

Emerging Lessons from Medium Sized Public Private Partnerships (PPPs) in the Kenyan Water Sector

Kevin Rombo Onyango

Economic Advisor: Public-Private Partnerships (PPP),
SNV Netherlands Development Organisation, Nairobi-Kenya

Abstract

In Kenya as many other countries of the world, Government tax revenues are constrained due to population pressures, expanded mandate of governments including social welfare and environmental protection that have resulted in fiscal constraints. The Kenya Water Master plan 2030 estimates that investments of KES 1.7 trillion are needed for rehabilitation and development of new Water Supply infrastructure to realise Vision 2030 goals of 100 percent water coverage and 80 percent sanitation coverage against a budget of KES 561.5 billion leaving a deficit of KES 1.2 trillion for the water sector that needs to be financed through other innovative financing mechanism. The Fiscal constraints experienced in Kenya have resulted in the adoption of Private Partnerships (PPPs) as an innovative approach to the provision and financing of public infrastructure and services such as water and sanitation, electricity and transport to supplement the traditional tax financing of services. This paper explores the genesis of Public-Private partnership (PPPs) projects in the water sector and the processes of project development to share on experiences and lessons learnt from implementing water PPPs in Kenya. Public-Private partnership was adopted by the Government of Kenya to mobilize private sector financing, innovation and management expertise in all sector of the economy including water service provision. The Kenyan Water sector PPPs initiative commenced in May 2013 when the Ministry of Water and Irrigation (MWI) sent out a “call for PPP project proposals” to all Water Service Providers (WSPs). Fifteen WSPs across the country submitted twenty five (25) projects in response to the “call for proposals” which were reviewed and a final six projects from six county Governments’ identified as viable for further development as PPP projects.

Keywords: Private sector, public private partnership (PPP), infrastructure, financing, water services

1. Introduction

The Government of Kenya through the Ministry of Water and Irrigation (MWI) provided water directly to the citizens since independence in 1963 up to the year 2002 when the water sector reforms culminated in the enactment of the Water Act 2002 that established Water service providers (WSPs) and Water Service Boards (WSBs) and clearly separated roles and responsibilities. The MWI was charged with policy formulation and resource mobilization, WSB with infrastructure development and WSPs with water and sanitation services provision. The 2002 Act has been replaced with the Water Act 2016 to include counties in water service provision in light of devolution.

In Kenya there are 47 Medium & Large Water service providers (WSPs) out of about 104 WSPs serving about 5 Million people in urban and peri-urban areas in the country with 665,035 connections with a water production of 140.2 Million M³ and an annual turnover of KES 5.1 Billion (WASREB, 2016). The Vision 2030 envisages 100 percent water coverage and 80 percent sanitation coverage by the year 2030 while the MDG target for water was to “halve the proportion of people without sustainable access to safe drinking water.” The SDG goal 6 for water and sanitation targets to achieve universal and equitable access to safe and affordable water for all and adequate and equitable sanitation and hygiene for all and end open defecation by 2030 (UNDP, 2015) paying special attention to the needs of women and girls and those in vulnerable situations to satisfy the Country’s Middle income status. Access to water in Kenya currently stands at 54 percent for urban and 51 percent for rural areas while sanitation coverage is 73 percent urban and 70 percent rural areas respectively (WASREB, 2015).

The Vision 2030 aims to transform Kenya into a middle income, globally competitive and industrialising country with a high quality of life for its citizens by the year 2030 (Republic of Kenya, 2007). To achieve this, massive investments are needed in social services as well as infrastructure. Kenya requires an investment of KES 320 Billion (US\$ 4 Billion) annually in the next decade if it is to fully implement the Vision and achieve Millennium Development Goals (MDGs) targets. It is currently estimated that there is an infrastructure funding gap of approximately KES 160 Billion-KES 240 Billion (US\$2-3 Billion) per year needed in order to meet the infrastructure requirements in the next 10 years (Briceño-Garmendia, and Shkaratan, 2011). These deficits necessitated the Government to explore alternative financing mechanisms and one such alternative identified is Public Private Partnerships (PPPs). PPPs have been identified to contribute to easing budgetary constraints on social expenditure, directly enabling the Government to broaden and deepen balanced development.

The challenges impeding Water Services provision include; old and dilapidated infrastructure, inefficiencies (technical, operational and commercial inefficiencies), growing population, and depletion of water resources.

