

Ambitious sanitation goals

IBRE recently brought together experts to discuss the challenges of providing universal access to basic sanitation in Brazil.

Solange Monteiro

OF ALL INFRASTRUCTURE SECTORS in Brazil, sanitation is the most critical. Poor sanitation has meant uncountable financial losses because water networks are inefficient; it also means a much lower quality of life for Brazilians exposed to the diseases that result from untreated sewage. Strategies to reverse this situation were discussed May 29th at a seminar on "Sanitation and Water Management sponsored by the Brazilian Institute of Economics (IBRE) of Getulio Vargas Foundation (FGV), in São Paulo city.

Speakers at the seminar analyzed developments in the sanitation sector since the Sanitation Law of 2007 and the launch of the Sanitation Plan (PLANSAB) in late 2013. Ernani Ciríaco de Miranda, director of institutional coordination of the National Sanitation Department of the Ministry of Cities, noted the importance of these milestones for promoting investment in the sector after the previous National Sanitation Plan (Planasa) was dismantled in 1986. "PLANSAB now effectively unifies the discussion of sanitation policies, influencing programs, activities, and guidelines," he said. PLANSAB's goal is to achieve universal access to sanitation services by 2033. It is estimated this will require investment of US$140 billion.

Carlos Alberto Rosito, of GO Associates consultants, considered the goal ambitious, because it implies increasing by about 50% the annual amount currently invested in sanitation. The experts were unanimous in saying, however, that the obstacles to meeting the goal are not just financial; a major problem is inability to execute these investments. A study of the Trata Brazil Institute found, for example, that of 149 sewage-related public works of the Growth Acceleration Program (PAC), more than half are not proceeding; they have been paralyzed or delayed or were never

even initiated. Based on the 2007 Sanitation Law, local authorities have until the end of 2015 to submit master plans that have been adopted by law or municipal ordinance. So far, however, only about 30% of cities have plans, and the quality of those plans submitted is quite uneven. "We have seen plans five pages long and others fully developed," Miranda said.

Another challenge for the expansion of sanitation is the how municipalities should address its regulation. Vinicius Benevides, president of the Brazilian Association of Regulatory Agencies, noted that here sanitation activity suffers from problems common to other sectors that relate to the need to build up regulatory agencies. "Regulatory agencies are still young in Brazil," he said, "and have suffered some setbacks in their operations. For sanitation, however, the priority now is to strive for rationality and making reporting information simpler," he said. "The private sector has proven it can contribute, as it did in sectors like power and roads," said Louzival Mascarenhas Jr., president of OAS Environmental Solutions, but better regulation has been identified as critical to attract the private sector to expand sanitation services through such options as public-private partnerships and concessions.

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Question of focus

Marilene Ramos, professor at Brazilian School of Public and Business Administration and former president of the State Environmental Institute of Rio de Janeiro, emphasized that the need to enhance planning capacity in the sector is directly connected to the safety of the water supply. She illustrated the current lack of planning by citing the crisis in the metropolitan region of São Paulo city because of the low levels in the Cantareira water system, and the decision of the Federal Attorney's Office to stop the public works to transfer water from Paraíba do Sul River to the Cantareira system. She said that actions like this suggest a failure to focus when dealing with current water supply problems. "If the project included targets for sanitation and reduction of water losses, there would be sufficient water for everybody," she said, pointing out that the current system of charging for the use of water has been moving slowly, and collections are still too small to pay for sustainable management of river basins. She added, "US$18 million a year collected is not sufficient to meet the investment needs of the Paraíba do Sul River basin."

Fernando Malta, coordinator of the Chamber for Water Resources of the Brazilian Business Council for Sustainable Development, noted that although Brazil has some of the most advanced laws in the world for water management, their enforcement and operation are not effective: "Today, Brazil has 200 state and federal watershed committees, but fewer than 30 are fully functional," he said. The inaction of committees can affect the water supply of some industries, and various companies have started to make efforts to improve water management.

"Working to reduce the loss of water supply requires the participation of everyone," said Giuliano Dragoni, president of the National Association of Private Concessionaires of Public Water and Wastewater. He noted that a study by the National Water Agency found that about 55% of municipalities could have water supply problems

by 2015 because of a shortage of water sources or deficiencies in their water systems.

The importance of water sources, which captured newspaper headlines because of the water supply crisis in São Paulo city, the largest in Brazil, is expected to gain even more prominence in coming years, according to Newton Azevedo, Brazil's representative at the World Water Council. "In 2018, Brazil will host the World Water Forum, which will attract 50,000 people to Brasilia. It will be an important moment because there are issues not only of the impact of climate change but also of health and water supply security," he said.

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Innovation

To increase access to sanitation services, the experts underscored the importance of incentives for adopting technologies to reduce water losses and allow water reuse though careful treatment of wastewater.

Ruddi de Souza, CEO of Veolia Water Technologies, said that the private sector has invested heavily in innovative water management techniques and noted that "Petrobras, for example, has adopted new technologies. Its new plants can reuse 35% to 40% of the water consumed," he said. Marco Aurélio Silva, director of research and development of Aegea Sanitation, cited gains recorded in one of its utilities, Águas Guariroba, which serves Campo Grand, capital of Mato Grosso do Sul state. "More efficient equipment has allowed us to reduce losses so that production of water increased by 20% and power consumption dropped by 40%," he said.

Sanderson Leitão, general coordinator of meteorology, climatology and hydrometeorology of the Ministry of Science, Technology and Innovation (MCTI), stressed the importance of making science, technology, and innovation an integral part of sustainable development in the sanitation sector. "Monitoring, management, and research should be the trio that guide the sanitation sector, encourage rational use and reuse of water, influence the legal and institutional framework, and encourage the urbanization of municipalities," he said. Leitão lauded the establishment in February of the National Institute for Water under the MCTI, which will carry out research to generate knowledge and technologies for water management.

Several participants identified obstacles that still hinder adoption of new technologies in the sanitation sector. Valdir Folgosi, president of the National Union of Manufacturers of Sanitation and Environmental Equipment, cited Public Law 8,666, which governs procurement by public agencies and noted that "Currently, we have technology available to meet the needs of the entire water production chain, from uptake of water to its treatment. But it is difficult to sell technology in Brazil because the public procurement law encourages purchasing at the lowest price," he said. The experts were unanimous in advocating elimination of this obstacle. "It is not enough to talk about investments. We need to focus on water conservation and reuse," said Ivanildo Hespanhol, director of the International Reference Centre for Water Reuse, University of São Paulo. He added that "We have laws that inhibit water reuse, but encouraging water conservation and reuse will be an inexorable movement in the next decade."