WATER GLOBAL PRACTICE

DISCUSSION NOTE

Enhancing the Enabling Environment to Promote Private Sector Participation in the Implementation of the Philippine Water Supply and Sanitation Master Plan

JUNE 2018

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WORLD BANK GROUP

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Acknowledgments

The discussion note was prepared to inform dialogues among Government policy makers and other stakeholders on how to move forward with the critical water supply and sanitation (WSS) sector reforms in the Philippines, focusing on how private sector participation might be harnessed to help achieve the universal access to safe and sustainable water supply and sanitation services. The initiative is being led by the National Economic and Development Authority (NEDA), in close coordination with other government agencies such as the Public-Private Participation Center (PPPC), Department of Finance (DOF), Department of Public Works and Highways (DPWH), Department of the Interior and Local Government (DILG) and Local Water Utilities Administration (LWUA).

This note is a follow-on analysis to the policy papers for the Unified Financing Framework (UFF) prepared in May 2015 and June 2017, which provided an overview of the key barriers and issues in the sector and identified options to resolve these barriers, based on experience internationally and in the Philippines.

The note aims to provide an initial analysis on: (i) current trends of private participation in the water sector, (ii) the possibility to encourage the private sector into parts of the WSS sector which have traditionally been less commercial, such as lower level water schemes and sanitation, (iii) the liquidity of the commercial finance markets to support these activities, (iv) any current challenges or bottlenecks in financing the private sector (including issues relating to the enabling environment), and (iv) possible solutions or mechanisms by Government for managing these challenges and bottlenecks and to encourage effective investment into the sector. This note incorporates inputs from preliminary consultations with the public and private sector and commercial finance providers working in the sector. The note includes feedback received during the April 11, 2018 Roundtable Discussion with the Private Sector on "Viable Options to Accelerate Investments and Performance of the Water Supply and Sanitation Sector in the Philippines" organized by NEDA.

This discussion note has been developed by a team of World Bank's Water Global Practice Team (under P166368), led by Aileen Castro (Task Team Leader) and Victoria Delmon (Senior Counsel and PPP Specialist). Inputs have also been provided by Christopher Ancheta, Edkarl Galing, Vickram Cuttaree, Lilanie Magdamo-Maitim and Mari Trillana. It is based on: 1) interviews and consultations with stakeholders to identify the trends and gaps, and 2) a desk review of international and domestic studies as listed in the References section of the report on the mechanisms to address the bottlenecks. A review of the existing PPP framework and interviews were conducted with government and private sector stakeholders to recommend enhancements to the NEDA JV Guidelines.

This note has benefited from the comments of peer reviewers: Sophie Tremolet, Tomas Wadstrom, Dirk Sommer, Alexander Bakalian, Joel Kolker and Kevin Bender of the World Bank Group.

Abbreviations and Acronyms

Bank	The World Bank
BOT	Build, operate and transfer project
COA	Commission on Audit
DENR	Department of Environment and Natural Resources
DILG	Department of the Interior and Local Government
DOF	Department of Finance
DPWH	Department of Public Works and Highways
GFIs	Government Financial Institutions
JV	Joint venture
LGU	Local government unit
LWUA	Local Water Utilities Administration
MWCI	Manila Water Company, Inc.
MWSI	Maynilad Water Services, Inc.
MWSS	Metropolitan Waterworks and Sewerage System
NEDA	National Economic Development Authority
NWRB	National Water Resources Board
PFIs	Private Financial Institutions
PhP	Philippine Pesos
PPP	Public Private Partnership
PSP	Private Service Provider
SEZs	Special Economic Zones
SDGs	Sustainable Development Goals
UFF	Unified Financing Framework
WD	Water district
WSPs	Water service providers
WSS	Water Supply and Sanitation

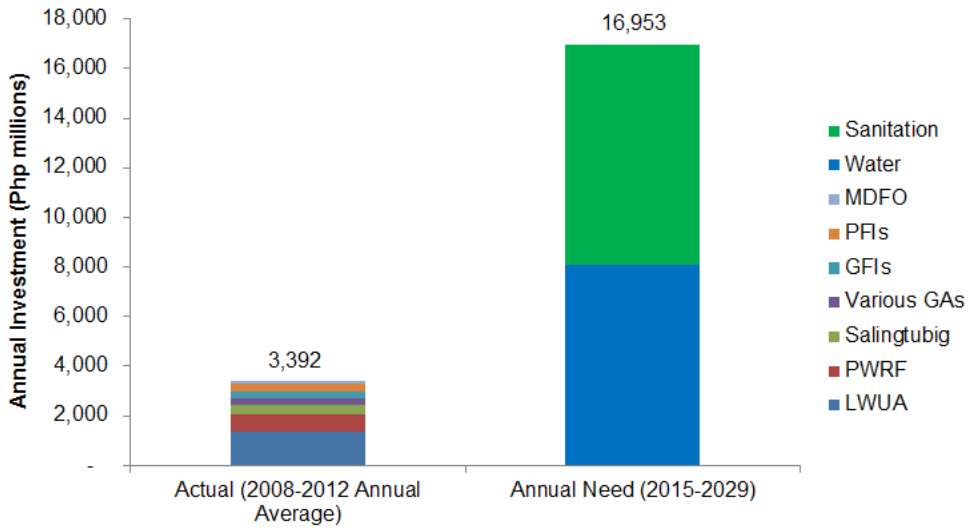
Currency Equivalent

$1 = PhP 52 (as of May 2018)

EXECUTIVE SUMMARY

1. The national government is committed to achieve the water supply and sanitation sector (WSS) targets under the Philippine Development Plan (PDP) in 2022 *(increase access to safe water supply to 95.16%; basic sanitation to 97.46%)* and the Sustainable Development Goal (SDG) 6 in 2030 *(universal & equitable access to safe & affordable drinking water; universal access to adequate & equitable sanitation)*. In 2015, the World Bank estimated that actual investments in the sector were only 20% of the projected annual demand to finance the target universal access to water supply and sanitation (***Figure 1***).

Figure 1: Comparison of Actual Financing against Needs outside mega-Manila[1]



2. Globally, the story is the same. A substantial increase in sector financing will be necessary to achieve SDG 6. Recent estimates by the World Bank indicate that the present value of the additional investment in WSS alone needed through 2030 will exceed $1.7 trillion. Existing funding falls far short of this amount; countries may have to increase their investment in the water and sanitations sectors up by four times in order to meet the SDGs[2].

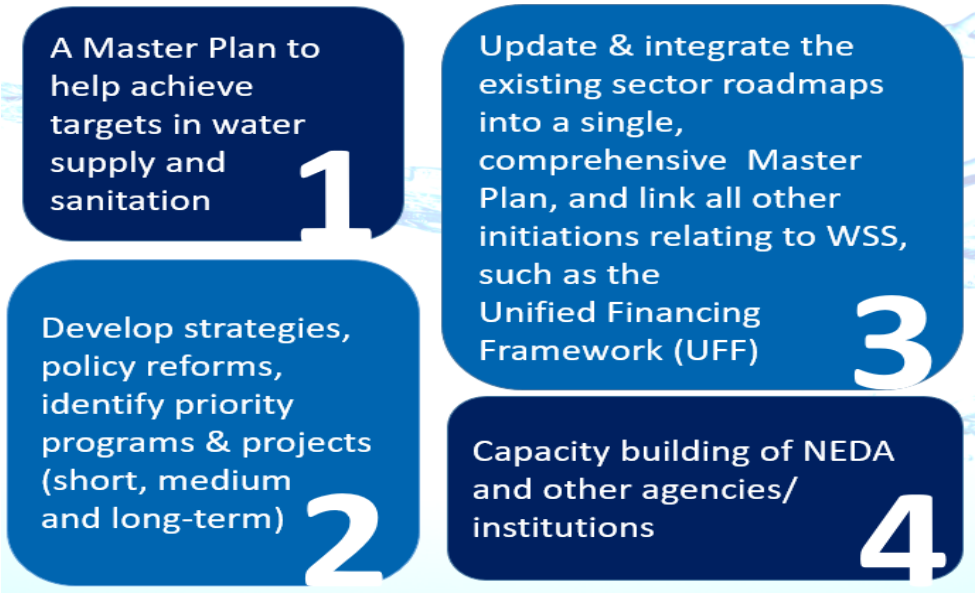
3. A change in approach to financing the water sector is necessary to enable the government to finance the PDP and SDG goals: the Unified Financing Framework (UFF). The UFF promotes promotes substantial grant allocation by the National Government to drive reforms and expansion of service delivery to less well served communities. The UFF

[1] Philippines Water Supply and Sanitation Unified Financing Framework, Castalia 2015. For reference with respect to the chart legend, MDFO is Municipal Development Fund Office; PFIs are private financial institutions; GFIs are government financial institutions; GAs are Government Agencies; *SalingTubig* is *Sagana At Ligtas Na Tubig Sa Lahat*, a partnership program between DILG, NAPC and DOH; PWRF is Philippines Water Revolving Fund; and LWUA is Local Water Utilities Administration.

[2] *Achieving Universal Access to Water and Sanitation by 2030: The Role of Blended Finance*. James Leigland, Sophie Tremolet, and John Ikeda. World Bank. August 2016.

is premised on a three-pronged strategy involving integrated and coherent institutional, regulatory and financing reforms. These reforms are key to implementing the Philippines Water Supply and Sanitation Masterplan (please see ***Figure 2*** for the objectives). The masterplan is an action plan with a corresponding investment and financing program to execute the water supply and sanitation roadmaps, and to achieve targets (PDP and SDGs).

Figure 2[3]. Philippines Water Supply and Sanitation Masterplan



4. The proposed Department of Water is intended to address the main institutional challenge that there are currently multiple agencies with overlapping responsibilities relating to WSS sector but no single institution championing the WSS sector. The proposed Water Regulatory Commission (WRC) is meant to consolidate economic regulatory powers of the various institutions involved (such as LWUA, NWRB, MWSS, economic zones, etc.) in the regulation in this sector within WRC to improve regulation and oversight of the sector. The proposed bills creating the Department of Water and WRC are currently being deliberated in the congress. This note does not discuss economic regulatory reform and tariffs in detail as these were captured in the UFF note and the Regulatory Options paper supported by the Bank.

5. This paper considers how the role of private sector could be promoted effectively in the water sector in the Philippines, as one financing source and/or service delivery mechanism of the Philippines Water Supply and Sanitation Masterplan. Private sector participation can bring a number of benefits to the water sector:
    a. PPPs allow mobilization of additional capital resources – not available on the required scale through publicly financed investments – for the improvement and expansion of water service delivery at a faster pace, and the generation of

[3] Slide Presentation on Roundtable Discussion with the Private Sector regarding the Formulation of Water Supply and Sanitation Masterplan. EDCOP, et. al. April 2018.

sustainable cash flow from operations; or alternatively, PPPs make it feasible for LGUs and other public agencies to pursue a more reliable water service through outsourcing management of water supply operations;

b. PPPs can bring industry technical and financial expertise required to manage water utilities in a sustainable manner; and
c. PPPs should include incentives to improve operational efficiency, so that services match the willingness to pay of LGU residents. The business model allows the expansion of service coverage in a sustainable and equitable manner through partnerships between LGU administrations, the communities and private operators[4].

6. This note incorporates inputs from preliminary consultations with public and private stakeholders and commercial financiers, as well as feedback received during the April 11, 2018 Roundtable Discussion with the Private Sector on "Viable Options to Accelerate Investments and Performance of the Water Supply and Sanitation Sector in the Philippines" organized by the National Economic Development Authority (NEDA), the country's socio-economic planning body responsible for formulating policy on water and sanitation.

7. The Roundtable discussion held on April 11, 2018 was an initiative of the NEDA with support from the World Bank, which considered: a) current trends of private participation in the water sector, b) the possibility to encourage the private sector into parts of the WSS sector which have traditionally been less commercial, such as lower level water schemes and sanitation, c) the liquidity of the commercial finance markets to support these activities, d) challenges or bottlenecks in financing the private sector (including issues relating to the enabling environment), and e) possible solutions or mechanisms by Government for managing these challenges and bottlenecks and to encourage effective investment into the sector.

8. Prior to the April 11 Roundtable discussion, one-on-one consultations were held with public and private sector stakeholders in the WSS sector and commercial finance providers working in the sector, starting in January 2018. Stakeholders confirmed that Joint ventures (JVs) following the NEDA JV guidelines were the emerging preferred option for private sector participation in WSS, as reported by the Global Water Intelligence in its January 2018 article which identified that proposed investments were PhP52.6 billion (or $1.052 billion) for 2016-2017. Stakeholders also confirmed that most of the JVs started out as unsolicited proposals which went in theory through a competitive challenge process, but which rarely yielded any competing bids. On the commercial financing side, private medium sized enterprises working in the sector have difficulty accessing commercial finance due to a combination of limited capacity to develop well prepared feasibility studies, lack of collateral, and government agency requirements for borrowing from commercial banks.

[4] Capacity Building on Public-Private Partnership in Local Water Projects. Vijay Jaganathan and Mariles Navarro. World Bank. June 2014

9. This discussion note focuses on mechanisms to enhance the enabling environment to promote private sector participation in the water supply and sanitation sector, particularly into the less financially viable areas. The following are the recommended mechanisms based on the key themes that emerged at the roundtable discussion:

    a. **Set up project preparation facility for PPP and JVs**. The government (NEDA/PPP Center) could consider **setting up a project preparation facility suitable to the size and needs of the LGU and WD projects** to avoid reliance on unsolicited proposals or, where unsolicited proposals are deemed appropriate, to enable the LGU/WD to review and negotiate the terms of such JV. The proposed UFF strand on technical assistance grant could be used to fund the proposed project preparation facility. LWUA could continue to support NEDA/PPP Center in project preparation (as is the case currently for feasibility studies funded by NEDA), and/or LWUA could also manage the proposed project preparation facility in close coordination with the PPP Center for PPP-and JV transactions.

    b. **Strengthen the NEDA JV Guidelines/PPP Act**. There are on-going deliberations on various congress bills intended to revise the PPP Act. The PPP Center, which implements policy on PPPs, has also recently been given the mandate to oversee JV transactions and is considering expanding its guidance on PPPs to cover JV transactions. There is also a parallel review by NEDA of its JV Guidelines. The enhancements to the NEDA JV guidelines/PPP Act recommended in this note have the objectives of encouraging more players into PPP and JVs by clarifying processes: providing a framework to manage unsolicited proposals more effectively, and promoting transparency and competition.

    c. **Promote Blended Finance**. Blended finance refers to investing public budget funds (loans, guarantees, or grants) alongside private sector capital (including commercial financing). Blending public or donor funds can catalyze commercial investments that would not otherwise happen[5]. The huge funding gap in WSS necessitates creative approaches to facilitate private capital as well as more efficient private sector management approaches to drive down costs. During the roundtable discussion, NEDA referred to the UFF as a key strategy to attain the sector targets. The UFF promotes the use of government grants to drive reforms, improved service delivery and expansion or coverage and comes with the following strands of support: 1) Technical Assistance Grant, 2) Capital Grant (Viability Gap Fund, Output-Based Aid), and 3) Credit Enhancement. These are discussed in detail later in this note.

10. To improve access to commercial finance to WSPs, the other recommendation during the roundtable discussion was making it simpler for public agencies to borrow from several sources. This can be done by rationalizing and streamlining the requirements for: 1) LGU borrowing from private financial institutions (Department of Finance – Bureau of

[5] Introducing Commercial Finance into the Water Sector in Developing Countries. Kevin Bender. World Bank. February 2017.

Local Government Finance certification of debt service ceiling[6], *Bangko Sentral ng Pilipinas* Monetary Board Opinion[7], Commission on Audit findings on the utilization of guarantee[8]), and 2) water districts being permitted to borrow from financing sources other than LWUA (LWUA waiver for obtaining credit from other lenders).

