

## **Context matters: how state forms and reforms influence water provision in Latin America**

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**(DRAFT November 2006)**

### **Abstract:**

No human being can live without water. Yet over one billion people do not have adequate access to this vital resource. Debates have raged over how to improve water provision in less-developed countries: dozens of contradictory works exist, and few clear lessons have emerged. Though private sector participation in water sectors has had some success in expanding the capacity of the state to provide public services in specific times and locations, the rush to implement “best practices” under the Washington Consensus has led to spectacular failures as well. In order to determine under what circumstances state-led reform, private contracting and concessions, and decentralization are more promising solutions, a more sophisticated understanding of institutions and the state is necessary than that underpinning most water management studies.

Our findings indicate that successes and failures of water sector reform depend on preexisting state structures and social relations in determinate ways. We find that the state is not a perverse organization *per se*: when there is participation, respect for the public sphere, and financial and technical capacity and autonomy, public entities can be quite successful. Contextual considerations must not be brushed aside. This project provides a cautionary tale regarding the wholesale transfer of public goods models from one context to another, as well as a roadmap regarding which policies and practices might be better suited to the complexity inherent to the essential drive to improve water provision in developing countries.

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## Statement of the problem

Water is a vital resource that no human being can live without for long. Yet, over one billion people in the world do not have access to safe drinking water, and double this number do not have sufficient sanitation. The World Health Organization estimates that over 2 million children die every year from drinking contaminated water. In Latin America alone, 70 million people lack potable water, and 95 million lack sanitation. Due to these alarming statistics, water provision has moved to the forefront of development efforts by international bodies such as the United Nations and the World Bank. The Millennium Development Goals recognize the key role of water in development, pledging to “reduce by half the proportion of people without sustainable access to safe drinking water” by 2015.

Debates have raged over the best way to improve water provision in less-developed countries. Dozens of contradictory works exist, and few unambiguous lessons have emerged. Those in favor of Washington Consensus policies herald studies that emphasize imitating developed-country “best practices” by harnessing the resources and capacities of the private sector (Beato and Díaz, 2003; Cardenas, 2003; Fischer and Serra, 2004).<sup>2</sup> Based on these studies, international financial institutions have come up with a litany of suggestions for public sector reform, most of which criticize the state and minimize its role in provision. These institutional reforms (privatization, contracting, concessions, and full cost recovery) epitomize the neo-liberal policy agenda of utilizing private firms as the key actors in development policy.

Critics argue that the neo-liberal approach of privatization and marketization reflects a deep misunderstanding of the viability of imitating institutional forms from alien contexts, especially from developed to less-developed countries, as a solution to development challenges. Developing countries are being asked, in many cases, to roll back the state when what is really needed is institutional strengthening and capacity building. Reform on this view must be an organic, contextual process that builds upon existing values, power structures, and institutional arrangements if it is to succeed (Portes, 2006; Evans, 2004). Numerous examples of the failures of neo-liberal reforms in the water sector support this position (McDonald and Pape, 2002; Azpiazu and Forcinito, 2003; Olivera, 2004).

How are countries, communities, advocacy groups, civil society organizations, and other key stakeholders to draw useful conclusions regarding policy alternatives for improving water provision, when so much of the available information is contradictory? We argue that in order to move beyond the states-versus-markets debate, a more sophisticated understanding of institutions and the state is necessary than those typically employed in water management studies. In this paper, we present empirical evidence regarding the circumstances under which various reforms – state-led reform, private contracting and concessions, decentralization and community-led development – appear to be more promising.

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<sup>2</sup> This is true despite the fact that only a handful of developed countries have actually carried out such privatizing experiments on their own water sectors (e.g., England, Wales, and France). Britain and Wales have since reconsidered the regulatory requirements of such an arrangement (Bakker, 2003), while France, already a strong regulatory state, has prohibited entry of foreign water companies into the sector (Center for Public Integrity, 2003).

## Theoretical framework: State Forms as Context

In Latin America as elsewhere, state “reform” is ubiquitous. Yet there is little clarity regarding how state forms, state-society linkages, and degrees of state penetration influence the way reforms of various types are “indigenized” as they travel (Haney, 2000). O’Donnell (1993) proposes a three-level typology in order to sort through this complexity, with *blue states* being those that function democratically, *green states*, characterized by bureaucratic presence but weak class influence, and *brown states* exhibiting both low bureaucratic presence and little societal control. Evans (1995) proposes a similar typology with two state variations: predatory and developmental. Predatory states are not bureaucratized in the Weberian sense. Their only real source of cohesion is personal ties, and individual goals take precedence over collective ones. In developmental states, by contrast, state-society ties are bureaucratic and provide channels for negotiation of policies and objectives. Meritorious recruitment and long-term career awards create commitment and coherence, while a “robust internal structure,” (p. 12) facilitates solving collective action problems and transcending individualistic interests.

For our examination of public services, we use a three-tiered classification of state forms derived from these earlier works, but taking into account cases where state penetration is weak:

- *The efficient state* is similar to Weber’s ideal type of the bureaucratic state, as well as the *blue* and *green* states suggested by O’Donnell and Evans’ *developmental state*. In the context of public goods, it signifies a state that is successfully harnessed for social ends, where infrastructure works are seen as appropriate state activities, and where human, institutional, and investment capacities to carry out state projects are, on the whole, adequate.
- *The precarious state* is where state presence is limited, investment capacity is low, and social demands are rarely met. Instead of bureaucratic administration, patrimonialism and clientelism prevail, with strong links between economic power and political representation. In this context, citizens distrust that the state can or will provide public goods. It is similar to O’Donnell’s *brown state* and Evans’ *predatory state*.
- *The absent state* is where state presence is very low, and rarely involves public works projects. In these marginal urban zones, rural areas, and remote regions, inhabitants survive by developing their own resources. Communities in such areas have, through self-organization, constructed and continue to monitor their own services. The state is not seen as a necessary or sufficient actor to achieve social ends.

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In Latin America, water sector reform has taken place on this terrain. In this study, we have chosen to compare and contrast several sites in Costa Rica, Colombia, and El Salvador with different degrees of state-society embeddedness and institutional and capital development in order to address the following question: What are the institutional, political, and societal characteristics – in terms of state capacity, autonomy, and ties to local communities – of successful and unsuccessful reform efforts?

### ***Costa Rica: reform in the context of an efficient state***

Costa Rica can be categorized as an efficient state. The Constitution of 1949 placed the provision of public goods firmly in the hands of the state, and public services operate relatively efficiently and are nearly universal. Centralized, interventionist institutions have developed extensive planning, regulation, and public administration capabilities, and have served largely social ends under a model of social solidarity. This, in turn, has contributed to a marked improvement in the quality of life for the average citizen, faith in public institutions as equalizing mechanisms, strong support for social equality, and high expectations regarding democratic inclusion.

Costa Rica's social democracy sets it apart from more authoritarian regimes common under import substitution industrialization (ISI). A range of democratic mechanisms link state policy to citizen claims in Costa Rica. Its relatively accessible congress, open commissions, and deliberative decision-making strengthen state legitimacy, thereby enabling it to carry out policies with the cooperation and consent of society at large. The executive branch has been thwarted in its attempts at carrying out many of the neo-liberal reforms seen in other Latin American countries, in part because certain "veto points" (Clark 2001) - the Legislative Assembly, the Constitutional Chamber of the Supreme Court, the Comptroller, the Attorney General, the Ombudsperson, and the semi-autonomous state institutions - prevented radical changes and increased broader accountability. The result was that reforms were slower, sometimes involving gridlock, but were also more accountable and based on broad inclusion.

The Costa Rican populace is characterized by a relatively high degree of engagement in community affairs (if not elections), high levels of education, and impressive organizational capacities. Political cooperation and calm deliberation were customary in the Costa Rican political sphere until the advent of neo-liberalism. Since the 1980s, however, protests and uprisings have become more and more common. The political crises in recent years, ironically, have underscored the adaptability of civil society in the face of threats to Costa Rica's development model, including its ability, through mobilization, to prevent the privatization of many services long privatized in other countries, as well as to stall the implementation of the Central American Free Trade Agreement (CAFTA). The successful management of these conflicts to date speaks highly of both the population and the political system.

### ***Bogotá and Cartagena, Colombia: reform in efficient and precarious state contexts***

Colombia is a country characterized by its class and cultural differences, as well as by a stark contrast between rural and urban areas. In less than fifty years, the country went through an enormous demographic change: during the first half of the century the country was mostly rural, but by the end of the century, almost the eighty percent of the population lived in cities. Unlike the process of state formation in Europe, where state-society linkages were strong, the state in Colombia was consolidated in a top-down process. There are territories in Colombia where the state is efficient (mainly in developed urban areas), while there are other places where the state is precarious (peripheral urban areas and small towns) or even absent (peasant or indigenous communities or territories dominated by other actors). This differentiated linkage between society and the state shaped the context state transformation. State reforms were designed to

establish the efficient state as part of a project of “modernization,” but the history of institutional reforms during the last decades cannot be reduced to linear and coherent processes. They are better understood as wide-ranging attempts to address one of Colombia’s enduring political and social problems: the precariousness or absence of the state.

In the political arena, Colombia is a paradoxical country. On the one hand, it is known as an older and more stable “democracy” in Latin America, but on the other, it has endured a history of political conflicts and violence that has deeply affected Colombian society. This paradox arises from the tension between legal and institutional arrangements, and social claims. During the second half of the twentieth century, the two traditional parties (liberal and conservative) that had been involved in bloody and cruel civil wars and violent conflicts, decided to create a mechanism to alternate power. This agreement, known as “National Front” started in 1958 and officially ended in 1974. During that time, social movements and other social actors felt these institutions did not represent all voices. The seventies and the eighties were decades of social struggles for democratic inclusion and openness that led to the call of a constituent assembly in 1990. Despite this new social pact, the conflict between left guerrilla groups and right paramilitary groups began to escalate.

Social mobilization has changed in Colombia during the last decades. Unlike the eighties, when social actors mobilized to demand for more social inclusion and access to public services, health, and education, social actors today have been forced to step back and keep a strategic silence in order to survive. On the one hand, both leftist guerrilla groups and rightist paramilitary groups try to co-opt social organizations, and on the other, there is a generalized feeling of fear of being labeled as a supporter of one or the other. Possibilities for social mobilization depend on the region and security conditions. People have found ways of expressing their discontent via mechanisms of participation enshrined in the Constitution and the law. However those mechanisms are not sufficiently embedded in social practices, first, because of lack of information about the existence of those mechanisms, and second, because of skepticism that outcomes of those mechanisms will be positive.

#### *Bogotá: the transition from prevailing precarious state to an efficient state*

In Bogotá, the capital of the country, the city became the main receptor of rural immigrants in the country. The population of the city skyrocketed since the sixties and today it is almost six million. Despite the resources and administrative autonomy available to the District, there were still problems: first, the demand for public services was always greater than supply; secondly, the political appointments in the public water service entity (Empresa de Acueducto y Alcantarillado de Bogotá EAAB), the concomitant lack of management capacity, and the low tariffs of the water service, led the entity to financial and administrative crisis by the early nineties.

In Bogotá the illegitimacy of traditional parties created an interesting social reaction: civic movements and alternative parties have been the ones to elect mayors since the 1990s. The city has a long history of social mobilization and a number of local NGOs that promote neighborhood development. Early on, social mobilization arose from squatter settlements demanding public services and social assistance. Since public services were not provided by the public entities, they obtained water or electricity informally or illegally. Years later, when water was provided

publicly, other problems emerged such as overcharging and low service quality. The difficulty of access and the discontent with the quality of service negatively affected the image of the public water entity and its relationship with citizens.

