Bakker, K. 2008. The ambiguity of community: Debating alternatives to private-sector provision of urban water supply. Water Alternatives 1(2): 236-252



# The Ambiguity of Community: Debating Alternatives to Private-Sector Provision of Urban Water Supply

## Karen Bakker

Institute for Resources, Environment and Sustainability, University of British Columbia, Vancouver, Canada; bakker@geog.ubc.ca

ABSTRACT: The concept of community has become increasingly important in debates over alternatives to privatisation, and is invoked by both proponents and opponents of private sector provision of water supply. This paper presents a critique of the concept of community water supply when it is invoked as an alternative to privatisation. The analysis presents a typology of proposals for community ownership and governance of water supply, and proceeds to critique some of the flawed assumptions in the concepts of community deployed in these proposals, together with references to more general debates about the viability of the 'commons' as enacted through community-controlled water supply systems. The paper closes with a brief discussion of the future evolution of the debate over 'community' alternatives to privatisation, focusing on water supply.

KEYWORDS: Water supply, community, commons, protest, privatisation

#### INTRODUCTION

Fierce anti-water privatisation campaigns and protests have occurred around the world over the past decade (Hall et al., 2005; Morgan 2004, 2005; Olivera and Lewis, 2004). Anti-privatisation advocates have campaigned vigorously for 'community' water supply as an alternative to private-sector provision.<sup>1</sup> Proponents of community water supply alternatives attempt to place water firmly in the 'public sphere' as a means of opposing privatisation. At the core of their vision of 'alternative' water supply management is the notion of 'community'. Appeals to the 'water commons', calls for 'water democracy', and campaigns for the 're-municipalisation' of water supply are examples of the central role which community plays in the vision of anti-privatisation activists.<sup>2</sup>

The concept of community has also come to play a greater role in the debate about alternatives to private-sector participation in water supply, particularly with respect to urban areas. Community provision was largely marginal to the arguments of those in favour of the rapid growth of Private Sector Participation (PSP) contracts in urban centres around the world in the 1990s (although community water supply, in both urban and rural areas, is of course an area of long-standing activity in the development sector). However, by the mid-2000s, it had become clear that water privatisation

<sup>&</sup>lt;sup>1</sup> These campaigns have been grouped around coalitions of unions, environmental groups, alter-globalization activists, and citizens'/consumers' advocacy groups such as Ralph Nader's Public Citizen in the United States, Maud Barlow's Council of Canadians, and the Transnational Institute. Some of these alternatives have been popularized by water campaigns such as the 'Blue Planet Project', the 'Reclaiming Public Water' network, 'Octubre Azul', World Social Forums (Ponniah, 2004; Ponniah and Fisher, 2003) and alternative 'global water forums'. See, for example, the on-line chat roomat <u>www.waterjustice.org</u>; the website of the second alternative world water forum (<u>www.fame2005.org</u>).

<sup>&</sup>lt;sup>2</sup> On the water 'commons', see Barlow, 2007. On 'water democracy' see Shiva, 2002. On 're-municipalisation' see TNI, 2005. See also Petrella, 2001 and the 're-municipalisation tracker' co-sponsored by the Transnational Institute and Corporate Europe Observatory: <u>www.remunicipalisation.org</u>

initiatives were failing to achieve development objectives (Kerf and Izaguirre, 2007; Prasad, 2006; World Bank/IMF, 2003). This was particularly the case with the supply of water to the poor: by the mid 2000s, it had become evident that the majority of urban PSP contracts signed in the 1990s had largely failed to extend water supply to poor households – despite sustained efforts on the part of private water companies backed by a significant degree of support from multilateral financial institutions. Moreover, hoped-for levels of private investment failed to materialise, and the large private water multinationals had begun a strategic retreat from certain types of contracts and large regions of the world.<sup>3</sup> Following these developments, a resurgence of community has been notable in discussions of urban water supply – whether through 'Public-Private-Community Partnerships' (PPCPs), an increased reliance on the informal private sector (such as water vendors), or community 'business partnerships' – on the part of mainstream development organisations.<sup>4</sup>

Alternative community economies of water do, of course, already exist around the world. These have been long-studied by development policy analysts and academics. The focus of this paper is not on a review of this extensive literature. Rather, the paper focuses specifically on a critique of the concept of community invoked in current debates as an alternative to privatisation. The second part of the paper presents a typology of community alternatives, followed by a critique of conceptualisations of community in the third section with reference to more general debates about the viability of the 'commons', as enacted through community-controlled provisioning systems, to supply public goods such as water. Throughout, the focus is on water supply (excluding other forms of water services, such as irrigation and sanitation). This is preceded by a short, illustrative case study of the ambiguous role of communities in water supply, focusing on the case of Cochabamba.

#### THE AMBIGUITY OF COMMUNITY: THE COCHABAMBA CASE

Cochabamba's *Guerra del Agua*, or "Water War", has become emblematic of the potential power of social movements, and is celebrated by anti-water privatisation activists as a victory of community over private capital. Yet a closer examination of Cochabamba's experience following the Water War suggests that there exist significant limits on the power of communities to improve water-supply access for the urban poor.

The main events of the Water War are well known.<sup>5</sup> Privatisation inspired mass protests that became a *cause célèbre* for alter-globalisation activists. Access to water had long been a contentious issue in Cochabamba, Bolivia's third largest city. Wealthy consumers and businesses received municipally subsidised water through the network, whereas half of the city's households – largely indigenous residents of poor neighbourhoods – relied on water delivered by tanker trucks, private wells, or small-scale, community-run water systems.<sup>6</sup>

<sup>&</sup>lt;sup>3</sup> As the World Bank acknowledged in its response to the Camdessus/World Panel on Financing Water Infrastructure Panel in 2003, private-sector finance had provided less than 10 % of necessary capital, and the declining trend in private-sector investment was likely to continue (World Bank/IMF, 2003). In addition, the majority of private investment was increasingly directed towards middle-income countries such as China and India, with little investment in, for example, sub-Saharan Africa (WDM, 2007). The emergence of local private-sector operators in Asia and Latin America cautions us, however, not to simplistically depict this trend as a 'retreat' of the private sector. See also (Annez, 2006; Bond, 2003; Izaguirre, 2005; Kerf and Izaguirre, 2007; Prasad, 2006; PriceWaterhouseCoopers, 2003; Robbins, 2003).

<sup>&</sup>lt;sup>4</sup> See Franceys and Weitz, 2003; Narain 2006; UNDP, 2006; UNWWAP, 2006 and especially <u>www.bpd-waterandsanitation.org</u>

<sup>&</sup>lt;sup>5</sup> The following account is based on first-hand interviews conducted in Cochabamba in 2001. See also the following sources: Assies, 2003; Bustamente et al., 2005; de la Fuente, 2003; Olivera and Lewis, 2004.

<sup>&</sup>lt;sup>6</sup> Only 55% of urban and 46% of rural residents have access to water supply and sanitation networks in Cochabamba (Bustamente et al., 2005).

The causes of Cochabamba's lack of water supply were complex, observers admitted: a lack of new water sources, over-consumption of water by wealthy households, the disinterest of the city mayor and political elites in extending the water supply system to the poor, inefficient management, and a culture of political exclusion of indigenous *campesinos* all played a role. By the late 1990s, privatisation was being advocated as a solution by international financial institutions and some Bolivian politicians. Bolivians were, of course, no strangers to privatisation: The pioneer of "shock therapy" in the mid-1980s, Bolivia underwent a series of IMF-administered structural adjustment programmes in the 1990s. In 1998, the IMF made a new loan to Bolivia, contingent upon privatisation of a range of state enterprises, including Cochabamba's water supply system. An additional source of pressure came the following year from the World Bank, which recommended the elimination of subsidies to Cochabamba's water supply system. The reward, promised proponents, would be an extension of the network to those without access. Events were to prove them wrong.

The consortium which signed the concession contract with the city government in 1999 included two of the largest water companies in the world: US-based multinational Bechtel and Britain's United Water. As is frequently the case in water privatisation deals, *Aguas del Tunari* (as the international consortium was known) was able to negotiate a highly favourable contract, in this case aided by the unusual fact that it was the sole bidder. One clause of the contract guaranteed a profit of 15% to the consortium. Shortly after taking control of the water supply system, the Bechtel subsidiary sharply increased water prices. Government sources and anti-privatisation campaigners publicised cases of increases as high as 200% (although *Aguas del Tunari* maintained that average price rises were 35%).

