Professionalizing Drinking Water Service Delivery in Small Towns of Haiti

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Abstract/Summary

The EPAR (Rural Water Supply and Sanitation) Project of the National Directorate of Drinking Water and Sanitation [Direction Nationale de l'Eau Potable et de l'Assainissement DINEPA] played a leading role in the reform of the water and sanitation sector in Haiti. The Project, which ran from August 2007 to November 2013, supported the construction or rehabilitation of drinking water schemes in small towns with fewer than 10,000 inhabitants in the Sud region.[1] The Project significantly increased access to and improved the sustainability of water services in beneficiary communities by introducing a radical change in the way these services were provided. The Project's results are all the more remarkable given that the EPAR was carried out in a period marked by political instability, devastating hurricanes, the 2010 earth-quake and a cholera outbreak that is still ongoing.

Introduction

Previous water supply investments in the Sud Region were limited and lacked monitoring from outside the communities.
As a consequence, water services deteriorated rapidly and communities became accustomed to receiving water free of charge. Against this backdrop, the Project adopted a management model that integrated domestic private sector participation and had been successfully implemented in Benin and Madagascar.

In parallel, Haiti began a reform process in 2009 that facilitated the continuous presence of DINEPA at the regional and local levels by creating OREPAs (Water and Sanitation Regional Offices), URDs (Rural Departamental Units) and TEPACs (Community Water and Sanitation Technicians). This paved the way for the development of a management model composed of: (i) a user association —the Potable Water Supply and Sanitation Committees [Comité d'Approvisionnement en Eau Potable et Assainissement CAEPA]; (ii) a professional water operator –the OP– contractually bound to the CAEPAs to operate the scheme and collect payments; and (iii) the URD, responsible for sustaining and supervising both the CAEPAs and the OPs.

Description of the Case Study – Approach or technology

The local professional operator, a solution for increasing access to sustainable drinking water services

The EPAR Project was the first to integrate private water operators in rural areas of Haiti. A committee composed of representatives from DINEPA, technical assistance personnel from the Project and the rel-evant CAEPA selected the OPs based on pre-defined selection criteria, which included being a native of the town and being able to submit an operating business plan. The committee's goal was to select an OP that would be accepeted by the community and possessed entrepreneurial skills. Selected OPs received basic technical and managerial training.

The OPs work with half a dozen employees, including plumbers, secretaries, and kiosk vendors. They manage a customer base of 100 to 300 households with metered water connections (although a flat rate is

[1] Specifically, in the departments of Sud and Nippes (financed by the World Bank) and in the Grande-Anse region (financed by the Inter-American Development Bank).

charged in some cases) and a number of kiosks where payment is made per number of purchased bokit (19 liter container).

Main results and lessons learnt

Improved access to water…

The Project laid the necessary foundation for regular chlorination of the water. The results of SIS-KLOR monitoring (a real-time monitoring initiative whereby mobile water testing teams are able to send results to DINEPA via SMS) demonstrate that the OPs are regularly performing chlorination. Ongoing provision of free chlorine by DINEPA and monitoring by the URDs will help sustain this result over time.

In terms of access, the percentage of households connected to the water distribution system rose from 8 to 20 percent in beneficiary communities. This rate will increase further once new requests for connections are met: 65 percent of kiosk client households have indicated that they are willing to connect. In contrast, the average connection rate in small towns and rural areas of the country was 5 percent in 2011.

When kiosk users (21 percent of households) and those purchasing water from neighbors with a household connection (10 percent) are added to the number of beneficiaries connected to the water distribution system, the total population that gained access to safe drinking water through a network managed by a professional operator as a result of this Project is 50,000.

The Project also provided access to water to an additional 10,000 people living in communities where the water distribution system was not managed by an OP. Approximately 51 percent of the households located in the targeted communities are enjoying access to safe drinking water as a result of the Project.

The kiosks were not used as frequently as originally anticipated. Management of these facilities proved challenging for the operators, who gradually abandoned them. Users, who were unwilling to pay for service, found an easy way to obtain water by forcing abandoned kiosks open. The operators did not have the means to discontinue this practice. Only 50 percent of the kiosks are being managed by the OPs, and it is estimated that 15 percent of the households are using the abandoned kiosks to obtain water.

… through professional, local, and cost-effective management

The operators have limited accounting skills, engage primarily in cash transactions that are rarely recorded and sporadically generate financial statements that are of very poor quality and usually limited to a cash balance. Nevertheless, the reconstruction of operators' financial statements demonstrated that they are achieving results: with average sales volume of US$23 per year per connected household or kiosk client and up to US$30 for the most efficient OPs, operators' compensation is expected to account for 25 percent of receipts.

