



Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 30-Apr-2019 | Report No: PIDA26591



BASIC INFORMATION

A. Basic Project Data

Country Honduras	Project ID P170469	Project Name TEGUCIGALPA: WATER SUPPLY STRENGTHENING PROJECT	Parent Project ID (if any)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date 30-Apr-2019	Estimated Board Date 31-May-2019	Practice Area (Lead) Water
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance (SEFIN)	Implementing Agency Municipality of Tegucigalpa (AMDC)	

Proposed Development Objective(s)

The Project Development Objective (PDO) is to increase the efficiency and reliability of water services in select areas of Tegucigalpa.

Components

- Component 1. Operationalization of new service provider in Tegucigalpa
- Component 2. Improved water production capacity and efficiency of the distribution network
- Component 3. Project Management and Technical Assistance
- Component 4: Contingent Emergency Response Component (CERC)

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	122.50
Total Financing	122.50
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	50.00
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IDA Credit	50.00
Non-World Bank Group Financing	
Counterpart Funding	72.50
Borrower/Recipient	39.00
Municipalities of Borrowing Country	33.50
Environmental and Social Risk Classification	
Substantial	
Decision	
The review did authorize the team to appraise and negotiate	

A. Introduction and Context

Country Context

- Although Honduras’s economy has experienced moderate recovery since the 2008-2009 global economic crisis, the country faces the highest level of economic inequality in Latin America.** Honduras’s modest rate of Gross Domestic Product (GDP) growth (0.3 points per year¹) has been insufficient to significantly improve living standards, especially given the country’s accelerated population growth. In 2017, roughly 64 percent of households (69 percent of the country’s 8.3 million inhabitants) lived in poverty and an estimated 41 percent lived in extreme poverty.² This level of extreme poverty is second only to Haiti in the LAC region. While income growth has been recovering — particularly for the bottom 40 percent of the income distribution-- preliminary data for 2017 suggest that inequality has been increasing over the last two years.
- Honduras’s urban growth rate (3.2 percent in 2015) and percentage of urban poor (53 percent) are among the highest in the region.** Nearly 54 percent of the population lives in urban areas, and based on the current growth rate, this figure is expected to increase to 70 percent by 2050. Investments in services have not, however, kept pace with ever-increasing urban growth trends. Instead, urban development has largely lacked planning, regulation or controls, subjecting a large and ever-increasing portion of the population to critical shortages in terms of access to housing and public services, including water supply and sanitation (WSS), basic education and health. Nowhere are the pressures of unchecked urban growth more apparent than in the capital of Tegucigalpa, which houses 18 percent of the country’s population and generates 32 percent of the country’s GDP.
- In addition to facing poverty and critical shortages in basic services, Honduras has been significantly affected by extreme weather events and climatic risks.** According to the Global Climate Risk Index for 2015 (Germanwatch), Honduras was the country most affected by climate change between 1996 and 2015. Its accelerated urbanization increased the country’s overall exposure and vulnerability to natural disasters many of which are

¹ From 2014 to 2017, the GDP has grown on average 0.3 points per year, GDP in January 2017 is 4 (Central Bank of Honduras).

² Instituto Nacional de Estadísticas (INE), Encuesta Permanente de Hogares de Propósitos Múltiples, June 2017.



exacerbated by climate change. On average, Honduras loses 2.6 percent of its GDP each year to climatic events.³ The combination of observed and anticipated climate change impacts and increased climatic variability are likely to exacerbate its exposure to hurricanes, floods, erosion, landslides, and droughts as most recently evidenced by the 2014-15 *El Niño* weather event. Reductions in annual precipitation projected across the country of 20 percent by 2050 and 30-40 percent by 2090, combined with increased temperatures⁴ are expected to result in reduced water availability.

