

*Case Study*

**MANILA WATER AND SEWERAGE  
CONCESSIONS**

*Water Supply and Sewerage*

## CASE OVERVIEW

**Country:** Philippines

**ULB:** Metro Manila (Region) – comprising 12 cities and 5 municipalities

**Sector:** Urban Basic Services      **Sub-Sector:** Water Supply and Sewerage

**Award Date:** August 1997 (including financial closure)

**Type and Period of concession:** Operations and Maintenance (O&M) concession (two separate agreements) for 25 years

### Stakeholders:

<b>Contracting Authority</b>	Public Utility for Metro Manila: Metropolitan Water Works and Sewerage System (MWSS)
<b>Concessionaire</b>	The city was divided into two service areas. West zone was awarded to Maynilad Water Services Inc. (Maynilad), and the East Zone to Manila Water Company Inc. (Manila Water).
<b>Oversight Arrangement</b>	Special body constituted for the project period - MWSS Regulatory Office (MWSS-RO)

**Present Status of Project:** Manila Water continues to be the Concessionaire for the East Zone and Maynilad for the West Zone. Maynilad went through a change of ownership in 2007.

### PROJECT TIMELINE:

<b>1994</b>	<i>Advisory Technical Assistance (TA) by ADB and creation of the MWSS Privatization Committee, mandated to guide the privatization process</i>
<b>1995</b>	<i>Enactment of the Water Crisis Act (WCA), empowering the President to privatize water utilities in the country</i>
<b>1996</b>	<i>Increase in water tariff and reduction in staff of public utility prior to the bidding process</i>
<b>1997</b>	<i>Award of the concession to two separate Concessionaires for the East and West service areas through an international competitive bid Asian Financial Crisis – Heavy Forex losses to Concessionaires</i>
<b>2001</b>	<i>Contractual amendment introducing mechanisms for facilitating recovery of losses incurred by Concessionaires</i>
<b>2002</b>	<i>Filing of termination suit by West Zone Concessionaire to the International Arbitration Panel (IAP), asserting MWSS failure to meet its obligations</i>
<b>2003</b>	<i>Counter petition by MWSS IAP ruling - forbidding termination of the contract</i>

**2005** *Listing of the East Zone Concessionaire (Manila Water) on the Philippines Stock Exchange*

**2007** *Reconstitution of the West Zone Concessionaire (Maynilad) through a public bid*

## **1. PPP CONTEXT**

### **1.1 ENABLING ENVIRONMENT**

In order to forestall economic bankruptcy and address the international debt burden, several initiatives were undertaken in the Philippines in the 1990s, for reducing public expenditure and monopoly and encouraging private investments in infrastructure. Chief amongst these (and which set the background for the Manila Water concessions) were:

1. Constitution of a Committee on Privatization (COP) mandated to privatize State owned enterprises
2. Enactment of the Foreign Investments Act of 1991
3. Enactment of the Build-Operate-Transfer Law of 1993
4. Creation of an MWSS Privatization Committee (1994) for guiding the privatization process
5. Enactment of the Water Crisis Act (WCA) of 1995, empowering the President to privatize water utilities in the country

### **1.2 SECTORAL CONTEXT**

1. As of 1997, the coverage of water supply networks in the Metro Manila region (approximately 11 million population) was about 59% and that of sewerage as low as 8%.
2. The prevalent system suffered from rampant leakages, faulty and inadequate metering, and illegal connections leading to as much as 58% of Non-Revenue Water (NRW). Revenue loss was further compounded due to inefficient billing and collection, despite relatively high personnel to connections ratio of 9.8/1000.
3. The sector also lacked adequate investments, and the MWSS was heavily indebted on account of decades of inefficiency and provision of price subsidy to consumers.

## **2. PROJECT DEVELOPMENT**

### **2.1 PROJECT CONCEPTUALIZATION**

Engagement with the private sector was expected to plug existing gaps in investments, and quality/coverage of services within a specific time frame and without overburdening consumers with high user charges by bringing in requisite efficiency in revenue collection and minimizing losses. An Area concession model (O&M concession) was chosen, transferring all operational and investment responsibilities to the Concessionaire without transferring ownership of assets.

## **2.2 PROJECT DEVELOPMENT**

President Ramos was the key political driving force behind the MWSS privatization (empowered by the WCA), overseeing proceedings up till the financial closure in August 1997.

