

Can PPCPs Improve Water Services Delivery in Rural Areas? Insights from Kenya

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Abstract/Summary

In Kenya, less than twenty-five percent of population is served by formalised water services providers (WSPs). Water services to remaining 75% of population (in rural and peri-urban areas) is managed by voluntary water users associations. Frequent breakdowns caused by various reasons, including lack of resources to pay power bill, lack of spare parts and technicians for operation and maintenance among others has been a key barrier to sustainable water services delivery in these areas. To address this challenge, public private community partnership (PPCP) models were designed and introduced. From 2012 to 2015, two regional water services boards have engaged five Private Operators (POs), resulting in improved outreach, reliability, quality and sustainability of water services delivery, benefitting 72,791 people. Improvements made by these POs in service expansion, supply hours, timely repair of leakages and bursts, and community satisfaction indicates that PPCPs can improve water services delivery in rural areas.

Introduction

This paper describes the context, approach, results and emerging lessons of the Public Private Community Partnership (PPCP) programme implemented by SNV in Kenya. The paper argues that PPCPs can offer solutions to sustainable water services delivery, benefitting millions of un-served and under-served people in rural and peri-urban areas in the world.

Kenya has recorded impressive GDP growth of more than 5% over the last decade (World Bank, 2014). However, less than 10.5 million people (approximately 25% of total population) is served by the 91 public water and sewerage companies (commonly known as WSPs) registered with the national regulator in 2014 (WASREB, 2015). Remaining, about 75% of the total population, mostly living in rural and peri-urban areas, fetched their drinking water from wells, rivers, streams, ponds, and sand dams. The majority of such water sources are managed by voluntary water users associations (WUAs) or informal suppliers and have problems related to frequent breakdowns, reliability/continuity, quality and adequacy. As these WUAs lack effective management practices, almost 1/3rd of these systems are mal-functional at any given time (SNV, 2013) and limited resources available with NGOs and local governments (public authorities) are depleted in repair and rehabilitation of these mal-functional water systems, making none or minimal resources available to expand services to un-served rural and peri-urban areas, mostly inhabited by the poorest quintiles. Therefore, lack of effective models for management of water sources/projects has been a key barrier to expand services to rural and peri-urban areas in this context. The Kenyan situation represents the wider context in the developing world, where only 68% of rural water projects are functional at any given time (Akvo, undated), indicating failure of billions of dollars invested in rural and peri-urban areas.

The Water Act of 2002 is the main legal framework for water services delivery in Kenya. WASREB has the mandate of regulating the entire water sector, but has managed to regulate less than 100 public WSPs, with a service area of about 50% of total population (WASREB, op.cit.). As per the Act, day to day management of water services is delegated to public WSPs. These WSPs sign a service provision agreement (SPA) with the Water Services Boards (WSBs) and assume monopoly role for water services delivery within the service area designated by the SPA. These WSPs are expected to run like businesses, however, had efficiency challenges as they are heavily influenced by public bureaucratic mind-set, without enough incentives to growth. Most consumers residing in areas served by public WSPs get water through piped connections. However, in rural and peri-urban areas, voluntary WUAs are managing community water projects and most

consumers commute for hours to fetch their drinking water.

Public Private Partnership (PPP) Act of 2013 and PPP Policy of 2012 have created space for private sector engagement and PPPs in water sector. County Governments (CGs) are newly established by the Constitution of Kenya 2010, and are developing their capacity in all aspects; most of them lack a clear strategy for water sector. There is a robust market for many of the supporting functions such as information and communication technology, auditing, media, repairs and maintenance services among others. However, the market is skewed in favour of the large public WSPs. Access to finance is partially developed with various forms of result based financing mechanism (e.g. Global Partnerships for Output Based Aid, Aid on Delivery etc.) designed to support credit-worthy public WSPs. As the rural and informal WUAs do not enjoy healthy cash flow, they cannot access market finance.

In line with the global quest for sustainable water services delivery models in rural and peri-urban areas, SNV Netherlands Development Organisation in Kenya supported two WSBs, Lake Victoria North and Lake Victoria South, collectively responsible for provision of water services to 15.8 million people (36% of Kenyan population) in design and introduction of innovative models of water services delivery, engaging private Operators, local government authorities and communities, in the form of Public Private Community Partnership (PPCP). During the first four years (2012-2015) phase of the project, four types of PPCPs were introduced, engaging private firms as Water Operators (POs). This has resulted in improved outreach, reliability, quality and sustainability of water services delivery, benefiting more than 72,791 people. The PPCP approach primarily builds on the domestic private sector participation approach described by Delmon, Victory R. (2014), and brings in ‘partnerships’ perspective to ensure win-win for all parties.

