

Beyond one-size-fits-all

Lessons learned from eight water utility public-private partnerships in the Philippines

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WHY WATER PPPs?

At a macro level, the Philippines has made impressive progress in water supply provision: Nationally, 92% of individuals have access to improved water sources, and the number of households with clean water piped directly to their premises has nearly doubled from 25% in 1990 to 43% in 2012¹. However, within the sphere of publicly financed networks, water systems piped into premises are limited in coverage, and service delivery is irregular at best. Local government units (LGUs) struggle to expand their utilities, leaving both rich and poor residents underserved.

Public-private partnerships (PPP) are one potential solution to accelerate access to piped water services, especially for the poor. In well-arranged PPPs, private sector capital is mobilized for water system improvements and expansion at a scale far larger than that available from public funds. Water services are more reliable as operators are incentivized to match supply with consumer willingness to pay, enabling a sustainable cash flow and facilitating service coverage expansion. The private sector also brings technical and financial expertise to manage

water utilities in a more efficient and sustainable manner.

FINDING THE WIN-WIN: ARRANGING A SUCCESSFUL PPP

What is the secret to arranging successful water PPPs in the Philippines? To answer this question, the World Bank's Water and Sanitation Program (WSP) examined eight water utility PPPs. These PPPs varied in contract type (e.g. concession, lease, management, build-operate-transfer for bulk water supply), procurement pathway (solicited vs. unsolicited), and legal basis. They also ranged in size, from 700 connections in municipal areas to over a million connections in one of the Metro Manila concessions. Despite these differences, all eight utilities (see Table 1) found a way to remain viable while meeting performance standards.

Key Findings

- **There is no “magic bullet” approach to water utility PPPs in the Philippines.** Different arrangements can lead to affordable, reliable and clean water services, provided there is sufficient market size and willingness to pay.
- **The foundations of success are laid by reaching a win-win arrangement,** where the operator provides reliable services that consumers are willing to pay for. A good arrangement is established by a shared understanding of this objective, clear roles, and a balancing of risks with rewards.
- **“The art of the deal” matters more for success than the checklist of steps.** The key concept is to achieve value-for-money and a win-win arrangement. This requires the goodwill of both parties throughout the life of the partnership, not just at the selection stage. Procurement details, as long as supported in law, should be secondary to this objective.
- **PPPs can thrive in diverse geographies** – so long as service is focused on meeting the demand for which consumers are willing to pay.
- **Pro-poor approaches are not yet universal,** though successful approaches have been implemented in Manila, Laguna, and Boracay.

¹ Joint Monitoring Programme, April 2014

Table 1: Summary of Water Utility PPP Case Studies

Area	Partners	Connections ^a	Arrangement ^b	Procurement ^c	Legal Basis
Metro Manila	Public: Metropolitan Waterworks & Sewerage System Private: Maynilad Water Services, Inc.	1,129,497	Concession	Solicited	The National Water Crisis Act of 1995 (Republic Act no. 8041)
	Public: Metropolitan Waterworks & Sewerage System Private: Manila Water Company, Inc.	639,066	Concession	Solicited	The National Water Crisis Act of 1995 (Republic Act no. 8041)
Laguna	Public: Provincial government Private: Laguna Water Corporation	61,448	Concession (under a Joint Venture Agreement)	Unsolicited	1991 Local Government Code (Republic Act no. 7160)
Boracay, Aklan	Public: Tourism Infrastructure and Enterprise Zone Authority (TIEZA, formerly Philippine Tourism Authority) Private: Boracay Island Water Company	5,531	Concession (under a Joint Venture Agreement)	Unsolicited, and subjected to Swiss challenge	The Tourism Act of 2009 (Republic Act no. 9593); and the NEDA Guidelines on Joint Venture for Government Owned/ Controlled Corporations
Sta. Cruz, Davao del Sur	Public: Municipal government Private: Sig Construction	3,911	Design-Build-Lease/Affermage	Solicited	1991 Local Government Code
Tabuk City, Kalinga	Public: City government Private: Calapan Waterworks Corporation	3,600	Lease/Affermage	Solicited	1991 Local Government Code
Malasiqui, Pangasinan	Public: Municipal government Private: Inpart Waterworks and Development Corp.	2,419	Concession	Unsolicited	1991 Local Government Code
Quezon (Brgy. Alfonso XIII), Palawan	Public: Provincial government Private: Alfonso XII Water Users' Association	731	Management/ Operation and Maintenance contract	Unsolicited	1991 Local Government Code
Norzagaray, Bulacan	Public: Water district Private: Phil Hydro/Maynilad	N/A – PPP for bulk water supply for water districts	Build-Operate-Transfer for bulk water supply	Solicited	The Government Procurement Reform Act of 2003 (Republic Act no. 9184)