1. Advisory Technical Assistance (TA) provided by the Asian Development Bank (ADB) in 1994 formed the background for the privatization process and led to the constitution of the MWSS Privatization Committee.
2. The committee conducted background research and proposed a model based on study visits of England, France and Argentina for reviewing their water privatization models. International Finance Corporation (IFC) was appointed as the Transaction Advisor and advised the Government on policy/legal matters, sectoral requirements and contractual structure. The structure was approved at various levels including the COP, a Special Advisory Committee to the President (created for the duration of project development) and finally the President himself.
3. In order to encourage bidders the existing water tariff was increased by 38% (award was based on lowest tariff proposed) and MWSS labour force was reduced by 30%, since it was binding on the Concessionaires to absorb the existing staff as part of the contract.

## **2.3 PROCUREMENT PROCEDURE**

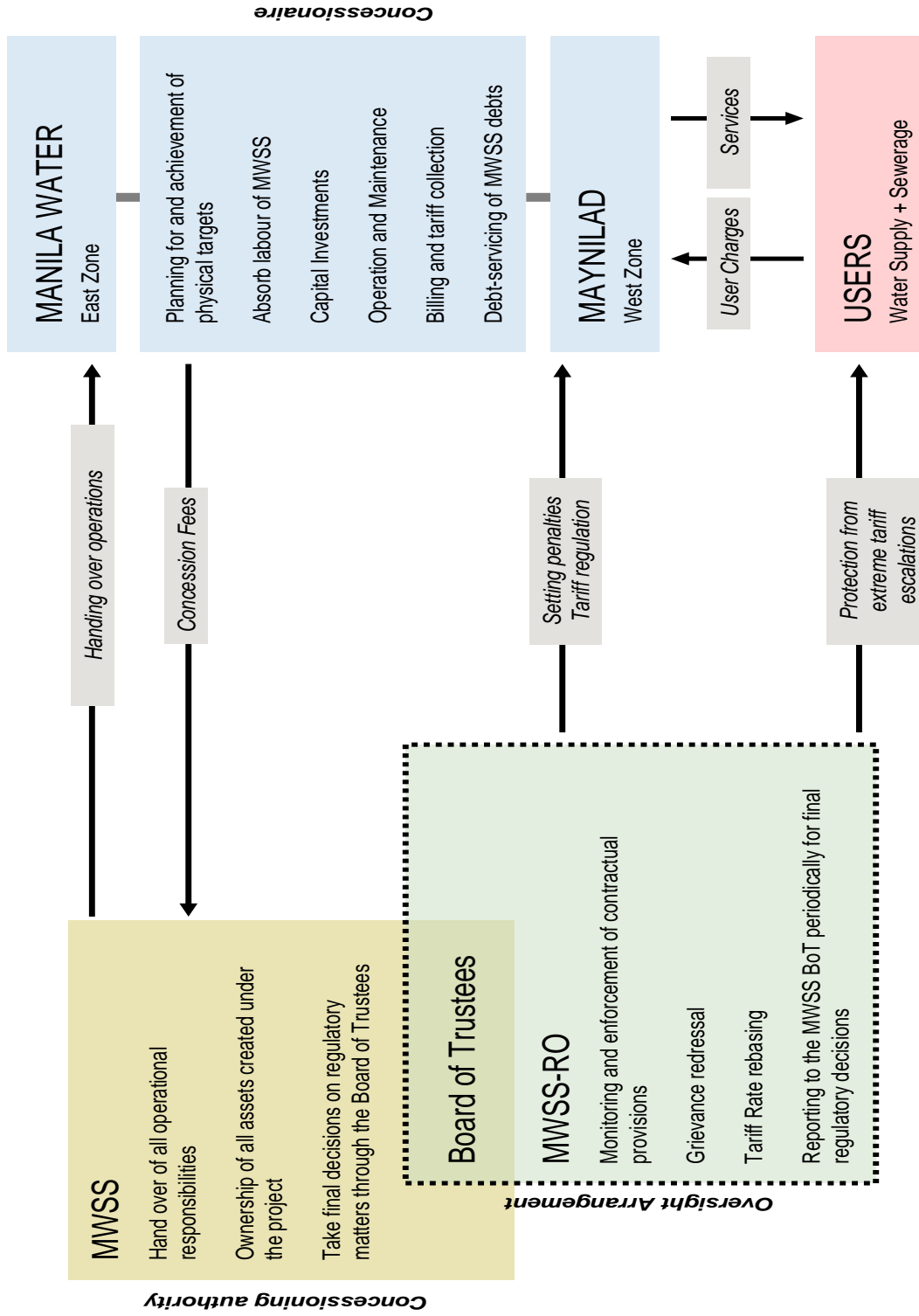
The service area was divided into two zones – the Eastern and Western regions – each of which was to be allotted in the form of 25 year O&M concessions to separate bidders. It should be noted that base conditions for the two concessions were different:

