

# Alternative PPP Model: The Laguna Water Story

by Noel O. Julao



PPIAF PPP Short Story Competition  
**CASE STUDY WINNER**

© 2015 Public-Private Infrastructure Advisory Facility (PPIAF)  
1818 H Street, NW  
Washington, DC 20433  
[www.ppiaf.org](http://www.ppiaf.org)  
E-mail: [ppiaf@ppiaf.org](mailto:ppiaf@ppiaf.org)

This material is disseminated by PPIAF as part of the winning entry from the PPP Short Story Competition which took place between January and March 2015. The purpose is to disseminate best practices and experiences on PPPs from around the world.

The findings, interpretations, and conclusions expressed in this report are entirely those of the authors and should not be attributed in any manner to the Public-Private Infrastructure Advisory Facility (PPIAF) or to The World Bank Group, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent.

Neither PPIAF nor The World Bank Group guarantees the accuracy of the data included in this publication or accepts responsibility for any consequence of their use. The boundaries, colors, denominations, and other information shown on any map in this report do not imply on the part of PPIAF or The World Bank Group any judgment on the legal status of any territory or the endorsement or acceptance of such boundaries.

For questions about this publication or information about ordering more copies, please refer to the PPIAF website or contact PPIAF by email at the address above.

#### **Acknowledgments**

We would like to acknowledge those who participated on the judging panel and thank them for their efforts in support of the PPP Short Story Competition. The panel included PPP experts from Agence Francaise de Developpment, Development Equity Associates, IAE Paris, Inter-American Development Bank, KPMG, Ministry of Foreign Affairs of the Netherlands, and the World Bank Group.

Cover photo: Simone D. McCourtie/World Bank

# ALTERNATIVE PPP MODEL: The Laguna Water Story

## I. CASE BACKGROUND



The Province of Laguna, located in the southern part of the island of Luzon in the Philippines is one of the most sought after alternative sites for business and urban living because of its proximity to Metro Manila, the country’s premier metropolis. Laguna hugs the eastern shores of Laguna de Bay, the country’s largest lake and may be conveniently reached from Manila through one of the most modern highways in the country, the South Luzon Expressway.

With its burgeoning population due to migration from the nearby Metro Manila, the province scaled-up its development programs to cope with the increasing influx of investors, residents and tourists. Among the basic services that needed immediate attention, the provision of piped water service was determined as inadequate.

Initially, It was the Office of the Provincial Government of Laguna (PGL), particularly the Cabuyao, Santa Rosa, Biñan Waterworks Division of the Provincial Government (CSRB) that ran the water supply network for the cities of Biñan, Sta. Rosa and Cabuyao, the towns at the edge of the province nearest to Manila which began to adopt mixed-use development of former agricultural areas into residential, commercial and industrial sites to spur economic development. CSRB, however, could not cope with the rapid development of these and was unable to meet the water demands of the population that already reached 900,000. Thus, in 2002, the PGL invited the private sector, AAA Water Company, as partner in running the water system using a Joint Venture model to guide the contracting parties. A Joint Venture Company, Laguna Water was formed based on a 30/70 sharing, with the private sector as the majority shareholder. From 2002 up to 2009, the PPP was implemented with the private sector running the day-to-day operations while the PGL acted as the service level regulator. Sadly however, the partnership was not able deliver the expectations.



In September 2009, with the consent of both parties, AAA Water Corporation was sold to Manila Water Company, Inc. (Manila Water), a concessionaire that provides the water supply needs of the east zone of Metro Manila. However, the original conditions as set forth in the Concession Agreement remained the same.

Limited Service Coverage <b>Only 14% connected to Laguna Water</b>	
Dilapidated Water Infrastructure <b>Aged and Poorly Maintained Water System</b>	
Poor Service <b>Intermittent Water Supply, Poor Water Quality, Water-related Health Issues</b>	
High NRW Level <b>48% NRW</b>	

Low water service coverage of only fourteen percent (14%) of the total population, non-revenue water (NRW) of forty-eight percent (48%), and non-compliance of water quality to the Philippine

National Standard for Drinking Water were among the most notable deficiencies of the sector prior to the take-over of Manila Water.

In the formation of the Joint Venture with the Province of Laguna, Manila Water for the first time would employ a model unfamiliar to its organization. Among the many intricacies of the model for Laguna is the involvement of elected officials in running the business as three of the nine members of the Board of Trustees were appointed by the sitting Governor. As elections are held every three years at the provincial level, Manila Water is subjected to make necessary adjustments each time a new Governor would be elected.