4. **Over the past two decades, Honduras has made significant progress in closing the WSS coverage gap.** Whereas in 1990 less than 75 percent of the population had access to improved water and under 50 percent to improved sanitation,⁴ Honduras succeeded in meeting the Millennium Development Goals of reducing coverage gaps in half by end-2012. By 2015, 91 percent of Hondurans had access to improved water, and 83 percent had access to improved sanitation.⁵ Despite the substantial headway made in terms of overall WSS coverage, there are still significant inequities and service quality is generally low. Whereas only 7 percent of the country's non-poor lacked access to water supply and another 12 percent lacked access to sanitation in 2015, 20 percent of its poor lacked access to these services. It is estimated that only 38 percent of water delivered in urban areas is potable.⁶

Sectoral and Institutional Context

I. Diverse Factors Threatening Water Security in Tegucigalpa

5. **Tegucigalpa is increasingly confronting water security risks** due to: (i) rapid urbanization; (ii) decreased precipitation; (iii) inadequate water resources management; (iv) a deteriorating water network; and (v) poor institutional arrangements for WSS services provision.

6. **The projected reductions in annual precipitation across the country combined with increased temperatures are expected to result in reduced water availability.** Tegucigalpa has experienced a reduction in precipitation of 7 to 10 mm annually throughout the last 50 years. According to latest projections, by 2030 the average precipitation is expected to further decline up to 39 percent, while average monthly temperatures are expected to rise by 1.2°C. The frequency and severity of storms and related flooding is also predicted to rise over time.

7. **The absence of a water resources management institutional, legal and regulatory framework has resulted in a proliferation of unprotected rivers and watersheds.** In the absence of water resources planning and protection policies, urban sprawl has increased both demand on water and unchecked contamination, further undermining water quality and availability. Population growth and water demand trends reveal mounting pressures on resources will only worsen.

8. **Longstanding poor governance arrangements and persistent management problems have caused water services to deteriorate to almost unbearable levels.** The national utility company, *Servicio Autónomo Nacional de Acueductos y Alcantarillados (SANAA)*, developed an organizational structure that grew beyond its financial viability. Tegucigalpa's water supply coverage gaps are likewise attributable to deteriorating infrastructure resulting from insufficient investments in maintenance and rehabilitation. As a result, the quality of WSS services in the capital city falls far below acceptable levels. According to latest figures, only 70 percent of Tegucigalpa's population has access to piped water and 50 percent to sewerage, significantly lagging national averages. Severe water rationing imposed year-wide result in highly intermittent service, particularly during the summer months. None of Tegucigalpa's residents enjoy continuous water service from the network and the frequency of services varies between neighborhoods. On

³ "The Central America urbanization review: making cities work for Central America" (WB, 2017).

⁴ *Honduras: Strategy Program for Climate Resilience* (2017). Ministry of Environment.

⁵ Joint Monitoring Programme, <https://washdata.org/data>

⁶ 2016 *Monitoreo de los Avances del País en Agua Potable y Saneamiento* — MAPAS.



average, households receive water twice a week for 2 to 4 hours each day with extremes of once every two weeks. The installed capacity for wastewater treatment in Tegucigalpa is barely 13 percent. No additional water sources have been developed in the past two decades to meet the needs. Reversing this situation will require investments estimated at \$570 million in the next 10 years.

II. Reallocation of responsibilities through institutional reform

9. **Throughout the past two decades, the Government of Honduras (GoH) has pursued a decentralization program aimed at reducing poverty levels and improving basic services by delegating greater responsibility to local governments.** By early 2000, the WSS sector institutions, including Honduras's largest service provider, SANAA, were locked in a vicious cycle of: (i) inefficient public spending largely driven by high staffing levels, which more than doubled the regional average, and associated high working capital costs; (ii) weak performance incentives; (iii) low and financially unsustainable tariffs; (iv) insufficient funding; (v) asset deterioration; (vi) squandering of financial resources; and (vii) political interference.

10. **The GoH's ambitious decentralization effort included issuing the 2003 Drinking Water and Sanitation Sector Framework Law (the Framework Law) which redefined WSS provision in Honduras.** Recognizing that the institutional setup at the time led to poor service levels, the Framework Law mandated, among others, the decentralization of SANAA, which managed and provided water supply services to 30 rural and urban areas; called for the transfer of its assets to the municipalities by 2013; required municipalities to set up autonomous service providers; and established a Water and Sanitation Sector Regulator (*Ente Regulador de los Servicios de Agua Potable y Saneamiento*, ERSAPS), among other sector entities, to ensure more effective sector governance. Following the decentralization, SANAA is intended to become a technical assistance agency providing support to municipal service providers.