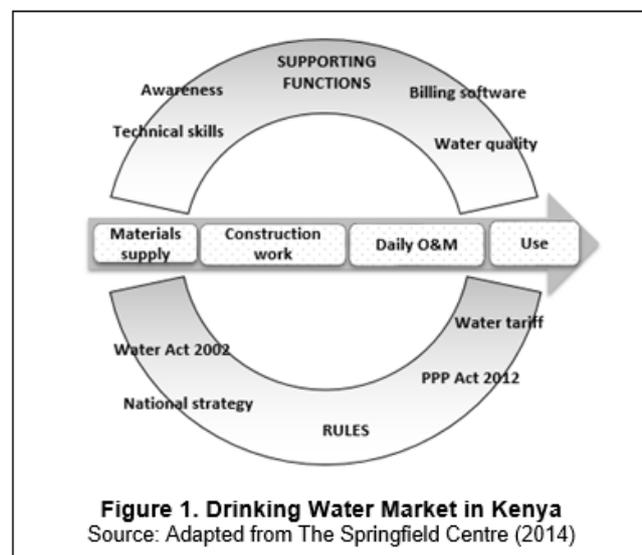
Description of the Case Study – Approach or technology

Making Markets Work for the Poor (M4P)

As the focus was on introducing commercially viable management models, SNV adopted M4P approach (The Springfield Centre, 2014), which is used primarily in economic development sectors. The approach considers poor people as a part of the market system and argues that they can improve their livelihoods when such market systems are aligned to their contexts and capabilities. The approach further argues that effectiveness of the CORE business within a given sector is shaped by the RULES governing the sector and associated SUPPORTING FUNCTIONS.

The methodology used by SNV in introducing the commercial management models of rural water services delivery in Kenya involved the following steps:

- **Sector analysis using the M4P framework** (refer to figure 1): This involved the analysis of the core functions in the water sector (demonstrated by the four boxes along the central arrow), relevant supporting functions (demonstrated by the upper arch) and associated rules, regulatory and legal frameworks (demonstrated by the lower arch). The core functions relate to the production and treatment of water, day to day management of water infrastructures and managing sales and consumer relations. Private construction companies contracted by the public Water Services Boards (WSBs) carry out water production (e.g. dam construction, pipeline work, treatment plants, sinking of boreholes, etc.) functions. These companies buy their materials and inputs (e.g. cement, pumps, pipes, fittings, meters, solar equipment, chemicals etc.) from a vibrant manufacturing sector. Daily operations and management (O&M) of water services is managed by public WSPs and WUAs, as explained above.
- **Household survey to understand the social and economic context of the project area:** A household survey was carried out with the water consumers from the project area, using a systematic random sampling method. A sample size of twenty households covered by each water project was used for the research. Statistical Package for Social Sciences was used to analyse the quantitative data, which was later triangulated with the qualitative information collected through observation and group discussions with WUAs and consumers.
- **Participatory design of management models and programme interventions:** A participatory workshop setting was used to reflect on the household survey findings, consumer preferences and affordability of alternative commercial management models. In addition, stakeholder consultation workshops at local (district), regional and national level were organised to agree on the roadmap, potential management models and the key interventions required



to introduce and scale up such models. Based on the feedbacks received, range of PPCP models were developed. Key interventions implemented include: i) policy advocacy and advice for water legislation and PPCP models, ii) strengthening public sector capacity on design and implementation of PPCPs, iii) business strategy support to POs and WUAs and, iv) consumer awareness raising on the importance of clean drinking water. As PPCP and engagement of POs was a relatively new concept in the Kenyan water sector, a strong advocacy and technical assistance throughout the process was needed. Furthermore, contracted POs did not have prior experience as water operators and had to be trained and mentored on the social aspects of engaging with and managing community dynamics. Users also required intensive awareness to help them understand how their cooperation could impact on sustainable water services.

- **Monitoring of the performance and impacts:** The results were assessed using: i) performance monitoring of the PPCPs using a monthly tracking tool, and ii) sample household impact assessment, using descriptive statistics and regression analysis.

Main results: outcomes and impacts

During the four years (2012 – 2015), SNV has achieved a number of milestones towards scaling up sustainable management models. The key outcomes (results at the water project management and institutional level) and impacts (beneficiary level results) are outlined below.

