

PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Report No.: AB5617

Project Name	Water Utilities Efficiency Improvement Project (PROME)
Region	LATIN AMERICA AND CARIBBEAN
Sector	Water supply (50%);Sewerage (25%);Central government administration (25%)
Project ID	P121195
Borrower(s)	UNITED STATES OF MEXICO
Implementing Agency	
	Responsible Agency: Comisión Nacional del Agua (CONAGUA) Gerencia de Fortalecimiento de Organismos Operadores Insurgentes Sur 2416, piso 3 Ala Sur Colonia Copilco El Bajo México, D.F. Contact Person: Lic. Eduardo Ibáñez Mariño
Environment Category	☐ A ☒ B ☐ C ☐ FI ☐ TBD (to be determined)
Date PID Prepared	March 31, 2010
Estimated Date of Appraisal Authorization	June 1, 2010
Estimated Date of Board Approval	August 5, 2010

1. Key development issues and rationale for Bank involvement

1. **Mexico faces an acute water crisis due to accelerated population growth and inadequate management of its water resources.** Severe regional disparity within the country in terms of water availability¹ persists², despite steady improvements in access to water over the past years, testifying to the government's effort to reach a sustainable and more equitable water resources management. The overexploitation is especially dramatic in groundwater resources, and water quality is deteriorating due to the lack of adequate wastewater treatment³. Surface and groundwater in the country suffer heavily from overexploitation and contamination. **Error! Bookmark not defined.**, due to an inefficient use of water in the context of water scarcity. In 1955, water

¹ The semi-arid and arid North, Northwest, and central regions account for 85 percent of the gross domestic product (GDP) and contain 92 percent of irrigated areas, but they receive only 28 percent of the total runoff. Access to water is still a factor of poverty and marginalization, especially in rural and indigenous communities that rely almost totally on groundwater for their activities. In Mexico, 10.6 million people do not have access to drinking water, and only 37.9 percent of the rural population has a proper sewage system.

² Water Resources – averting a water crisis in Mexico; Douglas Olson and Gustavo Saltiel, in: Mexico 2006-2012: Creating the Foundations for Equitable Growth; World Bank, 2006

³ *Agua, Medio Ambiente, y Sociedad: Hacia la Gestión Integral de los Recursos Hídricos en México*, Carabias and Landa; Universidad Autónoma de México, El Colegio de México, y Fundación Río Arronte (2005).

availability in Mexico was 11,500 cubic meters (m³) per person per year. By 2005, this amount decreased to 4,288m³⁴.

2. The water supply and sanitation sector is characterized by significant physical and commercial inefficiencies and low level of financial cost recovery. Compounding the water scarcity challenge is the fact that many of the water supply and sanitation utilities do not make efficient use of water resources. According to the most recent sector report published by CONAGUA⁵, the weighted average rate of Non-Revenue Water for water utilities (*organismos operadores*, OOs) in communities with a population of over 50,000 inhabitants is 38%. The same publication shows that the average tariff collection rate is 79% in a sample of utilities in municipalities with more than 50,000 inhabitants. In the same sample, the overall efficiency (an indicator used in Mexico to measure both operational and commercial losses) amounts to 44%. In addition, according to a 2005 Bank Report, the sector as a whole falls far short of generating sufficient revenues to cover full costs⁶. In the sample cited earlier, for example, only 79% of operation and maintenance costs were recovered.

3. The Federal Government considers water and sanitation a priority sector, and it is promoting significant investments in water, sanitation and urban drainage infrastructure projects, in part under private sector participation schemes. Upon starting its mandate, the Calderon administration launched a series of ambitious initiatives aimed at building a comprehensive national strategy in key sectors (see further details in Annex 3). Among others, the PNH (National Hydraulic Plan) sets out to invest close to US\$10 billion in the water and sanitation sector up to 2012 through large-scale so-called emblematic projects in addition to on-going investment programs. In order to achieve the goals set out in the PNH, the Plan also considers the need to strengthen the operational and commercial efficiency of water utilities, setting a goal of increasing the sector utilities' overall efficiency from 8% to 44% by 2012.

4. To implement this strategy, CONAGUA - the institution responsible for the implementation of the water sector policy framework - can rely on a number of federal investment programs. CONAGUA, the National Commission for Water, is the apex institution of the sector. Its mission is to “manage the nation’s water resources with participation by the society, aiming at the sustainable use of resources”. CONAGUA will implement the PNH through a number of federal investment subsidy programs, several of which also finance efficiency improvement activities. In fact, overall federal funding for efficiency improvement, for example, has increased from about 290M pesos (8% of overall federal WSS (Water Supply and Sanitation) sector spending) in 2002 to more than 4000M pesos in 2008 (14% of overall federal WSS sector spending)⁷. However, these programs are not always fully coordinated in purpose and geographical focus; due to lack of harmonization among them, they consist mainly in financing mechanisms, rather than comprehensive sector modernization instruments.

