PUBLIC-PRIVATE-COMMUNITY PARTNER-SHIPS: KEY TO SUSTAINABLE WATER SERVIC-**ES DELIVERY IN RURAL AREAS**

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Country: Kenya Sector: WASH

In Kenya, almost 70% of the population (some 29 million people) get their drinking water from wells, rivers, streams, ponds, and sand dams (KNBS, 2010). These sources are generally managed by voluntary water users' associations (WUAs), and have either quality or reliability challenges. As these WUAs lack effective management practices, almost one third of these systems are mal-functional at any given time (SNV 2013) and limited resources available via public authorities and NGOs are depleted in repair and rehabilitation of these water systems, reducing the resources available to expand services to unserved rural and peri-urban areas (primarily inhabitated by poor men and women). Therefore, lack of an effective mechanism for sustainable operation and maintenance (O&M) of small water systems has been a key barrier to expanding services to rural and peri-urban areas in this

Lake Victoria North and South Water Services Boards (WSBs) are the two of

Kenya, and Adam Smith International, who is the main techncial assistance partner for KMT, are the key implementing partners to SNV in this project, funded by DFID, Gastby Foundation UK and The Netherlands Embassy.

context.

eight regional water authorities in Kenya collectively responsible for water service delivery to 14 million Kenyans. Following the promulguation of the new Kenyan constitution in 2010, this role has been devolved to county governments. The case study covers water projects from six counties. The clients have high-level engineering technical capacity, however they lack capacity to design and implement sustainable post-construction management models, leading to sustainability challenges, especially in rural areas. The goal of the SNV assignment was to design and demonstrate the potential of a public-private-community partnership model and the role of private enterprises/firms in ensuring sustainability of rural water services within the two WSB areas. WSBs as the public authorities and WUAs as consumer representative are the key public stakeholders in rural areas. Kenya Markets Trust (KMT), who is pioneering a Markets for the Poor (M4P) approach in

> As the lead partner for WASH sector component of this GBP 25 million project, SNV was

responsible for the facilitation of all project intervention. KMT and ASI collaborated in the process and offered guidance to the SNV team on the M4P approach. SNV commissioned comprehensive market research, designed a public private partnership

(PPCP) model for sustainable

community

REGULATOR CONSUMER Service VOICE Provision Aareemen^{*} ASSET OWNER (WSB) OPERATOR **Payments** Consumer Contract CONSUMERS

operation and management Figure 1 - PCCP Framework

CONTEXT

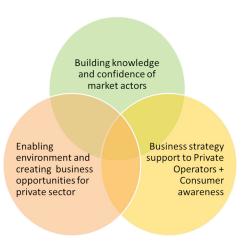
CLIENTS

METHOD / SNV INTERVENTION (O&M) of the sector. A framework for a typical PPCP is shown in figure 1, where a WSB engages an operator (private firm) through a lease contract (KMAP, 2013). The national regulator approves the framework for water tariff

setting and enforcement, taking into consideration of affordability and cost recovery principles.

A three-pronged strategy was implemented, including knowledge and confidence building of stakeholders on the new approach, development of an enabling environment for private sector participation and capacity strengthening of private companies.

SNV's facilitation services focused on the interface of these three areas and involved a number of steps as follows.



Market research – willingness and ability to pay

A household survey, using a sample size of twenty households and institutions under each water system, was commissioned to understand the social, political, and economic context of the project area, initially focusing on thirty-one potential water systems. Data were analysed using a statistical package for social sciences. In addition, observations and group discussions among water users' associations (WUAs) and District Water Officers were used to collect qualitative information. Average monthly income was reported at USD 147 per household. 74% of respondents confirmed consistent payment of their water monthly bills and even willingness to pay more for improved water service provision.

Commercial viability analysis

Commercial viability analysis was conducted to determine business cases for the private sector in O&M of rural water infrastructures. The situational risk status and financial (revenue and expenditure), socio-economic (service characteristics, main water sources and technologies, income status, and willingness to pay), legal and operating environments of each of the 31 water system was analysed to assess commercial viability of engaging a private firm as operator of each water system, the analysis presented three categories (15 ready for commercialisation, 12 improvement needed but potential and three not ready).