The contract also gave the company exclusive rights to all of the water in the Cochabamba valley, including rainwater, and private wells in rural areas surrounding the city. The company soon began attempting to place water meters on private wells and the local irrigation and water supply systems that peri-urban and rural residents had themselves created. The sacredness of water has a deep-rooted cultural significance for the Quechua population of the arid Andean highlands, and it quickly became clear that the company had overstepped its mark.

Widespread street protests began in April 2000, coordinated by representatives of social movements through the *Coordinadora de Defensa del Agua y de la Vida* [Coalition for the Defense of Water and Life]. Tens of thousands of people took to the streets. A broad-based coalition of unions, women's groups, rural farmers and irrigators, environmentalists, and consumers' groups succeeded in mobilising the city's residents, shutting down the city with general strikes and road blockades. The government's response was harsh: confrontations between the military and police and protestors left a 17-year-old boy dead and hundreds wounded.

But the protests persisted, and Bechtel officials eventually fled the city. Shortly thereafter, the contract was unilaterally rescinded in response to campaigners' demands.<sup>7</sup> Martial law was suspended, government officials resigned or decamped, and for a period the city was governed by its residents, through community assemblies presided over by the *Coordinadora* in a manner likened by sympathisers to the heady days of the Paris Commune of 1871.

La Guerra del Agua has been internationally touted as a David versus Goliath success. The water supply company was taken back under government control. A subsequent campaign led to the reform of national water legislation, giving greater protection to rural irrigators, whose usos y costumbres (customary rights to water) now have greater legal protection. And an international campaign played a significant role in persuading Bechtel to withdraw its suit for US\$25 million in damages from the ICSID tribunal (a World Bank Group affiliate) in 2006.

Yet the outcome of the Water War has not been as positive as one might expect for Cochabambinos. Attempts by the *Coordinadora* to gain greater control of the city's water supply utility (SEMAPA) have

<sup>&</sup>lt;sup>7</sup> Bustamente et al., 2005; Olivera and Lewis, 2004; Perreault, 2006; Schultz, 2008; Spronk and Flores, 2007.

been largely thwarted.<sup>8</sup> Initial demands for 'social control' of the water utility following Bechtel's departure were eventually diluted into a proposal for social 'representation' on the board of directors, previously staffed exclusively by professionals and politicians. But two rounds of elections of community representatives to the board attracted less than 2000 voters in a city of 650,000 (Spronk, 2008). Traditional suspicion of government as a means for advancing elite interests has outlasted, it seems, the spirit of radical democracy inspired by the Water War.

The failure to radically democratise the water utility has meant, in turn, a failure to achieve the *Coordinadora*'s goals of improved efficiency, democratised decision-making, increased transparency, and universal access. Connection rates were less than 50% in 2006, 6 years after the Water War.<sup>9</sup> Corruption, inefficiency, and leakage continued to drain both financial and water resources from the utility. Observers disagreed about the causes. Was it a) The continued control of the mayor over the water utility's budget? b) The stringent conditions attached to the new loan issued by the Inter-American Development Bank? c) A lack of sufficient finance? or d) The absence of new water sources? But all agreed that SEMAPA remained unresponsive to the needs of the poor, in a pattern unchanged from the pre-Water War era.

Like many social movements, the *Coordinadora* failed to translate the euphoric intensity of protest into the sustained achievement of its desired reforms. In large part, this failure was due to the difficulty of constructing a viable model of community ownership and social control, as originally envisioned by the Water War's leadership. The demands for communal property had grown, in large part, out of the experiences of two key participants in the Water War: small, rural irrigation associations and community-run water supply systems. Both ran entirely independently of government oversight and, particularly in the case of farmers' irrigation cooperatives, had deep historical roots. Communities in the poor neighbourhoods in the southern part of Cochabamba built their own systems, largely supplied by wells, and operated them via informal committees or councils elected by residents. In the aftermath of the failed reforms following the Water War, many of these community-run water systems organised themselves into a not-for-profit association, and secured financing from the European Union to build stand-alone water supply systems that will buy water from the public water company but be independently managed by the users.

How are we to interpret this outcome? On the one hand, the collective ownership of infrastructure and devolution of responsibility for water supply to self-organised users is consistent with local customs of community self-help. On the other hand, the creation of parallel networks entrenches the fragmentation of the water supply system, creating two tiers of service with vastly unequal levels of state support. Wealthy areas of Cochabamba receive government-subsidised services of high quality, whereas residents of poorer areas of the city must directly engage with donors and mobilise volunteer labour to create more expensive systems whose operating costs must also be borne by these poorer communities. The Cochabamba case thus presents us with a dilemma: in celebrating community resourcefulness, we risk condoning both government inaction and corporate misconduct.

#### COMMUNITY WATER SUPPLY AS AN ALTERNATIVE TO PRIVATISATION

The Cochabamba example reminds us that 'public' services in many countries are limited to the elite. As Chatterjee (2004) has argued, exclusion is integral to the process of modernisation under the aegis of developmental states, which often lack the resources required to universally provide material emblems of citizenship (like electricity or water) upon which their legitimacy is predicated. This is complicated by issues of identity; social ruptures within post-colonial states have frequently meant that only a subset

<sup>&</sup>lt;sup>8</sup> Schultz, 2008.

<sup>&</sup>lt;sup>9</sup> Calle and Lohman, 2006.

of the population is identified as full citizens, with the full set of rights and entitlements that one might expect. Strategies and technologies of development, formulated through interchange with the West and encouraged by development agencies, were (and are) not always appropriate to their new contexts. Indeed, the numerous differences between water supply around the world severely constrain the transfer of technological and governance models (and limit the value of comparative analyses). Chatterjee's arguments are an important part of the reasons why 'public' water supply systems work well in Northern Europe and North America, but function poorly in much of sub-Saharan Africa and parts of Asia: the 'community' served by networked water supply systems is limited to a small, usually economically, culturally, and socially elite sub-set of the population.

Invoking 'community' alternatives to privatisation thus necessitates an examination of our (often implicit) definitions of community, as well as the type of water supply in question. In asking these questions, it is important to distinguish between water supply systems and (raw) water resources, on the one hand, and between ownership and governance, on the other. Proposals for community alternatives to water supply are rarely sensitive to these differences. Table 1 presents a simplified typology of these community alternatives, distinguishing between community ownership and governance, and between water supply and water resources, following which the paper proceeds to critically examine the concepts of community embodied in these alternatives.

Table 1. Invoking community as an alternative to private sector provision of water supply: A typology

Tactic/Strategy	Example
	Water Supply Infrastructure
'The commons' (community ownership)	<ul> <li>Water cooperatives (e.g. water cooperatives in Finland; Katko, 2000)</li> </ul>
	<ul> <li>Low-cost, community-owned infrastructure (e.g. Orangi Pilot Project, Pakistan; Zaidi, 2001)</li> </ul>
	<ul> <li>Informal (private) water vendors (Collignon and Vezina, 2000; World Bank, 2003)</li> </ul>
	Water Resources
	<ul> <li>Communal water rights (Narain, 2006)</li> </ul>
	Collective provision of irrigation (Shiva, 2002; Wade, 1988)
	Water Supply Infrastructure
'Water democracy' (community-led	<ul> <li>Customer Service Boards and 'Customer Councils' (Franceys, 2006; Page and Bakker, 2005)</li> </ul>
governance)	• Participatory budgeting (e.g. Porto Alegre) (Baietti et al., 2006)
	<ul> <li>Public-public (TNI 2005) and public-private-community partnerships (PPCPs) (Lemos et al., 2002; Mugabi et al., 2007; Stewart and Gray, 2006)</li> </ul>
	Water Resources
	<ul> <li>Community watershed boards (Canada) (Alberta Environment, 2003)</li> </ul>
	<ul> <li>Sharing of irrigation water based on customary law ('usos y costumbres') in the Andes (Trawick, 2003b)</li> </ul>

#### Community ownership of water supply systems: Reviving the Commons

'Water is a commons and a human right' has become a rallying cry of anti-privatisation and alterglobalisation activists (Bakker, 2007). The best-known example of communal or collective water ownership is, of course, the 'commons', or more precisely, common pool water resource management. Common-pool resource water management regimes are widespread: they exist in both high-income (Ostrom, 1990; Ostrom et al., 1993; Ostrom and Keohane, 1995; Roberts and Emel, 1992) and lowerincome countries (e.g. Nemarundwe and Kozanayi, 2003).