## II. STRATEGIES

Manila Water has been involved in the water and used water business since 1997 after it won the East Zone concession of the state-run Metropolitan Waterworks and Sewerage System (MWSS). Manila Water is currently serving the eastern section of Metro Manila and the province of Rizal, with a population of more than six million.

The success of Manila Water's water and used operations in the East Zone is now being replicated to other provinces including the island of Boracay, Pampanga and very recently, Cebu and Zamboanga. Outside of the country, it has projects in Vietnam, Myanmar and continues to pursue opportunities in different parts of Asia Pacific region.



With 17 years in the water and used water industry, Manila Water has developed internal best practices that suit varying conditions and cultures and has seconded employees in its present areas tasked to replicate and champion the successes both in technical and customer fields.

Among others, the main strategies employed to improve the level of performance of Laguna Water were as follows:

### 1. Human Capital Development



As most of the employees of the former operator were retained by Manila Water, a change in the corporate culture was initiated by the new management team, composed of seconded employees from Manila Water. Using the Territory Management concept as its vehicle, the company was restructured from a tall multi-level to a flattish organization. This approach actually worked well in Manila Water and its applicability was warranted after it was determined that the former operator's decision making process was noticeably slow.

The employee empowerment enabled the Company to react faster to the changing business conditions and varying needs of customers. Rather than relying from top management to render decisions, the new set-up empowered people to act as they

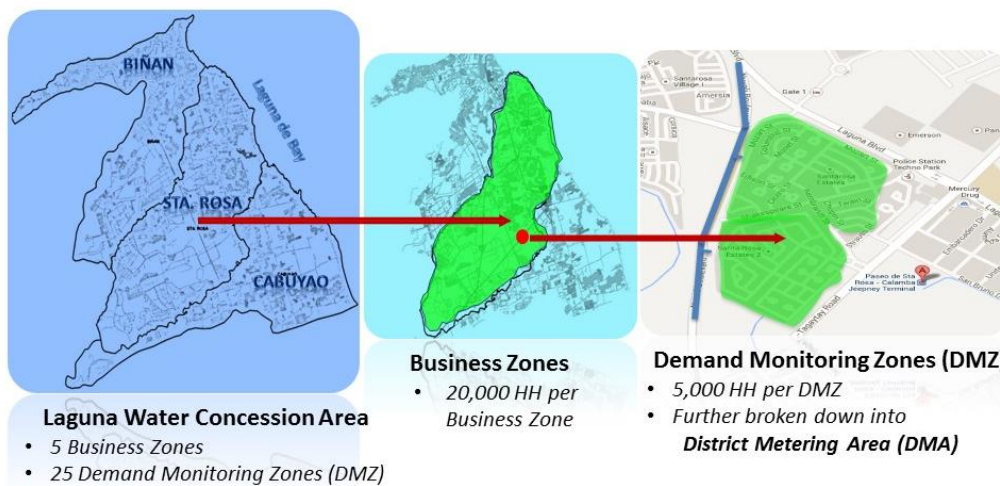
see fit from different levels. At all levels in the organizational hierarchy, employees were encouraged to challenge the existing practices and processes.



As a form of internal control and provide check and balance on the vast powers granted to many of its people, values such as integrity and accountability were emphasized and made part of personnel evaluation. Although people were allowed to

make important decisions, it was made clear that they should take responsibility and accountability of the outcomes of their actions.

Based on the adage ‘what you cannot measure you cannot manage’, the entire service area was broken down into smaller and measurable Business Zones. Each zone, with about 20,000 water services is metered and placed under the control and supervision of an empowered and accountable Business Zone manager. The Business Zones were further broken down into smaller territories called Demand Monitoring Zone, each one composed of about 5,000 service connection. With smaller territories, tracking of water losses or NRW, and other water supply and quality-related problems became easier --- even systems upgrade became programmable as well.



Management fully supported the concept and provided each territory with the necessary trainings, equipment and people. Territory Managers are the main movers of the program and were specifically tasked among others to supervise pipelaying contractors, meter readers, inspectors and other service providers.

With the myriad of decisions pertaining to day-to-day operation happening already at the lower level, this markedly reduced the supervisory functions of senior managers, giving them ample time to focus on strategic planning.

## 2. Institutionalization of Water for All Programs

The flexibility of Laguna Water in its service offerings cut across all social classes, enabling the Company to meet the distinct requirements of its various customers particularly those coming from the poor sector of society.