PPCP modelling and business planning for private sector

For the potentially commercially viable water system, all key stakeholders (local leaders, DWOs, WUAs, local enterprises, WSBs) were brought together to reflect on the operational status of each water project, potential role, obligations and responsibilities of private firms, WUAs and WSBs on O&M, and associated benefits. Based on stakeholder feedback, possible models of private sector engagement were developed. Furthermore, business plans were developed for each potential water project. Three scenarios of financing the initial rehabilitation costs of each water system (100% commercial, 50% commercial and 0% commercial) were analysed, keeping water tariff as a constant and fees and number of connections as variables. A financial plan was considered, focusing on financing period, water demand and source, staff cost, operating cost, debt servicing cost and inflation.

Procurement, negotiation and contracting of private firms

Both WSBs used a competitive and transparent two-stage bidding process to identify and select private firms as operators of their respective water systems. 18 firms responded to the call for expressions of interest (EOI) and 11 were pre-qualified on assessment using pre-defined eligibility criteria. The WSBs then published a request for financial and technical proposals (RFP) in national newspapers. The PPCP procurement process departed from the conventional approach in a numb of ways. The WSBs had to follow a licensing approach rather than the procurement of goods and services. The operators in PPCP have to be paid from the revenues generated from the sale of water; the contract only gives them the authority to be able to manage the water revenues. The successful bidder would offer their management services on lease basis, paying lease fees to the owners of assets/water project.

Strengthening of private firms and nurturing the relationships

With PPCP a completely new concept to all three groups of actors (public authorities, WUAs and private firms), strengthening capacity of the actors as well as nurturing collaborative relationships is key to the success of such models. SNV facilitated participatory planning and review processes to bring role clarity among the actors. Capacity of contracted private operators was strengthened on financial management procedures, consumer relationship and monitoring and evaluating systems, in addition to technical aspects of water services delivery. Operators were trained on Non-Revenue Water Management and learning and benchmarking exchange visits were facilitated. Further linkages are being developed with meter suppliers and billing software providers.

Consumer education and confidence building

Parallel to capacity strengthening of private operators, SNV offered technical assistance support to the private firms to integrate social marketing principles into their strategies to educate and inform consumers on the value of safe water. This is because building water infrastructure and having proper management systems in place does not automatically lead to consumers adapting to using and paying for safe water. To this end, three large-scale safe water awareness campaigns attended by approximately 36,000 people in three different counties have been implemented by private firms in collaboration with the WSBs and WUAs.

The approach of the campaign requires accountable and flexible institutions, considerable resources, trained facilitators and recognition that changing behaviour is a long-term process. Therefore, the steering committees of the campaigns included officers from the water service boards, county government water department officials, private sectors actors, mobile survey team, media team and WUA members. These individuals were involved in developing and implementing the campaign strategies, and financing and monitoring the outcomes of the campaigns.

Awareness creation campaigns attracted support from commercial entities like Coca Cola, Kenya Commercial Bank, Airtel, Safaricom, Athletics Kenya, Jamii Bora Bank, Chemelil Sugar Company and four media houses. UNICEF and Care Kenya also supported the campaigns. Both qualitative and quantitative tools including a mobile phone survey (M-Survey) were used to guide the campaign efforts and assess progress towards improving the performance of the water projects.

OUTCOME

National-level learning and enabling environment

Parallel to the WSB and county-level interventions, SNV facilitated the national Ministry of Environment, Water and Natural Resources (MEWNR) in establishing a PPP Node within the MEWNR. Two rounds of national workshops were organised, where international experts were invited to share best practices around the globe. Similarly, several focused workshops bringing together urban water services providers and national and regional stakeholders were moderated to ensure buy-in and gain input on the best models for private sector engagement in the water sector.