- (i) The MWSS debt liability was split in a 9:1 ratio (refer 3.5 for details) between the West and East Zones making the West Zone Concessionaire responsible for a major proportion of the debt.
- (ii) The West zone contained infrastructure in a much worse state, and a large un-connected and low-income population. In comparison, the Manila Water zone had a much more viable situation.

The concessions were awarded through an international competitive bid, based on the lowest quotes for tariffs (bid parameter). The West zone was awarded to Maynilad Water Services Inc. (Maynilad), a consortium between Benpres (Philippines) and the Lyonnaise des Eaux (France), who committed a 74% reduction in prevalent tariffs for the East Zone. The East Zone was awarded to Manila Water Company Inc. (Manila Water), a consortium between Ayala (Philippines) and International Water (U.K./U.S.), who committed a 44% reduction in prevalent tariffs for the West Zone.

### 3. CONTRACTUAL ARRANGEMENTS

#### 3.1 PROPOSED CONTRACTUAL STRUCTURE



### **3.2 OPERATOR OUTPUT OBLIGATIONS**

The Concessionaire was responsible for all operations and creation of new infrastructure to meet output specifications provided in the contract. The contract specified targets for coverage, water pressure, reliability and quality, reduction in NRW, renewal and expansion of the sewerage system and customer service. Key outputs included:

1. Increasing water supply coverage from the then current - 67% (for both service areas) to 96% by 2006
2. Increasing supply reliability to 24 hours and achieving water pressure of 16 psi
3. Improving sewerage coverage in the East Zone from 13% to 55% and in the West Zone from 7% to 66%.

### **3.3 OBLIGATIONS OF THE CONCESSIONING AUTHORITY**

Obligations of the Concessions Authority included peaceful and timely transfer of all operations, assets and human resource to the Operator.

### **3.4 REGULATORY AND MONITORING ARRANGEMENTS**

A separate regulatory body was created within MWSS, called MWSS Regulatory Office (MWSS-RO). The body was responsible for enforcing the provisions of the contract, setting appropriate penalties for non-compliance, implementing rate revisions, and dealing with complaints.

### **3.5 PROJECT FINANCIALS**

1. The contractual commitments of the Concessionaires were output based and not investment based. The Concessionaire was responsible for all capital/operational investments required to meet these targets.
2. The Concessionaires were to reimburse the Government for the transaction cost and pay concession fees to the MWSS. The concession fee included components for servicing the existing debts of MWSS and meeting a part of the operational costs of the MWSS (its BoT and remaining staff) and the MWSS-RO. Debt servicing liability was split in a 9:1 ratio between Maynilad and Manila Water.
3. All investments were to be recovered through user charges (tariffs), which accrued entirely to the Concessionaires. The tariff included all operating and capital costs, cost of borrowing, foreign exchange variations, and concession fee payments. Procedures for periodic tariff revision (to be carried out by the MWSS-RO) were also stipulated within the concession agreement.
4. The Concessionaire was granted an income tax holiday (6 years), preferential tariffs on import of capital equipment, tax benefits on locally produced equipment and exemptions from local and franchise taxes.

### **3.6 PROJECT RISKS AND ALLOCATION**

**Investment Risk** Associated with forecasting demand for services (since revenue was tariff based), was borne by the operator and the contract did not provide any guarantees to that effect. The tariff was also regulated by the MWSS-RO.

**Performance** Borne by the operator through mechanisms for penalties for non-compliance with

<i>risk</i>	contractual commitments and through annually renewable performance bonds.
<i>Currency risk</i>	Currency risk was a crucial component of the contract, since the MWSS debt (borne by the Concessionaire) was US\$ denominated. The Forex risk was split between the Concessionaires and consumers, introducing tariff adjustment mechanisms to reflect Forex fluctuations thereby passing the risk to consumers, while shielding consumers from extreme escalations by spreading collections over the 25 year span of the project.
<i>Force Majeure</i>	The MWSS was obliged to compensate the Concessionaire for investments made up till the date of termination, in case of early termination due to changes in policy.