The demographic changes in Bogotá mentioned above, and the increasing strain on public services that resulted, would imply that there was no possible solution. But throughout the last decade, independent local governments have committed themselves to a process of institutional change. Despite the class differences, social indicators show that the quality of life for Bogotá residents is improving,<sup>3</sup>

#### *Cartagena: the prevailing situation of a precarious state*

Cartagena, which is very well known as a tourist destination, was a regular municipality until the nineties. After the Constitution of 1991 it became as a Historical and Tourist District, which allowed the city to receive more economic resources from the national government. Despite the fact that it is a tourist place, it is a city with enormous social contrasts. Most of their financial resources come from tourist activities and a few other industries. However, scarce resources and political appointments debilitated the financial and technical capacity of public entities.

Cartagena is a city of more than six hundred thousand people, most of which are living in poverty. Relationships between citizens and the state have been mediated by the predominant role of established politicians who, no matter the political party, make promises and offer bribes to voters before electoral campaigns. As a result, people believe that if any service is provided to their communities, it is the outcome of private agreements instead of general social policies. It is a small city, where political relationships resemble an extended family (especially among elites), where every body knows each other, and where the boundary between public and private is blurred. As a consequence, the state has characteristics of Evans' (1995) predatory state. In terms of our public goods framework, the state can be considered precarious.

State presence varies by location. There is a formal city that is comprises the historical center, the tourist areas, and some traditional neighborhoods. However, the growing population is located on the periphery. Despite the fact that a new generation of professionals and some private entities have started to take part in public discussions about the future of the city (such as the Chamber of Commerce, the Caribbean Observatory, or some NGOs), there is still the perception that the state is the domain of powerful traditional politicians.

#### *El Salvador: reform in the context of a precarious state*

El Salvador can be categorized as a precarious state. Despite some success during the period of ISI in building planning and information-gathering capacities and expanding infrastructure (Bulmer-Thomas 1987), state effectiveness in public goods sectors is limited, investment capacity is low, and social demands are rarely met. El Salvador recently suffered a devastating civil war that left very few resources for ensuring the adequate provision of public goods, and state intervention is minimal. Though there is bureaucratic administration, there is a strong link between economic power and political representation, and large sectors of the population are

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<sup>3</sup> Bogotá Cómo Vamos. La pobreza en Bogotá.

marginalized in both systems. The military-oligarchy coalition that controlled, respectively, the political and economic power of El Salvador during the pre-civil war period was little disposed to meeting the needs of the population. Though this coalition supported ISI, it was built upon an authoritarian rather than democratic basis. Elite groups were interested in securing their own power base, ignoring social demands until conflicts over social and economic injustice finally erupted in civil war.

Structural adjustment policies in the 1980s reinforced official neglect of public goods by shifting the focus to private sector solutions, easing pressure for state responsibility, and underestimating the state capacity required to regulate private firms. The state abandoned its few sectoral policies, and reforms promoting fiscal austerity, privatization, retrenchment of public goods, and openings to international investment flows were the reigning orthodoxy (Segovia 2002). Though new regulatory bodies and rules were created, the monitoring and enforcement capacity of these institutions were weak. Rather than attempting to improve state capacity and accountability, neo-liberalism naturalized assumptions about the state's inability to provide public goods and instituted policies that framed that state out of provision.

Elite dominance was supposed to be remedied with the Peace Accords in 1992, but under neo-liberal reforms, ties between the state and business community were solidified. Elites heartily embraced the new model, seeing in it an opportunity to regroup under insecure post-war conditions. Reforms helped elites colonize new spaces of power, thereby reproducing the inequalities at the base of Salvadoran social conflict. Privatization in particular allowed tremendous resources, and thus power, to be transferred to private hands. Though the structure of the economy changed, the level of economic injustice did not. If anything, it intensified with the concentration of wealth in five, rather than the notorious "14 families" (Albiac 1998; Paniagua 2002). The main business organization, ANEP, exerts great influence over government policy, and its former president won the national presidency under the ARENA banner in 2004.

A lack of state ties to non-business groups and an attitude of disdain for the needs of the poor among ruling elites foment distrust of the state. Neo-liberalism reinforces this distrust by naturalizing assumptions about the state's inability to provide and closing off alternatives that might improve accountability. Even progressive politicians advocating alternatives have difficulty: "People still believe that the FMLN [the main opposition party], via the Legislative Assembly, can protect their interests. But neo-liberalism has weakened the state to the point where the FMLN has a hard time using state institutions to carry out its proposals."<sup>4</sup>

The organizational capacity of the Salvadoran populace is shaped by a complex confluence of factors. Years of civil war had the contradictory effect of building highly developed capacities for organization, dissemination of information, and solidarity at the same time as creating fatigue and apprehension among the less militant members of the population. Meanwhile, excessive migration has decimated the population, with perhaps one in three Salvadorans living abroad. There are actors in the existing social order attempting to build alternatives to neo-liberalism, including unions, municipalities, environmentalists, feminist and development NGOs, consumer groups, and university scholars. But a policy change would require a dramatic shift in the distribution of power and wealth in society, as well as an extraordinary effort on the part of an

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<sup>4</sup> Raúl Moreno, economist, Center for Consumer Defense, interview with the author, 16 Jul 2003.

already battle-weary populace. Ideology, impunity, and the scars of memory infuse every technical and economic decision, fueling polarization and making conciliation difficult.

***Summary: Reform in Context***

These brief histories highlight important path-dependent differences among countries in terms of meeting basic needs. In Costa Rica, the pre-existing efficient state creates an attractive context within which several types of reform have been tried and met with some degree of success: state-led reform, privatization, and community-led reform. In Bogotá, the city government resisted pressures from multilateral banks to privatize and instead favored state-led reform of public institutions, with strong regulation and the selective use of private sector contracting. Cartagena, in contrast, embraced the model offered by the World Bank but retained majority public control over shares, thereby breaking somewhat the political stranglehold of traditional politicians while improving service. Finally, in El Salvador we how the continuing precariousness of the state vis-à-vis society undermines positive reforms of all sorts: public, private, and decentralizing.

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Insert Table 2 about here  
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In the following section, we discuss three ideal-types of reform (centralized and state-led, privatizing, and decentralized) and present detailed empirical data from the four locations discussed above, in order to explore the challenges and possibilities for each approach. These data will help us to understand why monolithic approaches to solving development-related challenges must be problematized and contextualized. Though the rhetorical acceptance of targets such as the Millennium Development Goals may be identical among countries, and though the goals and approaches of lending agencies may reflect “best practices,” other requirements – such as state capacity and accountability – are indispensable to their realization. Without accounting for these other factors, development goals are nothing more than words, and may actually make matters worse.

## Water Sector Reform: Types, Processes, and Outcomes

We argue that the type of state, matched with certain types of reform, will have varied but predictable outcomes. What matters is not whether the public or private sector is the main provider of water, but which political and institutional antecedents, matched with which capacities and state-society ties, lead to positive and negative outcomes (as measured by cost, system efficiency, water quality, coverage, and sustainability of water ecosystems).

There are three main tasks that are central to adequate reform of water sectors: provision, regulation, and financing. Provision, understandably, receives the most attention in the development discourse, as bringing water to thirsty populations remains a most pressing need. But also important for the long term health of the population and resource sustainability is adequate sanitation and treatment of waste water, as well as holistic river basin management. It is these aspects of water provision that have been most neglected. Closely related to provision is regulation that can monitor water and service quality, environmental conditions, and prices. Finally, the financial aspects of water management (taxes, tariffs, subsidies, and loans) have become increasingly important, as attitudes toward state-led development and fiscal crises have limited the financial capacity of state-owned enterprises. Any water sector reform must take seriously the question of investment and finance if it is to succeed.

A fourth consideration, rarely addressed in mainstream development discourse, affects reform in important ways: the process itself. For many reformers, improving the water sector is a technical matter that is best left up to engineers and scientists, or in too many cases, technocrats who specialize in economics. But water is not solely a technical resource, much less an economic one. It is central to human health and well-being and therefore important for citizenship itself. Determining what kinds of policies are desirable requires debate, inclusion, negotiation, and oversight. As the UNDP argues in its 2002 Human Development Report, "...just as human development requires much more than raising incomes, governance for human development requires much more than having effective public institutions. Good governance also requires fostering fair, accountable institutions that protect human rights and basic freedoms" (p. 3).

Comparisons among state forms and a greater understanding of capacity and accountability requirements for integrated water management can help in the evaluation of different models of reform: *centralized* approaches that attempt to strengthen the human, institutional, and financial capacity of state water entities and improve their responsiveness to citizen needs; *private sector* participation, which attempts to bring new capacities and capital to the sector; and *decentralization*, which attempts to build local capacities while supporting local solutions to water demands. In the following sections, we will discuss the strategies employed in each of our chosen sites to improve water provision, regulation, and financing, as well as analyze the effect that context and relations of accountability have had on different types of reforms.

### *Costa Rican Reforms*

Up until recently, there were few pressures for water reform in Costa Rica, as coverage is nearly universal (see Table 3) and service adequate. Water is supplied mainly by public (national, municipal, and communal) bodies, with very few private-sector providers. The National Institute

of Aqueducts and Sewage Systems (AyA) controls about 43% of the sector, while rural associations (ASADAS), municipalities, and private and communal sources provide approximately 25%, 17%, and 14% of services, respectively.

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AyA has many institutional strengths, including the capacity to gather nationwide information on the sector; credit-worthiness (though not always permission to acquire debt); technical and financial support from entities such as the Pan-American Health Organization and the World Health Organization; and institutional support for its goals from several other Costa Rican ministries and agencies. There is thus a high degree of state capacity to carry out sectoral goals (Ministerio de Salud, 2004). But despite the fact that AyA has proved relatively efficacious, infrastructure is in decline due to decades of low investment levels. Sewage treatment in particular is severely deficient and there is little maintenance or supervision over build systems.

Currently, regulation in the sector falls under the jurisdiction of AyA, the Environment and Energy Ministry (MINAE), and the Public Services Regulatory Authority (ARESEP). Though there is a high level of consciousness regarding the need to protect the integrity of the water system as a whole, there are a variety of sometimes conflicting rules and legal mandates that work against integrated management. Though there is a fairly good working relationship among these various entities, there is a need for better co-ordination and clarity regarding final decision-making authority. Moreover, these institutions at times lack the resources, technical capacity, or political will to address complaints that involve large corporations and/or plantation owners.

The conservation and protection of water resources is threatened by extensive, poorly planned growth, a massive increase in tourism, and expansion of export crops, all of which have led to more water usage and pollution. Extensive irrigation associated with export agriculture has jeopardized accessibility, in part by siphoning off water via canals, and in part through the indirect effects of deforestation.<sup>5</sup> Rivers have nearly disappeared in some areas, even those protected by law. MINAE contributes to the problem through generous concessions for tourism and industry. Businesses are allowed to drill wells and extract water with little monitoring of amounts and very low fees. This unrestricted “development” and lack of control over extraction and contamination has been denounced by environmental groups as unsustainable, but with numerous concessions, the state simply does not have the personnel to regulate all of them.<sup>6</sup>

Financially, the sector has been faced with severe challenges. Around 1990, AyA began developing a plan of action to address sanitation and pollution in the Central Valley, which was to be paid for by Inter-American Development Bank and Japanese loans. President Rodriguez (1998-2002), a supporter of private concessions, rejected the project on the grounds that public entities should not be allowed to contract debt. Credit limits (set at 6% of net worth by the Central Bank) and spending limitations (imposed by the Treasury) put the brakes on investment

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<sup>5</sup> Guillermo Acuña Gonzalez, FLACSO Costa Rica, interview with the author, 28 Jul 2006.