11. **Substantial progress has been made toward strengthening WSS sector governance since the launch of the decentralization program.** In 2005, with the support of the World Bank and the Public-Private Infrastructure Advisory Facility (PPIAF), the GoH developed a Strategic Plan for the Modernization of the Water and Sanitation Sector (PEMAPS), which set forth a policy and action plan to support the decentralization of local WSS services. Subsequently, between 2007 and 2017, the WB-financed *Water and Sanitation Modernization (PROMOSAS) Project* advanced the decentralization program by directly supporting implementation of the Framework Law, focusing on mid-sized cities. The project also included technical assistance pivotal to strengthening the capacities of key sector agencies, including SANAA, to undertake the new roles called for in the Framework Law and allowed for the development of key policies, regulations and tools necessary to promote greater oversight, monitoring, and transparency.

III. The Unfinished Agenda: Completing WSS Reform in Tegucigalpa

12. **Completion of the decentralization process in Tegucigalpa is pending the revision of institutional arrangements and the award of severance obligations to SANAA staff.** In May 2015, the Municipal Unit of Potable Water and Sanitation of the Central District (*Unidad Municipal de Agua Potable y Saneamiento*, UMAPS) was instituted to serve as the local service provider responsible for delivering WSS services to the metropolitan area of Tegucigalpa.

13. **Although officially instituted in 2015, UMAPS has yet to be operationalized.** A gradual transfer of functions coupled with coordinated efforts to award severance payments represent the most viable path to complete the transfer. AMDC and SANAA have identified both staff eligible for transfer to the new service provider and those considered redundant. The approved service model established UMAPS as a Deconcentrated Entity of the Municipality of Tegucigalpa (*Alcaldía Municipal del Distrito Central*, AMDC) with administrative autonomy as well as its own budget and accounting system, while AMDC will remain the asset holder. The governance framework as set out in the municipal decree largely resembles that of SANAA. However, since poor and inefficient governance was identified amongst root causes for deteriorating WSS service provision in the metropolitan area, AMDC has decided



to revise UMAPS' governance arrangements and organizational structure to ring fence the provider from political interference. UMAPS will likewise need to develop the policies, manuals, and operation and management plans to ensure efficient service provision.

IV. Bridging Infrastructure and Operational Gaps in Honduras' capital

14. Insufficient investments in production facilities and distribution networks coupled with inefficient operational practices and external factors have also contributed to the deterioration of service levels in Tegucigalpa.

The main issues undermining water services are: (i) insufficient water sources; (ii) contamination of the two main catchment areas, *Guacerique and Rio Grande*; (iii) deterioration of infrastructure leading to operational inefficiencies at the *Laureles, Concepción* and *Picacho* WTPs; and (iv) physical and commercial losses throughout the distribution network.

15. Water demand exceeds the capacity of Tegucigalpa's supply sources. Although the population nearly doubled (from 540,000 in 1990 to over 1.4 million in 2016), Tegucigalpa continues to rely on the same water sources it did in 1990. The volume of water available at the three main water sources — *Concepción, Laureles* and *Picacho* — is insufficient to meet Tegucigalpa's current consumption levels.⁷ While the existing population requires approximately 3.5 m³/sec, the combined production capacity of these facilities is estimated at 2.00 m³/sec, (1.67 m³/sec during the dry season), with demand expected to reach 5.1 m³/sec by 2040.⁸ Unrestrained human activity and climate-related incidents are compromising the quality and availability of three water sources.

16. The Laureles and Concepción dams require regular maintenance and safety protocols to safeguard their security going forward. These dams have not received adequate maintenance and lack dam safety protocols. While the dams exhibit minimum structural issues, there are no emergency plans nor instruments in place to ensure the overall security of the infrastructure as well as of the roughly 2,000 people settled downstream along their river banks.

