

Private Sector Provision of Water Supply and Sanitation Services in Rural Areas and Small Towns

The Role of the Public Sector

Mouhamed Fadel Ndaw

March 2016

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About the Author

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Based on recent experiences in seven developing countries (Bangladesh, Cambodia, Colombia, Niger, the Philippines, Senegal, and Uganda), the report aims at helping national and local governments in developing countries and water, sanitation, and hygiene professionals to better engage with the domestic private sector in the provision of sustainable water and sanitation services in rural growth areas and small towns.

Abbreviations

BOT	build–operate–transfer
CBO	community-based organization
DPSP	Domestic Private Sector Participation
ECA	Economic Consulting Associates
ESP	Empresas de Servicios Públicos
GPOBA	Global Partnership on Output-Based Aid
IDA	International Development Association
MDG	Millennium Development Goal
NGO	nongovernmental organization
NWSC	National Water and Sewerage Company
PPP	Public-private partnership
WASH	water, sanitation, and hygiene
WSP	Water and Sanitation Program
WSS	water supply and sanitation

Executive Summary

Recent experiences have shown that domestic private sector participation is an effective and proven approach to address challenges in small towns' water and sanitation services delivery. However, though domestic private sector participation has some successes and shows great promise, there are also many challenges, and there is still much to tackle for this to become a norm.

This Guidance Note focuses on piped water schemes in rural and small towns where local private actors increasingly represent a significant group of stakeholders. It uses lessons learned and experiences from the selected countries: Bangladesh, Colombia, the Philippines, and Uganda. Additional insights were included from the global desk review and the results of completed questionnaires from Cambodia, Niger, and Senegal.

Why Small Towns Are Important

Urban development tends to follow a hierarchical pattern under which there are small numbers of large cities (frequently one large “primate” city), larger numbers of midsize settlements, and numerous small settlements. This work addresses the water supply and sanitation (WSS) needs of the residents of small towns. Although the towns are small, in aggregate they nevertheless account for a substantial proportion of the overall urban population.

Countries tend to define the term *small town* differently. However, in March 2000, to answer the need for a common definition of a small town, a global e-conference on small-town water supply arrived at the following definition [Bob Roche, conference facilitator: Small Towns Water and Sanitation Electronic Conference, January 31, to March 10, 2000]:

Small towns are settlements that are sufficiently large and dense to benefit from the economies of scale offered by piped water supply systems, but too small and dispersed to be efficiently managed by a conventional urban water utility. They require formal management arrangements, a legal basis for ownership and management, and the ability to expand services to meet the growing demand for water. Small towns usually have populations between 5,000 and 50,000 inhabitants, but can be larger or smaller.

Water Supply and Sanitation Challenges in Small Towns and Rural Areas

In rural areas, 8 out of 10 people still lack access to improved drinking water sources, with the majority living in Sub-Saharan Africa (319 million) and South Asia (134 million). With only 51 percent of the rural world's population using improved sanitation facilities, rural areas lag far behind urban areas, where the access rate is 82 percent. Seven out of 10 people live without improved sanitation facilities, and 9 out of 10 people still practicing open defecation live in rural areas.

The situation in small towns can be characterized as follows:

- *Low densities.* Land in smaller towns tends to be significantly cheaper and is developed at lower densities. Therefore, serving the consumers requires greater infrastructure costs, especially in the case of individual connections.
- *Lower incomes.* Incomes increase with the size of the settlement because of a more competitive labor market and the higher cost of living in larger towns.
- *Lack of institutional capacity.* Small towns typically have not been served by national or regional water utilities. Decentralization has become increasingly widely adopted, but even if local governments at the small-town level have the power to operate a water utility, they lack the capital and skills.
- *Availability of alternative water sources.* At the smallest level of urban settlement, residents often rely on natural water resources such as rivers, springs, or wells. Some who are better off may have their own boreholes.

Ways to Address the Problem

Some small towns have municipal or other public sector water supply schemes in operation. Many may be working well and will not be considered further.

For those that are not working well, or where there is no supply, the domestic private sector has emerged as a promising partner in reducing the gaps in water and sanitation in rural growth areas and small towns. However, domestic private sector operators need a proper regulatory framework to fully realize their potential, in addition to especially capable

and supportive public institutions (central governments, local governments, regulators, and public utilities). The key question is how to strengthen the public sector to build a business climate in which the private sector can actively and efficiently participate in water and sanitation service delivery in small towns. This can be further broken down into the following three questions:

- What roles does the public sector need to play to efficiently engage the private sector in the water and sanitation sector in rural and small towns?
- What aspects of the existing public sector institutions need strengthening to engage domestic private sector participation in rural and small towns to fulfill public policy objectives, in particular to deliver better water and sanitation services to the poor?
- What sector policies and institutional arrangements underpin successful promotion of private sector participation, and what are the monitoring and regulatory mechanisms that have been effective in improving private sector provision?

The Private Sector's Potential

Opportunities for commercially viable private sector operations arise from the following major factors:

- High population density and high average income of residents
- Opportunities to reap the benefits of economies of scale and scope
- Potential for rapid growth
- Lack of alternative sources of water
- Encouragement from development partners
- Inability of local governments to provide WSS services after decentralization
- Poor maintenance of community-managed systems
- Poor management of public sector systems

Typically, the private sector's role is to *operate* the assets. Lease contracts are increasingly preferred over concession contracts that have not, in practice, resulted in private capital financing investment projects.

The Public Sector's Role in Enabling Private Sector Participation

For the concept of public-private partnerships (PPPs) to succeed, policy makers must identify the players within the

public sector and their roles in encouraging, developing, and implementing PPP contracts.

Public views regarding the role of the private sector in providing public services are important, but there are some key factors that contribute to the growth and development of private participation in WSS service provision in small towns and rural areas.

Market making or market development. In many countries, public service provision has been delegated to local government. Allowing the private sector to participate in the sector introduces competition in a monopolistic market. However, private participation will not flourish without a clear understanding by all parties of the roles and responsibilities of the actors.

Providing institutional support. In addition to providing financial incentives, public institutions can encourage private participation through (a) awareness raising; (b) strengthening the legal and regulatory framework; and (c) capacity building.

Assisting in developing and improving access to finance. Financial institutions can be assisted to provide products to support the local private sector. The government may need to provide all or a portion of the capital investment, while the private operator provides funds for initial operation of the system. Financial institutions can also act as a conduit for financial support provided by central government institutions, or development partners to the private sector.

Provision of public goods. On occasion the private sector cannot effectively participate due to a lack of a suitable operating environment. In rural sanitation for example, behavior change campaigns are extremely important to build demand, but would not be carried out by any single firm, due to free rider issues.

Types of Support for Public Institutions

Public institutions in many developing countries simply do not have the capacity to meet WSS service obligations. This applies in particular to local level institutions established to meet local empowerment and other attractive

decentralization goals, but without being endowed with the necessary capacity and resources to carry out their mandates. Support for public institutions can be provided at the national (sector reform, PPP framework development and/or clustering and subsidy design), subnational level (capacity building) and community level (awareness campaigns).

NATIONAL LEVEL—WSS SECTOR REFORM

This support should be focused on achieving the following objectives:

- Improving WSS sector governance by clarifying roles, responsibilities, and functions of key actors
- Improving intergovernmental communication, including accountability and reporting mechanisms
- Ensuring consistency with the PPP framework
- Ensuring consistency with decentralization policies

All key stakeholders must be involved: these will typically include relevant ministries, national and local government institutions, regulatory bodies, existing utilities and operators, consumer associations, relevant nongovernmental organizations (NGOs), and community leaders. The experience of previous projects, including work done by donors or development partners, should be used to draw relevant lessons and identify potential partners.

NATIONAL LEVEL—PPP FRAMEWORK DEVELOPMENT

Policy makers should make sure that the PPP framework is consistent with existing legal and regulatory framework of the WSS sector. Often, a PPP framework has “larger” sectors as its focus, such as transport and energy, rather than water projects that tend to be smaller (often below legal thresholds of PPPs).

The activities involved in developing a PPP framework may include (but should not be limited to):

- Identifying the key government institution that will champion and implement the PPP framework (the “PPP champion”)
- Working closely with the PPP champion to develop the PPP policy, legal framework, processes, and institutional responsibilities
- Designing a PPP incentive framework that can be included in the PPP legislation

- If agreed and deemed to be appropriate, establishing a central PPP institution to promote and assist government agencies in implementing the PPP framework
- Assisting in developing and implementing a PPP demonstration project
- Providing ongoing support to all institutions involved

NATIONAL LEVEL—CLUSTERING AND SUBSIDY DESIGN

When the demand factors are not met, policy makers can take measures to improve demand conditions. These may include the following:

- Cluster small towns with larger cities, or rural growth centers into one service area, which may be more attractive to a private operator.
- Design a subsidy scheme that will ensure affordability while allowing for financial sustainability of the service provider. Subsidies can be provided as capital subsidies to cover the connection costs or in the form of a tariff structure that provides a cross-subsidy between customer groups.

SUBNATIONAL LEVEL—CAPACITY BUILDING

At the subnational level, support is generally needed to introduce the following:

- Concepts of PPP and private participation
- Types of PPP and the rationale for each
- Opportunities for involving private operators in public service provision, especially in WSS services
- Experiences, if any, from other sectors in the country, and lessons learned

One of the best ways to improve subnational governments’ ability to implement the PPP process is to provide technical assistance to relevant institutions. Technical assistance may include (but not be limited to) these methods:

- Identifying key institutions to be involved in support of private participation in the service (the “local champion”)
- Working closely with the local champion to develop a framework suitable for local conditions taking into account, if appropriate, any national PPP policies

- Developing local PPP guidelines, such as toolkits and monitoring tools, that can be used by local governments and other institutions
- Assisting the local champion and other relevant institutions to implement a PPP pilot project

Learning partnerships can be developed between the identified local champion and other institutions in the country that have experience in implementing PPP projects or with international institutions with a similar background.

COMMUNITY LEVEL—AWARENESS-RAISING PROGRAM

The main objective of awareness raising is to have public and community acceptance of private operators as one of the ways in which WSS services can be provided. Typical themes include (a) the importance of safe WSS services; (b) the obligation to pay for services received; (c) different ways of providing a service.

Support for Private Institutions

Policy makers must look for ways to support the needs of financial institutions and private operators and initiate demonstration projects. It is beneficial for public institutions to provide support to private financial institutions in terms of capacity building and training, so that local financial institutions can provide tailored products to support the local private sector.

CAPACITY BUILDING AND FINANCIAL SUPPORT FOR FINANCIAL INSTITUTIONS

Local financial institutions are accustomed to providing loans for relatively short-term projects, and the banks require high levels of collateral from the borrowers. However, the WSS sector generates a stable and predictable revenue stream that can also be taken as a form of security. Technical assistance and training may be required to help financial institutions understand the concept of revenue-based lending.

Where financial institutions are unwilling to support private operators in the WSS sector, the possibility exists for government or donors to provide guarantees to the lender. In addition, public finance may also be needed to address affordability issues and to accompany any private investment.

CAPACITY BUILDING FOR PRIVATE OPERATORS

Just as the concept of private operation of WSS services is new to many governments and communities, it may also be new to the private sector. There may be a need for communication and training regarding the role of the private sector in PPP and WSS projects.

DEMONSTRATION PROJECT DEVELOPMENT AND IMPLEMENTATION

Demonstration projects can be used to pilot private participation in the WSS sector, thereby generating support from stakeholders who may have initially been somewhat reluctant.

I. Introduction

The purpose of the Guidance Note is to better understand the roles and responsibilities of public institutions in creating a better operational and investment climate for the domestic private sector in such challenging “in-between” settlements such as rural growth areas and small towns. The study focuses on piped water schemes in rural and small towns where local private actors increasingly represent a significant group of stakeholders. It uses lessons learned and experiences from these selected countries: Bangladesh, Colombia, the Philippines and Uganda. Additional insights were included from the global desk review and the results of completed questionnaires from Cambodia, Niger, and Senegal.

This Guidance Note is organized around eight sections and two appendixes.

- Section 1 is the introduction.
- Sections 2, 3, and 4 provide background on the importance of small towns, the challenges related to

water supply service provision and sanitation for small towns and why private sector can be a viable solution.

- Sections 5 and 6 identify the role of public sector, the enabling factors, and present lessons learned based on country reports from Bangladesh, Colombia, the Philippines, and Uganda.
- Sections 7 and 8 provide guidance on how to assess, identify, and develop supporting programs for public and private institutions in water supply and sanitation (WSS), including demonstration projects.
- Appendix A provides guiding questions that can be used to assess the capacity of relevant institutions and community and market readiness to implement public-private partnership (PPP) in WSS service provision.
- Appendix B provides key reference sources.

II. Why Small Towns Are Important

One of the most important aspects of the rapid demographic change in developing countries is increasing urbanization. A consequence of this rapid urbanization has been a shortfall in service provision, of which one of the most important has been water.

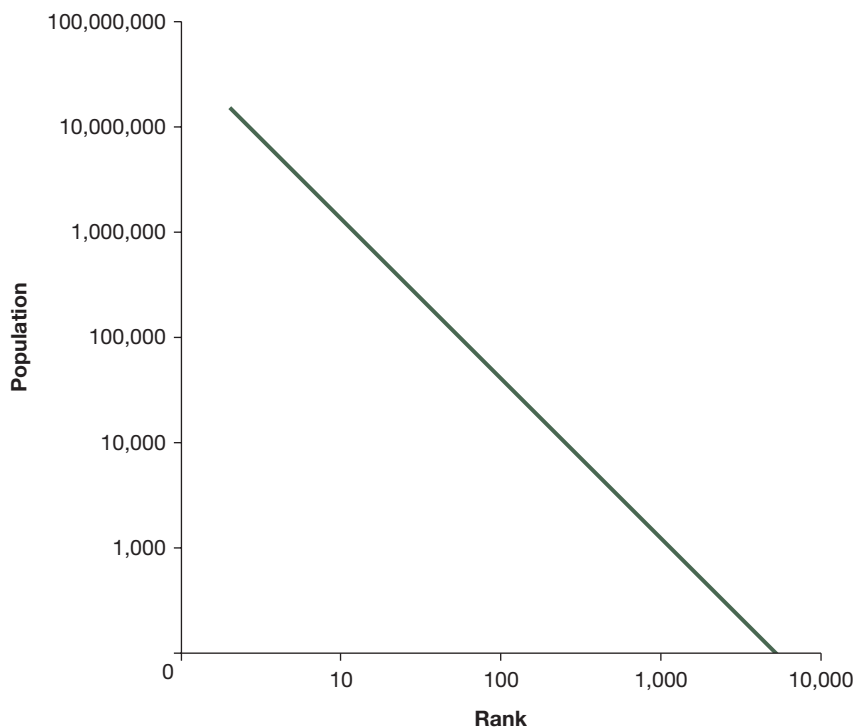
It has been observed that the size of urban areas tends to follow what is known as the “rank size rule,” as illustrated in figure 2.1. Under this phenomenon there are small numbers of large cities (frequently one large “primate” city), larger numbers of midsize settlements, and numerous small settlements¹. The many smaller towns account for a substantial proportion of the overall urban population.

Typically, the share of very large and primate cities in the overall population of a country increases over time, but increasingly the total population of settlements further down in the urban hierarchy is growing as fast or faster. This pattern of urbanization is a complex interplay of factors in different locations that unfolds over an extended period of time.

