

CHAPTER 6

COMMONS VERSUS COMMODITIES: THE AMBIGUOUS MERITS OF COMMUNITY WATER SUPPLY MANAGEMENT

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***Background:** The debate over water supply is a microcosm of contemporary struggles over the roles of states and markets, and over the acceptability and efficacy of market solutions to the world's putative environmental crisis. In the past five years, the partial retreat of private companies from the business of water supply, particularly for the urban poor, has intensified the debate over the appropriate role of the private sector in supplying water. Even the most ardent proponents of privatization admit that the private sector cannot and will not supply "water for all." The rise and retreat of water privatization in low and middle-income countries is the focus of Part I of the book. The resurgence of interest in alternatives to water privatization is the subject of Part II of the book. Successive chapters critically examine the most politically popular alternatives in contemporary debate. Chapter 5 discusses the transnational struggle over the human right to water and points to some of the potential limits of this approach, while suggesting that other notions of rights (such as the "right to the city"), predicated on political struggle, will provide more traction in obtaining "water for all." Chapter 6 critically interrogates notions of "commons" and "community" water supply that are often proposed as alternatives to both public and private provision. Chapter 7 speaks to ecological issues and the (often overlooked) environmental dimensions of water privatization.*

Introduction

The past few years have witnessed a surge of calls in support of "community" water supply. Appeals to the "water commons," calls for "water democracy," and campaigns for the community control of water supply are examples of the central role that community (however ill-defined the term might be) plays in the vision of anti-water privatization activists.ⁱ The concept of community has also come to play a greater role in mainstream development policy, even on the part of proponents of the commercialization and privatization of water. Although community provision was largely marginal to the early arguments of those in favor of water privatization, a resurgence of community has recently occurred in discussions of urban water supply—whether through "public-private-community partnerships," an increased reliance on the community-based private sector water providers (such as water vendors), or community "business partnerships."ⁱⁱ These notions of community are often mobilized in tandem with participatory governance strategies (variously labeled "delegation," "co-management," or the like) and commercial water management approaches. The term "community" (and its cognate, the "commons")

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is thus frequently mobilized by those on both the political ‘right’ and ‘left’-- a seemingly paradoxical convergence which engenders an ambiguous politics, and makes the evolution of commons and community water management regimes difficult to predict and interpret in practice.

This is reflective of a broader resurgence of interest in so-called commons strategies for the management of environmental and indeed social issues more generally,ⁱⁱⁱ which has become an important strand of thinking within environment and development debates. Rather than defending government or market provision, advocates of the commons argue that they seek an alternative to both states *and* markets, as captured in the opening lines of a chapter on the commons in the 2008 edition of the WorldWatch Institute’s influential *State of the World* report:

For decades we have been told that there are only two choices for the management of scarce resources: corporate self-seeking or the bureaucracy of the state. But there is another way. Commons management has worked for centuries and is still working today. It can be adapted to the most pressing global problems, such as climate change. A new phrase is about to enter the policy realm. To “market-based” and “command-and-control” we can now add “commons-based.”^{iv}

This invocation of the commons shifts the terms of debate. Rather than a confrontation between states and markets, we oppose the commons, on the one hand, and corporate forms of ownership and management (whether state or market), on the other. These are, of course, excellent political tactics, particularly in the United States, with its tradition of anti-government sentiment, but also internationally, insofar as this framing of the commons has the potential to unite diverse struggles, ranging from rural farmers in developing countries calling for land reform, to Internet hackers arguing for a global cyberspace commons, to environmentalists arguing for alternative approaches to atmospheric emissions control.

Appeals to the commons of this sort (and the implicit call for community management with which they are often associated) speak to various conceptual debates—over the post-Washington Consensus, post-neoliberalism, or “Third Way” approaches—that seek to re-articulate the relationship between governments, markets, and communities. In the wake of the private sector retreat from the water supply business in much of the world (and the global financial crisis which had hit with full force by the end of 2008), calls for alternative “community” management proposals have gained momentum. But, as we shall see, they are at times deeply flawed, and less widely applicable than their proponents might admit.

So what are we to make of calls for “commons” and “community” water management?^v Should we pursue or dismiss them? And what might they mean in practice? In this chapter, I propose to answer these questions and to articulate the analysis with reference to the broader debates over governance raised in earlier chapters. At the outset, it is important to note a distinction between approaches to the commons in public debate. On the one hand, we have institutionalist definitions of the commons, more often invoked by

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the right, which are associated with quite specific organizational and operational characteristics (often not that different, in practice, from market-based management regimes). On the other, we have on what we might term “communitarian” interpretations of commons and communities, usually invoked by the left, which are often associated with specific political and ethical stances (e.g. anti-capitalist, appropriate technology), but are often silent on operational detail. We might term the former a set of “blueprint utopias”, and the latter a set of “fictional utopias.” The uneasy dialectic between these two broad concepts of the commons, and the ambivalence of their implementation in on-the-ground struggles over water management ‘alternatives’, are central themes of the chapter.

To draw out these themes, I begin with a short, illustrative case study of Cochabamba, Bolivia—home to (perhaps) the most well-known anti-privatization movement over the past 20 years. The second part of the chapter presents a typology of community alternatives, drawing on (although not in a comprehensive fashion) the extensive literature (both academic and policy) that exists on community water management around the world. This is followed by critiques of various conceptualizations of community, with reference to more general debates about the viability of the commons (or, more correctly, “common pool management regimes”) and communities to manage and govern public goods such as water. Throughout, the focus is on water supply (excluding other forms of water services, such as irrigation and sanitation). I suggest that community approaches have the potential to be exclusionary and inequitable, and that they often operate in ways that undermine the straightforward storylines of community proponents.