Why do these systems emerge? One school of thought emphasises the utilitarian aspect of the commons as an efficient system for mitigating over-consumption amongst a delimited group of users (Ostrom, 1990). The other predominant school of thought with respect to collective action in resource management emphasises the moral economy of community solidarity and equity that underpins these institutions (Bhasin, 1997; Ratner, 2004; Trawick, 2001b, 2003a). Regardless of the reasons for their creation, observers agree that common-pool resource management systems are typically non-capitalist (although they may be market-based, and may be articulated with capitalist processes of economic exchange), and appear to be quite resilient, even to the point of (in some cases) resisting external pressures to prohibit and/or reform common-pool systems of tenure and property rights (Ashenafi and Leader-Williams, 2005; Boelens and Doornbos, 2001; Cremers et al., 2005; Potkanski and Adams, 1998; Sokile and van Koppen, 2004).

How well do these 'commons' arrangements work in practice? The academic literature suggests that common-pool resource water management regimes have proven to be successes under some conditions: a small geographical area with well-defined boundaries, low levels of mobility, a small community with a high degree of social capital, and an overlap between residential and resource use location (Bacdayan, 1974; Mosse, 2003; Trawick, 2001a; Wade, 1988). However, although research has demonstrated how cooperative management institutions for water common pool resources can function effectively to avoid depletion (Ostrom, 1990; Ostrom and Keohane, 1995), other research points to the limitations of some of these collective action approaches in water (Cleaver, 2000; Mehta, 2001; Mosse, 1997; Potkanski and Adams, 1998).

Bolivia's new irrigation water law, passed in 2004,<sup>10</sup> is an example of the institutionalisation of longstanding communal water rights in formal legal systems – promoted in this case, in part, in resistance to reforms introducing private property rights and private sector participation in water supply. The Bolivian law followed years of mounting public protests against the introduction of market-based principles in water resources management, including attempts to introduce individual water property rights and proposals for water markets permitting the exchange of tradable water rights (Garcia et al., 2003; Olivera and Lewis, 2004; Perreault, 2006). In reaction, citizen's groups argued that traditional, collective '*usos y costumbres*' (customary uses), widely recognised throughout the Andes in the management of common property resources, were being displaced (Boelens and de Vos, 2006; Boelens and Zwarteveen, 2005; de Vos et al., 2006; Perreault, 2005). This was, opponents argued, a moral as well as management issue, for *usos y costumbres* embodied water use practices well adapted to Bolivia's water-scarce, rigorous climate and to the indigenous cultural practices (both material and symbolic) predominant in rural areas and peri-urban zones.

The groundswell of public support within Bolivia after the Cochabamba and La Paz 'water wars' (Finnegan, 2002; Nickson and Vargas, 2002; Perreault, 2006), as well as protests against proposals for large-scale groundwater exports from Bolivia to a Chilean mining zone (Perreault, 2005) lent impetus to the reforms demanded by irrigators: legal recognition of traditional uses; integrated water management predicated on multiple rather than single uses; and decentralised, participatory water management (Perreault, 2005). Supported by research indicating that indigenous water use practices

<sup>&</sup>lt;sup>10</sup> Ley numero 2878, do Promoción y Fomento al Sector Riego.

were more efficient than the new proposals (based on granting concessions by unit of volume per time for specific uses) favoured by the Bolivian government (Aldurralde et al., 2005), these demands were met. This was followed by plans to develop a registry of traditional water rights and reform early market-oriented water legislation, actively promoted by the newly elected government of Evo Morales, Bolivia's first President of indigenous origin, who had been involved in the Cochabamba water war. Although still in its preliminary stages, Bolivia's water law reform is an example of the legal entrenchment of common-pool resource management regimes, which seems appropriate when associated with traditional or indigenous cultural practices for water resources management.

With respect to water supply infrastructure, as distinct from water resources, proposals for the 'commons' frequently take the form of (renewed) community ownership, such as the remunicipalisation movement promoted by NGOs like the Transnational Institute and Corporate Europe Observatory. Another alternative which has been attracting increasing attention is the water 'cooperative' as an alternative to conventional state or private-sector water utility management options. Cooperatives are widespread in rural areas in both developed and developing countries, and in some cases, such as Finland, are the dominant mode of water supply provision in both rural and urban areas (Juuti et al., 2005; Katko, 1992). Although size, scope, and degree of association with (or independence from) municipal governments vary substantially, cooperatives share in common a notion of 'associative self-governance', in which consumers of essential services have greater control over service provision. These alternative ownership and management structures are intended, at least in theory, to resolve the trade-offs between shareholder and customer interests evident in the case of privatised (or, indeed, publicly-run) monopoly services (Birchall, 2001; Birchall and Simmons, 2004; Birchall, 2002; Holtham, 1997; Kay, 1996; Morse, 2000).

Large-scale cooperatives, particularly in urban areas, are rare; the largest urban water cooperative in the world (in Santa Cruz, Bolivia) serves a population of approximately 750,000 (Hall et al., 2005; Ruiz-Meir and von Ginneken, 2006; Yavari, 2005). But other, similar corporate structures exist, the largest probably being the water supply utility which supplies 3 million customers in Wales, Dŵr Cymru/Welsh Water, which was created as a non-profit company owned by its members and limited by guarantee (a classic management form for charities in Britain) in 2001 (Bakker, 2003).<sup>11</sup>

The success of the Welsh case suggests that, under the right conditions, large-scale cooperatives can function effectively. This success challenges the view that cooperatives are best employed at a very small scale, in areas where the state is unable, and private sector uninterested, in service provision. Aligning the incentives of customers and owners (by making owners members), reducing risk (and thereby the cost of capital and consumers' bills), and creating efficiency incentives through the link

<sup>&</sup>lt;sup>11</sup> The Welsh case is of particular interest, as it highlights the potential advantages of cooperatives, mutuals, and other similar not-for-profit, customer-directed corporate governance structures. Financed entirely by debt (rather than equity), with a lower risk profile (particularly given its commitment to remaining a non-diversified company operating strictly as a regulated water business), the conversion from a private, investor-owned water utility to a mutual allowed the company to significantly reduce bills by reducing the cost of capital. Glas Cymru is prohibited from diversifying into other activities, both by its Constitution and by an undertaking to the economic regulator Ofwat that it will not change the Constitution without first consulting with the regulator. The lower risk profile was confirmed by Standard & Poor's AAA rating of the company's bond issues. The joint USAID-JBIC "Clean Water for People Initiative" has built upon this model, for example, by supporting the development of State Revolving Fund-type financing in the Philippines and India (in the states of Karnataka and Tamid Nadu). This initiative has also provided grant support and local currency investment guarantees as appropriate; these have been designed to encourage local financial institutions to lend to new sectors and underserved areas. Most importantly, the USAID model overcomes the lack of access to capital markets and eliminates the currency risk to which private, multilaterally- and bilaterally-funded projects are subject. For more information on the USAID-JBIC initiative, see http://usinfo.state.gov/xarchives/display.html?p=washfileenglish&y=2005&m=May&x=20050503125027TJkcolluB0.1300318 (accessed 28 October 08). The UK government's proposed International Finance Facility is a similar attempt to mobilize private capital (largely international in this case) ultimately through donor government-backed bond issues. This financing mechanism would leverage funds from international capital markets through issuing bonds backed by legally binding donor commitments (but would disburse funds through existing multilateral and bilateral mechanisms).

between lower bills and cost reduction (rather than lower costs and profit maximisation) are some of the key advantages of such a system. Cooperatives, and other similar governance structures, may also be able to incorporate some of the recognised advantages of delegated water governance: access to 'local' expertise which can improve the quality of decision-making; the ability to adapt regulatory programmes to meet local conditions; empowerment of stakeholders (particularly those traditionally marginalised); reinforcement of 'social trust' between stakeholders, and reduction of conflict over competing uses; greater cooperation in information-sharing; greater political legitimacy (and thus enforceability) of water management goals (such as water conservation, or pollution control).