No two countries have the same definition of what is urban.² In this regard, the following is to be noted:

- There is often a vast difference in urban character between a market town of 5,000 to 10,000 inhabitants and a large town of 50,000 to 100,000 people, or even between a town of 10,000 and one of 20,000 to 30,000.
- In many countries, a town of 50,000 or more would be regarded as a small city, because such centers are

FIGURE 2.1: ZIPF'S LAW AND CITY DEVELOPMENT



Source: The evolution of Zipf's law indicative of city development - Yanguang Chen, Department of Geography, College of Urban and Environmental Sciences, Peking University, Beijing.

large enough to have differentiated commercial areas and middle class neighborhoods, which might be favored for exclusive provision by a network utility, while rapidly growing low-income peri-urban areas would be neglected and represent an increasing social problem.

- Population figures on their own do not give a sufficient indication of what is urban and what is not. Factors include (a) small towns cannot be interpreted purely statistically; (b) classification criteria vary; (c) statistical units are often not well defined or defined differently in almost every case; and (d) official statistical units do not correspond to a delimited area of

¹ <http://arxiv.org/ftp/arxiv/papers/1504/1504.04229.pdf>

² The different definitions for countries across the globe are given on the UN Department for Economic and Social Affairs (DESA) website at <http://esa.un.org/unpd/wup/DataSources/Default.aspx>.

a particular density to suit the requirements of potential private operators.

Small towns are often considered isolated settlements in sparsely populated rural areas, but statistically they are much more likely to be found in the wider catchment areas of larger cities, sometimes called extended or mega-urban regions.

Urban areas are on average wealthier than rural areas, and larger cities tend to be richer than smaller towns. But evidence suggests that rural areas also benefit from the process of urbanization. Multiple factors are involved:

- Rural depopulation is often associated with the growth of commercial, mechanized farming that supplants labor-intensive subsistence farming.
- Remittances from urban areas to rural dwellers increase disposable incomes.
- Urbanization is economically dependent on linking cities with their wider markets, with each other, and with their natural resource and food supply hinterland, all of which implies increasingly dense road networks and wider rural accessibility to markets

and farm job opportunities (with towns near cities becoming increasingly commuter towns).

This phenomenon increases the demand for services such as clean water supplies, especially in small towns, that have historically been underserved.

In March 2000, to answer the need for a common definition of a small town, a global e-conference on small town water supply attempted to arrive at a WSS-specific universal definition of a small town [Bob Roche, Conference facilitator: Small Towns Water and Sanitation Electronic Conference - 31st January to 10th March 2000³]:

Small towns are settlements that are sufficiently large and dense to benefit from the economies of scale offered by piped water supply systems, but too small and dispersed to be efficiently managed by a conventional urban water utility. They require formal management arrangements, a legal basis for ownership and management, and the ability to expand services to meet the growing demand for water. Small towns usually have populations between 5,000 and 50,000 inhabitants, but can be larger or smaller.

³ <http://www.bvsde.paho.org/eswww/tecapropiada/otrateg/otros/synthesis.pdf>

III. Water Supply and Sanitation Challenges in Small Towns

The majority of the poor population lacking access to improved drinking water and sanitation services resides in rural areas and small towns.

According to the latest WHO/UNICEF Joint Monitoring Program Report (2015), in rural areas, 8 out of 10 people still lack access to improved drinking water sources, and only 51 percent of the rural world's population have improved sanitation facilities. Seven out of 10 people live without improved sanitation facilities, and 9 out of 10 people still practicing open defecation live in rural areas.

The situation in small towns can be characterized as follows:

- *Low densities.* Land in smaller towns tends to be significantly cheaper and is developed at lower densities. Therefore, serving consumers requires greater infrastructure costs, especially with individual connections.
- *Lower incomes.* Incomes increase with the size of the settlement due to a more competitive labor market and the higher cost of living in larger towns.
- *Lack of institutional capacity.* Small towns typically are not served by national or regional water utilities. Decentralization has become increasingly widely adopted, but even if local governments at the small town level have the power to operate a water utility they lack the capital and skills to do so.

In terms of commercial economies of scale, service providers are likely to be far more interested in towns that are close to their main area of operations in large towns, towns in clusters of closely spaced small towns (as can happen in mining areas, for example), or affluent rural market centers servicing dense networks of rural settlements.

- *Availability of alternative water sources.* At the smallest level of urban settlement residents often rely on natural water resources such as rivers, springs or wells. Some of the better-off may have their own boreholes. Frequently these water sources are unsafe and may be a source of transmission of disease.

In summary, even if most of these settlements are large and dense enough to call for piped water services, they may be too small and not dense enough to achieve significant economies of scale, and are therefore less commercially viable than urban areas. Low incomes may require financial support in terms of capital expenditure or poor-friendly tariffs.

Reference

WHO/UNICEF (World Health Organization/United Nations Children's Emergency Fund). 2015. "Progress on Sanitation and Drinking Water." Geneva: WHO. http://www.who.int/water_sanitation_health/publications/jmp-2015-update/en/.

IV. Potential for Private Sector Involvement

Many governments and local authorities have recognized the importance of private sector participation in the water supply and sanitation sector.

Some small towns operate municipal or other public sector water supply schemes. Many may be working well, and will not be considered further. However some may be underfunded or badly managed. They may not serve all residents, or may serve them so badly that they cannot be relied upon as a source of water. Likewise, many community-managed schemes have not fulfilled expectations due to poor management and the lack of a sustainable financial model. The questions being considered: What role can the private sector play in improving operations or extending infrastructure in small towns? Are there models that can be applied more widely?

The domestic private sector has emerged in many developing countries as a promising partner for addressing the challenges of water and sanitation provision in rural areas and small towns.

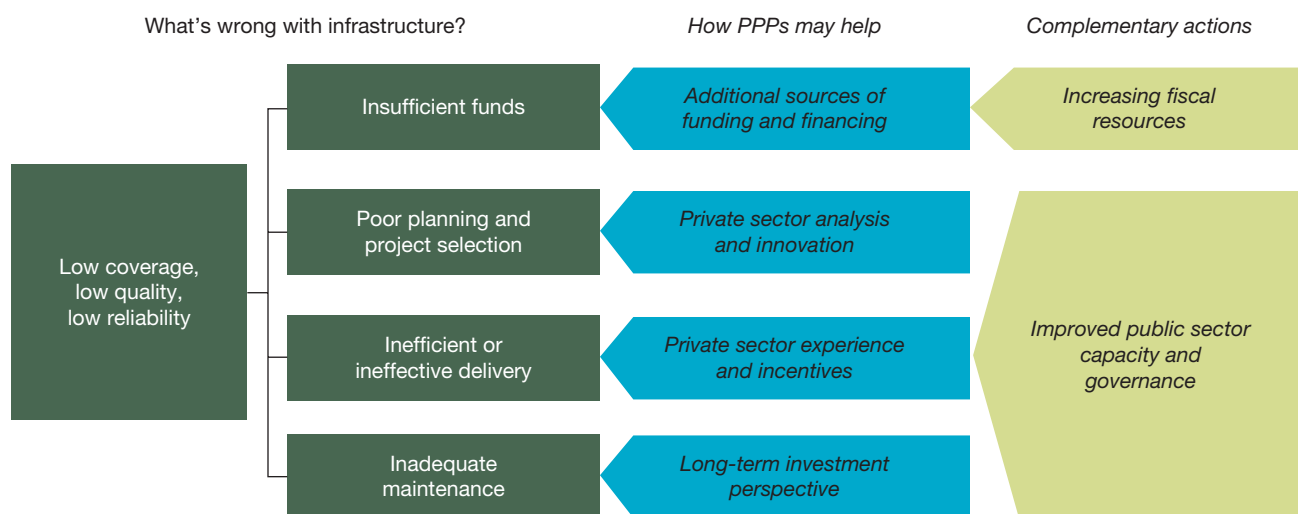
Sometimes the private sector operates as a supplier without any form of government support or engagement. More frequently, the engagement is in the form of a public-private partnership (PPP). The contribution that PPPs can make is summarized in figure 4.1.

Conditions Conducive to Private Participation

For domestic private sector operators to fully realize their potential, they need a proper framework and especially capable and supportive public institutions (central governments, local governments, regulators, and public utilities). Such arrangements work only if there is a real partnership between the domestic private provider and public agencies.

Table 4.1 summarizes public initiatives to promote private sector participation in studied countries. It tells a rich story of the interplay of the different factors, with evident strengths and weaknesses across the world. The examples demonstrate the important role that the public sector must play if private participation is to succeed.

FIGURE 4.1: HOW PPPS CAN HELP INFRASTRUCTURE PROVISION



Source: PPIAF, *PPP Reference Guide Version 2.0*, 2014.
 Note: PPP = public-private partner.

TABLE 4.1: DISTINCTIVE PUBLIC INITIATIVES TO PROMOTE PRIVATE PARTICIPATION IN WATER SUPPLY AND SANITATION SERVICES

Country	Notable public initiative
Bangladesh	<i>Sanitation marketing.</i> A successful water and sanitation program (WSP) that combines social and commercial marketing approaches to stimulate supply and demand for hygienic sanitation facilities for the benefit of poor consumers.
Colombia	<i>Commercializing water services as a precursor to private sector participation.</i> Municipalities are able to form public service companies, Empresas de Servicios Públicos (ESPs), to provide water services on a commercial basis. The ESPs provide an attractive entry point for the private sector. The formal public-private partnership (PPP) route, as required in other sectors in Colombia, would be far more cumbersome and inflexible.
Philippines	<i>PPP education and institutional support.</i> An internship program in the PPP center to educate local government officials from small towns on PPP structuring and negotiation. The Department of Interior and Local Government (the central government institution responsible for supporting local government units) provides water-specific capacity-building programs to prepare local government units to either establish water districts or contract private partners for water supply and sanitation (WSS) service provision.
Uganda	<i>Support to small WSS operators.</i> Umbrella organizations funded by the state but allowed to operate like responsive private sector entities provide training and backup support for domestic WSS providers.
Cambodia	<i>Demand driven.</i> Lack of government WSS service provision has led the private sector to step in and provide the much needed WSS services in small towns. The government requires private operators to obtain licenses from the relevant ministry; however, this practice has not been followed, and almost 50 percent of existing private operators do not have licenses.
Niger	<i>Government reform and requirements on local government structures.</i> In the WSS reform process, the government mandated the communes to be WSS asset owners, and to contract the operation of the assets to private operators.
Senegal	<i>Supportive institutional framework.</i> The institutional framework has been progressively restructured to provide clearer allocation of responsibilities between the institutions involved in the provision of WSS services. This in turn is expected to provide the stability and enhanced private sector confidence needed for greater private sector participation in WSS service provision.

The basic requirements for domestic private sector participation in WSS services are an acceptance that the private sector can have a role in the WSS sector, and that there is evidence of demand for those services (see box 4.1 for examples of the importance of demand and box 4.2 for examples of drivers for private participation in the WSS).

For WSS services to be commercially viable for private sector operators the following factors must be considered:

Relatively high population density and higher average income of residents. High population density decreases costs to connect households to the water supply network, and

higher average household income improves households' willingness and ability to pay. Both of these factors improve the financial performance of the private operator and hence its ability to make a profit. Conversely, where towns have low population densities and high per capita investment costs (even if these are met by the state), investors see high risks and low returns and are unlikely to be willing to provide services.³

Opportunities to reap the benefits of economies of scale and scope. Small rural systems far from a water source require high investment costs with limited potential for cost recovery. If a rural settlement is close to another one, and it is possible for the private operator to provide

³ This is a general rule based on market fundamentals. However, it does not preclude serving those with low incomes whose costs may be reduced by capital subsidies, cross-subsidization of tariffs, and similar measures.

BOX 4.1: EXAMPLES OF THE IMPORTANCE OF DEMAND

In the Philippines, the domestic private sector expressed its preference for densely populated areas that have growth potential. For example, Balibago Waterworks System stated that the criteria used to select areas to serve were (a) the availability of a water source, (b) the number of households and potential customers, (c) the growth potential, and (d) if the area were small, the potential to cluster with neighboring towns. The entrance of a well-known business venture (such as a Jollibee fast food franchise or a shopping mall) into a rural growth center is often used as an indicator that the area is growing and that the population's economic conditions are improving.

In Uganda, private operators expressed a desire to expand their business to neighboring unserved areas with evident demand, and the need to allow for these types of expansions or clusterings of small towns.

In Bangladesh, the existence of alternative sources of water, such as shallow wells, has deterred private operators from providing services. In most areas, households have private shallow wells, while industrial or commercial establishments have deep wells. Neither type of customer provides the demand needed to justify piped supplies.

both areas using one network, the potential for economies of scale will be an attractive attribute to the private sector.

Potential for rapid growth. Related to the previous two factors, potential operators will be motivated not just by the current demand conditions but also by the prospects for future growth. This scenario could take place through increasing access levels, greater densification, and rising incomes within the centers being served, or through opportunities for successful private operators to expand their business operations to other locations.

Availability of alternative sources of water. An important demand factor for potential operators to consider is the availability of alternative sources of water, such as rivers, springs, and boreholes (public and private). The potential of providing water supply for a fee is low compared to free supplies from rivers, lakes, or other sources. Households in areas where the free water is not safe may limit their purchases of clean water to the volumes required for drinking and cooking. Conversely, when there are few alternative sources of supply, the prospective operator can be sure of a secure market for a commodity that is a necessity, at least up to a certain level of consumption.

Encouragement from development partners. International donors and development partners can encourage private sector participation in the WSS sector through providing grants or other funding mechanisms for PPP projects, and also through providing assistance with demonstration projects, institutional reforms and capacity building to government institutions and the private sector.

Inability of local governments to provide WSS services after decentralization. Local institutions often lack the necessary skills and capacity to manage water supplies and sanitation services, which calls for private sector involvement to bridge the capacity gap.

Poor maintenance of community-managed systems. Rural and small town water supplies and sanitation services, managed by users associations, are poorly managed in most developing countries. In some countries, the underutilization of resources has been addressed by Governments by turning to domestic private operator models for the provision of water and sanitation services.

Poor management of public sector systems. In larger settlements water systems owned by the local government or a public sector water utility often face problems of poor management and/or lack of capital. These are

BOX 4.2: DRIVERS FOR PRIVATE PARTICIPATION IN THE WSS

The Bangladesh Water Supply Program Project is a donor-led program to introduce private participation in WSS service provision in the small towns of Bangladesh. It includes a financing component as well as some capacity building.

In Ghana until 2000, PPPs were unknown in small towns and rural areas. The World Bank funded a pilot project to demonstrate the benefits of private sector involvement in the provision of water supply services. The project started in four small towns with populations of between 5,000 and 25,000 and attracted small local water enterprises.

In Cambodia, the government public utilities could not cope with the demand for water services. There are only 12 public utilities serving mostly urban areas, while in rural areas small private operators were filling in the gap and meeting the demand for water supply services.