<sup>6</sup> Gerardo Cascante Amador, Union Consultant for AyA, National Association of Public Employees (ANEP), interview with the author, 4 Aug 2006.

in the sector. Even ARESEP, a relatively non-politicized agency, long denied rate increases for AyA, even though its rate of profit in 2000 was only 2.3%, well below the 7% permitted by ARESEP (AyA 2002), and well below market profits, which are often 15% or higher.

This financial strangulation has posed serious challenges for AyA, despite its efficiency.<sup>7</sup> When investment needs are excluded, the company operates with a surplus (income is greater than expenditures on administration, operations, maintenance, and depreciation). AyA's expansion and improvement plans naturally require large capital investments, which in the private sector are generally secured through loans. As the Director of the Environmental Management department at AyA put it, "tariffs alone will not meet investment needs. AyA must have access to credit."<sup>8</sup> Some charge that those who support privatization and concessions are against allowing AyA to have access to funding because it would signal that state-led reform is possible and undermine their case for private contracting.<sup>9</sup>

Financial constraints such as those discussed above have created problems in quality and undermined the stability of supply. Moreover, they are exceedingly strict for a sector of such importance, and which has proven to have a high level of capacity to utilize funding effectively and responsibly. The long term consequence has been a weakening of the sector and greater pressures to utilize the private sector to attend to systems in disrepair.

#### *State-led reform on the national scale*

Despite these setbacks, AyA continues to seek ways to remedy shortcomings in the sector. Recently, a Japanese loan with excellent terms was approved, after much political wrangling. With its state (rather than private sector) focus, its approval represents an important victory for state-led reform.<sup>10</sup> The project itself will be paid for by this loan, in conjunction with AyA and Central Government funds, and will consist of repair, cleanup, and extension of the existing system in four river basins.<sup>11</sup> Considering the historical success of Costa Rican state-owned enterprises as providers of public services, this project is promising.

The Costa Rican government has also taken steps to address regulatory shortcomings. Current reforms would overcome institutional conflict by creating one regulator, one rector, and one main operator in the water sector.<sup>12</sup> Regulatory functions such as setting tariffs and sectoral monitoring would go to ARESEP, while a newly-created rector would secure resources for the entire sector, rather than for piecemeal projects. AyA would be the main operator, allowing it to focus on ensuring access and quality of water provision, while MINAE would retain control over environmental regulation. The reforms contain provisions to strengthen the regulatory capacity as well as institutional autonomy for these entities.

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<sup>7</sup> Javier Valverde, former Systems Operations Director, AyA, interview with the author, 23 Jan 2003.

<sup>8</sup> Carlos \_\_\_\_ (Dirección de Gestión Ambiental), AyA, presentation before AyA and ANEP, 9 Aug 2006.

<sup>9</sup> Albino Vargas, Secretary General, National Association of Public and Private Employees (ANEP), interview with the author, 1 Aug, 2006.

<sup>10</sup> José María Villalta Florez-Estrada, Advisor to Deputy José Merino, Legislative Assembly, interview with the author, 1 Aug, 2006.

<sup>11</sup> Meeting with AyA President Ricardo Sancho and other member of AyA management, 9 Aug 2006.

<sup>12</sup> Mario Freer, Water Sector Director, Public Services Regulatory Authority (ARESEP), interview with the author, 9 Aug, 2006.

The issues of concessions and privatization have been the most contentious area of reform, and the water sector's legal framework is at the center of this conflict. The current Water Resources Bill under consideration by the Legislative Assembly was developed with the goal of clarifying the various roles of water sector entities, but would also explicitly eliminate the possibility for privatizing water: "One of the articles says that concessions for the provision of potable water would only be through AyA, the municipalities, and the ASADAS. This would close the door ...to privatization."<sup>13</sup> The government of Oscar Arias, an outspoken advocate for the Central American Free Trade Agreement (CAFTA) - which promotes private competition with state-owned enterprises - has frozen the bill in the assembly with the assistance of the libertarian party. Proponents of the bill say that it contains important clauses protecting the public nature of water,<sup>14</sup> but the PLN believes the bill in its current form is "too statist and centralized."<sup>15</sup>

To complicate matters, development lending in Costa Rica, as in many less-developed countries, has been tied to private concessions, despite their contentious nature. The World Bank "Water and Sanitation Sector Modernization Project," for example, included stipulations that privatization feasibility studies be conducted and services privately contracted.<sup>16</sup> In 2002, AyA was presented an analysis carried out by a Spanish investment bank (N+1), examining prospects for concessioning sewage and water systems. Members of AyA management rejected the plan on the grounds that even with a 6% rate increase, it was not financially feasible without bankrupting AyA and necessitating state subsidies to the private sector. As one manager put it, "It was a typical Latin America concession project. No thanks!"<sup>17</sup>

Environmental groups and others have taken the struggle over private participation in the sector to the constitutional realm. Water is currently considered irrevocably "in the public domain," but the constitution does not prohibit its contracting, concession, or marketization. This leaves room for interpretation, with each government advocating a new set of policies: Social Democrats emphasize privatization, while Christian Democrats do not. A proposed constitutional amendment would elevate the status of water to a good that is inalienable from public control, but would also contradict the principles and rules enshrined in CAFTA.

In sum, state-led reform in the areas of provision, regulation, and financing for water have been undertaken, but liberalizing governments and Washington Consensus policies have thrown up barriers to these processes. As the scale of the problem continues to grow and "the most contaminated river basin in Central America" continues to languish, state-led development projects suffer from insufficient political and financial support, and state institutions find themselves repeatedly impeded by external limitations. State capacity and the creativity of the proponents of state-led development will continue to be tested under these conditions.

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<sup>13</sup> José María Villalta Florez-Estrada, Advisor to Deputy José Merino, Legislative Assembly, interview with the author, 1 Aug, 2006.

<sup>14</sup> Osvaldo Duran Castro, Alternative Projects for Social Devel. (PROAL), interview with the author, 7 Aug 2006.

<sup>15</sup> Maureen Ballesteros, PLN Legislative Assembly Deputy and President of the Environmental Committee, interview with the author, 9 Aug 2006.

<sup>16</sup> World Bank, "Costa Rica - Water and Sanitation Sector Modernization Project," 2004: [http://www-wds.worldbank.org/servlet/WDS\\_IBank\\_Servlet?pcont=details&eid=000104615\\_20040311165040](http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000104615_20040311165040).

<sup>17</sup> Heibel Rodriguez, AyA Manager, interview with the author, 9 Aug, 2006.

### *Decentralization and municipalization*

According to the law establishing AyA, the operation and administration of all water and sewage systems of the country fall under its jurisdiction, and it is responsible for guaranteeing the quality and continuity of service nationally. Historically, rural areas, due to their isolation from the population centers, built their own water collection and carrying systems. With the creation of AyA, many municipalities that were administering their own systems were allowed to continue controlling them, as long as service met certain quality standards. If not, they would revert to AyA's control. In the 1990s, rural systems were transformed into legal entities called ASADAS (associations of administrators of rural water systems), the purpose of which was to formalize the operational, administrative, and maintenance roles of these systems under the supervision of AyA. AyA provides financial and technical support for the ASADAS, while ASADAS provide regular data regarding water quality, the condition of systems, and finances.

Approximately 45-50% of the systems controlled by ASADAS are in good condition, with the remaining half in average or substandard condition (Ministerio de Salud, 2004). Water coverage is high, though systems are facing many of the same problems signaled above (lack of funding for infrastructure projects and lack of follow-up for built systems). Problems also exist in the areas of operations, administration, and maintenance, due in part to insufficient capacity-building for those who run the systems and in part to financial limitations that impede follow-up. Community members in charge of maintaining the systems often "lack the appropriate knowledge and expertise," and must carry out their responsibilities while working full-time in other jobs (Welsh, 2006).

AyA has clear dominion over ASADAS: when services do not comply with standards, with the authority to terminate their contracts and take control over systems. This situation has created some tension, as ASADAS believe that AyA should be required to help them improve operative and administrative standards when they are not up to par (Ministerio de Salud, 2004), rather than simply taking over.<sup>18</sup> AyA management counters that all system takeovers are subject to due process, and that ASADAS are promoted, not threatened by AyA.<sup>19</sup>

This history shapes current dynamics between centralized and decentralized systems. There is recognition of the important role that local communities have played in the development of water resources, while at the same time there are national standards and control mechanisms to ensure that community-run systems are adequate. Despite tensions between local systems and AyA, this arrangement allows for the best aspects of centralized and decentralized management to exist simultaneously. State control allows for coordination among actors using the same river basins, introduces conservation and other broad goals as part of planning decisions, improves regulatory coherence and consistency across regions, and prevents powerful locals from usurping resources. Meanwhile, the contextual knowledge brought by local control allows reforms to respond to local realities and gives local citizens greater decision-making power regarding how resources are allocated and managed.

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<sup>18</sup> Esteban Monge, Center for Natural Resources and Environmental Rights (CEDARENA), interview with the author, 9 Aug, 2006

<sup>19</sup> Heibel Rodriguez, AyA Manager, interview with the author, 9 Aug, 2006

### *Privatization: Public Services of Heredia*

Despite Costa Rica's relatively good track record in the area of public services, private sector participation in the water sector has also occurred. One system that was the subject of the World Bank study mentioned above, Public Services of Heredia (ESPH), was eventually privatized. ESPH is a limited liability company formed in 1998 by the voluntary incorporation of regional municipalities. It enjoys full rights over the provision of water and sewage services, as well as the production, distribution, and sale of electrical services in the province of Heredia (Ministerio de Salud, 2004). Prior to incorporation, ESPH was a state company for 22 years, operating under the mandate of addressing the shortcomings and disjunctures of earlier private service providers.

With its incorporation, ESPH was given institutional autonomy to carry out projects using, and form alliances with the private sector, as well as to approve projects without congressional oversight.<sup>20</sup> Moreover, ESPH does not face the same financial constraints as public entities: the Inter-American Development Bank (IDB), for example, recently provided ESPH with grants (which do not need to be repaid) to create a treatment system in the area.<sup>21</sup> This institutional autonomy is a great strength of ESPH. There are no political appointees on the ESPH Board, and it does not answer to local political control. ESPH status as private property eliminates the ability of municipalities to use tariff income to fund unrelated municipal needs. "Competition" is simulated through a kind of internal challenge in which the firm seeks prizes and recognition from outside analysts, which in turn are actively cultivated as sources of pride for management and employees. Processes for rate setting and environmental impact analysis are the same as for public firms, and citizens are given an opportunity to participate through public hearings.

If looked at from a different perspective, however, these sources of strength can be considered problematic. Complete autonomy – without control by the legislature, AyA,<sup>22</sup> or even local elected officials – can easily translate into lack of accountability to the population as a whole, hearings notwithstanding.<sup>23</sup> Contracts can also be problematic. As recent airport concessions failures have shown, "copying contract ideas from elsewhere doesn't work; it's not what we would call 'internalized.'"<sup>24</sup> The sanctity of private property, while protecting funds from being siphoned into the pockets of public officials, does not protect funds from being siphoned off to shareholders in the form of profits. And when "competition" is only self-reflexive, as in monopoly sectors such as water, it does not have the same incentive effects as true competition, where consumers can pressure firms to change their behavior with the threat of flight.

Moreover, it seems likely that the strengths of ESPH could also be achieved within Costa Rica's framework of already-efficient state and community entities. If self-competition can be simulated in a privately-operated firm, why not in the public sector? There could be incentive

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<sup>20</sup> Ing. Allan Benavides Vilchez, ESPH General Manager, interview with the author, 8 Aug 2006.

