
Water and Sanitation Utilities Partnership

Report # 4, November 1993

Agents of Change: Public-Private Partnerships in Urban Water and Sewerage Services in Developing Countries

by Thelma Triche

Introduction

Public-Private Partnerships (PPPs) are becoming popular tools for improving urban water supply and sewerage services in developing countries. Well-designed contracts with private operators result in improved cost-recovery and commercial viability, a consumer-oriented approach to service, better maintenance, and reductions in water losses. The cases presented in this Report demonstrate how contractual models of PPP have been adapted to the unique urban environments of three different countries.

The Poor State of Water and Sewerage Services in Developing Countries

Publicly operated urban water supply and sewerage services in developing countries are plagued by a number of weaknesses. In many places, the quality of service is poor and access to service is inadequate, particularly for the poorest populations. Investments have been supply driven, planned on the basis of unrealistic estimates of demand growth, without regard for commercial viability. Technical operations are inefficient and worker productivity is low. Nonrevenue water levels are high—

with leakages of 50 percent or more in many places. Cost recovery through user fees is low and operating subsidies represent a drain on scarce public resources. An inappropriate institutional framework is one of the major sources of the problem. Water and sewerage company managers lack autonomy and are not held accountable; political authorities interfere in operations and staffing decisions; and low tariffs that do not reflect the full cost of service encourage waste and inefficiency. Since operators are not dependent on consumers for their revenue, they have little incentive to serve the consumers well.

The Need for Investments

While improvements in operating efficiency would reduce or postpone the need for new investments in source supply, several large cities are facing expensive rehabilitation programs and urgently need investments in sewerage and wastewater treatment to keep up with the growth of their populations. Domestic capital markets for the long-term finance required for this type of infrastructure have historically been very thin in developing countries, al-

though they are beginning to appear in some places. To compete for investment resources—domestically or internationally—water and sewerage services will have to become commercially viable.

The Role of PPPs in Change

Governments and water company managers face the daunting task of improving the financial and technical performance of services and making them more consumer-oriented. Many are engaging private firms as partners in this effort. In cities as different as Abidjan, Buenos Aires, Conakry, Gdansk, Johor City, Mexico City and Santiago, services that were previously provided exclusively by government departments or semi-autonomous public enterprises are now being provided through a variety of public-private partnerships. Perhaps the most important characteristic of these arrangements is that they introduce institutional changes that promote, and sustain, greater commercial viability and consumer orientation. Many governments are recognizing the need to improve cost-recovery and accountability in services, but policy changes alone are meaningless without the institutional changes necessary to

implement them. Because the private operator is seen by both parties to the arrangement as clearly distinct from government, government interference in day-to-day management is eliminated, results are likely to be monitored more carefully, and compensation can be linked directly to performance.

The Advantages of Contractual Forms of PPPs

Full privatization of water services through the sale of assets, the model adopted in England and Wales in 1989, is not likely to be pursued on a large scale in developing countries in the near future. While privatization of other public services, such as power, is gaining popularity, it is not clear that private investors are willing to buy water supply distribution assets, given their poor condition, the lack of good information, and the political riskiness of the sector. Moreover, the regulatory implications of privatization constitute a considerable burden, and regulatory failure could reduce or negate the benefits. For the near term, contractual models—which include service contracts for support activities such as meter reading, management contracts that include performance incentives, lease contracts, concessions, and BOT-type arrangements—appear more promising and offer many of the advantages of full privatization. Several characteristics of contractual forms of private participation in water supply make them particularly suitable for a range of developing countries. They introduce competition and contestibility into a

sector which has too often been considered a monolithic natural monopoly. Some reduce the need for price regulation and provide predictability by incorporating many of the rules governing the relationship directly into the contract. They allow for an evolution of the responsibilities and risks assumed by the private partners. Finally, in a sector that is marked by important political and social implications, they provide an opportunity for developing country governments to test the effectiveness of private service delivery and to develop credibility with both consumers and private partners.

Designing PPP to fit the Context

The contribution of the French experience in the evolution and application of several of these forms is notable, and it is not surprising that the French have played a leading role in introducing performance contracts, lease contracts and concessions in a variety of developing countries and former socialist countries. However, in adopting contractual models in developing countries, it is important to consider the local context. The French model of urban services has evolved in the unique political and social context of France in which the public-private partnership is marked by mutual cooperation and trust. Regulation of private water suppliers is very unstructured and depends on informal consumer feedback and a close working relationship between the local government and the operator. (For more information see

Dominique Lorraine, "Urban Services, the Market and Politics," in *Private Financing of Public Infrastructure, the French Experience*, French Ministry of Public Works, Transportation and Tourism, 1993.) Conditions in developing countries are, of course, quite different. Local governments are often weak and lack financial resources and credibility; consumers, particularly the poor, lack a voice in decisions regarding urban services; the private sector is often distrusted; and governments may be unstable or unpredictable. PPPs must be structured in innovative ways that reduce risks for both sides. The three cases presented below represent unique solutions that fit the context in which they were adopted.

A Word of Caution

The intent of this Report is to give the reader a feel for the range of possibilities in adapting contractual models to developing country contexts. It is impossible here to review cases fully. Such arrangements are not likely to be ideal: by their nature they imply compromise. While the arrangements presented here have either already achieved some success or appear very promising, it would be a mistake to give the impression that they are trouble-free. Each has had to overcome shortcomings. Most cases of PPP in water services in developing countries are quite recent, making final evaluation of results impossible. And because of the variety of different types of arrangements, generalizations are dangerous.