Rethinking community: Cochabamba’s “Water War”

Cochabamba’s *Guerra del Agua*, or “Water War,” has become emblematic of the potential power of social movements. It is celebrated by anti-water privatization activists around the world 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. It also provides an example of the possibilities and potential pitfalls of community-led water governance—which is currently widely supported by both proponents and opponents of water commercialization.

The main events of the water war are well known.^{vi} Privatization inspired mass protests that became a *cause célèbre* for alter-globalization activists. Access to water had long been a contentious issue in Cochabamba, Bolivia’s third largest city. Wealthy consumers and businesses received municipally subsidized water through the network, whereas half of the city’s households —largely indigenous residents of poor neighborhoods—relied on water delivered by tanker-trucks, private wells, or small-scale, community-run water systems.^{vii}

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

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farmers (*campesinos*) all played a role. By the late 1990s, privatization was being advocated as a solution by international financial institutions and some Bolivian politicians.

Bolivians were no strangers to privatization. The pioneer of “shock therapy” in the mid-1980s, Bolivia underwent a series of IMF-administered structural adjustment programs in the 1990s. In 1998, the IMF made a new loan to Bolivia, contingent upon privatization 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 that signed the concession contract with the city government in 1999 included a subsidiary (based in the Cayman Islands international tax haven) of two of the largest water companies in the world: the U.S.-based multinational Bechtel and Britain’s United Water. As is frequently the case in water privatization deals, *Aguas del Tunari* (as the local subsidiary of the international consortium was known) was able to negotiate a highly favorable contract (in this case, aided by the 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-privatization campaigners publicized cases of increases as high as 200% (although company officials 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. This was an unprecedented move, given that in the intensively farmed Andean mountain valley in which Cochabamba is located, well water and streams are essential sources for drinking and irrigating for indigenous *campesinos*, who managed local water sources largely independent of external control. 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, and its cultural resonance for the Quechua population of the arid Andean highlands, was used effectively as a discursive strategy by privatization opponents in information campaigns against *Aguas de Tunari* and it quickly became clear that the company had overstepped its mark.

Widespread street protests began in April 2000. Tens of thousands of people took to the streets: unions, women’s groups, rural farmers and irrigators, environmentalists, and consumers’ groups were coordinated by a *Coordinadora de Defensa del Agua y de la Vida* [Coalition for the Defense of Water and Life]. The coalition succeeded in mobilizing the city’s residents, shutting down the city with general strikes and road blockades over a period of several months. The government’s response was harsh: confrontations between the military and police and protestors left a 17-year-old boy dead and hundreds wounded. As the coalition continued to report events in Cochabamba to the international press (with coverage from *The Economist* and CNN), union leader Oscar

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Olivera was spirited out of the country to Washington, DC, where he addressed the April 16 anti-IMF/World Bank rally.

Back in Cochabamba, the protests persisted, and Bechtel's foreign managers (mostly American and British) eventually fled the city. Shortly thereafter, the contract was unilaterally rescinded in response to campaigners' demands.^{viii} 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 sympathizers to the heady days of the Paris Commune of 1871.

La Guerra del Agua has been internationally touted as a David-versus-Goliath success, and as one of the best examples of successful grassroots resistance to private sector participation in water supply in countries of the South. 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. In Cochabamba, meanwhile, there were growing demands of the anti-privatization protestors for community control of the water supply system, a movement which had wide appeal in this Andean society where rural water rights have historically entailed the right to democratic control over water resources.^{ix}

Yet the outcome of the *Guerra del Agua* 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 been largely thwarted.^x 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. 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 democratize the water utility has meant, in turn, a failure to achieve the *Coordinadora*'s goals of improved efficiency, democratized decision-making, increased transparency, and universal access. Connection rates were less than 50% in 2006, six years after the water war. 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? Regardless, all agreed that SEMAPA remained unresponsive to the needs of the poor, in a pattern unchanged from the pre-water war era.^{xi}

Like many protest movements, the *Coordinadora* has failed to translate the euphoric intensity of protest into the more sustained pursuit of positive reforms. In large part, this

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failure was due to the difficulty of constructing a viable model of communal 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: small, rural irrigation associations and rural communities (with an interest in communal ownership), and urban water users with a desire for more cooperative, democratic forms of urban supply governance. In the former case, irrigation systems were often run entirely independently of government oversight and, particularly in the case of farmers' irrigation cooperatives, had deep historical roots. In the latter case, communities in the poor neighborhoods 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, these community-run water systems continued to operate. Some secured financing from external sources (the European Union, the World Bank) to build or extend their independent water supply systems that still continue to be independently managed by users (even where water is purchased in bulk from the municipal water company).

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-organized users is consistent with local customs of community self-help. This is central to the social fabric of Andean communities and is often justifiably a source of community pride. 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-subsidized services of high quality, whereas residents of poorer areas of the city must directly engage with donors and mobilize volunteer labor to create more expensive systems for which operating costs must also be borne by these poorer communities. The Cochabamba case thus presents us with a dilemma: In celebrating community resourcefulness and promoting community-run water supply systems, we risk condoning both government inaction and corporate misconduct, while depriving low-income communities of the services and resources that wealthier communities already enjoy.

Debating commons and community water supply

The Cochabamba example reminds us that we must remember "public" services in many countries are limited to the elite. As Chatterjee has argued (and as the term "elite capture" discussed in earlier chapters suggests), exclusion is integral to the process of modernization undertaken by developmental states.^{xii} These states often lack the resources required to universally provide public services (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 of the population were identified as full citizens, with the full set of rights and entitlements that one might expect. Moreover, strategies and technologies of development, formulated through interchange with the West and encouraged by development agencies, were not always appropriate to their new contexts.

Invoking community alternatives to privatization thus requires an examination of our (implicit) definitions of community, as well as the type of water supply in question. In

Excerpt from Bakker, K. (forthcoming) *Beyond Privatization: Water, Governance, Community* Cornell U. Press. making these distinctions, 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 6.1 presents a simplified typology of these community alternatives, distinguishing between community ownership and governance, and between water supply and water resources.

