

**Asia-Pacific Environmental Innovation Strategies (APEIS)
Research on Innovative and Strategic Policy Options (RISPO)
Good Practices Inventory**

Implementation of public-private partnerships for water supply and sanitation services in Metro Manila (Philippines)

Summary of the Practice

Keywords: Public-private partnership (PPP), water supply, sanitation, public goods

Strategy: Improving urban environmental services through private sector participation

Environmental areas: Urban environment

Critical instruments: Design, planning and management, Partnerships

Country: Philippines

Location: Metro Manila

Participants: Metropolitan Waterworks and Sewerage System (MWSS) and private sector

Duration: PPP process (1996 to 1997), and a 25-year concession agreement for PPP

Funding: U.S.\$1 million technical assistance from France, total cost was U.S.\$5.8 million

Background:

Metropolitan Waterworks and Sewerage System (MWSS) is a government-owned corporation in Manila, the Philippines. It was formed in 1878 and serves an area nearly three times the size of Metro Manila, which includes the 6 cities and 31 municipalities of Metro Manila plus Rizal and parts of Cavite province. The statistics for water supply services provided by MWSS during 1995, prior to privatisation, are shown in Box 1.

The supply of fresh water depends on watersheds and aquifers, but the rapid growth in population with higher living standards has strained available water resources. This situation, coupled with the El Nino Effect (resulting in water shortages), created a severe situation for MWSS, making it difficult even to continue serving that portion of the population, which is already connected. Furthermore, sewer facilities were then provided to only 7 per cent of the population and disposal of untreated water was becoming a major environmental and civic threat. The more important issue, however, was the financial losses mainly due to levels of unaccounted for water consumption. The government had borrowed huge amounts of money from various lenders to invest in MWSS. Repaying the loans with interest, coupled with continuous subsidies, placed too much of a load on the government's budget. The tariff level and collection rate were not high enough to support even a fraction of the MWSS expenditures. For all of these reasons, the administration of President F.V. Ramos recognized the seriousness of their urban water management situation and decided to support private sector participation (PSP) in order to achieve the target of improved and sustainable services.

Box 1 Main features of MWSS water supply services during 1995

Service area	1,800 sq. km (with total pipeline of 12,000 km)
Water production	3,000 million litres per day from 3 treatment plants
Water connections	825,000 with water availability 16 hours a day
Service population	7.32 million out of 11.0 million (66.5% coverage)
Water availability	17 hours average
Water consumption	133 liters per person per day
Average water tariff	pesos 8.78 per cubic meter
Billing efficiency	42.87% billing
Non-Revenue water	56% (May 1996)
Raw water sources	Angat river (97%) and ground water (3%)
Percent coverage of sewerage	7%

Source: ADB (2000) and Barreiro and Arellano (1998).

Objectives:

The following objectives were proposed:

- Universal water services within ten years for the population in the MWSS service area without increasing the real water tariff, as well as a 24-hour service that meets World Health Organisation standards.
- Non-revenue water to decrease from 56 to 32 percent in the first 10 years.
- One third of the investment for those who are unable to afford piped water
- Wastewater program to reach 80 percent coverage within the 25-year concession period.
- Approximately \$7.5 billion to be invested in order to improve and expand water and wastewater systems during the 25-year concession period.
- Water supply and sanitation targets during the 25-year concession period would be reviewed every five years, as shown in Box 2.

Box 2. Coverage targets for MWSS 25-year concession contract (target for each 5-year plan).

Year	0	5	10	15	20	25
Water supply	67%	92%	97%	98%	98%	98%
Sanitation	7%	33%	33%	38%	47%	55%

Source: ADB (2000) and Barreiro and Arellano (1998)

Description of the activity:

1. Privatisation Process

Following the earlier developments for PSP in infrastructure development, the government reformed the legal structures and incentive systems for the water sector. Two key enactments were:

- The Build-Operate-Transfer (BOT) Law (1993), which enables PSP in public works activities.
- The Water Crises Act (1995), in response to the recurring crises in water supply. This legislation specifically provided for the privatisation of the MWWSS and the Local Water Utilities Administration (LWUA).

The study, conducted by Tasman Asia Pacific for the World Bank and the Ministry of Finance, proposed PSP as a preferred method of addressing inefficiencies plaguing the water supply sector. Based on this study, the National Economic and Development Authority adopted Board Resolution 4 in 1995, encouraging:

- the introduction of commercial incentives and management in local water districts,
- incentives for Local Government Units to improve water supply delivery,
- the application of an economic pricing rate for water,
- economic allocation principles for water resources,
- implementation of water supply projects at the local level, and
- increased PSP.