The Kenya Water Master plan 2030 estimates that investments of KES 1.7 trillion are needed for rehabilitation and development of new Water Supply infrastructure to realise Vision 2030 goals against a budget of KES 561.5 billion leaving a deficit of KES 1.2 trillion for the water sector that needs to be financed through other innovative financing mechanism (WASREB, 2016). Resource allocation can be improved by increasing sector efficiency, maximising consumer contributions through tariffs and tapping into private sector funding.

Public-Private Partnership (PPP) has been identified as one avenue for private sector participation in the Water services provision to bridge the financing gap currently being experienced. The potential areas of private sector involvement include management of Non-Revenue Water (NRW) in Water Service Providers (WSPs); water production and purification systems; network upgrading, rehabilitations and extensions; investment in renewable energy to reduce cost of production; management contracts; sewerage improvements in small towns and urban areas (Republic of Kenya, 2014).

Large PPP transactions take quite some time to materialize. Projects of budget above USD 10 million need to be approved by the Cabinet Secretary for finance and can take up to 2 years for project development (Republic of Kenya, 2013a). However, small and medium sized PPPs of about US \$ 1.0 million investments value per project can be fast-tracked by the Counties & Water Service Boards (WSBs) in consultation with the Ministry of Water and Irrigation. Project development work for such projects can be completed within a year. Medium sized PPP projects are therefore essential in improving water and sanitation coverage in the Country in urban and peri-urban areas as their development is not as complicated as those of bigger projects with manageable transaction costs.

2. Methodology

This paper is narrative review article of journey of Water PPPs in Kenya. Specifically it focuses on the policy process and development of pilot concept notes and a look at experiences of PPPs selected African countries. PPPs were aimed at attracting and involving private sector in management, financing and provision of technology for water services.

3.0 Water PPPs in the Africa continent

There have been a number of Water PPP initiatives in Africa since the Côte d'Ivoire urban water affermage of 1959 which continues to supply water over 7 million. Countries of South Africa, Niger, Egypt and Uganda have been engaged in one form of PPP or another for improvement of Water supply services (Worldbank Group, 2014). The affermage model has also been used to address the poor performance of the water sector with creation of The Société de Patrimoine des Eaux du Niger (SPEN), as a state-owned asset holding company for asset ownership, infrastructure development, service of debt, monitoring of the service quality, and development of public awareness about the sector reform on behalf of government. Government retained policy, tariff setting, and water resource management responsibilities.

In Uganda, the Ministry of Water implemented water sector reforms for the management of small towns' water supplies supported by the World Bank's Water and Sanitation Program (WSP). The government introducing one-year area performance contracts (APCs) that remunerated local managers based on results. Engaging private operator to manage water systems has resulted into impressive performance: A total of 430 connections have been installed, water production has increased from eight to 21 m³/hr collection rates have increased from 70 percent to 85 percent, non-revenue water decreased from 32 percent to 22 percent (Hirn, 2013).

In Egypt, the Government awarded 20-year PPP concession agreement in 2009 to a consortium of Egypt's Orascom Construction Industries and Spain's Aqualia (Orasqualia) for a public-private partnership (PPP) to build, operate and transfer (BOT) a 250,000 m³/day waste treatment plant, which is expected to mobilize private investments to the tune of \$150–200 million (World Bank Group, 2009) and upon completion expected treat waste New Cairo City, a satellite town of Greater Cairo that is expected to rise from 550,000 to approximately 3 million by 2029. The government will pay for Sewage Treatment and Electricity costs.

PPPs in Africa have had mixed results with some successful, other are still slow in results while other have failed and terminated. The water affermage in Guinea and power/water concession in Mali have been terminated and back to public management while in Cape Verde the power/water supply concession though still operational is marred by challenges that resulted in renegotiation of the contract to lessen risks and responsibilities for private sector.

4.0 The Water Sector PPP process in Kenya

4.1 Development of a Water Sector PPP Roadmap

The Ministry of Water and Irrigation with the support of development partners convened a two day conference on 7 and 8 November 2012 in Nairobi, Kenya aimed at accelerating infrastructure development and enhancing water services delivery through PPPs to ultimately meet Vision 2030 goals and the constitutional right to water

and sanitation for Kenyan citizens. Participation was drawn from Water Sector Institutions, Collaborating Government Departments and Ministries, the private sector, Development partners and key actors in water sector (Republic of Kenya, 2012). A follow up policy retreat was held on 8th February, 2013 in Naivasha, Kenya to facilitate mainstreaming Public–Private Partnerships in the Water Sector where a PPP Road Map for the water sector was drafted. The roadmap among other things led to the establishment of a PPP Node at the Ministry of Water and irrigation whose major function is to identify, screen and prioritise viable Water Sector projects for funding under the PPP framework

4.2 Call for PPP Project Proposals” to Water Service Providers (WSPs)

The Ministry of Water and Irrigation working in partnership with SNV Netherlands Development Organization and other stakeholders sent out a “*call for PPP project proposals*” to all WSPs through their Water Service Boards (WSBs) in May 2013. Fifteen WSPs across the country submitted twenty five (25) projects in response to the “*call for proposals*” and the MWI compiled a report on WSP proposals (Republic of Kenya, 2013b).