⁴ *Estadísticas del Agua en México*, CONAGUA, edición 2010.

⁵ *Situación del Subsector Agua Potable, Alcantarillado y Saneamiento*, CONAGUA, Edición 2009

⁶ Mexico Infrastructure Public Expenditure Review (IPER), Report No. 33483-MX, World Bank, 2005

⁷ Pesos figures in nominal terms; *Situación del Subsector Agua potable, Alcantarillado y Saneamiento*, CONAGUA, Edición 2009

5. **In order to explore the feasibility of a dedicated instrument to promote water utility efficiencies, CONAGUA launched in 2006 the PATME project.** The Modernization of the Water and Sanitation Sector Technical Assistance Project (*Programa de Asistencia Técnica para el Mejoramiento de Eficiencia*, PATME), which was partly financed through a \$25M technical assistance loan from the Bank⁸, was designed as a pilot technical assistance project to explore ways to significantly modernize participating water utilities. PATME supported the GOM's efforts to develop the tools and instruments to support local authorities in improving the financial sustainability and efficiency of water supply and sanitation service provision. Through this project, CONAGUA has developed new regulations providing incentives for efficiency improvement, including transferring financial resources based on efficiency and service improvements. The project also supported the improvement of commercial and operational efficiency in a group of selected utilities.

6. **PATME, which closed in March 2010, has shown encouraging results and CONAGUA is interested in learning from it and scaling it up.** The Implementation Completion Report of the project is currently being prepared, but first results are already available from an in-depth evaluation conducted through independent consultants with PATME financing⁹. In the first two years of PATME, the global efficiency of participating utilities was increased by almost 5 percentage points from 37.3 to 42.2% due to actions financed by PATME and other programs.¹⁰ At the same time the PATME evaluation revealed the need for stronger supervision, more solid technical assistance especially to the weakest utilities, and greater flexibility in terms of fiduciary constraints for the most advanced utilities.

7. **Mexico has had a longstanding partnership with the World Bank Group encompassing the delivery of the full menu of financial, knowledge, and coordination and convening services,** and the on-going Country Partnership Strategy (CPS) for Mexico¹¹ built on the Mexican authorities' desire to maintain such relationship. The CPS recognizes in its February 2010 progress report *Developing Infrastructure and Assuring [...] Environmental Sustainability* as a key theme. The Bank is also a key player in leveraging international experience to support innovative approaches to the challenges facing the WSS sector in Mexico, including for example large-scale efficiency improvement programs in a number of utilities in countries large and small throughout Latin America and the World.

8. **The Bank is currently preparing a Development Policy Loan to support the Country's adaptation agenda in the water sector.** This project (P120134 - Adaptation to Climate Change in the Water Sector Development Policy Loan), which is expected to be approved by the Board on May 31, 2010, has been agreed with the Ministry of Finance as part of a broader package of support to the water sector, which would also include this proposed operation as well as non-lending technical assistance. While

⁸ P091695, approved by the Board in August 2005 and closed on March 30, 2010.

⁹ *Estudio de Evaluación de Resultados actuales y Presentación de experiencias del programa PATME*, CONAGUA, 2009

¹⁰ The collection efficiency index rose from 69.8 to 77% between 2006 and 2008 while the operational efficiency for the same period increased in a very moderate manner (from 53.4 to 54.8%).

¹¹ Report No. 42846-MX, March 4, 2008 endorsed by the Board in April 2008.

CONAGUA has requested the Bank to maintain both operations separated, together with the technical assistance activities they will allow the Bank to support the water sector in addressing water scarcity and climate change in a more comprehensive manner.

2. Proposed objective(s)

9. The tentative PDO is to improve the efficiency of WSS services by (a) strengthening the institutional capacity of CONAGUA to improve sector performance, and (b) supporting operational and commercial efficiency increase activities in participating water utilities.

3. Preliminary description

10. **The operation's technical scope would be generally similar to the recently closed PATME project but entail a significant scale-up and incorporate a number of lessons learned during the implementation of PATME.** CONAGUA's vision is to use this project as the basis for the creation of a new federal program targeting efficiency improvements in the WSS sector overall. To achieve this, the project would keep a similar structure to the PATME project, with some adjustments, as described in the coming paragraphs.