11. The gaps and bottlenecks identified above were confirmed and the proposed mechanisms for managing them (summarized in Table 1 below) were well received by the participants of the roundtable discussion. There was confirmation on the need for viability gap fund to incentivize operators (including Private) to go into less financially viable areas such as sanitation, or water supply in hard to reach areas, or graduating community-based water service providers. At the end of the discussion, the participants (water districts, financial institutions and private proponents) requested the National Government to immediately implement the principles of UFF including the development of an enabling environment: 1) on commercial finance: rationalize the requirements and reduce the turn-around time to secure approvals from various government agencies for LGUs and WDs to be able to access commercial finance; 2) access to resources to prepare and review projects, and 3) competitive selection process for PPPs and JVs.

[6] LGUs are required to obtain the certification to ensure that the proposed borrowing is within the prescribed limit under the Local Government Code.

[7] Monetary Board opinion is issued so that LGUs are advised on the probable effects of their loans and other borrowings on prices, monetary aggregates and the balance of payments.

[8] Commission on Audit have issued Audit Memorandum and Notice of Disallowances to three LGUs stating that the guarantee fee to LGUGC is an unnecessary expense, and therefore, irregular.

Table 1. Summary of Key Bottlenecks and Potential Solutions

Bottleneck	Current/Past Initiative	Possible Mechanism*
1. Limited capacity of LGUs/WDs to: a) prepare feasibility studies, b) evaluate unsolicited proposals, c) proceed with procurement, and d) monitor contracts	• Current project preparation facilities and pool of transaction advisors are designed to support large projects • There are numerous facilities that LGUs/WDs can access for help (mostly in project development only not covering procurement, implementation and monitoring) but there is a need to consolidate them into a mechanism of complementation to ensure that the entire project cycle components are adequately covered	• Establish project preparation facility suitable to the size of LGU and WD projects including transaction advisory service (evaluate and build on existing programs) • Develop a pool of consultants for feasibility study and transaction advisory (consider NWRB accredited technical service providers or ATSPs and regional hubs) who can meet the typical size of LGU and WD projects and disseminate the information including in the websites of PPP Center, NWRB, DILG, LWUA
2. Lack of access to information: a) Mechanism for reporting of JVs and other projects to NRWB, LWUA and other pertinent agencies b) Mechanism for monitoring performance of projects (contract management)	• Various bills to revise PPP act currently being deliberated in Congress; NEDA is also revisiting the JV Guidelines	• Strengthen the NEDA JV Guidelines/PPP Act to encourage more PPP and JV players by clarifying processes: providing a framework to manage unsolicited proposals more effectively, promoting transparency and competition • Require reporting of performance similar to key performance indicators (KPIs) reported in *Listahang Tubig* (Philippines' national database on water utilities) and make them accessible to public
3. Inadequate access to finance particularly by medium sized private providers presented with opportunities to expand but lack adequate financing; often required to	• LGUs/WDs are subject to government agency requirements which often take time to secure • There were reported cases of guarantee fees being considered "irregular" by the Commission on Audit which discouraged LGU from borrowing from private financial institutions	• Improve the enabling environment for commercial finance by: leveling the playing field between government and private financial institutions, and revisiting the government requirements for making it easier for LGU/WD to access commercial finance • Promote blended finance particularly in areas where private sector has not been actively participating such as sanitation, lower level water utilities; leverage

pledge personal assets	• **Philippine Water Revolving Fund (PWRF) which funded PhP6.2 billion[9] ($120 million) in commercial finance is no longer available** • **LGUGC guarantee which facilitated PhP11.874 billion ($228 million) commercial finance by LGUs, utilities and private enterprises is no longer available** • **PhilEXIM is willing to support WSS projects but has limited resources to extend guarantee because current resources are already earmarked for current business**	**locally-generated funds (e.g., LGU real property tax, environment fees) with:** o **Grants (viability gap fund and output-based aid)** o **Credit Enhancements (guarantee and financing facility similar PWRF where ODA is matched with commercial loan to extend tenor and lower interest rate; government lenders taking more risks to crowd in private financial institutions in blended financing products)**

**Allocate necessary resources to implementing agencies to efficiently administer proposed mechanisms*

12. All these inputs gathered during the consultation were noted by the NEDA consultants who are preparing the Philippine Water Supply and Sanitation Masterplan. The masterplan is due to be completed in August 2018 and presented for approval thereafter. Implementation is expected to start in early 2019. This Note will also be shared with NEDA and PPP Center officials who are currently coordinating to amend the NEDA JV Guidelines and the guidelines on the PPP Act.

[9] Unified Financing Framework for Water Supply and Sanitation. World Bank. May 2015.

I. CONTEXT[10]

13. Access to improved water sources has increased significantly in recent years to 83.3% (2016 Philippine Statistics Authority data[11]) of the Filipino population but service quality remains unreliable and poor, and only 50%[12] have household connections. Access to basic sanitation, on the other hand, is estimated at 92%. The World Bank estimated that the economic cost to the country of doing nothing to improve the situation would be approximately PhP77 billion ($1.48 billion) annually due to poor sanitation (2008)[13].

14. Since estimated annual investment needs currently exceed available funding by approximately five-fold, reaching national targets will require a step-change in sector development, hinging on policy and sector reforms that make better use of public funds and policies to attract new sources of finance and drive improvements in service and coverage. The ramifications of inaction on public health, economic growth, and quality of life for the people of the Philippines can seriously hinder the country's development.

15. The proposed Unified Financing Framework (UFF) promotes substantial grant allocation by the National Government that is intended to leverage private sector finance to accelerate water supply and sanitation service coverage nationwide. This strategy is aligned with the recent global initiative on maximizing finance for development (MFD), which encourages governments to prioritize the use of commercial financing, where appropriate, as an important source of funding for the extensive investments needed to achieve the sustainable development goals (SDGs). Given the size of the financing gap (estimated by the World Bank study[14] as PhP16.9 billion or $325 million p.a. demand vs. PhP3.4 billion or $68 million p.a. supply, excluding Metro Manila which is primarily funded by private sector concessionaires) to achieve universal access to water and sanitation, private sector finance and participation will be important options considering the resources and capacity that need to be tapped.

16. The Roundtable discussion held on April 11, 2018 was an initiative of the National Economic Development Authority or NEDA (the country's socio-economic planning body responsible for formulating policy on water and sanitation) with support from the World Bank, which considered current trends of private participation in the water sector, the possibility to encourage the private sector into parts of the WSS sector which have traditionally been less commercial, such as lower level water schemes and sanitation, the liquidity of the commercial finance markets to support these activities, any current challenges or bottlenecks in financing the private sector (including issues relating to the enabling environment), and possible solutions or mechanisms by Government for

[10] Unified Financing Framework for Water Supply and Sanitation. World Bank. May 2015.
[11] Philippine Statistics Authority, 2016 Annual Poverty Indicator Survey
[12] Water is supplied from either a) a fully reticulated system with individual house connections from a recognized water utility (Level 3 or piped system); b) communal faucet system or stand post usually serving 4-6 households within 25 meters distance from their residences (Level 2 system); and c) stand-alone, often untreated water points with an outlet but without a distribution system (e.g., hand pumps, shallow wells, rainwater collectors, serving an average of 15 households with people having to fetch water from up to 250 meters distance (Level 1 system). Water supply in areas unserved by formal utilities is provided by refilling stations, trucks and handcarts operated by small-scale independent providers.
[13] Data from Discussion Note used during the World Bank-IFC High Level Water Roundtable on January 26, 2016.
[14] Unified Financing Framework for Water Supply and Sanitation. World Bank. May 2015.

managing these challenges and bottlenecks and to encourage effective investment into the sector.

17. The discussion note builds on the 2nd and 4th recommendations developed during the World Bank-IFC High Level Water Roundtable[15] on January 26, 2016 which are still applicable and relevant for sector policy discussions.

    a. Build a coherent national water strategy supported by a Department for Water to achieve an integrated approach to water management and supply and, where appropriate, promote consolidation to create economies of scale.
    b. Establish a national-level comprehensive, consistent, and transparent approach to regulation, based on performance standards and underpinned by quality data.
    c. Advance a payment-for-service culture and provide necessary support for balancing cost recovery, affordability, and service.
    d. Develop a funding and financing strategy aimed at better leveraging public funds, targeted output-driven subsidies, and specific support mechanisms (such as a guarantee fund) to help mobilize private resources into the sector.

A. **Sector Institutions**

18. The institutional set-up for water supply and sanitation is fragmented and the supporting agencies are weak. Multiple government agencies are supporting the sector with unclear and overlapping mandates. This fragmentation and overlap has hampered sector development. There are over 4,700[16] water service providers (WSPs) with varying capacity and needs which can be categorized as[17]:

    a. *Water Districts (WDs),* which are utilities formed in accordance with Presidential Decree 198 and are considered government-owned and controlled corporations. There are about 514 functioning WDs serving around 19.4 million people. Larger WDs generally have good quality service and are reasonably efficient. There are, however, many small WDs that have less than 3,000 connections (December 2013). As noted below, a trend has been developing over the past few years for some larger WDs enter into joint ventures (JVs) with private sector partners;

    b. *LGU-owned providers,* which are typically departments of a local government. These make up the largest number of WSPs providing Level 2 (communal faucet system or stand post usually serving 4-6 households) and Level 3 (a fully reticulated system with individual house connections) services. There are about 1,400 such LGU-run WSPs, most of which are small and do not have the status of a separate legal entity or have separate accounts;

[15] The day-long event brought together senior decision-makers from government (central, regional, and local), private sector (operators and financiers), and multilateral institutions to address Philippines water and wastewater sector issues, including regulatory, administrative, and institutional barriers, opportunities to attract private finance, strategies for dealing with affordability constraints in water PPPs at the local level, and approaches to building a sustainable ecosystem for the sector.
[16] Management of Survey of Water Utilities in the Development of Listahang Tubig (Water Register). Final Report. World Bank. November 2015.
[17] Unified Financing Framework for Water Supply and Sanitation. World Bank. May 2015.

c. *Two large private concessionaries in Metro Manila* that have been successful in improving and expanding water and sanitation services for the city. These concessionaires are Manila Water Company, Inc. (MWCI) and Maynilad Water Services, Inc. (MWSI), each serving more than six million people;

d. About 700 *privately-run water systems*, serving a total of around 2.3 million citizens; and

e. *Community providers*. There are over 2,000 small community utilities organized in various forms, including Community-Based Organizations (CBOs), Rural Water Supply Associations (RWSAs), Barangay Water Supply Associations (BWSAs), and co-operatives.

19. There is currently no one ministry responsible for water supply and sanitation to which the service providers are accountable. To address the sector fragmentation and institutional issues, the government (under the leadership of NEDA) is proposing legislation to establish an apex body called the Department of Water. This proposal is currently being deliberated in Congress, but there is no clear indication of when or if this legislation will pass. In the meantime, NEDA is preparing the Philippines Water Supply and Sanitation Masterplan which will define sector targets for access and service provision and provide a financing program that would incentivize WSPs to accelerate increase in service coverage.

20. Other key institutions in the sector being consulted by NEDA for the development of the Philippine Water Supply and Sanitation Masterplan include:

a. ***Local Water Utilities Administration (LWUA)*** – is the main lending and financial support institution supporting water districts (government owned utilities outside Metro Manila).

b. ***Metropolitan Waterworks and Sewerage System (MWSS)*** – is the agency charged with providing water supply and sanitation in the whole Metro Manila area and parts of Cavite and Rizal provinces.

c. ***Department of Public Works and Highways (DPWH)*** – has administrative supervision authority over LWUA and MWSS. DPWH spearheads a grant program for sanitation called National Sewerage and Septage Management Program[18] (NSSMP) for service providers to establish sanitation services outside Metro Manila.

d. ***Department of the Interior and Local Government (DILG)*** – provides capacity building support to LGUs and has a grant program for waterless municipalities called *SalingTubig* is *Sagana At Ligtas Na Tubig Sa Lahat (SALINTUBIG).*

e. ***National Water Resources Board (NWRB)*** – is the main agency responsible for management and regulation of water resources and economic regulation of private water service providers.

[18] Grant of up to 50% for sewerage and septage projects of highly urbanized cities and first class LGUs

f. ***Department of Environment and Natural Resources (DENR)*** – is the main agency responsible for the implementation and enforcement of the 2004 Clean Water Act.

g. ***Department of Health (DOH)*** – is responsible for setting national water drinking standards and sanitation policy.

21. Financial Institutions actively engaged in supporting the water supply and sanitation projects are:
    a. ***Government Financial Institutions*** – Both the ***Development Bank of the Philippines (DBP)*** and ***Landbank of the Philippines (LBP)*** have provided commercial finance as well as concessional loans from international development financial institutions to LGUs, WDs and private sector providers.

    b. ***Municipal Development Fund Office (MDFO)*** - is an agency under the Department of Finance providing concessional loans to LGUs, which they may use for water and sanitation projects including preparation of feasibility studies, detailed engineering designs and other technical assistance needs of LGUs.

    c. ***LGU Guarantee Corporation (LGUGC)*** - LGUGC is a private guarantee corporation (majority owned by the Bankers Association of the Philippines) that provided up to 85% credit guarantee to water districts and up to 100% for LGU bond flotation. LGUGC also offered prompt payment guarantees in respect of bulk water supply agreements entered into by water districts and LGUs with private proponents.

B. **Economic Regulation**

22. Some of the agencies involved in economic regulation of the sector, particularly tariff approval and oversight, are summarized in the table below[19]. Regulation of the sector is piecemeal, with no regulation of public providers other than WDs and limited regulation of private providers other than by contract under the large concessions of Metro Manila and the special economic zones (SEZs). Regulating service providers in the Philippines poses practical challenges, given the number of islands and service providers, and effective regulation would require significant resources deployed at the local level.

Table 2: Agencies performing a regulatory function in the Water Sector

Provider regulated	Public or Private	Sets Coverage Targets	Service Standards	Tariffs	Comment
Water Districts	**Public provider**	**LWUA[20]**			**Focus of LWUA on financial sustainability rather than service levels**

[19] Options Paper for Water Sector Regulation in the Philippines. Victoria Delmon and Alexey Morozov. World Bank. April 2014.

[20] LWUA is a de-facto regulator (per Executive Order 860 signed in 2010)

				Regulation not achieving target coverage levels **Coverage and service not closely monitored**
LGUs	**Public provider**	**LGU can request tariff review by NWRB, but this is voluntary**		**In practice there is little review or oversight – tariff levels low and coverage limited. Little data gathered**
Private Systems	**Private provider**	**NWRB is regulator, but little focus on setting and enforcing coverage and service standards**	**NWRB periodic review**	**NWRB has limited resources to assist at local level**
Metro Manila and SEZs	**Private provider**	**MWSS Regulatory Office (and SEZ asset holders)** **Targets, service standards and tariff methodology in concession agreements** **Significant level of oversight**		**Economies of scale** **Commercial tariff (other than regarding sewerage)** **Achieve extensive oversight**

23. NEDA is also currently leading on the regulatory reform of the sector. The proposed Water Regulatory Commission (WRC) to be established by legislation (currently under deliberation in Congress) has the objective of ensuring that national targets and policies for service delivery and access as set by NEDA are met. WRC would also be responsible for regulation of LGU-run utilities and of sanitation provision. The economic regulatory powers and functions of the various institutions currently regulating the sector (such as LWUA, NWRB, MWSS, economic zones, etc.) are proposed to be consolidated within WRC.

