

Roundtable Executive Summary

Water in Mexico: Government Objectives and Opportunities for Private Investment

**Mexico City, Mexico
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Executive Summary:

- Mexico is facing severe water quality problems due to the great pollution caused by municipal and industrial discharges that flow without treatment. In addition and more importantly, water availability is becoming an important problem since both, superficial and underground water sources are becoming scarce in the most populated zones.
- The National Water Commission (CNA) is aware of the different problems of Mexico's water sector and on the impacts these problems represent to the economy and the society. In fact, President Fox has referred to the water problem as a National Security Issue and is expected to deal with it accordingly.
- Private participation in Mexico's water sector is incipient, with only four medium sized cities and Mexico City, home of 19 million inhabitants having some form of private participation in the operation of water systems. Since the Mexican government lacks of sufficient resources to make front to the increasingly strong water problems, it will make an effort to promote the adoption of private participation schemes in Mexico's most important cities. To do this, the government has initiated a program to provide funds to those local water authorities that select private partners or concession their systems to the private sector. This program is expected to be the main driver for increased private participation in the sector in the following years.
- Mexico's largest water user is agriculture using approximately 83% of the total water used. This sector is highly inefficient on its water consumption losing between 40% and 60% of the water. One of the main priorities of the new government is to promote efficient water use in this sector. To do this, the CNA will develop programs for the construction of irrigation infrastructure; develop new zones for irrigated agriculture, especially in Mexico's southeast region; and promote the substitution of water from wells with treated water for non-vegetable agriculture.
- Mexico City has a water deficit of close to 4 m³/s. In recent years the government has made front to this program by reducing water leaks and increasing metering and collection as well as tariffs. This has represented a recovery of 1.93 m³/s and is expected to reach 2.4 m³/s for the year 2004. In addition the Mexico City government has opened 120 new wells to extract water from the aquifer. This situation is only a temporary relief since Mexico City's aquifer is being overexploited and from three cubic meters extracted only one is recovered. This situation is

causing the city to sink and represents great long-term risks. The Mexico City Government is evaluating the introduction of water re-injection technologies.

- Wastewater is also another important problem not only for Mexico City but also for another 92 localities which are missing compliance with wastewater treatment regulations since the beginning of 2000. While Mexico City has had an authorized Japanese loan to build over 40 m³/s of wastewater infrastructure, political disputes between the Federal, local and the State of Mexico governments have been the main cause of delays. These projects are scheduled for tender in 2002 but could suffer further delays.
- The City of Guadalajara, being the second most important in Mexico in terms of population is also having strong water availability problems. The lake of Chapala, which traditionally has been the main source of water for the city and for the agricultural zones surrounding the lake, is on its lowest historical level reaching less than 8 meters. The lake loses in addition to the 7.5 m³/s, which are extracted for agricultural and urban consumption, 1,400 million m³ per year due to evaporation, and it is estimated that only recovers half of this volume. The government of Guadalajara, aware of the problem is seeking for alternatives to substitute use of water from the lake by other sources. This project involves not only the construction of infrastructure to source water from new sources, but also programs to bring efficiency to irrigation districts and installing a hydro-meteorological network.
- Private participation in wastewater treatment in Mexico begun in the early 1990's and since then, projects have begun to flow but only slowly. Approximately 40% of the total wastewater treated in Mexico is being treated by private concessionaires. Unfortunately the treatment level on a national level is only 24%. Private participation in this area has demonstrated to be the best option, however low tariffs and low efficiencies of local water utilities don't allow this market to mature faster.
- Several financial mechanisms have been installed in Mexico's water sector, and the new government is developing additional programs, mainly to attract private investment. The federal government is betting on private participation which will translate to efficiency which will turn the water sector self-sustainable. This process will take years but projects involving private operators are gaining momentum.