### **3.7 DISPUTES RESOLUTION MECHANISM**

An appeals panel was set up for minor disputes; with the regulator, the Concessionaire and the appeal chairman each appointing one member on the panel. In the event of major disputes, the matter could be referred to the Internal Arbitration Panel (IAP).

## **4. PARTNERSHIP IN PRACTICE**

Two unforeseen events occurring at the outset, threatened the success of the privatization initiative. First, water availability reduced by 30% due to an unprecedented draught and second, the Philippine Peso devalued during the Asian Financial Crisis (1997); almost doubling the MWSS's dollar denominated debt-burden and increasing the Concessionaires' liabilities twofold. Despite measures by the Government to keep the concessions afloat, the two Concessionaires followed completely different trajectories – while Maynilad filed for bankruptcy in 2003, was handed over to MWSS in the interim and went through a change of ownership in 2007; Manila Water was financially successful and is a listed company on the Philippines Stock Exchange. Immediately upon reconstitution Maynilad repaid its outstanding debts (January 2008) and initiated several steps to improve its service coverage and reliability, and reduce NRW - targeting major outcomes by 2012.

### **4.1 PROJECT OUTCOMES**

#### **SERVICE OUTPUTS**

1. The serviced population increased from 7.5 to 9.5 million and supply network (length of pipelines) improved from 4500 to 6300 km for both concessions in the first four years of the contract
2. The percentage of consumers with 24 hour service reliability in the East zone increased from 26 to 98% by 2006. This factor improved in the West zone after re-organization of Maynilad, with 60% of consumers availing the facility by 2008.
3. Sewerage networks have improved in both service areas, through rehabilitation of existing facilities and construction of new facilities for treatment of waste water.

#### **OPERATIONS**

4. Operational efficiency in terms of worker productivity improved for both concessions, and NRW in the successful East zone concession reduced from 39% to 24% by 2007.

## **URBAN POOR**

5. Both the Concessionaires launched separate programmes for bringing hard-to-reach urban poor localities within the service network. About 1.5 million poor households have been brought under the service network through Manila Water schemes and about 0.5 million through Maynilad schemes.

### **4.2 PROJECT SHORTCOMINGS**

1. Despite increases in coverage and other aspects of service delivery indicated in the previous section, output targets up till 2009 for water supply and sewerage in both service areas remain unachieved.
2. Since the awards were based on lowest quote for tariffs, the project was expected to significantly reduce the cost burden on consumers. However, as indicated in the following table Manila Water rates increased by 540% and Maynilad rates by 325% by 2006.

Year	Average Base Tariff (PHP per cubic metre)	
	Manila Water	Maynilad
<b>Pre-Privatization</b>	8.56	8.56
<b>Post-Privatization</b>		
1997/98	2.32	4.96
2000	2.76	6.13
2002	4.51	11.39
2003	10.06	11.39
2004	10.40	11.39
2006	14.94	21.12

3. Maynilad failed to pay concession fees (towards MWSS debt-service) to the MWSS between 2001 and 2007. This increased the debt burden of MWSS since it had to borrow on several occasions in order to address its maturing debt liabilities.
4. In the course of implementation it was realised that the pre-bid data provided by the Concessions Authority was incorrect leading to anomalies in the investment forecasts of the Concessionaires. On the other hand tariff quotes of the Concessionaires (bid parameter) were later criticized as being too low and unrealistic, resulting in a series of tariff hikes during the course of implementation.

### **4.3 LEGAL/CONTRACTUAL ISSUES**

1. A contractual amendment was enacted in 2001 to address the unforeseen increase in the MWSS debt-servicing liabilities of the Concessionaires during the financial crisis. The Original contract, while loading such losses on the consumers, shielded them from extreme escalations in the short term by spreading such collections over the project duration. This provision was amended, enabling the Concessionaires to recover losses within 15 months instead of 22 years, passing the Forex risk entirely to the consumers.
2. The amendment reduced several output commitments so as to enable the Concessionaires to meet targets.
3. The amendment also reduced the autonomy of the MWSS-RO, and deemed that the RO would report to the MWSS Board of Trustees, who in turn took final decisions on all regulatory matters. The regulatory body was thus subservient to the decisions and interests of the contracting party. This was



further compounded through repeated political intervention throughout the implementation period (in several cases overruling the decisions of the MWSS-RO).