However, cooperatives and delegated water governance models also have potential, and important, limitations. The consumer focus on local concerns (and, in particular, on minimising bills) may reduce the degree to which cooperatives are willing to undertake costly long-term environmental sustainability initiatives (particularly at watershed scale); indeed, this was one of the concerns which persuaded the Scottish government to create a public authority for water in Scotland rather than to mutualise (Scottish Parliament, 2001).<sup>12</sup> Overall costs may be greater, and efficiency lower – particularly for smaller organisations without the requisite technical expertise (Cleaver and Toner, 2006). An emphasis on consensus may lead to politically workable solutions, rather than long-term economically and environmentally sustainable solutions, particularly in the case of unequal power relations and inequitable representation of consumers and other stakeholders in decision-making (indeed, fears about capture of boards by 'sectional' interests were a key factor in the decision by the British water industry's economic regulator against tentative proposals by British water companies to 'mutualise' their operations following the successful mutualisation of Welsh Water). The large amounts of (often volunteer) time required to maintain cooperatives raise questions about the long-term sustainability of consumer oversight, particularly in light of increased expectations on the part of governments and donors regarding participation – to the extent that it has been deemed the 'new tyranny' (Cooke and Kothari, 2001).

#### **Community-based water supply governance**

The other primary strategy for invoking community in debates over alternatives to water privatisation has centered on community participation in water governance (simply defined as 'decision-making processes'). In this case, unlike a true 'commons', resource users are not always owners (or usufruct holders) of place-based water resources, but may own water-associated infrastructure, or have been granted a degree of control over water management through state-initiated consensus-based or participatory management practices. Examples abound of this 'deep democracy' in action (e.g. Appadurai, 2002). Customer-controlled models of utility regulation, in which consumers are not merely consulted, but rather have formalised channels of input into decision-making, and some degree of decision-making power, are one example. Direct board representation (or even customer-dominated boards), external regulatory advisory bodies composed of consumers, or internal consumer affairs bureaux are other examples (Lemos and De Oliveira, 2005; Muzzini, 2005; Ugaz, 2002). The models of Customer Sevice Boards and Customer Councils developed in the United Kingdom post-privatisation, as well as Porto Alegre's well-known 'participatory budgeting' process are examples of community water governance as applied to water supply infrastructure (Table 1).

Another set of examples of water resources governance strategies may be drawn from the community-based, 'delegated' or 'collaborative' water management models used to involve non-state actors in decision-making for water resources management (Baril et al., 2006; Blomquist and Schlager, 2005). Community governance of water resources frequently (but not always) implies the delegation of

<sup>&</sup>lt;sup>12</sup> The failure of Bolivia's Santa Cruz water supply cooperative to expand beyond the 'fifth ring' of the city is a good example, as is the cooperative's coverage rates for sanitation sewerage (approximately 50%), causing considerable groundwater contamination (Spronk, 2008).

some degree of decision-making power to non-state actors at lower scales of governance, the use of a hydrographic boundary such as the watershed rather than political boundaries such as the municipality, or region, and collaborative decision-making processes, often emphasising consensus and trust-building. Community watershed boards, whose number has increased rapidly over the past two decades in North America, are one example (Sabatier, 2005). Perhaps the most novel aspect of delegated water governance partnerships is the involvement of a large number of stakeholders representing diverse interests who treat each other more or less as equals, and the principle that decision-making should not be left solely to government experts. This increase in community involvement has occurred for a number of reasons, most importantly the putative shift from 'government' to 'governance', in which non-governmental actors play a more significant role than in the past (Pierre and Peters, 2000; Rhodes, 1996; Swyngedouw, 1997, 2004), thereby posing a challenge to conventional theories of governance in which the nation-state is the primary locus of political power and decision-making (Agnew, 1999).

This shift has been associated with new approaches to participation in environmental governance and planning more generally, as well as increased acceptance of the legitimacy of community involvement in watershed-based management as a means of achieving political legitimacy for the integration of water-related goals. These goals have historically included such matters as the integration of land use planning and water resources management at a local scale, particularly with respect to nonpoint source pollution, water quality management, coastal estuary protection, and protection of aquatic species. The trend is present not only in a wide range of lower-income countries but also in high-income countries (Kemper et al., 2005). In the US, for example, multi-stakeholders' water governance partnerships receive financial support from state agencies in at least several states; the growth of collaborative models of water governance, involving non-state actors and multiple levels of government has been most notable in the western US (Sabatier et al., 2005), and has also been promoted by aid agencies and multilateral development banks as part of broader agendas of decentralisation (and in some cases, marketisation) of water management (Akbar et al., 2007; Gaye and Diallo, 1997; Kyessi, 2005).

Community-based water management is thus often far more comprehensive (in terms of integration of water management goals and spatial extent) than water cooperatives, which tend to be focused on the ownership and management of a single water provider – usually a water retailer.<sup>13</sup> But both share a notion of 'associative self-governance', although the specific approach to associative self-governance varies in different countries. In Britain, for example, associative self-governance has taken the form of 'mutual' non-profit corporations (Bakker, 2003); or in the US and Canada, non-profit corporations or (largely in rural areas) water associations, particularly in the Western states and provinces (Cooperatives Secretariat, 2001; Curry and McGuire, 2002; Emel and Roberts, 1995).

This concept of 'associative self-governance' is, of course, highly ambiguous. On the one hand, it is congruent both with the 'public-public partnerships' promoted by alter-globalisation activists and with the 'Public-Private-Community partnerships' (PPCPs) promoted by some development agencies and multilateral lending agencies (Lemos et al., 2002; Mugabi et al., 2007; Stewart and Gray, 2006), in which public water supply utilities with expertise and resources are partnered with those needing assistance, often those in smaller urban centres (PSIRU, 2006; Public Citizen, 2002; TNI, 2005).<sup>14</sup> Activists have actively promoted these strategies as a tactic of resistance to water supply privatisation initiatives,<sup>15</sup> which have been taken up by bilateral aid agencies (e.g. DfID) and multilateral development banks (e.g.

<sup>&</sup>lt;sup>13</sup> A cooperative may be simply defined as an enterprise owned and democratically controlled by the users of the goods and services provided; users can be consumers, employees, or producers of products and services.

<sup>&</sup>lt;sup>14</sup> There are other examples, such as the international extension by the US National Rural Water Association of its 'circuit rider' programme for training small system operators <u>www.nrwa.org/internationalruralwater/index.html</u>

<sup>&</sup>lt;sup>15</sup> For example, a campaign by the UK's World Development Movement spurred that country's Department for International Development to begin sponsoring public-public partnerships.

the ADB),<sup>16</sup> and the UN Secretary General's Advisory Board and Water and Sanitation, which has requested the UN to support the creation of an international association of public water operators.<sup>17</sup> Encouraged by the UN Commission on Sustainable Development's official acknowledgment of the importance of promoting public-public partnerships (TNI, 2006; UNCSD, 2005), and by specific campaigns by public water supply utilities – notably in Porto Alegre – governments in Argentina, Bolivia, Brazil, Indonesia, Holland, Honduras, France, South Africa, and Sweden have initiated public-public partnerships, at times also entailing a radical restructuring of management-worker relationships within water supply utilities (Hall and Lobina, 2006, 2007; TNI, 2006). However, proponents of 'Public Utility Partnerships' acknowledge the political pitfalls of promoting public-public partnerships to be promoted as a strategy for lower-income areas, allowing more limited private-sector contracts to cherry-pick profitable communities (Hall and Lobina, 2007; TNI, 2006). A similar critique can be directed at Public-Private-Community Partnerships.

