

Re-conceptualizing Public-Private Partnerships in the Water Sector as a Coevolving System of Innovation

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“As partnerships are living, breathing organisms, we should expect them to be dynamic...a partnership is not the end goal, but a [process] to deliver project objectives.”

– Caplan et.al. 2001

1. Introduction

The paper’s aim is to explore how two intertwined analytical concepts might clarify roles among partners in the water sector and how this case study might aid in further developing the two concepts: 1) a **system of innovation** which means organizations interact in the generation, use, and diffusion of new – and economically useful – knowledge (Fischer and Frohlich 2001); and 2) the concept of **coevolution** -- a process in which each part of a system interacts with and influences the other parts, thereby stimulating their mutual development (Tasaka 1999). These two intertwined ways of thinking questions *how* and *why* a public and private organization mutually influence each other for desirable and/or undesirable coevolution. The benefit of using such conceptual approaches is that the *changing patterns of behavior* may be better explained to point towards processes that may be developed for greater flexibility.

Water is central to all dimensions of life: health, social, economic, political, and environmental. Traditionally, governments (public sector) were, and in many cases still are, the main managers of the quantity and quality of water. However, strongly recognized in the 1990’s, the public sector has not been able to manage the technical, administrative, and financial costs of water alone. Therefore the hypothesis emerged that partnerships between public and private water related organizations may be a solution. As a result, the responsibility of water management has taken the form of different shades of partnerships, sometimes even toward full privatisation of water management organizations. Some recent studies conclude that partnerships pool resources and reduce risks, building on core competencies (BPD 2003). According to the same studies, however, unconstructive competition among partners continues to be a constraint.

In light of the potentials and constraints of partnerships, Calaguas (1999) argues that two factors have fueled the expansion of private sector activity in the urban water supply and sanitation (watsan) sector in recent years. On the one hand, international lending institutions and the World Bank are aggressively pushing for Private Sector Partnerships (PSP) in the watsan sector in low-and middle-income countries, often as leverage for structural adjustment lending. On the other hand, several factors internal to governments in these countries also pave the way for engaging the private sector in what was traditionally a public sector activity. These factors include: high public sector deficits and the need to reduce them; a shortage of investment resources, and moves to de-politicize water provision and tariffs. In addition, the provision of water

supply is becoming more intricate due to the combined effects of pollution, scarcity of water resources and increasing demands on drinking water quality. Public utilities are barely coping with new technical, administrative, and management requirements. Calaguas (1999) proposes the need for regulation, model contracts and best practices, the need for defining and understanding the roles of the private sector, civil society, and government for a more effective partnership.

2. Benefits

For Water Management Practice

The benefit of using the intertwining of innovation systems and coevolution to analyze partnerships is that the changing patterns of relationships among partners may be better explained and point toward processes that may be developed for greater flexibility. Being able to trace relationships and behavioral patterns to observe and analyze what is being mutually influenced and how, may help identify generic processes that are flexible to changing circumstances. One example is a regulatory policy put forward by a regulatory agency and how a water organization that has both public and private elements responds and affects those regulations.

For Theory Development

Using Fischer and Frolich's (2001) definition of innovation systems – meaning organizations interact in the generation, use, and diffusion of new and economically useful knowledge – begins to broadly explain why public and private entities would collaborate together for competitive advantages. This definition of innovation system describes what is intended for a public-private partnership. The need to explain why reality changes is facilitated here by further developing the concept of coevolution -- a process in which each part interacts with and influences the other parts, thereby stimulating their mutual development. Individually and complementary, further developing these two concepts may provide useful frameworks for analyzing other forms of partnerships, linkages, and alliances.

3. Methodology

As current work in progress, this qualitative case study places a public water organization and a private water organization in the conceptual framework of innovation systems to trace the 'generation, use, and diffusion of new and economically useful knowledge' between these two partners. Knowledge in this context will need to be defined. The concept of coevolution, meaning mutually developing influences, provides the dynamic dimension for tracing patterns of behavior in terms of knowledge. Mapping the relationships and influences may provide a description of *how* this partnership operates, and a further analysis may provide directions as to *why* the patterns occur and where flexibility may be harnessed.