<sup>21</sup> Ibid.

<sup>22</sup> AyA is supposed to oversee ESPH operations, but a mere 5% of AyA's budget is earmarked for supervision over ASADAS, while nothing at all is left for the supervision of private companies such as ESPH

<sup>23</sup> In opposition to a similar plan in Pérez Zeledón, Deputy Humberto Arce argued that a project like this, where public-oriented entities are free of all regulations under the law, is "simply incomprehensible." From the Legislative Assembly manuscript "Creación de la Empresa Pública de Pérez Zeledón como Mecanismo de Intervención."

<sup>24</sup> Mario Freer, Water Sector Director, Public Services Regulatory Authority (ARESEP), interview with the author, 9 Aug, 2006.

programs for efficient public-sector firms, using similar criteria, with rewards for achievement (Evans, 1995; Tendler, 1997). ASADAS already eliminate the ability of municipalities to use tariff income for purposes other than reinvestment in water infrastructure, but without financial losses to private profit, and with continued accountability to local communities and national oversight. Finally, public firms such as AyA and ICE have been wrestling for many years for the kind of decision-making and financial flexibility given to ESPH, though have been unable to secure it (Comisión Mixta, 2000).

To add insult to injury for financially challenged state firms, the recent Law for Concessions of Public Works helps private companies secure funds from state banks to build and invest in infrastructure. In a country where the main argument for privatization is lack of state financial capacity and the need to attract private investment, such lending exposes these arguments as disingenuous. Not only do these arrangements allow private firms take advantage of state-secured funding, but also they reduce private risk by sharing it with state banks. Private firms are supposedly better entrepreneurs because risks encourage efficiencies rewarded with profit; yet in light of these empirical realities, this argument also appears dishonest. The fact is that privatization is attractive for investors in Costa Rica because risks are low due to state efforts to attract investors; the infrastructure, though in disrepair, is already in place; water sources are plentiful; and water enjoys a ready market, limited supply, and steady demand.

If improvements had been dramatic in Heredia, state-led alternatives would be less pertinent. But ESPH has many of the same problems as ASADAS and AyA, including contamination, sanitation deficiencies, and declining infrastructure. Further, the national state continues to play an important role in Heredia by spearheading an integrated plan for resources management and an education program to raise awareness regarding water conservation. AyA has the capacity to carry out these broader tasks, but does ESPH? Why privatize at all when the development model and state institutions have been largely effective for so many decades?

### *Processes of Reform*

If we look at processes of reform in Costa Rica, we find that many social movements, unions, students, and environmental groups are asking the same question. Historically, water management has been both public and participative. With over 1600 ASADAS, communities and the state both contribute to water management. This is accompanied by a very important social and organizational capacity that allows for constructive participation by civil society in economic decision making.

But a disturbing anti-democratic trend has developed in Costa Rica over the last two decades, and is well illustrated by neo-liberal reforms in the water sector. Despite dramatic needs for the sector, and widespread agreement regarding loan agreements that would facilitate state-led responses, presidents and functionaries on the government economic “team” have been able to halt projects without legislative recourse (Haglund, 2005).<sup>25</sup> Private models for public goods management grant autonomy to firms while removing congressional or municipal oversight of any kind. Some may say that is the goal of privatization: to remove political influence from economic decision making. But is water simply an economic good? Both of these moves –

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<sup>25</sup> Heibel Rodriguez, AyA Manager, interview with the author, 9 Aug, 2006.

toward executive and private-sector decision making – shift accountability away from the most democratic bodies (legislatures and municipalities) into fewer hands, in a sector that is central not only to human development, but also to citizenship.

Current struggles over the important issue of water concessions further illustrate the point. The process by which the Water Resources Bill was created was very participative. A commission was formed to include water experts, unions, environmentalists, social movements, and political actors, who worked together to come up with the text. Although concessions were included in early drafts for periods of up to 60 years, opposition mounted until they were removed.<sup>26</sup> Water was clearly defined as a public good and all language referring to concessions was rejected. The bill was approved in the first Legislative session, but then it disappeared from public view. The government is reported to be working on an alternative that is more compatible with the looming CAFTA, especially in terms of concessions.<sup>27</sup> This process is anathema to many:

The fact that the government did not take [the negotiated] text as its working model, and instead is coming up with something on its own, shows its lack of respect for civil society and its willingness to make a joke of inclusive, deliberative processes. This happens here all the time now, whereas 20 years ago it was much less frequent. Since [protests against electricity and telecommunications privatization] in 2000, the capacity of civil society has grown a great deal for participating in deliberative activities, as well as protests. The ruling class has tried to ignore this, even though the contributions are valid.<sup>28</sup>

Organized communities have until now impeded the advance of neo-liberal policies. Unfortunately, the streets appear to be one of the few remaining spaces left for resistance, considering recent anti-democratic developments and the unrelenting economic liberalism of the current government. Without formal inclusion, civil society is unable to fulfill a constructive role in natural resources management, and may even impede reforms. As one sociologist put it, “local movements do not need technical reasons for being against neo-liberal policies, nor do they need to present alternatives. It is enough for them to say, ‘we do not want our land and resources used for the benefit of business or elites.’”<sup>29</sup> Reformers must deal with such inherited political contexts if reforms are to be effective. In Costa Rica, that entails recognizing that citizens, “do not want only to participate once every four years, or simply as complaining consumers.”<sup>30</sup> In the eyes of much of Costa Rica’s population, the legitimacy of public policy rests on the inclusiveness of the process by which it is formulated.

### ***Reforms in Colombia***

The above mentioned areas of relevance to water reform – provision, regulation, and financing – formed the core of the institutional reform introduced in Colombia in 1994, with the law of domestic public services. For some economists, the reform meant substituting an Anglo-Saxon

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<sup>26</sup> Alvaro Espinoza, Director, AyA Workers’ Union (ASTRA), interview with the author, 3 Aug 2006.

<sup>27</sup> Pablo Cárdenas, Costa Rican Federation for Nature Conservation (FECON), Environmental Forum “No to CAFTA,” 29 Jul 2006.

<sup>28</sup> Albino Vargas, Secretary General, National Association of Public and Private Employees (ANEP), interview with the author, 1 Aug, 2006.

<sup>29</sup> Osvaldo Duran Castro, Alternative Projects for Social Devel. (PROAL), interview with the author, 7 Aug 2006.

<sup>30</sup> Pablo Cárdenas, Costa Rican Federation for Nature Conservation (FECON), Environmental Forum “No to CAFTA,” 29 Jul 2006.

model of regulation for a public services model based on state provision (Caballero, Jadresic, Ramirez, 2006). The main task of the state in the former would be to create an independent technical regulator that would correct possible market distortions. The new institutional arrangements thus attempted to separate technical regulation from public policy. There are three main institutions at the national level that deal with water: the Environment Ministry; the Water Regulatory Commission, which sets tariffs; and a supervisory agency (Superintendencia de Servicios Públicos Domiciliarios).

According to the law, the provision of water and sewage services is to be carried out by specialized entities, either public or private. Prior to reform, each municipality had its own public company in charge of provision, but these firms were plagued by lack of autonomy and capacity. During the nineties, the water sector was in crisis, with almost all local entities facing financial and administrative problems that affected their ability to provide high-quality service (Navarro, 2001). The financial crisis was caused by what many believed to be artificially low tariffs, which did not even meet production costs. The National Council of Tariffs did not use technical or consistent methods to set rates, and rarely allowed increases for fear of political fallout; thus tariffs were kept low until 1994. The problem for the new Regulatory Commission of Water and Sanitation was that the low cost impeded the ability of public entities and municipalities to invest in the sector.<sup>31</sup>

Following the reforms introduced by the law of domestic public services in 1994, there was an increase on coverage and quality of service; especially in urban areas. Coverage, which was almost at 80% nationally in 1993, was at 90% eight years later (see Table 3). Since the new legal and institutional frame allowed the private sector to participate in water and sewage provision, new specialized actors – public and private – have started to operate in different municipalities (Uribe, 2005). The Water Regulatory Commission has allowed tariffs to rise, contributing to increased financial capacity of public entities. However, according to some, the reforms have had varied outcomes. For one, higher tariffs have bred social discontent, but also have led to decreased water consumption. For another, reform has had little impact on small towns because private investors consider small markets unattractive.<sup>32</sup>

Cartagena and Bogotá offer two contrasting Colombian cases. The private participation process in Cartagena started before the reform of 1994 and belongs to the first generation of reform in the country.<sup>33</sup> The modernization of the water service in Bogotá occurred after 1994, and it is possible to observe the effects of the above-mentioned institutional changes on the financial situation of the public water company, which is still owned by the District of Bogotá.

#### *Reforms in Cartagena, Colombia: from public entity to private participation*

Cartagena has been one of the most heralded cases of private participation in the water sector in Latin America, especially by some international financial institutions (Beato and Diaz, 2003). However it is important to take into account some elements of the political, social, and institutional context in order to understand the possibilities and limitations of this private

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<sup>31</sup> Diego Fernandez, Former member of the Regulatory Commission of Water and Sewage, 28 Jul 2006.

<sup>32</sup> Staff member of Superintendencia de Servicios Públicos, confidential interview with the autor, 28 Jul 2006.

<sup>33</sup> By the same time, there was also the process of privatization of water service in Barranquilla.

participation process. By the beginning of the nineties the company was facing a very difficult situation, with pressure for reform from the national government, as well as from some social sectors. The most visible aspect of the crisis was the deficient quality of service that the Municipal Water Service Entity (Empresas Públicas Municipales de Cartagena –EPMC-) provided for the city. However, there were also environmental challenges (discussed below) that triggered the decision to reform the entity (Navarro, 2001).

Decades ago, the Public Services Company of Cartagena (Empresas Públicas de Cartagena – EPMC-) had been considered a very important asset for the city. However, EPMC faced difficulties that undermined its technical and financial capacity to provide quality services. The appointment of non-qualified people in posts that required technical expertise eroded capacity, and sometimes put further financial strain on the entity. Besides these internal problems, EPMC was responsible for manifold municipal services, such as electricity, water, sewage, parks, public ways, etc. The water service was used to finance other public services, and functioned as a “petty cash drawer” for the municipality. The entity did not have a costing system for services that provided information for technical decisions. Finally, artificially low tariffs affected the investment capacity of the entity (Navarro, 2001). By the end of the eighties, EPMC was facing an enormous deficit, high costs and low revenues, and some social sectors did not have trust in the entity as long as it was controlled by politicians, so there was a generalized perception that sooner or later EPMC had to be transformed.

Another element to take into account is the environmental issue. Cartagena, as a coast shore city in front of the Caribbean Sea, depends heavily on its water resources (Navarro, 2001). By the beginning of the nineties, the main sources of water were in danger. First, water for human consumption was brought from the Magdalena River via the “Dique” channel (Canal del Dique), which necessitated investment for maintenance and cleaning. Second, the city’s main bays were polluted by industrial and human waste. The diagnosis was that it was necessary to develop a Master Plan of Water and Sewage, but that the EPMC had neither the financial capacity nor the credibility to carry it out (Navarro, 2001).

When Mayor Gabriel Garcia Romero was elected (1992-1994), there was already enormous pressure to transform the EPMC. The first reform was to split the EPMC into two entities: the former EPMC would carry on providing other public services, while the new entity, the Public District Entity (Empresas Públicas Distritales -EPD-) would assume the provision of water and sewage service. But at the moment of its creation, the EPD was assigned the pension debt of former employees by the political authorities, which undermined future investment capacity. The EPD only was able to operate a short time before Mayor Garcia requested an assessment of its sustainability in 1993 (Navarro, 2001; 27). The assessment concluded that the public entity was unsustainable, and that a private company would more appropriately fulfill the demands of the new circumstances (Navarro, 2001). At that point, Mayor García decided to start an international bidding process and attract investors with experience in water service.