#### **Critiquing 'community'**

In addition to the critiques of 'commons' and community water supply governance outlined above, we can identify five problematic assumptions underpinning general arguments by proponents of community, in its various incarnations, as a strategy for resisting privatisation. First, proponents of the concept of community tend to assume that 'community' management necessarily implies greater accountability. The obvious counter-example is that of the British water supply utilities: more transparent, and subject to closer regulatory oversight and political pressure following privatisation (Bakker, 2004). Equally, examples of the seeming unresponsiveness of public water authorities to the needs of poor families abound in the literature (e.g. Castro, 2007), co-existing with case studies of well-performing public services (e.g. Tendler, 1998). From this, we might conclude that 'ownership' (i.e. public versus private) is less important than institutions (rules, norms, and laws) and governance (decision-making processes); it follows that the imposition of 'public' or 'community' management is not a sufficient condition for better water services.

Second, advocates of 'community' involvement often fail to account for the broader political economic dynamics which foster desires on the part of governments and the development industry for greater community involvement. In the wake of the partial retreat of private water multinationals, for example, advocates of 'public-private-community partnerships' (PPCPs), for example, laud the actual and potential contribution of small-scale private enterprise and NGOs in service provision, particularly to the urban poor (Franceys and Weitz, 2003; Lemos et al., 2002; Mugabi et al., 2007; Stewart and Gray, 2006). Others argue in favour of the 'formalisation', 'regularisation', or 'legalisation' of informal water suppliers (Batley and Moran, 2004; Collignon and Vezina, 2000; World Bank, 2003). Here, an endorsement of community involvement risks condoning the cherry-picking of profitable or otherwise attractive cities, neighbourhoods, and regions, by both public and private water supply utilities (as in the Cochabamba case discussed above).

Third, advocates of some form of the 'commons' often assume that implementing the correct organisational form (such as a cooperative or community ownership) will automatically give rise to desired changes in behaviour and thus in management outcomes. Birchall, however, cautions that there are many other variables at work, citing cases where a transfer of ownership of assets to a non-profit corporation or cooperative has not had a noticeable effect on governance (Birchall, 2001). Organisational form can prohibit certain actions (such as the sale of assets to investors), but it will not

<sup>&</sup>lt;sup>16</sup> See ADB Water Operators Partnership Programme: <u>www.adb.org/water/operations/partnerships/GWP-water-operators.asp#a1</u>

<sup>&</sup>lt;sup>17</sup> See archived meeting session history on the Advisory Board website: <u>www.unsgab.org</u>

automatically result in changes in behaviour, although it can create conditions in which these changes might be possible. There are a number of potential reasons for this: formal governance mechanisms may be less important than the way in which governance mechanisms work in practice; democratic decision-making processes may not necessarily imply greater efficiency or material outcomes. This may be the case because the degree of power that consumers can effectively assert does not, of course, flow automatically from consumer participation in utility regulation. The scope of representation (and the degree to which consumer representatives can adequately and accurately reflect the interests of different constituencies), the need for independent consumer representatives (despite the threat of regulatory capture or capture by sectional interests), the likelihood of information asymmetries between consumers, the regulator, and the water supplier, the high costs of ensuring transparency and facilitating broad-based participation are all important barriers (Garande and Dagg, 2005; Wolff and Hallstein, 2005) to this 'deep democracy'.

Fourth, proponents of community water supply management often essentialise (or even romanticise) the concept of community, overlooking the 'partial citizenship' (Corbridge et al., 2005) which many residents of developing countries experience on a daily basis – in which claims on the state must be constantly reiterated and negotiated, and are by no means assured (Chatterjee, 2004). Demands for the extension of water supply to poor households must be seen, from this perspective, as attempts to deepen democracy by making claims over material emblems of citizenship – basic public services necessary, particularly in urban areas, for dignified human lives. Admittedly, much of the literature on collective, community-based forms of water supply management tends to romanticise communities as coherent, relatively equitably social structures, despite the fact that inequitable power relations and resource allocation exist within communities (McCarthy, 2005; Mehta, 2001; Mehta et al., 2001). Commons, in other words, can be exclusive and regressive, as well as inclusive and progressive (McCarthy, 2005). For example, the term 'partnerships' may be used as a euphemism for devolving water supply to informal providers and leaving poor, peri-urban, and rural communities to their own devices (Jaglin, 2002);<sup>18</sup> or for using volunteer community labour or concessionary finance as a means of subsidising otherwise unprofitable private-sector water management operations (Hall and Lobina, 2007). Careful attention must be paid to the difference between partnerships and participation which are empowering, and those which are exploitative.

This leads me to a final, fifth criticism: the assumption that communities can solve all water-supply related issues. Improving governance through involving consumers in decision-making can improve transparency and accountability, but can rarely deal effectively with issues of financing, access, and operational management. The assumption that communities are the sole solution to water management problems is flawed for another reason: its implicit rejection of state provision. The state remains, in many instances, the best vehicle through which consumers' interests can be balanced against one another, and against other interests. The need to balance equity and sustainability suggests the need for the continued, active role of the state in setting and enforcing water management criteria in community-managed initiatives. This is particularly the case in developing countries where the assumption that cooperatives will provide services in rural and peri-urban areas not served by municipal utilities will lead (and has led) to dual access standards, and will foreclose the possibility of spatial and social cross-subsidies which have been widely used in some wealthy countries to support universal provision.

Recognising these critiques, some opponents of privatisation assert that community governance models are only meaningful when implemented in tandem with alternative service-delivery approaches (TNI, 2005). Customer corporations (in which incentives are structured towards cost-minimisation for a

<sup>&</sup>lt;sup>18</sup> See, for example, the World Bank-sponsored Business Partners for Development, the UK government- sponsored Partners for Water and Sanitation network (<u>www.partnersforwater.org</u>); and the European Union-sponsored Water Initiative (<u>www.euwi.net</u>).

given service-quality level, rather than profit maximisation for a given cost-minimisation level) (Kay, 1996) are one example; another is that of corporatised public water companies (publicly owned, yet operating on modified commercial principles) (see Blokland et al., 2001). One example which combines alternative governance and business models is that of DMAE,<sup>19</sup> the municipally owned water supply utility for the city of Porto Alegre, Brazil (population: approximately 1.5 million) (Hall et al., 2002; Hoedeman et al., 2005).<sup>20</sup> Fully self-financed with a progressive tariff structure (increasing block tariffs, but with cross-subsidies and a 'social tariff' for poor families), with nearly 100% coverage for water supply despite rapid recent population growth, a low non-payment ratio and high approval ratings for its services, DMAE performs well above the average for public utilities in developing countries. Democratised workplace structures, selective use of the private sector for out-sourcing while retaining full municipal control over strategic decisions, and the importance of the 'participatory budget' planning process, in which citizens vote to determine budget allocations by the municipality are key aspects of DMAE's model cited by senior managers as means of increasing social support for crosssubsidies and the higher tariffs necessary to support network extension into poorer neighbourhoods. As the DMAE example demonstrates, publicly owned and managed utilities can combat the governance weakness and disincentives (e.g. lack of autonomy, accountability, efficiency incentives, and a 'customer service' orientation) which have become predominant explanations for poor performance of public utilities (Baietti et al., 2006), while enjoying the advantages of community ownership and governance. But Chatterjee's arguments about the impacts (and limitations) of political culture, as explored at the beginning of this paper, are an important reminder that the Porto Alegre example, like other successful cases around the world, can not easily be transposed to other communities.

### CONCLUSIONS

The resurgence of 'community' water supply alternatives to privatisation in public debate has been extremely useful in disrupting the misleading public/private binary to which much of the privatisation debate is subject. Historical experience shows that the terms 'public' and 'private' only incompletely capture the diversity of the existing range of resource management systems. At least three, rather than two, models exist in practice: public (or state), private (or corporate), and community (or cooperative) models. These models are indeed distinct, and it is important to emphasise the different choices with which we are presented when considering alternatives for water supply management (Bakker, 2007).