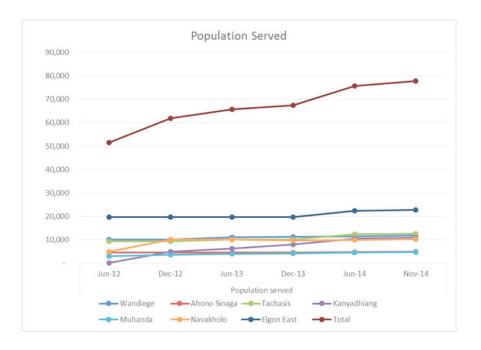
County-level governance and WASH sector planning, targeting

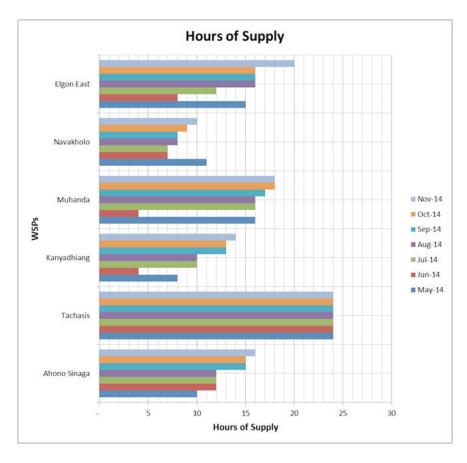
As the new constitution devolved water and saniation services to county level, SNV provided support to 10 counties in developing their sector strategy. SNV engaged IRC expertise to facilitate this assignment. All 10 counties have developed a robust mechanism for improved planning, monitoring, targeting and coordination of the WASH sector. Issues of post-construction sustainability, equity and inclusion are recognised in the strategies.

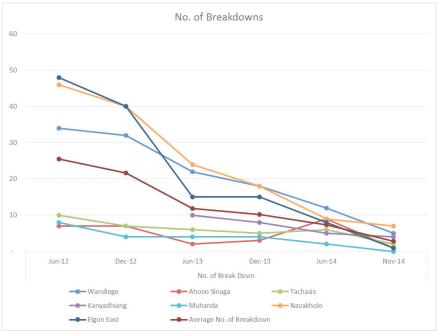
Outstanding outcomes have been achieved by SNV clients in this project, as indicated below.

Improved service delivery in project areas

Performance of the water projects has gradually improved as indicated by the following graphs.







As seen in the graphs above, reliability of supply has increased (less bursts and leakages due to close monitoring of functionality), hours of supply have increased and O&M cost recovery has improved. While improving the service levels, coverage of water supply has also increased, reaching greater numbers of poor people.

Consumers are aware of the O&M costs of the water systems and appreciate that if they don't pay there will be no service. Consequently, consumers have changed their behaviour towards consumption of safe water. Generally consumers' awareness on their right to safe water has increased.

Increased confidence of all key market actors on PPCP model

One of the most important achievements of the intervention is that all key stakeholders – the WSBs, partner county governments (Homa-Bay, Kisumu, Siaya, Nandi, Vihiga, Kakamega and Bungoma), WUAs and private firms – believe that PPCP is likely to help improve sustainability of water service delivery in rural and peri-urban areas. The WUAs have given full support to the operators, who are joint signatories on the revenue, deposits and investment accounts of the water projects. This is an indication of improved confidence, transparency and accountability among the WUAs.

Some county governments (e.g., Kakamega, Busia, Vihiga, Marsabit, Homabay and Kitui) have openly expressed interest in expanding the PPCP model in the water sector. These counties are in the process of putting in place mechanisms to gradually transition a number of their water projects from community management to private management. The private firms have now seen new business opportunities in the sector. They are open to new ways of interacting with consumers, have promptly responded to consumer issues/complaints, are replacing incompetent staff and are proactively looking for funds to expand services to underserved, poorest-of-the-poor consumers. Kanyadhiang also uses local FM radio services (i.e., Gulf Radio) to advocate for water connections and payment for safe quality water. Different actors participate in a weekly programme on the radio station to discuss challenges facing water supply services and come up with various solutions on the same.

