

Regulatory Collaboration in the Americas: ADERASA¹

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1. Introduction

During the last decade, most countries in the Latin American region introduced regulatory frameworks for the water and sewerage sector and created regulatory entities to oversee and enforce them. Reforms were introduced in Chile and Argentina in the early 1990s, spreading to Bolivia, Colombia, and Peru in the mid 1990s, and to Nicaragua, Panama, Paraguay, Uruguay, and Venezuela towards the close of the decade. In Brazil and Mexico, systematic adoption of regulations has been limited to a handful of states, while in Costa Rica a long-standing regulatory tradition was already in place. As a result, it is estimated that by the year 2000, about 40% of urban water consumers in Latin America enjoyed some form of regulatory protection. For a variety of reasons, the water sector has proven relatively difficult to regulate effectively in comparison with other infrastructure sectors.

There are a number of reasons why the water sector presents a particular regulatory challenge. First, water is the utility sector with the least scope for competition, necessitating a more labor intensive form of natural monopoly regulation, without the possibility of relying on the market to reveal information about costs. Second, the water and sewerage services present a particularly complex and multi-dimensional array of quality issues that complicate the regulatory process. Third, in many countries, water services have been completely decentralized and there has been comparatively little private sector participation. Fourth, because of its direct impact in public health and the environment, water services have a deep social sensitivity, and it often becomes a political issue. Another factor is the inherent capital intensity, with huge investments necessary to reach all populations with water and sewage services, while at the same time protecting the environment from pollution. As a result, regulators often find themselves trying to apply modern regulatory techniques to a highly atomized and politicized sector of old-style municipal utilities.

Experience has shown that developing regulatory culture and practice in a region that lacks any regulatory tradition is a much slower and more challenging process than originally anticipated, requiring sustained input over a number of years. In many countries laws and institutions exist, but regulators lack the necessary tools to put the model into practice.

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ADERASA Origins and Objectives

In October 2001, representatives of 10 Latin American regulatory entities (including Argentina, Bolivia, Chile, Colombia, Costa Rica, Nicaragua, Panama, and Peru, plus observers from the Dominican Republic and Venezuela) convened in Cartagena, Colombia to form a regional association of water regulators: ADERASA (Asociación de Entes Reguladores de Agua y Saneamiento de las Américas or Association of Water and Sanitation Regulatory Entities of the Americas). The objectives of ADERASA are to promote cooperation and coordination of efforts in the development of the water sector in Latin America by facilitating the exchange of experiences and collaboration around common initiatives in the field of regulation.

There are at least two reasons ADERASA could potentially provide an excellent opportunity to strengthen and sustain water regulators in the region. First, ADERASA brings together countries at varying stages of their development of a regulatory framework (e.g., Chile and Argentina with at least 10 years of experience, and Nicaragua and Venezuela with recently-created regulatory entities). This creates opportunities for south-to-south exchanges, which are likely to be more fruitful than traditional north-to-south exchanges. It should also help to accelerate development of regulatory institutions in the more recently-reforming countries as they take advantage of lessons already learned elsewhere in the region.

Second, many of the regulatory tools that need to be developed to improve the practice of regulation in the region, such as financial models, regulatory accounting guidelines, and benchmarking performance indicators, are generic in nature. This means they can more cost-effectively be developed on a regional level, saving the costs of ‘reinventing the wheel’ in each specific country.

In the light of these considerations, ADERASA has started a multi-year regional initiative to establish itself as an active and supportive forum for the discussion of regulatory challenges, and the development of regulatory solutions. ADERASA has established three Regional Working Groups and one Regional Network, and identified country leaders for each. The Regional Working Group on Benchmarking chose Argentina its leader. The working group presented a proposal for the adoption of Performance Indicators (PIs) by ADERASA members. The proposal included about 80 Performance Indicators, covering all relevant aspects of water and sewerage services. The definitions assigned to these PIs reflect the definitions used by the World Bank (created in 1999 as the Benchmarking Start-Up Kit, eventually becoming the International Benchmarking Network [IBNET]), and the International Water Association (IWA), paving the way for future global comparisons.

