In the Metropolitan Manila area, IBRD has supported two utilities in expanding affordable and efficient water and sewerage services to benefit some 107,000 poor households since 1997, relying on an approach that encourages private sector investment and support and greater community involvement.

**The Challenge**

In the past fifteen years, Metro Manila’s growing urban population demanded a significant increase in water supply and sanitation (WSS) services and facilities. Before the 1997 Manila Water concession, only 6.3 million of Metro Manila’s 11.8 million residents had water service connections. Only 67 percent of households had water available for 24 hours per day, while only 13 percent had adequate sewer and sanitation coverage.

Even with some investment coming into the sector, more was required to provide an affordable and efficient service to address these shortfalls. The local concessionaires—the Manila Water Co. Inc. (MWCI) and Maynilad Water Services Inc. (MWSI)—had challenges in upgrading their piped water supply and sanitation coverage because of the expanding franchise areas. The proliferation of informal households and the lack of institutional preparedness in implementing new and complex projects on the part of water service providers (WSPs) exacerbated the problem.

To address the challenge, the International Bank for Reconstruction and Development (IBRD) set out to promote greater private sector participation to undertake improvements in the sector and improve the sustainability of WSPs.

**Results**

Through capital infusion, debt restructuring and infrastructure rehabilitation, both concessionaires—and especially MWCI serving Manila’s East Zone—managed to accelerate and enhance supply provision across their franchise areas.

In terms of 24-hour water availability, MWCI posted a dramatic increase to 99 percent in 2009 from 26 percent in 1997. Its aggressive civil works and pipe-laying endeavors almost doubled the number of people served with potable water, to 6.1 million in 2009 from 3.1 million in 1997. Water previously lost to leaks and pilferage was used to supply MWCI’s expanding coverage area. Meanwhile, it reduced its non-revenue water (NRW) to 16 percent in 2009 from 63 percent in 1997. Its organization was also streamlined to 1.5 staff per 1,000 connections in 2009 from 9.8. MWCI was able to strengthen its collaboration with business patrons and Metro Manila local governments, which contributed to the ease of redeveloping key water supply and distribution systems.

On the other hand, MWSI encountered financial difficulties in 2000–2001 that affected its operations. It was unable to increase its sewerage coverage due to the deferment of targets in line with its rehabilitation plan. Currently, it has...
maintained its sewerage coverage at 8 percent of the total population. Nevertheless, it has developed its capacity in managing and maintaining septage collection and treatment projects, and has also operated high-quality laboratories.

**Improved Facility for Urban Environmental Management, Community Development and Poverty Alleviation**

By expanding the provision of reliable and affordable services to customers, the program has benefited some 107,000 poor households since its inception in 1997. Near-to-regular access to potable/piped water supplies and increased community sanitation facilities has been achieved in low-income residential centers. Furthermore, the program established customer facilities to encourage communities to discuss and participate in the process of expanding services, and to resolve their concerns.

MWCI’s investment program for water and sanitation also reduced the risk of sicknesses from exposure to sewage contamination, which is estimated to have reduced mortality by 20 percent. The project’s focus on expanding coverage through useful and alternative arrangements for connection and payment (such as deferred payment schemes and early payment discounts) also amplified its positive impact in poor urban communities.

**Enhanced Institutional Capacity for Regulation Policy, Investment and Service Delivery**

The Bank supported the development of a transparent and stable regulatory framework of the Metropolitan Waterworks and Sewerage System Regulatory Office (MWSS-RO) to achieve a balance between investor concerns and consumer welfare. The IBRD-assisted Water Districts Development Project (WDDP) extended a US$2.5 million loan for technical assistance designed to pilot and fieldtest a public performance audit system in the MWSS in the post-privatization phase. To improve the regulation of water supply, the project provided statistical and on-the-ground information to local politicians, consumers and potential private sector partners on the relative performance of WSS utilities. Later renamed the Public Assessment of Water Services, the public performance audit system expanded its coverage to include wastewater services.

**The Approach**

IBRD’s involvement in water concessions was based on the rationale that the private sector can play an important role in delivering services because of the financial incentives that can be generated from an improvement in efficiency. Private utilities in the Philippines remain a major provider of formal WSS services in urban areas, particularly in Metro Manila. Both MWSI and MWCI were expected to resolve lagging performances in critical areas (such as arrears collection, non-revenue water (NRW) usage, and cost-recovery ratios) and to improve management across all areas of business. IBRD has assisted the concessionaires by providing financial and technical support to improve access to and delivery of wastewater treatment and both septage and solid waste management services.