The most interesting results have been observed at the consumer level. Consumer confidence and responsibility has increased, while as a result water projects are registering more complaints from consumers and operators' response times on complaints, especially on leaks and bursts, has improved. This improved management of non-revenue water, as well as improving customer satisfaction rates. Staff incentives have also helped increase morale within operators, with fincancial bonuses for staff bringing in new customers or reporting illegal connections.

Improved enabling environment for private sector participation

One precondition to successful scaling up of PPCP models is the legal space for the private sector to invest in infrastructure improvements. SNV proactively facilitated 10 county governments to develop their water sector strategies such that they created space for the adoption of PSP models. All the 10 counties supported by SNV have recognised PPCPs and PSP models in their water sector strategic plans with six (Kakamega, Busia, Vihiga, Marsabit, Homabay and Kitui) already in the process of laying structures to put some schemes under PPCP. The PPCP model is one of the key pillars aimed at ensuring sustainability of water service provision within the counties.

At the national level, the national Ministry of Environment, Water and Natural Resources (MEWNR) has established a PPP Node within the MEWNR, trained its staff on PPP concepts and tools, and developed sector-specific guidelines for water PPPs, creating an enabling environment for PSPs and PPPs.

Overall results are very inspiring. Over **44,420 men** and **46,600 women** under seven water systems in Lake Victoria region WSBs have benefitted from improved water services provided by private operators under the PPCP contracts. There is huge potential to upscale this model countrywide, benefitting millions of poor men and women in rural areas of Kenya.

IMPACT

Goretti Achieng, a female consumer from Muhanda Village in Vihiga County testifies to how local women and children are benefiting from the improved water services delivered by the private operators:

"My school going children and I used to walk one kilometre five times day to and from the nearest water pan to fetch water. After the private operator assisted me to connect to the Muhanda water project, I have more time to run my hotel business and my dairy cows are healthier due to the consumption of safe water. My children also have more time to concentrate on their studies."

There are several factors that have contributed to the initial success of the PPCPs in the Lake Victoria region.

Persistent governance challenges and consumer push for the reforms

One of the key drivers of change was the fact that consumers were unhappy with the status quo and most of them (more than 90%) were willing to engage private operators. Governance challenges, poor water quality and high incidence of waterborne diseases (which varied from 95% to 10% in the study area), and the need for frequent, time-consuming trips to collect water were identified as key drivers of private sector engagement as operators (SNV 2012). Households in the study area had a monthly income of USD 126-150 and thus are capable of paying commercial water fees. Cash flow analysis indicated that more than 50% of the water systems were ready for commercial operation, while other 50% would be ready after some investments on metering, pipeline expansion, and rehabilitation (op. cit.).

Use of evidence base from market research

Findings of the market research, including the analysis of the commercial viability of each water project, was a powerful eye-opener for the stakeholders. When the findings were shared, the Ministry of Water, national regulator, communities, WUAs, WSBs and private sector operators all felt that there was an opportunity to commercialise rural water systems, leading to full support for the interventions.

Strong leadership of the WSBs and county governments

Following the sharing of the findings of the market research and proposed PPCP approach, the CEO of the Lake Victoria South WSB was strongly committed to the proposed approach and offered whatever support was needed in the design and implementation of the PPCP model in pilot areas. When the county governments raised concerns about the model, the CEO personally met with all the governors of the counties within the Lake Victoria South WSB area and championed the model on his own. Similar support was provided by the CEO of Lake Victoria South WSB, as well as all participating counties. County governments followed the same path later on.

Full engagement of all key stakeholders

SNV used a participatory approach and engaged with WUAs, WSBs, CGs and potential private firms on their possible role, responsibilities, rights and obligations. Users were educated on the pros and cons of engaging private firms, the private sector received orientation on possible business opportunities, and WSBs and CGs received support on participatory and transparent procurement processes (development of procurement tools

SUCCESS FACTORS

including tender documents, evaluation criteria, and lease and private operator contracts).

