PRIVATIZATION OR SELF-STRENGHTHENING FOR THE WATER SECTOR IN CUBA?: LESSONS LEARNED FROM THE WATER SECTOR IN PUERTO RICO

Jorge Rodríguez Ruiz

As one envisions the eventual transition of Cuba to a pluralistic society with significant free market features, it is pertinent to consider what institutional model to apply to the provision of water and wastewater services. Currently, the water and wastewater sector is managed by the national government's Instituto de Recursos Hidráulicos, which largely delegates the operations of facilities to the provincial governments. However, the Instituto has departed from the strictly governmental mode at a couple of important locations — the City of Havana and the beach resort of Varadero — and formed public/private operations (joint ventures) with Spanish private companies. Thus, there are mixed features in Cuba's water/wastewater sector.

In recent years, international lending institutions, which may have a large role to play in a transitional Cuba, have favored privatization of water/wastewater utilities to promote economic efficiency. Some notable successes at privatization have occurred in Chile. However, efforts at privatization in other countries have failed for various reasons. It seems that privatization is not a panacea and that the decision of whether to privatize involves many country-specific issues, as well as timing and preparation considerations. The experiences of Puerto Rico in this regard are pertinent because of proximity, geographic and climatic similarities and cultural factors.

THE FIRST 40 YEARS: SUCCESS AND GRADUAL DETERIORATION

The Puerto Rico Aqueduct and Sewer Authority (PRASA) was created in 1945 as a public corporation managed by an Executive Director and governed by a Board of Directors. The first thirty years of PRASA were times of major accomplishments and successes. During that era, meeting the water and wastewater treatment needs of the island was critical for its economic development due to the rapid growth of the industrial sector and evident infrastructure needs.

At this time, PRASA employees were unionized and the initial labor leadership was in agreement with corporate goals to improve service and add value to the process. As time went on, however, the union leadership changed and negotiations with labor leaders became increasingly difficult. Due to the increasing support for unions in the politically charged environment, emboldened union leadership began exerting greater power in the corporation through negotiations. Yet it is important to note that PRASA was recognized in the early 1970s as the best-managed public corporation in Puerto Rico.

Beginning in the 1970s, local and federal pollution control regulations became more stringent, which placed significant pressure on PRASA. During this time, the Puerto Rican economy also suffered a major recession as well as a significant, contentious strike at PRASA. This strike during the mid-1970s resulted in the jailing and subsequent release of the union president, Héctor René Lugo, amid a heavily charged political atmosphere. In the years that followed, significant factors greatly increasing PRASA's operating costs included: (1) complying with more stringent regulations; (2) meeting significant infrastructure needs; and

(3) complying with costly labor agreements. User fees were not raised commensurately. By the late 1908s and early 1990s, PRASA was operating at a deficit. During 1992 and 1993, an extreme dry season caused major problems to PRASA in meeting water needs. Service was interrupted several hours a day for a two-month period, and the adverse economic impact was considerable.

THE 1990s AND THE PRIVATIZATION PUSH

In 1992 there was a governmental change that resulted in two major decisions affecting the water/wastewater sector. The first called for the development of a "superaqueduct" from the northern part of the island to the metropolitan area, while the second called for an investigation into privatizing the management of PRASA's operations. The decision to privatize was prompted by the government's conclusion that PRASA was virtually unmanageable. Thus, PRASA became Compañía de Aguas in the mid-1990s. Conditions of the privatization agreement included the following: (1) all employees of PRASA continued as part of the operation while also remaining government employees (with salaries and fringe benefits managed by Compañía de Aguas); (2) the union continued to represent the employees in related matters; (3) funding for capital improvement programs was managed by the Authority for Financing Government Infrastructure (AFI), a governmental entity; (4) the compensation to the private operator was based on the "cost plus profit" method; and (5) any major organizational structure changes had to be approved by the Board of Directors.

As evident in the contractual agreement, there were significant risks in the process: (1) Compañía de Aguas had to bring its management team, which predominantly consisted of foreigners; (2) any agreement with employees had to be approved by union leaders; (3) there was no internal control of capital investments; and (4) there was a lack of a strong auditing and monitoring process for services rendered. Thus, the intention of the government was good, but a flawed framework was set up such that the desired results were not accomplished. Indeed, the motivation and morale of the employees suffered, infrastructure deteriorated, communication between AFI and Compañía de Aguas was weak, the union leaders gained more control, employees in management from PRASA were retained but underutilized, productivity was not a priority, investment in operations was nonexistent, and compliance with local and federal agencies was poor. Though compliance agreements were reached, poor execution caused eighteen plants to be fined for noncompliance.

