



# Latin American water and sanitation

Dick de Jong

Latin America has been in advance of many parts of the world in reforming the water supply and sanitation sector. In some cases the private sector has been enlisted in the hope that it will improve services, in others service provision is being decentralized to municipalities. A number of countries in the region have enacted or are discussing new legislation, yet rarely are policies explicitly developed for providing services to rural communities.

Support for the operation and maintenance of rural water supplies is the subject of the first article in this issue by Fred Rosensweig of EHP (Environmental Health Project) in which he summarizes lessons learned from case studies of programmes in Nicaragua and Honduras. It is clear from these cases that locally based technicians can play a key role in keeping rural water supplies working.

Mario Alejandro Pérez Rincón of CINARA (Instituto de Investigación y Desarrollo en Agua Potable, Saneamiento Básico y Conservación del Recurso Hídrico, Universidad del Valle, Cali, Colombia) provides an interesting comparative assessment of the administrative management in different kinds of water supply companies serving communities of less than 2400 users (i.e. about 12 500 inhabitants) in Colombia. This includes a review of unaccounted-for water by type of company. It was found that community-based companies have an organizational structure that produces the best results, i.e. they have a remarkably low unaccounted-water rate of 19.8 per cent, which is half the national average level of 39 per cent. On the other hand, private management shows better results than mixed ownership or public companies.

Fred Rosensweig's second article with Eduardo Perez of EHP focuses on improving sanitation in small towns in Latin America and the Caribbean. In

this region, small towns are classified as ranging from 5000 to 25 000 inhabitants. One of the principal reasons for the increased interest in small towns in Latin America is the sheer number of municipalities that fall within this category. For example, according to the last census in El Salvador only 13 out of 252 municipalities in the country have populations over 20 000. In Paraguay, there are 93 municipalities with populations between 10 000 and 40 000 and only 15 with populations over 40 000. While the importance of sanitation to improve health is generally acknowledged, it has not received the same attention or investment as water supply in small towns.

To address this issue, the USAID-funded EHP elaborated a methodology for developing a plan for sustainable

## Reform efforts have focused primarily on towns and have largely neglected rural areas

sanitation services in small towns. This is a specific plan that can serve as the basis for an application for funding or, if the funding is already secured, as the basis for an implementation plan. The sanitation plan that results from this process is intended to be equitable, environmentally sound, financially sustainable and health-focused. Sanitation is defined as the hygienic principles and practices related to the safe collection, removal or disposal of human excreta and wastewater, and it includes both on-site and off-site systems. The true test of this methodology will be in three pilot tests, of which one has recently been completed. The field test sites are Macara, Ecuador; La Cabima, Panama; and White Horses, Jamaica.

Gabriel Roldán of the Universidad Católica de Oriente, Rionegro, Antioquia, Colombia describes how an aluminium factory has been using water hyacinth to clean up its effluent for the last 10 years. The removal efficiency of the different pollutants

is remarkable at more than 90 per cent for heavy metals and up to 98 per cent for suspended solids.

Finally, Mariela García Vargas of CINARA has contributed a Waterpoints news item relating to water associations in Colombia. There are as many as 25 000 organizations that run water-supply systems in Colombia, most of them community based, and by forming into associations they hope to be in a better position to access training and technical support. Good luck to them!

### About the author

Dick de Jong is with IRC International Water and Sanitation Centre, Netherlands. He may be reached by email: [jong@irc.nl](mailto:jong@irc.nl)

## Water titles from ITDG Publishing

### Dictionary of Water Engineering

*Ken Nelson*  
1853394904 2002 348pp £35.00

### Productive Water Points in Dryland Areas

*Chris Lovell*  
1853395161 2001 240pp £12.95

### Hygiene Promotion

*Suzanne Ferron, Joy Morgan and Marion O'Reilly*  
1853395056 2000 256pp £12.95

### Negotiating Water Rights

*Bryan Randolph Bruns and Ruth Meinzen-Dick (Eds)*  
185339484X 2000 396pp £15.95

*Not available in South Asia*

### Rainwater Catchment Systems for Domestic Supply

*John Gould and Erik Nissen-Petersen*  
1853394564 1999 352pp £16.95

### Water Pumping Devices 2nd Ed

*Peter Fraenkel*  
1853393460 1997 264pp £19.95

ITDG Publishing, 103-105 Southampton Row, London, WC1B 4HL  
Tel: +44(0)20 7436 9761  
Email: [orders@itpubs.org.uk](mailto:orders@itpubs.org.uk)