#### *Cartegena: Private participation process*

The process of water sector transformation in Cartagena was very conflictive (Nickson, 2001; 14). The District followed an international tendering and bidding process in order to draw

foreign investors. Initially three international companies were interested, but as the schedule fixed by the District was very short, only one investor took part in the process: Aguas de Barcelona –Agbar. The initial design of the sale allowed 51% of the entity to go to an international investor, while 44% went to minority stakeholders and 10% to the District. Finally, the contract was adjudicated on December 30, 1994, at the end of Mayor García’s term (Nickson, 2001; 14). The new mayor, Guillermo Paniza (1995-1997), initially opposed the negotiations, due to new regulations over domestic public services, the negative impact the city might experience after losing ownership of the entity, and the commitment he had made to the EPD labor union not to sell. However, the national government and the World Bank exerted pressure over the mayor (Nickson, 2001 and Navarro, 2001), the former refusing to fund the project if the modernization process was interrupted.<sup>34</sup> Mayor Paniza ultimately carried out the privatization, but re-negotiated the terms of the agreement to ensure that the District of Cartagena would retain majority shareholder status.

Currently the water service is provided by a mixed entity called ACUACAR whose shares. Shares are owned by the District of Cartagena (50 %), Aguas de Barcelona –Agbar- (45.1%), and other private stake holders (4.9). The operation of the system has been assumed by the “operating stakeholder” (socio operador) Aguas de Barcelona –Agbar – which provides the “know how” and operates the equipment and systems.

#### *Cartegena: Social and institutional consequences of the private participation*

ACUACAR’s concession is for a term of 26 years. The company assumed the transportation of water from the sources, the operation of the water service and sewerage service. Getting water for Cartagena is an expensive and difficult process. Water is taken from the Magdalena River many kilometers from the city, and is conducted by means of channels and pipes to the treatment plants. Investment for transportation of water comes from the District, the National Government and external credit of multilateral banks. Regarding the operation of the water service, the company has achieved an increase in the coverage, quality and continuity of the service. Some of the interviewees have recognized that the entity has achieved a good level service, and that fact is out of discussion<sup>35</sup>.

However, there have been some debates about the costs of this process and the convenience for the city. For some of the informants who are close to ACUACAR, the company assumed an enormous risk investing in the city and heading a process where no other investor took part<sup>36</sup>. According to Jorge Navarro (2001), private participation in ACUACAR has had some flaws. First, decisions were taken without enough information about the risks that the District was to assume. Secondly, the term set forth the bidding process was very short and decisions were taken too fast, which affected the possibility of gathering information and allowing for a truly competitive process. And thirdly, those decisions created an asymmetrical situation in which risks were almost eliminated for the foreign investor. Further, Aguas de Barcelona receives earnings from three different sources: first, from a recovery fund, where investments are

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<sup>34</sup> Diego Fernandez, interview with the author, 28 Jul 2006.

<sup>35</sup> Judit Pinedo, FUNCICAR, and Jorge Navarro España, Observatorio del Caribe, interview with the author, 9 Aug 2006.

<sup>36</sup> Former legal consultant and a staff member of ACUACAR, confidential interview with the author, 8 Aug 2006.

reimbursed from profits; second, from its earnings as a shareholder; and third, from its earning as system operator (Navarro, 2001).

Regarding the balance of the process, several ideas could be taken into account. First, private participation achieved a level of autonomy, technical and administrative capacity that enhanced the management and operation of the service. Virtually, private participation has been useful to create a mechanism of protection from certain types of political penetration. However some interviewees affirm that the political influence does not totally disappear. According to a staff member of ACUACAR, they still receive politicians and listen to them, but the company does not allow politicians working on the company<sup>37</sup>. Regarding the contracts, ACUACAR appears to have had two contract standards: for those contracts that involved money of the company, the process was extremely clean; but for those contracts that involved money from the District, the process was less exigent<sup>38</sup>. This concern was confirmed by the NGO Transparency for Colombia<sup>39</sup>.

So, the private participation process seems to have created two types of outcomes: one internal and the other external. The internal outcome is the transformation of the management capacity of ACUACAR, which is now more autonomous from politicians. But for some interviewees, politicization did not disappeared but rather transformed into a “private actor-politician” alliance. The external outcome is the improvement of water service provision in the city. However, private participation has not transformed the social context: patronage and politicization is still a problem. Cartagena remains a society where public affairs are conceived as matter of traditional politicians that struggle for the control of public entities.

Accountability is still weak in Cartagena. Before the privatization process, accountability was also weak because few mechanisms of control existed and were monopolized by local politicians, and because there was very low levels of social mobilization. Those who advocated for the transformation of EPMC were more organized, such as industry and tourism sectors. After the creation of ACUACAR, there was more social awareness about the importance of water and sewage services for the city, but accountability has not improved. Despite the fact that ACUACAR provides information about outcomes such as coverage, formal mechanisms of control are still weak and have been neglected by the company. For the president of the District Council, the institutional design has a problem: ACUACAR does the design, the building, and the controlling of quality.<sup>40</sup>

### *Bogotá: State-led reform*

The process of modernization of the water sector in Bogotá is the outcome of several institutional and social circumstances. First, as mentioned above, there is a national regulatory framework formed by the Constitution and the 1994 law of domestic public services, which made it possible for the District of Bogotá not only to retain ownership of the water entity

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<sup>37</sup>Alvaro Vélez. Human and Institutional Relationships Manager. Aguas de Cartagena, interview with the author 8 Aug of 2006.

<sup>38</sup>Judit Pinedo, staff member of FUNCICAR. Interview with the author, 9 Aug 2006.

<sup>39</sup>Marta Tamayo, staff member of Transparency for Colombia, interview with the author, 1 Aug 2006.

<sup>40</sup>Argemiro Bermudez, president of the District Council, interview with the author, 11 Aug, 2006.

(Empresa de Acueducto y Alcantarillado de Bogotá –EAAB-), but also to increase tariffs when EAAB faced a difficult financial situation<sup>41</sup>. Second, in the nineties, citizens began to elect mayors from civic movements in an attempt to promote a shift toward public administration. These factors have contributed, not only to solving what was considered an unsolvable problem (the provision of water), but also to improving the quality of service and promoting a social and environmental conception of water.

Currently, the city has the ownership of the EAAB, which manages the general programs of the water service such as strategic projects and planning. Operation of the service is sub-contracted to both public and private entities that provide water in five zones. Each zone is served by one operator responsible for provision as well as billing. This design was an attempt to introduce competition among operators for rights to operate in a zone for a five year term. This is feasible because each of the zones is large enough to be attractive for private and public operators.<sup>42</sup> Each operator knows that contract renewals will be based on the quality of the service, and that poor service could entail losing the contract to a competing firm.

### *Bogotá: Process of Reform*

By 1993, EAAB was facing a very difficult situation, as were similar entities nation wide. According to the National Department of Planning, a new water source would have to be in place by 2000 to avoid crisis and meet social demand, due to a growing population and limitations on current sources (Chingaza and Tibitoc). But there was also a financial crisis; tariffs were low and the entity did not have the resources to invest in service expansion. EAAB was not authorized to increase tariffs autonomously; this required authorization of the Tariffs Commission. So despite the fact that expansion was imperative, the financial circumstances did not provide the means for solving the financial problems facing EAAB. For the National Government and the World Bank the best solution was privatization, but the mayor rejected this idea.

By 1995 there were new institutional arrangements that were favorable to EAAB. First, the Regulatory Commission of Water started to increase water and sewage tariffs based on a new formula for calculating them. This formula comprised not only the present cost of the service, but also a component for investment<sup>43</sup>. Based on the new regulatory frame the mayor of the city authorized an increase of 30% for the water service tariffs in January of 1996<sup>44</sup>. As the company's income grew, its accounts became more balanced. In a few years, the financial situation of the entity had changed, and along with them, the conditions that had been used to support the idea of privatization. Meanwhile, EAAB requested some assessments in order to better understand the current situation of the entity and the best way to promote modernization.

EAAB's modernization project, called "Corporative Transformation," began in 2000. By then, the financial problems had been solved and coverage was increasing. Yet there was still concern regarding public perceptions that the entity provided inadequate customer service. EAAB then

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<sup>41</sup> Diego Fernandez, Economist and former consultant of EAAB, interview with the author, 28 Jul 2006.

<sup>42</sup> Fernandez, *ibid.*

<sup>43</sup> Diego Fernandez, former member of the Regulatory Commission and was the person who proposed the new formula for water service tariffs, interview with the author, 28 Jul 28 2006.

<sup>44</sup> *Ibid.*

began another process of transformation where the basic role of the entity would be “strategic asset management,” where roles such as operations or billing could be sub-contracted. In November of 2002, the water service entity of Bogotá granted operations contracts to three specialized companies that would cover each zone of the city: Aguas Capital (zone 1), Aguas Azules (zones 2 and 5) and EPM-Bogotá (zones 3 and 4), and would be under the close supervision of EAAB.

### *Bogotá: Consequences of the reform and current debates*

As an outcome of the institutional and legal reforms, EAAB has achieved one of the higher levels of quality of service in the country. Coverage has been 100% since 2003, the quality of water is one of the highest in the country, the availability of service is almost 24 hours per day, and relationships with citizens and costumers have greatly improved.<sup>45</sup>

However, there are also negative consequences from these reforms. First, the cost of the service has increased substantially (sometimes as high as 300%) during the last ten years, not only in Bogotá but also in other large cities. Surveys that measure citizen perceptions of EAAB reflect discontent regarding higher prices. But despite the increasing cost of the water service in Colombia, cross-subsidies still exist, which allow high income families to subsidize the cost of the service in favor of low income families. Nevertheless, subsidies are much lower than before, and thus there is still an increased burden on many families, middle class and poor.

Second, higher rates have led to a decrease in water consumption (from 34 cubic meters per second ten years ago to 12 cubic meters per second today). This has forced the company to revise its plans for expansion, which had been under discussion since the 1990s, including abandonment of plans to bring water from the Sumapaz region, as well as for diverting rivers from Orinoco and Venezuela regions, plans which would have had serious environmental effects. Plans to expand the Chingaza treatment plant also became unnecessary, as the water consumption is constant and tends to decrease<sup>46</sup>.

Finally, the biggest current concern is related to sewage and treatment of polluted water. The fact that the city has reached 100% water service coverage and has improved the sewage coverage shows that during the past fifteen years there have been social and political processes of transformation of the relationships between state and society. If decades ago, social mobilization was mainly focused on access to citizenship and social rights such as public services, current social movements and debates are moving to more general concerns, such as water resources and treatment of polluted water.

### *The Salvadoran Water Sector*

El Salvador’s 12-year civil war took a toll on the water sector by sapping resources for investment, reducing the priority of public goods provision, and destroying (often literally) the physical infrastructure of the country. In 1990, two years before the end of the war, only 66% of the population had improved water sources and 73% sewage treatment. Ten years after the end

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<sup>45</sup> Ibid.