### **Water for the Community (Tubig Para sa Barangay) and Water for Relocatees (Patubig sa Bagong Bahay)**

Laguna Water's programs to provide water to poor communities demonstrate the company's strong desire to reach out to the marginalized group. Aware of the financial difficulties that prevent these people to have access to basic necessities,



Laguna Water packaged a special arrangement to ensure that cost will not be a deterrent for a water service connection through the Tubig Para sa Barangay (TPSB) and Patubig sa Bagong Bahay (PBB).

The TPSB project along the coastal areas of Laguna de Bay straddling the cities of Santa Rosa and Biñan addresses the absence of piped water supply of thousands of residents living in the area, many of whom are informal settlers. TPSB projects are specifically intended for conditions prevalent in poor communities and thus take into consideration both affordability and engineering solutions for narrow streets and dense population. Distribution lines are designed to reach all residents up to the farthest points. Mode of payment is also made flexible through staggered schemes to accommodate as many applicants as possible.



**FREE water service connection to indigent families**

Because of the province's proximity to Metro Manila and its growing economy that supports job generation, Laguna has become one of the most desirable relocation sites for informal settlers from Metro Manila who resided near railroad tracks and along river banks. To help ease the difficulties of the relocatees in adjusting to their



new environment, Laguna Water is provided greater access to a reliable water supply through PBB. So far, Laguna Water had taken over the operations of water systems of three relocation sites namely, Southville Cabuyao, Southville Caingin and

Southville Langkiwa. Today, the twin problems on water quality and availability had been remedied through the rehabilitation of the water facilities and the replacement of old and leaking pipes. The old practice of using shallow wells in the sites which posed as a health hazard has diminished due to the presence of a reliable water supply. To encourage everybody to connect to Laguna Water's system, the company offered instalment payments.

### **Water for Public Schools (Lingap Eskwela)**

In areas where access to clean and affordable water supply is a problem, public institutions, among them public schools, appear to be taking the brunt of the water woes. To even out the playing field, Laguna Water instituted the Lingap Eskwela Program.



In partnership with Manila Water Foundation, the social development arm of Manila Water, public schools were connected to the Laguna Water network free of charge. Aside from this, the support package includes rehabilitation of toilets, construction of drinking fountains and regular monitoring of water quality.

So far, nine public schools or about 20,000 students and teachers have benefitted from this project. In the years ahead, Laguna Water foresees the inclusion of private schools in the program.



## Interconnection of Commercial Accounts

Water provision has fueled economic growth in the area with the interconnection of shopping malls, hospitals, commercial and other industrial establishments. After a long wait, the business sector finally found a partner capable of providing piped water supply for their needs.



The volume of water being delivered to commercial accounts thus significantly increased from 1,000,000 cubic meters in 2009 to 29,000,000 cubic meters as of end of 2014. This did not only improve the revenue generation of Laguna Water but has likewise contributed immensely in attracting entrepreneurs to invest in the Province.

More commercial accounts are lined up for interconnection which would further enhance trade and industry in the province.

### 3. Rehabilitation of Water Facilities

The Province of Laguna is blessed with a healthy ground water source which according to experts can still be mined for a number of years. And thus, about 90% of the water being distributed by Laguna Water to its customers comes from the many deepwell facilities strategically located at different site points in the service area. Unfortunately however, the locals did not fully benefit from this as the quality of the water network that Laguna Water inherited was not only antiquated but was also ill-maintained. The customer base upon take-over was only fourteen percent (14%) of the population as the local folk chose to use artesian wells rather than patronize the services of the former water service provider that is unable to address problems on intermittent water supply and quality. As a way to address these issues, Laguna Water embarked on a capital expenditures or CAPEX program involving improvement of the water network.



Laid about 273km of pipes



Replaced 52km of pipe mains



Repaired 6,369 leaks

With a tight area metering system in place, modern pipe leak detection devices and the availability of Contractors, it became very easy for the Company to locate and repair pipe leaks that caused loss of precious water and intrusion of dirty water in the system. Today, after repairing about 6,400 pipe leaks, and laying a total of 320 kilometers of new pipes, supply of clean water in most parts of the service area is 24 hours with water pressure able to reach the second floor of the houses.

To regularly monitor compliance with the Government's set standards on water quality, an in-house laboratory accredited by the Department of Health regularly checks water quality for compliance. Generally, groundwater is naturally clean, particularly when sourced at depths exceeding 150 meters. Nevertheless, Laguna Water makes doubly sure about water quality by mixing it with chlorine and in some cases where sand and other elements such as manganese and iron are present, filtration systems are installed to ensure that water quality consistently meets set standards.