By 2002, the Argentine Regulators Association prepared a *Performance Indicators Manual*, which described methodology, data need, and indicators. This manual’s initial proposal was intended to be updated as the group developed its work. The proposed manual, covering water and sewerage services PIs, was distributed among members in April 2003.

A task force for benchmarking activities was created that included one representative from each of the ADERASA member countries, and their first meeting was held in August 2003. During that meeting the proposed manual was discussed, with the assistance of the World Bank and IWA. That discussion resulted in a significant reduction in the number of proposed PIs, as well as some changes in definitions.

Although regulators in Latin America have been promoting the adoption of cost-based tariffs, in most cases they have no real tools at their disposal for assessing whether these costs are efficient. The creation of a consistent and accurate regional database on utility performance parameters would greatly assist regulators in detecting and eliminating inefficiencies, thereby ensuring that customers pay a fair rate. Given the international public good nature of this kind of information, a regional approach would be particularly appropriate.

2. Design of ADERASA Benchmarking System

Data Collection

The benchmarking system is based on each country's data collection capabilities. To recognize country differences and facilitate the process, an assistantship and consulting program was developed under the Public-Private Infrastructure Advisory Facility (PPIAF) agreement and has thus far been utilized by Costa Rica, Colombia, Mexico, and Brazil. The Benchmarking Group requested each country to collect data every year starting in 2003 from at least the main service companies. Reported data by each country is accompanied by a data quality indicator according to the IWA grade system where both precision and confidence are indicated for each observation. The goal is to provide an indication of the quality of the available information in order to focus attention on improving the less reliable data.

Efficiency Measures

In addition to the set of PIs and to recognize the interrelationship of production factors, the Benchmarking Group has contracted with an external consultant to analyze the data set and propose adjustments and necessary processes to perform Efficiency Frontier Analysis. This work represents an important step towards more comprehensive analyses of water utility performance. In the last two years, these studies have produced a set of convergent models and a first ranking, still to be refined².

3. ADERASA Countries Already using Performance Indicators

Argentina

The Argentine Water Regulators Association (AFERAS) began developing a benchmarking strategy in 2000. They developed a Performance Indicator manual, which has been presented and

² A short version of this study is available in Spanish through the link:
<http://www.aderasa.org/es/documentos3.htm?x=669>.

accepted by the ADERASA Benchmarking Regional Group.

Bolivia

The regulatory entity of Bolivia Superintendencia de Saneamiento Básico (SISAB) established a set of PIs in 2002 and reviewed them in 2003. Values from 2003 are available on its web site (<http://www.sisab.gov.bo>). The list includes commercial, technical, administrative, and financial PIs.

Brazil

The National Sanitation Information System (SNIS; <http://www.snis.gov.br>) is a federal database maintained by the City Ministry of Brazil (MCIDADES), under the direction of its National Secretary for Environmental Sanitation (SNSA), who started the Modernization of Sanitation Sector Program in 1995. The database consists of data from 382 service companies, covering 4,187 municipal locations (out of 5,561) and 94.3% of urban national population (out of 142 million Brazilian inhabitants).

Chile

The Superintendency of Sanitary Services (SISS; <http://www.siss.cl>) was created in 1990 as a key ingredient in the process of water and sanitation sector restructuring. Since its early years, SISS has been using water quality and customer complaints as regulatory tools, in addition to operational and financial PIs.

Colombia

Since 2003, the Colombian regulatory commission for water and sanitation, Comisión de Regulación de Agua Potable y Saneamiento Básico (CRA; <http://www.cra.gov.co>) has linked its information content to the Public Services Information System which shows collected data from all the Colombian Public Services Companies (Sistema de Información de Servicios Públicos [SUI]; <https://www.sui.gov.co>). This web site is comprehensive with operating and financial information from the various service companies. The CRA has already developed some DEA³ studies up to this information and plans to use them to set rates in the near future.

Peru

The Superintendency for Water and Sanitation in Peru (Superintendencia Nacional de Agua y Saneamiento [SUNASS]; <http://www.sunass.gob.pe/sector.jsp>) uses a benchmarking system that was established in 1996 and uses quality, price, operational, and financial PIs.

