

WATER SUPPLY AND SEWAGE TREATMENT

Some 3 billion cubic metres of raw municipal sewage and more than 2 billion cubic metres of untreated industrial effluent is dumped into Mexico's natural water system every year.

Mexico is faced with both a scarcity of natural water and severe water pollution from household, industrial and agricultural sources. Supply shortages and government policy changes have driven water prices to unprecedented levels, particularly for industrial use. This has generated a demand for equipment to reduce consumption through recycling at the plant level. Increasing pollution of the nation's river basins is creating a demand for pollution control and water treatment technologies on a larger scale. A substantial proportion of water supply and sewage treatment expenditures are for construction services. Mexico is relatively self-sufficient in these services, but it must import a large proportion of the equipment and technical services involved. By one estimate, Mexican imports of water treatment equipment and services totalled US \$140 million in 1993, which was more than 80 percent of the market.

WATER SUPPLY

Mexico's water resources are distributed unevenly relative to both its land mass and its population. Half of the water resources are concentrated in the south-east. Northern Mexico, which comprises almost one-third of the nation's area and includes the city of Monterrey, has only 3 percent of the water. The country's largest cities are in the centre of the country, where water resources are located at much lower altitudes than most of the population. Substantial energy is required to pump water to where it is needed. According to government sources, there are 13 million people who live in urban areas who do not receive potable water because of lack of infrastructure.

Mexico City, in particular, faces enormous problems. Eighty percent of its water is pumped from aquifers, at a rate which exceeds capacity by half. This is causing subsidence of the land and damage to surface structures. Most of the rest of Mexico City's water is pumped 127 kilometres from the Cutzamala River. This requires a lift of more than a kilometre, at a huge energy cost.