MWCI and IBRD implemented the US$57 million Manila Second Sewerage Project (MSSP) to improve the quality of wastewater and septage management service in Metro Manila from 2001–2005. With over PhP1 billion in investments, the MSSP allowed MWCI radically to expand its sewerage and septage management program. During the project, 26 septage treatment plants were constructed and more than 20 de-sludging trucks were procured for sanitation services. Moreover, the implementation of the MSSP was instrumental in giving MWCI the capacity to envisage and design succeeding projects.

The Manila Third Sewerage Project (MTSP) was developed for the 2005–2010 period to build on the results of its predecessor. The public-private partnership (PPP)-led wastewater project is a US$85 million initiative to extend improvements in sewerage and sanitation across the East Zone concession area. Assisted by a US$64 million loan from the IBRD, the MTSP further enhanced the septage management program, piloted the combined sewer-drainage system approach and promoted advocacy campaigns on the negative environmental impacts of wastewater. The goal of the septage management component of the MTSP was realized in 2007 through the completion and operation of
two septage treatment plants. De-sludging vacuum trucks were also procured, bringing the fleet’s number to more than 90. Meanwhile, sewer coverage in the East Zone is expected to increase to 30 percent when the MTSP is completed. The project is proposed to be extended to 2012.

Lessons Learned

Lessons learned from the IBRD-financed projects with MWCI are distilled into the following:

[1] Community sanitation projects can be successful in low-income communities, provided that regular and timely public information campaigns are carefully conducted and the benefits well-explained.

[2] Dialogue with the government, the borrower and the operating entities is necessary but not sufficient, particularly when the local population or local government units are likely to be affected by project activities. The issues of disposal of septage and excavation/building permits highlight the critical importance of local government cooperation.

[3] Land for sewerage facilities was difficult or costly to secure. Problems associated with land acquisition primarily caused project delays. Careful planning for land acquisition must be made part of the project development process.

[4] Final options for project implementation must be arrived at considering not only the technical and financial aspects but also the required institutional arrangements and the social and other risks.

[5] In the context of operations carried out by private companies, particular attention should be paid to:

   i. Maintaining the dialogue with operators to ensure their ownership;
   
   ii. Reaching agreement with all parties on well-defined performance indicators and monitoring systems;
   
   iii. Ensuring that the operators’ role in the project is fully compatible with (and integrated into) their business plans; and
   
   iv. Entrusting procurement to private operators, provided that it is in accordance with IBRD guidelines.

[5] Stringent standards for monitoring and the integrative approach to project development adopted by MWCI-IBRD serve as precautionary measures against negative environmental effects and water- and sanitation-related sicknesses that inflict severe burdens on the urban environment, public health and community hygiene.

IBRD Contribution

IBRD’s technical assistance on the policy reforms in the sector and IFC’s support to MWCI made it possible for the private utility to continue initiatives in improving services and planning for infrastructure investments in Metro Manila’s East Zone with its six million residents (as of 2009). IBRD established the financial and technical viability of new approaches for sewage management in Metro Manila by providing construction supervision, environmental monitoring and management assistance.

World Bank Group Engagement

The World Bank Group maintains an active role in financing development opportunities and technical assistance projects that improve urban WSS coverage, sub-sector investment programming, capacity-building and private sector participation processes. By supporting a concessionaire that has ably demonstrated efficiency and client responsiveness, IBRD and the World Bank Group’s private sector arm, the International Finance Corporation (IFC) hope to send a positive signal to the market and to other governments.
that are considering either an infusion of private capital and expertise into a public sector exercise or a fully-fledged privatization. For its part, MWCI asserted that further involvement in a private sector participation approach with urban WSS is seen as an attractive business prospect for lenders and other investors.

The IFC-backed US$218 million investment with the MWCI for the period 2002–2005 focused mainly on the concessionaire’s supply expansion and water sources development. Similarly, another loan under IFC (MWC II) was provided to support MWCI’s expenditure program for 2004–2007 which was estimated at US$292 million. The loan further helped to attain the WSS service targets set out under the original concession agreement. Through a specially-designed facility, MWC II was able to provide lower-income households with access to piped water at a rate sensitive to their capacities to pay.

In support of the MTSP, the Global Environment Facility also extended a US$5 million grant option in 2007. It prioritized assistance to the government in identifying essential adjustments to administrative/institutional practices and to existing legislation in order to generate private investment in the wastewater sector.

**Good Practices Developed and Replicated**

There has been strong interest in the replication and expansion of PPPs for urban water, especially as the privatization of MWSS has resulted in dramatic improvements in terms of operating efficiency, water loss recovery, wastewater treatment and management, and general service delivery across the utility’s coverage area. A recent privatization effort directed at the Metro Iloilo Water District is a prime example, in which the IBRD was requested to provide technical assistance in the preparation of a study to explore possible private sector involvement as a means for improving WSS service performance.