These resources are used primarily to cover staff costs (41 percent), which represent an area for potential savings. However, 8 percent of the costs relate to infrastructure work, a significant improvement relative to the pre-Project situation when the CAEPAs conducted almost no maintenance work. Although these works most often entailed repairs and no actual maintenance program is in place, the operators have the potential to become proactive in infrastructure management.

The operators have also demonstrated their capacity to provide new household connections and further increase access to water services. However, this materialized as a result of the free provision of meters under the Project. The price of water meters in Haiti is above US$100, and the OPs only have three years to recover their investments. This combined with the lack of support the OPs receive from the CAEPAs and the URDs to reduce delinquency rates prevents OPs from increasing their client base. DINEPA needs to propose a long-term solution, such as extending the duration of the management contract and/or leasing equipment or subsidizing procurement, to overcome this barrier.

Nonetheless, the results of the evaluation show reason to believe in the potential of the OP management model. OPs have been able to cover their operating costs, generate profit and finance corrective mainte-

nance investments for approximately three years while increasing access to safe water. Moreover, field surveys show that users in the towns that piloted this solution are very satisfied with their service. Users overwhelmingly support the model and have a high level of confidence in the quality of the water.

Challenges in achieving sustainability

Access to water services through individual household connections was expanded through the widespread installation of meters to facilitate volumetric billing. However, volume-based payment schemes could not be applied across the board. Rehabilitated schemes posed the first challenge; former users refused to have meters installed and prevailed upon the CAEPAs and other users to join their cause. As a result, the users served by some water schemes are not being billed based on volume of water used despite their general agreement about the benefits of volumetric billing in terms of fairness and ability to reduce water waste.

In comparison, in light of the infrequent use of the kiosks and the low revenue collection levels for services provided via individual household connections, the practice of reselling water to neighbors should be reexamined. Some 37 percent of households with a connection sell water to their neighbors, and the prices are similar to the ones charged for use of the kiosks. This practice, which had not been formally included in the Project, provides 10 percent of households in targeted communities with access to potable water.

The average revenue collection rate for OPs is 50 percent and reaches 66 percent in the best of cases. This rate is still too low to ensure that water management can suffice as the operators' sole source of income. Nevertheless, the rate is enough for the OPs to make some profit thanks to the provision of free inputs such as chlorine and the initial batch of meters.

The success or failure of the OPs is largely dependent on the CAEPAs. CAEPAs often side with users against the professional operators, in particular with respect to the rejection of a payment system based on volume used, cases of illegal connections and even issues unrelated to the service. The CAEPAs see themselves more as a user association responsible for defending interests of the OPs' clients than as the organization responsible for the provision of sustainable and safe water distribution services through a delegation agreement with an OP.

The operators need further support from the authorities in the areas of training and regulation. URDs should provide specific training to the professional operators on technical and management aspects and act as an independent mediation agent between the CAEPAs and the OPs. However, the URDs were unable to assume their role as regulators in contentious cases. The appropriate roles of these three stakeholders still needs to be adjusted and their relations better formalized. In one case, a CAEPA stripped one of the professional operators of his functions without the URD's knowledge.

Conclusions and Recommendations

The "OP model" can be considered a success even though further analysis is needed to assess its sustainability and prove that operators can provide service in challenging environments. The Public-Private Infrastructure Advisory Facility multi-donor trust fund is financing an evaluation of this model with the objective of defining the conditions and training needs required for this model to be scaled up and reach other regions of Haiti. This analysis and scaling-up of the model are at the heart of the recently approved World Bank-financed Small Town Water and Sanitation Project. The following lessons and findings highlight what needs to be improved in order for the OP model to provide sustainable water services to the small towns of Haiti:

• The operators do not yet have sufficient contractual security to allow them to engage in long-term planning in terms of business activities or infrastructure maintenance.
• Although users support the OP model, operators expend a lot of energy negotiating with users to obtain payment for connections or usage and managing local political interference.
• Increasing the number of kiosks was not the appropriate solution for increasing access; however, the practice of reselling water to neighbors has the potential to achieve the same objectives.
• While the recruitment process paved the way for the introduction of operators who were viewed as legitimate by

the users, it did not attract candidates with the requisite financial and management skills.
• The conflicts that arose on the ground between the OPs and the CAEPAs could not be resolved through the intervention of the URDs, which lack the resources and an adequate regulatory structure to allow them to fully assume their role as regulators. The roles of these three stakeholders needs to be adjusted and formalized.
• A long-term solution must be implemented to make meters more affordable for the operators.

References

All of the material from this submission is taken from Jean-Martin Brault, Zael Sanz and Bruno Le Bansais (2015) Professionalizing Drinking Water Service Delivery in Small Towns of Haiti; Lessons from the Rural Water Supply and
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