In other words, proponents of community control are legitimate in arguing that conventional models of public and private sector management do not exhaust the range of alternatives to be considered in the water supply sector. Nor should their claims to the moral dimension of property rights – in which the nature of water precludes or constrains private ownership, usually on spiritual or environmental grounds, and requires forms of trusteeship or stewardship – be summarily dismissed. Ethnographic studies have demonstrated that water is part of a broader material-symbolic domain (Strang, 2004). Mosse, for example, argues that "water is not simply an exploitable productive resource or a physical input for agriculture. It is also a medium through which a variety of social relations have been structured... water systems are repositories of symbolic dimension of water is one important reason why communities have a critical role to play in water supply management. In addition, all societies confront the simultaneous need to mobilise water resources for a range of uses, to mediate conflicts between users and uses, to build and maintain infrastructure, and to dispose of wastes, while mediating jurisdictional scales. The involvement of communities in decision-making processes for water supply is necessary if these tensions are to be mediated (although they are unlikely ever to be fully resolved).

<sup>&</sup>lt;sup>19</sup> Departamento Municipal de Agua e Esgotos.

<sup>&</sup>lt;sup>20</sup> See also the research conducted by the PRINWASS project: <u>http://prinwass.ncl.ac.uk/pdfs/dmae.pdf</u>

However, the role of the state in encouraging redistributive models of resource management, progressive social relations and redistribution is more ambivalent than those making calls for a 'return to the commons' would perhaps admit. As discussed above, the call for community control can sometimes fall into the trap of romanticising communities, thereby denying the progressive potential of state-led redistributive strategies. Advocates of water as a 'commons' sometimes acknowledge this fact (for example, when phrasing campaign slogans in terms of 'water as a commons and as a public [i.e. state] trust').

But we must also remember that governments, even in wealthy countries, were not necessarily willing providers of public services. Rather, public services had in many instances to be incited by social movements – Bellamy in the US, or the Webbs in Britain. These reformers sought state involvement to address a central conundrum which proponents of community involvement could not, at the time, resolve (and which persists even today): the high capital costs of private provision of centralised water supply networks mean that costs remain at levels which are politically contentious and often beyond what individual communities and consumers can afford.

Today's debate is reminiscent of the questions raised by municipal socialism over a century ago. This is positive, insofar as the debate opened up by disrupting the public/private dualism has created space for the construction of alternative community economies of water. Proposals by anti-privatisation advocates counterpose various forms of common property ownership, non-capitalist economic and management mechanisms, and solidarity-fostering governance models to commodity-based property and social relations. Greater progressive possibilities seem to be inherent in the call of alter-globalisation activists for radical strategies of ecological democracy, predicated upon calls to decommodify public services, enact "commons" models of resource management, and solicit subjectivities of solidarity both practically and symbolically. Alternative forms of water management institutions, organisational structures, and governance models subvert and transcend conventional dualities, for example, involving actors usually construed as both 'public' and 'private', or prioritising policies that simultaneously improve social equity while improving efficiency. These proposals have much, therefore, to recommend them. However, this paper has argued that in the context of water supply privatisation debates, proponents of community water supply would do well to revisit history and avoid the multiple flaws to which the concept of community is all too easily subject.

#### ACKNOWLEDGEMENTS

The research presented in this paper was partially supported by a grant from the Social Sciences and Humanities Research Council of Canada. Research assistance from Alice Cohen, Jennifer Karmona, and Sue Moccia is gratefully acknowledged. Discussions with Patrick Bond, Erik Swyngedouw, Oscar Olivera, Maude Barlow, Brewster Kneen, Anil Naidoo, Susan Spronk, David McDonald, Adam Davidson-Harden, Emanuele Lobina and David Hall were formative in shaping the direction of this paper. All errors and omissions remain, of course, the responsibility of the author.

#### REFERENCES

- Agnew, J. 1999. Regions on the mind does not equal regions of the mind. *Progress in Human Geography* 23(1): 91-96.
- Akbar, H.; Minnery, J.; van Horen, B. and Smith, P. 2007. Community water supply for the urban poor in developing countries: The case of Dhaka, Bangladesh. *Habitat International* 31(1): 24-35.
- Alberta Environment. 2003. *Water for life: Alberta's strategy for sustainability*. Edmonton: Alberta Ministry of the Environment.
- Aldurralde, J.; Molina, J.; Vilarroel, E. and Orrelana, R. 2005. *Informe final: Proyecto regulación de derechos de agua en Bolivia*. Ottawa: International Development Research Centre.

- Annez, P. 2006. Urban infrastructure finance from private operators: What have we learned from recent experience? World Bank Policy Research Working Paper 4045. Washington, DC: World Bank.
- Appadurai, A. 2002. Deep democracy: Urban governmentality and the horizon of politics. *Public Culture* 14(1): 21-47.
- Ashenafi, Z.T. and Leader-Williams, N. 2005. Indigenous common property resource management in the Central Highlands of Ethiopia. *Human Ecology* 33(4): 539-563.
- Assies, W. 2003. David versus Goliath in Cochabamba: Water rights, neoliberalism, and the revival of social protest in Bolivia. *Latin American Perspectives* 30(3): 14-36.
- Bacdayan, A.S. 1974. Securing water for drying rice terraces: Irrigation, community organization, and expanding social relationships in a western Bontoo group, Philippines. *Ethnology* 13(3): 247-260.
- Baietti, A.; Kingdom, W. and van Ginneken, M. 2006. *Characteristics of well-performing public water utilities*. Water Supply & Sanitation Working Notes No. 9. Washington, DC: World Bank.
- Bakker, K. 2003. From public to private to... mutual? Restructuring water supply governance in England and Wales. *Geoforum* 34(3): 359-374.
- Bakker, K. 2004. An uncooperative commodity: Privatising water in England and Wales. Oxford: Oxford University Press.
- Bakker, K. 2007. The commons versus the commodity: 'Alter'-globalization, anti-privatization and the human right to water in the global South. *Antipode* 39(3): 430-455.
- Baril, P.; Maranda, Y. and Baudrand, J. 2006. Integrated watershed management in Quebec (Canada): A participatory approach centred on local solidarity. *Water Science and Technology* 53(10): 301-307.
- Barlow, M. 2007. Blue covenant: The global water crisis and the coming battle for the right to water. Toronto: McLelland and Stewart.
- Batley, R. and Moran, D. 2004. *Literature review of non-state provision of basic services*. International Development Department, School of Public Policy. Birmingham: University of Birmingham.
- Bhasin, V. 1997. Water sharing and human solidarity in Ladakh. *Journal of Human Ecology* 8(4): 279-286.
- Birchall, J. (Ed). 2001. The new mutualism in public policy. London: Routledge.
- Birchall, J. and Simmons, R. 2004. What motivates members to participate in co-operative and mutual businesses? A theoretical model and some findings. *Annals of Public and Cooperative Economics* 75(3): 465-495.
- Birchall, J. 2002. Mutual, non-profit or public interest company? An evaluation of options for the ownership and control of water utilities. *Annals of Public and Cooperative Economics* 732: 181-213.
- Blokland, M.; Braadbaart, O. and Schwartz, K. 2001. *Private business, public owners*. The Hague: Ministry of Housing, Spatial Planning and the Environment.
- Blomquist, W. and Schlager, E. 2005. Political pitfalls of integrated watershed management. *Society and Natural Resources* 18(2): 101-117.
- Boelens, R. and Doornbos, B. 2001. The battlefield of water rights: Rule-making amidst conflicting normative frameworks in the Ecuadorian highlands. *Human Organization* 60(4): 343-355.
- Boelens, R. and de Vos, G. 2006. Water law and indigenous rights in the Andes. *Cultural Survival Quarterly* 29(4): 18-21.
- Boelens, R. and Zwarteveen, M. 2005. Prices and politics in Andean water reforms. *Development and Change* 36(4): 735-758.
- Bond, P. 2003. The limits of water commodification in Africa. Journal fur Entwicklungspolitik 19(4): 34-55.
- Bustamente, R.; Peredo, E. and Udaeta, M. 2005. Women in the water war in the Cochabamba valleys. In Bennett, V.; Dávila-Poblete, S. and Nieves Rico, M. (Eds), *Opposing currents: The politics of water and gender in Latin America*, pp. 72-89. Pittsburgh: University of Pittsburgh Press.
- Calle, J. and Lohman, M. 2006. The triumph of the national majorities and the challenge of change. In Chavez, D. (Ed), *Beyond the market: The future of public services*, pp. 75-83. Amsterdam: Transnational Institute.
- Castro, J.E. 2007. Poverty and citizenship: Sociological perspectives on water services and public-private participation. *Geoforum* 38(5): 765-771.