^a As of 2012 or 2013

^b These contractual arrangements refer to PPP-type contracts invoking legal bases (see column 5 above) outside of the Build-Operate-Transfer (BOT) Law and its Implementing Rules and Regulations (IRR). In addition, appropriate legal justifications were secured by the public sponsors to support their mandates in undertaking their respective projects.

^c The procurement methods used were justified based on the legal bases, and not on the BOT Law and its IRR. The PPP Center, a group that facilitates the coordination and monitoring of PPP programs in the Philippines, did not provide technical assistance to these projects.

SPOTLIGHT: MANILA WATER CONCESSIONS

The story of the Manila water concessions is a remarkable narrative of turnaround in the provision of water and sanitation services over two decades, first in east Manila, and now in west Manila. Both concessions have achieved world class performance, doubling the number of water connections since the start of the concession period and serving as a model for all similar water PPPs in the country.

The Manila concessions both feature pro-poor mechanisms that provide differentiated level of services that are more affordable to base-of-the-pyramid customers and contribute significantly to concessionaire revenues.



FOUR KEY DECISIONS

Results from the eight case studies suggest that it is not so much who initiates a deal as much as it is how the deal is signed off and managed in the course of the PPP, including how financing flows from the public and private financing sources. An LGU considering PPP in water supply needs to make four key decisions:

Decision 1: What institutional arrangement is most appropriate?

PPPs are not the only available institutional arrangement in water service delivery. LGUs should weigh the decision to pursue a PPP against alternative options such as water users' association, water districts², or direct LGU management. Factors to consider include available resources, financing, and the technical capability of relevant stakeholders.

Decision 2: What do the consumers want?

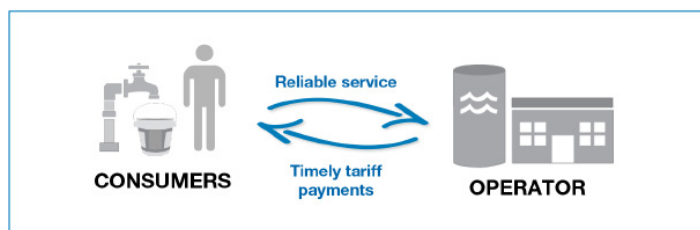
The demand for water dictates the sustainability of the water services. Water utilities should provide services based on what consumers want and are willing to pay for, so that the operator is assured of cash flow as long as services provided meet the contractual obligations (Figure 1).

If there is consensus on the need to improve services, the LGU and other stakeholders need to consider two additional issues:

- 1. Not all levels of access are created equal:** While most Filipinos today have access to at least Level 1 water (a communal point source away from premises), thereby meeting the terms of the Millennium Development Goal benchmarks, there are still considerable variations in the quality of services received. LGUs need to consider to what extent they want to achieve universal access to 24/7 piped water services.
- 2. Equitable access to piped water services is expensive:** If equitable access is an important priority, the LGU needs to next consider how best to leverage its limited financial resources to piped water services in the shortest possible time. The project would usually require external financing to cover capital investments in the millions of pesos range, an amount larger than most LGU-financed capital investments.

² Water districts are local corporate entities initiated by local governments that operate and maintain water supply systems in cities and municipalities. They are created on the basis of Presidential Decree No. 198 of 1973, also creating the Local Water Utilities Administration (LWUA).

Figure 1. Water PPPs succeed when services are provided on the basis of what consumers want and are willing to pay.



Decision 3: How will the PPP be financed?