**Built/acquired 74 new deepwell facilities**



**DOH-accredited Water Quality Testing Facility**



**Installed advance water filtration systems**

Since it took over in 2009, Laguna Water has invested a total of US\$ 57.5 Million for the provision of clean, safe, reliable water supply to its service area.

#### **4. System and Process Innovations**

To ensure adherence to excellent service quality while addressing the increasing volume of customer transactions that need to be processed, Laguna Water shed-off its semi-manual data management system and procured the internationally renowned Systems Applications and Products (SAP) technology, a German-developed enterprise applications for software related service. Today, all the data from the old system had been migrated to SAP and thus, retrieval of customers' files is done at a faster pace and provided tools for Business Intelligence reports.



- ◆ iPaq for meter-reading
- ◆ SAP for billing and other processes
- ◆ Centralized customer service hotlines
- ◆ After-sales service standards

Even bills payment was made easy. From the previous set-up where customers pay exclusively to collection offices, arrangements were made such that payments may now be done through ATMs, Banks, convenient stores, other financial institutions even through mobile cellular phones.



Collection through payment facilities

Most importantly, customer interface was made easy as members of the Territory teams spend most of their working hours in the field. If by chance a customer fails to talk to Company representatives personally, Laguna Water has likewise installed a 24/7 hotline.

#### 5. Strengthened Relationship Across All Stakeholders

The continuing successes of Laguna Water may not only be attributed to the dedication and winning attitude of its people but likewise from the support it is getting from the Provincial Government and other community stakeholders. Strong relations with local government units and executives mitigated resistance from communities that may have resulted to delays in project implementation.



Regular Management Updates



Partnership in Relief Operations and Other Programs

Laguna Water was organized with stakeholder relationship in mind. A public relations team ensures that key stakeholders are properly informed about the company's undertakings. Regular community consultations and dialogues are conducted to secure inputs of stakeholders.

### **III. CHALLENGES**

The challenges that the Company faced during the early years of its operation were focused on its key stakeholders, among them, its employees, the customers and the Joint Venture partner.

During the takeover of Laguna Water's operations, most of the employees of the former operator were retained and introduced to a new working culture that focused among others, on the upscaling of skillsets and people empowerment. With few seconded employees from Manila Water acting as champions, it was initially difficult to carry out the desired changes and institute a culture of performance-based meritocracy.

Getting the confidence of existing and future customers proved to be a challenge due to their poor experience with the previous operator. It was only after both the water quality and operational reliability improved that customers were finally convinced that indeed, Laguna Water will be able to deliver on its promises.

The sitting Governor, an elective official who has a three-year term, represents the PGL and is thus the Company's Joint Venture partner. After each election, the probability of dealing with a new Governor/partner who may espouse a management style different from the previous one requires adjustments and sensitivity to the uniqueness of the new joint venture partner. During the last five (5) years of Laguna Water's existence, it has dealt with three (3) Governors already and the mode of transition from the former to the new Governor had been complex.

#### **IV. OUTCOMES**

Through implementing and tailoring the different expertise and best practices inherited from its parent company, coupling these with homegrown strategies, Laguna Water was able to achieve significant milestones since it started operations in 2009. From a low fourteen percent (14%), service coverage is currently at sixty percent (60%). This coverage achievement is way ahead of the 30% agreed target with the Provincial Government after five years in operation. NRW is now at twelve percent (12%) from forty-eight percent (48%). Also, water quality has been tested potable and has showed continuous compliance to the Philippine National Standard of Drinking Water. Most customers of Laguna Water now enjoys 24/7 water availability.

#### **V. LESSONS LEARNED**

The success of Laguna Water since it formally started operations can be attributed to the following:

1. Stakeholder relationship management across all levels is key. The need to engage the provincial government, local government units, community, homeowners' organizations, key accounts and government agencies cannot be overemphasized.
2. Regular consultations and dialogues enable stakeholders to be part of the planning process and mitigate resistance during project implementation.
3. System and network rehabilitation is a combination of engineering, technical and social interventions.
4. People empowerment and providing an enabling environment that would develop human capital would maximize the potential and productivity of employees.
5. Support of the parent company from technology transfer, system and process innovations and replication of best practices facilitate better customer service and interaction.



PPIAF is a multi-donor trust fund that provides technical assistance to governments in developing countries to develop enabling environments and to facilitate private investment in infrastructure. Our aim is to build transformational partnerships to enable us to create a greater impact in achieving our goal.