³ DEA: Data Envelopment Analysis.

4. Products of Regulatory Networks

Berg and Horrall⁴ identify seven primary outputs of regional regulatory networks as follows (1) events and meetings; (2) data for benchmarking; (3) public pronouncements; (4) materials for stakeholders, (5) capacity-building for professional staff; (6) best practice laws, procedures, and rules; and (7) regulatory network news.

(1) Events and meetings can be supplied on a commercial basis: the number of technical conferences available to potentially interested parties is vast. Nevertheless, an event sponsored and organized by a network of regulators fills a unique niche in the array of events available to regulatory professionals. The topics, speakers, and formats can be determined by leaders seeking information and fresh perspectives.

(2) Data for benchmarking consist of cross sectional data that are used for comparisons—over time and across utilities. With information about what other utilities have been able to achieve with comparable inputs, the regulator is in a position to better establish targets, create incentives, and defend decisions. In addition to cost and productivity, service quality, network expansion, and prices can be compared across utilities and countries. A recent ADERASA Benchmarking Task Force Report provides a useful comparison of utilities in the region⁵.

(3) Public pronouncements made by regional regulatory networks are unlikely to be highly controversial. Nevertheless, such statements represent shared views on important issues, identify objectives (if not overall priorities), and provide guidelines for strengthening regulatory procedures. Public pronouncements are official statements, notices, or announcements that are recognized by authorities as providing principles that affect how regulators address issues.

(4) Materials for stakeholders enable national regulatory commissions to educate and influence those affected by regulatory decisions. Establishing legitimacy for citizens and credibility for investors and ministries requires that agencies document procedures and methodologies. Such material represents another output that could be provided by external parties, including consultants funded by donor countries and multinational organizations.

(5) Capacity-building for professional staff provides specialized training via cooperative programs across nations. Universities play an important role in this area. In addition, consulting firms provide training and certification programs. ADERASA, in collaboration with the Universidad Argentina de la Empresa (UADE), is developing an E-learning Program in Economic Regulation, available not only for its own members but for all stakeholders, including regulators for other sectors and utility staff⁶.

(6) Best practice laws, procedures, and rules that address institutional and policy issues on a

⁴ Sanford Berg and Jacqueline Horrall (forthcoming), “Networks of Regulatory Agencies as Regional Public Good: Improving Infrastructure Performance,” *Review of International Organizations*. The list has been extracted from their article with their permission.

⁵ The last ADERASA benchmarking report is available in Spanish through the link:
[http://www.aderasa.org/es/documentos3.htm?x=753&als\[Español\]](http://www.aderasa.org/es/documentos3.htm?x=753&als[Español]).

⁶ The Virtual Campus of ADERASA can be visited at <http://www.campusvirtual.aderasa.org/>.

regional or global level are useful to particular regions and countries depending mainly on how valuable or applicable general solutions can fit specific regional situations. At annual meetings, speakers share experiences and discuss developments in the region: awarding licenses or concessions, administering rules included in licenses such as tariff levels and adjustments, resolving disputes among the different stakeholders, monitoring firms' compliance with regulatory guidelines, and prosecuting and penalizing firms for noncompliance.

(7) Regulatory network news represents another product that is similar to events and training. Recent developments can be distilled and disseminated across countries. Professionals gain experience by contributing summaries of national developments—helping counterparts in other nations understand the implications of new rulings. Although information on new books, videos, and other educational material can be supplied competitively, regulator networks can screen, evaluate, synthesize, and promote the use of different types of material.

5. Concluding Observations

One lesson for utility managers and firms supplying inputs to utilities is that the regulatory system has a significant impact on the financial sustainability of the water sector in a nation. ADERASA illustrates one form of inter-governmental networking that is designed to share information and improve the development and implementation of water policy in the region. Without such collaborations, lessons are diffused in a slow and erratic fashion. Water professionals interested in promoting network expansion and cost-effective operation of water utilities should monitor and support efforts that strengthen the institutional capacities of nations and that improve transparency and accountability.