan. On achieving preagreed targets, an output-based grant of up to 40 percent of project cost was awarded to communities that successfully implemented subprojects. Communities repay the remaining loans over five years through operating revenues from water sales. Technical assistance was provided to develop bankable loan applications and supervise project implementation. The program was scaled up with support from the European Union, and by 2012, some 35 communities had borrowed $3.4 million from K-Rep Bank, raised $1.2 million of equity, and accessed output-based grants of $2.8 million, which enabled provision of access to 190,000 people. Participating communities reported an increase in productivity, including supplementary income from micro-level animal husbandry and vegetable farming. It was estimated that every $1 invested in the subprojects yielded economic benefits of $3 to $4.

Building on the 2009 tariff reform led by the sector regulator, WASREB, the World Bank worked with utilities seeking to develop new infrastructure financed from their own revenues. Surplus revenues—monies remaining after statutory financial obligations, regulatory levies, and O&M costs—were earmarked for investment in system rehabilitation and expansion. A revenue-backed loan structure was developed through which utilities borrowed investment capital to be repaid through future surplus revenues. Four utilities—Embu, Malindi, Kericho, and Nakuru—received term sheets from a local commercial bank offering 10-year loans for a total of $11 million at market interest rates. The loans required a 50 percent partial credit guarantee from Gurantco, a company that helps overcome constraints in the supply of local currency debt financing for infrastructure, which had appraised the projects and offered to negotiate a guarantee. The International Finance Corporation also appraised the loan applications of two utilities.

Due to changes in the sector brought about by devolution and uncertainty over asset ownership, these transactions did not materialize. However, they were important in setting a precedent for future financing activities.

Utility Creditworthiness

To support commercial financing, WASREB collaborated with the World Bank to develop a mechanism to assess utility creditworthiness. In 2011, shadow credit ratings for 43 Kenyan utilities were published, which gave borrowers and lenders an objective overview of creditworthiness and risk. Thirteen utilities were given investment-grade ratings (A or BBB) and another 16 near-investment grade (BB). Together with WASREB’s IMPACT report, which documents the performance
of Kenya’s water services sector, the ratings provided utilities with a diagnostic tool with which to identify areas for improvement.

Recent technical assistance supports capacity building at sector institutions to increase the commercial viability of the sector. It helps WSPs interested in commercial borrowing by providing a toolkit to strengthen financial management, project modeling, and business plan writing. It also provides a lender toolkit to help local banks improve their knowledge of operations and risks in the water sector, conduct utility credit analyses, assess legal issues, and develop appraisal guidelines and loan structures. A creditworthiness index will be established at WASREB to assess the credit risk of WSPs on an annual basis, and this index will be incorporated into WASREB’s IMPACT report.

**Ongoing Financing Initiatives**

Several recent initiatives are being implemented to support WSPs’ access to commercial finance. The Water Services Trust Fund of Kenya (WSTF), a state corporation that invests in pro-poor water and sanitation infrastructure, is running a results-based financing program that provides grants to WSPs that access commercial loans for investment. The program is supported by the World Bank through the Kenya Output-Based Aid (OBA) Fund for low-income areas, and by KfW, through the Aid on Delivery (AOD) program.

Under the OBA Fund, WSP subprojects will be prefinanced with commercial loans from domestic lenders on market terms. The loans will support investments that deliver household water and sewer connections, public water kiosks, and public toilets. An OBA grant will buy down 60 percent of the project cost financed by domestic lenders. Areas eligible for grants will be identified through WSTF’s poverty database, Majidata, which has mapped over 1,880 urban settlements considered low income based on an index of quality-of-life indicators. It is expected that the project will support access to $16 million of debt and enable provision of water and sanitation to 30,000 households. One WSP that has already accessed a loan through this program is Muranga South. Its user connection project builds on considerable upstream investment in water resource augmentation and treatment funded by the AfDB.