The size of the necessary capital investment is not as important as whether there is sufficient willingness to pay for water services. If the demand for water is large enough, the piped water supply system can generate sufficient cash flow to enable the private operator or LGU to service a loan. LGUs may be able to access loans from global and private financial institutions, who are willing to provide long term loans amortized through tariff collections over five, ten, and even twenty years at affordable interest rates.

The funding portfolio and distribution of who bears the investment costs will impact the water tariff. Customers benefit the most when loan liabilities can be shared with the LGU from its Internal Revenue Allocation and other revenue sources, and from available grant funding as these will lower the required tariffs.

Decision 4: What contractual arrangement is the most sustainable for this situation?

PPPs are long-term commitments, lasting between five to thirty years. As such, both the LGU and operator need to be confident in the economic benefits of entering such a long term relationship. The contract defines the “rules of the game” both parties are required to observe. Successful PPP contracts specify, within the framework of Philippine law, how:

- Responsibilities will be divided
- Customers will be protected from arbitrary actions
- Operator property rights will be protected
- Disagreements will be judiciously settled
- Tariffs will be rebased

Beyond establishing satisfactory written contractual terms, water PPPs in the Philippines have worked well when the private investor is reasonably assured of his or her ability to mitigate political risks, including the inevitable transitions in the political environment. Additionally, including steep buy-out provisions and drawing the coverage area boundaries to include a base of high volume institutional and commercial consumers helps assure the long term sustainability of the contract.

CASE STUDY COMPARISON

This section brings more clarity to Decisions 2 – 4 by drawing specific examples from the eight case studies.

Demand Drivers (Decision 2)

Each of the eight investigated water PPPs was initiated because of a desperate need. For instance, in Metro Manila, the driver was the water crisis of 1995, declared by the then-President, who found it unacceptable for Manila to lag so far behind other regional capitals. At the time, the Metropolitan Waterworks and Sewerage System only supplied water for an average 16 hours a day to just two-thirds of Metro Manila, while experiencing nearly 60% non-revenue water. In another example, the beach community of Boracay turned to PPP when massive sewage contamination on the area's beaches led to the cancellation of international tourism events that had been held annually in Boracay for nearly two decades. In other cases, the relevant public institution opted to pursue a PPP after assessing the consumer base's desire and willingness to pay for higher levels of water

services (Table 2). Their communities demanded a safe and reliable water supply that met minimum performance standards such as 24/7 service, sufficient water pressure (at least 3 meters in small towns; at least 7 psi in Manila), and drinking water quality according to national standards.

The contracts also had clear provisions on tariff setting and adjustment (e.g. indexed to inflation or to rising prices of major cost components, intermittent across the board increases, force majeure situations) as well as on risk sharing.