- Chatterjee, P. 2004. *Politics of the governed: Reflections on popular politics in most of the world*. New York: Columbia University Press.
- Cleaver, F. 2000. Moral ecological rationality, institutions, and the management of common property resources. *Development and Change* 31(2): 361-383.
- Cleaver, F. and Toner, A. 2006. The evolution of community water governance in Uchira, Tanzania: The implications for equality of access, sustainability and effectiveness. *Natural Resources Forum* 30(3): 207-218.
- Collignon, B. and Vezina, M. 2000. Independent water and sanitation providers in African cities: Full report of a ten-country study. Washington, DC: World Bank.
- Co-operatives Secretariat. 2001. Co-operatives in Canada 1999. Ottawa: Co-operatives Secretariat, Government of Canada.
- Cooke, B. and Kothari, U. 2001. Participation: The new tyranny? London: Zed Books.
- Corbridge, S.; Williams, G.; Srivastava, M. and Véron, R. 2005. *Seeing the state: Governance and governability in India*. Cambridge: Cambridge University Press.
- Cremers, L.; Ooijevaar, M. and Boelens, R. 2005. Institutional reform in the Andean irrigation sector: Enabling policies for strengthening local rights and water management. *Natural Resources Forum* 29(1): 37-50.
- Curry, J. and McGuire, S. 2002. Community on land: Community, ecology, and the public interest. Lanham: Rowman and Littlefield.
- de la Fuente, M. 2003. The water war in Cochabamba, Bolivia: Privatization triggers an uprising. *Mountain Research and Development* 23(1): 98-100.
- de Vos, H.; Boelens, R. and Bustamante, R. 2006. Formal law and local water control in the Andean region: A fiercely contested field. *International Journal of Water Resources Development* 22(1): 37-48.
- Emel, J. and Roberts, R. 1995. Institutional form and its effect on environmental change: The case of groundwater in the southern High Plains. *Annals of the Association of American Geographers* 85(4): 664-83.
- Finnegan, W. 2002. Leasing the rain. The New Yorker, April 8.
- Franceys, R. 2006. Customer committees, economic regulation and the water framework directive. Journal of Water Supply: Research and Technology-Aqua 6(5): 9 15.
- Franceys, R. and Weitz, A. 2003. Public private partnerships in infrastructure for the poor. *Journal of International Development* 15(8): 1083-1098.
- Garande, T. and Dagg, S. 2005. Public participation and effective water governance at the local level: A case study from a small under-developed area in Chile. *Environment, Development and Sustainability* 7(4): 417-431.
- Garcia, A.; Garcia, F. and Quiton, L. 2003. *La 'Guerra del Agua' abril de 2000: La crisis de la política en Bolivia*. La Paz: Programa de Investigación Estratégica en Bolivia.
- Gaye, M. and Diallo, F. 1997. Community participation in the management of the urban environment in Rufisque (Senegal). *Environment and Urbanization* 9(1): 9-29.
- Hall, D.; Lobina, E. and de la Motte, R. 2005. Public resistance to privatisation in water and energy. *Development in Practice* 15(3 & 4): 286-301.
- Hall, D. and Lobina, E. 2006. *Water as a public service*. London: Public Services International Research Unit, University of Greenwich.
- Hall, D. and Lobina, E. 2007. Profitability and the poor: Corporate strategies, innovation and sustainability. *Geoforum* 38(5): 772-785.
- Hall, D.; Lobina, E.; Viero, O. and Maltz, H. 2002. *Water in Porto Alegre, Brazil: Accountable, effective, sustainable and democratic*. London: Public Services International Research Unit, University of Greenwich.
- Hoedeman, O.; Kishimoto, S. and Terhorst, P. 2005. Public water services. *Water and Wastewater International* 20(3).
- Holtham, G. 1997. The water industry: Why it should adopt the mutual society model. *Journal of Co-operative Studies* 29(3): 3-8.
- Izaguirre, K. 2005. Private infrastructure: Emerging market sponsors dominate private flows. Public Policy for the Private Sector. Note No. 299. Washington, DC: World Bank.

- Jaglin, S. 2002. The right to water versus cost recovery: Participation, urban water supply and the poor in sub-Saharan Africa. *Environment and Urbanization* 14(1): 231-245.
- Juuti, P.; Katko, T. and Rajala, R. 2005. Evolution of and lessons learnt from water and sanitation services in Porvoo, Finland, 1900-2000. *Natural Resources Forum* 29(2): 109-119.
- Katko, T. 2000. *Water! Evolution of water supply and sanitation in Finland from the mid-1800s to 2000*. Tampere: Finnish Water and Waste Water Works Association.
- Katko, T. 1992. Evolution of consumer-managed water cooperatives in Finland, with implications for developing countries. *Water International* 17(1): 12-20.
- Kay, J. 1996. Regulating private utilities: The customer corporation. Journal of Co-operative Studies 29(2): 28-46.
- Kemper, K.; Dinar, A. and Blomquist, W. 2005. Institutional and policy analysis of river basin management decentralization. Washington, DC: World Bank.
- Kerf, M. and Izaguirre, A. 2007. Revival of private participation in developing country infrastructure: Recent trends and policy implications. *Gridlines* 16. Washington, DC: World Bank, Public Private Infrastructure Advisory Facility.
- Kyessi, A. 2005. Community-based urban water management in fringe neighbourhoods: The case of Dar Es Salaam, Tanzania. *Habitat International* 29(1): 1-25.
- Lemos, M.C. and de Oliveira, J.L.F. 2005. Water reform across the state/society divide: The case of Ceara, Brazil. *International Journal of Water Resources Development* 21(1): 133-147.
- Lemos, M.; Austin, D.; Merideth, R. and Varady, R. 2002. Public-private partnerships as catalysts for communitybased water infrastructure development: The Border waterworks program in Texas and New Mexico colonias. *Environment and Planning C: Government and Policy* 20(2): 281-295.
- McCarthy, J. 2005. Commons as counter-hegemonic projects. Capitalism Nature Socialism 16(1): 9-24.
- Mehta, L. 2001. Water, difference and power: Unpacking notions of water 'users' in Kutch, India. *International Journal of Water* 1(3/4): 324-342.
- Mehta, L.; Leach, M. and Scoones, I. 2001. Environmental governance in an uncertain world. *IDS Bulletin* 32(4). Editorial.
- Morgan, B. 2004. Water: Frontier markets and cosmopolitan activism. *Soundings: A Journal of Politics and Culture* 28: 10-24.
- Morgan, B. 2005. Social protest against privatization of water: Forging cosmopolitan citizenship? In Cordonier Seggier, M.-C. and Weeramantry, J.C.G. (Eds), *Sustainable justice: Reconciling international economic, environmental and social law, chapter 21.* Boston: Martinus Nijhoff Publishers.
- Morse, L. 2000. A case for water utilities as cooperatives and the UK experience. Annals of Public and Cooperative Economics 71(3): 467-495.
- Mosse, D. 2003. *The rule of water: Statecraft, ecology, and collective action in South India*. Oxford: Oxford University Press.
- Mosse, D. 1997. The symbolic making of a common property resource: History, ecology and locality in a tankirrigated landscape in South India. *Development and Change* 28(3): 467-504.
- Mugabi, J.; Kayaga, S. and Njiru, C. 2007. Partnerships for improving water utility management in Africa. *Proceedings of the Institution of Civil Engineers-Municipal Engineer* 160(1): 1-6.
- Muzzini, E. 2005. Consumer participation in infrastructure regulation: Evidence from the East Asia and Pacific region. Washington, DC: World Bank.
- Narain, S. 2006. *Community-led alternatives to water management: India case study.* Background paper: Human Development Report 2006. New York: United Nations Development Programme.
- Nemarundwe, N. and Kozanayi, W. 2003. Institutional arrangements for water resource use: A case study from southern Zimbabwe. *Journal of Southern African Studies* 29(1): 193-206.
- Nickson, A. and Vargas, C. 2002. The limitations of water regulation: The failure of the Cochabamba concession in Bolivia. *Bulletin of Latin American Research* 21(1): 99-120.
- Olivera, O. and Lewis, T. 2004. Cochabamba! Water war in Bolivia. Boston: South End Press.