C. **PPP Framework**

24. **Build-Operate-Transfer (BOT) Law**. Under the 1987 Philippine Constitution, it is stated that "The State recognizes the indispensable role of the private sector, and provides incentives to needed investments." To provide the legal framework for PPP, specifically on Build-Operate-Transfer (BOT) arrangements, the BOT Law (Republic Act No. 6957) was enacted in 1990. Amendments to the BOT Law were introduced in 1994 through Republic Act No. 7718, to broaden the types of PPP schemes available and introduce provisions governing unsolicited proposals, direct negotiations and special incentives for certain registered projects[21]. Whilst there is now clarity in the process, the BOT Law has been little used in the water sector other than few known cases such as the MWSS concession, Cagayan de Oro and Bulacan Bulk Water projects Under the BOT Law, competitive bidding is the default mechanism for procurement of PPPs.

25. **Joint Venture (JV) Guidelines.** The modality which currently seems most popular with water districts is the use of JVs following the 2013 Revised NEDA JV guidelines, issued pursuant to Section 8 (Joint Venture Agreements) of Executive Order No. 423 dated 30 April 2005, which mandates NEDA, in consultation with the Government Procurement Policy Board (GPPB), to issue guidelines in respect of JVs. A copy of the guidelines can be found at http://www.neda.gov.ph/wp-content/uploads/2014/03/2013-Revised-JV-Guidelines.pdf.

26. A joint venture (JV) is defined under the Guidelines as "*an arrangement whereby a private sector entity or a group of private sector entities on one hand, and a Government Entity or a group of Government Entities on the other hand, contribute money/capital, services, assets (including equipment, land, intellectual property or anything of value), or a combination of any or all of the foregoing to undertake an investment activity. The investment activity shall be for the purpose of accomplishing a specific goal with the end view of facilitating private sector initiative in a particular industry or sector, and eventually transfer the activity to either the private sector under competitive market conditions or to the government. The JV involves a community or pooling of interests in the performance of the investment activity, and each party shall have the right to direct and govern the policies in connection therewith with the intention to share both profits and, risks and losses subject to agreement by the parties. A JV may be a Contractual JV or a Corporate JV (JV Company)*."

27. A JV under the guidelines is similar to a PPP, therefore, in that the private and public sectors come together in a long-term relationship combine resources for an activity. A JV structure, if well-structured and balanced, can be a useful mechanism in the water sector to mobilize capital and share risks. The World Bank team did not have an opportunity to review a sample JV arrangement to determine whether there is a balanced risk allocation between the parties. As the JV mechanism has only been used by water utilities in the Philippines in the past few years, and there is little information available on the performance of these JVs, it is not possible to comment on the success or otherwise of this approach in the Philippines. ***Box 1*** describes the mixed ownership

[21] The Public-Private Partnership Law Review. Chapter 12 Philippines. Marievic Ramos-Añonuevo and Arlene Maneja. April 2015.

company model that is used extensively in Spain, France and Latin America. It is important, however, that the joint venture arrangement set out the respective responsibilities of the parties and create protections on the use and sale of assets, as well as provide for how to build a sustainable revenue base and business model. Vietnam is currently undergoing a process of introducing private sector investment into the shareholdings of urban provincial water supply companies but the process has been slowed by low tariffs and lack of clarity in protections and responsibilities[22].

[22] WSP. 2014. Vietnam: Review of Urban Water and Wastewater Utility Reform and Regulation. June. WSP, World Bank.

Box 1. Mixed Ownership Company Model

Joint Ownership Company (Empresa Mixta)

The joint ownership company has proved successful in countries that have had wanted to implement a series of improvements in water supply companies over time. In many jurisdictions where they have been extensively used, including in Latin America, France and Spain, there is a specific legislative framework that eases the transition into an empresa mixta and governs the framework.

Features

- Utility transformed/corporatized into a company.
- Strategic investor invests capital into company in exchange for shares.
- Employee share ownership program put in place.
- Staff, assets, and liabilities transferred into company.
- Government retains majority stake but day to day operating control is typically passed to private sector under a management or operations contract (as with empresa mixta in Spain) – so operating autonomy is with operator.
- Operator nominates general manager.
- Operator is often responsible for financing new investments.
- Government appoints some of the board members and has a right to dividends (to the extent that there are distributable profits).
- Shareholder agreement governs appointment of directors, dividend policy, and shareholder rights (e.g., minority given enhanced voting rights or rights of veto over certain issues).
- Empresa mixta is long term – typically from 10 to 50 years.

This approach could be appropriate where there is already a robust financial position so that the value of each party's contributions can be established to allocate shares, and where the contracting authority is happy to divest shares in the utility that is, among other things, holding water assets, to the private sector.

Advantages and Disadvantages

GOVERNMENT HAS STAKE IN UTILITY	GOVERNMENT BEARS RISK OF PERFORMANCE WHILE NOT NECESSARILY BEING IN CONTROL	REPUTATIONAL RISK KEEPS BOTH PARTIES ACCOUNTABLE
Greater transparency as has board representation and right to accounts	In practice operator runs day to day activities and so government has to remain vigilant	Need to ensure that board representation is strong and that reporting is strong
Shared allocation of risks	Need to be very clear about roles and responsibilities of each party	Need clear reporting rules and performance requirements
Government gets benefit – lease fee, dividends	Dividends are only payable if there is a net profit – so would need to cover operating costs at least with tariff	Need to ensure that revenues are sufficient to cover various costs and fees
Staff remain within utility	Staff transfers need to be put in place	Need strong negotiation teams on both sides – may need mediation

28. The guidelines set out very briefly the requirements and conditions for JV proposals, including "*The JV proposal clearly describes the proposed investment, including its total cost, activities, objectives, sources of funding, extent and nature of the proposed participation of the Government Entity concerned, and the relevant terms and conditions*" and "*The JV proposal establishes all the components in determining the over-all feasibility of the JV proposal which include, among others, the technical, financial, economic, and legal aspects*". There is further detail given on these requirements and what the contract should cover in Annex A of the guidelines but it is not at the level of detail of the PPP guidelines, for instance. There have been no standard JV documents developed to guide LGUs and WDs.

29. The guidelines allow for competitive selection or negotiated JVs. A negotiated JV is developed from an unsolicited proposal with a project proponent. In accordance with the guidelines, third parties are invited to submit a competitive challenge which are "*proposals to a negotiated JV either initiated by a private sector proponent or, by the government in case it has failed to identify an eligible private sector partner for a desired activity after subjecting the same to a competitive selection as provided under Section VIII.9 of Annex "A" hereof. Accordingly, the private sector entity that submitted the negotiated proposal is accorded the right to outbid, through a superior financial bid, any comparative financial offers given by comparative private sector participants who have met the eligibility requirements and have passed the technical qualification process*".

30. If a project is to be selected through an unsolicited proposal then there is a process to be followed to allow for some competitive tension to be introduced into the pricing.

31. **Other PPP Legal Frameworks.** Other modalities of delegation of services by the contracting authorities of WDs, LGUs and other public agencies are provided in the Local Government Code, the National Water Crisis Act, the Tourism Act, and the Government Procurement Reform Act (GPRA).

32. **PPP Center.** The PPP Center is an agency under the National Economic and Development Authority which is mandated to facilitate the implementation of the country's PPP Program and Projects by virtue of the Executive Order no. 8 series of 2010, as amended by Executive Order no. 136 series of 2013. Initially, it only coordinated and monitored projects under the BOT Law but in 2018, the PPP Governing Board (the overall policy making body for all PPP-related matters to which PPP Center reports to) issued a resolution formalizing PPP Center's role in respect of Joint Ventures[23] (the option utilized by most water districts recently). This is a new role for the PPP Center which has yet to issue guidelines on development and procurement of JVs.

33. The PPP Center is the main driver of the PPP Program. It serves as the central coordinating and monitoring agency for all PPP projects in the Philippines. It champions the country's PPP Program by enabling implementing agencies in all aspects of project preparation, managing of the Project Development and Monitoring

[23] Communication with PPP Center

Facility (PDMF), providing projects advisory and facilitation services, monitoring and empowering agencies through various capacity building activities. The PPP Center provides technical assistance to national government agencies (NGAs), government-owned-and controlled corporations (GOCCs), government financial institutions (GFIs), state universities and colleges (SUCs), and local government units (LGUs) as well as to the private sector to help develop and implement critical infrastructure and other development projects[24].

34. **Approval Bodies under the BOT Law**. PPP projects under the BOT Law are subject to the approval of the following authorities:
    a. NEDA's Investment Coordinating Committee (ICC) – for national projects costing up to PhP 300 million
    b. NEDA Board – upon the recommendation of the ICC, for national projects costing more than PhP 300 million and negotiated projects (regardless of amount)
    c. Local legislative body – for local projects

35. Under the PPP guidelines issued by the PPP Center, contracting authorities wanting to enter into a PPP are required to develop, amongst other things, a feasibility study for the project that will demonstrate value for money, financial viability and affordability of the project. The PPP Center has issued guidelines and standard bidding documents (general and for some sectors).

36. The proposed PPP contract is required to be reviewed by the Office of the Government Corporate Counsel, Office of the Solicitor General or any other entity prescribed by law as the statutory counsel of the procuring entity prior to signature. The head of the WD or LGU as the contracting authority concerned will then approve the reviewed PPP contract. The Department of Finance must also review the contract or projects of national government agencies, local projects involving funds of the national government and local projects requiring ICC approval[25].

37. **Approval Bodies for NEDA JV Guidelines.** Proposed JVs under the NEDA JV Guidelines are subject to the approval of the following authorities:
    a. NEDA's Investment Coordinating Committee or ICC – where government contribution is PhP 150 million or more for: i) infrastructure or development (defined Sec 5.9 of NEDA JV Guidelines), ii) public utilities, iii) negotiated JVs, and iv) not primary mandate of the public entity
    b. Head of Government Entity – for projects that are: 1) primary mandate of the public entity and non-infrastructure projects; and ii) not subject to NEDA ICC approval.

38. The Department of Finance and/or Department of Budget and Management shall clear/approve the JV activity that will require national government undertakings, subsidies or guarantees. For the creation of a JV company, the approval of the President of the Philippines shall be secured upon review and recommendation of the

[24] https://ppp.gov.ph

[25] The Public-Private Partnership Law Review. Chapter 12 Philippines. Marievic Ramos-Añonuevo and Arlene Maneja. April 2015.

Governance Commission for Government-Owned and/or Controlled Corporations (GCG).

39. As noted above, whilst the JV Guidelines require certain approvals, there is limited guidance on the content of feasibility studies or on risk allocation between the private partner and the contracting authority.

40. **Monitoring**. There has been no single agency monitoring all the PPP and JV arrangements in the country. The PPP Center monitors PPP contracts under BOT Law while under the NEDA JV Guidelines, the government implementing agency needs to submit an annual report on the status of JV implementation to each of DOF and GCG. Each government implementing agency is also required to submit the salient features and copy of the JV agreement to NEDA, DOF and GCG along with other documents required for monitoring compliance with relevant policies, procedures and conditions for approval of the JV undertaking. It is not clear that any of these agencies have resources or capacity to monitor these arrangements. The LGU PPPs and JVs contracted under the Local Government Code are monitored by the LGUs themselves. Hence, there is no single repository of information on PPPs. Going forward, it is expected that the PPP Center will play a more active role by virtue of the recent PPP Governing Board resolution formalizing the role of PPP Center in respect of JVs.

II. CONSULTATIONS AND FINDINGS

41. One-on-one consultations were held beginning January 2018 with eight private sector proponents, three public water utilities, six financial institutions, four key national government agencies in the sector, two development partners and one water utility association. Consultations were conducted to inform the WB team's presentation during the April 11, 2018 roundtable discussion which covered:

    a. the trends in private sector participation (PSP) in WSS; what it would take to encourage the private sector to participate and invest in less commercially viable schemes such as lower performing water utilities, Level 1[26] and 2[27] Water Supply Systems as well as Sanitation Projects (i.e., treatment, collection and septage and sewerage management systems);

    b. the availability and liquidity of commercial finance markets to private parties and to contracting authorities wishing to enter into PPPs and JVs, and discuss the bottlenecks for financing; and

    c. the possible mechanisms by which the Government can ease these bottlenecks and accelerate effective investment into the WSS sector.

42. The roundtable discussion was attended by 76 representatives from the national government agencies, private service providers, lenders, guarantor, water districts (WD), association of WDs, development partners (ADB, JICA), non-governmental organizations (Water.Org, Philippine Water Partnership), etc. Below are the key findings during the discussion.

A. Private Sector Participation in the WSS Sector

i. Recent trends in the Private Sector Participation in the Philippines

43. According to Global Water Intelligence (GWI)[28], there were P52.6 B (or $1.052B) worth of PPP capital investments for 2016-2017 (please see Table 3 for details). These are mostly joint ventures (JVs) following the NEDA JV guidelines. Apart from this table, two other concessions plus five bulk water supply contracts were identified during WB interviews with private proponents using the Government Procurement Reform Act. In April 2016, the $469 million/PhP 24 billion Bulacan Bulk Water Supply Project was contracted using the BOT Law. These PPP transactions are clearly providing significant investments as well as more efficient private sector management approaches and efficiencies, which need to be continuously harnessed in the implementation of the Masterplan.

[26] stand-alone, often untreated water points with an outlet but without a distribution system (e.g., hand pumps, shallow wells, rainwater collectors, serving an average of 15 households with people having to fetch water from up to 250 meters distance)

[27] communal faucet system or stand post usually serving 4-6 households within 25 meters distance from their residences

[28] Global Water Intelligence Magazine, January 2018

Table 3 – JV Contracts in 2016-2017 as reported by Global Water Intelligence

Name	Scope	Cost (in billion PHP)	Cost (in million USD)
2016			
Iloilo	**Concession**	**12.3**	**246**
Leyte	**Concession**	**3.8**	**76**
Batangas	**Concession**	**5.6**	**112**
Cagayan de Oro	**BOT**	**2.8**	**56**
Ilagan	**BOT**	**-**	**-**
Guagua	**Concession**	**-**	**-**
Ilocos Norte	**Concession**	**3.4**	**68**
Marilao	**Concession**	**1.4**	**28**
Obando	**Concession**	**-**	**-**
2017			
Iloilo	**BOT**	**2.8**	**56**
San Fernando	**Concession**	**2.9**	**58**
Camarines Norte	**Concession**	**4.4**	**88**
Agoncillo	**Concession**	**3.3**	**66**
San Pedro	**Concession**	**3.1**	**62**
Floridablanca	**Concession**	**1.9**	**38**
Sorsogon	**Concession**	**1.9**	**38**
Laguna	**Concession**	**1.4**	**28**
Nueva Ecija	**Concession**	**1.1**	**22**
Calasiao	**Concession**	**0.5**	**10**
Total		**52.6B**	**1.1B**

44. A number of strategies identified by GWI by which private investments flow into the water and sanitation sector include:
    a. Joint ventures (JVs) with a water district governed by the NEDA JV Guidelines
    b. Projects under the national Build-Operate-Transfer (BOT) Law
    c. Bulk water facilities where the private sector secures water abstraction rights, invests directly in a water treatment plant and sells to distribution organizations (such as water districts and LGUs) using the Government Procurement Reform Act
    d. Local government PPPs: BOT or concession projects granted directly by local governments through their own local PPP 'codes' (which water districts cannot use) as authorized under Local Government Law 1991

45. From the consultations, it was understood that most of the contracts identified started out as unsolicited proposals and unincorporated JVs (or contractual JVs, under the definition of the JV Guidelines). Whilst the Guidelines provide that such unsolicited proposals, once negotiated, should be subject to competitive challenge, it is understood that few if any competitive challenge processes yielded any competitors. This is consistent with recent findings on unsolicited proposals of a PPIAF funded study[29].

[29] Policy Guidelines for Managing Unsolicited Proposals in Infrastructure Projects, World Bank Group, 2017

46. In the pipeline according to PPP Center, there are about 6 LGU/WD projects including unsolicited proposals. There are also currently 18 planned projects in the pipeline for water supply agreement (from just one private service provider). In each case, the districts seeking to grant these projects approached Local Water Utilities Administration (LWUA) for technical and financial support. In some cases, given that it has resource constraints, instead of providing support LWUA has referred the water districts to a technology provider with a good track record with whom the water districts could enter into supply agreements. However, this private service provider has indicated that it does not have sufficient funds to simultaneously meet all the requests for bulk water supply.

ii. Limited support and resources available to contracting authorities wishing to enter into PPPs or JVs

47. Generally, no support is extended to small scale JV transactions entered into by local government units. A few water districts reported receiving support in the form of grant from a donor supported scheme.