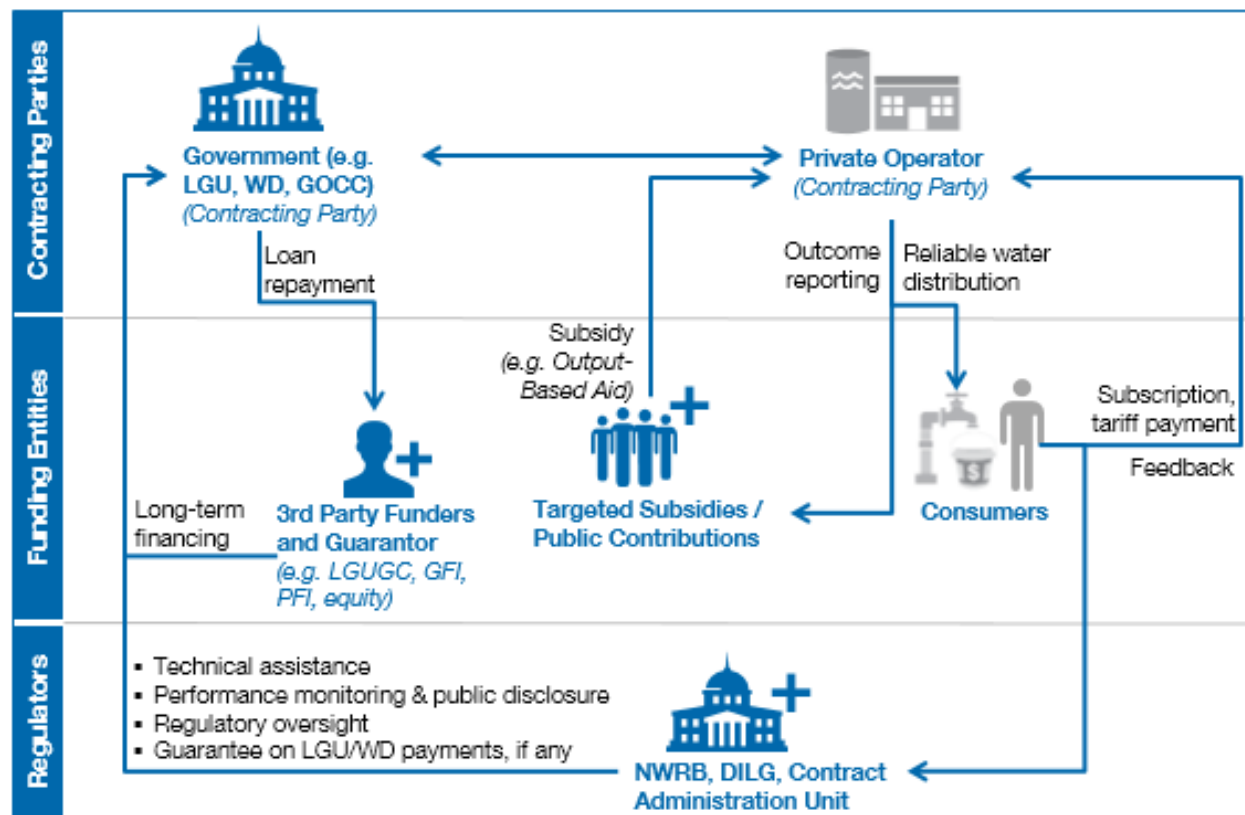
Project Structure (Decision 3)

At a high level, water PPPs share a common structure (Figure 2). For the eight case studies, the public and private contracting parties are summarized in Table 1. Yet as noted in the previous section, how the PPP is arranged and managed over its lifetime matters more than who initiates the deal. Table 3 thus captures the different accountability mechanisms employed for each PPP.

Table 2: Demand drivers for increased access to improved water services

Area	Key Driver for Use of PPP
Metro Manila (West and East)	Water crisis of 1995, declared by then-president Fidel Ramos. PPP target was set, reaching 24/7 water service within 6 years and universal coverage for water within 11 years, while assuring drinking water quality according to national standards at a pressure of 16 psi.
Laguna	Expensive yet poor quality water supply leading to severe water-related health issues amongst the cities of Cabuyao, Sta. Rosa, and Binan; these conditions prompted the then-governor to consider PPPs in 1998 and eventually close a deal in 2002.
Boracay, Aklan	Inadequate water and wastewater infrastructure that did not expand at the same rate as the area's population, leading to non-compliance with environmental standards, cancellation of International Kiteboarding Event in 2008, and dwindling tourist arrivals.
Sta. Cruz, Davao del Sur	Both LGUs have limited capacity to expand and experienced intermittent water supply which prompted their chief executives to look for innovative financing approaches.
Tabuk City, Kalinga	LGU Urban Water Supply and Sanitation Program financed by a World Bank loan in 2000, sought to work with LGUs to create viable models of PPP according to the principles of (a) providing services according to what consumers want and are willing to pay for, (b) commercial standards for utility management, (c) the lowest appropriate level of management.
Malasiqui, Pangasinan	Poor service (one hour in the morning, and one hour in the afternoon) limited to mainly the <i>poblacion</i> of the town, despite the municipality's affluent constituency; by 2000, the local government began seeking a private investor in recognition of its limited ability to improve and expand services.
Quezon (Brgy. Alfonso XIII), Palawan	Complete lack of a water supply system before 2004; local residents depended on shallow wells and water tankers that charged volumetrically for water of uncertain potability.
Norzagaray, Bulacan	Observed increasing content of manganese and iron in wells in the northern part of the municipality and drying up of wells in the southern part in 2008; estimates of developing alternative surface water by tapping the Angat River was beyond the affordability of the water district because it would have led to a doubling of the water tariffs at a time when it would be investing in expanding its supply network.

