Water and Sustainable Development From vision to action



Special Regional Session: Achieving sustainable water for all in Latin America and the Caribbean

Session report, 15th January 2015

Introduction

The most recent data from the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) show that, although the situation varies greatly among countries, Latin America and the Caribbean (LAC) has already exceeded the Millennium Development Goal of access to improved sources of drinking water. At the national level, the overwhelming majority of the countries of the region has already achieved or is likely to achieve the goal for drinking water. But while more than one third have already achieved the target for access to sanitation, the majority are unlikely to do so. In concrete terms, 46% of LAC countries have achieved the water MDG. It is unlikely that 58% of the countries will achieve the sanitation target by 2015.

Despite the seeming success in the expansion of access to improved services between 1990 and 2011 (going from 85% to 94% for drinking water and 68% to 82% for sanitation), in Latin America, the most urbanized and unequal region in the world, there are still almost 36 million people without access to improved sources of drinking water and over 110 million people without access to improved sanitation facilities.

In the majority of cases, the issue is not so much of water scarcity (the region has abundant water resources in general terms) but of insufficient investment. Inequalities are still one of the main challenges in the region. Gaps in service mainly affect low-income groups. This means that about 70% of the people who do not have access to safe drinking water and more than 80% of those without sanitation services are in the two lowest income quintiles. In rural areas, coverage is consistently lower: 15% in the case of drinking water and 24% in the case of sanitation services. Future challenges in the region include the reduction of such inequalities between rural and urban areas and service improvement, particularly in regards to uninterrupted services. It is also important to take into account that water sources are threatened by climate change.

CAF, the Latin American Bank for Development, has undertaken a study to calculate the costs of reaching the water related SDG targets. The study concludes that reaching universal services by 2030 is an attainable challenge, which would require an investment of USD 12.500MM annually. This is equivalent to 0,31% of the Region's GDP in 2010.

The session was convened by Caridad Canales from the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), Javier Gavilanes/Mónica Corrales/Inmaculada Paniagua from the Spanish Agency for International Development Cooperation (AECID) and Gonzalo de Castro, from CAF. The panel was composed by the following distinguished participants:

- Claudia Vargas, Universidad Mayor de San Andrés, La Paz, Bolivia
- Carlos Narváez, American University, Nicaragua
- William Carrasco, Expert, Colombia
- Diego Fernández, Valle de Colombia University, Colombia
- Pablo Lloret, FONAG, Ecuador
- Franz Rojas, Expert, Bolivia
- Roberto Ramos, Special Assistant of the State Secretary of Puerto Rico, Puerto Rico



Discussion panel.

Regional cases

Several case studies in different countries of the region were examined.

A decentralised water treatment plant in Lomas del Pagador, Cochabamba

The case of the decentralised water treatment plant in Lomas del Pagador, Cochabamba, Bolivia, is presented as an example of good practice. The project, which counts with funding from UN Habitat, Municipal Government and the treatment plant users, has been completed in 2013 and it is the first decentralized plant in a peri-urban area in the country. The plant is fully operational, owned by the community with a self-sustainable rate and has become a solution being replicated at a larger scale in other cities of Bolivia. Positive lessons of the project include the training of the local institutions for the operation and sustainability of the treatment plant, the establishment of a Water Committee in the area and the implementation of a user's fee. Amongst the future challenges is the need to promote the reuse of wastewater of the treatment plant.

The cost of not having drinking water supply services in Nicaragua

A study by the American University of Nicaragua has quantified the cost of *not* having water in this country, where 64.46% of households have access to water through the public network and only 25% of the houses have water services in rural areas. People without improved access to water pay the equivalent of USD 15 / month and consume approximately 2m³ per house and month. In contrast, a customer of the National Water Company ENACAL network consuming 15 m³ pays approximately 3-4 USD / month, a much lower figure than

those without household service. The study calculates that a home in Nicaragua would have a welfare gain of USD 15 per month for having piped drinking water at home. It analyses the pricing model currently used and proposes changes in the price matrix, which are considered feasible and necessary, especially taking into account that many departments have developed residential and high income dwellings.

Departmental Water Plan for the Atlantic, Colombia

The case of the Departmental Water Plan for the Atlantic, Colombia, is presented to illustrate how regional integration can be useful for better services. Integrating municipalities under a regionalization scheme management has proved better quantity and quality of the services. In particular, 22 'weak' municipal operators were integrated into one strong operator, resulting in greater coverage, quality, guarantee and economy of scale. In Colombia, the experience of Public Community Partnerships evidences adequate management of the water systems and drinking water distribution by residents themselves, breaking away from the Government dependency cycle. A fixed equilibrium is put in place between revenues and expenses in the aqueducts management in order to accomplish the system's sustainability. Project highlights include the introduction of mediation tools to help reduce conflicts, the continuous influx of information among the Government agencies and the constant participation of community actors during the whole project.

Financial sustainability to support the long term management of water resources in Ecuador: the case of FONAG

In Ecuador, the Fund for the Protection of Water (FONAG), initiated by the public municipal company in Quito 14 years ago, is a financial mechanism for the sustainability of water sources based on the co- responsibility of all users. This innovative experience has already been replicated in Colombia, Peru and Dominican Republic, and its success is considered to be due to the simplicity of the mechanism by which all water users- drinking water, irrigation and energy, take responsibility towards the care and protection of the water resources. The FONAG now gives technical assistance to several institutions and River Basins which are creating this mechanism as a tool to generate solutions in relation to water supply. It has enabled an integrated and holistic approach to water resources management with clear social, environmental and water source protection components.