Malawi implemented a community-managed rural piped scheme that had gained a lot of recognition. However, due to poor maintenance of the network, the program deteriorated over time, and reached a point where only half of the taps were functioning. The government then decided to adopt a new approach of establishing Water User Associations to contract the maintenance of the piped network to private firms. As a first step, the User Associations are established and private operators are hired with core operational staff. Subsequently, business plans and operator performance agreements are prepared.

manifested in a high level of leaks in the pipe work and slow responses to burst pipes; inefficiencies in billing the customers and debt collection; lack of capital to expand coverage of network and poor water treatment standards.

Structuring the Role of the Private Sector

There are various arrangements for participation by the private sector, which can be summarized as follows:

Contracting out. The government contracts out services to the private sector for a specific package of work (e.g., customer billing; specific maintenance tasks). The private sector role is limited to specific tasks and does not involve any investment. These contracts are typically input-based and involve limited transfer of risks to the private contractor, if any. As a result they tend to bring only limited benefits.

Example: A private sector company is appointed under a five-year contract to read the meters and take responsibility for notifying the customer in the case of possible disconnection due to nonpayment.

Management contract. The private sector takes responsibility for part of the operations, while the government has responsibility for system expansion and other capital works. Payment of the private operator is not linked to the tariff revenues but is determined through a payment formula in the contract.

Example: A private company is given a fixed price, five-year contract for the management of a water treatment works.

Lease-affermage. The private sector organization is responsible for providing agreed levels of service to customers and working capital for repairs and rehabilitation of the assets. The main tasks are operation and maintenance but with a greater degree of autonomy than for management contracts, and the period of the contracts are usually longer. In a lease-affermage, the operator gets paid through a portion (or all) of the consumers' water accounts, which it collects; hence, it takes all commercial and collection risks.

Example: A private company is appointed to take responsibility for managing an existing water network.

Under the contract the company buys bulk water from the public sector water provider and sells it to the customers. The operator is responsible for employing all personnel required (including, for example, plumbers, accountants, and meter readers). The private operator may receive subsidies for the extension of the network and other specific circumstances, but relies on customer payments for its revenue and thereby takes the commercial risk.

Concession. The private sector organization is responsible for financing the investment costs of the system including system expansion—and for all of the operation and maintenance—to achieve prescribed service delivery objectives.

Example: An existing network is facing capital shortages, which result in a high level of unaccounted for water, operating deficits, and an inability to extend the network to serve a rapidly urbanizing town. Under the concession the company agrees to provide necessary capital in return for which the public party will allow the concessionaire to raise tariffs subject to certain formulas embodied in the contract. The concession lasts 30 years, after which the assets are returned without charge to the asset owner.

Full divestiture. In addition to responsibility for service delivery, ownership of existing assets is transferred from the public to the private sector. In all of the arrangements previously described, ownership of assets remains with the public sector.

Example: As in the concession example, but the assets remain the property of the private party.

Private sector supplier. The water system is developed and operated by a private entity.

Examples: One is provision of a service by a local entrepreneur in an informal settlement, such as a water vendor who sells from house to house. At the other extreme is a private water system in an exclusive housing area that sources and treats its own water.

Examples of Contracting and Supply Arrangements

Examples of domestic private sector participation in water and sanitation service provision in small towns vary considerably. A cross-section of examples is summarized in table 4.2. For Bangladesh, Colombia, the Philippines, and Uganda, more detail is found in the case studies presented in section 6.

Concessions are more typical for large urban systems, while full divestitures are not commonly chosen in developing countries. For small towns, management- and lease-type contracts are the most common. For example, in Senegal and Niger the type of contract used in rural water supply is lease-affermage, in which the operation of the systems is leased to private operators.

However, many variations exist. For example, in the Philippines, and to some degree in Colombia, the most popular arrangement is a joint venture between the private entity and the local government institution. In Cambodia, two types of formal contracts were used in projects supported by donor agencies: a design-build-operate contract or a design-build-and-lease contract. Many hybrid schemes are in practice, too, such as lease contracts with some private investment, or concessions with public subsidies.

By and large, the role of the private sector is to operate the assets. As noted previously, lease contracts are increasingly preferred over concession contracts that have not, in practice, resulted in private capital financing investment projects. The situation in Colombia is a little different: private operators invest in the supply systems to a limited extent, but the major investments are financed through capital subsidies from the government. It is only in the Philippines that the domestic private sector is providing investment capital to any significant extent, albeit with the provision that assets are relinquished at the end of the contract period. This may be due to the success of the two Manila concessions initiated in 1996, which validated the private financing approach. In other countries, investment in water is considered to be a public responsibility, with financing provided by donors and the government. Water assets are owned by central or local government, and investments are made by public authorities.

TABLE 4.2: EXAMPLES OF PRIVATE SECTOR EXPERIENCE IN PROVIDING WSS SERVICES

Country	Form of private participation in the WSS in small towns
Bangladesh	<p>In Bangladesh, there are very few private sector WSS operators. Schemes run by nongovernmental organizations (NGOs) and community-based organizations (CBOs) are common. These are regarded as “private” because they are not public. The profit-making private sector is not common for the WSS sector.</p> <p>The private sector success story relates to the marketing of sanitation services by local entrepreneurs. They build latrines and provide other sanitation services. The local availability of sanitation materials and kits also facilitates self-provision of improved sanitation by households.</p>
Colombia	<p>Colombia has been committed to private provision of water services in urban areas since 1990. A flexible legal form—the public services enterprise—makes it possible for municipalities to establish commercialized water utilities that attract private capital and skills. Full-scale national PPP procedures can thereby be avoided.</p> <p>For private sector participation in small town WSS, the success stories relate to private sector operators in large urban areas extending their services to nearby small towns. The private sector is pushing for a system of regional tariffs, which would allow for cross-subsidization between urban areas. This would result in many more small towns being served by private operators.</p>
Philippines	<p>Among the case study countries, the Philippines has the most successful program of private participation in small town water supply. There is now a vibrant and active market for it in small towns. Key performance outcomes have been positive in terms of water service availability, drinking water quality, water pressure, per capita water availability, and operational efficiency. Private participation is mainly market driven in that the private sector actively seeks opportunities to invest.</p> <p>The Philippines has an established national PPP framework supported at the highest political level. Many institutional forms have emerged in the water sector, flexibility being one of the hallmarks of successful penetration of the private sector. Private companies make proposals to governments or local utilities to provide WSS services, on a joint venture or some form of PPP. Unsolicited proposals are subject to a Swiss challenge,^a but once signed the contracts run for 25 years or longer.</p>
Uganda	<p>In Uganda, private water operators have played an important role in operating piped water schemes in a number of small towns. As of mid-2014, the leading 20 such operators were managing 48 town water supply systems, with a total of around 28,000 connections (including water kiosks and public stand posts) and a total population served of over one million people. The main driver of private participation is government initiative, anchored in the legal framework.</p> <p>The role of the private sector, however, is currently regarded by the authorities as a stopgap until the water supply systems can be taken over by the National Water and Sewerage Company. The management contracts are short (typically three years) and investment by the private sector is precluded.</p>
Cambodia	<p>Small private operators play a key role providing water supply services to small towns and rural areas in Cambodia, filling the gap between the demand for WSS services and the absence of government-supported systems. The private sector is the main driver of WSS in Cambodia.</p> <p>Many of the small private operators, however, are not licensed. To operate in areas not provided by government public utility, private operators must get municipal and provincial approvals before obtaining a license from the Ministry of Industry and Handicraft.</p>
Niger	<p>Government policy prescribes PPP arrangements to manage WSS assets in urban and rural areas. In urban areas, one private operator, SPEN (an asset holding company), has lease-affermage contracts. In rural areas, the municipalities are asset owners and lease the assets to various small private operators. The main driver for private participation is government reforms and initiatives.</p>
Senegal	<p>Senegal has promoted PPP in WSS sector since 1996, starting with a large PPP contract between Senegalaise des Eaux and Société Nationale des Eaux du Senegal. Since then, rural water PPPs have also been promoted and supported by the government. A new institutional framework for rural water PPPs has recently been established, where OFOR (the institution responsible for rural WSS) can contract private distribution companies to provide WSS to the communities. The main driver for private sector participation is government reforms and initiatives.</p>

a. A “Swiss challenge” is a form of public procurement that requires a public authority (usually an agency of government), upon which receiving an unsolicited bid for a public project or services to be provided to government, to publish the bid and invite third parties to match or exceed it. Some Swiss challenges also allow the entity that submitted the unsolicited bid to match or better the best bid that comes out of the process.

V. The Public Sector's Role in Enabling Private Sector Participation

The key question for the *public sector* is how to build an enabling environment and a conducive business climate for the *private sector* to actively and efficiently participate in water and sanitation service delivery in small towns. This can be further broken down into the following three questions:

- What roles does the public sector need to play to efficiently engage the private sector in the water and sanitation sector in rural and small towns?
- What aspects of the existing public sector institutions need strengthening to engage domestic private

sector participation in rural and small towns to fulfill public policy objectives, in particular to deliver better water and sanitation services to the poor?

- What support can be given to private institutions to underpin successful promotion of private sector participation?

To assist in answering these questions, table 5.1 summarizes typical roles of public institutions in relation to private sector participation in the water supply and sanitation (WSS) sector.

TABLE 5.1: SUMMARY OF PUBLIC INSTITUTIONS' ROLES IN PRIVATE PARTICIPATION IN WSS

Type of institution	Common roles and responsibilities
National government: Line ministry or department responsible for water and sanitation	<ul style="list-style-type: none"> • <i>Policy making.</i> Develop policies related to water supply and sanitation. • <i>Technical support.</i> Provide capacity building to local governments. • <i>Financing capital investments.</i> Provide capital investments through government budget allocation. • <i>Identifying projects.</i> Identify projects that can be structured as public-private partnerships (PPPs), or assist local governments to identify suitable projects.
National government: Department or ministry responsible for PPP	<ul style="list-style-type: none"> • <i>Develop PPP framework.</i> Set up the PPP policy, institutional, legal, and regulatory framework (these are usually relevant for domestic private sector participation and larger PPP projects involving foreign partners). • <i>PPP implementation.</i> Assist in the implementation of PPP projects, which could include project appraisals, PPP structuring and contract design, PPP procurement process, and PPP contract monitoring. • <i>Technical support.</i> Provide assistance to line ministries and local governments in developing projects.
Local government	<ul style="list-style-type: none"> • <i>WSS service provision.</i> Responsible for providing WSS services. In some cases, the local government is allowed to choose how to provide WSS services, either through an internal department (usually public works or a dedicated WSS department), or by contracting a separate entity (private or state-owned) to provide the WSS services. • <i>Contracting agency.</i> If the local government chooses to contract out WSS services, there may need to be contracting agency responsible for monitoring the operator's performance. • <i>Asset owners.</i> In most cases, the local government is the owner of the WSS assets.
Regulator	<p>Regulatory functions can be performed by a national government agency or an independent regulator. In some countries, regulation of small town WSS is delegated to local authorities, with varying degrees of supervision from central regulatory institutions.</p> <p>Regulatory functions usually include the following:</p> <ul style="list-style-type: none"> • <i>Licensing.</i> Issue licenses that allows operator to provide WSS services in the designated areas. • <i>Tariff regulation.</i> Regulate WSS tariffs to ensure financial sustainability of the operator while being affordable to consumers. In some cases, the regulator approves tariffs proposed by the operators; in other cases final approvals are given by the ministry. • <i>Technical regulation.</i> Provide guidance and technical standards to be followed by the operators. • <i>Performance monitoring.</i> Monitor technical, financial, and operational performance of the operators. In some cases the regulator also benchmarks the performance of the operators. • <i>Customer protection.</i> Provide customers with a forum or a means to be heard. Also provide awareness raising to customer about relevant WSS services.

table continues next page

TABLE 5.1: (CONTINUED)

WSS utility or operator	<p>WSS can be provided by a department within the local government, a separate utility owned by the municipality or central government, or by a private operator.</p> <p>WSS services usually include the following:</p> <ul style="list-style-type: none"> • Piped or nonpiped water supply • Sewerage services, such as piped sewerage and septic tanks emptying services • Sanitation services, such as community toilets <p>Note that few WSS utilities or private operators provide sewerage and sanitation services.</p>
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The following are key factors in supporting the growth and development of private participation in water supply and sanitation (WSS) service provision in small towns and rural areas:

- Market development
- Institutional support
- Access to finance
- Provision of public goods

The four key action areas for public institutions to encourage private participation in WSS service provision are as follows:

Market development. Private participation will be encouraged by two complementary elements: (a) opening the WSS market to private sector involvement, and (b) structuring the market in such a way that the functions, roles, and responsibilities of the private sector are clear.

Opening markets. In many countries, public service provision has been delegated to the local government, which decides how to provide these services. This has opened the market for private sector involvement in WSS services, filling the gap left by poorly performing national or regional WSS utilities. See box 5.1 for examples of opening the market for private sector participation in WSS in sample countries. Among the common factors that have led local government institutions to use private operators:

BOX 5.1: EXAMPLES OF OPENING THE MARKET FOR PRIVATE SECTOR PARTICIPATION IN WSS

In the Philippines, local government institutions choose how to provide the services either through establishing a separate corporate water utility (called water districts), using its own economic enterprise, or partnering or contracting with private partners.

In Colombia, local governments can establish a separate utility that can be publicly owned, privately owned, or both.

In both the Philippines and Colombia, this devolution of public service provision and the authority to choose the service delivery model is clearly stated in the legal framework.

In some African countries, such as Uganda and Niger, the decentralization of WSS service provision has been part of the reform of the sector. In Niger, the local government institutions are *strongly encouraged to contract private operators* to operate and maintain WSS systems. This is less strongly the case in Uganda, but in both countries, the legal framework clearly supports this arrangement, and the regulatory framework allows for regulation by contract.

- Lack of capacity, ability, or willingness of the local government institution to provide the services
 - Poor performance of community-based organizations in providing services
 - Tendency to operate rural water systems from the center, without taking local specificities into due consideration
 - Lack of availability of public sources of finance
- Structuring the market.* This includes clarifying the roles and responsibilities of each actor in the sector, including the private sector, and allowing the private

sector to earn returns on its investments within a well-defined regulatory structure while also being fully accountable for end results to customers (quality of service).

The degree of efficiency and responsiveness of the public institutions can be an important factor affecting whether private companies enter the market. For example drawn out government processes, such as the time required to process license applications, can discourage private participation in the market.

The dynamics of the urban hierarchy will also influence the market. The proximity of small towns to one another and of small towns and villages to larger cities are important factors in structuring the market: private entities might find the market more attractive if small towns close to one another are clustered to allow for

economies of scale. See box 5.2 for examples of market structuring for private participation in WSS in sample countries.

Providing institutional support. In addition to providing financial incentives, public institutions can provide other forms of support to encourage private sector participation, including the following (see also box 5.3 for examples of the need for institutional support in sample countries):

- *Awareness raising.* The comparative advantages of having private sector participation in the WSS sector must be understood by the local governments and the community. The perception that private entities are not appropriate to provide public services can be a major constraint to private sector participation unless tackled through communication campaigns.

BOX 5.2: EXAMPLES OF MARKET STRUCTURING FOR PRIVATE PARTICIPATION IN WSS

In Uganda, Senegal, and Niger, there is a clear legal framework regarding the roles and responsibilities of the private sector under which operators are responsible only for the operation and maintenance of the system. Thus, private operators do not invest in construction of major new assets, and therefore do not need to find large financing sources.