4. Despite the contractual amendment and substantial increases in tariffs, Maynilad filed for termination of contract to the IAP in December 2002, blaming the government for the firm's inability to sustain operations in the West Zone, followed by a counter petition by MWSS in 2003. The IAP ruled in 2003 that neither party could terminate the contract and directed Maynilad to compensate MWSS for unpaid concession fees (refer 4.2). Maynilad formally declared bankruptcy in November 2003 and Benpres (lead consortium member) relinquished its shares in Maynilad to MWSS in lieu of the unpaid compensation fees in 2005. This led to the eventual change of ownership of Maynilad through a public bid in 2007.

#### 4.4 DIFFERENCE IN PERFORMANCE: MANILA WATER AND MAYNILAD

As mentioned in 2.3 there were differences in the two contracts in the sharing of the debt liability as well as in the nature of the concession areas leading to differences in the initial conditions of the two Concessionaires. Some of the key reasons that may have led to the differential performance of the two Concessionaires are as follows:

<b>Manila Water (East Zone)</b>	<b>Maynilad (West Zone)</b>
<b>a Sharing of debt liability:</b>	
Debt service liability of MWSS debt was shared in a 9:1 ratio between Maynilad and Manila Water	
Manila Water carried only 10% of the debt liability	Maynilad carried 90% liability and hence experienced a large hike in its debt liabilities (debt being dollar denominated) during the Asian Financial Crisis
<b>b Third-party sub-contracting:</b>	
The concession did not enforce the use of competitive bidding processes for sub-contracting works to third parties.	
However, with the exception of a single contract, all procurement (third party) was through open competitive bids significantly lowering the price of services obtained through third parties.	In the case of Maynilad most sub contracts were related-party contracts awarded to associates of the International firm involved in the consortium, leading to higher procurement costs and heavy Forex losses.
<b>c Internal financial management (during the financial crisis)</b>	
Manila Water focussed on domestic lenders for capital expenditure, obtaining small loans from multiple banks. While this affected capital investments in the initial years leading to restricted performance, the company was able to protect itself from immediate financial risk and subsequently take aggressive steps to achieve its targets. The company also focussed on crucial targets such as reduction of NRW which were central to improving company revenues.	Maynilad on the other hand opted for large loans from international lending agencies. While this helped the company to make large capital investments, it also increased the Forex burden during the financial crisis. Investments were also not directed properly (for instance towards plugging revenue losses due to NRW) with the result that the NRW increased from 64% to 69% between 1997 and 2003, reducing the potential revenue for the company.

## 5. LESSONS LEARNT

1. Need for robust sectoral needs and investment analysis prior to the bidding process, so as to allow all parties in a PPP structure to make informed assumptions and set accurate output forecasts. In this case lack of accurate information from the Concessioning Authority and unrealistic bids from the Concessionaires led to tariff escalations during implementation – hampering the initial objective of the project.
2. Need for proper risk allocation even during contractual amendments as this could seriously impact the expected outcomes of projects. In the Manila Case, the amendment resulted in transferring the Currency risk, initially allocated on a long term shared basis, entirely from the Concessionaires to the public.
3. Need for ensuring transparency in third party contracting, so as to avoid unearned gains for operators and unwarranted escalation of project costs. In this case the eventual financial failure of Maynilad could be attributed, at least in part, to the lack of such transparency
4. Need for ensuring autonomy of regulatory bodies/arrangements in order to eliminate regulatory bias and protect project interests. In the Manila case though the original contract envisaged a neutral regulatory arrangement, subsequent amendments did not uphold the strategic importance of such an arrangement, leading to eventual disputes and compromising project outcomes.
5. On the positive side the experience also highlights the possibility of bringing hitherto excluded urban poor communities within the service network through PPP arrangements, on account of issues of efficiency and economic returns involved within the process
6. Despite its shortcomings the project also highlights the substantial efficiency gains that can be achieved through PPP arrangements. For instance, coverage for the two service areas increased by 30% in the first five years, a significant improvement considering that MWSS would have achieved this in 30 years based on their historical performance.