Outcome 1. PPCP models designed and introduced by two WSBs

The key finding of the sector analysis and consumer research indicated that more than 74% of the respondents had experienced frequent interruptions in water supply due to pipe bursts and that they were willing and able to afford commercial water tariff if quality, reliability, affordability and convenience were guaranteed (Tiwari, 2013). The participatory workshops concluded that poor people in rural areas could benefit by engaging professional management firms as Water Operators. It was also suggested that various forms of PPCPs would be the desired model for water services management in the context. SNV catalysed the two WSBs in developing a range of PPCP models in a participatory way and in engaging POs through a transparent and competitive procurement process. A typical contractual model developed by the two WSBs is illustrated in figure 2, where Public Sector (Asset Owner WSB), PO (Operator) and Community (Water Action Group) are the three parties that sign a mutually beneficial agreement. The key outputs achieved by the programme are cited below:

- Three management consulting firms are engaged as POs: Romada Pvt. Ltd, Breinscope Consulting Ltd and Lobonyo and Associates are managing Elgon East, Kanyadhiang and Wandiege rural water projects respectively.
- An Urban WSP, Kakamega Busia Water and Sewerage Company has expanded water services to Navakholo village in Kakamega County.
- A community group (WUA) in Tachasis village of Nandi County has transformed itself into a commercial and legal WSP.

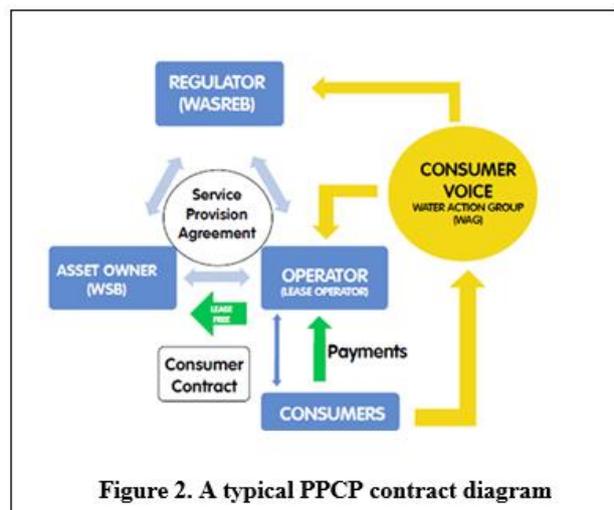


Figure 2. A typical PPCP contract diagram

In addition, improved cooperation among the parties and improved enabling environment for the PPCPs are the key outcomes achieved by the programme, which are further explained below:

Outcome 2. Improved co-operative behaviour among the public sector, POs and communities

- All key stakeholders have demonstrated improved confidence, transparency and accountability on the way water projects are managed leading to improved cooperation among WUAs, WSBs, CGs and POs.
- POs are responding to consumer issues/complaints promptly, and are replacing incompetent staff; some POs have incentivised staff performance by awarding bonuses (e.g Tachasis Ltd). By doing this, POs have demonstrated that they can indeed improve sustainable services to their consumers.
- POs prompt response to repairing leaks and bursts has contributed to improved customer satisfaction and increased service hours.

Outcome 3. Improved enabling environment for POs

- Increased knowledge and confidence of public sector and WUAs has created more conducive environment for POs engagement.
- Ten County Governments (CGs) have developed their water sector strategy, recognising the role of private sector in addressing water services delivery challenges.
- The National Ministry of Water and Irrigation has developed PPP Guidelines for the water sector.
- More development partners (e.g. EU, UNICEF, and USAID) have recognised the PPCP model in their strategies, indicating a huge potential for scaling up the same.
- National regulator WASREB (2015) has recognised the PPCPs by publishing a case study in their annual IMPACT report of 2015.

Impact 1: Improved services to under-served and un-served consumers

Several changes are



Figure 2. Monthly frequency of breakdown

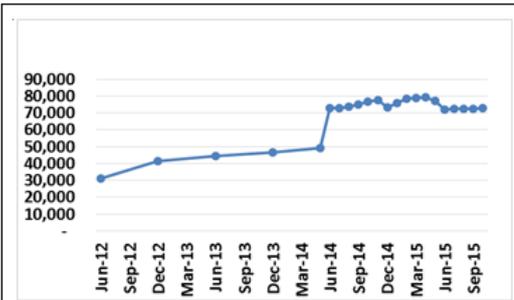


Figure 3. Population served by 5 projects

achieved at the beneficiaries’ level, including but not limited to: i) reduced frequency of water project breakdown (Ref. Figure 2) leading to increased supply hours for the consumers; ii) increased number of men and women (72,791 consumers, in December 2015) are benefitting from re-connections and new connections (Ref. Figure 3). These changes are accompanied by continuous improvement on revenue base (Ref. Figure 4) of the POs, indicating that the changes are likely to be sustained by the POs.