48. When approached, the PPP Center extends support to public agencies for PPPs (and presumably it would do so in respect of JVs in the context of its expanded mandate). The Bulacan bulk water supply project and the Municipality of Baggao new water supply system were assisted by the PPP Center. PPP Center is also extending support to LGUs which receive unsolicited proposals but it only has limited capacity and resources to evaluate the proposals, such as the bulk water supply in the Province of Pampanga.

49. While there are various on-going programs for project development (not necessarily for PPPs or JVs) from NEDA, LWUA, DILG, PPP Center, etc., the challenge is to consolidate them and complement each other towards actual projects being developed and moved to next stages of review and approvals[30]. Moreover, the is also no clear monitoring by an independent agency on progress of the concluded transactions, particularly for the projects falling under the NEDA Joint Venture Guidelines. There is a need to clarify the monitoring functions at the review, procurement and implementation stages.

50. Given the trend towards using JVs for these projects, it is clearly a priority to strengthen the framework for preparation and implementation of JVs and to provide capacity and resources for good preparation of projects.

iii. Private Sector Financing in respect of PPPs and JVs

51. Most of the PPP and JV transactions are largely funded by the private sector. The amounts vary and the purpose is either to finance bulk treatment and supply infrastructure under bulk water supply agreements or for all aspects of a water supply network under a concession. Typical equity offered by public agencies in these

[30] Communications with PPP Center

projects includes land and permits (and in the case of concessions, the existing networks), with limited public finance offered. Private finance will therefore need to cover both capital expenditure and operation and maintenance over a long period of time.

B. Gaps in Liquidity

52. In the Philippines, there are 40 commercial and universal banks holding around 90% of the total market share of banking industry. The rest are categorized as rural and cooperative banks (495), and thrift banks (57)[31]. Less than ten of these commercial and universal banks are interested in lending to LGUs and WDs primarily due to lack of familiarity with water service providers. Private banks are not authorized to take deposits from LGUs and Water Districts hence less opportunity to build banking relationships. Private banks also face barriers in managing credit risk because they are not authorized to take deposits from these providers. Loan tenors are up to 15 years and interest rates can be variable or fixed ranging from 5%-7.5% p.a. Interest rates are steadily rising since Q4-2016 due to inflation with Philippines' 10 Year Treasury Bond Mid Yield now at 5.5% as of Q2-2018 (Haver Analytics[32]).

53. For public utilities, projects were historically funded mostly through grants (to LGUs for their water utilities) and LWUA loans for water districts until 2004 when the government encouraged creditworthy utilities to access commercial finance under Executive Order 279. Many creditworthy water districts were able to access commercial finance for new projects and even to refinance LWUA loans, initially with the support of partial credit guarantees and later on, even without guarantees for the larger water districts. Total loans from commercial banks for water utilities' capital investments outside Metro Manila amounted to PhP6.6 billion[33] ($127 million) as of 2012.

54. Small public utilities and those with poor governance as demonstrated in technical and financial indicators are the ones deemed not creditworthy and therefore cannot access commercial finance.

55. For private service providers, many of them use 100% internally generated cash from their balance sheets for small-scale projects. Other larger projects maintain a 70:30 debt to equity ratio for project vehicle using local commercial bank loans. Recent WB interviews indicated that big companies do not have problems accessing commercial finance for water supply projects. Usually the term loans are extended at market rates (averaging 5-7.5% p.a.) with tenors based on project cash flow (up to 12-15 years).

56. However, **small and medium enterprises (SMEs) have limited access to financing**. Apart from the usual real estate and chattel mortgages, joint and several signatures

[31] https://creditbpo.com/content/overview-philippines-banking-industry

[32] http://www.haver.com

[33] Philippines Water Supply and Sanitation Unified Financing Framework. Castalia. 2015.

(JSS) are required for SMEs (requiring the entrepreneurs behind such SMEs to put their own personal collateral at risk). A number of fledgling SMEs benefitted from the LGUGC partial credit guarantee scheme[34] to enter into water PPPs. These SMEs either had credit lines extended to them that were renewable every year, or term loans averaging PhP100 million or $1.9 million, with maximum term of up to 10 years, from private commercial banks. But this **guarantee facility is no longer available**. LGUGC has recently stopped issuing guarantees. However, there is recognition that demand remains from SMEs for financing support which may not be able to be satisfied going forward due to absence of an active guarantee facility.

57. PhilEXIM[35] has guaranteed a 15-year loan of a private water utility provided by a government commercial bank in 2011 and is open to supporting water supply and sanitation as this falls under Environment which is considered a priority area of the government. However, **PhilEXIM has limited resources to extend guarantee** because current resources are already earmarked for current business and guarantee calls (Only about PhP5 billion ($96 million) out of its PhP10 billion ($192 million) authorized capital were paid in). Likewise, the **collateral will still be a concern for SMEs because PhilEXIM is subject to the rules** of the *Bangko Sentral ng Pilipinas* (Central Bank of the Philippines) and Commission on Audit which consider low collateral coverage as a weakness for a guarantee institution. Unless the regulations are liberalized, there is no anticipated change in the level of lending to SMEs in the water sector.

58. During the roundtable discussion, both the water districts and private sector providers confirmed that they would be willing to enter into less commercially viable service areas, provided there was substantial support from the government in the form of capital grants that would make the projects viable, and might even be able to leverage commercial finance.

59. Private water service providers indicated that there is **limited interest to venture into sewerage and sanitation primarily because the investment requirement is higher than water supply** and there is **no mechanism in place to recover the costs of investments**. It was recognized that current tariffs are not sufficient but that customer tariffs would likely not be affordable if utilities impose full cost-recovery in respect of sanitation investments. The current commercial **loan terms do not match the financing requirements of the sanitation investments**. Even in Metro Manila, the sewerage coverage is not yet 100%. The public utility, Metropolitan Waterworks and Sewerage System (MWSS), agreed to extend the concession period for an additional

[34] LGUGC is a private guarantee corporation that provided up to 85% credit guarantee to water districts and private proponents; up to 100% for LGU bond flotation. LGUGC also offered prompt payment guarantee to bulk water supply agreements entered into by water districts and LGUs with private proponents. As of January 2018, it has guaranteed 127 revenue generating projects of 41 LGUs, 15 WDs, 5 electric cooperatives and 34 private medium and large enterprises and renewable energy proponent aggregating PhP11.874 billion ($228 million). It has maintained its credit rating of PRS Aa+ (corp.) from Philippine Rating Services Corporation (2010-2017).

[35] PhilEXIM, also known as the Trade and Investment Development Corporation of the Philippines (TIDCORP), is a government-owned corporation attached to the Department of Finance (DOF) which provides sovereign guarantee to exporters and business entities which facilitate investment in strategic sectors of the economy. It has no experience lending/extending guarantee to LGUs and WDs to date but has guaranteed 1 private water utility. PhilEXIM carries the same rating as the Republic of the Philippines which is BBB (stable) according to S&P and Fitch Ratings.

15 years to allow investments in sewerage and sanitation to be undertaken within a politically feasible tariff. Both MWSS concessionaires tapped concessional financing to facilitate sanitation-related investments in 2012 when sewerage coverage was only at 17%.

60. To encourage participation in increasing the sanitation coverage, private water service providers present during the roundtable discussion reiterated the need for: a mechanism that will facilitate **reasonable returns** and **ensure collection of tariff** (either through the LGU's real property tax or a combination of capital grant and additional tariff based on water consumption that is still affordable).

61. For water districts, they welcome the government support in the form of capital grant for supporting sanitation coverage expansion as well as output-based aid to connect the last mile connections for water supply. The water districts expressed **difficulty in accessing commercial finance mainly due to government agency requirements** such as, in the case of WDs that are still borrowing from LWUA, the need for a LWUA waiver to be permitted to obtain credit from other financing sources. Likewise, the guarantee fee is considered a Commission on Audit (COA) audit finding as it is viewed as an unnecessary cost (and therefore irregular) had the LGU/WD borrowed from government financial institutions (GFIs).

62. In the case of LGUs borrowing from private financial institutions, they are faced with similar government agency challenges. When seeking Department of Finance clearances to borrow from private financial institutions (PFIs), LGUs and WDs were instructed to have their loans taken out by GFIs. There were also LGUs that were served with audit memorandum and notice of disallowance by COA stating that payment of guarantee fees to LGUGC for obtaining loans from PFIs is viewed as an unnecessary cost (and therefore irregular) had the LGU/WD borrowed from government financial institutions (GFIs). This is contrary to the national government call for private sector support to help fund infrastructure projects.

C. Bottlenecks to Support Private Sector Participation

63. **Project Preparation**. During the project preparation stage, **many LGUs and WDs do not have the funds and/or have low capacity** to prepare feasibility study (FS) and to negotiate projects. The use of unsolicited proposals is seen as a solution as the project proponent prepares the feasibility study for the project, but without capacity and resources to review the proposals and studies, there is a risk that this approach could lead to one-sided projects. Moreover, the focus of these unsolicited proposals is in well-performing water utilities in urbanized areas.

64. The national government agencies: **PPP Center and LWUA, have limited resources to provide support to LGUs and WDs for reviewing proposals and transaction advisory**. When approached, the PPP Center seeks to extend support to public agencies. The Municipality of Baggao was assisted by the PPP Center to develop a business case

(funded by the World Bank) for a new water supply system (PhP84 million or $1.6 million). This is a 25-year BOT project envisioned to benefit 21,000 population initially. The PPP Center assisted Baggao in the development of a LGU PPP Code for Baggao LGU, which was utilized by the municipality in processing the PPP. The PPP Center provided transaction advisory with the support of a consultant funded by ADB's Asia Pacific Project Preparation Facility – Trust Fund. Baggao is now at pre-qualification stage and is expected to complete the award in 2018.

65. PPP Center is also extending support to LGUs which received unsolicited proposals and have limited capacity to evaluate the proposals, such as the bulk water supply in the Province of Pampanga. Considering the growing demand for unsolicited proposals, this capacity support needs to be augmented given the current limited resources within the disposal of the PPP Center. It should be noted that when a project is developed as a JV, as is in a growing majority of cases, it is not required to follow the PPP process under the BOT Law although the PPP Center can still provide support (where there are resources available) when requested.

66. Lack of standardization of risk allocation for JV structures. As noted above, it is succinct and gives limited detail on what is required in the feasibility study and the contract. it is also understood that there is limited transparency on JV development. All projects seem to have started as unsolicited proposals and whilst it is understood that they were put out for competitive challenge in accordance with the guidelines, there have been few if any challengers coming forward. There were concerns raised during the consultations about the extent to which opportunities under competitive challenges were widely advertised and about the limited opportunity for competitors to put forward winnable bids. Given that these JVS are therefore not being subjected to competitive pressure in practice, and that there seems to be limited scrutiny of the draft proposal and contracts, there are concerns that the terms may not always be as competitive or balanced as they could be if a full competitive process were followed.

67. **Process**. Generally, **no support is extended to small transactions normally entered into by local government units**. A **few water districts reported receiving support in the form of grant** such as: 1) Baguio City Water District assisted by Cities Development Initiative Asia (CDIA) for the development of feasibility study, and 2) Metro Iloilo City Water District supported by USAID BeSecure Project through transaction advisory.

68. From the information that the WB has gathered, **there is limited and unsystematic financial and/or other support given to public utilities to develop and negotiate projects with the private sector**. Given that the private sector is likely to have greater capacity, it is likely that LGUs and districts face challenges to strike balanced deals that represent value for money. There is very **limited oversight of the development and procurement of such projects** or independent review of the project documents, value for money, etc.

69. It is understood that there is limited reporting required under the JVs and that the contracting authority, the entity that is expected to monitor the performance of the JV under the guidelines, lacks the capacity and resources to do so. It is not clear to what extent the JV agreements include clear performance indicators and targets to be

met, commitments on the part of the private party to invest, and clear reporting requirements. There is also no benchmarking of JV performance or pricing at present.

70. **Performance Regime and Monitoring**. There is also **no clear monitoring by an independent agency on progress of the concluded transactions** particularly those under the NEDA Joint Venture Guidelines. The monitoring is carried out only by the public party to the contract, who may have limited capacity to do so. It is understood that some concessions require reporting to NWRB but that there is no formal reporting mechanism for JVs.

D. Potential Mechanisms to Enhance Private Sector Participation as a mechanism for Implementation of the Masterplan

i. **Set up Project Preparation Facility**

71. The government (NEDA/PPP Center) could consider **setting up a project preparation facility suitable to the size and needs of the LGU and WD projects** to avoid reliance on unsolicited proposals or, where unsolicited proposals are deemed appropriate, to enable the LGU/ WD to review and negotiate the terms of such JV. LWUA could continue to support NEDA/PPP Center in project preparation (as is the arrangement now on feasibility studies funded by NEDA), or LWUA could also manage the proposed project preparation facility (described below) in close coordination with the PPP Center for PPP-related transactions.

72. The government could consider building on the following relevant programs in the Philippines which were presented and discussed from the roundtable discussion:

a. **ADB facilities**: i) Asia Infrastructure Centre of Excellence (AICOE) and, ii) Asia Pacific Project Facility (AP3F) – which are meant for project development and transaction advisory support to LGUs. The costs are reimbursable by the winning bidder. The indicative project cost is $100 million (PhP5.2 billion) or any amount that can afford to pay its accredited transaction advisor and so would not be suitable for smaller WSS projects, but a similar mechanism or window could be established to cater for smaller projects.

b. **NWRB's Accredited Technical Service Providers Program with Revolving Fund** (supported by the World Bank and USAID). NWRB trained and accredited 78 individual experts who offered standard packages to 115 small utilities across the country, including business plans, operations manuals, preparation of documents for obtaining an operating license, and regulatory compliance for tariff-setting or adjustment. These experts fall under three categories: technical, financial and institutional (see ***Figure 3*** below). The program connects small water utilities with technical experts from the private sector at PhP60,000 ($1,154) each which can be financed by the revolving fund administered by NWRB payable in 12 months by the utility with 4 months grace period and 2% processing fee.

Figure 3. Technical, Financial and Institutional Consultants Working with Utilities

Infographic courtesy of NWRB.

c. There should be an analysis on the **existing related facilities** and how to increase their uptake such as the Project Technical Assistance and Contingency Fund (PTACF) of the Municipal Development Fund Office (MDFO). The PTACF loan proceeds can be used for preparation of feasibility study, detailed engineering design and other technical assistance needs of LGUs with interest rate of 0-1.5% payable in three years.