Figure 2. Each investigated water utility PPP shares a common project structure, with different contracting parties, funding arrangements, and regulatory bodies.



Contractual Arrangement (Decision 4)

The contracts for the eight case studies all specify the duration of the PPP, the operator's expected performance standards, any exclusivity provisions, and responsibilities for asset investments, operations, and maintenance. The contracts also specify tariff adjustment mechanisms. Taken as a whole, these factors contributed to the allocation of risk across the contracting parties. Especially on tariff adjustment and risk share, the contracting parties across the eight utilities reached different terms that would influence their overall success and challenges encountered.

Tariff Adjustment Approaches

The frequency and parameters of tariff adjustment range from monthly changes based on movements in the consumer price index (e.g. in Sta. Cruz and Tabuk) to automatic adjustments any time the price of electricity increases by >5% (e.g. in Malasiqui). In Laguna, the total tariff automatically increases by 10% over the 25 years of the concession period according to a schedule defined in the contract, so long as the National Water Resources Board (NWRB) reviews and approves the final tariff. In Manila, tariffs are regularly adjusted based on movements of the consumer price index and foreign currency rate, and further reset every five years to take into consideration actual investments made and approved investments moving forward.

Risk Share

The share of private sector responsibility in PPP contracts can be viewed as falling along a fully public to fully private continuum. Many of the risks associated with a water PPP can be grouped as:

1. Investment/financing risk
2. Design risk
3. Construction risk
4. Operations and maintenance risk
5. Market/commercial risk
6. Watershed protection risk
7. Environmental risk
8. Force majeure risk
9. Service underperformance risk

PPP project structures should strive to balance these risks with reward. For instance, in the Quezon management contract, given the small size of the system, it was important that the provincial government both bore some of the risks in the PPP and adequately oversaw the terms of the contract. In contrast, the operators in the Metro Manila concessions stood to gain due to a large consumer base. Those PPPs could therefore generally place more risk on the operator, since they stood to gain a sizeable revenue stream.

Table 3: Approaches to regulation of financial flows in PPP project structures

Area	Financial Flows	Accountability Mechanisms
Metro Manila (West and East)	<ul style="list-style-type: none"> Concessionaire collects tariffs from consumers, pays concession fees to MWSS 	<ul style="list-style-type: none"> Regulation is contractually stipulated, and administered by MWSS Regulatory Office (RO) Annual third-party administered Public Assessment of Water Services directly allows consumers to assess concessionaire
Laguna	<ul style="list-style-type: none"> Provincial government and Manila Water both hold shares of Laguna Water joint venture company, which pays dividends to each owner Joint venture company collects tariffs from consumers, and pays concession fees to the provincial government 	<ul style="list-style-type: none"> Joint venture company is governed by a nine-member board, with three representing Provincial Government of Laguna and six Manila Water, reflecting the ownership structure of the company Regulation is contractually stipulated, with tariffs submitted to the National Water Regulatory Board for review and approval
Boracay, Aklan	<ul style="list-style-type: none"> TIEZA and Manila Water both hold shares of Boracay Island Water joint venture company, which pays dividends to each owner Joint venture company collects tariffs from consumers, while paying concession fees to TIEZA 	<ul style="list-style-type: none"> Joint venture company is governed by board with four members representing Manila Water and one from TIEZA, reflecting the ownership structure of the company Regulatory Office is established and reports directly to the TIEZA Board, which is overseen by the Department of Tourism
Sta. Cruz, Davao del Sur Tabuk City, Kalinga	<ul style="list-style-type: none"> Operator collects tariffs from consumers, pays lease fees to the LGU Development Bank of the Philippines provides long-term loan to LGU Operators responsible for reporting asset conditions every five years 	<ul style="list-style-type: none"> Contract Administration Unit is responsible for contract regulation and dispute resolution Operators are responsible for reporting asset conditions every five years
Malasiqui, Pangasinan	<ul style="list-style-type: none"> Operator collects tariffs from consumers, shares revenues with the LGU 	<ul style="list-style-type: none"> Tariffs are submitted to the National Water Resources Board for review and approval
Quezon (Brgy. Alfonso XIII), Palawan	<ul style="list-style-type: none"> Operator collects tariffs from consumers, remits 80% of net revenues to the LGU Land Bank of the Philippines/World Bank funded on-lending program that provides long-term loan to LGU 	<ul style="list-style-type: none"> Tariffs are subject to public hearing and approved by the provincial government
Norzagaray, Bulacan	<ul style="list-style-type: none"> Water district collects tariffs from consumers and royalties from the bulk water supplier, while paying a tariff to the bulk water supplier and premium to the LGU Guarantee Corporation LGU Guarantee Corporation guarantees the water district's financial obligations 	<ul style="list-style-type: none"> Water district tariffs are submitted to LWUA for review and approval