Impact 2: Increased income/savings of consumers

Sample impact study (SNV, 2015) demonstrated that improved access to water services has directly contributed to improved economy at the household level as indicated by the following results:

- Each household saved an additional KSh 5,116 (USD 51) per month productively using the time saved in water collection.
- Some households (at least 15) have started new micro-enterprises such as hotel/restaurant businesses, kitchen gardening, etc. and consequently increased their incomes by about KSh 5,000 (USD 50) per month.

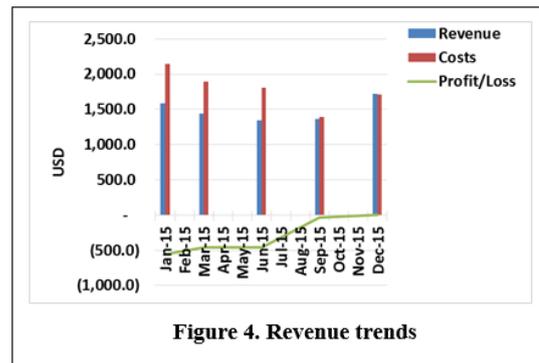


Figure 4. Revenue trends

Satisfied consumers, co-operative behaviour among Operators, WUAs and public authorities and increased revenue base of the POs indicates that the PPCPs have indeed contributed to address sustainability challenges of water services to the poor in the project areas. Increased consumer confidence/satisfaction and increased revenue base of POs challenges the common argument that poor people cannot pay for commercial water tariff, and that private sector has no business incentives in the water sector.

Challenges, Lessons and Recommendations

Engagement of private firms as Water Operators is feasible and, this can improve sustainability of water services delivery by addressing several issues such as cost recovery, repair, maintenance, and service expansion. POs can achieve economy of scale by gradually expanding outreach as demonstrated by the five PPCPs implemented in Kenya. However, entire process of identifying and engaging POs is very demanding; several challenges emerge and need to be mitigated. Some of the challenges emerged and lessons learned are highlighted below:

Getting buying in of the local governments and WUAs

Despite huge demand for improved services, WUAs had fears that POs would increase water fees and *steal* their revenues. In addition, communities in Elgeyo-Marakwet and Kisii County were less receptive of the idea of engaging POs from outside; they were comfortable only with Operators from within their own ethnic groups, delaying the entire process. This was managed through facilitation of conflict mediation, awareness raising of consumers and WUAs, peer-reviews and peer-learning sessions. Similarly, the bid winning POs required to make commitment that they would recruit local staff as and when feasible. To get buying in of the County Governments, the programme had to facilitate the CGs to develop their water sector strategy, creating space for POs engagement. The good outcome, most Counties are now ready to take the approach to scale. The key lessons from this process is that the POs engagement process needs to be inclusive so that all key stakeholders, consumers, POs and regulators of the service (WSBs or CGs) have full confidence and commitment to support such models. In rural areas, where the WUAs are operating on voluntary basis, there is a need for targeted education and awareness to consumers.

Access to finance for hardware’s is crucial

All the five project’s business plans indicated that the projects would require some investments on rehabilitation, pipeline extension and household connections etc. to make them viable for the POs. Expectation was that WSBs and CGs would be able to mobilise public finance for these activities as per the government policy. However, mobilising public funds was practically difficult, which delayed the full-fledge implementation of the contracts. SNV and its partner Kenya Market Trust structured *a blended finance facility* in the form of an **Output Based Grant** (OBG) to mitigate this risk. The key lesson we learned from the five projects is that provision for hardware rehabilitation, pipeline extension and metering investments are key to successfully engaging POs.

Private sector is not the silver bullet, they also need capacity support

As the POs were not recognised as water operators in Kenya in the past, it was very difficult to find experienced POs to come on board. As the winning POs had no prior experience as water operators, SNV had to strengthen their capacity through business development training, advice and mentoring support. It was evident that the reforms took longer period than originally envisaged, indicating that the market reforms in social development sectors such as drinking water supply in rural areas require more efforts and time compared to economic development sectors.

In conclusion, education and awareness of consumers, capacity strengthening of POs, support to public authorities and availability of smart grants are pre-requisites to have successful outcomes through PPCPs in management of water services in rural and peri-urban areas. Stakeholders need to go beyond *business as usual* and the *one-size-fits-all* approach.

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