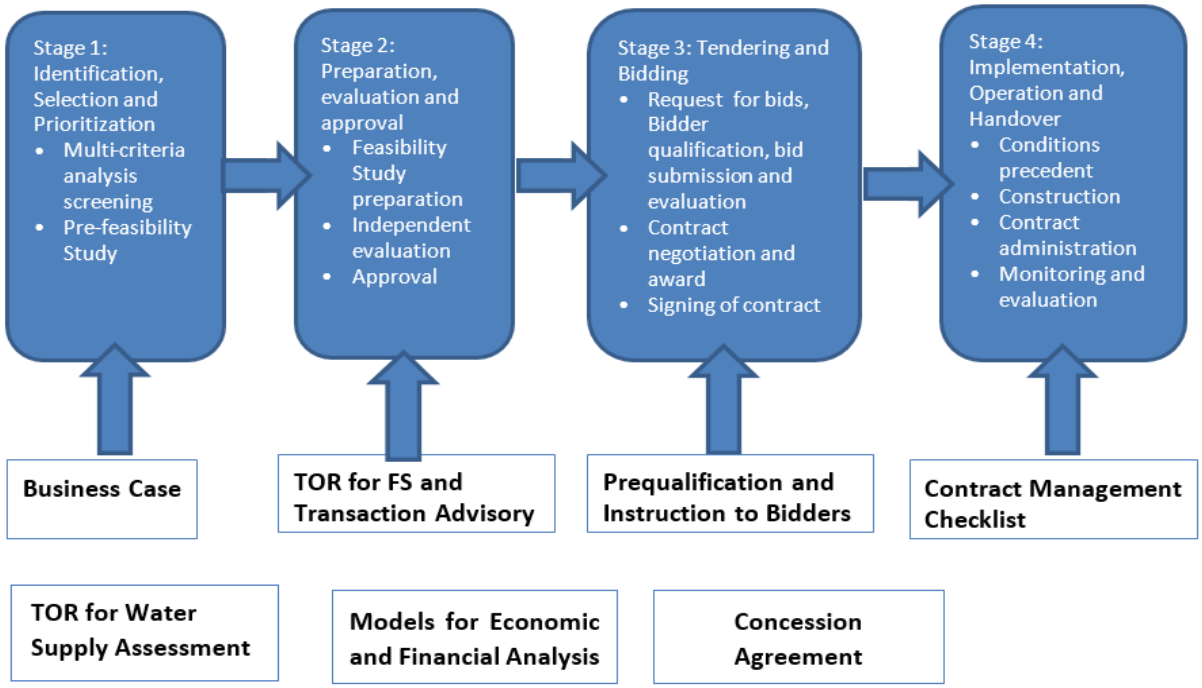
73. The NEDA/PPP Center could develop a unit that would focus on the administration of the proposed project preparation facility for LGUs and WDs with the following suggested features:

    a. Standardized services (to reduce transaction costs and time) e.g., business case/feasibility study preparation, transaction advisory. The business case/feasibility study to be developed must be aligned with the approved regional and provincial master plans, taking into account Integrated Water Resource Management (which must be published)
    b. Simplified templates (e.g., business case/feasibility study, bidding documents, JV contract etc.) which could be used as a starting point for the more complex templates developed by the PPP Center for larger projects)
    c. (Accredited) Pool of individual consultants and transaction advisors offering a standard package - hiring advisors brings confidence to the market and contributes to equal bidding conditions
    d. Revolving Fund for project preparation that gets repaid (in part) out of project on successful completion of a project
    e. Include a clear project review process for projects, including for unsolicited proposals with capacity in a dedicated unit to carry out the review
    f. Include preparation and process requirements – e.g., strengthening NEDA JV Guidelines, PPP Act.

74. In 2015, the PPP Center (with the support of the World Bank) started to assist the Municipality of Baggao in Cagayan Province with its objective of developing a new water supply system (PhP84 million or $1.6 million) through a concession with private operator. Only two individual consultants (from the NWRB accredited experts mentioned above) were commissioned to develop the business case which became the basis for tendering the bid for concession. Transaction advisory was provided by PPP Center (finance, legal) complemented by an individual technical consultant supported by a grant.

75. The PPP Center assisted Baggao with PPP project development, including business case preparation, conduct of an investors' forum akin to a market sounding, preparation of a financial model, bid terms of reference, concession agreement and a checklist for contract management. These suite of tools and materials of the PPP Center (similar to World Bank supported knowledge products) can be utilized for the preparation of templates under proposed project preparation facility (*see **Figure 4** below*).

Figure 4. Project Development Lifecycle



76. In 2015, the World Bank published a learning note on eight water PPP case studies in the Philippines[36] which recommended the "productization of good deal making". The case study discussion highlights the disparate ways in which water PPPs were established. The PPP experience also demonstrates that deal closures are affected by significant gaps in information and delays in receiving guidance from national

[36] Beyond One-Size-Fits-All: Lessons Learned from Eight Water Utility Public-Private Partnerships in the Philippines. Aileen Castro, Vijay Jaganathan and Mariles Navarro. August 2015.

government agencies, notably in terms of regulatory advice and support. To help bridge the gap, the PPP Center, in partnership with DILG and NWRB, can help bridge the gap through service productization. ***Productization is defined as stream-lining the transaction process by which PPPs are identified, negotiated, and concluded within a framework of clear rules and responsibilities of the operators, the LGU administration, national government agencies, and water supply users, while fully leveraging current and future technologies***.

77. Due to their roles in setting up the overall business environment, national government agencies can be critical supporters of LGUs seeking to close water supply PPP deals.

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

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

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

78. **Other Areas for Private Sector Mobilization**. The private sector can be contracted to bring technical support through performance based contracts to address specific issues such as non-revenue water, energy efficiency, and metering and collection of revenues. The national government can set aside funds for technical assistance to promote operating efficiencies to the more capable water utilities. Other utilities may just opt to enter into performance-based contracts with private proponents to improve operating efficiency and eventually improve creditworthiness to attract commercial finance for expansion and rehabilitation.

79. **International experience on Project Preparation Facilities**. A number of countries have project preparation facilities for PPPs, although most of these facilities to date have been focused on larger national projects and cover several sectors. Please see ***Annex 1*** for more details.

ii. Strengthen the NEDA JV Guidelines/PPP Act

80. There are on-going deliberations on various congress bills meant to revise the PPP Act which will now include the NEDA JV guidelines. There is also a parallel review by NEDA of its JV Guidelines with the objective of eventually appending this to the Revised PPP Act. Given the recent trends in the private sector participation in the sector, the recommendations below will focus on enhancing the NEDA JV guidelines.

81. Principles. Provide clarity on the role of public agency and requisite capacity building to effectively play the role – Under the principles of the current NEDA JV guidelines, it is stated that "the role of government as regulator of the business of JV should be clearly and explicitly delineated from its role as the implementer of the business to avoid conflicts of interest". There is no known mechanism to monitor whether this principle of delineating the public agency's role as regulator and implementer is adhered to. Public agencies likewise request for capacity building to act as regulator.

82. Process for Entering JV – Annex A. Selection/Tender Documents. Prescription/more guidance on submission requirements such as standardized documentation on feasibility studies and bidding documents. The requirements should be commensurate to the terms of reference. During the roundtable discussion, there was a consensus to promote private sector participation in graduating level 2 to level 3 systems and sanitation projects. The bid documents must be priced rationally to attract small and medium enterprises to these undertakings. It is understood that NEDA is currently looking at the guidelines of the Government Procurement Reform Act (GPRA) which prescribes more details.

83. Process for Entering JV – Annex B. Competitive Challenge. Prescription/more guidance on eligibility requirements which promotes competitive process. Some of the private service proponents complain that the eligibility requirements in tender documents are very restrictive. Another concern is the prescribed number of days given to challengers to submit comparative proposals. The current guidelines state "at least 120 calendar days or as may be approved by the appropriate Approving Authority…" Reportedly, there are instances where a public agency only gives 30 calendar days to the challengers. In general, 60 days is more reasonable as long as the terms of reference is robust enough, containing adequate technical and financial details to facilitate equal access to information and development of comparative proposal.

84. NEDA can draw on international experience on how to manage unsolicited proposals, ensure some transparency and competition. Below are the 2017 World Bank Policy Guidelines conclusion[37]:
    a. Introduce submission requirements
    b. Institute unsolicited proposal (USP) review fees

[37] Policy Guidelines for Managing Unsolicited Proposals in Infrastructure Projects. World Bank Group. 2017

c. Centralize USP submission process (PPP Center with Local Water Utilities Administration or LWUA / Department of the Interior and Local Government or DILG / National Water Resource Board or NWRB)
d. Establish a dedicated time window for USP submissions

Others

e. Provide bidders with sufficient time to prepare bids
f. Minimize incentives to USP proponent that distort competition

85. Reporting Requirement. Require reporting of performance similar to key performance indicators (KPIs) reported in Listahang Tubig[38] such as service coverage, water availability, non-revenue water, average tariff, operating ratio, collection efficiency, etc. to facilitate easier tracking of contract provisions and benchmarking with similar utilities. These KPIs should be published through the Listahang Tubig.

86. Penalties. The guidelines must have prescriptions for non-compliance. For instance, if the publication of invitation to apply for eligibility and to submit a proposal (IAEDSP) was made in local newspaper rather than a newspaper of general nationwide circulation, no penalty is prescribed. This does not promote a competitive environment. There are also no penalties if there is non-compliance on reporting requirements.

87. Clarity of Roles. The NEDA JV guidelines should recognize and define the roles of concerned national government agencies such as NEDA, PPP Center, LWUA, NWRB, OGCC, etc. NEDA is currently tasked to review whether the public agency is compliant with process as prescribed in the JV guidelines. It is understood that when documents are submitted to NEDA for review, NEDA provides comments. In some instances, upon submission of signed contracts, NEDA comments are not taken into consideration. In the absence of explicit provision for NEDA's review for transactions below PhP 150 million ($2.885 million), NEDA cannot take action as they can only do moral suasion under the current guidelines.

88. In the case of PPP Center, there are no provisions under current guidelines that give them mandate. In practice, PPP Center provides inputs on merits of the project tender prior to approval of transactions requiring NEDA approval. The PPP Center also provides assistance when requested but subject to available resources. The recent PPP Governing Board resolution formalized PPP Center's role in JVs which is the option utilized by most water districts.

89. LWUA gets involved only when the WD requests for tariff increase. In February 2016, LWUA presented draft "Proposed Policy Guidelines of PPPs under JV Arrangements"

[38] The *Listahang Tubig* is the first national survey of water service providers in the Philippines. With a participation rate of 88% from cities and municipalities nationwide, the survey generated a robust database of water service providers' directory, profiles and service levels; and benchmarked performance of utilities providing piped household connections. The database was developed under the leadership of NWRB in close coordination with DILG, LWUA and NEDA with support from USAID and World Bank.

to the Philippine Association of Water Districts. However, the guidelines have not yet been finalized given the retirement of the LWUA officials leading this initiative. Under the proposed guidelines, LWUA has specific requirements such as legal and institutional arrangements, a relatively detailed business plan, financial and regulatory reporting requirements.

90. NWRB is the economic regulator for water service providers that are not under LWUA and concessions (such as MWSS and economic zones). When a WD enters into a JV, the reporting lines become less clear. There is one school of thought that once a WD enters into a JV it is no longer a WD and therefore needs to report to NWRB, but this needs to be clarified.

91. The OGCC currently serves as the counsel of public entity and issues legal opinion on the draft contracts and tender documents. The OGCC must be equipped with the technical knowledge in the sector to determine whether terms on the reviewed documents are reasonable.

92. Information, Education and Communication (IEC) – There is a need for continuing dialogue among concerned national government agencies on the benefits of PPPs/JVs. The new leadership of the Philippine Association of Water Districts (PAWD) is mulling to propose to LWUA the classification of WDs under JV arrangements to lower categories which means lower salary and compensation package, etc. The rationale is that these WDs have already contracted another entity to perform its major tasks and therefore they have less headaches compared to a regular WD.

iii. Promote Blended Finance

93. Blended finance refers to public budget funds (loans, guarantees, or grants) invested alongside private sector capital (including commercial financing). Blending public or donor funds can catalyze commercial investments that would not otherwise happen[39]. The huge funding gap necessitates the creation of structures that facilitates private capital as well as more efficient private sector management approaches to drive down costs.

94. The Bank estimated in 2015 that the actual average annual investment of PhP3.4 billion/$65 million, is just 20% of the annual investment projected at PhP16.9 billion/$325 million to achieve the universal access target. There is a need to implement a financing reform: the Unified Financing Framework (UFF) which was approved in principle by InfraCom in 2016 with comments from some line agencies. NEDA is currently leading on the formulation of UFF implementing guidelines in consultation with concerned agencies.

95. The UFF promotes the use government grants, where possible, to drive reforms and expansion and comes with the following strands of support: 1) Technical Assistance

[39] Introducing Commercial Finance into the Water Sector in Developing Countries. Kevin Bender. World Bank. February 2017.

Grant, 2) Capital Grant (Viability Gap Fund, Output-Based Aid), and 3) Credit Enhancement.

96. **Viability Gap Fund (VGF)**. VGF is the grant provided for capital expenditure to make the project viable. It is estimated as difference between Net Present Value of cash flow from proposed investment and projected revenues with affordable tariffs[40]. VGF grant may be provided to support investments especially in areas not yet attractive for PSPs, e.g., sanitation, level 2 (communal faucet) to level 3 (piped water to homes) systems. In the Philippines, some local government units apply a real property tax to fund sanitation investments, which generates some revenue to start to cover costs. The VGF could be combined with local funds to scale up sanitation coverage.

97. International experience of viability gap funding is included at ***Annex 2***, including experience at the state and national levels in India and Brazil. It could also be used to reduce annuity payments. World Bank support has been provided in various countries to these different forms of VGF.

98. An interesting government subsidy targeted to sewage treatment plants (STPs) is Brazil's PRODES - Watershed Decontamination Program (PRODES[41]). PRODES is a financial incentive, in the form of payments for treated sewage, to public and private sanitation service providers that invest in the implementation and operation STPs. The Program was launched in 2001 and has been executed ever since by Brazil's *Agencia Nacional de Aguas* (ANA) or national water agency. Funds come from the general budget of the Federal Government assigned to ANA, managed by the basin committees (from water charges, state funds and others). Subsidy can range from 30% for large projects (population $\geq$ 200 thousand) to as much as 100% for small contracts (population $\leq$ 20 thousand). Please see ***Annex 2*** for more details.

99. **Output-Based Aid (OBA)**. OBA, on other hand, is the grant of fixed value per poor household connection given to water utility. OBA can be used to incentivize water supply and sanitation expansion into poor areas.

100. The grant allocation will be demand driven and will be based on a case to case evaluation of the viability gap funding using a standard financial analysis model. Grants will be tied to conditions on performance indicators and a take-over provision by the regulator in case of non-compliance.

101. The grants, where possible, are meant to be leveraged with commercial loans either from government financial institutions (GFIs) or private financial institutions (PFIs). Due to the nature of the water supply and sanitation business, PFIs often require credit enhancement such as partial credit guarantee.

[40] Public Private Partnership Funds Observations from International Experience. Michael Schur. ADB East Asia Working Paper Series No 6. September 2016.
[41] PRODES - Watershed Decontamination Program. PowerPoint presentation by Marco Alexandro Silva André. March 28, 2018

102. If a not so creditworthy WSP could demonstrate to a GFI/PFI that it could mobilize a grant package to amortize the debt at completion of outputs, then the GFI/PFI might be more willing to lend. Under such a scheme the WSP would be able connect new customers and extend its revenue base at a reduced loan cost, effectively combining OBA with VGF. This could be a mechanism to mobilize commercial finance.

103. While OBA has a clear role in combination with commercial financing, OBA can be structured as pro-poor whilst commercial finance is often not. There is a concern that the OBA grant will attract commercial lenders away from more viable customers due to the predictable and large payout that comes from OBA. At 50%, OBA can greatly decrease the weighted average life of a loan.

104. To mitigate the risk, there is a need to ensure that the PFIs understand the risk of OBA. In the past, the banks underestimated the risk associated with OBA and were over eager to lend. If a project does not get built, it will not get OBA. If a project is delayed, the borrower may run into cash flow problems as they expected the grant at an earlier date. If the money is diverted/mismanaged , the OBA will never come and could drive a WSP into insolvency. These risks must be factored in during the due diligence process.

105. For larger projects, the risks can be mitigated by construction bonds. With these bonds a WSP knows it will get paid either by OBA, if the project is implemented, or by the construction insurance bond if the developer does not complete the project. However, only larger well-known entities have access to construction bonds. This is more of a challenge for smaller firms doing smaller projects and for WSPs who want to do the development work themselves. This model works best on larger urban projects.