The PPP process for the water sector in Kenya from call for proposal, development of concepts and project development is presented in the flowchart in figure 1 as follows

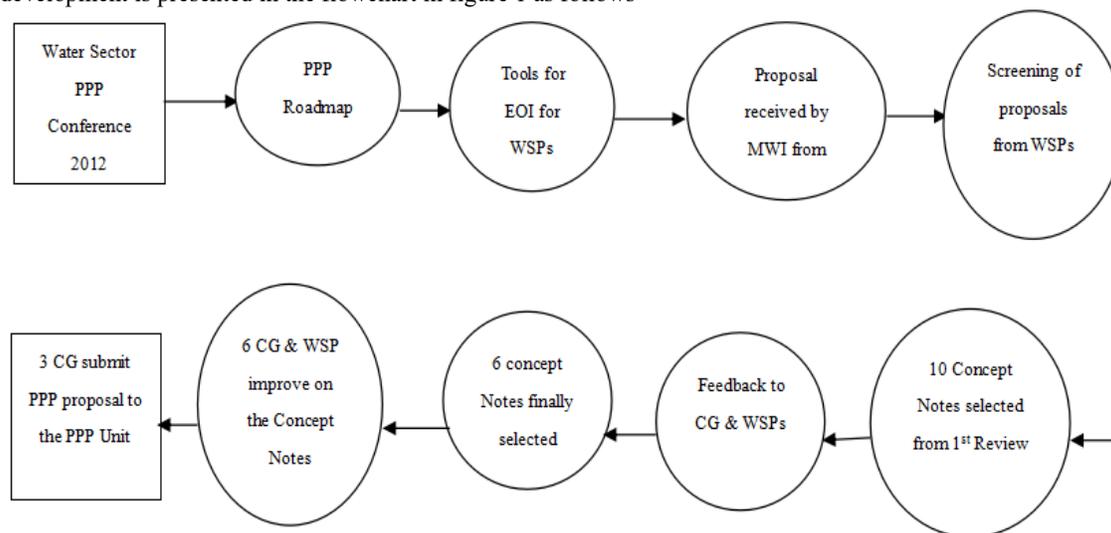


Figure 1: Flow chart of PPP Process for the Water Services in Kenya

A planning meeting organized by MWI was further held on 16th August 2013 attended by The Treasury, Water Services Regulatory Board (WASREB), Water Service Providers Association (WASPA), and Development Partners all of whom have actively participated and supported the PPP process. A shortlist of few (not more than 10) was drafted for the pilot from which experiences and lessons in the process will be drawn to guide future scaling up of PPP initiative.

CG and WSPs were provided with feedback on the 10 concepts and upon resubmission to the MWI, 6 concept notes for Muranga, Laikipia, Transzoia, Kakamega, Meru and Kiambu Counties were selected as potential for PPP test case (Republic of Kenya, 2014). The concept notes were then presented to the PPP Node of MWI in Dec 2014 where they were reviewed and recommendations made to the 6 counties on areas in need of improvement. Three Counties of Muranga, Laikipia and Transzoia improved on their project proposal and subsequently forwarded the same to the PPP Unit of the National Treasury for review and consideration for inclusion in the National Priority list of Potential PPP projects in Kenya (Republic of Kenya, 2015).

The project proposed by the various counties ranged from small rehabilitation and extension of pipeline to construction of big dams with treatment plants and distribution networks. The nature of each of the six proposed projects is presented in table 1 as follows.