In Senegal, in the case of rural piped water schemes, the government creates PPP areas with a population of more than 100,000 inhabitants. These PPP opportunities are then open to public competitive tenders.

In the Philippines, the PPP framework and Joint Venture Guidelines provide guidance to both government institutions and private companies on the types of partnership that are legally accepted. Although private companies are encouraged to invest in WSS systems, at the end of the contract period, the assets will be returned to the government. To allow for returns on their investments, companies usually receive long-term contracts, mostly 25 years.

In terms of incentives, most countries provide some form of financial incentives to attract private operators. In Bangladesh and the Philippines, the legal framework clearly prescribes the types of financial and fiscal incentives the governments are willing to provide. This includes capital investments, guarantees, subsidies, and tax breaks.

In some cases, market structuring is also tied to water resource management. In Kenya the industry is structured around water catchments to promote equitable management of water resources within the area.

In Colombia there is an indirect incentive, also anchored in the legal framework, in that local governments that have corporatized their public service provision through the establishment of a separate utility may receive higher national budget allocations for WSS investments.

BOX 5.3: EXAMPLE OF THE NEED FOR INSTITUTIONAL SUPPORT

In Bangladesh, local government institutions do not fully understand opportunities for the sector of having private partners in providing WSS services. In addition, communities in general share the local government's view that the private sector will be interested only in earning profits and not in providing public services such as WSS. These views have deterred private operators from becoming involved in WSS service provisions.

In contrast, private sector participation is a well-accepted concept in the Philippines. The national government has made great efforts in promoting PPPs in all infrastructure sectors, and has created a PPP framework that includes the establishment of a PPP Center, which acts as a knowledge center. The PPP Center provides *capacity building programs* for local government institutions regarding the concept of PPPs; how to structure, develop, and prepare PPP projects; and how to implement and monitor PPP projects. This dissemination of knowledge has resulted in the acceptance of the PPP concept by local government institutions. In addition, the PPP Center also engages private sector actors, such as chambers of commerce, to increase PPP awareness in the private sector. These awareness raising and capacity building programs have been complemented by several successful pilot projects. They have greatly improved community understanding and belief in the benefits of private sector participation.

- *Local government capacity building.* This is usually needed regarding structuring projects for private participation, selecting private partners, and managing projects. In addition, the capacity of private entities often needs to be developed in terms of providing good services at a reasonable cost.
- *Legal and regulatory framework.* A clear legal and regulatory framework is very important, though ultimately the effectiveness of a legal framework is dependent on the strength of law enforcement and the competence of the courts. See box 5.4 for examples in sample countries.

A sound legal and regulatory framework brings significant benefits:

- *Confidence that contract enforcement will be fair.* A solid legal framework gives the private sector the confidence that its operations are protected by law and reduces bureaucracy for the private sector. An effective institutional framework should include appropriate allocation of the monitoring and evaluation function in the WSS sector, including clear accountability and reporting arrangements.
- *Confidence that commercial interests will be protected.* A good regulatory framework will assure the private sector that its interests will be protected. This is especially

important in terms of setting tariffs that will cover the private sector's costs. Having a clear tariff approval process, that is not politicized, is key. In addition, having a good regulatory framework also means that sector performance as a whole will be monitored. Underperforming service providers (whether private or public institutions) can then be identified and remedied through regulatory initiatives.

Assisting in developing and improving access to finance. Capacity building may also be required for financial institutions. Access to finance is a crucial factor in the development and growth of private participation in WSS in any country. It is beneficial for public institutions to provide support to private financial institutions so that they can provide tailored products to support the local private sector. Public finance may also be needed to address affordability issues and to accompany any private investment. For example, for small towns or rural areas where the community is not able to pay cost recovery tariffs to cover the full investment costs, the government may need to provide all, or a portion of, the capital investment, while the private operator provides funds for initial operation of the system. See box 5.5 for examples of having access to finance to support private sector participation in sample countries.

BOX 5.4: EXAMPLE OF LEGAL AND REGULATORY FRAMEWORKS

In Niger, Senegal, and Uganda, the legal frameworks explicitly encourage partnerships with private operators in providing WSS services, and outline how the partnership should be governed and the types of contracts that can be entered into. They clearly outline the roles and responsibilities of each party, for example, in Uganda, the local authorities remain asset owners and the private sector service providers are responsible for operating and maintaining those assets.

There are, however, exceptions to this arrangement. For example, in Cambodia the lack of clear legal and regulatory framework has created opportunities for private entities. They have stepped in to invest in WSS systems and provide the services without any government technical or financial support. Since these private operators are contributing to access, they should be recognized and supported in their growth to further expand their coverage.

Market development by operators has also occurred in the Philippines, albeit to a lesser degree. The comprehensive PPP framework has diminished the impact of a lack of regulatory framework. Regulation by contract has been an accepted compromise. However, this PPP framework needs to be supported by capable and experienced staff and good arrangements for accountability.

In the Philippines, tariff setting procedures are not restrictive, in that in most cases tariff adjustment clauses are included in the PPP contracts, monitored by the regulator. Thus, having a regulatory framework that allows private companies to earn returns on their investment, is also key to attracting private participation.

BOX 5.5: EXAMPLE OF HAVING ACCESS TO FINANCE TO SUPPORT PRIVATE SECTOR PARTICIPATION

In Cambodia, the private sector fills the gap left by local governments, which do not have the technical or financial capacity to provide WSS services. One factor that allows the private sector to be able to provide WSS services is access to finance. However, most commercial banks still require high collateral, which is a concern for small private firms.

In Benin, the project design required the private operators to design, engineer, rehabilitate, operate, and maintain systems, without increasing the price of water. This included rehabilitating equipment, extending the network, installing private water connections, and partially financing these activities. The PPP arrangements provided a robust contractual framework and a better risk allocation among the parties. For the first time in Benin, local commercial banks have committed to support the sector by providing debt, equity, and various financing instruments to the concessionaires. The financial burden on the public finances will be reduced, as historically the government has fully financed capital investment.

Such grants or subsidies can be channeled through local private financial institutions to private service providers. These may, for example, take the form of output-based grants to encourage expansion of distribution networks to enhance access of poor households to clean water and improved sanitation, as has been done in Kenya.

Provision of public goods. On occasion the private sector cannot effectively participate due to a lack of a suitable operating environment. In rural sanitation, for example, behavior change campaigns are extremely important to build demand, but would not be carried out by any single firm, due to free rider issues.

VI. Lessons Learned from the Case Studies

Four full Country Reports from Bangladesh, Colombia, the Philippines and Uganda have been prepared for this Guidance Note. They provide a more in-depth analysis of each of the country's efforts and best practices in encouraging and promoting private sector participation in water supply and sanitation services in rural areas and small towns. This section is an overview of how the previously identified enabling factors influenced the successes and failures of private sector participation in each country, and outlines the lessons learned from these experiences.

Bangladesh

The following paragraph is a summary of the Bangladesh Case Study Report, one of the case studies from the four countries selected for the study. The Bangladesh Case Study aimed to identify good practices in Bangladesh in strengthening public institutions to effectively engage domestic private sector in providing water supply and sanitation services in rural and small towns. The report was based on a desk study research, followed by a field visit to Dacca (September 2014).

Background

Bangladesh is one of the world's most densely populated countries. Approximately 150 million people live in an area of 147,570 km²—giving a population density of 964 inhabitants per km². Considering the very high population density, population growth, and the omnipresent poverty, the provision of adequate water supply and sanitation services presents one of the largest challenges Bangladesh is currently facing. (Information in this section on Bangladesh is from ECA country study 2015a.)

Water supply and sanitation (WSS) service provision is the responsibility of local government institutions. In most small towns, the Pourashavas (municipalities) operate and maintain the water supply system. These systems are financed and constructed by the main central government agencies involved in water supply and sanitation: the Department of Public Health and Engineering and the Local Government Engineering Department.

In rural areas, the Union Parishads (the lowest level of rural local government institution) usually operate and maintain the water supply system. In some rural areas, the operation and maintenance of the piped water supply system is undertaken by community user associations or nongovernmental organizations (NGOs). These systems are usually built as part of a development project, financed either by donor funds or central government budget allocation.

Market Development

In Bangladesh, water supply is seen as a service to be provided by the government. Communities generally have the perception that private service providers are not suitable for water supply services, as they are profit-making entities. For this reason community-based organizations (CBOs) or user associations are preferred, with the capital investments being provided by the national government.

However, in 2005 the World Bank Bangladesh Water Supply Program Project introduced the concept of having private operators in the WSS. Initially, the project was aimed at small towns; however, due to some difficulties in involving the Pourashavas, the project was implemented in rural areas instead, involving several Union Parishads.

The concept of the project was to award contracts for the design, build, and operation of piped water supply schemes. Initially, 50 percent of the funding for each project was to be provided by the World Bank and 50 percent by a private or nongovernmental investor. However, due to the lack of interest from the private investors, and possibly a lack of finance, it was mostly NGOs and wealthy individuals with charitable or social motives who participated in the project.

Access to Finance

In spite of World Bank's pilot project, the market for private sector participation in water supply has not yet been established. The enabling environment—such as the legal, regulatory, and institutional frameworks—is improving, but is not yet sufficiently conducive to encourage private sector participation in small town water supply. Moreover, water supply systems are capital-intensive investments. As a result,

not many private entities are willing to take the financing risk, especially if the government counterparts are reluctant to allow cost recovery tariffs. The financial risks make it difficult for private companies to obtain loans for the capital investment.

Institutional Support

Local government institutions are technically allowed to contract private companies to operate and maintain their systems, but to date this has not yet been done. Central government engineers and officers are often stationed in local offices, which can be in the headquarters of a subdistrict (Upazila) or in a small town governed by a Pourashava. The engineers and officers in these local offices often provide assistance in terms of operating and maintaining the systems.

Most sanitary equipment and sanitation service providers are private entities (e.g., either a listed company or an individual vendor) or a community-based service provider. In water supply, most government institutions consider community user associations and NGOs to be a type of private sector, in that they are not a government entity. Therefore, many of the water supply systems operated by community user associations or NGOs are considered to be operated by the private sector.

Unusually, in Bangladesh the private sector's contribution has mainly been in the sanitation sector rather than water supply.

Lessons Learned

During discussions with various government and nongovernment personnel in Bangladesh, many stated that there was plenty of private sector participation in the water and sanitation sector.

Since the country is new to the concept of private sector participation in public service provision, much groundwork needs to be done before public-private partnership (PPP) projects can be implemented in small towns and rural growth centers.

Local government institutions will benefit from capacity building in terms of (a) how to provide public services,

including having private partners; (b) raising community awareness; and (c) understanding the economic characteristics, as well as social characteristics, of water.

These capacity building steps will increase communities' willingness to pay for safe water services.

Once local government institutions gain better knowledge and understanding of the options for providing public services, including the benefits of involving the private sector, the priority will be to develop a legal and regulatory framework conducive to private sector involvement and improving the availability of finance.

Colombia

The following paragraph is a summary of the Colombia Case Study Report, one of the case studies from the four countries selected for the study. The Colombia Case Study aimed to identify good practices in Colombia in strengthening public institutions to effectively engage the domestic private sector in providing water supply and sanitation services in rural and small towns. The report was based on a desk study, followed by a field visit to Bogota and Barranquilla (September 2014).

Background

The Colombian Constitution establishes that public services are inherent to the social purpose of the government and it is therefore its duty to ensure the efficient delivery of such services to all inhabitants of the national territory both in urban and rural areas. Under this framework, the State *must provide financial, technical, and administrative support to utilities, companies or municipalities providing public services*. Public services may be provided by the government, directly or indirectly, organized communities or individuals. In the case of indirect provision by the government, this may be done by different types of operators, including private WSS service operators as contracted by each municipality. This constitutional mandate probably explains the degree to which the private sector participates in the provision of public services in Colombia. (Information in this section on Colombia is from ECA country report 2015b.)

In the 1990s Colombia introduced a policy of decentralization together with an emphasis on the corporatization of public services (which are typically managed at the municipal level) and the involvement of the private sector in the provision of public services. In addition, decentralization gave municipalities the responsibility for WSS provision, with support from the central government.

The key central government institution in the WSS sector is the Vice-Ministry of Water and Sanitation, which sits under the Ministry of Housing and Territory. This Ministry is responsible for implementing national policies, plans, and programs in the WSS sector. The National Planning Department, working closely with the Ministry, sets the policies through development plans and sector-specific policies.

Since the passing of Law 142 in 1994, the government's policy has been to encourage provision by specialized entities, rather than having the municipality provide public services directly. The option of direct provision by municipalities is allowed only when no other alternatives exist, and if they provide services directly they must follow strict procurement rules. However, there are a number of other delivery models available to municipalities that fall outside public procurement rules. Important among these is the public service company.

Regulatory responsibilities are divided primarily between the Comisión Reguladora de Agua Potable y Saneamiento, which regulates tariffs, and the Superintendent of Public Services, which monitors and enforces the performance of operators.

Service providers are categorized as small if they supply fewer than 2,500 connections and large if they supply more than that. This is in contrast to the classification employed in other jurisdictions, which focuses instead on urban versus rural provision. It is worth mentioning that service coverage in Colombia's rural areas is far below that of urban centers. The government is introducing policies to address this disparity.

Market Development

The most common form of private participation in the WSS sector in Colombia is through public service

companies, called Empresas de Servicios Públicos (ESPs). These are organizations established specifically for the provision of public services and can be publicly owned, privately owned, or jointly owned by public and private entities.

ESPs in most large urban centers in Colombia have been established with private capital. However, there are few in small towns and rural areas due to low population densities, which increase the cost of infrastructure and result in a high cost of supply, making these opportunities less attractive for private investment. Nevertheless some ESPs with private shareholders have recently started exploring the possibility of providing WSS services in areas surrounding the large cities in which they operate.

Access to Finance

One of the key lessons learned is that it is not realistic to expect the private sector to provide capital for large investments. Concession contracts in larger urban areas (where theoretically the population can afford higher tariffs) that were designed for the private operator to recover the costs of its upfront investment through the tariff have almost all been renegotiated, either formally or informally. The renegotiations suggest that it is unlikely that in practice much private capital (if any) was ever invested.

A preferred contractual arrangement is a lease/affermage contract in which the bulk of upfront costs are covered by the public sector. In such a contract revenues collected from customers by the private operator are used to pay a lease fee to the state, to cover operation and maintenance expenses, and to make defined investments in maintenance and expansion of the system.

Additionally, large private operators are currently proposing the concept of regional tariffs to the regulator. A regional tariff will allow an operator to charge a uniform tariff across WSS systems that are not physically connected. This will effectively enable large urban centers to cross-subsidize small towns, such that service provision to the small towns would be profitable for the operator. In November 2014, the first proposal for regionalization of tariffs was approved

for Triple-A, the operator in the department of Atlántico (MinVivienda 2014). The benefits of the regional approach are the following:

- *Long-term sustainability.* Users will be served by an operator that can guarantee the continuity of service and quality at a price that takes the economic reality of smaller municipalities into account.
- *Financial sufficiency.* The regionalization of service provision tackles the challenge of supplying small municipalities, without compromising the financial standing.
- *Economies of scale.* These will be realized thanks to the expansion of existing facilities, such as water treatment plants.

