

Water Utility Regulation in Mexico: Lessons Shared at a Recent Meeting

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Introduction

While many Mexican water utilities rank among the best in Latin America, Mexico nevertheless faces major problems associated with water service quality, efficiency, and coverage, particularly in rural areas. The WHO/UNICEF Joint Monitoring Program reported that in 2004, 76% of the population lived in urban areas, while the remaining 24% resided in rural locations. While 97% of Mexico's total population had access to a safe water supply, only 87% of the nation's rural population had such access. Similar trends were evident in sanitation. Coverage extended to 79% of the total population; however, only 41% of the rural population received some form of sanitation service (JMP 2006). In terms of the nation's water service quality, in 2000 only 45% of households connected to a water distribution network received continuous service, while remaining customers experienced various degrees of supply interruption (World Bank 2005). National operating efficiency also remains below the average for both developed and developing countries in the region. In 2000, the proportion of non-revenue water in Mexico was reported to be 44%, roughly double the average in other countries (World Bank 2005). Variability in labor efficiency is also apparent, as the number of staff per 1,000 connections was reported to range from 2.8 to 19.6 in a sample of 35 large Mexican utilities (World Bank 2005).

The “*Seminario Internacional de Gestión y Regulación de los Servicios de Agua Potable y Saneamiento: La Experiencia Mexicana e Internacional*” held in Mexico City from July 25-27, 2007 was organized by the *Instituto Mexicano de Tecnología del Agua* in cooperation with the *Comisión Nacional del Agua* (CONAGUA), *Asociación Nacional de Empresas de Agua y Saneamiento* (ANEAS) and the *Comisión Económica para América Latina* (CEPAL). This seminar was designed to bring together water utility managers, consultants, academics, and regulators from within Mexico and from other countries, in order to share ideas and discuss problems associated with water supply operations. Major themes of the meeting included needs for change in the areas of management, regulation, and politics in order to improve overall utility performance. Discussions focused on issues of self-regulation, commercial efficiency, governance structures, and benchmarking. In particular, a broader implementation of benchmarking was identified as a potentially useful method for identifying weaknesses in utility performance and inefficiency in operational practice.

Regulatory and Governance Issues

As a result of the decentralization of Mexico's water supply and sanitation services in 1983, most regulations pertaining to water supply and service are currently of municipal origin. While some water and sanitation policies are set by CONAGUA and/or individual states, debate exists over whether regional vs. federal entities should become more involved in regulation at the

municipal level. Water utilities operate primarily independently, as no over-arching agency exists to link them. In this autonomous system, water managers are not formally obligated to align their objectives with those of neighboring operations. This strategy may be feasible when water resources are plentiful, however as utilities attempt to plan for long-term sustainability, some level of communication and cooperation between utilities will become necessary.

Opinions of the seminar attendees were varied as to the degree to which federal agencies should become involved in water supply and sanitation regulation. However, many water utility managers agreed that a system for identifying and sharing successful solutions to common problems would benefit individual utilities by saving time and money. In addition, the creation of a centralized regulatory agency would help to relieve individual municipalities of sole responsibility for implementing and enforcing regulations. The issue of “self-regulation” was a recurring theme throughout the seminar, highlighting a need for increased transparency and accountability within municipalities and greater involvement at higher governmental levels. The idea of placing partial responsibility for regulatory processes in the hands of state or federal agencies was viewed by some as a way to address some of Mexico’s current regulatory problems.

Political Issues

Regulatory issues are inevitably tied to political issues; the power of the purse and jurisdictional tug-of-wars influence who has the authority to make decisions regarding water quality, prices, and network expansion targets. However, several water utility problems of a primarily political origin were identified during this seminar. The most frequently-discussed political problems concerned pricing schemes and commercial efficiency. Mexico’s “culture of non-payment,” is often referenced as the reason why large utility revenues are sub-standard. Seminar attendees cited inefficient billing departments and faulty or missing water meters as factors contributing to, but not solely responsible for these losses. Partial responsibility was also attributed to political factors such as federal subsidies and government-mandated term limits for utility managers.