Table 6.1: Community and commons in water-supply management: A tentative typology

Anti-privatization Tactic/Strategy	Example
“The Commons” (community ownership and management)	<p style="text-align: center;">Water Supply Infrastructure</p> <ul style="list-style-type: none"> • Water cooperatives (e.g. water cooperatives in Finland; Katko, 2000) • Low-cost, community-owned infrastructure (e.g. Orangi Pilot Project, Pakistan; Zaidi, 2001)
“Water democracy” (community-led governance)	<p style="text-align: center;">Water Resources</p> <ul style="list-style-type: none"> • Communal water rights (Narain, 2006) • Collective provision of irrigation (Boelens 2006) <p style="text-align: center;">Water Supply Infrastructure</p> <ul style="list-style-type: none"> • Customer Service Boards and “Customer Councils” (Franceys, 2006; Page and Bakker, 2005) • Participatory budgeting (e.g. Porto Alegre) (Baietti et al. 2006)
	<p style="text-align: center;">Water Resources</p> <ul style="list-style-type: none"> • Community watershed boards (Canada) (Alberta Environment, 2003) • Sharing of irrigation water based on customary law (<i>usos y costumbres</i>) in the Andes (Trawick, 2003b)

Critiquing the “commons”

The best-known example of communal or collective water ownership is, of course, the “commons,” or more precisely, common-pool water resource management. Simply defined, common-pool resources are those from which it is difficult to exclude individuals (either through physical barriers or laws), and for which use by one individual can reduce the benefits available to others. Consequently, private property rights are difficult or impossible to establish. Local collective management institutions thus evolve within communities to deal with common-pool resources. These are conventionally known as “common property (or pool) management regimes,” characterized by exclusive rights-holding membership^{xiii}. Common property water management regimes are widespread; they exist in both developed and developing countries.^{xiv} To give a simple example, *acequia* irrigation systems in Spain are community-controlled: community members have carefully detailed rights and responsibilities involving all aspects of diversion, allocation, use, and renewal (recharge) of water resources.^{xv}

Significantly, common-pool resources like water are in this sense distinct from true public goods, which are non-rivalrous.^{xvi} Consequently, common-pool resources are

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potentially prey to overuse and, perhaps, eventual destruction. When unregulated—that is, when access is completely open, as with the oceans or global atmosphere—this is exactly what tends to happen, as in Garret Hardin’s “tragedy of the commons.”^{xvii} But most common-pool resources are not open to access by all. As Hardin later admitted, the “tragedy of the commons” is a misnomer. Common-pool resources are usually governed by rules and social relations that control access with the goal of limiting overuse.^{xviii} Where it occurs, Hardin’s tragedy is, rather, a tragedy of open access, in which no property rights systems are in place. Of course, not all common-pool resources are governed in this way. Indeed, much of the work of what Caffentzis terms the “neo-Hardinians” has been focused on the question of how and where the “tragedy of the commons” arises, or might be averted, through detailed study of the attributes of common-pool resources that are more or less conducive to communal or individual ownership.^{xix}

A flourishing research agenda has thus emerged in the past few decades focusing on common-pool resource management regimes (successful and otherwise). It suggests that, subject to limitations, coordination and cooperation among users may evolve even without external incentives or state control and thus avoid “tragedies.” In other words, under certain conditions, resource users are capable of sustainably managing the resource themselves. As Elinor Ostrom notes, “examples exist of both successful and unsuccessful efforts to govern and manage common-pool resources by governments, communal groups, cooperatives, voluntary associations, and private individuals or firms.”^{xx} This observation usefully reframes the issue as a problem of collective action in which emphasis is placed not on ownership, but rather on the appropriate alignment of institutions and incentives enabling individuals sharing a commons to develop and sustain successful management models.

But sustainable common property regime management, at least according to the scholarly literature, is only possible under a specific set of conditions. The academic evidence indicates that common property regimes only function well in a small, defined set of cases because significant barriers exist to effective commons management. Under some conditions—including 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—common-pool resource water management regimes have proven successful.^{xxi} Common property water management regimes, however, tend to perform poorly when any of the following conditions apply: a large number of users, uniformly abundant water resources, a large spatial scale with low population density, or a mismatch of jurisdictional and hydrological boundaries.^{xxii} In short, although in some cases cooperative management institutions can function effectively to avoid depletion of common-pool resources such as water, there are also important limits to collective action.^{xxiii}

We can now begin to answer the question: Why do common-pool resource management regimes arise? One school of thought emphasizes the utilitarian aspect of the commons as an efficient system for mitigating over-consumption amongst a delimited group of users.^{xxiv} The other predominant school ... emphasizes dynamic defense of relative local autonomy, historic culturally embedded arrangements and the moral economy of

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community bonds, which are best adapted to the local environment in which they are rooted but which at the same time need checks and balances within broader legal-political frameworks.²⁷ A third and distinctly different school of thought perhaps best characterized as the “communitarian commons” presents idealized community constructs based on essential notions of romanticized solidarity and presumed equity.^{xxv} 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. They also appear to be quite resilient, even to the point of (in some cases) resisting external pressures to prohibit and/or reform systems of collective tenure and property rights.^{xxvi}

This is in part because a key element of sustainable common-pool resource management regimes, according to some scholars, is what Cleaver terms a “moral ecological rationality,” in which water users operate in a web of social relationships that support an ethic of environmental care. Ethnographic studies have demonstrated that water is part of a broader material-symbolic domain.^{xxvii} 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 resources—they are a part of the symbolic production of locality.”^{xxviii} In other words, the commons is not merely an instrumental resource management tool undertaken by self-interested individuals: it is a web of relationships operating within (to use Walzer’s term) a “sphere of justice” with specific rules, norms, and moral commitments.