MWCI has also begun to capitalize on the effectiveness of its experience by adopting and bringing over replicable technical and management practices, financing options and technologies to urban water utilities outside Metro Manila and even beyond the Philippines. New businesses, which exceed PhP 3 billion in investments, include:

- A concession agreement with Cabuyao, Santa Rosa, and Binan in partnership with the provincial government of Laguna.
- A management contract for water and wastewater systems that serve Boracay Island in partnership with the Philippine Tourism Authority,
- Separate ventures in Vietnam and India.

These operations outside the Metro Manila core are important drivers of MWCI’s long-term growth and stability, and support the company’s earnest commitments towards raising corporate social responsibility and meeting environmental and sustainable growth targets through corporate governance, sound investment planning and infrastructure-led expansion.

**Next Steps**

In line with a Philippines Supreme Court ruling in December 2008 that ordered the clean-up of Manila Bay, both Metro Manila concessionaires are obliged to accelerate the implementation of proposed sewerage projects and wastewater treatment initiatives. Accordingly, MWCI and MWSI have submitted their programs to MWSS and have sought the extension of their concession periods in order to meet their sewerage and wastewater treatment targets.

Because of the huge capital investment requirement under the program, MWSS granted MWCI a fifteen-year extension of its contract to 2037. Similarly, MWSI has requested the extension of its contract. Both MWCI and MWSI requested IBRD to extend a new financing window that would support and expand their respective initiatives. In response, IBRD is preparing a programmatic lending facility centered on sewerage and wastewater treatment.

To ensure the continuity of satisfactory results of private sector participation projects, IBRD is presently aiming for an annual lending program of between US$700 mil-
lion and US$1 billion through 2012 that would support the replication of successful PPPs practices and schemes, and key performance improvements. The IBRD, through the IFC, is expanding its advisory services in light of the MWSS’ successful privatization with the MWCI; IFC services would be responsible for maximizing and catalyzing the developmental impact.

INTERNATIONAL FINANCE CORPORATION

www.ifc.org
Summary of Project Information (SPI)
Project 11232 – MWC
Project 22621 – MWC II

MANILA SECOND SEWERAGE PROJECT

Project ID: P004611

MANILA THIRD SEWERAGE PROJECT

Project ID: P079661

MANILA THIRD SEWERAGE PROJECT – GLOBAL ENVIRONMENTAL FACILITY (GEF)

Project ID: P089082

LGU URBAN WATER AND SANITATION PROJECT APL2

Project ID: P069491
Key Figures

**FIG. 1** MWCI’s Operating Improvements as a Result of Privatization (Selected figures, 1997–2009)

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>2001</th>
<th>2007</th>
<th>2009 (3rd Qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanded Coverage, %</td>
<td>67</td>
<td>89</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>Improved 24 hour supply, %</td>
<td>26</td>
<td>83</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Reduced NRW, %</td>
<td>63</td>
<td>51</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>Water Quality Standard Compliance, %</td>
<td>91</td>
<td>100</td>
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**FIG. 2** MWCI Efficiency Indicators 1997–2009

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<tbody>
<tr>
<td>No. of Household Connections (*000s)</td>
<td>325</td>
<td>340</td>
<td>390</td>
<td>409</td>
<td>428</td>
<td>1,007</td>
</tr>
<tr>
<td>Population Served (millions)</td>
<td>3.0</td>
<td>3.1</td>
<td>3.6</td>
<td>3.76</td>
<td>4.05</td>
<td>6.0</td>
</tr>
<tr>
<td>Staff per 1000 connections</td>
<td>6.3</td>
<td>5.1</td>
<td>4.8</td>
<td>3.8</td>
<td>3.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Total Operating Cost per cubic meter of billed water</td>
<td>5.95</td>
<td>5.47</td>
<td>5.21</td>
<td>4.77</td>
<td>4.73</td>
<td>—</td>
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**FIG. 3** Other Development indicators

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
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<tbody>
<tr>
<td>SOCIAL</td>
<td></td>
<td></td>
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<tr>
<td>Individuals Benefiting from Water for the Community Program (million)</td>
<td>1.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Schools and institutions included in the wE care Program</td>
<td>60</td>
<td>233</td>
</tr>
<tr>
<td>ENVIRONMENTAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage Reduction in Water Losses</td>
<td>23.8</td>
<td>19.6</td>
</tr>
<tr>
<td>Volume of Septage Treated</td>
<td>74,855</td>
<td>225,804</td>
</tr>
<tr>
<td>Percentage Compliance to Wastewater Volume</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>