Nonetheless, contract provisions should be able to cover as far as possible unforeseen circumstances or force majeure events that can potentially have a significant impact on the viability of a contract. For example, Maynilad (with previous owners Benpres and Suez) became bankrupt as a consequence of the 1997 Asian financial crisis and was unable to fulfill its obligations in the contract.³

³ Maynilad inherited 90% of MWSS' loans, mostly dollar-denominated. When the 1997 Asian financial crisis occurred, the peso devalued by 100%, making it doubly expensive to service these loans.

Conflict of Interest & Performance Monitoring

In Laguna and Boracay, the public contracting party is also a shareholder in the joint venture company. This opens up the possibility of conflict of interest, particularly in regard to monitoring and enforcing the contract. For instance, in Laguna, the provincial government does not have a regulatory unit and relies solely on the operator to provide technical and financial data.

The public entities in Malasiqui, Tabuk, and Sta. Cruz also do not have a unit dedicated to monitoring and enforcing the contract, which has hampered decision-making processes and resulted in unverified technical and financial data.

Contract Deviations

In some systems, contract deviations have left operators in a vulnerable financial position. For instance, in Tabuk, there were 580 connections in place upon water system handover as opposed to the 3,600 connections described in the lease agreement. In Sta. Cruz, the operator has not been able to implement contract-specified 10% tariff increase every two years (to finance increases in the lease fee) due to non-approval by the LGU. The Manila concessionaires are currently in arbitration over disallowances of significant capital expenditures and recovery of corporate income taxes from the tariffs.

Access to Finance

Malasiqui faces financial challenges, mostly due to its small size. The operator is constrained from expansion due to the limited availability and high cost of financing, as much of the operator's financing is from the informal market at exorbitant interest rates with short payback period.

Half of the case study utilities are implementing pro-poor programs. Manila, Laguna, and Boracay provide installment plans for connection charges. Boracay and Maynilad also offer discounted tariffs for consumers with monthly consumption below a minimum bracket of 10 cu.m, while also providing a network of tap stands to poor communities. In a PPP arrangement, this can be set as a parameter in the bidding documents, or as an incentive mechanism in structuring the PPP transaction.

Cost Management

Quezon struggles with cost management. Some expenses are out of the operator's control. For example, the town is not connected to the grid and thus relies on diesel generators; however, fuel costs are twice that of electricity. On the other hand, the operator pays a remittance to the provincial government calculated as a percentage of net revenue. Since this payment is not a set amount, the operator is incentivized to not focus on reducing costs. Perhaps due to this, salaries make up 57% of the system's operating costs, with a staff to 1,000 connections ratio of 13.7, or 3-4 times the international benchmark.