THE BEGINNING OF THE 21ST CENTURY: NEW PRIVATIZATION CONTRACTUAL TERMS AND NEW OPERATOR

In 2000 there was another government change. Although this new government supported the initial decision to privatize, it decided to request proposals (RFP) from the private sector to alter the terms of the privatization agreement. Among the new terms in the RFP, the "cost plus profit" provision was eliminated, as it was deemed an insufficient inducement to control costs. This procurement yielded an operator change, and the French firm ONDEO took over the management of the system in 2002. They were the lowest bidders and agreed to a $96 million per year fixed price contract to manage PRASA's operations. The other conditions remained unchanged. However, PRASA also created a small organization to audit and monitor ONDEO's operations.

The first year of ONDEO's operations presented several challenges as certain assumptions failed to materialize. Among them, the relationship with the union did not work out as expected. ONDEO expected productivity improvement would occur by establishing good relationships with the union. ONDEO offered monetary incentives to union members to perform duties, which, it appeared to observers, were already part of the agreement. After that first year, ONDEO requested a $100 million change order from PRASA on the basis that the $96 million was insufficient to operate the corporation. The result of this contentious situation over the following two years was a mutual agreement to terminate the contract at the end of 2003. After these two failed attempts at privatization, the government decided to retake the responsibility for operating PRASA.

2004: GOVERNMENT DE-PRIVATIZES PRASA OPERATIONS AND TURNS AROUND PERFORMANCE

In early 2004, the general consensus on the island was that PRASA had deteriorated considerably. The service was poor, noncompliance with local and federal agencies was the highest ever, negative stories about PRASA made headlines at least twice a week, and customer perceptions were negative. This situation prompted the Board of Directors to propose changes to the PRASA governing law, Law 73–2008, which would provide the new management team all the tools required for a quantum change for the better. An important change in favor of continuity and stability was a six-year appointment time for the Executive President, the regional directors, and the infrastructure director. The law also placed these appointments beyond political considerations in the event of governmental changes. In May 2004, I was appointed executive president. At the time, PRASA faced a $400 million deficit, deteriorated infrastructure, environmental noncompliance problems, significant customer dissatisfaction, a lack of a well-delineated capital improvement, unmotivated management that would not counterbalance union leadership, poor internal and community communication, poor press relations and economic development slowed by PRASA's difficulties.

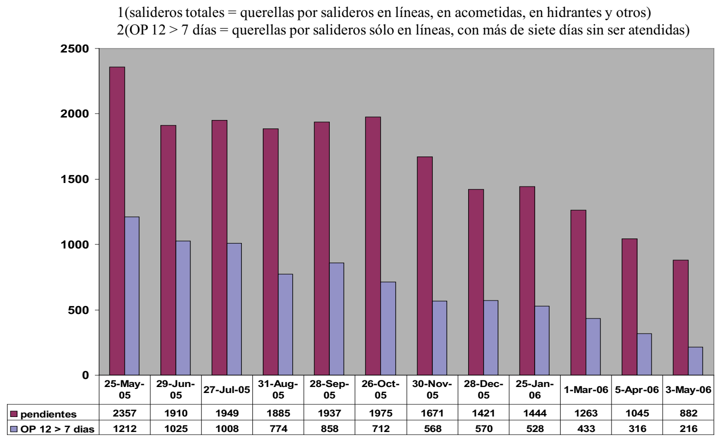
Initially, I met with the management staff and with union leaders, filled critical vacancies, visited operational and commercial sites across the island, and met with professional organizations and local and federal agencies. After obtaining feedback, I met with my team to develop goals, strategies and metrics in three major areas: operations, capital improvement program, and administrative/supporting functions.