A UNECLAC study to explore 'Public Policies and Institutional framework for Water and Sanitation in Latin America and the Caribbean'

A published study conducted by UNECLAC in 22 countries in the region has analysed the 'Public Policies and Institutional framework for Water and Sanitation in Latin America and the Caribbean'. The study includes the legal and institutional framework, national plans, investments, management models, corporate governance and best practices by country. Main challenges in the region identified include: excessive political dependence, the need to separate the roles of stewardship and regulation, the need to strengthen capacities, to increase funds and the capacity to execute them, and the sustainability of the services. Some examples are provided as to how these challenges can be met and some tools that have been successfully implemented in the region. Peru, for instance, counts with a legal framework that clearly separates the roles of guidance, regulation and service provision, and Honduras counts with notable examples of capacity development as a comprehensive process beyond the achievement of products.

Sustainable community aqueducts and community alliances in Puerto Rico

In Puerto Rico about 200 thousand people lack access to safe drinking water. It has 247 rural water aqueducts located in 45 of the 78 municipalities of the island. These aqueducts are distributed mostly in the mountains and remote places and managed by small groups of citizens, mostly elderly, poor and poorly educated people. To date the relationship between the government and these communities has been limited to some regulatory and supervision activities, so the citizens see the government with suspicion. Meanwhile, 50% of the community water systems do not provide any treatment or perform water samples and the amount of water provided is limited due to the breakage and lack of maintenance. This situation is exacerbated by the lack of financial resources, the poor organization and the lack of legal identity for most of the systems. Only 8.1% of the systems have an operator and a large number of the users do not pay for the water consumed, causing around 8.1 million gallons of water being daily withdrawn from rivers and wells without any control measures. In view of this problem, the Governor of Puerto Rico has approved an Executive Order to create the State Department Sustainable Community Water Supply Project aimed at organizing, protecting and strengthening the rural water systems in Puerto Rico through a new public investment system based on public community partnerships.

Provision of drinking water supply and sanitation services in rural areas

This case study analyses public policies for the provision of drinking water and sanitation services in rural areas. To this end, the following content is covered: the characterization of rural areas from the perspective of a qualitative and quantitative approach; the situation of drinking water supply and sanitation services for rural communities in the countries of Latin America and the Caribbean; and a comparative analysis of public policies in this field in Colombia and Peru.

Rural drinking water supply and sanitation services reflect very different features and conditions from those in urban areas, and require countries to develop public policies specific to each case.

Public policy recommendations for drinking water supply and sanitation for rural populations will be presented, with the caveat that in every case and for every reality measures should reflect local conditions as much as possible. The experience of Colombia with the Cooperative Public Administrations (APC) model for providing services in small municipalities and the Departmental Water and Sanitation Plans (PDA), will be highlighted.

Session discussion

During the discussion the panelists addressed more specifically the challenges and opportunities for water services in rural and peri-urban areas in Latin America and the Caribbean. It is considered imperative for the region to have differentiated public policies for water and sanitation in the rural sector. Challenges highlighted include unreliable information, little presence of water treatment, sparse populations, poverty, best unit costs in urban areas, absence of economies of scale, limited technical capacity and low participation of the community. Some opportunities to address these include: developing information systems with specific public policies for the rural sector; designing comprehensive programs and projects, with focus on demand and community participation; strengthening of community management; establishing levels of service for the selection of sustainable and efficient technologies, and the protection of water resources.

The Millennium Development Goals have facilitated investments being made for drinking water and sanitation. The objective now is to have water as a self standing goal in the post-2015 Sustainable Development Goals. In this framework the quality of investments must improve to ensure sustainability. The economic capacity of small municipalities and rural areas can only be solved with clear subsidy policies. It is essential, however, to have subsidies as well as local contribution, and take into account both construction and maintenance costs. The interdependence and interrelatedness of water, energy and food calls for a holistic approach and Latin America is a fertile region to undertake integrated management and interdisciplinary alliances.

Final messages and conclusions

Final reflections and conclusions of the session indicate that the region needs to improve and consolidate its water governance with a paradigm shift towards the sustainable integration of water resources management to improve socio-economic development and reduce poverty and inequalities. To overcome this situation, governments will have to put in place and make fully operational: (i) water management institutions that adequately respond to the nature of the problems involved in utilizing the resource, and that are in tune with the conceptions and practices of society; (ii) water management instruments (water use rights and discharge permits, assessment, planning, water quality norms, water information systems, demand management, conflict resolution, regulation, etc.), which use economic means such as charges, efficient costs, markets and social evaluation; (iii) independent water authorities, with powers and resources commensurate with their responsibilities, supported by river basin organizations; (iv) water allocation (and especially reallocation) systems that promote investment in water development and conservation, ensure efficient and orderly water use, avoid monopolies and facilitate control in the public interest; and (v) water pollution control systems able to mobilize the necessary technological and financial resources.