- Ostrom, E. 1990. *Governing the commons: The evolution of institutions for collective action*. New York: Cambridge University Press.
- Ostrom, E.; Schroeder, L. and Wynne, S. 1993. *Institutional incentives and sustainable development: Infrastructure policies in perspective*. Boulder: Westview Press.
- Ostrom, E. and Keohane, R. (Eds). 1995. *Local commons and global interdependence: Heterogeneity and cooperation in two domains*. Cambridge, Mass: Harvard University, Centre for International Affairs.
- Page, B. and Bakker, K. 2005. Water governance and water users in a privatized water industry: Participation in policy-making and in water services provision-A case study of England and Wales. *International Journal of Water* 3(1): 38-60.
- Perreault, T. 2005. State restructuring and the scale politics of rural water governance in Bolivia. *Environment and Planning A* 37(2): 263-284.
- Perreault, T. 2006. From the guerra del agua to the guerra del gas: Resource governance, popular protest and social justice in Bolivia. *Antipode* 38(1): 150-172.
- Petrella, R. 2001. The water manifesto: Arguments for a world water contract. London: Zed Books.
- Pierre, J. and Peters, B.G. 2000. Governance, politics and the state. Basingstoke: Macmillan Palgrave.
- Ponniah, T. 2004. Democracy vs empire: Alternatives to globalization presented at the World Social Forum. *Antipode* 36(1): 130-133.
- Ponniah, T. and Fisher, W.F. (Eds). 2003. Another world is possible: Popular alternatives to globalization at the World Social Forum. New York: Zed Press.
- Potkanski, T. and Adams, W.M. 1998. Water scarcity, property regimes and irrigation management in Sonjo, Tanzania. *Journal of Development Studies* 34(4): 86-116.
- Prasad, N. 2006. Privatisation results: Private sector participation in water services after 15 years. *Development Policy Review* 24(6): 669-92.
- PriceWaterhouseCoopers. 2003. Comparative review of IFI risk mitigation instruments and direct sub-sovereign lending. London, Washington, and Amsterdam: PricewaterhouseCoopers Securities LLC, World Bank, and Bank-Netherlands Water Partnership.
- PSIRU (Public Services International Research Unit). 2006. Public-Public Partnerships as a catalyst for capacity building and institutional development: Lessons from Stockholm Vatten's experience. London: Public Services International Research Unit, University of Greenwich.
- Public Citizen. 2002. Public-Public Partnerships: A backgrounder on successful water/wastewater reengineering programs. Washington, DC: Public Citizen and Food and Water Watch.
- Ratner, B. 2004. Reasserting community: The social challenge of wastewater management in Panajachel, Guatemala. *Human Organization* 63(1): 47-56.
- Rhodes, R. 1996. The new governance: Governing without government. Political Studies 44(4): 652-657.
- Robbins, P. 2003. Transnational corporations and the discourse of water privatization. *Journal of International Development* 15(8): 1073-82.
- Roberts, R. and Emel, J. 1992. Uneven development and the tragedy of the commons: Competing images for nature society analysis. *Economic Geography* 68(3): 249-71.
- Rogers, P.; de Silva, R. and Bhatia, R. 2002. Water is an economic good: How to use prices to promote equity, efficiency, and sustainability. *Water Policy* 4(1): 1-17.
- Ruiz-Meir, F. and von Ginneken, M. 2006. Consumer cooperatives: An alternative institutional model for delivery of urban water supply and sanitation services? Water Supply and Sanitation Working Note #5. Washington, DC: Water Supply and Sanitation Sector Board, Infrastructure Network, World Bank Group.
- Sabatier, P.; Focht, W.; Lubell, M.; Trachtenberg, Z.; Veditz, A. and Matlock, M. 2005. *Swimming upstream: Collaborative approaches to watershed management*. Cambridge: MIT Press.
- Schultz, J. 2008. (Ed). *Dignity and defiance Stories from Bolivia's challenge to globalization*. Berkeley: University of California Press.

Scottish Parliament. 2001. *Water Industry (Scotland) Bill*, Policy Memorandum. Edinburgh: The Stationery Office. Shiva, V. 2002. *Water wars: Privatization, pollution and profit*. London: Pluto Press.

Sokile, C. and van Koppen, B. 2004. Local water rights and local water user entities: The unsung heroines of water resource management in Tanzania. *Physics and Chemistry of the Earth* 29(15-18): 1349-1356.

Spronk, S. 2008. Personal communication, January 2008.

Spronk, S. and Crespo Flores, C. (Eds). 2007. Después de las guerras del agua. La Paz: Plural Editores.

Stewart, A. and Gray, T. 2006. The authenticity of 'type two' multistakeholder partnerships for water and sanitation in Africa: When is a stakeholder a partner? *Environmental Politics* 15(3): 362-378.

Strang, S. 2004. *The meaning of water*. Oxford: Berg.

- Swyngedouw, E. 1997. Power, nature, and the city: The conquest of water and the political ecology of urbanization in Guayaquil, Ecuador, 1880-1990. *Environment and Planning A* 29(2): 311-332.
- Swyngedouw, E. 2004. Social power and the urbanization of water: Flows of power. Oxford: Oxford University Press.
- Tendler, J. 1998. Good government in the tropics. Baltimore: Johns Hopkins University Press.
- TNI (Transnational Institute). 2005. *Reclaiming public water: Achievements, struggles and visions from around the world*. Amsterdam: Transnational Institute.
- TNI (Transnational Institute). 2006. *Public water for all: The role of public-public partnerships*. Amsterdam: Transnational Institute and Corporate Europe Observatory.
- Trawick, P. 2001a. Successfully governing the commons: Principles of social organization in an Andean irrigation system. *Human Ecology* 29(1): 1-25.
- Trawick, P. 2001b. Moral economy of water: Equity and antiquity in the Andean commons. *American Anthropologist* 103(2): 361-379.
- Trawick, P. 2003a. Against the privatization of water: An indigenous model for improving existing laws and successfully governing the commons. *World Development* 31(6): 977-996.
- Trawick, P. 2003b. *The struggle for water in Peru: Comedy and tragedy in the Andean commons*. Stanford: Stanford University Press.
- Ugaz, C. 2002. *Consumer participation and pro-poor regulation in Latin America*. WIDER Discussion Paper 2002/121. Helsinki: World Institute for Development Economics Research.
- UNCSD (UN Commission on Sustainable Development). 2005. *Report on the thirteenth session*. New York: UN Commission on Sustainable Development.
- UNDP. 2006. *Beyond scarcity: Power, poverty, and the global water crisis.* UN Human Development Report 2006. New York: United Nations Development Programme.
- UNWWAP (United Nations World Water Assessment Programme). 2006. *Water: A shared responsibility*. Rome: United Nations World Water Assessment Programme, FAO.
- Wade, R. 1988. Village republics: Economic conditions for collective action in South India. San Francisco: ICS Press.
- WDM (World Development Movement). 2007. *Going public: Southern solutions to the global water crisis*. London: World Development Movement.
- Wolff, G. and Hallstein, E. 2005. *Beyond privatization: Restructuring water systems to improve performance.* Oakland, CA: Pacific Institute.
- World Bank. 2003. World Development Report 2004: Making services work for poor people. Washington, DC: World Bank Group.
- World Bank/IMF. 2003. Implementing the World Bank Group Infrastructure Action Plan (with special emphasis on follow-up on the recommendations of the World Panel on Financing Water Infrastructure). Washington, DC: World Bank and International Monetary Fund.
- Yavari, L.F. 2005. Management of basic drinking water and sanitation services by a co-operative in Bolivia. In Balanyá, B.; Brennan, B.; Hoedeman, O.; Kishimoto, S. and Terhorst, P. (Eds), *Reclaiming public water: Achievements, struggles and visions from around the world,* pp. 37-44. Amsterdam: Transnational Institute and Corporate Europe Observatory.
- Zaidi, A. 2001. From lane to city: The impact of the Orangi pilot project's low cost sanitation model. London: WaterAid.