The “commons” in action: The case of Bolivia

What are the implications of formalizing recognition of these commons management arrangements for water property rights? Before answering this question, it is important to note that the term “property rights” is highly elastic: it covers a broad array of use privileges, which are historically and geographically contingent. The variation in property rights for water around the world (and even within North America) is highly suggestive of the fluidity of the bundle of entitlements that constitute water property rights in different places at different times. This comes as no surprise if we define property as a political relationship enforced by the state (following legal scholars) or as a social relation (in Marxist terms). Understood in this way, the political potential of property—to be regressive or progressive, to be more or less environmentally destructive—becomes quite evident. The conceptual point here is that property is not a fixed object framed by economic rationality; rather, it is a social relation that can evolve over time, in which different institutions and power relations are at work.

This perspective is helpful in understanding Bolivia’s new irrigation water law, passed in 2004.^{xxix} At one level, the new law is an example of the institutionalization of longstanding commons water management practices in formal legal systems—promoted by some as a means of resistance to market environmentalist 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

Excerpt from Bakker, K. (forthcoming) *Beyond Privatization: Water, Governance, Community* Cornell U. Press. water property rights and, eventually, tradable water markets.^{xxx} In reaction, citizen's groups argued that traditional, collective *usos y costumbres* (customary uses), widely recognized throughout the Andes in the management of common property resources, were being displaced.^{xxxii} 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, as well as protests against proposals for large-scale groundwater exports from Bolivia to a Chilean mining zone lent impetus to the reforms demanded by irrigators: legal recognition of traditional uses, integrated water management predicated on multiple rather than single uses, and decentralized participatory water management.^{xxxii} The demands were supported by extensive research indicating that indigenous water use practices were more efficient than the new proposals favored by the Bolivian government, which were based on granting concessions by unit of volume per time for specific uses. In fact, the government met these demands.^{xxxiii} They followed up with plans to develop a registry of traditional water rights and to 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. This, at first glance, seems appropriate when associated with traditional or indigenous cultural practices. But there are other, potentially less positive implications.^{xxxiv} First, the formalization of these rights amounts to their privatization, insofar as private rights are allocated to individual rights-holders (communities in this case). In other words, recognizing indigenous water rights, in this instance, implies removing water from the sphere of the "commons" (belonging to all Bolivians), and allocating it to private (community) owners. The risk of exclusion is high for those who do not belong to an eligible community (for example, peri-urban residents, or rural residents who are not identified as "indigenous"). Second, the possibilities for the Bolivian state to plan or intervene in water resources management are potentially restricted. An ethic of exclusive ownership of water resources by some communities implies the difficulty in reallocating resources (for example, for drinking water to fulfill the state's new commitment to drinking water as a human right). Third, water rights create the possibility of the creation of water markets—in which water rights owners are to be reimbursed for allowing "their" water to be diverted to others. In other words, the danger here is that a system of water rights akin to private property rights is being created. This is aligned with mainstream development models, which have evolved in an ideological environment in which government's ability to finance and support redistributive policies has been considerably reduced (hence the support of Bolivia's reforms by well-known proponents of market rights). But although these rights may provide the some communities with an opportunity to engage in market exchange (e.g., via the sale of water rights, or the use thereof), they may not necessarily enable the poor within or beyond these communities them to reap the benefits that

Excerpt from Bakker, K. (forthcoming) *Beyond Privatization: Water, Governance, Community* Cornell U. Press. markets can putatively provide; nor do they create the context in which coherent, integrated management of water resources can effectively be conducted.^{xxxv}

Critiquing “water democracy”: Querying community-led water supply management

In urban and industrialized areas, particularly in wealthier countries, common-pool resource management regimes for water services have been frequently displaced by state and private-sector provision (as explored in Chapter 3). Particularly in cities, it is more usual to encounter community governance rather than outright ownership of water resources. In these cases, 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 governance through state-initiated consensus-based or participatory management practices. The division between “commons” and “community-based water management” in Table 6.1 speaks to this distinction.

The past two decades have witnessed a resurgence of community-based, “delegated” or “collaborative” water management, which may be broadly defined as the involvement of non-state actors in decision-making for water management.^{xxxvi} Similar to the broader trend towards “co-management” of environmental resources, this frequently (but not always) implies the delegation of some degree of decision-making power to non-state actors at lower scales of governance, and collaborative decision-making processes, often emphasizing consensus and trust-building. Uniquely, however, delegated water management can also imply the use of a hydrographic boundary such as the watershed rather than political boundaries such as the municipality or region. 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, guided by 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, thereby posing a challenge to conventional theories of governance in which the nation-state is the primary locus of political power and decision-making.^{xxxvii}

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.^{xxxviii} In the United States, 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

Excerpt from Bakker, K. (forthcoming) *Beyond Privatization: Water, Governance, Community* Cornell U. Press. states, and has also been promoted by aid agencies and multilateral development banks as part of broader agendas of water sector reform.^{xxxix}

Community-based water management is thus far more comprehensive (in terms of integration of water management goals and spatial extent) and widespread (in terms of numbers of cases) than water cooperatives, which tend to be focused on the ownership and management of a single water provider—usually a water supplier (“retailer”).^{xi} Nonetheless, water cooperatives merit examination, particularly because they have been attracting increasing attention 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 a predominant mode of water supply provision in both rural and urban areas.^{xii} 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 privatized (or, indeed, publicly-run) monopoly services.^{xlii}

Specific approaches vary between countries. In Britain, for example, associative self-governance has taken the form of “mutual” non-profit corporations; or in the United States and Canada, non-profit corporations or (largely in rural areas) water associations, particularly in the Western states and provinces.^{xliii} 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.^{xliv} But other, similar corporate structures exist, the largest probably being the water supply utility that 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.^{xlv}

The success of the Welsh case suggests that, under the right conditions, large-scale cooperatives can function effectively. This 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 between lower bills and cost reduction (rather than lower costs and profit maximization) 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 recognized advantages of delegated water governance: access to “local” expertise which can improve the quality of decision-making; the ability to adapt regulatory programs to meet local conditions; empowerment of stakeholders (particularly those traditionally marginalized); 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).