106. A revolving fund structure with OBA may be the best approach. Often the poor cannot afford connection fees and deposits at one time but can pay them down over time. If a WSP collects back the OBA grant for connections and deposits, it can issue its own grants for the next series of areas to be connected.

107. OBA has been used successfully in the water sector in Indonesia under the Water Hibah initiative. This was developed in collaboration of the Government of Indonesia (GoI) and the Australian Government and has now been mainstreamed by GoI. More detail is given of how the hibah works in ***Annex 2***.

108. **Credit Enhancement**. The purpose of credit enhancement is to provide confidence to investors that government will honor its obligations under a PPP contract or in respect of a loan, provide confidence to lenders that the borrower can pay when payment is due. In the case of loans, LGUs have internal revenue allotments (IRA) which can be intercepted by their lender/government depository bank. For WDs, they assign their reserves and receivables to LWUA and LWUA has access take-over provision in case of default. Therefore, credit enhancement for LGUs and WDs is only critical for PFIs. The private small and medium enterprises (SMEs) normally would also require credit guarantee because they do not have sufficient assets to back up their loans.

109. The enhancement can be **direct or indirect guarantee**. For instance, direct guarantee is provided to SME loans for their water projects like purchase of equipment. Indirect guarantee is extended when LGUs/WDs enter into bulk water supply agreement with a private sector provider (PSP). The PSP will then show this bulk water supply agreement backed up by a guarantee of say 85% to PFIs so that the risk assessment is substantially reduced and it facilitates commercial financing.

110. These guarantee mechanisms have been provided by LGUGC in the past to PSPs. However, LGUGC recently decided to suspend the scheme for partial credit guarantees to PSPs due to their high-risk profile. PhilEXIM likewise provided one guarantee to a private water service provider in 2012. Nonetheless, PhilEXIM is not actively pursuing this venture given limited resources. During separate discussions in April 2018, however, both LGUGC and PhilEXIM expressed interest to become guarantee program manager and/or accept paid in capital to use their own balance sheets to provide the needed guarantees.

111. While there is long history of credit enhancement in the Philippines, more detailed analysis will need to be carried out to determine the details of any structure before it could be implemented. Identifying what enhancements are needed would be best identified and tested through piloted projects and adapted to take into account lessons learned along the way. Tenor extension products, credit risk sharing structures (first loss, co-lending, etc.) and liquidity drawdown facilities could all be helpful. One approach would be to have all of these mechanisms available and keep the offerings flexible with clear conditions on what is needed to qualify for the enhancement.

112. **International experience**. Several international financial institutions such as the World Bank offer guarantee and other risk mitigation mechanisms, although the World Bank guarantee instrument has yet to be used extensively in the water sector, and governments such as Indonesia and UK have put similar mechanisms in place (Umbalan, large regional bulk supply project in Indonesia, has benefited from a prompt payment guarantee). In the case of Umbalan, this was combined with viability gap funding and also benefited from a project preparation facility. Indonesia has also used a credit subsidy scheme that subsidizes the interest rate payable by borrowers, as discussed in ***Annex 2***.

113. A portfolio guarantee could also be applied to smaller projects whether for “partial” (where government sponsored guarantee would take the first loss in case of loan guarantee between a private bank and LGU/WD) or “prompt” guarantee. Similar facilities have been set up in the renewable energy sector in Argentina as discussed in ***Annex 2***. To further enhance the confidence of investors and financiers, the World Bank Group (WBG) supported the preparation of the first RenovAr tenders and provided a $480 million guarantee to backstop certain government obligations under the program. In doing so, the WBG support helped Argentina unlock its

renewable energy potential by creating a market and mobilizing about $3.2 billion of mostly private investments[42].

114. Another possibility is a guarantee of an escrow account in a project for several monthly payments where a government sponsored guarantee facility would guarantee the account or the Letter of Credit to the account. Guarantees could also be provided for non-payment by off-taker. These options could be made available (especially for smaller projects), depending on the delivery model and financing modality.

115. Lastly on international experience regarding blended finance, there is a successful scheme in Columbia called "*FINDETER* (*Financiera de Desarrollo Territorial*)". FINDETER, a partly government-owned second-tier lender, was established in 1989 to provide discounted loans to domestic commercial banks that lend to local entities to finance infrastructure projects. FINDETER was initially set up with equity provided by the Government of Colombia and loans from the World Bank and the Inter-American Development Bank. FINDETER offers maturities of up to 15 years, which is notable, as loans to LGUs without the involvement of FINDETER would normally not exceed five years. The strong credit rating and intercept provision help FINDETER lend for longer tenors at better rates. In addition to lending activities, technical assistance is extended to service providers accessing FINDETER finance, typically in the form of project preparation support. Today, water and sanitation investments represent one of the largest sectors of the FINDETER loan portfolio, with the sector receiving an estimated 28 percent of disbursements in 2014[43]. Please see more details in ***Annex 2***.

116. During the roundtable consultations, the private providers including SMEs have expressed interest in guarantee support to help raise commercial finance on better terms/with reduced personal collateral.

117. It is worth noting that the Philippine Water Revolving Fund (PWRF) contributed to the supply of funds from 2006 - 2012. PWRF is an example of blended finance established to support LGUs, WDs, SMEs through loans from GFIs and PFIs. Under PWRF, JICA money (with sovereign guarantee) through DBP (50-75% of loan at 15yrs) was blended with PFI loan (25-50% at 10yrs) guaranteed by LGUGC (partially guaranteed by USAID, 50%). As of 2015, the PWRF facilitated PhP6.2 billion[44] ($120 million) in commercial finance with zero default rate[45].

118. To accelerate the WSS service coverage expansion, the government could follow the approach similar to PWRF where ODA is matched with FI loan to extend tenor and lower interest rate. This would facilitate the financing of critical water supply and

[42] Argentina Renewable Energy Auctions. Financial Solutions Brief. World Bank Group. January 2018.

[43] Institutional Blending via Second-Tier Lender FINDETER in Colombia. Case Studies in Blended Finance for Water and Sanitation. World Bank. Joel Kolker and Sophie Tremolet. August 2016.

[44] Unified Financing Framework for Water Supply and Sanitation. World Bank. May 2015.

[45] Communications with DBP and LGUGC

sanitation projects at longer tenor and very competitive interest rates which in turn translate to affordable tariffs.

119. Another approach is for the government financial institutions (GFIs) to take on more risks and provide protection to private financial institutions (PFIs). The GFIs are authorized depository banks for LGUs and can have access to these accounts in case of default as part of the loan agreement. In the case of LWUA, they have step in rights in case of WD default. All of these can provide comfort to crowd in PFIs in blended financing.

120. Cash flows/Tariffs. Attracting commercial finance, stand alone or in blended structures, solely depends on cash flows. Since the cash flows come from customer tariffs, efforts into pricing tariffs 'correctly' are highly important. This is an opportune time to have this discussion - while building off the Master Plan - to assist the infrastructure builders, national and local, with creating investment plans and more importantly financing plans.

121. In Kenya, under a World Bank initiative an investment plan was developed for projects including costs and calculating the required tariff needed to cover the costs of financing the infrastructure through commercial finance. That tariff was always too high for political purposes. But the viability gap could then be calculated and so it was possible to identify which projects were commercially viable or could be at a reasonable tariff increase and could show decision makers what the market cost of the tariff was. The accredited consultants envisioned under the Project Preparation Facility should be trained to carry out similar analysis. It is also helpful for sanitation projects to calculate the cost of the social benefit of public sector funds. It also provides an opportunity to address the benefits of longer-term financing of amortizing debt to keep the tariff lower.

122. Standardization. As the Philippine Water Supply and Sanitation Masterplan is formulated, this is also an excellent opportunity to put in place standardization in the sector financing. With standard documentation on deal structure and loan structure, more companies are likely to be interested and the market will be more transparent. More interested parties should lead to more deals and greater potential for competition. Moreover, the standardization of loan documents and projects could eventually lead to securitization of loans and provide longer tenor loans at reduced capital market interest rates.

123. Integration. With NEDA as the lead in the formulation of WSS master plan, it is understood that the plan is built upon integrated water resource management, taking into account existing roadmaps and masterplans linked with WSS such as but not limited to the Philippine Development Plan, Philippine National Environmental Health Plan 2010 – 2013, Philippine Energy Plan (2005 - 2014), Philippines Energy Sector Plan (2012 – 2030), NIA Corporate Plan (2010-2020) on irrigation development, National Climate Change Action Plan 2011-2028 and Philippine Water Supply Sector Roadmap 2010.

124. Information, Education and Communication (IEC). As part of the Master plan information dissemination, NEDA can consider a dialogue among concerned agencies to promote an enabling environment for commercial finance and levelling the playing field between government and private financial institutions. In particular, address the recommendation on rationalizing and streamlining the requirements for LGU/WD borrowing from private financial institution such as the DOF-BLGF certification of debt servicing ceiling, BSP Monetary Board Opinion, COA findings on the utilization of guarantee, LWUA waiver, among others.

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Annex 1 – International Experience in Project Preparation Facilities

Governments around the world have developed project preparation facilities at the national level, similar to that managed by the PPP Center.

Country Based Project Preparation Facilities

Kenya[46]

The Infrastructure Finance and Public Private Partnerships (IFPPP) Project is a Government of Kenya "first of a two-phased" Adaptable Lending Program (APL) financed by a credit from the International Development Association (IDA). The credit became effective on 12th February 2013.

The overall objective of the IFPPP Project is to provide technical assistance to increase private investment in the Kenyan infrastructure market and to sustain this participation over an extended period of time.

By helping to strengthen the PPP enabling environment/framework, the IFPPP APL phase I project will assist the GoK to develop a solid foundation to systematically prepare PPPs and realize the benefits of PPPs more effectively, including:

- increased private investments in infrastructure;
- increased employment opportunities;
- improved service delivery to enterprises and the population in general;
- an improved fiscal impact on government from better project preparation;
- more balanced risk allocation;
- increased transparency;
- wider quality control;
- greater efficiency; and
- enhanced financial sector support.

Indonesia[47]

The **Project Development Facility (PDF)** is a facility provided by the Ministry of Finance of Indonesia to help Government Contracting Agencies (GCA) to prepare pre-feasibility study, bidding documents, and assist the GCA in the PPP project transaction until the project reaches the financial close.

[46] http://www.pppunit.go.ke/index.php/ifppp
[47] http://www.djppr.kemenkeu.go.id/ppp#fasilitasproyek

Benefits

- Helps GCA to prepare pre-feasibility study and bidding documents in a professional manner in order to attract the private sector to participate in PPP Projects.
- Assists GCA in PPP project transaction until the project reaches the financial close.
- Aligning the provision of facilities by the Minister of Finance for PPP Project in a series of processes that runs effectively and efficiently.

Types of Facility

Project Preparation
● Preparation of final business case (FBC)
● Preparation of studies and/ or supporting documents for FBC

Transaction Advisory Facility
● The procurement of project company
● Signing of the PPP agreement
● Signing of the PPP agreement

India

India Infrastructure Project Development Fund (IIPDF)[48]
The India Infrastructure Project Development Fund (IIPDF) provides financial support for quality project development activities. The Sponsoring Authority will, thus, be able to source funding to cover a portion of the PPP transaction costs, thereby reducing the impact of costs related to procurement on their budgets.

The Union Finance Minister in the Budget Speech for 2007-08 announced in the parliament the setting up of a Revolving Fund with a corpus Rs. 100 Crore to quicken the process of project preparation. Accordingly, the corpus fund titled India Infrastructure Project Development Fund (IIPDF) has been created in Department of Economic Affairs, Ministry of Finance, Government of India with an initial corpus of Rs. 100 Crore for supporting the development of credible and bankable Public Private Partnership (PPP) projects that can be offered to the private sector. The IIPDF has been created with initial budgetary outlay by the Ministry of Finance, Government of India.

Objectives:
The main objectives of the scheme are as follows:

a. The IIPDF is available to the Sponsoring Authorities for PPP projects for the purpose of meeting the project development costs which may include the expenses incurred by the Sponsoring Authority in respect of feasibility studies, environment impact studies, financial structuring, legal reviews and development of project documentation, including concession agreement, commercial assessment studies (including traffic studies, demand assessment, capacity to pay assessment) etc. required for achieving technical close of such projects, on individual or turnkey basis, but would not include expenses incurred by the Sponsoring Authority on its own staff.

[48] https://www.pppinindia.gov.in/schemes-for-financial-support

b. The Sponsoring Authority will, be able to source funding to cover a portion of the PPP transaction costs, thereby reducing the impact of costs related to procurement on their budgets.

Eligibility:

a. The proposals for assistance under the Scheme have to be sponsored by Central Government Ministries/Departments, State Governments, Municipal or Local Bodies or any other statutory authority;
b. To seek financial assistance from the IIPDF, it would be necessary for the Sponsoring Authority to create and empower a PPP Cell to not only undertake PPP project development activities but also address larger policy and regulatory issues to enlarge the number of PPP projects in 'Sponsoring Authorities' shelf;
c. The IIPDF will contribute up to 75% of the project development expenses to the Sponsoring Authority as an interest free loan. The balance 25% will be co-funded by the Sponsoring Authority;
d. On successful completion of the bidding process, the project development expenditure would be recovered from the successful bidder. However, in the case of failure of the bid, the loan would be converted into grant; and
e. In case the Sponsoring Authority does not conclude the bidding process for some reason, the entire amount contributed would be refunded to the IIPDF.

Sub-national Project Preparation Facilities

A number of countries have also developed project preparation facilities at a sub-national level:

India

State-based Project Development Funds[49]
Some states in India have established project development funds (PDF) to help government agencies and municipal government entities undertake robust and comprehensive feasibility studies of proposed projects.

These funds are sometimes managed by government-created corporate entities, such as the Maharashtra Urban Infrastructure Development Co. Ltd. (MUIDCL) and Karnataka's iDeCK, and are structured as revolving funds with funds being recovered as a "success fee" or project development fee from the winning bidder on a project. In other states, the funds are in the form of a state level scheme, without a corporate identity- like in the case of Haryana.
These state level PDFs are complemented by a national level PDF – the India Infrastructure Project Development Fund (IIPDF) – created by the Department of Economic Affairs and managed by the national PPP Cell specifically to fund the development of feasibility studies and the provision of transaction support for approved PPP projects. The IIPDF is made available to central government ministries/departments, state governments, as well as municipal authorities, and covers only up to 75 percent of the transaction expenses. The PPP

[49] Castalia 2018 Case Study of Municipal PPPs in India

Cell is tasked to screen projects requesting IIPDF funding, and has laid down specific requirements before a project may qualify. The remaining 25% is expected to be co-shared with the concerned municipal/sponsoring authority.

Through these PDFs, experts and transaction advisors are engaged to provide assistance during the project development, approval, and tender stages. While the national government maintains its own panel of transaction advisors, numerous states, such as Madhya Pradesh, Karnataka, and Tamil Nadu, maintain their respective panels of experts.

IFI Supported Project Preparation Facilities

Global Infrastructure Facility (GIF)[50]

The Global Infrastructure Facility (GIF) is a partnership among governments, multilateral development banks, private sector investors, and financiers. It is designed to provide a new way to collaborate on preparing, structuring, and implementing complex projects that no single institution could handle on its own.

The comprehensive project support provided by the GIF draws on the combined expertise of its technical and advisory partners. This group, which includes commercial banks and institutional investors, ensures that well-structured and bankable infrastructure projects are brought to market in a way that sustainably meet the needs of governments and service users. Funding partners provide financial contributions to the GIF.

The GIF partnership is overseen by a Governing Council that supervises strategic programming and funds management as well as the development of operational policies and procedures. It also holds the GIF's management accountable for delivering on objectives and principles. The Governing Council comprises representatives of funding and technical partners and representatives of emerging markets and developing economies, and is co-chaired by the World Bank Group and a Funding Partner.

