This study presents key findings from the author’s recent report to the United Nation’s Economic Commission for Latin America and the Caribbean (ECLAC). The fundamental lesson that emerges from that survey of developing countries is that sector regulation has to be embedded in an adequate and consistent institutional framework in order to have a positive impact on performance. Sector regulation, by itself, is no guarantee of performance improvements in the drinking water supply and sanitation sector. Case studies and empirical analyses suggest that without significant changes in the supporting institutions, the standard tools of regulation will not be effective. This conclusion is disturbing, especially for developing countries, since it means that the establishment of a regulatory agency might raise hopes, but ultimately, the agency’s rules are unlikely to improve performance without additional, politically difficult initiatives.

An industry observer said “to have effective regulation, you must have utilities that can, in fact, be regulated”. The problem boils down to getting a broader set of institutions to support regulatory and managerial actions that promote good sector performance. This means getting the governance structures right (rules of the game) and the substantive actions right (play of the game). For example, Uganda’s successful performance was embedded in a reform process that involved “regulation by contract”, not external regulation by an autonomous agency (Mugisha and Berg, 2008). The ECLAC report identified the following elements that promote success for state-owned and municipal utilities:

- **Independent directors**: The role of the utility’s Board of Directors is a topic that is under-studied, yet it surely belongs on the list of issues warranting greater attention. If those monitoring and evaluating management (on behalf of the owners—the nation or the municipality) are driven by political concerns, they will tend to have a short term view of outcomes: keep tariffs low, “do not rock the boat”, and leave technical management alone since “they know best”. Certainly, regular interference by Directors is to be avoided: let managers do their job. However, if business plans and executive performance are not monitored, then the Board’s governance responsibilities are abrogated. Little is known about the selection process, retention, and other aspects of the boards of state-owned water utilities (assuming that they are, indeed, corporatized). However, best practice suggests that having highly respected representatives of different professions (law, engineering, business, and accounting, for example) can promote healthy discussions and more careful reviews of management performance. Note that if Board members primarily come from (and return to) the realm of politics, they are likely to be more concerned with future political opportunities (and so will tend to be “captured” by those making the appointments).

- **Managerial commercial orientation**: If the utility is fully embedded in a ministry or within a municipality, the likelihood that its managers will have a commercial orientation is reduced. A focus on cost-containment requires that financial sustainability be emphasized rather than (current) social concerns, since future performance will be weak if the utility acts like a charitable organization. This point runs counter to the orientation of many water utilities. Yet waving the flag of “social needs” over utility operations does not justify the inefficiencies that characterize many SOEs and municipal water utilities. In fact, those who speak loudest on behalf of a “social orientation” are often the
same ones who appoint politically-connected individuals to positions of responsibility in utilities: managers who lack the expertise and professionalism required for making sound business decisions.

- **Clarity of roles**: Within the utility, each job description requires careful work. An organizational chart is only useful to the extent that it reflects actual interactions. If the enterprise consists of silos that hardly interact (engineering vs. sales, for example) then customer-orientation becomes subservient to political in-fighting. Promoting interactions and learning among different units contributes to improved performance.

- **Coherence among objectives**: If managers have not prioritized objectives, there is likely to be some inconsistency in decision-making. Keeping tariffs low is one popular objective, but it is totally inconsistent with expanding service coverage to the poor (unless a donor or government provides funds consistently over time). Thus, there is a clear need for a business plan that reflects reality. Similarly, a customer orientation promotes community and trust and supports the legitimacy of the water utility activities.

- **Internal performance incentives**: Uganda’s National Water and Sewerage Company utilized incentives to meet targets. A strong case can be made that incentives and information are the cornerstones of good performance—both require that governance systems monitor trends over time and that Boards take action when there is weak performance. Executives manage what they measure. One objective of a benchmarking study is to measure productivity and efficiency so that the analyst can make comparisons: productivity considers the link between utility inputs and outputs. Efficiency is related to productivity, but it involves establishing a standard and determining how close the firm comes to meeting that standard: how far is the utility from “efficient practice”?

- **Integrated information system**: Data represent the raw material for decision-making. Investment decisions cannot be made in a vacuum. Maintenance requires an asset registry and information about reported leaks and customer complaints. Multi-period information on operations and financial conditions is essential for sound decision-making. Retaining historical data provides analysts with the opportunity to identify trends and conduct more robust statistical analyses. When managers make investment and operational decisions, they need to be clear about the objectives of the project, the techniques being used, and the level of detail required for the dataset. The absence of such specificity limits accountability and diminishes organizational learning.

- **Business plan**: Together, objectives, past outcomes, and expected revenues, costs, and other outlays serve as the basis for a business plan. Customer usage data and population growth can be used for forecasting likely future demand. Business plans serve as reality checks for decision-makers: are the cash flows reasonable and will the operational and expansion targets be met under current financial constraints? Will quality of service be improved under the business plan? This element of utility governance reinforces the need for a commercial orientation and for trained engineers and managers who can develop a sound business plan.

- **Staff participation**: Staff buy-in is important for setting goals and developing incentives. Their support requires that they have input into the business plan, performance incentives, and other aspects of utility operations. A top-down approach is not an effective way to run a complex organization where information is widely diffused and those in closest contact with customers and operations need to have a voice in how things are done. Given the potential importance of political appointments, there can be a lack of continuity within the regulatory agency. Also, staff training and capacity building may be given inadequate attention by top management.
These elements of governance and utility organization lead to decisions that improve a utility’s performance. Advocates (and incentives) for efficiency are crucial. Sound engineering is necessary but not sufficient for improved utility performance. That means that governance within water utilities must be addressed (including selection of CEOs and Boards of Directors via non-patronage routes) just as external oversight of water utilities (sector regulators and government ministries) needs to be improved. Institutions matter—perhaps even more than money. As Rodriguez and McMahon emphasize, “Simply financing more water infrastructure and services—from public or private sources—will not solve the problem. . . . changing how the money is budgeted, targeted and executed is the proper place to start.”

References


About the Author

Dr. Sanford Berg earned his Ph.D. in Economics from Yale University. His research has focused on infrastructure industries: the role of research and development in determining the basic industry conditions and the role of public policy in determining sector performance. Because of its collaborations with regulatory commissions and utilities around the world, the Public Utility Research Center (PURC) has created a library of material on infrastructure policy and regulatory governance. Berg has examined the role of network industries in economic growth and the promotion of innovative approaches to improving water sector performance. Dr. Berg is the co-author of *Natural Monopoly Regulation: Principles and Practice* (Cambridge University Press). He has published more than one-hundred articles on infrastructure issues, joint venture activity, and innovation. A recent publication is *Water Utility Benchmarking: Measurement, Methodologies, and Performance Incentives* (International Water Association Publishing, 2010). His email address is sberg@ufl.edu.