But there are also several critiques we might make of community water supply management. The first pertains to critiques of participation, in which the involvement of community actors tends to legitimize policy and environmental programs.^{xlvi} In poor neighborhoods of urban areas in developing countries, for example, participation may simply be a label for strategies which seek to transfer costs from water companies to low-income households: through, for example, voluntary labor for construction of networks.^{xlvi} A longer-term risk when communities are left to supply themselves, as the Cochabamba case illustrates, is the entrenchment of two-tier services, with poorer households forced to rely on services of inferior quality and desirability. Participation may also be deployed as a technique of “normalization,” intended to reform or even eradicate community water use and management practices, particularly in contexts where indigenous communities continue to actively control local water sources.^{xlvi} And participation does not necessarily increase capacity.^{xlix}

The rejection of state provision implicit in advocates of community water management of urban water supply systems is also problematic. 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 that have been widely used in some wealthy countries to support universal provision. It is important to qualify this argument, nevertheless, with the observation that both the state and the market at times undermine the ability of communities to engage in collective action to solve resource problems and to govern resources. But certain strategies for recourse to the state can avoid the pitfalls of governance failure that we first addressed in Chapter 1.

For these reasons, opponents of privatization often assert that governance models seeking to empower citizens are only meaningful when implemented in tandem with alternative service-delivery approaches via public-sector business models.ⁱ Customer corporations (in which incentives are structured towards cost-minimization for a given service-quality level, rather than profit maximization for a given cost-minimization level) are one example.ⁱⁱ Another example is that of corporatized public water companies (publicly owned, yet operating on modified commercial principles).ⁱⁱⁱ Customer-controlled models of utility regulation, in which consumers are not merely consulted, but rather have formalized 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 bureaus are other examples.ⁱⁱⁱⁱ

However, cooperatives and delegated water governance models also have potential, and important, limitations. The consumer focus on local concerns (and, in particular, on minimizing 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 that persuaded the Scottish government to create a

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public authority for water in Scotland rather than to mutualize.^{liv} Overall costs may be greater, and efficiency lower—particularly for smaller organizations without the requisite technical expertise.^{lv} 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.^{lvi} The large amount of (often volunteer) time required to maintain cooperatives raises 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.”^{lvii}

In the wake of the partial retreat of private water multinationals, for example, advocates of public–private–community partnerships laud the actual and potential contribution of small-scale private enterprise and NGOs in service provision, particularly to the urban poor.^{lviii} But, the term “community 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;^{lix} or for using volunteer community labor or concessionary finance as a means of subsidizing otherwise unprofitable private-sector water management operations.^{lx} Others favor the “formalization,” “regularization,” or “legalization” of informal water suppliers.^{lxi} Another contested example of this “residual commons” is the “public–public partnership,” in which public water supply utilities with expertise and resources are partnered with those needing assistance, often those in smaller urban centers: proponents have acknowledged the political pitfalls of promoting public–public partnerships in the wake of failed private-sector contracts, particularly the potential for such partnerships to be promoted as a strategy for less profitable communities, allowing more limited private-sector contracts to cherry-pick profitable communities and enabling international development assistance funds to continue to be directed towards private sector involvement.^{lxii} We might term all of these phenomena the “residual commons” (Table 6.2). Of course, the label “residual commons” implies a broader definition of the term “commons” than the neo-Hardinian version given above, implying a definition of the commons not solely with reference to common-pool resources, but rather to a broader range of collectively created and shared resources.

Table 6.2: Categorizing the commons

<i>Types of commons</i>	<i>Example</i>
Private club	19th century clubs for social services (such as health), patronized by the upper class in London, England
Commodity-producing commons (resource cartel)	Maine lobster workers
Subsistence-producing commons	Household gardens for self-provisioning—widespread in developing countries
Defensive commons	The public domain or a union: seeks to protect people or resources from the predations of capitalism
Inverse commons	Each user adds, rather than subtracts, to the total resource, as with users of the Linux operating system.
Reciprocal commons	A system of mutual aid, entitlement, and responsibility at a

	community level; water co-ops in rural areas across Canada
Residual commons	Whatever is left after the claims of private corporations and the state have been satisfied; the “public-private community partnerships” in urban areas, where poor communities resort to commons-type arrangements for basic services (often in collaboration with NGOs) because nothing else is available
Religious commons	Resources under Islam (which are the property of all of the faithful, not any state or set of nation-state citizens)

Source: Author, in conjunction with the Forum on Privatization and the Public Domain

In Table 6.2, each type of commons operates along distinct axes of exclusion and inclusion. A “commodity-producing” commons, for example, functions as a resource cartel; only members of the commons have access to a specific resource (such as a fishery), which they may exploit as commodities, for profit, according to the rules agreed to and enforced by members. A “subsistence-producing commons,” on the other hand, produces goods for consumption rather than for sale; household gardens for self-provisioning of necessary foodstuffs, common in Africa and throughout the developing world, are classic examples. Whereas the first type of commons is consistent with, and indeed fully inserted into, capitalist economies, the latter is more ambiguous; non-market production and exchange operates beyond the direct scope of markets, but indirectly subsidizes the labor-power of waged workers when and if they do enter the market.^{lxiii} This conceptualization of multiple forms of collectively created resources enables us to see the various, and at times inequitable forms of commons which may be created by communities, and provides one means of understanding how “community” solutions may reinforce an unequal (and unsatisfactory) status quo.