Table1: County Proposed project and investment needs

County Government	Investment Cost	Proposed Water Project
Muranga	USD 1.4 Million	Makuyu Water Supply Project- To develop a new 15 km water distribution system to Mukuyu market
Transnzoia	USD 7.6 Million	Kiminini Water Supply Project- To construct an 18 km distribution line from Nzoia to Kiminini.
Laikipia	USD 22.3 Million	Nanyuki Dam Water Supply Project- Construct a dam to supply of 24, 000 m ³ of water/day to Nanyuki town and its environs.
Kakamega	USD 2.3 Million	Extension of water distribution network in Amalemba Township in Kakamega to serve an additional 4000 connections.
Meru	USD 1.7 Million	Augmentation of Milimani water treatment plant in Meru- Increase water production by 9,000M ³
Kiambu	USD 13.4 Million	Thika Dam Water Supply Project- Build a dam, treatment plant and distribution network.
	Total Cost USD 48.7 Million	

Source: PPP Unit Kenya and PPP Node of the Ministry of Water and Irrigation, Kenya

Two of the six projects- the one for Kiambu and Laikipia Counties costing USD 13.4 Million and USD 22.3 Million respectively were for Dam construction to provide water majorly for human consumption and partly irrigation while the other four were mainly for rehabilitation and extension of water distribution. The two dams constituted 73.3 percent of the total cost of the Water PPP investment. Dams are expensive in nature due to the huge initial cost outlay (figure 2) and also due to numerous legal, social and environmental requirements and stakeholders involved, land acquisition issues, catchment protection.

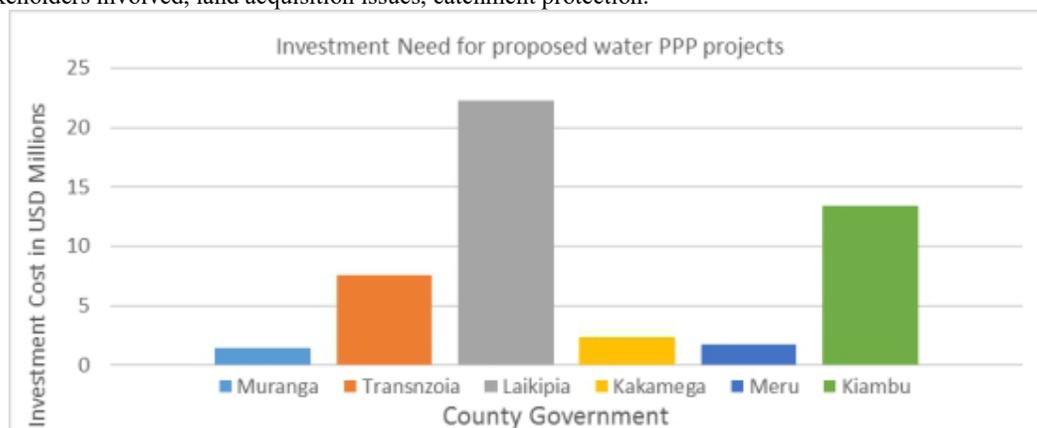


Figure 2: Investment Needs for County PPP Projects

4.3 Why the Process took so long?

As of 2012, the Government of Kenya had initiated the process of creating an enabling environment for implementing PPPs in the Country through establishing legal, regulatory and institutional framework. The PPP Unit was therefore established as a centre of expertise and a specialised unit within the National Treasury to promote and oversee the implementation of the Governments PPP Program.

The PPP policy of 2009 was aimed to articulate the Government commitment to Public Private Partnerships (PPP) and to provide a basis for the enactment of a PPP law to strengthen the existing legal and regulatory framework; to provide a foundation for the establishment of institutions to champion the PPP agenda, facilitate mobilization of domestic and international private sector investments, and to provide for Government support for PPP projects, as well as providing a clear and a transparent process for project development (PPP Unit Kenya, 2016).

The Water Sector PPP process took long due to the fact that between the periods 2012-2014 there were numerous initiatives aimed at creating an enabling environment. These included: Establishment of PPP unit in 2009; The adoption of PPP policy statement 2011; the enactment of PPP Act 2013; establishment of PPP Node at MWI and the adoption of PPP Regulations 2014.

The potential Six WSP PPP projects identified in 2013 as potential PPP projects took long to move through the PPP process as the process was not clearly defined at that point in time and certain essential institutions or legislation had not been in place.

4.4 The outcomes of the Water Services PPP process

The outcome of the PPP process for the Water Sector is that three projects (Muranga, Laikipia and Transzoia Counties) out of the six show case PPP projects have been submitted to the PPP Unit of the National Treasury for consideration for inclusion in the National Priority List of PPP projects. The proposed PPP project by Muranga County has been listed in the National Priority list of Potential PPP in Kenya awaiting the recruitment of Transaction Advisor to conduct a detailed feasibility study while the other two (Laikipia and Transzoia) are being reviewed by the PPP Unit.