<sup>46</sup> Ibid.

of the conflict, changes in these indicators were contradictory, with 82% of the population enjoying improved water sources (a 12% gain over 1990) and 63% sewage treatment (a 10% loss since 1990) (see Table 3). Part of the reason for improvement in the water sector can be attributed to post-bellum NGO involvement in water provision and an emergent effort to channel resources to rural areas via the “Social Investment Fund for Local Development” (FISDL).<sup>47</sup> Declining sanitation services, in contrast, can be traced to ever-contracting resources for investment. Moreover, data shows a *decrease* in water coverage between 1994 and 2004.<sup>48</sup>

Water continues to be supplied mainly by public entities, though the number of private-sector providers has grown in recent years. The National Aqueducts and Sewers Administration (ANDA) controls about 53% of the sector, mainly in urban areas (though some of its municipal holdings have recently been privatized), while rural systems developed under the Plan for the Supply of Drinking Water to Rural Communities (PLANSABAR), municipalities, and private systems developed for housing and urbanization projects provide approximately 9%, 1%, and 2.5% of services, respectively. For those citizens without access to water in their homes or through public standpipes, expensive water sold from trucks or in bottles is their only option.

ANDA was created in 1961 in order to provide national water and sanitation services via a centralized entity. Until the 1980s, public sector water services improved, but the early ANDA neglected rural areas, focusing instead on larger cities. The state firm was relatively successful in those places where efforts were channeled, but neglected areas paid the price: discrepancies between urban and rural water and sewage coverage are greater in El Salvador than in any other country in the region (see Table 3). Beginning in the 1980s, a rollback in state support for public sector water provision created a number of challenges for ANDA, even in the urban areas that formed the core of its efforts. With the coming of the debt crisis, the government imposed rules against public investment in order to prioritize debt payments,<sup>49</sup> while retraction of credit from the IDB for public projects directly impeded public efforts in the water sector. Moreover, the capacity to gather information and monitor natural resources, which grew substantially in the 1960s, collapsed with the drastic public sector cuts of the 1980s (Artiga, 1999).

ARENA governments since Christiani (1989) have further limited possibilities for state-led development. In order to meet the stated objective of, “bettering water and sanitation services at the national level,” ANDA’s 2006 investment budget was cut to its lowest allocation in seven years.<sup>50</sup> These cuts were implemented despite steady and sometimes dramatic declines in ANDA funding since 2002 (González and Salgado, 2005), consistent rationing and scarcity of water in ANDA’s network, and a fall of 12% in water provision over the decade from 1994-2004. ANDA’s former President Manuel Arrieta argued that the shortfall would be made up by “international cooperation and other institutions,” such as, “the central government, IDB credits, donations, or the private sector,”<sup>51</sup> despite the fact that none of these sources were secured prior to the cuts, and there is very little evidence to indicate that they will be forthcoming.

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<sup>47</sup> It is difficult to evaluate changes in basic services over time in Central America, or to evaluate outcomes of reforms unambiguously, as increases in coverage were part of a progressive trend not clearly attributable to reform alone, especially in countries emerging from civil war (UNDP 2001).

<sup>48</sup> “Recortan \$16 millones a ANDA en 2006.” *La Prensa Gráfica*, 27 Dec 2005.

<sup>49</sup> Beatrice Carillo – Procuraduría, Water Privatization Seminar in San Salvador, Aug 2003.

<sup>50</sup> “Recortan \$16 millones a ANDA en 2006.” *La Prensa Gráfica*, 27 Dec 2005.

<sup>51</sup> *Ibid.*

With a dilapidated infrastructure, overexploitation of water resources due to uncoordinated planning, and lack of technical and human capacity, these systems are not being strengthened, but rather “abandoned to their own devices, left to die.”<sup>52</sup> Contracts between ANDA and private construction firms, brought in to fill the gap left by insufficient investment and productive capacity, created attractive corruption opportunities. Former ANDA President Carlos Perla, ex-ANDA employee Mario Orellana and 20 others were recently charged with illicit activity, corruption, accepting bribes, illegal contracts, violations in the bidding processes, and other unsavory acts.<sup>53</sup> As one NGO activist charged, the state is “mechanically imposing institutions that seem to have worked elsewhere without taking into account the real needs of El Salvador.”<sup>54</sup>

These needs go beyond funding to include adequate and accountable regulation. ANDA is the only entity that officially regulates the potable water sector, but its dual role as regulator and provider creates problems when there are violations or conflicts of interest, and it is difficult for the enterprise to be impartial when acting as both “judge and jury.”<sup>55</sup> Moreover, there is no integrated approach to water management, with a lack of coordination among rules and little clear idea of which body is the final arbiter in water issues in El Salvador.<sup>56</sup> It is ironic that a place so rich in water has been unable to bring adequate supplies to the population. There are also geopolitical and environmental reasons for this.<sup>57</sup> 70% of the water in El Salvador enters, already contaminated, from Guatemala and Honduras, while 23% comes from unusable volcanic sources. The remaining 7% is polluted, mainly by sewage but also from agro-chemicals and heavy metals. The majority of rural communities with water built their own systems, and water treatment rarely accompanies provision. The focus, as in urban areas, has been on bringing the water for human consumption, not on conserving or protecting water resources. There is also a problem of deforestation, to the detriment of water sources. Clearly reforms are needed.

### *State-led reform on the national scale*

In 1995, the Coordinating Commission for Hydrological Sector Reform began exploring the possibilities for modernizing ANDA, including separating its roles as rector, regulator, and operator (much like in Costa Rica), as well as trying to overcome problems in meeting rural demand, recovering costs, and maintaining existing systems (CDC, 2005a). Unlike reforms in other countries, however, ANDA was put in charge of its own reform, raising a number of criticisms regarding the transparency and honesty of the process. ANDA reform has been shrouded in mystery, in part because eight distinct reform bills have been formulated, though none have been formally debated or presented to the Legislative Assembly. The reasons for this

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<sup>52</sup> Julio Menjívar Chacón, ANDAR: Asociación Nacional para la Defensa, Desarrollo, y Distribución de Agua, interview with the author, 17 Jul, 2003.

<sup>53</sup> *La Prensa Gráfica*, “Contraloría ordena juicios por fraude in 2 proyectos ANDA.” 21 Oct 2003.

<sup>54</sup> Graciela Colunga, ProVida, interview with the author, 19 Jul 2006.

<sup>55</sup> Several respondents indicated concern regarding ANDA being “juez y parte,” as with AyA in Costa Rica.

<sup>56</sup> Among the numerous laws currently in effect to regulate the sector are the Constitution, the Municipal Code, the Health Code, the Forestry Law, the Environmental Law, and the Law of Integrated Water Resource Management and Regulation, while the many entities involved in managing different aspects of the sector include ANDA, the Hydroelectric Executive Commission of the Lempa River (CEL), the Electricity and Telecommunications General Superintendent (SIGET), the Health Ministry, the Agriculture Ministry, and the Planning Ministry (Cuéllar, 2001).

<sup>57</sup> Graciela Colunga, ProVida, interview with the author, 19 Jul 2006.

appear to be political: despite the insistence of ANDA officials that water will not be privatized in the country, key aspects of the bill reflect greater marketization. Anti-privatization advocates believe that the government is postponing its public release until the last possible moment in order to head off debate and inevitable protest.<sup>58</sup> Meanwhile, any reforms that would strengthen the human, technical, or financial capacity or accountability of ANDA are notably absent.

Outside the purview of ANDA, PLAN SABAR and the Salvadoran Social Investment Fund for Local Development (FISDL) were two recent projects designed to improve rural coverage. Though they were both successful at increasing rural access to water by a small percentage, they both ultimately failed to solve the country's water problems because of a lack of financial capacity of municipalities. Prior to 1980, costs for water systems had been subsidized with income from state-owned banks, electricity, and telephony, as well as coffee production and income taxes. The fall in rural production following the shift away from agriculture undermined local tax bases nationwide (Segovia, 2002), while the privatization of state banks and firms left few resources for state-led investment.<sup>59</sup> The dramatic rise in electricity prices and removal of subsidies for rural systems following privatization also undermined the financial sustainability of such systems (SAPRIN, 2001). FISDL was more successful than PLAN SABAR, mainly due to co-financing of projects by the state via the general budget (administered through the Treasury) and outside donors,<sup>60</sup> but its promise was undermined by the demand that municipalities come up with matching funds, placing insurmountable financial burdens on local communities.<sup>61</sup>

Regulatory reform suffers from the same lack of transparency as the reform of ANDA; indeed both reforms are being developed concurrently, without much public debate. Based on available information, the bill currently being formulated would create two distinct entities: the Water Resources Superintendent, charged with general sectoral regulation; and the Water and Sanitation Superintendent, which would regulate water for human consumption, as well as sewage systems (CDC, 2005b). Such institutional development is badly needed in El Salvador, and there is precedent for the task at hand: the regulator for energy, SIGET, was modeled after advanced legislation in other countries, making it one of the best regulatory frameworks in the region.<sup>62</sup> Yet despite the adequacy of the framework, superintendents change with each new government, and there is very little political will to depoliticize regulation.<sup>63</sup> The proposed water regulation faces similar deficits, with superintendents appointed exclusively via executive channels and influence peddling by the powerful private sector a serious threat (CDC, 2005b). These extra-institutional factors must be kept in mind if reforms are to function at all.

On the environmental front, the Salvadoran Legislative Assembly has taken measures that reflect some environmental consciousness, despite decades of neglect, war, and overexploitation. In May of 1998, they adopted the "Environmental Law," designed "to create norms for... environmental protection as a basic obligation of the State, the municipalities, and the general population," and to promote state capacity with regard to the protection, conservation, and

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<sup>58</sup> Meeting of Red Sinti Techan, San Salvador, 30 Jun 2006.

<sup>59</sup> Graciela Colunga, ProVida, interview with the author, 19 Jul 2006.

<sup>60</sup> Representative, Salvadoran Social Investment Fund for Local Development (FISDL), confidential interview with the author, 28 Jul 2003.

<sup>61</sup> Graciela Colunga, ProVida, interview with the author, 19 Jul 2006.

<sup>62</sup> Raúl Moreno, economist, Center for Consumer Defense, interview with the author, 16 Jul 2003.

<sup>63</sup> *La Prensa Gráfica*. "Expertos aconsejan a candidatos sobre economía." 24 Nov 2003.

regeneration of the environment.<sup>64</sup> Yet because of state-capacity limitations, regulatory confusion, and lack of political incentives to follow through on these commitments, concrete achievements have yet to materialize. In the precarious public goods context of El Salvador – where public officials say one thing and do another, where public accountability is rarely secured, and where the goals of elites are often hidden from view – state-led reform faces particularly daunting challenges.

*Decentralization, a.k.a., shrinking the (central) state*

What seems to be required upon examination of the Salvadoran case is greater extension of state capacity, coupled with autonomy from rapacious elites, not further retraction of the state. But further retraction is what El Salvador is getting. The ARENA party, the World Bank, and the IDB have advocated decentralization and, predictably, private participation as solutions to water sector shortcomings. Reforms that began with IMF structural adjustment policies continued under the “Public Sector Modernization Program.” The World Bank contributed privatization language to reform efforts with a “Technical Assistance Loan for Public Sector Modernization,” while a series of IDB loans called for concessions and the creation of “mixed businesses” (*empresas mixtas*). Following the mandates of these projects, ANDA’s “Decentralization Unit” (UDES) was created, a move which required an alteration of the law that established the entity.