Achievements since PPP Initiation

Though some of the PPPs have only been in effect for four years, the eight evaluated sites are achieving the following key outcome indicators:

- 24/7 water service
- Water availability ≥ 100 liters/capita/day
- Water pressure ≥ 7 psi
- Drinking water quality according to Philippine National Standards
- Operating ratios $> 50\%$, assuring adequate revenue generation to Operator
- Collection efficiency $> 90\%$
- Non-revenue water $\leq 20\%$
- Number of staff per 1,000 connections within international benchmarks of 3 to 5 (Note: achieved by most utilities except Tabuk and Quezon, Palawan)

NATIONAL AGENCY ROLES

The case studies underscore the need to tailor each PPP based on the specific geography, market size, and utility management type. LGUs who may want to pursue PPPs can be paralyzed by the case-by-case nature of the transaction. Due to their roles in setting up the overall business environment, national government agencies can be critical supporters to LGUs seeking to close water supply PPP deals.

PPP Center

The PPP Center's mandate is to provide capacity building support to implementing agencies and local governments in all aspects to project preparation and development. Within this mandate, the PPP Center is positioned to facilitate deals – including water PPPs at the local level. The Center can connect LGUs seeking to enter PPPs with potential private partners and link both parties to financing. The PPP Center is also well-positioned to champion “productization”, i.e. efficiently institutionalizing the process by which PPPs can be identified, negotiated, and concluded.

Department of the Interior and Local Government

As oversight department for LGUs, DILG is mandated to assist LGU administrations in delivering basic services, including water. DILG can help by informally securing the political commitment needed to pursue development initiatives, including honoring PPP contracts. DILG can also leverage national grants to enhance the viability of water PPPs, and encourage LGUs to improve water services through selective award of its prestigious Seal of Good Governance award.

National Water Resources Board

NWRB has a considerable body of case law and data on privately supplied communities that, coupled with its mandate to oversee water service regulations, gives NWRB a unique opportunity to manage a virtual platform to share information with PPP stakeholders, disclose performance data, and support dispute resolutions.

MOVING FORWARD: PRODUCTIZATION OF GOOD DEAL-MAKING

The case study discussion highlights the disparate ways in which water PPPs were established. The PPP experience also demonstrates that deal closures are affected by significant gaps in information and delays in receiving guidance from national government agencies, notably in terms of regulatory advice and support. To help bridge the gap, the PPP Center, in partnership with DILG and NWRB, can help bridge the gap through service productization.

Productization:

Streamlining the transaction process by which PPPs are identified, negotiated and concluded within a framework of clear rules and responsibilities of the operators, the LGU administration, national government agencies and water supply users, while fully leveraging current and future technologies.

Under productization, the PPP Center, DILG, and NWRB will aim to lower barriers for local governments to enter into and stay engaged in win-win deals. Productization of services focuses on structuring the sector's know-how, know-what, and know-who for water PPPs on an online platform for easy access. These agencies will act as connectors, facilitators, and light-handed regulators. The PPP Center can be the driving champion behind the productization process, enabling relevant sector stakeholders to learn and apply the latest knowledge and practices related to PPP. This knowledge includes expanding access to reliable and sustainable water supply services based on willingness to pay, economic and environmental sustainability and appropriate sharing of risks between contracting parties. Also important is how to customize PPP contracts to suit the specific needs of water supply customers in participating LGUs, while fulfilling national government standards with regard to quality, reliability and environmental sustainability of water.

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About the program

The Philippines Expanded Small Water Utilities Improvement and Financing Technical Assistance Phase 2 (ESWIF2) is a three-year initiative that seeks to develop and implement new sector approaches – “light-handed” regulation, technical support to small utilities on a fee-basis by accredited service providers, and access to credit trials - that promote systematic acceleration of water service provision in unserved areas. As part of this project, WSP has developed a guidance note for the PPP Center of the Philippines on how PPPs can be arranged and scaled successfully, based on an investigation of eight water utilities across the country. WSP has also prepared snapshot two-page briefs that summarize each case study for quick reference.

Contact Us

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WSP is a multi-donor partnership created in 1978 and administered by the World Bank to support poor people in obtaining affordable, safe, and sustainable access to water and sanitation services. WSP's donors include Australia, Austria, Canada, Denmark, Finland, France, the Bill & Melinda Gates Foundation, Ireland, Luxembourg, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States, and the World Bank. The findings, interpretations, and conclusions expressed herein are entirely those of the author and should not be attributed to the World Bank or its affiliated organizations, or to members of the Board of Executive Directors of the World Bank or the governments they represent.

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