

HOW CAN THE PRIVATE SECTOR HELP PROVIDE ACCESS TO DRINKING WATER IN DEVELOPING COUNTRIES?

Philippe Marin, a specialist in water and sanitation at the World Bank, led a comprehensive study on public-private partnerships in the water sector between 2006 and 2008. In this article, he presents the main findings and, based on objective facts, makes a generally positive review – while recognizing their limits – of the introduction of public-private partnerships in the water sector in developing countries.

# What is the Actual Performance of Public-Private Partnerships for Urban Water Utilities in Developing Countries?

*By examining progress achieved and problems encountered by 65 public-private partnerships (PPPs) implemented on different continents, a recent World Bank study is providing some objective facts from an analysis of the practice. Overall, the performance achieved by PPPs in terms of improving access, service quality and operating efficiency has been quite satisfactory, even though the level of private investment has proved disappointing. Without being a panacea, PPPs can continue to be – alongside other types of projects – an option for decision-makers.*

**By Philippe Marin, Specialist in Water and Sanitation at the World Bank<sup>1</sup>**

Public-Private Partnerships for urban water utilities in the developing world is a rather conflictive topic. PPPs were widely promoted by International Financial Institutions and donors back in the 1990s to turn around poorly performing water utilities and help improve services for the population. Yet the problems many large PPP projects have encountered during implementation, combined with a series of highly publicized contract cancelations in recent years, have shed doubts on the validity of this approach for developing countries.

## Need for a comprehensive review

Unfortunately, the debate about water PPPs has often been more about ideology than objective data. While a rather large body of literature has been published about PPPs in the water sector, there is a lack of quantitative data and indicators upon which to judge the actual performance of PPP projects. After more than 15 years of experience in the developing world, the time had come to carry out a comprehensive review of the overall performance of water PPPs. Between 2005 and 2007, the Water Anchor Department of the World Bank carried out a major study – with financial support from PPIAF – to gather and analyze performance data from 65 water PPPs for urban utilities in 30 developing or transition countries. The sample represented close to 80% of the population served by private operators in developing countries since 1990, under contracts signed before 2003 and in place for at least 3 years. The analysis focused on the improvements achieved

in access, service quality and operational efficiency. This new study provides a fresh perspective on the contribution water PPPs make in developing countries, and brings several important findings for water practitioners (Marin, 2009).

The first of these findings is that – contrary to a rather widespread belief – water PPPs in the developing world are not in retreat. Out of about 260 PPPs for urban water utilities awarded in developing and transition countries in the last 15 years, as many as 84% of them were still active by the end of 2007, and the overall rate of early contract termination stands at just 9%. In spite of several large contract cancelations (in Buenos Aires and La Paz for example), the population served by private water operators in developing countries has in fact been growing every year since 1990 and rose from about 94 million in 2000 to 160 million by the end of 2007. In recent years, several large countries have started experimenting with water PPPs on a large scale, including China, Russia, Malaysia, Algeria, Ghana and Cameroon. What has been going on since 2001 is not so much a downturn but a change in the market. Several large international operators have withdrawn, but they have gradually been replaced by local private investors that entered the business. Water PPPs run by private water operators from developing countries have accounted for the bulk of market growth since 2001. They now represent more than 40% of the market and as many as 28 have been identified that each serves at least 400,000 people. If anything, the market for water PPPs in developing countries has become more ...

<sup>1</sup> This short article is a personal contribution by the author. It is a short and incomplete digest of the findings developed in the study of reference currently being published by the World Bank by the same author. The positions expressed do not necessarily reflect the view of the World Bank, PPIAF, the Executive Directors of the World Bank and/or the governments they represent.

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... mature. There is a more diverse supply side and private operators have generally learnt their lesson: they have become much more aware of the risks inherent to water PPP projects in developing countries when they submit bids for new contracts.

## Promising results

The second major finding is that, overall, the performance of water PPP projects has been quite satisfactory. Even though PPPs have proved to be complex arrangements, often difficult to implement in the context of developing countries, many projects have achieved sizeable improvements in terms of access, service quality and/or operational efficiency. While the total amount of private investment<sup>2</sup> in the water sector has been disappointing, water PPP projects have provided access to piped water to more than 24 million people over the last 15 years. This is not insignificant when considering that private water operators served just 7% of the urban population in 2007<sup>3</sup>.

Experience in Colombia and Western Africa - as well as with many management contracts - shows that PPPs can help reduce water rationing and improve service quality for populations. The analysis of the evolution of water losses (non-revenue water), bill collection and labor productivity shows that PPP projects can be efficient in improving operational efficiency. The current low mood about water PPPs is probably more the result of exaggerated early expectations back in the 1990s about what private operators could achieve than a reflection of their actual contribution to improving services. Successful PPP projects can be seen on all continents, for instance the national utilities in Cote d'Ivoire, Senegal and Gabon, the concessions in Eastern Manila (Philippines), Macao (China) and Guayaquil (Ecuador), as well as many PPPs for municipal or provincial water utilities in Morocco, Chile, Armenia, Colombia, Brazil and Argentina.