Seventy-two municipalities were slated for decentralization in 2006, organized by micro-region, with mainly small, unprofitable systems being de-linked from ANDA. Unlike in other countries, cross-subsidies were largely eliminated, and small systems were forced to try and maintain themselves with little assistance from larger systems, an arrangement that, as we have seen, has had a miserable track record in El Salvador.<sup>65</sup> Recent reforms of ANDA are making decentralization inevitable, rather than a policy option for municipalities. Not only have resources been cut, but also repairs for municipalities that refuse concessions have slowed considerably.<sup>66</sup> Members of ANDA’s union SETA argue that work orders “are prioritized for systems that are planned to be concessioned off,” while other systems just have to get in line.<sup>67</sup>

Why the pressures to decentralize in a country where decentralized systems have failed and capacity is severely lacking? UDES argues that municipalities are gaining capacity through the decentralization program, and that financial shortcomings will be remedied by raised rates, with targeting of subsidies for the poorest. But the capacity-building that purportedly accompanies decentralization is largely managerial and administrative.<sup>68</sup> UDES assists local governments with the paperwork necessary to transform decentralized systems into new legal entities, and later with management issues, but “in the 2003-2004 period, few were the firms that actually received technical assistance” (CDC, 2005a). The bulk of the responsibility for day-to-day maintenance, infrastructure expansion, and long-term planning fall to the municipalities. Meanwhile, municipalities do not have the borrowing capacity of the central government, and

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<sup>64</sup> “Ley del Medio Ambiente.” Decreto Legislativo No. 233. República de El Salvador. 4 May 1998.

<sup>65</sup> Meftalí Colocho, Secretario de Finanzas, SETA, interview with the author, 30 Jun 2006.

<sup>66</sup> “Not For Sale: El Salvador's Movement Against Water Privatization” by Jason Wallach, *Upside Down World*, 27 Sep 2006: <http://upsidedownworld.org/main/content/view/445/1>

<sup>67</sup> Jorge René Cordoba, Press Secretary, SETA, quoted in *ibid*.

<sup>68</sup> Luis Trejo, ANDA-UDES, interview with the author, 19 Jul 2006.

tariff income is nowhere near what is required to fund infrastructure investment without placing a severe burden on what are essentially the rural poor. Responsibilities are thus decentralized without the necessary accompanying financial support.

In sum, water reforms in El Salvador follow traditional Washington Consensus policies: de-capacitating the government by dismantling state structures, restricting spending and credit, and devolving responsibility for public goods away from the central state. Municipal capacity has repeatedly proven insufficient, so when decentralization processes are put into motion that do not include hefty state support, municipalities are set up to fail. Privatization under these circumstances is more easily framed as the only alternative. This argument was in fact used to push for the privatization of six municipalities under the banner of Tetralogía-SEM.

### *Tetralogía-SEM*

In 1999, Tetralogía-SEM was created as a public-private venture, its “owners” comprising six municipalities in Usulután, employee shareholders, and private investors.<sup>69</sup> The marketization of shares began in 2000, and by 2003 a majority had been sold, with the proceeds going to ANDA. Forty percent were held by municipalities and 60% by Tetralogía employees, commercial business, industry, and “private citizens.” Lacking a majority of shares, mayors had no control over decision-making or finances. From the perspective of those who criticize public servants for using state enterprises as petty cash drawers, this can be seen as a positive development; however, this also means that social investment is out of the hands of elected representatives. When the current contract expires in 2009, other accountability risks will emerge: sales will be open to foreign companies, and shares could be sold to a single owner.

ANDA has continued to subsidize Tetralogía’s administrative and electricity costs, as the company does not have sufficient income from tariffs to cover these expenditures, much less infrastructure investment.<sup>70</sup> The company is working to gain independence from ANDA, despite the current deficit of \$87,000 (after subsidies).<sup>71</sup> To be self-sustaining and alleviate dependence on ANDA, rates would need to rise dramatically. When asked how rate hikes might affect the poor, Tetralogía’s president, René Vidaurre commented that most people could pay more. “Water is not a gift,” said Vidaurre, “but Salvadorans do not want to pay for water, even though they have cable and a telephone.”<sup>72</sup> In a country where 62.5% of the rural population lives on less than \$1 per day, these claims seem exaggerated (Jacir, 2004). The Water Bill discussed above, which Tetralogía favors, would remove ANDA oversight and place it in the hands of a separate regulatory body. Each region would be able to set its own water rates, as well as obtain long-term concessions that would provide a secure period in which to recover investments.<sup>73</sup>

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<sup>69</sup> The municipalities involved were all held by the ARENA party at the time, but as opposition parties won mayoral races in the region, friction over the project grew. In 2006, the political map consisted of a fairly even distribution of ARENA and opposition parties: Alegría (FMLN), Berlín (FMLN), Mercedes Umaña (ARENA), Santiago de Maria (PCN), Tecapán (ARENA), and California (ARENA)

<sup>70</sup> Ing. René Mauricio Vidaurre, President of Tetralogía-SEM, interview with the author, 11 Jul 2006.

<sup>71</sup> Moises Funes, Mayor of Alegría, interview with the author, 11 Jul 2006.

<sup>72</sup> Ing. René Mauricio Vidaurre, President of Tetralogía-SEM, interview with the author, 11 Jul 2006.

<sup>73</sup> Ibid.

The government holds up Tetralogía as a successful case of decentralization, to be emulated on a national scale. Yet when asked how the government is monitoring decentralized systems and whether they could provide data regarding their success, UDES said this information is not available to the general public.<sup>74</sup> To date, neither ANDA nor any independent body has done a formal, public evaluation of Tetralogía, nor explained indicators reported by the firm. These indicators show Tetralogía cleaning up illegal connections, expanding coverage, providing water 3-12 hours a day (up from 2), and reducing complaints. A public opinion survey of the region, however, showed that the availability of water per day declined in four of six municipalities; the number of days per month that people went without water rose in three of six, declining in the other three; and the response time for damages to the system increased by over two days (CDC, 2005a). Though it is true that there is 80% coverage in the area, this can be partly attributed to the prior 70% coverage from wells and other existing sources.<sup>75</sup> Moreover, there is no treatment of waste in the area. There was, however, a more favorable assessment of the customer service provided by Tetralogía over ANDA, as well as a dramatic improvement in the response time for new connections. Incentives for the firm to gain paying customers, as well as ANDA's alleged neglect of systems until they are "decentralizing," might explain this dramatic change.

The case of Tetralogía provides important insights into the complexity of solving problems regarding water management in the context of a precarious state. The Salvadoran government does a poor job of supplying water and sanitation services, it is true; but municipalities often lack the diagnostic, technical, investment, and maintenance capacities required to take over the responsibility. If there is no capacity-building, decentralization will fail. But if the state can build capacity at the local level, why would it not be possible at the national level, where broader water management and conservation concerns could be addressed? And how will the state provide adequate regulation in this sensitive sector if it has trouble simply providing water? If shareholders have the power to fix rates, and regulatory capacity does not dramatically improve, there will be strong incentives to set rates high to produce profits. The long-term contracts designed to recover investments will impede local communities from holding these companies accountable. There is already evidence that a private geothermal energy company has caused environmental damage to water supplies, but because it has resources that far surpass those available to mayors, there is not much the latter can do to hold it responsible; there have been no repercussions so far for the firm.<sup>76</sup> ANDA may have the strength to stand up to such a firm (despite a lack of political will), but municipalities are unlikely to stand a chance.

The performance record of private companies regarding environmental commitments is also disappointing. Tetralogía agreed in its original contract to create a fund for the protection of the San Simon River Basin, but there were no institutional mechanisms created to channel or monitor the funds, and the money never materialized. In 2003, the San Simon River Basin Protection Committee, which could serve as such a mechanism, asked for the funds to begin the preservation work, but they were told by Tetralogía that the funds "did not exist anymore."<sup>77</sup> Tetralogía's president shrugged off this criticism, arguing that environmental cleanup will (and should) come from NGO donations. With greater autonomy of private water companies, greater

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<sup>74</sup> Luis Trejo, ANDA-UDES, interview with the author, 19 Jul 2006.

<sup>75</sup> Legislative Deputy Virginia Morataya, interview with the author, 5 Jul 2006.

<sup>76</sup> Moises Funes, Mayor of Alegría, interview with the author, 11 Jul 2006.

<sup>77</sup> Legislative Deputy Virginia Morataya, interview with the author, 5 Jul 2006.

dependence on tariffs to meet the needs of the sector, low regulatory capacity, and little local accountability, chances are good that environmental considerations will be marginalized entirely.

### *State reforms: process*

With the decentralization program, it seems that the ARENA government is washing its hands of the responsibility for water management. The result, if municipalities are not up to the task, is likely to be citizen anger at mayors and municipal counsels rather than the central government and ARENA party. And some mayors are worried. Despite ANDA's claims that decentralization will be implemented only where it is requested (Ortiz and Jarquín, 2006), the Mayor of Santa Maria, Usulután, reported that his municipality is being forced to accept it.<sup>78</sup> When he took office, he found that water was available only 6-7 hours per day, and ANDA could not be compelled to fix anything. He reported a great deal of concern about being left without options if he rejects decentralization, and expressed the hope that at least some immediate payback might come if he accepts it. As the municipality has no capacity whatsoever to run the system without the assistance of ANDA, he felt he had no choice but to take what ANDA offered: decentralization, like it or not.

The public forums held by UDES – where ostensibly decisions about decentralization are made with local input – have been criticized by some as a sham. The Municipal Trustee of Berlín reported that, “meetings with ANDA and the government are just photo opportunities, and [ANDA's President Cesar] Funes does not even seem to know anything about water systems.”<sup>79</sup> ANDA hired a private consulting firm to go to communities and try to convince them of the benefits of decentralization. These kinds of public relations forums – where hand-picked members of communities are invited to attend a “discussion” with the entity promoting reform, only to find a pre-conceived agenda and a process of persuasion rather than a true dialogue about the pros and cons of the various options – are legendary in Central America. The CDC criticizes this approach as fundamentally undemocratic:

UDES... must ensure that there is an adequate citizen consultation process so that the population can be informed enough to say yes or no to decentralization... It is not acceptable that they are interpreting citizen participation as just a few people ... Trejo [of UDES] even said that only legally constituted water boards really need to participate. But I told him one thing is legality and another is social representation. Legality cannot and should not exclude social representation. ...If people want decentralization, they should choose it, accept it, and define it, then advance in that direction. That should be the trajectory of the decision making, not exclusion.<sup>80</sup>

Lack of accountability to local elected officials, much less to local communities, is worrisome in a sector as central to human well-being as water, especially considering the push by private owners to be able to set rates for water service. There is thus a great deal of resistance to decentralization and privatization from the FMLN at the national and local level, as well as from SETA (the water union) and various NGOs (CDC, CARITAS, UNES, FESPAD). Alternatives to the decentralization agenda have been developed, following the principles set forth in 1992 at

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<sup>78</sup> Nicolas Castellón, Mayor of Santa Maria, Usulután, meeting with the CDC and SETA, 18 Jul 2006.

<sup>79</sup> Mercedes Serrano Gómez, Sindico Municipal of Berlín, interview with the author, 18 Jul 2006.

<sup>80</sup> Danilo Perez, Center for Consumer Defense (CDC), interview with the author, 19 Jul 2006.

the Dublin International Conference on Water and the Environment, and at the Earth Summit in Rio (Ibarra, 2005).

These alternatives bring sustainability and basin management to the center of the discourse and enshrine water as a human right, i.e., water suitable for human consumption would be available to all, 24 hours a day. Democratic participation is central to these alternatives, with a “hydrologic plan from below” based on the ecological and human needs at the micro-basin level shaping full basin plans, and mechanisms for citizen participation at each level. At the national level, a “National Water Commission” would be created for this purpose. Concessions would only be given when they are chosen through democratic means, and they would only be granted to not-for-profit entities with short contracts, evaluated and renewed on a short-term basis (as in Bogotá) rather than a long-term one. A national water fund would be created from general and tariff revenues to ensure that municipalities have the financial capacity they need to make investments and meet demands.