17. Despite support provided to SANAA in the past to improve infrastructure, additional investments are required to improve service provision systemwide. Throughout the past decade, the World Bank and other agencies financed the renovation of water supply networks. Poor organizational and management practices have eroded many of these improvements. To lay the groundwork for increased system efficiency, the Municipality is currently financing an international firm to map the primary water and sewage networks, assess the condition of Water Treatment Plant (WTPs), recommend improvements to them, and design a pilot project for network sectorization, district metering and Non-Revenue Water (NRW) reduction. These activities will inform the formulation of a long-term Water, Sanitation and Drainage Master Plan for the city.

18. Water losses, wastage and excessive consumption are contributing factors to extreme water scarcity and rationing. Old network infrastructure combined with limited sectorization, illegal connections, insufficient number of consumption meters, lack of pressure management and inadequate telemetry prevent accurate diagnosis and reduction of water losses estimated at 45 percent. Prevailing water collection practices result in water wastage and the direct discharge of high volumes of unused potable water into sewerage networks. Limited adoption of water saving appliances lead to excessive consumption.

Development Objective(s)

19. The Project Development Objective (PDO) is to increase the efficiency and reliability of water services in select

⁷ Usually between 200 lpcd and 250 lpcd including all kinds of users and an allowance for water losses (lpcd: liters per capita per day). The *Laureles* and *Concepcion* reservoirs and WTPs, respectively, supply 81 percent of Tegucigalpa's raw water.

⁸ Study under development by Hidalgo & Hidalgo – Consultancy firm hired by the AMDC to develop a pilot project to improve water services in the area supplied by Picacho water treatment plant and provide recommendations to improve overall service provision in Tegucigalpa. This study assumes a total water demand of 232 lpcd.



areas of Tegucigalpa.

Key Results

20. Achievement of the PDO will be measured through the following key PDO indicators:
1. A new Municipal Water and Sanitation Provider operational
 2. People receiving at least 12 hours of water per day in targeted areas under the Project.
 3. Priority WTPs operating at 95 percent capacity or higher in compliance with internal process standards.
 4. Number of hydraulic sectors complying with NRW targets.

D. Project Description

21. The proposed Project will constitute an Investment Project Financing with selected Disbursement-linked Indicators (DLIs) to provide incentives to ensure implementation of critical institutional reforms. The overall cost of the proposed Project is US\$122.5 million, to be financed by a US\$50.0 million IDA credit, with the remaining coming from national and municipal counterpart contributions. The Project will comprise four components as follows:

22. **Component 1. Operationalization of the new service provider in Tegucigalpa.** This component will support the transfer of SANAA's WSS operations in Tegucigalpa to the UMAPS through (i) updating of the statute defining the service provider's governance structure, duties and responsibilities, and inter-institutional relationships; (ii) supporting the operationalization and staffing of the key Departments and Units of the UMAPS, which may include, *inter alia*, the development and implementation of policies, as manuals, instruments, and operation and management plans for each of these units; and (iii) developing and implementing a gender policy to incentivize a gender-sensitive work environment including improving gender equality. This component will be disbursed against the achievement of specific indicators (DLIs) targets measured through the following DLIs:

23. **Component 2. Improved water production capacity and efficiency of the distribution network.** This component will strengthen the resilience of the city's water supply and sanitation sector to climate change related risks, including droughts, floods, and landslides, by increasing water availability and reliability; and reducing the risk of dam failure of the cities two reservoirs.

24. **Component 3. Project Management and Technical Assistance.** This component will finance goods, operating costs and consulting services associated with overall project management and oversight, including financing a third-party independent agent to verify the attainment of agreed DLIs. This component will, likewise, finance technical assistance to: (i) explore financing options for larger investments; (ii) carry out a gender gap analysis to explore disparities related to WSS services in targeted areas; and (iii) design and implement a communications campaign targeting beneficiaries in the services areas including support to citizen participation to promote transparency, accountability and responsiveness of UMAPS to its client base.

25. **Component 4: Contingent Emergency Response Component (CERC) (Total Cost US\$ 0.0 million).** This component will provide immediate response to eligible emergencies, in the event of such an eligible emergency (as defined in the Contingency Emergency Response (CER) Operational Manual prepared and adopted by the GoH).



Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

Based on screening at this stage, the project is not expected to entail major environmental or social risks and impacts. Civil works to be carried out under the project will be small scale and site-specific in nature, with impacts expected to be limited to the construction stage. Dam safety issues at the two large water storage dams (Laureles and Concepcion) in the municipality pose the potentially highest risk; the project design responds to these risks by including a subcomponent focused on improving dam safety, including contracting of a Dam Safety Panel of Experts, developing critical emergency and dam safety plans, and limited physical works to improve dam management -- however, major works on the dams will not be undertaken. The project's main social risks relate to sectorization works along water distribution networks in marginal and vulnerable communities, in particular where there are high rates of informal/illegal water connections; these will be managed through robust stakeholder engagement. The project will also entail a variety of minor, site specific construction related environmental, health and safety impacts associated with the various civil works activities, all of which are easily mitigated with proper construction management practices. The municipality's existing environmental and social capacity will be strengthened through the project to ensure adequate management of these issues. The proposed project activities should also result have the positive effect of enhancing environmental and safety management of the dams and water treatment plants, as well bolstering the climate resilience of the city.

Note: To view the Environmental and Social Risks and Impacts, please refer to the Appraisal Stage ESRS Document.

Institutional and Implementation Arrangements

26. Project will be implemented under the overall coordination of AMDC, which will host the Project Coordination Unit (AMDC/PCU). The AMDC/PCU will oversee all technical, administrative, and fiduciary aspects. It will ensure compliance with Bank environmental and social policies and will be responsible for monitoring and evaluation of progress under the Project. Financial management arrangements will be explained in detail in the Financial Management arrangements section of the PAD. The AMDC/PCU will work in close coordination with the Mayor's office as well UMAPS. Different municipal units, which form part of the current municipal structure, will provide advisory and technical support in different areas as deemed necessary.

27. A Financing Agreement will be signed between SEFIN in its capacity as Borrower for purposes of the Credit and the Association, a Subsidiary Agreement will be signed between the Recipient and AMDC and a Project Agreement will be signed between the Association and the AMDC to allow the latter to take on the responsibilities of project implementation.

28. The AMDC will designate, under a competitive process, a Project Coordinator. The latter will ensure that all contracting by the AMDC/PCU will be undertaken in a manner that will enhance the professional and operational capacities of the institution and its staff. To this end, all contracts particularly related to increasing operational efficiencies, Non-Revenue Water (NRW) reductions, and commercial operations will include a clause



ensuring that knowledge is transferred to the staff of UMAPS. This requirement may also be included in a Service Performance Memorandum (SPM)⁹ to be entered into between AMDC and UMAPS, defining the roles and responsibilities between both, with the objective to improve accountability since results will be measured through performance targets.

29. An international consulting firm will be hired with Project funds to serve as a Project Management Consultant (PMC) to support the AMDC/PCU. The PMC will be responsible for assisting the AMDC/PCU and UMAPS in the management and implementation of activities envisaged within the Project's scope and in compliance with all Bank standards. The firm will likewise provide extensive senior managerial and operational experience to the AMDC/PCU to: (i) ensure that all goods, works and services to be procured by AMDC comply with sound engineering principles, environmental and social safeguards standards; (ii) monitor and improve management systems; and (iii) provide technical advisory and the transfer of knowledge to UMAPS.

30. The AMDC/PCU will also retain the services of an Independent Verification Agent (IVA) for activities that trigger disbursements against the agreed DLIs. The IVA will be responsible for verifying progress made under each activity, as reported by contractors or consultants together with their requests for payment, which will include their calculation of the corresponding DLI. The hiring of an Independent Verification Agent will be a disbursement condition for activities under DLIs for Component 1.

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Implementing Agencies

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⁹ An internal managerial arrangement between AMDC and UMAPS will be explored based on the principles of customer orientation and financial viability. The SPM will stress aspects such as: operational efficiency, sustainable revenue strategies, improved cost recovery, and enhanced SPM accountability, as a means of improving the delivery of WSS services in the urban perimeter of Tegucigalpa.



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APPROVAL

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