I also resumed negotiations with the union. At the time, a report from the Puerto Rico Insurance Commissioner's office alleged mismanagement of the union employees' medical insurance plan by union leaders. The negotiations with the union grew more intense and union leaders were not accepting the findings from the audit. In August, PRASA decided to stop funding the union's medical insurance plan and began administering it in-house, while following up with other legal actions. In early September, the union called for an assembly of all 4,500 workers and requested a strike vote, which was approved. However, a major tropical storm hit the island a few weeks later and the focus shifted to re-establishing service. Approximately 95% of customers regained service within two weeks. On October 2, 2004, the union executed the strike vote. Since PRASA had prior knowledge of the strike vote, a plan was developed by the management team, the police, the National Guard and the FBI to ensure continuity of service to customers and compliance with the required security to PRASA facilities and employees. The management team of approximately 1,000 employees and 200 contractors did an outstanding job of maintaining service. This was the turning point in improving PRASA's operations.

In January 2005, goals, strategies and metrics were developed and a five-year $2 billion capital improvement program was ready for execution. In operations, metrics were presented and discussed by region on a weekly basis. These metrics addressed financials, environmental compliance and human resources. Examples of metrics are provided in Figures 1 and 2. As part of the plan, PRASA performed a deployment of the goals and strategies to all regional management teams, continued meeting with frontline employees, presented plans to each of the 78 municipal mayors, requested feedback, and adjusted accordingly. PRASA also met with all concerned professional organizations on the island. This was the real beginning of the transformation of PRASA. The focus in 2005 was on operational improvements, efficiency, team building within the organization, capital improvements and financial stability—the government was subsidizing PRASA with $400 million and PRASA planned to eliminate this subsidy in one year. PRASA also began developing a plan for environmental compliance because the U.S. Environmental Protection Agency (EPA) and the Puerto Rico Department of Health were dissatisfied with PRASA's performance. This was a year of consolidation.

In 2006, PRASA developed and implemented a preventative maintenance program, a new tariff structure, education and training, water and wastewater infrastructure improvements, a consent decree with EPA

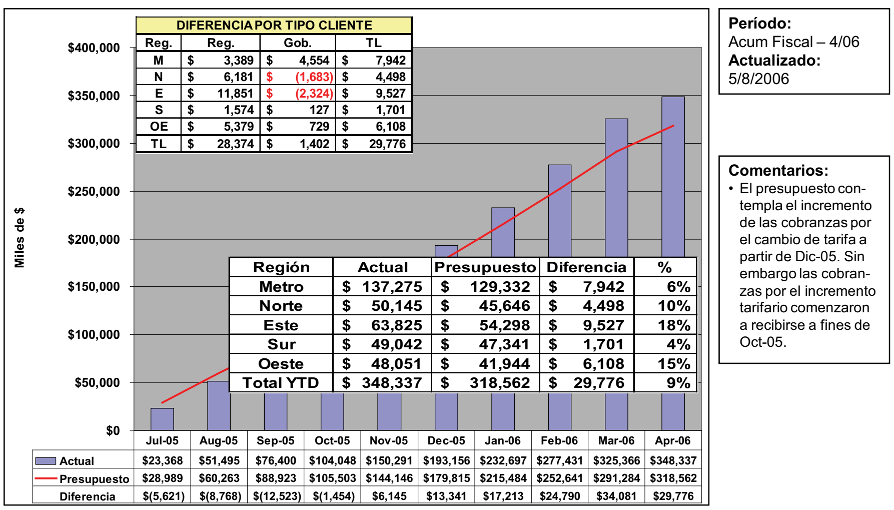
Figure 1. Total Water Leaks Pending/ OP12 > dias2



	25-May-05	29-Jun-05	27-Jul-05	31-Aug-05	28-Sep-05	26-Oct-05	30-Nov-05	28-Dec-05	25-Jan-06	1-Mar-06	5-Apr-06	3-May-06
pendientes	2357	1910	1949	1885	1937	1975	1671	1421	1444	1263	1045	882
OP 12 > 7 dias	1212	1025	1008	774	858	712	568	570	528	433	316	216

- **Reduction Water Leaks Pending 63%**
- **Reduction in OP12 > 7 days 216**

Figure 2. Actual vs. Budget (000)



DIFERENCIA POR TIPO CLIENTE			
Reg.	Reg.	Gob.	TL
M	$ 3,389	$ 4,554	$ 7,942
N	$ 6,181	$ (1,683)	$ 4,498
E	$ 11,851	$ (2,324)	$ 9,527
S	$ 1,574	$ 127	$ 1,701
OE	$ 5,379	$ 729	$ 6,108
TL	$ 28,374	$ 1,402	$ 29,776