There is no way to know whether these alternatives would improve water management in El Salvador, as they remain untested, despite their promise to answer calls for both sustainability and accountability. Debates about water reform are absent in any formal institutional spaces, due to the long-term delay of releasing any kind of reform text on the part of the ARENA government or ANDA. Rumor has it that before the end of the year, ANDA will present its water law,<sup>81</sup> but it is difficult to have a meaningful public debate based on a protracted rumor.

Since alternatives are not given a formal reception in El Salvador, social movements have had to carve out their own spaces for dialogue and struggle. SETA has held several public forums to discuss the unspoken trade-offs of, and alternatives to what it sees as an inevitable slide toward total privatization of the sector.<sup>82</sup> They hope to force the government to take responsibility for water by helping communities to organize and protest against steps toward privatization. Once water is privatized, they warn, people will no longer be able to go to ANDA for resolution. These meetings are an attempt to arm the community with information, preparing them for the government “consultations.”

The purpose of contrasting the government and social movement approaches to “consultation” is to problematize the concept and pose the question of what is necessary for accountability in public goods sectors. When formal institutional spaces are closed to citizens, and when decision making takes place behind closed doors, with last-minute rush legislation, potentially devastating mistakes are likely, as is social conflict. IFIs are implicated in this: the IDB, for example, conditioned its water loan on the implementation of the decentralization project, without ensuring that local communities were favorable toward this solution, or that political interests did not take advantage of these conditionalities to evade government responsibility and to suppress alternative projects and visions for the sector.

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<sup>81</sup> “Ley de Agua con Avance de un 80%, dice ANDA,” *La Prensa Gráfica*, 28 May 2006.

<sup>82</sup> Wilfredo Romero, Secretary General of SETA, meeting in San Agustín, 8 Jul 2006.

### *Summary: Reforms, Processes, and Outcomes*

In Costa Rica, all three of our ideal types of reform have been tried, and all have had some degree of success. This, we argue, is due to the preexisting strengths of the Costa Rican state, and the broad inclusion that allows civil society and local communities to provide insights into local conditions, and to hold leaders accountable for policies in the sector. That is not to say that water reform is without conflict: though the state has tried to continue the Costa Rican model by investing in water projects, it has been impeded by imposed financial constraints. Moreover, democratic deliberation is increasingly marginalized; the privatized model in Heredia simply formalizes these changes. Public services are likely to see halting reforms, as struggles over models paralyze the sector, but should succeed somewhat in improving service and regulation, due to preexisting capacities and institutional commitments. The political sphere, meanwhile, is likely to see continued or increasing conflict over the meaning and construction of public goods.

In Colombia, institutional reforms in the water sector altered the role of the national state as provider to encompass mainly regulation. These reforms brought new regulatory institutions and opened water provision to the private sector, with localities deciding how to pursue reforms. In Cartagena, citizen discontent, coupled with government and World Bank pressure, led to privatization, whereas Bogotá kept its water services public. Rising tariffs have allowed both ACUACAR and EAAB to improve their financial and technical capacity, but have also raised prices dramatically. Luckily, cross-subsidies are available for poor families in both cases.

As for institutional autonomy, both firms gained through initial state-led reforms. Accountability increased in Bogotá, as did the strength of the public sector to handle broader public goods and environmental concerns. Coverage is now at one-hundred percent, which was unthinkable fifteen years ago. Political transformation, election of independent mayors, and greater awareness of the importance of common public goods have contributed strength the public sphere. Financial strength of the EAAB via tariffs was also decisive in improving technical capacity. Debates have moved to address more transcendent issues such as water conservation and environmental issues.

Coverage also increased in Cartagena to 99%, but there is some concern about the financial impact of reforms on the city and how they might affect other social programs. Profits from the company do not seem to benefit the city, but go to the main private investor Agbar, which was favored by an unbalanced negotiation process. Beyond tariffs, investment finance continues to depend on credit and funding from the national government and the District. And though ACUACAR secured some level of autonomy from local politicians, thereby diminishing the precariousness of the state, private participation by itself did not change the social and political network of clientelism and patronage that has undermined the social construction of public goods on a broader and more enduring scale. Finally, though there is more awareness about the importance of protection of water resources and water service, citizen participation and social accountability is still weak.

Whereas in Costa Rica, the debate clearly acknowledges limits to recovering all costs through tariffs, and in Colombia, credits and national government funding is made available for investment finance, El Salvador is implementing reforms that will make systems excessively

dependent on tariff income. Wholesale application of neo-liberal reform has led to a nearly complete retraction of the state in water sectors. Neither state-led reform nor decentralization have provided new capacity for the sector, addressed corruption, or secured adequate funding for water projects. The government is relying heavily on the assistance of NGOs and the private sector, as well as praying for loans, to meet investment needs. It appears that a regulatory reform is forthcoming, but like previous regulatory efforts, it seems unlikely that this body will be any better equipped to deal with the demands of regulating a complex and sensitive sector with lack of funds, human capacity, or accountability to society as a whole.

State capacity building, as well as accountability to social ends would be necessary for sectoral success under Salvadoran scenarios. Thus, the real problems of the sector have yet to be ameliorated and even well-constructed institutions are unlikely to have much of an impact, except to exacerbate political polarization, due to the autocratic way in which they are being implemented. People have little faith in corporations or the government, and there is no political will to work toward conciliation. Accountability and cooperation among the state and civil society are the key missing ingredients.

### **Conclusion**

Our findings indicate that successes and failures of water sector reform depend in large part on the preexisting state structures:

*Centralized reform of state structures* is an attractive option in places where an efficient state is in need of modernization, as in Costa Rica and Bogotá. Due to its promise of improving the coherence of holistic watershed management and coordination among competing uses, this type of reform has additional advantages over other types of reform regardless of state context. This kind of national-level coordination is sorely needed in places like El Salvador, where resource degradation is severe. But state-led reform will have difficulties in precarious situations like El Salvador, unless a great deal of attention is paid to the specific institutional deficits and underlying power structures that fuel corruption, clientelism, and elite dominance. It may also face challenges and social conflict from local communities, as with decentralization in El Salvador and ASADAS in Costa Rica, unless active measures are taken to include these communities in reform processes.

*Private sector participation* can be helpful in situations where the state lacks financial capacity, but only if private firms are required to invest their own capital. The continued use of central governments and multilateral banks to fund private sector projects in all of our cases belies the claim that private sector participation brings otherwise unavailable capital to development projects. Rather, it seems that neo-liberal reformers have done their best to ensure that only privatizing projects get the funding they need to succeed. Transfer of technical know-how can be another benefit of private sector participation, as occurred in Cartagena. Yet in some places, state firms have been in the business for decades, and already possess high levels of technical expertise, as in Costa Rica. Privatization can also be instrumental where the presence of outside capitalists (and thus protection of private property) dismantles patrimonial ties among traditional elites, as in the case of Cartagena, but this outcome is not given. In El Salvador, where ruling elites are also economic elites, privatization simply legitimizes the monopoly over public

resources that accrue to private actors. Privatization may also cause difficulty in cases where it undermines functioning state structures (Costa Rica), erodes accountability for public goods (El Salvador, Costa Rica), and/or transfers profits from social to private ends (Cartagena, El Salvador). In situations of these latter precarious states, there is added risk that regulation will not be effective in preventing private firms from using monopoly power to benefit at the expense of citizens and sustainability.

*Decentralized governance by organized local communities* has advantages in all cases, especially the ability to draw on vital contextual knowledge to create reforms that respond to local realities, as well as a greater likelihood that the democratic rights of local citizens to decide how resources are allocated and managed will be respected. State-led decentralization (or any reform, for that matter) will be most effective where an efficient central state exists, as we saw in Costa Rica. Decentralization will have difficulty where there is no coordination among actors using the same river basins, conservation and other broad goals are left out of planning decisions, regulations are contradictory or incoherent, and powerful locals control most of the resources – no matter what the preexisting conditions. This is the prevailing situation in El Salvador. Decentralization will have particular difficulty such precarious state situations, as reforms will need to address institutional and financial deficiencies, as well as attempt to promote democratic control over resources. Decentralized reform in areas where the state is not well-established must also harness resources for improvements in the system; if not, reforms are bound to fail.

In this paper, we have shown that reform must be an organic, contextual process that builds upon existing values, power structures, and institutional arrangements if it is to succeed. The institutional characteristics of importance are technical, financial, and human capacity and autonomy from those who would use reforms to better their own private situation. Politically, dynamics of conflict and cooperation can hinder or aid reforms in important ways, and must be part of the planning process. How these contingencies are incorporated will depend in part on societal characteristics, such as level of mobilization, public capacities, and self-sufficiency of civil society, and in part on existing state-society linkages and degrees of state penetration (embeddedness).

In Latin American countries, the efficient state is still an unfinished project, and precarious state structures prevail. Though private sector participation in water sectors has had some success in expanding the capacity of the state to provide public services in specific times and locations, it is not a strategy that can be simply transplanted from place to place. Moreover, the state is not a perverse organization *per se*: when there is participation, respect for the public sphere, and financial and technical capacity and autonomy, public entities can be quite successful. Rather than emphasizing this or that reform, outside aid could be used to compel competing parties to come together and negotiate mutually acceptable solutions. In the rush to implement “best practices” under the Washington Consensus, these important contextual considerations have often been brushed aside or ignored entirely. This project provides a cautionary tale regarding such wholesale transfer of ideas from one context to another, as well as a roadmap regarding which policies and practices might be better suited to the complexity inherent to the essential drive to improve water provision in developing countries.

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**Table 1: Characteristics of various state typologies**

	<b>Efficient State</b>	<b>Precarious State</b>	<b>Absent State</b>
<b>Institutional context</b>	Weberian bureaucracy; strong institutional capacity	Patrimonial organization of the bureaucracy; weak institutional capacity	Very little bureaucratic development and institutional capacity
<b>State-society ties</b>	Accountability to a range of societal actors through laws and democratic processes; autonomy from clientelistic ties; state enterprises used for public ends	Lack of democratic accountability mechanisms; prevalence of clientelism, where only certain actors have access to public resources; state enterprises used to create patronage networks	State seen as outside the realm of community or as an enemy (as in war-torn areas); public services tend to be community-run
<b>Cultural attitudes toward the state</b>	State perceived as legitimate provider of public goods	State not perceived as a fully legitimate provider of public goods	State not recognized as provider of public goods

**Table 2: Summary of cases**

	<b>Efficient State</b>	<b>Precarious State</b>
<b>Cases of state-led reform</b>	Bogotá, Colombia Costa Rica (AyA)	Cartagena, Colombia (1993) El Salvador (ANDA)
<b>Cases of private-sector reform</b>	Costa Rica (Public Services of Heredia)	Cartagena, Colombia (1995) El Salvador (Tetralogía)
<b>Cases of decentralization</b>	Costa Rica (ASADAS)	El Salvador (UDES)

**Table 3: Water and sanitation indicators in selected countries**

Country	Improved water source (% of pop w/access)			Sanitation (% of pop w/access)		
	Total	Urban	Rural	Total	Urban	Rural
<b>Colombia*</b>	90	97	66	82	90	58
<b>Costa Rica</b>	97	100	92	92	89	97
<b>El Salvador</b>	82	91	68	63	78	40
<b>Guatemala</b>	95	99	92	61	72	52
<b>Honduras</b>	90	99	82	68	89	52
<b>Nicaragua</b>	81	93	65	66	78	51
<b>Panama</b>	91	99	79	72	89	51

Source: WHO/UNICEF (ECLAC, BADEINSO), 2002.

\* Source: National Department of Planning. Documento Conpes 2282 (2003 data)