Institutional Development

Colombia has acknowledged that the WSS requires specific expertise that is not typically found at the municipal level. It has therefore made it a policy to encourage regionalization of services by implementing Departmental Water Plans, which are a set of planning and interinstitutional coordination strategies that municipalities can voluntarily opt into. This brings a better resourced and more corporate approach to WSS provision and ultimately makes it easier for large private operators to expand services to small towns and rural areas. Although the concept of the Departmental Water Plan is relatively new and therefore is only just beginning to be applied, the initial indications are that this approach can be very successful in encouraging private sector participation.

Lessons Learned

Colombia has made the important step of encouraging private sector operators in large urban areas. For small towns, the most successful instances of private participation have been when large water operators extend their services provided in larger towns to nearby small towns.

Colombia has been successful in encouraging municipalities to relinquish direct control of WSS services by making some central government funding conditional on corporatization and other efficiency criteria. The option of establishing joint venture service providers to provide WSS services has also opened up the market in Colombia, since this type of arrangement allows the municipality to

circumvent public sector PPP procurement rules (which can sometimes be restrictive, because they are not tailored to WSS service contracts).

Colombia has recognized the challenge of fully recovering water infrastructure investments from tariffs. It has consistently set aside significant funding for WSS infrastructure and has launched a number of projects—with the support of such organizations as the World Bank—that contract WSS services to the private sector, paired with grants to cover the bulk of the upfront investment costs. Separate tariff methodologies have been established for large and small operators. The key differences between the two are that whereas all costs are to be paid for by users in the case of large operators, small operators normally receive a government contribution to cover investment costs (the collected user charges cover administration and maintenance costs).

A variety of funding channels exists for the WSS sector, including general budget allocations and funds that are available for capital investments based on predefined criteria. Colombia is notable for having a single cross-subsidy scheme that relies on the stratification of households through the country.

In the past, little attention was given to the provision of WSS services in rural areas. It remains to be seen whether there is any scope for private sector involvement in rural areas, given that the experience to date suggests that populations are too dispersed and affordability of services is too low.

Colombia's record in terms of regulation and monitoring is overwhelmingly positive. However, the separation of regulatory functions and monitoring and enforcement functions creates a disconnect that ultimately leads to less effective regulation and increases the risk for private operators.

The regulations—and to some extent the policies—need to cater specifically for small operators. The vast majority of operators (mostly community-based) are officially monitored and therefore do not receive any support from central government.

The Philippines

The following paragraph is a summary of the Philippines Case Study Report, one of the case studies from the four countries selected for the study. The Philippines Case Study aimed to identify good practices in Philippines in strengthening public institutions to effectively engage the domestic private sector in providing water supply and sanitation services in rural and small towns. The report was based on a desk study research, followed by a field visit to Manila, Cebu Island and Bohol Island (October 2014).

Background

At first sight, the institutional arrangements in the Philippines water sector look very complicated, with overlaps between executive functions, regulatory functions and service provision. It might be expected that these overlaps would be incompatible with extensive private sector participation, but, on the contrary, the local private sector manages to thrive in this environment because at the scale of local water service PPPs are entered into through relatively simple contracts. (Information in this section on the Philippines is from ECA country study 2015c). The simple business model that has evolved has resulted in domestic private entities providing 25 percent of piped water services (Tungpalan 2009).

There is no single law governing both the water supply and sanitation sector, and there is no single national government institution that is tasked with overseeing the operation of the sector. The Water Code of 1976 governs the water sector in general, but this is more relevant to the allocation of water resources than to water supply service provision, and does not cover sanitation. The Local Government Code of 1991 provides that WSS services are the responsibility of Local Government Units, and allows them to choose how to provide these services.

Some local governments choose to establish water districts, which, by virtue of a special charter (Presidential Decree 198) then become corporatized water utilities separate from the local government. Others choose to operate and maintain the water supply system themselves. A third category choose to partner with private companies to provide water supply and sanitation services.

Water supply standards are related to the type of settlement served. In small urban towns and rural areas, CBOs operate at Level I (stand-alone water points) and Level II (piped water with communal water points). As a settlement grows and becomes more urban or more densely populated, communities may request their local government to provide a Level III service (piped water with private connections).

Although there are also some CBOs operating Level III systems (typically following community demands due to increased urbanization), in such circumstances the local government commonly establishes a water district, and provides these services itself, or solicits a private investor-operator.

In some cases, when a private sector entity becomes aware of a community requiring Level III service, it approaches the local government with an unsolicited proposal.

Market Development

In the early days, the Build Operate Transfer (BOT) policy was the main mode of partnership between public institutions and private entities. However, the BOT Law also provides for other types of PPP contractual arrangements, and over the years many different types of contractual arrangements have been used in the WSS sector. To ensure that water supply service provisions are provided efficiently and are still affordable to the public, the BOT Law provides a cap on the rate of return that the private partner can earn in an *unsolicited* PPP project.

One of the key success factors is that the government has put considerable effort into market development for PPPs in infrastructure sectors. Examples of the market-making efforts by the government include:

- *Establishment of a national PPP framework.* Having a PPP legal framework provides the legal base for government institutions to seek private partners to provide public infrastructure and services, and for private companies to seek out opportunities in those sectors.
- *Establishment of the PPP Center.* The PPP Center, as a one-stop shop, has improved the capacity and capability of government institutions to implement

PPP projects, including in the WSS sector. In addition to the PPP Center, the Department of Interior and Local Government provides capacity-building programs aimed at improving management of local government water supply systems, and contracting private partners for WSS service provision.

The vibrant and competitive market that has emerged in the WSS sector leads to many unsolicited proposals being made by private companies to local governments. Private companies prefer this method of selection because in most cases they can negotiate directly and hence shorten the procurement process. Local governments also benefit from unsolicited proposals in that they do not have to conduct the preparatory studies required for a solicited process.

However, there are downsides to this arrangement. Many local governments do not have the capacity to properly evaluate the proposals, and unsolicited bids may not be at a competitive price. To obviate this, the BOT Law requires that such bids should be subject to a Swiss challenge, but in practice the cost of obtaining the tender documents is often set at such a high level that potential challengers do not do so. Other ways are used to deter challengers, such as allowing only a short time for the challenger to conduct due diligence and prepare comparative bids.

In reality, most private operators prefer a joint venture-type contract using the Local Government Code as the legal basis of a contract. This type of contract is preferred by the private sector because the local government, as a partner, will have certain responsibilities, such as providing land rights or rights of way, assisting in acquiring permits and licenses, and obtaining approvals from other government agencies. In addition, the approval of a joint venture arrangement using the Local Government Code is the responsibility of the local legislative body only, in contrast to an arrangement under the BOT Law that requires external approvals such as the local development councils or even a national government oversight committee.

Some local governments also prefer to have more control over the operation by being a shareholder in the

development and having the private company as a partner. In general, the performance of the private providers has been good. In almost all cases, although some early adjustments were required, domestic private operators have managed to increase access to water supply, reduce losses, and improve efficiency.

Institutional Support

The Government of the Philippines has put significant effort into developing a strong PPP framework that has been accepted and adapted by the majority of national and local government institutions.

The Constitution of 1987 explicitly acknowledged the private sector's critical role in the country's development agenda. This was followed soon after by the development and enactment of the Build Operate Transfer Law in 1990, which aimed to mobilize the private sector to invest in building, operating, and maintaining infrastructure projects and other development programs that had previously been the responsibility of government at national and local levels.

In 1994, this Law was amended to include the commitment of the government to support the private sector by providing financial incentives and minimizing government regulation. In 2010, the Aquino administration showed further commitment to the development of PPPs under the Executive Order No. 8, which established a PPP Center, a central government institution tasked with the role of facilitating the implementation of the PPP program and the associated PPP projects.

Access to Finance

Compared to the other case study countries, the Philippines has successfully created a market for private participation in the WSS sector in large cities, intermediate urban areas, and small towns.

- *Financial incentives.* The PPP framework specifically identifies types of financial support that the private companies can draw upon in PPP projects.
- *Less restrictive regulation.* The lack of a central regulatory agency in the Philippines may be seen as a negative. However the absence of such a body has not been a major problem because most existing

partnerships are regulated by contract. These can be formulated to meet the needs of the parties, and invariably include basic regulatory requirements, such as key performance indicators and tariff adjustment processes.

- *Support from development partners.* The government has obtained both technical and financial support for private sector participation in the WSS sector. For example, the World Bank has been working with the PPP Center to develop business case templates that can be used by local governments to implement WSS PPP projects. Another example is the Accredited Technical Service Providers program, whereby the World Bank assists the National Water Resources Board to approve and accredit technical and financial experts, and creates a pool of local and international experts that can be called upon by local governments or water districts to assist them in WSS service provision.

Lessons Learned

The main lesson learned is that political support is crucial in developing a market for private sector participation. The PPP framework in the Philippines was championed by the President in 1994, and has had continued support from the political leaders who have followed. The government's commitment to PPP and the robust structure it has set up to promote and facilitate PPPs have sent a strong message to the private companies that they will have opportunity to invest in and make reasonable returns from public infrastructure and service provision. Although the central government support system has generated success stories, such as toll roads and the Metro Manila water concessions (all of which have increased private sector confidence), in practice the local government PPP system is relatively lightly regulated.

The Philippines experience demonstrates that with political and technical support from the top, and a somewhat flexible regulatory framework, local governments and the private sector can work together relatively efficiently. Most important, the experience has shown that any partnership between government institutions and private companies is best formed through mutual trust.

In considering how best to encourage private sector participation in small town WSS service provision, one area for improvement is in improving the competitiveness of the procurement process. Although the unsolicited method of procurement is preferred by both private companies and local governments, it can be improved to ensure fair competition. The current legal framework, the BOT Law, and the Joint Venture Guidelines require a challenge process for unsolicited proposals and for security bids. However, there are no regulations regarding the pricing of tender documents: unfortunately, the high pricing of the documents required to submit a bid acts as a constraint on free competition.

In addition, local government's ability to develop business cases and assess proposals should be improved to ensure that the best options are chosen.

Uganda

The following paragraph is a summary of the Uganda Case Study Report, one of the case studies from the four countries selected for the study. The Uganda Case Study aimed to identify good practices in Uganda in strengthening public institutions to effectively engage the domestic private sector in providing water supply and sanitation services in rural and small towns. The report was based on a desk study research, followed by a field visit to Kampala (August 2014).

Background

Uganda is a country of 35 million people, with 20 percent of the population (around 7 million people) living in areas that are classified as urban. The population is projected to grow at 2.8 percent per year, with urban growth at 4.8 percent per year. (Information in this section on Uganda is from ECA country study 2015d.)

The capital, Kampala, has a population of 1.8 million. The next six largest urban centers are one-tenth or less this size, and there are five centers in the 60,000 to 70,000 range. The larger urban centers are likely to have the fastest growth, but the number of small towns is also set to grow rapidly, as are the populations within small towns.

A small town is defined as having a population between 5,000 and 25,000.

Responsibility for water provision depends on the size of the town. The National Water and Sewerage Corporation (NWSC) currently has responsibility for 66 urban councils. In the smaller towns water is provided by the local administrative structure or by CBOs or NGOs.

Market Development

Since the year 2000 the government has permitted private sector participation in the water sector. By 2001, private water operators were already providing services in 15 urban centers. By 2013, this number had grown to 132 centers, of which 58 were served by operators belonging to the Association of Private Water Operators, 53 by other operators, and 21 by individuals. NWSC had responsibility for Kampala and 29 towns.

At present, there is a contract-based regulation system. Where there is a private sector supplier, the urban councils in turn have management contracts with the private operators. In principle, the performance and management contracts are all supervised by the Regulation Unit in the Ministry of Water and Environment, but in practice this entity cannot cope satisfactorily with the workload that this entails.

Over the past 13 years, private operators have achieved much, including adding connections and improving revenue performance. However, technical performance varies, with some centers having longer hours of water supply and more reliable quality than others. One of the main causes of poor performance is irregular electricity supply.

Institutional Development

Uganda's key legislation in the water sector is the Water Act of 1995. The government department responsible for urban and rural water supply is the Directorate of Water Development, in the Ministry of Water and Environment. Large urban areas are supplied by the NWSC, while small towns, which are progressively being designated by the Water Directorate as water authorities, either supply their own water and sanitation services or contract private water

operators to do so. However, the government and NWSC do not have anywhere near the financial and other resources to meet the demand. The private sector therefore has a critical role to play in filling the gap in small town water supply.

Uganda has innovated by establishing umbrella organizations to provide support to new private operators in small towns (e.g., when a major failure occurs). This reduces the risk of severe interruptions in water supplies. The government provides financial support to these organizations, but they are intended to operate like private companies, in that they should be able to order and deliver spare parts quickly in the event of system failures.

Access to Finance

Funds are allocated for water and sanitation development under the national budget, but donor-funded activities in the WSS sector play a significant role in Uganda's efforts to develop its WSS services. Civil society organizations' (CSOs) financial contribution and investments are derived largely from donor support, community contributions, and to a limited extent from income-generating activities. CSOs' investments in water, sanitation, and hygiene (WASH) have declined in recent years in an environment that saw donor funding fall in general.

Operators make their own proposals for tariffs to be charged. The Minister of Water and Environment approves tariffs and signs performance contracts with Water Supply and Sewerage Boards and NWSC. One of the current problems is that delays in revising tariffs are common because of delays in the approval process.

Operating expenses are typically less than revenues, implying that the systems do not require recurrent subsidies. However, the standard of maintenance is often inadequate, which could lead to high rehabilitation costs in the future. The paucity of investment is reflected in low access rates: according to government figures, access is around 65 percent in small towns as compared with 77 percent in large towns.

Lessons Learned

Among the case study countries, the growth in the number and size of small towns is highest in Uganda. The rate

of growth in small towns is posing a major WSS challenge to the government; however, it regards the private sector interventions as a stopgap until NWSC can take over responsibility.

The private sector can play a significant and sustained role in providing water services in small towns, and is willing to move into undertaking investment projects. These projects could build on the experience of externally funded output-based aid schemes to increase access to clean water in towns with existing piped supplies but limited distribution networks.

Other reforms could include extending contract duration, allowing tariffs that include a rate of return on investments, and establishing independent regulation. Operating areas should also be clustered so that private operators can take advantage of the economies of scale. In parallel, there would be benefits in regional divisions of NWSC being formed.

Other suggestions for improvements in domestic private participation in WSS:

- Improving monitoring and evaluation of private operations (including greater use of digital systems) so that government interventions can be more precisely targeted
- Encouraging the establishment of asset registers and asset management programs
- Increasing focused support to hygiene, sanitation, and pro-poor interventions
- Protecting water sources, to counter the tendency that has been observed in the past five years of declining water quality in rural and urban areas

After years of discussion, a revised Water Act is being submitted to Parliament that will establish an independent

regulator. This will mean that the current Ministry of Water and Environment will mainly concentrate on its roles of policy-making and implementer of last resort of WSS schemes.

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VII. Support to Public Institutions

There is no single prescription to encourage private sector participation in the water supply and sanitation (WSS) sector. The case studies demonstrate that many variables should be considered in designing a support framework. These include country-specific legal and regulatory conditions, the capacity of the public institutions, and the readiness of the private sector. Public views regarding the role of the private sector in providing public services are also particularly important.

This section describes the support public institutions should provide to encourage private participation in WSS service provision in rural growth areas and small towns, based on the assessment of enabling and demand factors and on the preliminary capacity and readiness assessment in appendix A.