During the same year, the government decided to conduct a feasibility study into the form, extent, process, and guidelines for privatisation as well as formulating the basis upon which potential sub-contracts could be financed. The first phase was devoted to forming a clear privatisation plan; this took eight months. The basis for the tender was to be water tariffs while bids would entail many contractual obligations regarding coverage, water quality, and investments. The second phase in this process was to implement the privatisation process.

The French government provided \$1 million for a technical assistance grant for the study leading to the privatisation process. The International Finance Corporation (IFC) was the lead adviser for choosing between two options of concessions and the sale of assets. The eventual cost of the privatisation program was \$5.8 million, of which \$3.8 million was for advisor/consultant fees, and a \$1 million success fee (which MWSS advanced and which was reimbursed by the winning bidders). This contingency or success fee was to be paid by the winners to the IFC on successful completion of the privatisation. This financial arrangement meant that the MWSS did not have to provide any funds from its own budget. The inclusion of a private sector style success fee in this case, as opposed to the absence of such incentives in most World Bank and ADB assistance programs is a possible reason for the relatively rapid and successful implementation of these procedures in Manila. Payments driven by outcome rather than payments based upon input or reports have had the effect of focusing all parties on the defined goals.

The study recommended full privatisation of water supply services in this concession model. The total service area was subdivided into two zones, east and west. The MWSS would retain ownership of the fixed assets and would then transfer operation and management facilities to the concessionaires, along with responsibility for future investments such as water source development, treatment, distribution, and provision of sewerage facilities. The study drafted a 25-year concession agreement for the joint venture (JV) wherein both JVs would have access to Angat water, the raw water source. The East Zone would serve a population of 4.5 million people with 71 percent coverage while the West Zone would serve 6.3 million people with 63 percent coverage.

2. Implementation of PPP

Each bidding consortium was required to be structured in the following manner:

- Filipino shareholdings should be a minimum of 60 percent. Local sponsors would own at least 20 percent of the shares and no other Filipino entity would hold more than half of the shares held by these local sponsors.
- A possible 10 percent of the shares could be held by MWSS employees, transferred from MWSS.
- Foreign shareholding would be held at a 40 percent maximum.
- Only one international operator would own 20 percent of the shares of the consortium.

The concessionaires had to be Filipino companies and the water utilities were to be managed and operated by Filipinos. It was proposed that the minimum 60 percent of local ownership should be broken down as 10 percent for employees, 20 to 30 percent for the main sponsor, and 20 percent for the other local investors. The foreign investor would take at least a 20 percent share in the company.

The physical targets and tariffs would be set and monitored by a regulatory body to be established within MWSS. The concessionaires were to be selected through an open bidding process. These recommendations were made to protect MWSS employees from loss of tenure. Finally, a consortium would have to bid for both of the two concessions but could only win one. The detailed document was circulated to potential bidders ahead of time with the following provisions:

- Assets and liabilities: Long-term debts were to be retained by MWSS, but serviced by the concession fees paid to MWSS.
- Clarification of transitional arrangements for existing projects.
- Tariff adjustments: The concessionaires were not to adjust rates, except for inflation, during the first 10 years, and any such adjustments were subject to review and approval by the government. Moreover, upstream water treatment plants were to be managed and financed by the concessionaires.
- There would be room for extra-ordinary price adjustments (EPAs) in very specific or “force majeure” situations (as happened in 1998, when the peso was depreciated and there was a 30 percent drop in bulk water supply attributed to the El Nino effect).
- Allocation of capital costs: 90 percent were assigned to the West concessions in an apparent attempt to equalize what was expected to be lower tariffs in the western area. This increased the foreign exchange risk element in the West’s concession.

The main phase of privatisation included pre-marketing, registration, due diligence, strategy report, information memorandum, documentation, pre-qualification, tendering, pre-negotiation, bidding, evaluation, and award of contracts. The planned schedule was to start in April/May 1996 and be completed by February 1997. However, the actual completion was in April 1997.

The bidding process was based on a two-envelope system containing technical and financial proposals. The technical proposal was opened immediately whereas the financial proposal was opened after 15 days. The bids were accompanied by performance bonds of \$120 million for the West zone and \$80 million for the East. The bids were made against the existing tariff of pesos 8.78 per cubic meter and the lowest bids were made by Ayala Corporation at P2.32 (26.38 percent) for the East zone and 2.51 (28.63 percent) for the West zone. However, one bidder would be awarded only one concession as per a pre-defined formula, so Benpres Holdings won the West zone.