Table 6.2 also suggests the need to disrupt the conventional opposition drawn between ‘commodities’ and ‘commons’. In fact, many commons are used to produce commodities. One might even argue that a corporation (characterized by internal cooperation and redistribution via worker ownership and share distributions) is a kind of capitalist commons. If we follow this logic, then the opposition between commons and commodities (and its conflation with the state (public)/market (private) binary) becomes untenable. Of course, opponents of privatization often deploy the concept of the commons as a means of asserting that collective management—whether by communities or the state—is not only preferable but necessary, and thereby argue that private ownership of water supply will invariably conflict with the public interest. Here, the commons serves as a romanticized metaphor of a sort of pre-market state of grace, which market relations have wrongfully invaded (Table 6.3).

Table 6.3: The “commons versus commodity” dichotomy

	Commons	Commodity
Definition	Public good or trust	Economic good
Pricing	Free or “lifeline”	Full-cost pricing
Regulation	State-led	Market-led
Goals	Livelihoods &	Efficiency & profit

	maintenance of resource base	
Access	Commons Membership	Ability to pay
Manager	Community/State	Private companies/Market

Source: Author

Opponents of the commons fall into the same trap. For example, those who oppose commons management of water resources often assume that water can be divested from communities. Similarly, proponents of market approaches to water management argue that users can (and should) be redefined as individual customers or users with a merely utilitarian interest in water, rather than a collective of citizens alert to the religious, cultural, symbolic, and environmental dimensions of water. These latter arguments are misguided; on the contrary, work by anthropologists has shown the degree to which these non-economic factors both shape water use, and influence opinions about water privatization.^{lxiv}

The commons/commodity binary is also misleading when applied to water because it obscures a historical reality: there exist more than two types of property relations for water. In Roman law, for example, we can identify at least four distinct property relations for water: *res nullius*, *res publica*, *res privata*, and *res communis omnium*, corresponding roughly to open access (such as the high seas), state (territorial seas, navigable rivers), individual (a riverbank or riverbed), and communal property (water in a flowing stream). Indeed, in countries with a legal tradition descended from Roman law, the concept of water as *res communis* still persists.^{lxv} Customary rights, treaty rights, and aboriginal rights further complicate this picture. We misrepresent the historical evolution and contemporary diversity of water rights and water use practices when we ignore these many types of rights, conflate public and communal rights, or focus solely on public versus private property rights, as the commons/commodity binary encourages us to do.

The limits of community

Let me sum up the critiques made above.

First, proponents of commons and community water supply management often essentialize (or even romanticize) the concept of community. This glosses over the “partial citizenship”^{lxvi} 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. Admittedly, much of the literature on collective, community-based forms of water supply management tends to romanticize communities as coherent, relatively equitably social structures, despite the fact that inequitable power relations and resource allocation exist within communities^{lxvii}. Common-pool management regimes and community water supply management are not necessarily equitable or democratic.

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Second, and related to the previous point, commons and communities can be exclusive and regressive, as well as inclusive and progressive.^{lxxviii} Appeals to the commons run the risk of conveniently overlooking the fact that the commons are a mechanism to “privatize solidarity”; common-pool resource management regimes are, in fact, defined by exclusion (i.e. closed membership that limits access to resources by non-members). Nor are commons or community management systems necessarily equitable. This is the case, for example, with respect to urban water supply systems in middle-class areas, which can be as exclusionary of the poor as conventional systems^{lxxix}.

A third set of issues pertains to the broader political economic landscape in which commons or community solutions are pursued. Advocates of community involvement often fail to account for the broader political economic dynamics that foster desires on the part of elites for greater community involvement. For example, an endorsement of community involvement risks condoning the cherry-picking of profitable or otherwise attractive cities, neighborhoods, and regions, by both public and private water supply utilities, with communities (as in the Cochabamba case), to be left to their own devices. An argument in favor of the commons thus risks reinforcing the post-Washington Consensus, where states, markets and communities play complementary, but definitely unequal roles. This is particularly the case when community water provision is by neglect, rather than design, upon those whom neither governments nor markets are able or willing to serve. Here, the role of the state in encouraging redistributive models of resource management, progressive social relations, and redistribution is more positive than those making calls for a “return to the commons” would perhaps admit.

A fourth objection pertains to the (mistaken) assumption that implementing the correct organizational form (such as a cooperative or community ownership) will automatically give rise to desired changes in behavior and thus in management outcomes. Much literature suggests that this assumption is mistaken.^{lxxx} Organizational form can prohibit certain actions (such as the sale of assets to investors), but it will not automatically result in changes in behavior, although it can create conditions in which these changes might be possible. For example, 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.^{lxxxi} Simply put, the imposition of public or community control is not a sufficient condition for better management.^{lxxxii}

We should be equally cautious of the “local trap”, in which proponents of community or commons water management conflate effective democratic representation with “lower” scales of governance (e.g. a community or watershed).^{lxxxiii} The local scale, according to its proponents, is more responsive to community needs, more empowering, more effective, and more cost-efficient than higher scales of governance.^{lxxxiv} We can, of course, challenge this uncritical acceptance of the rhetoric of the local.^{lxxxv} Brown and Purcell (2005), for example, articulate the dangers of the “local trap”: the assumption that organization, policies, and action at the local scale are inherently more likely to have desired social and ecological effects than activities organized at other scales.^{lxxxvi} On the contrary, one can equally argue that communities, particularly if they are poor, are likely to lack the requisite capacities and institutions. Moreover, common property regimes do not necessarily have to be applied at the local scale; we should not conflate “commons”

Excerpt from Bakker, K. (forthcoming) *Beyond Privatization: Water, Governance, Community* Cornell U. Press. with “communities,” Common property regimes may be as large as a nation-state (as with the welfare state), or a region (such as worker cooperatives in the Basque country).^{lxxvii}