Public institutions in many developing countries simply do not have the capacity to meet WSS service obligations. This applies in particular to local level institutions established to meet local empowerment and other attractive decentralisation goals, but without being endowed with the necessary capacity and resources to carry out their mandates. Support for public institutions can be provided at the national (sector reform, PPP framework development and/or clustering and subsidy design), subnational (capacity building) level and community level (awareness campaigns).

Figure 7.1 summarizes the types of support and identifies the level of government or community at which the support is targeted. The following subsections describe each type of support in more detail.

National Level WSS Sector Reform

The first type of support is to assist the national government institutions in preparing, developing, and implementing reform in the water supply

and sanitation sector. This support should be focused on achieving the following objectives:

- Improving WSS sector governance by clarifying roles, responsibilities, and functions of key actors regarding the provision of WSS in small towns
- Improving intergovernmental communication, including accountability and reporting mechanisms
- Ensuring consistency with the public-private partnership (PPP) framework
- Ensuring consistency with decentralization policies

Figure 7.2 provides an example of the types of activities that can be performed to achieve the above objectives.

Policy makers must take into account local and national conditions, culture, and context. The level of decentralization in a country should also be considered, as it will affect the roles and responsibilities of public institutions.

All key stakeholders must be involved: these will typically include relevant ministries, national and local government institutions, regulatory bodies, existing utilities and operators, consumer associations, relevant NGOs, and

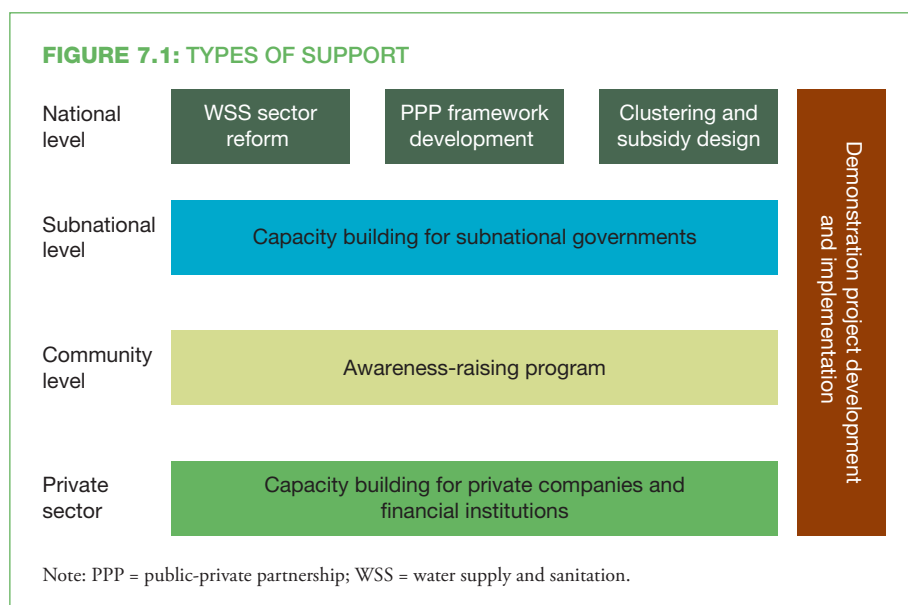
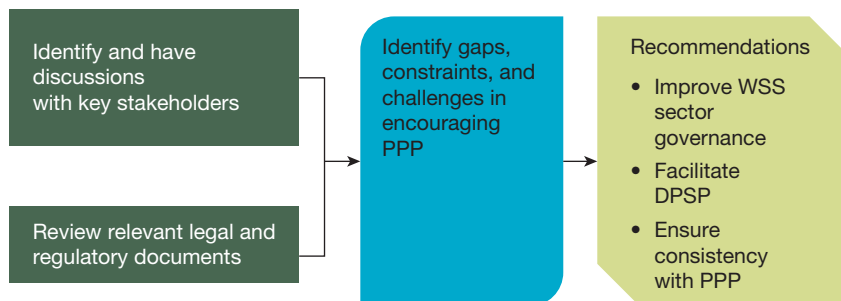
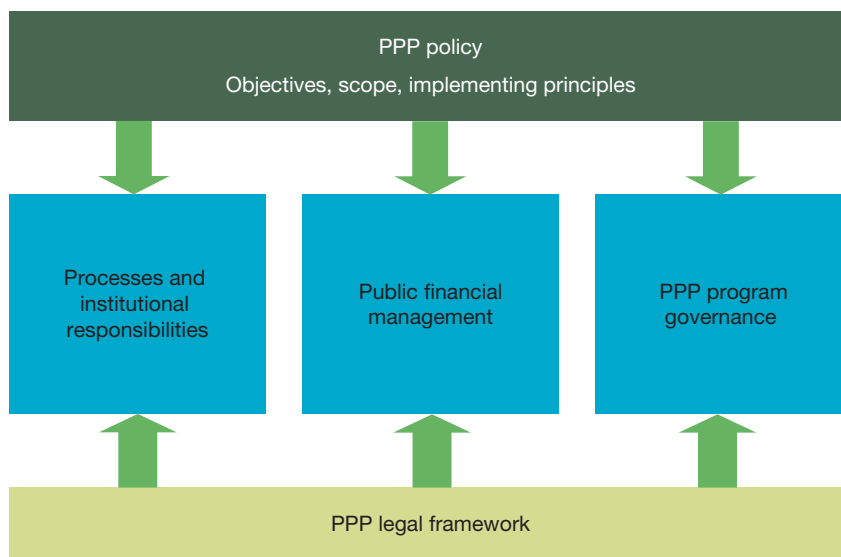


FIGURE 7.2: ACTIVITIES AND OBJECTIVES OF WSS SECTOR REFORM SUPPORT



Note: DPSP = domestic private sector participation; PPP = public-private partnership; WSS = water supply and sanitation.

FIGURE 7.3: OVERVIEW OF PPP FRAMEWORK COMPONENTS



Source: PPIAF, *Public-Private Partnerships Reference Guide*, 2014.
Note: PPP = public-private partnership.

provide a history of previous reforms, and document what has worked—or not—in the past.

In addition, governance assessment tools and guidelines are available publicly to aid stakeholders as they conduct a more detailed assessment of the country’s policy setup, legal and regulatory frameworks, and institutional arrangements. Some references to these tools and literature are provided in appendix B.

PPP Framework Development

It is important to ensure that the PPP framework is consistent with existing legal and regulatory frameworks of the WSS sector. Often, a PPP framework is focused on larger sectors, such as transport and energy, rather than water, which tends to involve smaller projects (often below the legal thresholds of PPPs), and deals with local government departments rather than state-owned companies.

According to the PPIAF *Public-Private Partnerships Reference Guide* (2014), a PPP framework consists of the following components (as shown in figure 7.3).

The activities involved in developing a PPP framework may include (but should not be limited to) the following. (See also box 7.1 for an example

of types of assistance to develop a PPP framework in Indonesia.)

- Identifying the key government institution that will champion and implement the PPP framework (the “PPP champion”)
- Working closely with the PPP champion to develop the PPP policy, legal framework, processes, and institutional responsibilities

community leaders. The experience of previous projects, including work done by donors or development partners, should be used to draw relevant lessons and identify potential partners.

Existing policy documents and legislation relevant to the WSS sector should be reviewed. Previous project documents and reports may also provide a good background and indication of the key concerns in the sector. They may also

BOX 7.1: EXAMPLE OF TYPES OF ASSISTANCE TO DEVELOP A PPP FRAMEWORK IN INDONESIA

The Government of Indonesia has received various types of assistance from donors and development partners in developing its national PPP framework. Examples of the assistance programs:

- Assistance to the Ministry of Finance in refining the risk management framework to evaluate and provide support to PPP infrastructure projects.
- The establishment of and ongoing support to the Indonesia Infrastructure Guarantee Fund. This government agency is tasked to appraise PPP infrastructure projects that require government guarantees.
- Assistance to the Ministry of Finance to enhance the functions of the PPP Center/Unit (currently being tendered at the time of writing of this document).
- In most cases, assistance included technical aid in implementing stages of the PPP process, such as appraising PPP projects, assessing fiscal support needs, and selecting and identifying PPP projects.

- Design a PPP incentive framework that can be included in the PPP legislation
- If agreed and deemed to be appropriate, establish a central PPP institution to promote and assist government in implementing the PPP framework
- Assist in developing and implementing a PPP demonstration project
- Provide ongoing support to all institutions involved

When preparing the PPP framework, specificities of small towns' WSS need to be taken into account.

Clustering and Subsidy Design

When demand factors are not met, measures can be taken to improve demand conditions. These may include (a) clustering service areas and (b) designing a subsidy scheme to that will ensure affordability while allowing for financial sustainability of the service provider. These measures can be packaged together with other types of support.

CLUSTERING

The pattern of urban development has a significant impact on WSS service provision. For example, the

proximity of small towns to larger cities may mean that WSS service provision in the cities can be expanded to serve neighboring small towns. Another example is when several rural growth centers are in close proximity to each other: clustering the rural growth centers into one service area may be more attractive to a private operator.

This approach would normally be based on demand studies undertaken in the proposed areas to determine the technical feasibility of clustering. Can the same pipe network supply more than one area? Can water sources be shared between several areas? The financial feasibility should also be considered. Will clustering provide better economies of scale?

Recommendations on clustering can be found in the Benin case (see references in box B.11 of appendix B).

SUBSIDIES

Various subsidies can be provided depending on the need and structure of the project. For example, for new systems to be developed in low-income areas, it may be appropriate to provide a capital subsidy that will cover the connection costs. This type of subsidy can be provided in an output-based form, in that subsidy can be provided only after the outputs (e.g., number of connections) are achieved.

In other cases, a tariff structure that provides a cross-subsidy between customer groups may be more suitable. Private operators will not be interested in providing services if the revenues do not cover the cost. However, customer affordability is also an important factor. Therefore, a cost recovery average tariff can be calculated, and the tariff structure can allow for poor households to pay less than other customer groups, such as commercial or industrial.

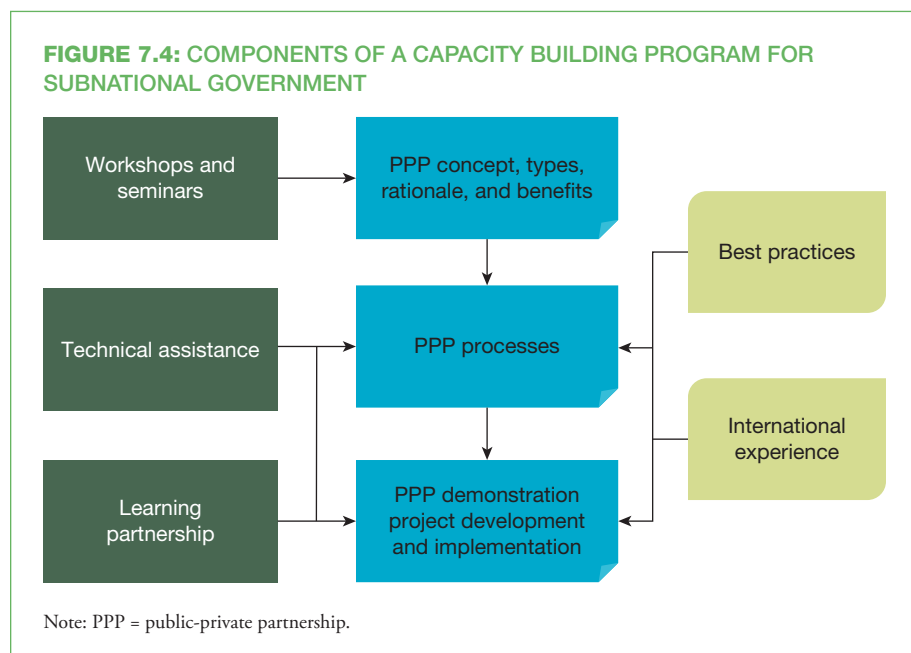
Subnational Level—Capacity Building

At the subnational level, support is generally needed to improve the capability of local government institutions, especially in the following areas:

- Understanding the benefits of involving private operators in public service provision, especially in WSS services
- Procuring and selecting the most suitable private partner to operate and manage the WSS system in the area
- Monitoring the performance of the private operators
- Improving understanding of the management of WSS services, such as the importance of having tariff levels that at least cover the cost of operations

The main objective of the capacity building program is to provide the subnational governments with an understanding of possible choices in providing WSS services, including encouraging and engaging domestic private suppliers in WSS services.

Figure 7.4 illustrates the type of activities that can be performed to achieve the above objectives.



Workshops and seminars can be conducted for subnational governments to introduce the following:

- Concepts of PPP and private participation
- Types of PPP and the rationale for each
- Benefits of involving private operators in public service provision, especially in WSS services
- Experiences, if any, from other sectors in the country, and lessons learned (examples of successful implementation of private participation in other sectors can help enable local government buy-in for private participation in WSS services)

In terms of the PPP process, one of the best ways to improve subnational governments’ understanding and ability to implement the PPP process is to provide technical assistance to relevant institutions. Technical assistance can develop the knowledge and skills of subnational government staff through practical examples and on-the-job training.

The technical assistance may include (but not limited to) the following:

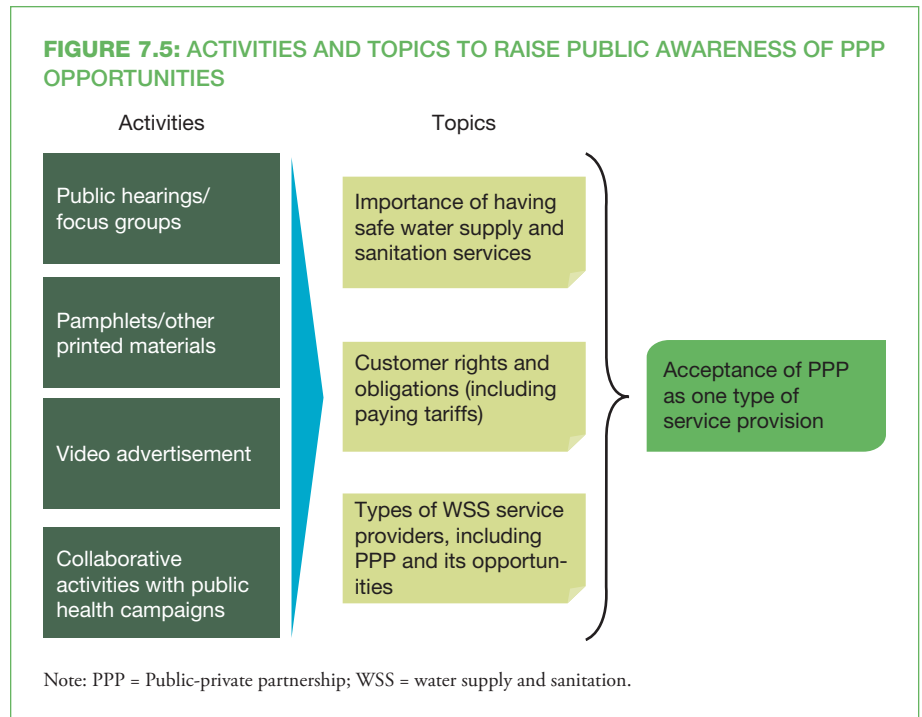
- Assisting subnational governments to identify a key institution that will be involved in support of private participation in the service (the “local champion”)
 - Working closely with the local champion to develop a framework suitable for local conditions taking into account, if appropriate, any national PPP policy
 - Developing local PPP guidelines, such as toolkits and monitoring tools, that can be used by local governments and other institutions
 - Assisting the local champion and other relevant institutions to implement a PPP pilot project

Learning partnerships can be developed between the local champion and other institutions in the country that have experience in implementing PPP projects or with international institutions with a similar

background. Learning partnerships may include (but not be limited to) the following:

- Interactive workshops and discussions on various topics relevant to PPP implementation
- Technical assistance by a “learning partner,” which could be short-term secondment or assignment to work with the local champion on implementing the pilot project

Publications regarding best practice and international experience can supplement the knowledge on how to engage the private sector in WSS services.