Flexible options for engagement with the private sector

One interesting outcome of the consultative process was that four possible models of engagement with the private sector were identified by the stakeholders. These four models enabled the WUAs, private firms and WSBs to identify the most feasible model for their specific context, rather than an approach imposed upon them.

While the overall achievement has proved inspiring, the PPCP design and implementation process was very demanding, with several challenges emerging. Key amongst these challenges are highlighted below.

WUA and WSB scepticism regarding engaging the private sector

Following reflection on the findings of the market research, stakeholders had agreed that some sort of public-private-community partnership with a clearly defined role for WUAs (oversight with financial obligation) would be an appropriate model. However, the role of private firms and WUAs in the PPCP business model was the most debated issue. Although the Kenyan Water Act of 2002 envisaged that O&M would be carried out by commercial water service providers (WSPs) licensed by WSBs (MoWI, 2002), business incentives for commercial WSPs is limited in rural and peri-urban areas and water systems are generally handed-over to voluntary WUAs for O&M. While these WUAs are unable to manage O&M of these water systems effectively, they are sceptical of handing over the O&M role to private firms, with the perception that this would result in water fees increasing and the private sector 'stealing' their resources. The challenge, in this context, was to obtain buy-in on the model from WUAs, while creating clear space for the private sector to bring gains in effectiveness and efficiency.

Even after the initial agreement was reached and contracts were signed, some WUAs who were benefiting directly from the water projects continued to change terms of engagement with the operators. Some WUAs still wanted to have a say in staff hiring and management, despite contractual obligations explicitly separating roles and responsibilities. This was managed through training on corporate governance, and facilitation of conflict mediation, peer-reviews and learning.

Similarly, although the WSBs wanted to improve sustainability of rural and peri-urban water systems, they were not convinced that engagement of private firms was the solution. Close coaching and engagement of WSB staff in the entire process of research, commercial viability analysis and business modelling helped them to build their confidence.

A reluctance to accept intervention of external private firms by some ethnic communities who were only comfortable with operators from their own ethnic groups emerged as another challenge in the North Rift (Elgeyo-Marakwet County) and South Nyanza (Kisii County). As the local private firms did not meet the basic eligibility criteria from the public institutions (Water Service Boards), engaging them as operators was not possible. These socio-political complexities led to compromises in the selection of private firms.

CHALLENGES AND LESSONS LEARNED

Agreeing on the lease and management fees for private firms

Sufficient revenue to meet the operational expenditure (OpEx) of water projects including day-to-day O&M, fuel, chemical, staff salaries, minor repairs, network expansion, etc., is key to financial sustainability. While there was a consensus among the WSBs and WUAs that a sustainable tariff structure had to be put in place, neither the WSBs nor the WUAs were able to decide on the adoption of such tariff. As the Kenyan water sector policy directive was to achieve 100% OpEx cost recovery from water revenue in rural areas, this issue required consultation with the national regulator. A very close engagement of actors and analysis of financing model was useful in deciding the tariff for OpEx.

Similarly, setting base fees for private operator contracts became a challenge as all the private sector firms requested fees beyond what some of the water projects were able to generate on a monthly basis. Through facilitation of the programme and support from the WSBs, a working formula between the operators and WUAs was developed that allowed the operators to employ staff and pay monthly salaries focusing a 20% surplus drawdown at the end of each successful financial year.

In the case of lease operators, there was a challenge to agree on the lease fees to be paid to the WUAs and WSBs by the operators. Although the lease operators quoted their lease fees during the bidding process at USD 364, and considering they inherited water systems that needed some initial capital injection, lease operators agreed with the asset owners on some level of service delivery before commencing payment of the lease fees. Close engagement between actors and analysis of financial scenarios helped the stakeholders to understand and agree on a reasonable tariff structure.