5.0 Key lessons learned from the process

The entire PPP process for the water sector brought out some important lessons. First, The PPP process for projects is long hence need for patience among the parties involved. Secondly, Large PPP projects of over USD 10 million usually take long to materialize with up to 2 years of project development. Thirdly, Project proposals that had been developed with PPP financing framework being hijacked for funding through commercial loans/grants/other funding avenues.

5.2 Recommendations for the public sector

- Focus more on medium sized PPPs as these require slightly shorter time for project development.
- Clustering of Medium sized PPP projects to help reduce costs of project development.
- Developing Capacity of key staff in PPP Project development and implementation.

5.3 Recommendations for the donors

- Coordinating closely with Government agencies when supporting PPP initiatives.
- Donors need to be patient when investing in water sector PPP projects as results may not be immediate.
- Allocate more resources to PPP process

5.4 Recommendations for the County Governments (GCs)

- Allocate resources for development of PPP process
- Enact county legislation and framework to provide enabling environment for PPPs-viz-Establishment of PPP Nodes, PPP laws, regulations etc
- Build partnerships with National Government, Donors and the private sector for resource mobilization for PPPs

References

- Briceño-Garmendia, Cecilia M. And Shkaratan, Maria (2011). Kenya's Infrastructure: A Continental Perspective. The World Bank Africa Region Sustainable Development Department March 2011. Available: <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5596>
- Hirn, Maximilian (2013). Private Sector Participation in the Ugandan Water Sector: A Review of 10 Years of Private Management of Small Town Water Systems. The World Bank. Available: https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/documents/Uganda_Private-Sector-Participation-in-the-Ugandan-Water-Sector-Review.pdf.
- PPP Unit Kenya (2016). PPP Pipeline Report April 2016. Available at <http://pppunit.go.ke/news/view/ppp>.
- Republic of Kenya (2015). Fast-tracking PPP Process: Consultative Workshop with County Governments. Workshop Report 8th October 2015. The Ministry of Water and Irrigation, Nairobi
- Republic of Kenya (2014). *Developing Bankable Public Private Partnerships (PPPs) Projects for Water Sector: Next Steps and Way Forward for Six PPP Water Sector Test Case Projects*. Workshop report 6th August 2014. The Ministry of Water and Irrigation, Nairobi
- Republic of Kenya (2013a). Public-Private Partnership Act 2013. Government Printers, Nairobi
- Republic of Kenya (2013b). Accelerating Infrastructure Development and Enhancing Water Service Delivery through PPP: 2nd Consultation on Public Private Partnerships (PPPs) For Water Sector: Workshop Report. The Ministry of Water and Irrigation, Nairobi
- Republic of Kenya (2012). National Conference 7-8 November: Promoting Public Private Partnerships (PPPs) in the Water Sector: *Accelerating Infrastructure Development and Enhancing Water Services Delivery through PPPs*. Workshop Report. The Ministry of Water and Irrigation, Nairobi
- Republic of Kenya (2007). Kenya Vision 2030: The Popular Version. Government Printers, Nairobi
- UNDP (2015). Sustainable Development Goals Booklet. Available at <http://www.undp.org/content/undp/en/home/librarypage/corporate/sustainable-development-goals-booklet.html>

- Water Service Regulatory Board (WASREB, 2016) A performance Review of Kenya's Water Services Sector 2014-2015, Issue 9, Water Services Regulatory Board.
- WASREB (2015), A performance Report of Kenya's Water Sector 2013-2014, Issue 8, Water Services Regulatory Board.
- Worldbank Group (2014). Water PPPs in Africa. The World Bank, Washington D.C. Available: http://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/ppp_testdumb/documents/africa_water_ppps_in_africa_en.pdf
- World Bank Group (2009). Egypt: New Cairo Wastewater. Public-Private Partnerships briefs. Available at: https://library.pppknowledgelab.org/documents/1975?ref_site=kl

The views in this paper are those of the author based on his experience working in the Kenyan water sector specifically in implementing PPPs in urban utilities in Kenya and promoting sustainable management models for rural water systems and do not necessarily represent the views of SNV Kenya or its partners. The author is an economist with vast experience in development work, research, consultancy and academia.

He can be contacted at: kevinrombo@gmail.com.

Recommended citation: Rombo, Onyango Kevin (2017): Emerging Lessons from Medium Sized Public Private Partnerships (PPPs) in the Kenyan Water Sector. Journal of Economics and Sustainable Development, Vol 8, No.22, 2017. ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)