Community Level—Awareness-Raising Program

The main objective of awareness raising is to have public and community acceptance of private operators as one of the ways in which WSS services can be provided. An awareness-raising program conducted at an early stage of the project through community discussions or public hearings is usually an essential part of project development. Community awareness can also be achieved through educational materials, such as pamphlets and booklets, or mass media, such as video advertisements on television or online. Whatever the chosen method, the material should be simple and easy to understand.

Figure 7.5 illustrates awareness-raising activities and suggested topics to achieve the objective of public and community acceptance of private sector participation as one of the ways WSS services can be provided.

The awareness-raising program can be conducted as part of a program of sector reform, PPP framework development

and capacity building, or part of project development support. It can also be incorporated as part of public health campaigns. It typically will have three main components:

Importance of safe WSS services. In small towns and rural areas, the community often lacks an understanding of the benefits of having a safe WSS service, let alone the benefits of private sector participation. It may therefore be important to educate the community on the health and economic benefits of having safe WSS services. In many cases, this can be included as part of existing public health campaigns conducted by NGOs or government institutions.

Obligation to pay for services received. Community members must fully understand their rights and obligations as WSS customers. One of these obligations is to pay for the services they receive.⁴ This will lay the basis for private operations, but even if the services are provided by local government departments or water utilities, this understanding is needed to ensure sustainability of the service provision.

⁴ In certain circumstances subsidies may be provided that will exempt the poorest members from paying for their consumption, for example, if they use less than a certain quantity (usually 6 or 9 cubic meters) per month. Such subsidization does not preclude teaching the principle of payment.

Different ways of providing a service. The community needs to understand that WSS services can be provided by different providers, such as the local government, community-based organizations (CBOs), or by private operators. This instructional process establishes that private companies are

another type of WSS service provider that may be able to provide better services than other providers.

Having community buy-in and willingness to pay for WSS services is key to successful private sector participation.

VIII. Support to Private Institutions

Local financial institutions are accustomed to providing loans for relatively short-term projects, and the banks require high levels of collateral from the borrowers. However, the WSS sector generates a stable and predictable revenue stream that can also be taken as a form of security. Technical assistance and training may be required to help financial institutions understand the concept of revenue-based lending.

Capacity Building for Financial Institutions

Access to finance has been acknowledged as a key factor facilitating more private sector participation. Without access to finance, many domestic private operators will not have enough funds from their own resources to implement the contract.

The WSS operations are long-term investments that may have high upfront capital costs. Unfortunately, financial institutions typically provide loans only for shorter-term projects, and require high levels of collateral that many private operators cannot provide.

However, WSS projects generate a stable and predictable revenue stream from user charges. Loans can be repaid from these revenues, but not many local financial institutions understand the concept of revenue-based lending. The alternative is that funds must come from equity. This is another major constraint that reduces the potential for the private sector to invest and meet customer demand, while also raising the financing cost and ultimately tariff levels for the population.

Financial institutions will typically benefit from learning about financial models suitable for lending to private operators in the WSS sector. They may have to be convinced that the long-term risks are relatively minor and that an effective funding partnership can yield a steady and profitable rate of return.

Capacity Building for Private Operators

Just as the concept of private operation of WSS services is new to many governments and communities, it may also be

new to the private sector. Thus when the public sector advertises opportunities, the response may be inadequate either because the companies bidding do not have the skills or funds required, or because they misunderstand the nature of the work.

Some countries, therefore, may wish to institute a two-stage process. The first stage is to make a public announcement inviting interested companies to register for an opportunity. This announcement should be sufficiently detailed for the applicants to have a clear idea of the work. These applications should then be screened to eliminate those that clearly are not suitable. Following this, all suitable candidate companies, *and their financial partners*, should be invited to an interactive briefing session or workshop at which the concept and the criteria for selection are explained in depth. This briefing should detail the skills and funding required. Plenty of time should be allowed to respond to questions and enter into debate so that all parties have a clear understanding of the way forward.

Such briefing sessions may produce suggestions to the public party that will allow it to tailor the bidding process most effectively to the needs of the possible bidders.

Financial Support for Financial Institutions

Where financial institutions are unwilling to support private operators in the WSS sector, the possibility exists for government agencies or donors to provide guarantees to the lender. Guarantees reduce the risk to the financial institution to a significant degree (depending on the type of guarantee provided). This may have the effect of permitting the pool of bidding companies to be enlarged and thereby increasing competition and reducing tariffs.

Demonstration Project Development and Implementation

The main purpose of developing and implementing demonstration projects is to generate support for scale-up from stakeholders who may have initially shown reluctance. Therefore, it is important to start by determining whether

the demand criteria discussed previously have been met. For example, when assessing and selecting the potential service area, the area should be relatively densely populated with sufficient average income and have the potential to grow. It is also important to check whether there are competing alternative sources of water supply. These demand criteria should be included in the criteria for selecting and identifying PPP projects.

Once the service area has been selected based on demand criteria, a full feasibility study can be conducted, followed by deciding the type of contract most suitable for the arrangement. The procurement process can be tailored to suit local conditions, in that small transactions may not require complex processes. If more than one service area is

offered, it may be more efficient and economical to pool the tender process to reduce transaction costs.

Long-term assistance or support can be provided for the whole PPP implementation process, up to the construction (if included) and operation of the system. In addition, in most cases, the public sector contracting agency will require assistance or support in monitoring the PPP contract.

Reference

PPPIRC (Public-Private Partnership in Infrastructure Resource Center). 2014. *Public-Private Partnerships Reference Guide*. Washington, DC: World Bank. <http://ppp.worldbank.org/public-private-partnership/library/public-private-partnerships-reference-guide-version-20>.

Appendix A: Capacity and Readiness Assessment

This section provides some guiding questions that can be used to assess capacity of the relevant institutions and community and market readiness to implement private sector participation in water supply and sanitation (WSS) service provision. The assessment is grouped into national, subnational, and community level assessment.

It is recommended that the assessment be completed as a *preliminary assessment* before deciding and developing the type of support provided to public institutions. The assessment is best accomplished in two stages:

- *Stage 1.* Gather information through publicly available documents and data.
- *Stage 2.* Supplement the information with discussions with identified stakeholders. This stage is crucial, as in most cases, what happens in practice is not the same as what was envisioned in policy documents.

The assessment matrices that follow indicate the type of support that can be provided to help encourage private participation in WSS services. The assessment matrices provide a detailed list of questions to guide the analysis. Not all the questions are relevant to every situation, so the questionnaire should be used as a guide. The key questions driving the assessment are listed at the start of each subsection.

National Level

The national level assessment focuses on the water supply and sanitation sector and how it is organized at the national level. It assesses the governing laws, regulations, national policies and targets, identification of the key players at the national level, how the WSS sector is being financed, and whether a specific public-private partnership (PPP) framework has been implemented (see table A.1).

Key questions:

- What is the role of the national government institutions in terms of WSS services?

- Are the institutions performing their functions? If they are not, what are the constraints?
- Do any national government institutions have the knowledge, skills, and capability to implement PPP projects? Have any PPP projects been implemented?
- Do the national government institutions provide any form of assistance to subnational governments in terms of WSS service provision?
- How capable are the national government institutions in encouraging, developing and implementing private participation in the WSS sector?

Subnational Level

The subnational level assessment seeks to understand the dynamics of rural and urban areas, and how different levels of government and public institutions provide public services. The objective is to determine what factors influence the way public services are provided by the different levels of governments, and to understand the capacity and willingness of subnational level governments to develop private participation in the WSS sector (see table A.2).

Key questions:

- Has WSS service provision been delegated to the subnational government?
- Are subnational governments allowed to contract other entities to provide WSS services?
- Do the subnational governments have the knowledge, skills, and capability to provide WSS services?
- Does the subnational government have the knowledge, skills, and capability to contract other entities to provide WSS services?
- Are the definitions of urban and rural areas clear? How do these definitions affect public service provision?
- For rural growth centers or small towns, do local governments have the knowledge, skills, and capability to provide WSS services? Or do they rely on regional or national government support?

TABLE A.1: NATIONAL LEVEL ASSESSMENT MATRIX

Topic of assessment	Stage 1: How things are meant to work in theory	Stage 2: How things are working in practice	Reference to enabling factors
Legal framework of WSS sector	<ul style="list-style-type: none"> Was there a reform in the WSS sector that changed the sector significantly? If yes, what were the drivers for reform? What was the purpose of the reform? What were the main changes? What legislation and other legal instruments emerged from the reforms? 	<ul style="list-style-type: none"> Did the reform achieve the intended objectives? Did the reform successfully address or improve the sector? What were the main drivers for the reform? Was there a particular individual “champion” of the reforms? Was there any opposition to the reform? How was opposition handled? 	Legal and regulatory framework
WSS sector policies and national targets	<ul style="list-style-type: none"> What are the short-, medium-, and long-term goals for the WSS sector? Is there a published national policy or strategic plan for water supply and sanitation? If yes, do the plans include investment requirements in the sector? Who is responsible for implementing the policies and plans? 	<ul style="list-style-type: none"> In practice, are the policies and strategic plan being implemented? Who in practice is driving the implementation of the policy or plan? Are the targets being met? Are the plans updated regularly? 	Legal and regulatory framework and institutional support
Institutional and regulatory framework of WSS sector	<ul style="list-style-type: none"> Who is supposed to be doing what in the WSS sector according to legislation and policy documents? Which ministries are responsible for setting policies and long-term objectives? Is there a regulator? If not, who is performing the regulatory functions? In particular, who is designated to set and approve water tariffs? 	<ul style="list-style-type: none"> Who is actually doing what in practice? Which institution is leading the water sector in practice? In practice, is the institutional and regulatory framework effective? Are there regular water tariff reviews and adjustments? Is the process of tariff approvals and setting transparent and fair? Is there a formal structure for regulating sanitation? What are the perceived main problems with the existing structures? What are the perceived strengths? 	Market making, institutional support, and legal and regulatory framework
PPP framework	<ul style="list-style-type: none"> Is there a PPP framework in place? Is there any specific legislation or regulations for PPP? What are the incentives for PPP? Who are the key actors in PPP in the public sector? 	<ul style="list-style-type: none"> What is the experience with PPP so far (not just in WSS)? How many PPP transactions have there been to date? In which sectors? Is the PPP framework an incentive or a hindrance? What is the main constraint for PPPs? 	Legal and regulatory framework, institutional support

TABLE A.1: (CONTINUED)

Topic of assessment	Stage 1: How things are meant to work in theory	Stage 2: How things are working in practice	Reference to enabling factors
Financing framework of WSS sector	<ul style="list-style-type: none"> • How is the government budget allocated to the different sectors? • Who allocates the government budget? • In the WSS sector, which institution prioritizes investments? • What tools or methods are used to prioritize investment? • What percentage of the budget is allocated to the WSS sector on average? • Is there a WSS sector investment plan? • Is there significant donor funding available for WSS investments? 	<ul style="list-style-type: none"> • In practice, who allocates the government budget? • In practice, how are investments prioritized? • What are the main sources of funding for investments in the WSS sector? 	Legal and regulatory framework, access to finance

Note: PPP = public-private partnership; WSS = water supply and sanitation.

TABLE A.2: SUBNATIONAL LEVEL ASSESSMENT MATRIX

Topic of assessment	Stage 1: How things are meant to work in theory	Stage 2: How things are working in practice	Reference to enabling factors
Levels of government	<ul style="list-style-type: none"> • What are the levels of governments (e.g., national, provincial or regional, local governments or municipalities)? • Who is supposed to do what in terms of the WSS sector at the different levels of governments? • Is there any regional or local legislation or regulation for the WSS sector? 	<ul style="list-style-type: none"> • Is there any conflict between levels of government in terms of public service provision or infrastructure investments? • Who are the other key players in the WSS sector in the different levels of government? 	Legal and regulatory framework, institutional support, market making
Public service provision in subnational levels	<ul style="list-style-type: none"> • What are the roles of each level of government in terms of providing public services? • Which level of government is mandated to provide water and sanitation services? • Which level of government contracts with or engages with private service providers? 	<ul style="list-style-type: none"> • Which level of government is most effective in providing services? • Which level of government has the capacity to engage with private service providers? • What services are currently provided by the private sector? • What motivates private service providers to provide public services? • What demotivates private providers? 	Legal and regulatory framework, institutional support, market making
Dynamics of the urban hierarchy	<ul style="list-style-type: none"> • What are the definitions of small towns and rural areas in terms of <ul style="list-style-type: none"> – Population and demography – Geographical location – Economic activities – Availability of infrastructure – Availability of public services – Proximity and connectivity to other small towns or rural areas • How do the definitions of small urban towns and rural areas change over time? • What are the main drivers for change? • How do the changes affect public service provisions? 	<ul style="list-style-type: none"> • In practice, when do rural areas become small towns? What drives this process? • How is the process encouraged and managed by government structures? • What measures are used in practice to define settlements as rural or small towns? • In practice, how do the changes affect public service provision? • How do public institutions cope with increasing need for public services? • How well are these needs being met and who finances the investments? 	Demand factor, market making, institutional support

Community and Market Readiness

The community readiness assessment aims to understand community perception of private participation in providing public services. This assessment looks at experience with private participation in other sectors and how these experiences are perceived by the community.

The market readiness assessment looks at whether or not there is a desire from the private sector to provide or get involved in public service provision.

Key questions:

- Are communities served by private entities satisfied with the services provided?

- Were they consulted before engaging the private entity?
- What is the community perception of private provision of public services?
- What motivates the private entity to get involved?
- What was perceived to be the main opportunity by the private entity? What are the main challenges faced by it?
- Was access to finance an issue for the private entity?
- Is there any experience with private participation in public services in other sectors?
- How successful is the experience with private sector participation? For example, is the private partner operating well and earning returns? Are the services provided satisfactory?