Political buy-in of county governments:

There were two challenges related to the county governments. As the county governments were only established following the promulgation of Constitution of Kenya in 2010, the initial stages of the programme were led by the regional WSBs, who had the mandate at that stage. By the time the counties were established and water sector staff recruited, some of the contracts were ready for signing. However, the process was slowed by counties openly expressing dissatisfaction regarding the approach of engaging private sector as operators. Their expectation was that huge revenues would be generated by these water projects and that the counties could manage these water systems themselves, making significant profits in the process. When counties realised that the water projects were making a loss each month and they developed an understanding of the rationale behind the engagement of PPCP, they realised that they did not have any supporting policy documents to engage with the private sector. To mitigate the risk of complete derailing of the entire PPCP process, the programme had to facilitate the counties to develop their WASH sector strategies, so that they would be officially mandated to engage with the private firms. The strategic planning process also provided an opportunity for SNV to facilitate establishment of sound sector planning, participatory governance and poverty targeting for equity and inclusion.

Taking such PPCP models to scale for management of water schemes may require counties to develop and enact appropriate policies. Close follow-up and capacity support will be required to ensure that the enthusiasm to enact policies does not result in defective and contradictory frameworks.

Availability of competent private sector

While 18 private firms responded to the call for expressions of interest by the WSBs, few of these met the criteria set by the WSBs. Of the 18 firms, 11 were qualified after scoring 60% against pre-defined eligibility criteria. The WSBs then requested technical and financial proposals from these firms. Nine private firms submitted proposals, however, few of these firms had sufficient competency or prior experience in managing water projects, and most lacked experience in billing, financial management, accounting, and O&M services for water projects. A carefully designed training and capacity strengthening programme was needed to build the capacity of the bulk of private firms to the point where they were able to perform as operators.

Financing of capital rehabilitation (CapEx) costs to make the water systems viable

While the business plans clearly indicated that commercial viability of most projects rested on availability of funds for rehabilitation, metering and pipeline extension work, most private firms were not ready to take the high risk of investing in the necessary capital rehabilitation work. Full implementation of the signed contracts was delayed due to this fact. Most of the water projects were not in a position to attract commercial finance, as they lacked the collateral or steady cash flow required. A specially designed financing vehicle was needed in this context.

SNV provided technical assistance to carry out a financial modelling exercise exploring a possible combination of a grant and commercial loan to meet the CapEx requirements. Three commercial financing scenarios – 100%, 50% and 0% grants – were used as a reference point for this purpose. MAP has since developed and structured a credit facility for operations, refurbishment and expansion of existing facilities at an interest rate of 4% per annum repayable within a period of 60 months. The facility is structured and monitored along water sector performance standards agreed upon between the operators and the WUAs.

Prohibitive initial costs preventing household connections for the poor

Transferring actual financing costs to the consumer is a key approach to achieving commercial viability. However, this need became an obstacle to poor people to obtaining household connections, with costs for this at almost USD 114 per household. While it is necessary to cover these costs from consumers, such costs have proved prohibitive for poor consumers. SNV is currently investigating an approach to offering connection costs for poor households through a meter leasing model.

Perception of limited incentives in the water sector amongst large private firms

As water sector has a limited return on investment (KMAP, 2012), large private firms did not see real business opportunities in investing in water projects. Tailor-made business models for each water system, potential revenue versus expenditure analysis and targeted orientation and educational campaigns helped attract interest from small and medium-sized private firms. The programme has started engagement with the Kenya Private Sector Alliance to entice large private investors.

STANDARD DATA

REFERENCES

The MAP project started in January 2012 and is expected to close on 31 December 2015.

Team members:

Chiranjibi Tiwari, Abdi Wario, Patrick Omondi and other 4 staff.

Number of PP-days already invested and planned to be invested per category: More than 2,000 for the entire project.

Relevant partnerships:

Kenya Markets Trust and Adam Smith International are the most important partners, offering technical guidance to SNV on M4P approach

Financial resources invested: almost GPB 1.5 million (100 % externally funded)

Client satisfaction and enhanced capacity scores: Excellent

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