The constraints imposed by which biophysicality of resources such as water further complicate this appeal to the local. In the case of water, appeals to the commons often equate the local scale with the watershed as the “natural” scale of organization for ecological systems and human activities.^{lxxviii} From an ecological perspective, the watershed is not necessarily the ideal scale. It does not correspond with biomes, or even groundwater distribution through aquifers. For individual users, such as farmers, the watershed may be so large as to be relatively meaningless.^{lxxix} But the watershed is also too fine a resolution to deal with the issues raised by the fact that water is a flow resource—implying that the actions of one user can affect others beyond the watershed. The flow of water through the hydrological cycle implies the need for scales of governance both “higher” and “lower” than that of the watershed. Moreover, the idealization of the watershed may simply endorse the “downshifting” of responsibility, without critically examining whether local communities have the resources and capacity necessary to govern, or whether local governance translates into equitable and meaningful participation, significant influence over decision-making, and accountability or empowerment.^{lxxx} In the case of water, for these reasons, we should design nested scales of governance—rather (or in addition to) a local commons. In short, we should reject the assumption that communities can solve all water-supply related issues, particularly in urban areas. Improving governance through involving consumers in decision-making can improve transparency and accountability, but although necessary is not sufficient to deal effectively with issues of financing, equitable access, and ecological sustainability.

Conclusions

Appeals to the commons are highly ambiguous. As with other such terms of broad, even universal appeal—democracy, justice, freedom—this ambiguity gives the term enormous political reach, while leaving much room for quibbling over interpretation--appeals to the water commons are thus often predicated upon misinterpretations, misrepresentations, and romanticization of community water supply and the commons. In practice, commons and community water management approaches also have important limits. This means that alternative water management strategies predicated on concepts of the “commons” or “community”, although they might in theory provide us with progressive options for environmental management, are in practice often highly constrained and compromised, as demonstrated by the Bolivian case.

What, then, should we think about the degree to which “commons” represent a progressive alternative to conventional approaches water supply management—stalemated between proponents of privatization and defenders of classic models of government provision? In an attempt to introduce some precision into the debate, I have argued that the notion of the water commons, in current practice, is more relevant to and widespread in rural areas, where community ownership and collective property rights in water, particularly in regions where water is vital for subsistence, are central to community life. These water collectives are enormously varied, and not necessarily fully

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equitable or sustainable. But they often represent highly adapted, time-tested solutions to the problem of accessing water in difficult ecological (and indeed social) conditions. Here, granting collective property rights to water can, if appropriately handled, be progressive; for it constrains the possibilities for encroachment by both state and market actors. But the case of Bolivia suggests that water rights do not necessarily have progressive (in the sense of redistributive) outcomes. This failing is in part because the essence of the commons (defined here as privately-owned common property) is exclusion, not inclusion. Accordingly, attempting to advocate the commons as a blanket model for social organization (for example, through arguing that all environmental resources are commons) both dilutes and misrepresents the term. It also blinds us to the potentially negative implications of its implementation.

The situation is more complex in urban areas or in situations where water supply has been industrialized through large-scale hydraulic networks. Here, community governance (i.e., involvement in decision-making) is more common than ownership, although it may be far from universal. In this latter case, claims for rights tend to focus on the human right to drinking water, rather than on collective property rights in water. In the case of modern water supply networks in urban areas, because of the high degree of technical complexity and scale of hydraulic networks at play, governance (i.e., participation in decision-making) is the key mechanism by which communities exercise influence.

Let me reiterate this point about the undeniable necessity of government responsibility for water supply. Recourse to the state is necessary if we are to supply urban water on an equitable and universal basis to all. To demand less, or to demand that communities take on the responsibility for water supply themselves, risks condoning rather than addressing governance failure. It also runs the risk of devolving the costs of water supply to the poor, and of creating entrenched and inequitable two-tier systems. Proponents of community solutions need to avoid, in other words, endorsing divestment by the state (and governing elites) of responsibility for urban water supply services—whether couched in the language of “decentralization,” “participation,” or “community management.”

Some might contend that, on the basis of this reasoning, we should dismiss the commons and community altogether. Certainly, these approaches are an uneasy fit with the technocratic expertise that governs the day-to-day business of managing large-scale technical systems such as water supply networks. But dismissing the notion of community altogether would be both unrealistic and misguided. We should not dismiss community management strategies merely because of their complexity and limitations. Nor should we summarily dismiss 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. The moral and symbolic dimensions of water are important reasons why communities have a critical role to play in water supply management. But it is precisely these dimensions of water supply that create the multiple, locally-rooted community practices that are often an uneasy fit with market logic and state management mechanisms. In short, definitions of community are slippery and multiple, and they disrupt our normative distinctions between “markets” and the “public sphere”.

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Rather than rejecting (or attempting to erase) this diversity, then, we should recognize and embrace the resulting ambiguity as constructive. To the extent that this endorses pluralistic approaches to water governance and multiple, community-driven approaches to water management, this is to be welcomed. 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—although they are incorrect when they argue that commons and communities are antitheses to the market or governments. We should not, therefore, entirely abandon the notion of the commons. But we should be cautious about its progressive potential, particularly with respect to the reconciliation of environmental and social justice concerns. It is to this set of issues that Chapter 7 now turns.