TABLE A.3: COMMUNITY AND MARKET READINESS ASSESSMENT MATRIX

Topic of assessment	Stage 1: How things are meant to work in theory	Stage 2: How things are working in practice	Reference to enabling factors
Experience with private sector participation	<ul style="list-style-type: none"> • Is there any experience in private participation in WSS or other sectors? • What are the contractual arrangements? • What are the roles of the private operator? • Who owns the assets? • Who provides capital for investments? • What drives the private participation (e.g., donor project, private sector demand, government seeking private partners)? 	<ul style="list-style-type: none"> • Is the experience perceived to be successful? • How well does the private sector perform its functions? • Was there a monitoring and evaluation framework? • What are the key challenges? 	Access to finance, demand factor, legal and regulatory framework
Community readiness	<ul style="list-style-type: none"> • Was there any community participation in the decision to engage a private entity? • Was there any awareness raising or marketing efforts before engaging a private entity? 	<ul style="list-style-type: none"> • Is the community satisfied or happy with the services provided by the private entity? • What is the general perception of having private entities providing public services? • Were there any issues with tariffs or user fee levels? • What are the key issues about private participation perceived by the community? 	Institutional support, market making, demand factor
Market readiness	<ul style="list-style-type: none"> • What motivates the private sector to get involved in public service provision? • What were the incentives to encourage private participation? • How was the contract procured (solicited or unsolicited)? • Is access to finance a problem for the private entity? 	<ul style="list-style-type: none"> • What are perceived as good opportunities by the private sector? • Is there a preference regarding the types or size of the local areas (e.g., urban versus rural, population density)? • What are the private sector's considerations to get involved in public service provisions? • What are the key challenges faced by the private operator? 	Demand factors, access to finance, institutional support

Appendix B: Key Reference Sources

BOX B.1: AVAILABLE REFERENCES ON DEVELOPING PUBLIC-PRIVATE PARTNERSHIP FRAMEWORKS

In developing national public-private partnership (PPP) framework, policy makers should consider account decentralization policies that delegate public service provision to subnational governments.

Key aspects with regard to subnational PPP arrangements:

- *Knowledge, skills, and capability of subnational governments.* Local level institutions were established to meet local empowerment and other attractive decentralization goals, but without being endowed with the necessary capacity and resources to carry out their mandates.
- *Simplified processes for local PPP projects.* Local projects may not require complicated PPP processes designed for national PPP projects.
- *Transaction costs.* These may be disproportionately high for small PPP projects, therefore, there may be a case to pool small PPP projects and gain from economies of scale by having regional PPP centers help local governments implement local PPP projects.

References on Developing PPP Frameworks

The online toolkit for PPP in India can provide examples and tools of how to develop a PPP framework and how to implement PPP projects in various sectors, including water supply and sanitation (WSS). See http://toolkit.pppinindia.com/water-sanitation/module1-intro.php?sector_id=2.

PPIAF, *Public-Private Partnership Reference Guide Version 2.0*, 2014, provides guidance on how to develop PPP framework on a national level. PPIAF, *How to Engage with the Private Sector in Public-Private Partnerships in Emerging Markets*, 2011, provides guiding questions on legal and regulatory framework related to PPP.

BOX B.2: REFERENCES FOR GOVERNANCE ASSESSMENT LITERATURE

Copenhagen Consensus Center, “Benefits and Costs of the Governance and Institutions Targets for the Post-2015 Development Agenda,” 2015, discusses indicators used to measure governance targets and provides lessons learned on how to improve governance and institutions. See http://www.copenhagenconsensus.com/sites/default/files/governance_assessment_-_hilderbrand.pdf. [Mary Hilderbrand]

OECD (Organisation for Economic Co-operation and Development, “Building More Effective, Accountable, and Inclusive Institutions for All, Element 6, Paper 1, 2015, provides a brief discussion on why “honest and responsive governments” is one of the most widely-cited priorities during post-2015 consultations of people from around the world. See http://www.oecd.org/dac/_POST-2015%20effective%20and%20accountable%20institutions.pdf.

UNDP (United Nations Development Programme), *Making the State Responsive: Experience with Democratic Governance Assessments*, 2011, provides examples of various types of governance assessments and their application. See http://www.undp.org/content/dam/undp/documents/partners/civil_society/additional_documents/Africa%20Forum%20on%20Civil%20Society%20and%20Governance%20Assessments/Making%20the%20state%20responsive.pdf. [Edited by Göran Hydén and John Samuel]

World Bank, “Balance, Accountability, and Responsiveness: Lessons about Decentralization,” 1998, discusses lessons learned from decentralization and public sector reforms. See <http://siteresources.worldbank.org/INTWBIGOVANTCOR/Resources/BalanceAccountabilityandResponsiveness.pdf> [Anwar Shah]

BOX B.3: EXAMPLE: WORLD BANK WATER SECTOR REFORM ASSISTANCE PROGRAM, COLOMBIA

Project objectives: (a) support water sector reform by creating enabling environment for private sector participation in the management and operation of water utilities through assisting the implementation of pilot projects and providing financial support to ensure viability; (b) expand the coverage of water and sewerage services; and (c) facilitate access of population in low income areas to water and sewerage services.

Government counterpart: Ministry of Environment, Housing and Territorial Development

Project components:

- Investment in water supply and sanitation work in medium-size cities and in small municipalities—provide financial support to engage private sector in several medium-size cities and small municipalities
- Environmental management capacity strengthening—capacity building program with a focus on wastewater management
- Development of a rural water and sanitation policy
- Project management and training

The project was a pilot project to test a novel approach to private sector participation in small and medium-sized cities, and was considered to be satisfactory in achieving the stated objectives.

Reference

For more information about this project see “Water Sector Reform Assistance Project,” <http://www.worldbank.org/projects/P065937/water-sector-reform-assistance-project?lang=en>.

BOX B.4: AVAILABLE REFERENCES ON HOW TO SUPPORT WSS SECTOR REFORMS

Many investment projects include a component to review the existing legal, regulatory and institutional framework. However, if the main focus of the project is to implement a project with private sector participation, in some cases this will be done without ensuring that the legal and regulatory framework are sound and conducive to the sustainability of private sector participation. Therefore, it is highly recommended that a thorough WSS sector reform is conducted and implemented before shifting the focus to investment project development and implementation.

References

World Bank, *Engaging Local Private Operators in Water Supply and Sanitation Services*, 2006, for experience from other countries in developing legal and regulatory framework and upstream policy work to encourage domestic private sector participation (DPSP) in the WSS sector.

World Bank, *Tapping the Markets: Opportunities for Domestic Investments in Water and Sanitation for the Poor*, 2014, for recommendations on how to improve government policies to encourage more DPSP especially in chapter 9. See <http://hdl.handle.net/10986/16538>.

BOX B.5: CASE STUDIES

ECA (Economic Consulting Associates). 2015. "Bangladesh Country Report." In *Strengthening Public Institutions in Engaging and Regulating Domestic Private Sector for the Provision of Water and Sanitation Services in Rural Growth Areas and Small Towns: Best Practice Report*. London: ECA.

———. 2015. "Colombia Country Report." In *Strengthening Public Institutions in Engaging and Regulating Domestic Private Sector for the Provision of Water and Sanitation Services in Rural Growth Areas and Small Towns: Best Practice Report*. London: ECA.

———. 2015. "The Philippines Country Report." In *Strengthening Public Institutions in Engaging and Regulating Domestic Private Sector for the Provision of Water and Sanitation Services in Rural Growth Areas and Small Towns: Best Practice Report*. London: ECA.

———. 2015. "Uganda Country Report." In *Strengthening Public Institutions in Engaging and Regulating Domestic Private Sector for the Provision of Water and Sanitation Services in Rural Growth Areas and Small Towns: Best Practice Report*. London: ECA.

BOX B.6: EXAMPLE OF PROPOSAL FOR REGIONAL TARIFF IN COLOMBIA

In the northern department of Atlántico, Triple-A was established as an Empresas de Servicios Públicos (ESPs) in 1992 to operate WSS services in the urban municipality of Barranquilla. Once the operator had established itself successfully in Barranquilla, it started expanding its services to the communities in surrounding municipalities. This was carried out by using the plants employed for Barranquilla to treat larger quantities of waters to supply neighboring municipalities. The system currently supplies seven additional municipal systems besides Barranquilla. Furthermore, the operator has included two additional water supply systems that serve another seven locations.

Triple-A proposed a new regional tariff that allows the firm to earn a return on a larger asset base with minimal additional risk by charging a uniform tariff across a region, even when systems are not physically connected, as is the case in Atlántico. Effectively, the regional tariff allows for cross-subsidization of poorer municipalities by large urban centers without the need of physical interconnection.

Reference

For more information, consult the following:

ECA (Economic Consulting Associates). 2015. "Colombia Country Report." In *Strengthening Public Institutions in Engaging and Regulating Domestic Private Sector for the Provision of Water and Sanitation Services in Rural Growth Areas and Small Towns: Best Practice Report*. London: ECA.

BOX B.7: EXAMPLE OF A PPP INTERNSHIP PROGRAM FOR LOCAL GOVERNMENTS IN THE PHILIPPINES

An example of a national level institution providing capacity building to local government through a learning partnership is the Internship Program, offered by the PPP Center in the Philippines. The PPP Center is the national agency tasked with the role of facilitating the implementation of PPP programs and the projects being pursued by implementing agencies and local governments in the Philippines.

As part of its function, the PPP Center offers an internship program to local government institutions, in which the local government institution can allocate staff members to work in the PPP Center office in Manila. The program provides first-hand experience on the processes undertaken by the PPP Center to develop viable PPP processes.

Reference

For information about the internship program and about the PPP Center, see Republic of the Philippines, "Public-Private Partnership Center," <http://ppp.gov.ph/>.

BOX B.8: EXAMPLE OF DESIGNING A CAPACITY BUILDING PROGRAM FOR LOCAL GOVERNMENT

When designing a capacity building program for local government, policy makers should include a component that explains that engaging DPSP in public service provision has benefits, but is not the only way or necessarily the best way to provide public services such as WSS. In some cases, the local government departments may be best placed to provide the services, or in other cases, community-based organizations (CBOs) are already providing satisfactory WSS services. The main development objective of improving access to safe WSS services should always be in the forefront of the assistance program.

References on International Experiences

World Bank. 2006. "Engaging Local Private Operators in Water Supply and Sanitation Services: Initial Lessons from Emerging Experience in Cambodia, Colombia, Paraguay, the Philippines, and Uganda." Washington, DC: World Bank. Contains information on lessons learned. [Triche, T., Requena, S., Kariuki, M.]

———. 2014. *Tapping the Markets: Opportunities for Domestic Investments in Water and Sanitation for the Poor*. Washington, DC: World Bank. [Sy, Jemima; Warner, Robert; Jamieson]

Reference Materials for PPP

PPIAF (Public-Private Infrastructure Advisory Facility). "Knowledge Center." Washington, DC: World Bank. <http://www.ppiaf.org/page/knowledge-center>.

PPPIRC (Public-Private Partnership in Infrastructure Resource Center). Washington, DC: World Bank. <http://ppp.worldbank.org/public-private-partnership/>.

BOX B.9: EXAMPLE OF A COMMUNITY AWARENESS PROGRAM IN BANGLADESH

The sanitation marketing program in Bangladesh is an example of how social and commercial marketing can stimulate supply and demand for sanitation facilities and services. The program includes a demand creation component, whereby the community was educated on the benefits of having safe sanitation practices along with sanitation product promotion. Without this demand, there would be no market for the sanitation facility providers.

Reference Materials on Sanitation Marketing in Bangladesh and Elsewhere

SanMark. N.d. "Sanitation Marketing in Bangladesh." *Sanitation Marketing* (blog). <http://www.sanitationmarketing.com/sanitation-marketing-blog/sanitation-marketing-in-bangladesh>.

World Bank. "In Bangladesh, Sanitation Marketing Helps Make Toilets More Available and Affordable," April 8. <http://www.worldbank.org/en/news/feature/2014/04/08/in-bangladesh-sanitation-marketing-helps-make-toilets-more-available-and-affordable>.

———. 2016. "Domestic Private Sector Participation." <https://www.wsp.org/global-initiatives/DPSP>.

BOX B.10: EXAMPLE FROM THE FINANCE FACILITY FOR URBAN WSP IN KENYA

A finance facility for urban water service providers (WSPs) in Kenya was developed to provide an alternative source of financing for urban water and sanitation investment projects. The intention is not to replace the traditional sources of investment financing (government and development partners) but to provide a complementary additional financing option.

The intended financing structure is to be a 50 percent grant from Global Partnership on Output-Based Aid (GPOBA) and a 50 percent loan from Kenyan commercial banks. The role of subsidies in improving affordability where market financing is used to pay for infrastructure is critical. This is because it may not be practical to expect full recovery of operational and capital costs in a sector that has traditionally relied on public funds to finance infrastructure.

The grant is output-based and can thus be released only when the project is complete and the agreed output has been independently verified. During the construction period, therefore, the banks have to extend the full amount of the project. Commercial banks were interviewed during the facility planning process and suitable candidates identified as potential partners. The accredited banks will compete to provide credit facilities for the WSPs. Even though this project does not include an explicit capacity building component for the commercial banks, the interaction with commercial banks throughout the project has improved the participating local banks' understanding of WSS business and the types of loans or financial products are suitable for WSS.

Reference

Further information on this project is available at GPOBA, "Establishing an OBA Finance Facility to Expand Water Supply and Sanitation Services in Small and Medium-Sized Towns in Kenya," <https://www.gpoba.org/node/531>.

BOX B.11: EXAMPLE OF CLUSTERING IN WSS PROJECT IN RURAL AND SMALL TOWNS IN BENIN

The DPSP WSS project in Benin started with the selection of pilot sites, which were grouped into four clusters to reduce transaction costs. The project design required the private operators to design, engineer, rehabilitate, operate, and maintain systems, without increasing the price of water. One key lesson from the pilot project is that more ambitious clustering than what was included in the pilot project should be considered.

Such clustering can be fostered in several ways:

On the one hand, "market-led" clustering, whereby a single operator can win multiple contracts should be allowed (i.e., there should not be any rule stating that any operator cannot win contracts in multiple locations) and explicitly encouraged. This is likely to lead to "market consolidation," which is already taking place for the affermage contracts and much needed in Benin, since the market probably cannot support 70 viable operators. Scaling up of the most robust operators will allow them to build technical competencies and increase their access to capital (both from their own resources and through commercial loans). This could also generate employment. However, such market consolidation should be monitored carefully so as to limit the exercise of market power by the private operators. If one private operator starts winning all contracts, for example, such a situation could be investigated to ensure that there was no wrongdoing.

On the other hand, incentives could be given to municipalities that wish to group together to let out larger contracts. For example, this could be done by making subsidies available only above a certain threshold in terms of the target number of new household connections. Such a threshold could gradually be increased to encourage letting out larger contracts to private operators and enable economies of scope and accumulation of technical expertise.

Reference

For more information:

Migan, Sylvain Adokpo, with Tremolet Consulting. 2015. *Benin: Innovative Public Private Partnerships for Rural Water Services Sustainability: A Case Study*. Washington, DC: World Bank. <https://wsp.org/sites/wsp.org/files/publications/WSP-Benin-Innovative-Public-Private-Partnerships-Rural-Water-Services.pdf>.

BOX B.12: CONTRACTING WITH SMALL-SCALE PROVIDERS

Many PPP investment projects focus on the PPP transaction process and do not put enough emphasis in the project development and selection process. Although transaction assistance is undoubtedly required and useful, policy makers should also provide support to the public institutions on how to develop and select PPP projects, taking into account the necessary demand factors. In addition, in some cases the type of PPP contract has already been decided before the project was developed, and therefore the project development process was not done to suit the local conditions but rather to suit the types of contract selected. This situation may result in less buy-in from DPS and a less sustainable arrangement.

References on Providing Project Development and PPP Transaction Assistance

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