Región	Actual	Presupuesto	Diferencia	%
Metro	$ 137,275	$ 129,332	$ 7,942	6%
Norte	$ 50,145	$ 45,646	$ 4,498	10%
Este	$ 63,825	$ 54,298	$ 9,527	18%
Sur	$ 49,042	$ 47,341	$ 1,701	4%
Oeste	$ 48,051	$ 41,944	$ 6,108	15%
Total YTD	$ 348,337	$ 318,562	$ 29,776	9%

	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06
Actual	$23,368	$51,495	$76,400	$104,048	$150,291	$193,156	$232,697	$277,431	$325,366	$348,337
Presupuesto	$28,989	$60,263	$88,923	$105,503	$144,146	$179,815	$215,484	$252,641	$291,284	$318,562
Diferencia	$(5,621)	$(8,768)	$(12,523)	$(1,454)	$6,145	$13,341	$17,213	$24,790	$34,081	$29,776

and the Puerto Rico Department of Health and attention to customer needs. Results included 33% improvement in water service to communities with deficient service, 62% improvement in water leaks, 68% improvement in overflows, more than 100 capital projects, over $400 million investment under way for infrastructure improvements with the implementation of five consortiums to perform program management and technical advice, a 15–year agreement with EPA with the commitment of 65 capital projects related to compliance in water and wastewater and a new tariff with 128% increase in two phases—the tariff had not been adjusted for 20 years. Additionally, there were 27,000 hours of education and training—300 sessions in 90 different subjects ranging from the motivational to technical standpoints, and completion of the overall plan to start a preventive maintenance program. Evidently, the PRASA transformation was on its way by the end of the second year of government taking over with excellent results in all areas of the corporation.

In 2007 a major success was achieved: after 20 years out of the municipal bond market PRASA was back with the issuance of a $1.8 billion bond sale in the market. Finally PRASA was back in its own feet as a public corporation.

LESSONS LEARNED ABOUT PRIVATIZATION AND SELF-PERFORMANCE

We have seen how a public corporation started auspiciously on its own feet, deteriorated to the point of being partially privatized twice, and was then taken back and turned into a success story as a public enterprise. There are lessons learned in this process which apply in particular to privatization:

1. The management of any public utility, in this case one essential to human existence, has to be managed without political pressure;
2. Privatization, if it is carried out, has to be total—not partial. Whoever is the selected private operator has to have all the power to make the decisions that will satisfy customer needs and protect the infrastructure;
3. The government needs to have a solid fiscal and regulatory entity to insure compliance of the contractual agreement, and this agreement must have clear metrics and deliverables;
4. Any incremental cost to the customer must be approved by the fiscal agent appointed by the government;
5. If there is a union, it must be clear that the Management team operates the company. If in the contractual negotiations management responsibilities are unclear, the potential to fail is high; and
6. Understanding the culture and the social aspects of the country is essential to success. Thus, a high percentage of the employees of the organization should be locals to help in bonding with the customers. Active participation in community related activities is a must.

We have discussed above some of the issues about privatization. Now let us discuss what should be the elements for the government to succeed in the self-management of a utility:

1. Management and technical resources must be knowledgeable of the business;
2. There must be a clear and well-understood plan to manage the company with specific targets, goals and metrics;
3. Politics must not be part of the decision making process; and
4. Public policy must be clear and the management team should use it as guideline to run the operation.

APPLICABILITY TO CUBA

What mode of operation would be preferable for Cuba's water/wastewater utilities? Privatization or self-management? Either mode could be successful, assuming that lessons learned from the experience of Puerto Rico and elsewhere are wisely applied. There are desirable actions that are common to either mode, which should be applied early in a political transition as a foundation before a decision is made on the mode. These actions include the de-politicization of the implementing agency, the establishment of a strong regulatory agency, and the establishment of clear metrics for performance. Also, a thorough inventory of infrastructure conditions and consequential infrastructure needs should be performed to properly establish the scope of the activities to be subsequently performed either by a private operator or in-house and to avoid misunderstandings.

In light of Puerto Rico's geographic proximity and cultural identity with Cuba, an exchange program of some sort between the two islands' utilities should be planned for the early stages of a political transition. There is no substitute for hands on, face-to-face interaction.