The GIF supports Governments in bringing well-structured and bankable infrastructure projects to market. GIF's project support can cover the spectrum of design, preparation, structuring and transaction implementation activities, drawing on the combined expertise of the GIF's Technical and Advisory Partners and focusing on structures that are able to attract a wide range of private investors.

The GIF's project preparation and transaction support activities can include advisory support to client Governments as needed through the following project stages:

Program Definition/ Enabling Environment

Preliminary work to prioritize investments and test a project concept through "pre-feasibility" analysis; as well as support to legal, regulatory, or institutional reforms as required to enable successful development and/or participation of long-term private capital in the financial structure of a particular project.

[50] http://www.globalinfrafacility.org/

Project Preparation/ Investment Feasibility

Support to the full range of project preparation and appraisal activities required to bring the project to a point where the government is able to make an informed decision to proceed with a transaction. This could include support for technical, economic, and other feasibility studies, social and environmental impact assessments, investment appraisal and risk analysis, and public-private partnership (PPP) structuring.

Transaction Design/ Implementation

Support in preparing transaction documentation and managing a competitive transaction process, which could include initial design of risk mitigation/credit enhancement packages.

Annex 2 – International Experience in Viability Gap Funding, Guarantee Facilities and Output Based Aid Facilities

A number of countries have developed viability gap funding, guarantee facilities and output based aid facilities aimed at making overall projects or individual household connections more financially viable and affordable.

Indonesia

Municipal focused credit subsidy scheme

Subsidy Scheme to encourage banks to finance investments in the sector through a credit subsidy scheme. The scheme, introduced under Presidential Regulation No. 29 of 2009 on Interest Subsidies, sought to provide credit support for loans to municipal water utilities (PDAMs) from eight participating national commercial and regional development banks. Through the scheme, the central government would provide up to a 5 percent subsidy on interest rates to narrow the gap between the commercial lending and central bank rates and guarantee up to 70 percent of defaults (of which 30 percent was in the form of counter-guarantees from local governments). This scheme was targeted at PDAMs with no debt arrears. This scheme did not take off as expected in the initial years. However, after nearly a decade, interest is now picking up. So far, 11 PDAMs have taken loans from 5 banks, totaling USD 25 million. This amount represents only 6 percent of the program's total target but is a positive sign. Difficulties encountered in implementing the scheme include:

- the reluctance of, or the difficult process to, obtain local government counter-guarantees;
- the lack of capacity of PDAMs in preparing bankable proposals, extremely complex procedures requiring MOF to approve each umbrella agreement between all parties in order to issue a partial credit guarantee (the first three cases, for Bogor, Ciamis, and Lombok Timur, took between 411 and 594 days to process the approvals);[51]
- the limited borrowing capacity of PDAMs, which was measured by different studies as only 0.6 to 1.6 times Earnings before Interest, Tax, Depreciation and Amortization (EBITDA)[52] ;
- a lack of clarity about the terms of the loans to the PDAMs (for example, whether the interest rate over the loan period would be on a fixed rate or floating rate basis);
- a general lack of exposure of banks to the water supply industry and PDAM businesses.

Output-based grants for water connections (OBA). The government piloted the Water Hibah program in 2010 with development partner grant funding from Australian Government and USAID[53]. This output-based incentive reimburses local governments for investments made in

[51] Based on PT CRM (and EBD) in association with PWC was involved for Presidential Regulation No. 29 of 2009 related efforts to conduct Business Plans for several PDAMs funded by INDII (DFAT).

[52] Financing PDAM investment through Presidential Regulation No. 29 of 2009; Technical Report prepared by KPMG and IndII; 2012 Incidentally research by INSEAD for water utility companies, quoted by the report put the borrowing capacity as equal to 6.2 times EBITDA for Europe and 3.0 times EBITDA in America, 1.8 times EBITDA in the Philippines, and 2.0 times EBITDA in Brazil.

[53] Source:http://kiat.or.id/sectors/category/watersanitation/activity/1

PDAMs towards increasing service connections for the poor. The Water Hibah Program[54] was generally successful in using excess production capacity by stimulating local government investment in service connections. This resulted in an additional 97,000 low-income households being connected to piped water and about 5,000 low-income households to piped sewer systems, thereby helping over 485,000 people gain access to improved water supply, and 25,000 people to improved sanitation.[55] While the main focus of the Hibah program was on improving access to water for the poor, it also helped PDAMs to utilize its idle production capacity and generated additional revenue (program reimbursement includes conditions to demonstrate payment of the consumer water bill for three consecutive months). It also provided the incentive for participating local governments to invest in their PDAMs. Following the success of the pilot, the Hibah program has now been mainstreamed into the government program. A mainstreamed Hibah program that is fully funded through central government budget has been in place since 2016 – the Government of Indonesia allocated about A$46.5 million in 2015, A$62.7 million in 2016 and A$76.0 million in 2017 to the program.

Efforts have begun to expand the Hibah program to include other forms of investment beyond water connections. The Hibah program is focused on increasing water connections where a PDAM has existing unsold water surplus or idle production capacity. The current short term one-off payment program does not lend itself easily to address larger and longer-term investment requirements, such as water transmission, pressure management, or non-revenue water reduction. While the mainstream Hibah program continues, the government (with the support of development partners, including the World Bank) has begun an effort to develop other performance-based grant programs. Initial focus is on non-revenue water and energy reduction-based incentive programs, which can directly contribute to improved PDAM financial performance.

The Hibah program demonstrated how central government funding can be used to incentivize direct action at the local level. Consistent with experience in other countries[56], a sufficient Hibah payout early into the term could enable commercial financing for a project by effectively bringing down the cost of capital (the grant settles an equivalent part of the principal owed) and renders the project bankable. A Hibah-supported enhancement of commercial viability of this nature also has the potential to incentivize private partnerships.

[54] Source: http://www.prohamsan.com/

[55] Source:http://dfat.gov.au/about-us/business-opportunities/tenders/Documents/revised-concept-note-indonesia-infrastructure-program.pdf

[56] Similar approaches have been used in Uganda and Kenya in urban and small towns' water supply.

Viability Gap Funding

India

Various states, often through government corporate entities, offer various government support packages to enhance the viability of municipal PPP projects. These government support packages are sourced, through funds created both at the national level and at the state level, as follows:

National Level
The Viability Gap Funding Scheme administered by the Government of India's Ministry of Finance to provide financial support often in the form of a capital grant at the project construction stage (one time or deferred) up to 20 percent of the total project cost, upon approval by the Empowered Institution, but in case the sponsoring government authority proposes to provide any assistance over and above the said VGF, such will be restricted to a further 20%; Case Study on Municipal PPPs in India 17 / 51.

The India Infrastructure Finance Company, Ltd. (IIFCL), a government-owned company created to fund viable infrastructure projects (including PPPs) through: (a) long term debt; (b) refinancing to banks and public financial institutions for loans granted by them; (c) take out financing; (d) subordinate debt; and (e) credit enhancement, among others;

State-level

- The Project Investment Fund (PIF) managed by iDeCK in behalf of the State of Karnataka, which may be infused into the project in the form of debt or equity on a case-to-case basis;
- The State of Punjab provides any of the following as government support to the project: (a) government equity participation (up to 49%); (b) subsidy (not exceeding 15% of the project cost); (c) senior or subordinate loans; (d) government guarantees; (e) development rights; and (f) tax incentives, among others;
- The Project Finance Fund (PFF) Scheme – which provides loan assistance in the form of viability gap funding (VGF) for PPP projects – and the Debt Service Reserve Fund (DSRF) Scheme – which provides guarantees for loans covering project debt and provision of credit enhancement mechanisms, among others – both managed by the MUIDCL for the State of Maharashtra; and
- The Andhra Pradesh Urban Development Fund (APUDF) managed by the Andhra Pradesh Urban Infrastructure Asset Management Ltd (APUIAML), which allows government to invest into projects and project companies / special purpose vehicles, among others.

Brazil[57]

A. Sources of financing for PPPs at the subnational level

Brazil's National Development Bank (BNDES for its Portuguese acronym) has proved to be a crucial actor in this field. Being the biggest national development bank in the world and the most influential financial vehicle in the country, BNDES has played a fundamental role in stimulating the expansion of industry and infrastructure in the country. This bank has built its preferential position through loans that outperform market-based rates, and are lower than the rates offered by Multilateral Development Banks (MDBs). BNDES loans usually equal the return of governments bonds (with a rate usually near to 6%).[58] It is thus not surprising that by 2010, 40% of BNDES' portfolio is leveraged in long-term infrastructure projects, including debt in PPP projects.

The influence of the bank has been particularly significant in the last decade. In 2009, the bank doubled its portfolio in comparison to 2007 (USD 69 billion). Although this paramount increase can be attributed to the Bank's countercyclical strategy of boosting the economy during financial downturns, by 2014, BNDES almost doubled the annual disbursements made by the World Bank.[59] This influx of resources, on the one hand, has helped boost the implementation of PPP projects, but on the other hand it has also resulted in fiscal stress, and impeded domestic financial markets to fully develop.

For a firm, the minimum requirements to request financing through the BNDES are:[60]
- Be up to date with the tax and social contributions;
- Present satisfactory record;
- Have ability to make repayments;
- Have sufficient guarantees to cover the operation risk;
- The company must not be under credit recovery regime;
- Comply with environmental legislation.

Presidential decree No. 777/2017 sets the base for a national strategy aimed at bridging the gap between BNDES' and commercial banks' preferential rates. The effects of this decree started to take place in January 2018, and will have an important effect on PPP projects at the subnational level. As such:
- BNDES rates will be gradually merging to government's rate and it is expected that by 2023, the difference between what the government charges and pays in interest on the new contracts has closed, let alone with commercial banks;
- There will be more transparency in the allocation of loans;
- Improvements in the capital market will be promoted;
- MDBs will be allowed to have a bigger role in financing infrastructure projects,
- Rather than having a principal role in the domestic capital market, BNDES will switch to a more complementary role as a financier of infrastructure projects.

[57] Municipal PPP Framework – Brazil, Rebel, 2018
[58] https://www.economist.com/node/16748990
[59] https://www.sciencedirect.com/science/article/pii/S1062976916300539
[60] https://www.bndes.gov.br/SiteBNDES/bndes/bndes_en/Navegacao_Suplementar/FAQ/faq_answers.html

Brazil has four other government-backed federal institutions, which also provide funding for infrastructure and PPP-related projects: Banco do Brasil, Caixa Econômica Federal, Banco da Amazônia and Banco do Nordeste. In addition to this, other financing partners for PPPs at a subnational level are subnational development Banks such as the Banco de Desenvolvimento de Minas Gerais (BDMG), Banco do Estado do Rio Grande do Sul (BANRISUL) and the Banco Regional de Desenvolvimento do Extremo Sul (BRDE).

On other grounds, state-owned financial vehicles such as Banks or Funds do not require project-specific measures to validate weather or not the project is feasible (e.g., value-for-money assessment, cost-benefit-analysis). They also do not provide technical advisory for the implementation of PPP projects.

Subsidies as PPP-enhancing incentive

Subsidies (and other possible contractual incentives) offered by the public sector (federal or subnational) are another form of financing for PPPs apart from equity and debt. In fact, incentives through subsidies are often needed for the contract to be attractive enough for a private firm to step into the project. If a project is shown to be financially viable without any public funding, instead of falling under the PPP law, it should be managed as a "common" concession, to be bid and implemented under the country's concession laws and other related norms.

Prior to the changes to the Federal PPP Law in 2012 (Law 12.766/2012). The so-called "subsidies" were availability payments paid by the subnational government for provision of a service. Main features included:
- The inclusion of the financial burden on the annual budget planning,
- Review by the jurisdiction's PPP unit,
- Approval from the Federal Public-Private Partnership Fund (FGP),
- Minimum size of USD 12 million and up to 3% of the jurisdiction's net revenues, and
- Subsidies would be provided when operation start and were subject to output specific measures.

The Law 12.766 of December 27, 2012 main changes included the allowance of subnational governments to start paying subsidies to the concessionaire prior to the beginning of the service delivery. In addition, the Law 12.766 for an annual subsidy cap change from 3% to 5% of the jurisdictional net annual income. These changes provided even further financial flexibility in the implementation of PPP projects at the municipal level.

Infrastructure Bonds

As a way to expand the capital markets in Brazil, the Federal Government enacted, through the federal Law 12,431, tax-relief bonds for infrastructure (infrastructure bonds) as an expansion of the financing vehicles in the market and to divert the financial burden of the state-owned banks to more innovative and sustainable solutions to finance PPP projects in the country.

The infrastructure bonds can finance federal or subnational governments PPPs. The bond is back by the future revenues / performance of the project.

The main features of the project bonds are the following:
• Having a minimum weighted average term of 4 years;
• Prohibition on the repurchase of the by the issuer or related party;
• A period including a periodic payment of income, if any, with intervals of at least 180 days to pay;
• Proof that the security is registered through a registration system duly authorized by the Central Bank or the Brazilian Securities and Exchange Commission (CVM); and
• A simplified procedure demonstrating the commitment to allocate funds raised for the future payment or reimbursement of expenses, or for expenses or debts related to investment projects.

The infra-bond is remunerated at a fixed interest rate which is linked to the price index or the reference rate (TR). The total or partial settlement of the post-fixed interest rate is forbidden. When the target investor is general and qualified, the infrastructure bonds may be the object of a public offer (under CVM Instruction 400/2013). Moreover, when the target investor is the only qualified investor, there can be a restricted public offering (under the terms of CVM Instruction 476/2009).

Between 2012 and 2016, 70 infrastructure bonds were emitted mostly in the transportation and energy sectors, accounting for over 90% of emissions. Whilst in 2012, only 9 bonds were issued, in 2015 the number had raised to 20 emissions. However, it then dropped to 8 emissions in 2016. This significant decrease may have been caused by the political and financial crisis of 2016, since 64% of the buyers were regular citizens.

B. PRODES - Watershed Decontamination Program (PRODES[61])

An interesting government subsidy targeted to sewage treatment plants (STPs) is Brazil's PRODES - Watershed Decontamination Program (PRODES). PRODES is a financial incentive, in the form of payments for treated sewage, to public and private sanitation service providers that invest in the implementation and operation STPs. The Program was launched in 2001 and has been executed ever since by Brazil's *Agencia Nacional de Aguas* (ANA) or national water agency. Funds come from the general budget of the Federal Government assigned to ANA, managed by the basin committees (from water charges, state funds and others). Subsidy can range from 30% for large projects (population $\geq$ 200 thousand) to as much as 100% for small contracts (population $\leq$ 20 thousand).

Eligible projects:
- ✓ New STP construction projects;
- ✓ Expansions, enhancements, or operational improvements in existing STPs, provided that:
  - they increase the volume of treated sewage; or
  - they make the abatement of pollutant loads more efficient.

Prerequisites

[61] PRODES - Watershed Decontamination Program. PowerPoint presentation by Marco Alexandro Silva André. March 28, 2018

For enrollment:

- Well-defined project specifications (size, technology), in the form of concept studies or designs; and
- Decontamination targets approved by the Services Owner and by the Watershed Committee.

For contracting:

- Funds secured to carry out construction works

PRODES Stages

1 - Enrollment: Submission of proposals
2 - Validation: Assessment of the technical feasibility of proposals
3 - Selection: Application of the selection criteria (tied to PRODES objectives)
4 - Contracting: Transfer of funds to a specific account
5 - Certification: Assessment of compliance with pollution abatement targets and management criteria

Certification

This stage begins only after the works are completed and the STP begins operations.
Funds are paid in quarterly installments, provided contractual targets and obligations are met.
Certification of targets is based on:
- Self-assessments submitted by the Service Provider; and
- On-site audits to check the company's management criteria and confirm the self-assessment results.