11. **Component 1: WSS sector information and knowledge management improvement (estimated cost: 5M USD, 100% IBRD funding).** This component, implemented by CONAGUA, would finance activities centered around two main axes:

- **Management of information.** Under the project, the preparation of standards for indicators definition, initiated under PATME, would be completed and CONAGUA would move towards greater coordination and standardization of the information with the objective of turning it into a tool for benchmarking and an instrument for greater accountability and transparency.
- **Management of knowledge.** Within CONAGUA, the unit that would implement the PROME project is generally responsible for capacity building activities and would continue and strengthen its efforts to improve the sector's capacity to provide efficient, reliable water and sanitation services. Activities such as training courses, sector studies, development of manuals and organization of annual conferences around the efficiency issues, are contemplated, in continuity of PATME-financed activities.

In addition, this component would also finance overall project management and evaluation activities.

12. **Component 2: Modernization of the services of the water utilities (estimated cost: USD 195M USD, IBRD funding: 100% of federal contribution, estimated to USD 95M).** This component, implemented mostly by the water utilities themselves, would finance physical and commercial efficiency improvement measures. Under PATME, less than 20 water utilities participated in the project, and these were mostly hand-picked to create a representative sample of pilot models. No specific criteria, types of investments or investment ceilings were established and there was

limited supervision and focus on results. Given the scale-up that PROME entails, and the vision of creating a self-standing federal program, a much larger number of utilities will participate in PROME. Aside from the utilities already involved under PATME, CONAGUA seeks to focus this program initially on a number of utilities in the Mexico Valley (*Valle de Mexico*), which includes close to 40 water utilities with variable but generally low efficiency, and where a large investment program is underway, potentially requiring utilities to cover higher operations and maintenance costs. Following preliminary discussions, the Component would entail three different windows targeted at supporting utilities wherever they are in their strengthening process.

- **Technical Assistance (total cost: 10M):** all participating utilities would have access to a technical assistance window throughout the project. Initially, this window would finance activities such as initial diagnostics and investment plans; later in the process, the window would finance studies on a case-by-case basis, for example on tariff and subsidies, governance structure, or specific operational or commercial issues. The window would be implemented by either CONAGUA or the utilities themselves. This window would also finance a stronger supervision scheme aimed at ensuring that the activities are well planned and well implemented.
- **Classical Efficiency Investments (total cost: 175M):** utilities that comply with a set of minimal requirements, to be defined during preparation, would be eligible for this investment window, possibly linked with an overall ceiling based on performance criteria. This window would finance typical operational and commercial improvements similar to those financed under PATME, such as establishment of District Metering Areas, leak reductions, macro and micro-metering installation, commercial system installations etc. This window would represent the core of PROME's investment. All investment measures would have to be based on an initial diagnostic that would establish financing priorities together with a specific baseline and an easily measurable objective for each action. Such diagnostics and investments plans would be financed by the Technical Assistance window in utilities where none is available.
- **Pilot Results-based Efficiency Investments (total cost: 10M):** Among existing and potential participating utilities, some are much more advanced than others; this window would cater to their higher level of sophistication, generally financing similar activities as the classical investment window but using outputs (or outcomes), rather than inputs, as the basis for disbursement. Since eligibility criteria would be more demanding than for the classical investment window, this window would possibly allow for the use of the country's fiduciary rules and systems, in agreement with the stronger capacity of the utilities.

4. Safeguard policies that might apply

13. **While the PATME project was classified as a category C with no safeguards triggered, this project is proposed as a category B with several safeguards triggered.** The proposed activities (replacement of efficiency-related infrastructure, minor construction works) imply low environmental impacts and generally positive social

impacts. During preparation, the Bank team will support CONAGUA in the preparation of an Environmental Framework and a Resettlement Framework.

Safeguard Policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	☒	☐
Natural Habitats (OP/BP 4.04)	☐	☒
Pest Management (OP 4.09)	☐	☒
Physical Cultural Resources (OP/BP 4.11)	☒	☐
Involuntary Resettlement (OP/BP 4.12)	☒	☐
Indigenous Peoples (OP/BP 4.10)	☐	☒
Forests (OP/BP 4.36)	☐	☒
Safety of Dams (OP/BP 4.37)	☐	☒
Projects in Disputed Areas (OP/BP 7.60)*	☐	☒
Projects on International Waterways (OP/BP 7.50)	☐	☒

5. Tentative financing

Source:	(\$m.)
Borrower	100
International Bank for Reconstruction and Development	100
Total	200

6. Contact point

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* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