Santiago, Chile: Service Contracts

Service contracts for specific support services have been used successfully in Santiago, Chile, where in 1977 the public water company EMOS began to encourage its employees to leave the company and form private firms that would bid for service contracts. Contracts for meter reading, billing, maintenance, vehicle leasing, etc., are awarded for periods of one to two years. The short contract period subjects contractors to frequent competition and eliminates the need for fee negotiation. Several contracts are tendered with different

firms to deliver the same services, often in different districts of the city. This sustains competition and enables the water company to compare costs and performance. As a result EMOS has one of the highest staff productivity rates among water companies in Latin America, even when the labor content of the service contracts is included.

This approach is appropriate for a developing country like Chile which has a fairly healthy environment for small and medium enterprises and a judicial system that enforces contracts fairly. While this

approach eliminates the need for periodic price negotiations that exists in the case of long-term operational contracts, the water company must be capable of administering numerous contracts efficiently. The design and administration of contracts posed some problems for EMOS initially, but the company learned from its early mistakes and has developed a systematic approach to the contracting process. Contractors are now compensated on the basis of units of work completed, an approach which promotes efficiency.

Mexico City: An Innovative Approach to Operational Improvement Contracts

There is often a need for an interim arrangement prior to a lease contract or concession, during which both parties can "test the waters," or during which an important constraint in the system—whether of a financial or physical nature—can be resolved. In France, management contracts (*gestion déléguée* or *gestion intéressée*) have been used to this end. Unfortunately, management contracts typically suffer from a number of disadvantages when used in developing countries. The contractor may lack autonomy and thus cannot be held accountable for results. Management contracts tend to be expensive and incorporate few incentives to train and substitute local staff. There is rarely a

realistic plan for moving to a less expensive, self-sustaining arrangement in which the contractor assumes commercial risk.

The recently tendered contracts for operational improvements in Mexico City's water and sewerage services represent an innovation in a phased contract design which provides a low-risk interim arrangement while avoiding the problems of a management contract. These contracts would introduce comparative competition in water distribution for the first time into a large metropolitan area in a developing country. (Such an arrangement exists in Paris where the two largest French water companies each operate half of the distribution network.)

The city has been divided into four districts and, following competition, contracts are being negotiated with four different operating groups. These groups represent a mix of French, British, Spanish and Mexican partners. The ten-year contracts are structured in three phases, during which the commercial responsibilities of the operators progressively increase. During the first phase, each of the contractors would establish a census of water users and eliminate illegal connections, install and maintain meters on all connections, and prepare a computerized cadastre in its respective districts. During the second phase, their responsibilities would be expanded to include more di-

rect relations with the consumers through such activities as processing new requests for service, meter reading, and preparation and collection of bills. In the third phase, the operators would assume distri-

bution and commercial operations, maintenance and rehabilitation.

Payment terms evolve over time as well. Initially the operators would be paid fees for units of work completed, as in a service contract.

By the end of the third phase, they would retain a portion of the tariff collected from consumers as their sole compensation. At this point, the contracts would effectively have become lease contracts.

Guinea: A Donor-Supported Affermage (Lease Contract)

One of the major barriers to private delivery of water supply and sewerage services in developing countries is the low level of tariffs. While World Bank research shows that consumers are willing to pay the cost of service if it is reliable, in many places, tariffs are so low and service so poor that full cost-recovery can be phased in only gradually while service improves. This creates a mismatch between funding needs and cost-recovery capacity: in order to introduce operational improvements, large resource inputs are required at an early stage; but once improvements are introduced and better cost recovery is possible, costs may actually fall. If the central or municipal government can fund the shortfall and enjoys a good reputation for paying debts on time, it should have no difficulty in arranging an affermage contract. If either of these conditions is lacking, as is often the case, donor support may be needed until tariffs reach the full-cost level.

Guarantees are an increasingly popular form of donor support for private initiatives that depend on government policy decisions or payments for services. The World Bank has arranged guarantees against the sovereign risks (that is, the risk that a government might not honor a contract) in several industrial sectors, including the power sector. In theory, such guarantees could be applied to water supply operations. Another approach is direct donor finance of the improvements which are to be introduced under an affermage contract. The way Bank financing was used in Guinea signified an innovation in Bank lending policy to accommodate a public-private partnership.

In 1989, the government of Guinea arranged a lease contract for water supply in all urban areas of the country with SEEG, a mixed enterprise owned by two French water companies and the state. Just prior to that, tariffs were increased from 60 Guinea francs (GF) to GF

150/m³ (equivalent to about one third the full cost of service), and the government committed to a schedule of regular increases aimed at reaching full cost-recovery by 1998. By 1992, the tariff had reached GF 420/m³ in current value (about one half the full cost). In the interim, the World Bank is financing the foreign exchange costs of operation on a declining basis, as well as rehabilitation works. The government has assumed debt service, also on a declining basis.

The innovation in this case (besides the very courageous decision taken by the government of Guinea when it adopted this approach) occurred when the World Bank agreed that inputs to be procured by the operator and financed by the Bank would not be subject to the Bank's international competitive bidding rules. This was successfully defended by arguing that the operating contract itself had been awarded following Bank selection rules.

Conclusion

As World Bank President Lewis Preston pointed out in his address to the Annual Meetings of the World Bank Group in September, 1993, a single term "developing countries" is no longer useful for describing the widely divergent clients of the Bank. The differences among these countries pose a challenge for finding effective solutions for what is a common problem among many

of them, inadequate water supply and sewerage services. Contractual models of private participation are proving to be useful tools which can be tailored to the political and cultural context in many countries. New adaptations are evolving rapidly; some will undoubtedly achieve more success than others. As experience grows, it should become clearer which approaches are likely to work best in a given context. This is a challenge that will require the

collaboration of governments and private water supply operators, as well as the World Bank and other donors.

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(The contents of this Water and Sanitation Utilities Partnership Report are being published in French in *PCM - Le Pont*, November 1993, Paris).

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