Results to date

ANA

PRODES FIGURES

YEAR	Contracted STPs	Contracted value (R$ million)
2001	17	51.79
2002	11	17.74
2003	6	16.72
2004	4	1.66
2007	3	42.98
2008	1	21.34
2011	13	48.59
2012	3	56.96
2013	11	77.23
2014	8	39.47
2015	3	14.79
2016	2	14.39
TOTAL	82	403.66

Contracts

OGU + Collection:
R$ 403.66 million
(US$ 121.6 million)

↓

Investments by Service Providers: R$ 1,597 million
(US$ 481 million)

↓

Beneficiary population:
7.49 million inhab.

ANA

Status of contracts

Status	Number
Contracts with certifications completed	34
Canceled contracts	05
Contracts with certifications in progress	15
Contracts with certifications not yet started	28
Total	82

Final Considerations

Some of the merits of the Program:

Enterprises increase in value as a result of the expected results

The contract values are set according to the final benefits expected from the project (removal of the pollutant load), instead of the work's budget.

Public funds are guaranteed to be put to good use

Funds are only released upon authorization by ANA, after proof that the work has been completed and meets pollution abatement targets.

Financial support at the most critical point of STP operations

The PRODES certification process covers the entire initial stage of STP operations, as this period often requires adjustments and provides valuable lessons, and operational routines may not yet be fully consolidated.

Continuous search for the operational improvement of STPs

The fact that payments are conditional to the achievement of goals ensures that the performance of contracted STPs receives due attention.

Encouraging complementary investments

The systematic monitoring of the projects by a Certification Agent - in this case, ANA - encourages the swift resolution of problems commonly detected in sewage

infrastructure - such as the underutilization of collection networks, rainwater-related issues, among others.

Some of the Challenges faced by the Program

Need for a continuous flow of funds - budget;
Including new partners;
Improving stakeholder coordination; and
Search for ways to ensure greater integration with planning tools, e.g. Atlas Sewage: depollution of watersheds

Australia[62]

With the careful selection of projects that will be undertaken as a PPP, Australian governments do not generally provide guarantees for PPP projects. Nevertheless, some states, such as New South Wales outline a process for the issuance of sovereign guarantees in its regulations.

PPP projects in Australia are typically financed jointly by the public and private sectors.
From the private side, financing for infrastructure projects are sourced from:
- Debt finance;
- Equity finance; and
- Hybrid financing (i.e. superannuation funds).

From the public side, financing comes from different levels of government. Generally, PPP projects receive Federal level financial support for PPP projects. For State level projects, part of the funding is also sourced from State budget while for LGC projects, part of the funding is sourced from the Council's budget. To partly reduce the risk exposure of the private sector, some projects typically include a milestone payment during the construction period or at the completion of the facility. For Partnerships Australia, the typical project stages where milestone payments are allowed are:
• During development phase;
• A lump-sum payment upon Commercial Acceptance; and/or
• A lumps-sum payment at a refinancing event during the Operational Stage of the Project[63].

This mechanism in general reduces the incentives for the State government to undertake PPPs that are not financially viable to the private partner and not affordable to the users. Meanwhile, Australia puts great emphasis on deflecting the possibility of a termination of a PPP contract, as such, there is usually a direct agreement between debt providers and the government that ensures extensive

[62] Municipal PPP Framework – Australia, Rebel, 2018

[63] Partnerships Victoria, Guidance note Partnerships Victoria on Funding Options, December 2017, https://www.dtf.vic.gov.au/sites/default/files/2018-01/Guidance-Note-Partnerships-Victoria-financing-options.pdf

cure rights (including step-in rights) to avoid termination of the project contract for default.

Credit Enhancement

Argentina[64]

Argentina has some of the world's best renewable energy potential but financing the opportunity to explore it has been challenging. In early 2016, the Government of Argentina launched the RenovAr initiative. It is an auction-based renewable energy program designed to scale-up private renewable generation capacity. The RenovAr scheme helps address the key constraints to Argentina's development of renewable energy. These include poor access to long-term funding sources and perceptions of high country and sector risks.

To further enhance the confidence of investors and financiers, the World Bank Group (WBG) supported the preparation of the first RenovAr tenders and provided a $480 million guarantee to backstop certain government obligations under the program. In doing so, the WBG support helped Argentina unlock its renewable energy potential by creating a market and mobilizing about $3.2 billion of mostly private investments.

While Argentina has abundant renewable energy resources and needs to expand its generation capacity to meet growing demand, it was unable to exploit them. For example, the share of renewable sources of Argentina's electricity production was just 1.8 percent in 2015 and not reflective of the country's potential. In response, the Government of Argentina (GoA) decided to address this situation, launching the RenovAr program in May 2016. The goal of the program is to increase the share of renewable energy production to 8 percent in 2017 and 20 percent in 2025.

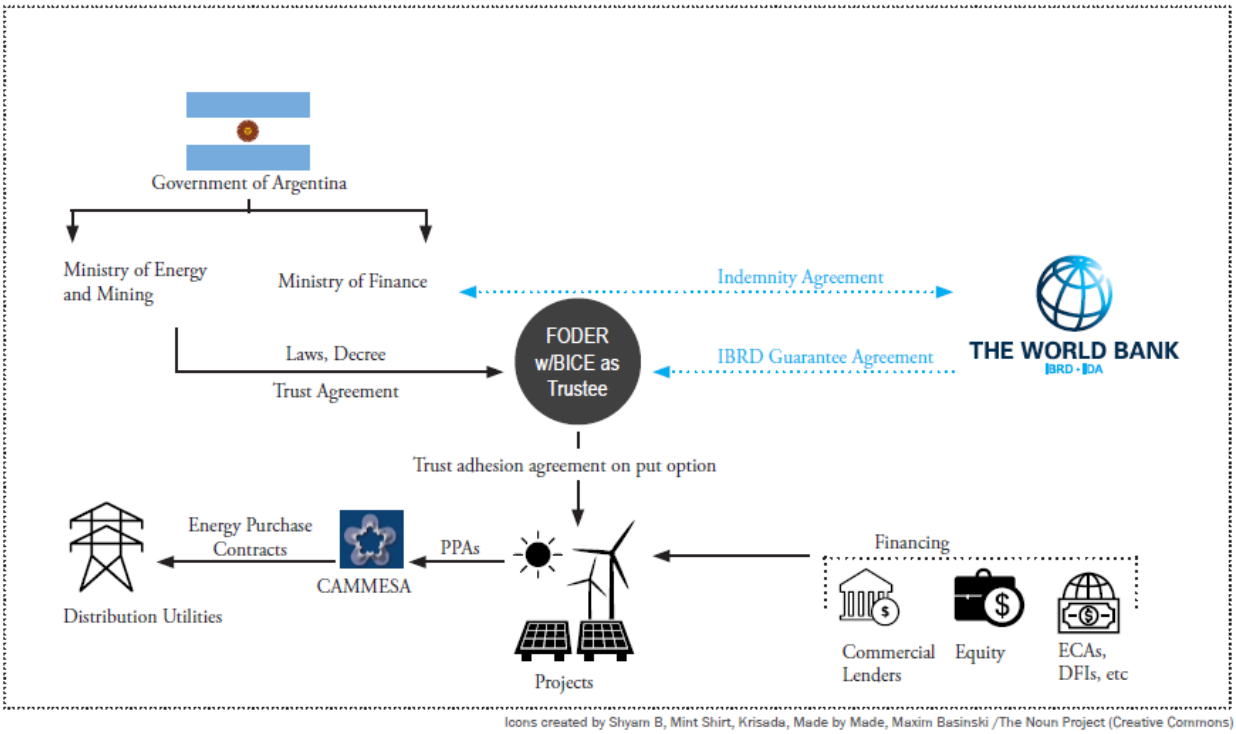
RenovAr aims to increase renewable generation developed by private investment through competitive auctions. CAMMESA, the wholesale energy market administrator, is the offtaker and signatory to Power Purchase Agreements (PPAs) awarded to private Independent Power Producers (IPPs).

To facilitate financing, the GoA implemented the Fund for the Development of Renewable Energy (Fondo para el Desarrollo de Energías Renovables or FODER) created by the renewable energy law (Law No. 27191) of September 2015. FODER was set up to provide guarantees, direct financing (debt or equity) and other financial instruments. The "Banco de Inversión y Comercio Exterior" (The Investment and Foreign Trade Bank - BICE) administers FODER as its trustee.

Initially, the primary instrument of FODER is a payment guarantee designed to cover: (i) ongoing PPA payments (i.e. liquidity support), and (ii) termination payment obligations arising from the rights of the IPPs to sell their project (a put option) to FODER if specific macroeconomic or sector risks materialize. This termination coverage is typically required by the private sector in emerging markets.

[64] Argentina Renewable Energy Auctions. Financial Solutions Brief. World Bank Group. January 2018.

GUARANTEE STRUCTURE



World Bank (IBRD) Guarantee

In Round 1, 15 of the 29 awarded projects, with a total installed capacity of 590 MW, requested the IBRD guarantee for a total value of $295 million. For Round 1.5, 12 of the 30 awarded projects, with a total installed capacity of 443 MW, requested the IBRD guarantee for a total value of $185 million.

The total IBRD guarantee was therefore $480 million for 1,033 MW covering 27 different projects (12 wind projects for 721 MW, 10 solar PV for 306 MW, four small hydropower for 4 MW, and one biogas for 1 MW). Bidders were given the option to select the IBRD guarantee tenor of up to 20 years. The average tenor chosen was 16 years.

Benefits

In its first nine months, RenovAr awarded 2.4 GW of renewable energy generation capacity, around 7 percent of the current installed capacity in the country. This substantially boosts the GoA's ability to meet its renewable energy targets. Argentinian customers will now benefit from a clean and indigenous power supply at competitive prices.

The WBG support is helping leverage about $3.2 billion in renewable energy financing with $2.5 billion from commercial sources. Discussions with GoA, bidders, and lenders indicated that this engagement played a critical catalytic role in attracting the large number of bids in these initial auctions rounds. Support should decrease over time as Argentina rebuilds its track record and investor confidence grows.

The WBG has helped a middle-income client country diversify its energy matrix and meet its climate goals. Power plants under Rounds 1 and 1.5 will reduce greenhouse gas emissions by about four million tons of CO2 per year over 20 years, around 4 percent of Argentina's National Determined Contribution target for 2030.

Columbia[65]

FINDETER, a partly government-owned second-tier lender, was established in 1989 in Colombia. It provides discounted loans to domestic commercial banks that lend to local entities to finance infrastructure projects. FINDETER was initially set up with equity provided by the Government of Colombia and loans from the World Bank and the Inter-American Development Bank. Thanks to its good credit rating, it can borrow at better rates than commercial banks and provide them with lending capital, while commercial banks retain 100 percent of the credit risk of municipal borrowers. A voluntary intercept provision plays a critical role in credit enhancement, increasing security and investor confidence for both FINDETER and the first-tier lender.

The Inter-American Development Bank and the World Bank provided financing to FINDETER at the outset. The Government of Colombia served as a guarantor for the multilateral loans. Today, FINDETER's funding comes primarily from the issuance of certificates of term deposits (a savings certificate with a fixed maturity issued by a bank), but it continues to have access to long-term funding from multilateral institutions. Revenues from existing loans finance a large share of FINDETER activities. The Government of Colombia owns approximately 92 percent of FINDETER's shares, with the remaining shares owned by local governments. The Fund's AAA local credit rating from DUFF & Phelps has helped it access less expensive financing.

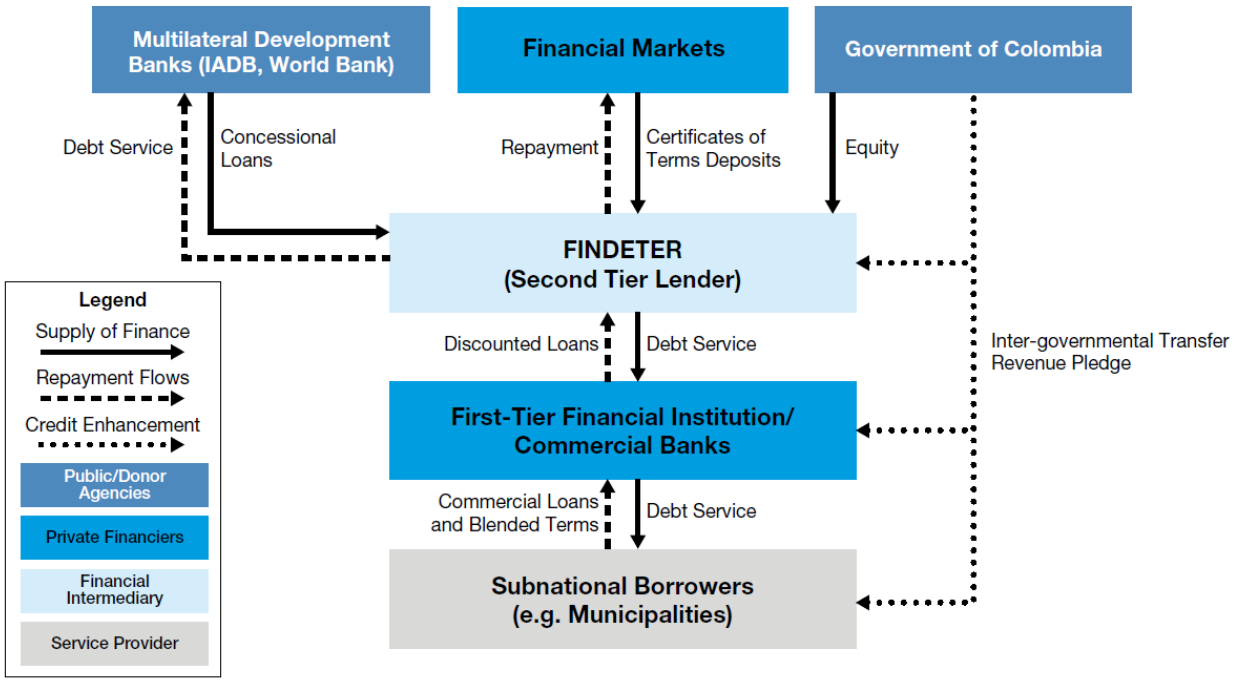
Financial Structure and Approach to Blended Finance

The way in which FINDETER operates is as follows:
a local government body applies for a loan through a commercial bank; FINDETER appraises the local government's proposal in parallel with the commercial bank, and upon approval (if

[65] Institutional Blending via Second-Tier Lender FINDETER in Colombia. Case Studies in Blended Finance for Water and Sanitation. World Bank. Joel Kolker and Sophie Tremolet. August 2016.

accepted) the loan package is granted. The first-tier lender provides a loan to the sub-national government, and FINDETER then lends the amount to the first-tier lender at a discounted rate. Figure 1 shows the discounting process for FINDETER.

FIGURE 1 Institutional Blending via Second-Tier Lender FINDETER, Colombia: Financial Structure



The commercial bank is responsible for repaying the rediscounted loan to FINDETER, independently from repayment by the local borrower. This means that the commercial bank takes on 100 percent of the credit risk. A crucial component of the financial structure is the establishment by the borrowing local government of an account into which intergovernmental payments flow.

The first-tier lender (commercial bank) has the right to intercept revenues if loan payments are not made, and in turn, to endorse these revenues to FINDETER. The pledging of municipal revenues is significant because, if a participating bank becomes insolvent, FINDETER can still collect its payment directly from the bank's local borrowers.

The intercept provision has helped maintain a low percentage of non-performing loans. FINDETER offers maturities of up to 15 years, which is notable, as loans to local governments without the involvement of FINDETER would normally not exceed five years. The strong credit rating and intercept provision help FINDETER lend for longer tenors at better rates.

Results

FINDETER has established itself as a viable financing institution, setting an example of the potential that second-tier lenders have to support the development of local credit markets. Today, water and sanitation investments represent one of the largest sectors of the FINDETER loan portfolio, with the sector receiving an estimated 28 percent of disbursements in 2014.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