Under the AOD program, WSPs commit to achieving predetermined targets that result in higher volumes of water reaching final consumers, an increase in revenue, and a reduction in nonrevenue water. The WSPs meet 20 percent of project cost up front and borrow 80 percent through a loan from domestic banks. A 40 percent grant is paid on achieving the targets. Embu WSP borrowed $850,000 under this program for network rehabilitation and was supported by a 50 percent partial credit guarantee from USAID’s Development Credit Authority (DCA). Utilities seeking to improve operational efficiency and expand access through commercial borrowing could benefit from OBA and AOD as well as from the DCA credit guarantee structure. Most projects to be funded under these initiatives build on investments funded by the GoK and soft loans from development partners.

**Commercial Financing for Sanitation**

Nairobi City Water and Sewerage Company (NCWSC) is piloting a household sanitation project to connect 16,000 households to the company’s water and sewerage network in low-income communities. NCWSC has obtained a commercial loan to finance the project, and an OBA grant will reimburse the company up to 70 percent of the cost of sewerage and 40 percent of the cost of water connections. NCWSC will recuperate the balance through a combination of up-front connection fees and monthly billing surcharges for up to five years. Customers are expected to pay an additional $5–$8 per month for the services. The loan is in local currency for up to 10 years and, because of NCWSC’s strong balance sheet, does not require a credit guarantee. In both the water and sanitation projects, grants are paid on independent verification that preagreed targets have been met. These interventions are expected to support WSPs in accessing $30 million to $40 million of commercial loans for infrastructure.

**Lessons**

Several lessons can be drawn from the various initiatives supporting utility and community WSPs in accessing commercial finance for infrastructure investment.

- It is essential to have an operating environment and legal structure that are conducive to bank lending. In the Kenyan context, three elements of the 2002 Water Act stand out: (1) providers are autonomous entities incorporated under the Companies Act (WSPs) or the Cooperative or Trust Acts (communities); (2) revenues are ring-fenced within the sector, with income from water sales going toward...
O&M and capital expenses; and (3) there is a functional and independent regulator that licenses WSPs, regulates tariffs, and monitors utility performance.  
• Financial instruments that mitigate lender credit risk and improve financial viability help encourage both borrowers and lenders and kick-start the flow of commercial finance. In Kenya the use of partial credit guarantees and output-based grants were instrumental in accessing commercial finance and making pro-poor investments viable.  
• Technical assistance to assess the financial viability and technical feasibility of investment projects, improve the bankability of utilities, and supervise project implementation was essential in providing additional reassurance to lenders.  
• A sufficient scale of customers who are willing and able to pay for piped water is critical for revenue generation. Ideal project for commercial financing are capable of generating revenue quickly and are likely to include investments in network densification and expansion, metering, and improving energy efficiency. 
• Commercial debt can bring governance benefits to WSPs in the form of added oversight from lenders and help providers improve capital expenditure planning, operating efficiency, and financial management.

Policy makers need to ensure adherence to a proper governance framework established through the regulatory process and to ensure that future key decisions with regard to tariff setting, organizational oversight, and financing are not politicized. The tariff-setting methodology will need to allow for greater retention of funds that can be used to leverage more borrowing by WSPs. Developing assets on WSP balance sheets will reduce their tax liability through charges for depreciation. Furthermore, outsourcing the financing and operation of water and sanitation systems to private operators can help counties improve operating performance and achieve access targets, while shifting risk from the public to the private sector.

Strategic grant funding or soft loans can help unlock additional capital through innovative financing mechanisms and structures, and development partners can support the scaling up of utility access to commercial finance by integrating commercial lending into their operations. Donor cofunding can significantly reduce the perceived risk of private lenders and lower the effective cost of borrowing for utilities to affordable levels through the use of blended financing mechanisms. This would grow the role of private finance in the water sector.

Notes
5. The targets are a combination of coverage (increase in number of connections) and service level (increase in average monthly revenue) goals.
6. Subject to a cap of $115 per beneficiary.  
7. Subject to a cap of $175 for sewer and $80 for water connections.
8. A new water act is under discussion in Kenya. The role of WSPs in financing capital expenditures and borrowing rules will become apparent only after the act is passed.

Rajesh Advani is a Senior Infrastructure Specialist with the Global Partnership on Output-Based Aid under the World Bank’s Global Practice for Social, Urban, Rural and Resilience. The author is grateful to Aldo Baietti, Bill Kingdom, and Kevin Bender for their constructive input into this document.