Although Article 115 of the Mexican Constitution places municipalities in charge of providing and managing water and sanitation supply operations, allocation of the nation’s water resources is primarily controlled by the federal government. Federal law allows the government to declare water resources of national importance as public domain and to sell these resources to water operations at a subsidized rate in order to support universal water coverage. While significant subsidies allow water costs to remain low, many operators cite subsidization as one factor undermining water utility self-sufficiency. Under this system, payments are frequently delayed and funds difficult to access. These problems are exacerbated by the fact that water system directors within each municipality are restricted to three-year terms. Many meeting attendees expressed concern that this short tenure effectively restricts directors’ ability to design and achieve long-term goals. A mechanism for shielding water utilities from the destabilizing effects of shifting political policies may in part ameliorate many of these politically-related problems.

The Role of Benchmarking

Benchmarking is a valuable tool for evaluating the performance of a water utility. Utility performance depends on many external conditions (access to financial resources, policy and regulatory frameworks, availability of labor and resources) as well as on internal factors (corporate culture, management accountability, and customer orientation). Benchmarking provides a framework of well-established empirical procedures that allows managers to identify external and internal problems in performance and create realistic targets and incentive programs to aid future improvement (Berg, 2007; Mugisha, Berg, and Muhairwe 2007). Benchmarking promotes transparency, analytic rigor, and information dissemination. Yardstick comparisons are particularly useful in developing countries where inefficiency is a major reason for poor access to water services. Water utilities in areas that use benchmarking principles such as strategic and participatory planning, internal incentives, baseline performance documentation, trend identification, greater employee accountability, and goal-setting have been found to show significant improvements in overall efficiency and performance (Mugabi, Kayaga and Njiru, 2007; Baietti, Kingdom and van Ginneken 2006; Mugisha, Berg, and Muhairwe 2007).

Implementation of a benchmarking approach for Mexican water utilities was discussed during the seminar as a means for evaluating and ranking the overall performance of utilities nationwide, as well as providing a framework for improving utility coverage, service quality, and efficiency. Although there has been much interest in applying this approach to Mexican water utilities, implementation has been rare. Many utilities believe that they lack the useful historical data and expertise to perform a benchmarking analysis; however, local universities and international training programs are available to assist utilities, and developing countries can often participate for a reduced or waived fee. Utilities that are able to incorporate benchmarking into their operations typically experience a range of benefits, including greater ease in attracting donor money, improvement in service quality, expanded networks and optimization of utility operations.

Conclusions

In the course of investigating many of the problems associated with water supply and sanitation management and regulation in Mexico, several important ideas about management, politics and regulation emerged from this seminar.

1. *Politics plays a significant role in the reform process: successful changes can only be made with the full commitment of policy makers to financial and political objectives.* Many water utility managers in Mexico believe that they are restricted by changing political whims rather than effective participants in the political process. This restriction is felt to play a major role in stunting utility performance.
2. *Separate and well-identified functions and responsibilities are important elements for institutional design.* Issues of accountability, i.e., which agencies possess regulatory power and which are in turn regulated, need to be addressed if there is to be an increase in the transparency and efficiency of the water regulatory system. In addition, positions at each level of control must be filled with qualified personnel, trained to effectively and efficiently manage the system.
3. *Reforms must occur both internally and externally to promote successful outcomes.* Cooperation between politicians, utility managers and customers is crucial for improved performance. In particular, a system must be developed to enhance the accountability of

operators, agencies and customers. Operators must comply with regulations, and customers must be aware of their rights and responsibilities as users. In addition, utilities must also be responsible for reducing internal inefficiencies that hinder performance and affect the responsibilities of external agencies and customers.

4. *Benchmarking is a potentially useful tool for improving water utility performance.*

While many Mexican water utilities are collecting and posting data useful for benchmarking (such as on the International Benchmarking Network (IBNET)), few studies have actually evaluated the performance of water utilities within Mexico, either compared within Mexico or on an international level. The considerable interest expressed at this seminar in increasing efficiency and transparency within the Mexican water utility sector suggests that operators and managers in Mexico would be willing to incorporate this type of performance measurement into their utilities both as an impetus for encouraging institutional reform and for self-improvement in the management of water supplies.

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