The Benpres Holdings/Lyonnaise des Eaux consortium was named Maynilad Water Services Inc. (MWSI). The Ayala/Bechtel consortium was named the Manila Water Company (MWC). The definition of boundaries and completion of the interconnection agreement is still unresolved. The tariff adjustments were disputed when MWSI sought an increase of 15 percent in terms of P4.96 to P5.71 per cubic meter and MWC sought an increase of 97 percent in terms of P3.65 to P7.21 per cubic meter.

This was coupled with devaluation of the peso in 1998 and a drop in bulk water supply due to the El Nino effect.

Critical Instruments

Overview

This case study shows that political will was the main power motivating public sector officials to speed up the process of design, planning and implementation for the introduction of private sector participation through a concession contract. Bringing in a well-experienced player like IFC was a very productive move because this was a new experience for the public sector. The involvement of such reputable consultants in the privatisation process instilled confidence in private sector companies to plan joint venture partnerships with the intent of winning and managing these concession contracts.

Design, planning and management

Planning and Implementation of PPP Contract

- In most of the failed experiences elsewhere, the most crucial aspect would have been the implementation of PPP. If the implementation of such projects is prolonged, unfortunately, there are usually huge cost over-runs, inflation and delays. This also leads to possible arbitration to clarify responsibility for the delay and to sort out claims and counter-claims. Hence, speed of implementation is the key to success.
- The most innovative aspect was the rapid time-line for such a new experience, as shown in the following timetable:

11 July 1996	Procedures for pre-qualification of bidders were issued
01 August 1996	Procedures for pre-qualification of bidders were ratified
08 October 1996	Outline of the privatisation was issued
19 September 1996	Pre-qualification process started
26 September 1996	Bidding rules were issued
21 November 1996	Instructions for bidders were issued
06 December 1996	Concession agreement was finalized
30 December 1996	Final list of pre-qualified bidders was issued
03 January 1997	Submission of bids
23 January 1997	Opening of financial offers
February 1997	Signing of concession agreement
04 August 1997	Takeover date

Source: Barreiro and Arellano (1998).

Partnerships

PPP to Release Pressure on Public Sector Finances to Improve Public Sector Services

- Private sector participation in providing public services is an innovative approach in this region where the public sector is traditionally responsible for this role. Public services need to be provided at affordable prices, yet the private sector also has to make profit to pay back its shareholders. This requires a lot of innovation even in managing the business. Most of the profits could be generated by reducing losses from unaccounted-for water, by improving the rate of tariff collection and by improving the efficiency of services. Therefore, a whole range of innovations from the government as well as from the private sector was involved in this partnership process.
- The government was in debt and could not inject any more funds to subsidize the operation and maintenance of water supply and sanitation. The quality and quantity of these services were deteriorating and losses were enormous. Hence, these public-private partnerships improved the situation by injecting finances, improving the quality and quantity of the services, and increasing coverage.

Impacts

- Services were improved considerably in quality and quantity without putting more pressure on the public exchequer. European Union (EU) standards for quality were achieved in the shortest possible time, and round the clock water supply was restored.
- Losses, mainly unaccounted-for water, were reduced considerably during the early years. Other losses are mostly within households but these are steadily improving.
- The drought periods, well known as being connected with the El Nino effect, were well managed without the major disruptions in water services that had previously occurred during the infamous electricity crisis in Manila in the early 1990s.

Lessons Learned

- The formula for bids resulted in extra costs due to the 50 percent devaluation. Hence, re-setting the rate levels on fixed dates every five years is a good way to renegotiate tariffs.
- Interconnection agreements are not resolved and are still subject to arbitration.
- In order to maintain the idea that the highest fee for each concession would win, it may be a good option to re-evaluate the bidding criteria for concession fees by pre-determining an appropriate tariff structure.
- Bulk water rights and trading were not an issue in Manila; hence, it seems right to proceed with development rather than wait for the resolution of long-term and complex issues.
- A regulatory body must be in place. In this case, it wasn't but the efficiency of both concessionaries and the trimmed-down MWSS was commendable.
- Need high level advisers and good public relations; IFC performed well and well qualified companies submitted the bids
- Low tariffs do not help in meeting conservation targets; hence, tax incentives might not be provided to the concessionaries in order to maintain lower tariffs

Potential for Application

The transferability of similar PPP is possible in other cities of the Asia-Pacific region, with even better results. This experience shows that political will and a sound strategy are the basic requirements needed to induce similar developments in other cities through various means. Awareness could be one of the means in this regard. If political leaders and communities become aware of the importance of urban water management and if they are made aware of successful experiences in other cities such as Manila, then it would be easier for them to move ahead in this direction.

This experience also provides some good insights, as highlighted above, that should be taken into consideration when planning and implementing PPP for urban water management.

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