The third important finding, when looking at what worked and what did not work in practice, is that the most suitable PPP model for the developing world seems to combine public financing of investment with private operation which is, incidentally, the approach that has been adopted for more than a century by municipalities in France and Spain. This suggests a new paradigm for PPPs in water utilities: they should not be about attracting private money, but rather about using private operators to improve services and efficiency. Under such arrangements, private operators do have a positive financial con-

tribution, but it is largely indirect. Improving service quality and operational efficiency generates a "virtuous circle" whereby the utility gradually improves its financial situation and creditworthiness, allowing it in turn to gain easier access to financing for investment in expansion and rehabilitation. The most successful water PPPs are essentially long-term contracts with hybrid financing arrangements and an optimal mix between government, donors and private financiers depending on the case. Such hybrid schemes have taken various forms in practice, such as with the affermage contracts in Senegal, Côte d'Ivoire, Niger and Cameroon, the mixed-ownership companies in Cartagena (Colombia) and La Havana (Cuba), or the concessions with public funding in Colombia, Cordoba (Argentina) and Guayaquil (Ecuador).

## No magic formula

While this new study confirms that PPPs are a viable option for reforming the urban water sector in developing countries, it is also clear that it is not a magical formula that can solve the sector's many problems. PPPs have proved to be challenging endeavors, and they should not be the sole option on the table for governments seeking to reform their urban water sector. Reforming poorly performing water utilities under public management is an equally viable option: there are well managed public water utilities in the developing world, and several donor-supported projects based on public management have worked well (as in Burkina Faso, Uganda and Phnom Penh, Cambodia). As for PPPs, they can be made to work and bring very sizeable benefits, provided they are properly designed and implemented. Experience over the last 15 years has taught us valuable lessons about what works and what does not. Other approaches for involving the private sector also exist and are gaining acceptance in many countries, such as performance-based service contracts, subcontracting and Build-Operate-Transfer (BOT) schemes for treatment facilities. When it comes to improving water and sanitation services for populations, decision-makers need a choice of options and the private sector does have a lot to bring. ●

## REFERENCE

Marin, P., 2009. Public-Private Partnerships for Urban Water Utilities - A Review of Experiences in Developing Countries, World Bank Publications, Washington, forthcoming.



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<sup>2</sup> Keeping in mind that not all PPPs involve private investors  
<sup>3</sup> Up from less than 1% of the urban population back in 1997, and 4% in 2003

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Lise Breuil and Aymeric Blanc give a mixed review of public-private partnerships in the water sector. Based on AFD experience – support to sectoral policies and implementation of best management practices – the authors consider that the private sector has still not fulfilled its role in terms of extending networks and policies that are favorable to the most disadvantaged populations. They do, however, underscore the benefits that have been gained from the introduction of private interests – particularly in terms of clarifying the roles and responsibilities of the different players.

# Can Public-Private Partnerships Benefit Populations Excluded from Water Services?

*Although public-private partnerships may have achieved relatively disappointing results in terms of extending access to water for poor populations, the arrival of private operators has nevertheless often allowed authorities to better define their public service objectives and give a political dimension to access to water for all. International operators also constitute a source of innovation and make it possible to tailor supply to the poorest populations; in future, local entrepreneurs will have to fully participate in this objective.*

**By Aymeric Blanc and Lise Breuil, Project Managers at Agence française de développement**

Throughout the 1990s – during the heyday of public-private partnerships (PPPs) – one of the conditions for donor intervention was often that national water distribution companies in developing countries were opened to the private sector. Although the issue of the future of disadvantaged populations may not always have been clearly dealt within the framework of these partnerships, there were a number of more or less implicit expectations concerning them; first, financing provided by the private sector would undoubtedly increase the supply coverage for the population, second, productivity gains achieved by private management and by competition would improve financial equilibrium in the sector, and the poorest would ultimately benefit as this would bring down tariffs.

Private sector involvement did benefit poor populations, either directly – via the extension of water networks to unserved populations – or indirectly – by drawing the attention of the authorities to the need to focus on access to a service for all in the framework of a more equitable sectoral policy, and also by providing the technical and social innovations required to integrate the poorest populations. However, twenty years of experience of PPPs have produced mixed results.

## Globally negative results for the poorest

The first obstacle to providing widespread access to water is the cost of connection to the network. In this context, the most favourable policies for poor populations are those that increase their supply the most. Private operators involved in PPPs have often promoted individual connections to the detriment of standpipes; as early as

1974, the national water distribution company in Côte d'Ivoire financed distribution networks and made some 350 000 connections between 1988 and 2006. This example was followed by Senegal – 130 000 social connections between 1996 and 2006 – Niger and Burkina Faso.

Although access to a connection may have been the meeting point between population demand and a commercial model led by the private operators, the development of this policy did remain limited. Indeed, the lack of financing for networks led to connections being targeted in neighborhoods that were already connected, to the detriment of the poorest that were often located in the outlying areas of cities. This underinvestment – which was sometimes attributable to the State in cases of affermage – was detrimental to the extension of primary and secondary networks to remote neighborhoods and limited the impacts of social connection policies. These policies also failed to make progress as a result of the low capacity of populations to save enough to pay a bi-monthly bill; a number of disconnections (70 000 in Côte d'Ivoire) were observed during the period that followed connection. Service provision mechanisms implemented by PPPs cannot disregard the characteristics of demand which is often unstable and precarious.

Private sector involvement sometimes went hand in hand with tariff increases due to the need to recover costs. Progressive block tariffs were implemented by most PPPs with a first subsidized social block for low monthly consumption – supposed to be that of the poorest. But these systems showed mixed results; the practice of “neighborhood ...