References

- ⁱ 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: www.remunicipalisation.org.
- ⁱⁱ See Franceys and Weitz 2003; Narain 2006; UNDP 2006; UNWWAP 2006.
- ⁱⁱⁱ See, for example, Barnes 2006, and (for a critical reading) McCarthy 2005.
- ^{iv} Rowe 2008, 150.
- ^v See, for example, Barlow 2008 and Olivera (n.d.).
- ^{vi} 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.
- ^{vii} Only 55% of urban and 46% of rural residents have access to water supply and sanitation networks in Cochabamba (Bustamente et al. 2005).
- ^{viii} Bustamente et al. 2005; Olivera and Lewis 2004; Perreault 2006; Schultz 2008; Spronk and Flores 2007.
- ^{ix} Boelens 2006.
- ^x Schultz 2008.
- ^{xi} Calle and Lohman 2006.
- ^{xii} Chatterjee 2004.
- ^{xiii} These members might be defined by geographical location (as with the British village “commoners”), by purchase of shares (as with cooperative banks), or by affiliation (as with contemporary proposals to create national public “trusts” of which all citizens are members).
- ^{xiv} See Kozanayi 2003; Ostrom 1990; Ostrom et al. 1993; Ostrom and Keohane 1995; Roberts and Emel 1992.
- ^{xv} Rivera 1998.
- ^{xvi} Ostrom and others make a distinction between common-pool resources (rivalrous, non-excludable, subtractible) and public goods (non-rivalrous, non-excludable, non-subtractible). In both cases, it is difficult to exclude people from access. But with common-pool resources, such as a fishery, use by one person can reduce the overall resource. Public goods (such as national defense or street lighting) are not “diminishable” in the same manner (Ostrom 1990).
- ^{xvii} Hardin 1968.
- ^{xviii} Berkes 1989; Feeny, Hanna, and McEvoy, 1996.
- ^{xix} Caffentzis 2004.
- ^{xx} Ostrom 1990.
- ^{xxi} Bacdayan 1974; Mosse 2003; Trawick 2001a; Wade 1988.
- ^{xxii} Heikkila 2004; Lopez-Gunn 2003; Marshall 2004; Wade 1988.
- ^{xxiii} Cleaver 2000; Mehta 2001; Mosse 1997; Ostrom 1990; Ostrom and Keohane 1995; Potkanski and Adams 1998; St Martin 2005.
- ^{xxiv} Ostrom 1990.
- ^{xxv} I am grateful to Rutgerd Boelens for this insight.
- ^{xxvi} Ashenafi and Leader-Williams 2005; Boelens and Doornbos 2001; Cremers et al. 2005; Potkanski and Adams 1998; Sokile and van Koppen 2004.

- ^{xxvii} Strang, 2004.
- ^{xxviii} Mosse, 2003.
- ^{xxix} Ley número 2878, do Promoción y Fomento al Sector Riego.
- ^{xxx} García et al. 2003; Olivera and Lewis 2004; Perreault 2006.
- ^{xxxi} Boelens and de Vos 2006; Boelens and Zwartveen 2005; de Vos et al. 2006; Perreault 2005.
- ^{xxxii} Finnegan 2002; Nickson and Vargas 2002; Perreault 2005; Perreault 2006.
- ^{xxxiii} Aldurralde et al. 2005.
- ^{xxxiv} I am grateful to Rocio Bustamente for these insights.
- ^{xxxv} Chile encountered some of these same issues after it created a system of water rights. See Bauer 1997, 1998; Budds 2004.
- ^{xxxvi} Baril et al. 2006; Blomquist and Schlager 2005; Sabatier et al. 2005.
- ^{xxxvii} Agnew 1999; Pierre and Peters 2000; Rhodes 1996; Swyngedouw 1997, 2004.
- ^{xxxviii} Kemper et al. 2005.
- ^{xxxix} Akbar et al. 2007; Gaye and Diallo 1997; Kyessi 2005; Sabatier et al. 2005.
- ^{xl} 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.
- ^{xli} Juuti et al. 2005; Katko 1992.
- ^{xlii} Birchall 2001; Birchall and Simmons 2004; Birchall 2002; Holtham 1997; Kay 1996; Morse 2000.
- ^{xliii} Bakker 2003; Co-operatives Secretariat, 2001; Curry and McGuire 2002; Emel and Roberts 1995.
- ^{xliv} Hall et al. 2005; Ruiz-Meir and von Ginneken 2006; Yavari 2005.
- ^{xlv} 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 (Bakker 2003). The joint USAID-JBIC “Clean Water for People Initiative” has built upon this model.
- ^{xlvi} For a discussion pertaining to water, see Norman and Bakker 2009. For a more general discussion, see Cooke and Kothari 2001.
- ^{xlvii} Jaglin 2000.
- ^{xlviii} Boelens 2008.
- ^{xlix} Norman and Bakker 2008.
- ^l TNI 2005.
- ^{li} Kay 1996.
- ^{lii} See Blokland et al. 2001.
- ^{liii} Lemos and De Oliveira 2005; Muzzini 2005; Ugaz 2002.
- ^{liv} See Scottish Parliament 2001. 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).
- ^{lv} Cleaver and Toner 2006.
- ^{lvi} 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 “mutualize” their operations following the successful mutualization of Welsh Water. See Bakker 2003b.
- ^{lvii} Cooke and Kothari 2001.
- ^{lviii} Franceys and Weitz 2003; Lemos et al. 2002; Mugabi et al. 2007; Stewart and Gray 2006.
- ^{lix} See, for example, the World Bank-sponsored Business Partners for Development, the UK government-sponsored Partners for Water and Sanitation network (www.partnersforwater.org); and the EU-sponsored Water Initiative (www.euwi.net).
- ^{lx} Hall and Lobina 2007; Jaglin 2002.
- ^{lxi} Batley and Moran 2004; Collignon and Vezina 2000; World Bank 2003.
- ^{lxii} Activists have actively promoted these public–public–partnerships, and the UN Secretary-General’s Advisory Board on Water and Sanitation (UNSGAB) has sponsored a formal initiative. Encouraged by the UN Commission on Sustainable Development’s official acknowledgment of the importance of promoting public–public partnerships, 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 (Hall and Lobina 2006, 2007; TNI 2006; UNCSD 2005). See PSIRU 2006; Public Citizen 2002; TNI 2005. There are other examples, such as the international extension by the U.S. National Rural Water Association of its “circuit rider” programme for training small system operators (www.nrwa.org/internationalruralwater/index.html)

^{lxiii} Bennholdt-Thomsen and Mies 1999; Meillassoux 1981; Perelman 2000.

^{lxiv} Strang 2004.

^{lxv} Cumyn.

^{lxvi} Corbridge et al. 2005

^{lxvii} McCarthy 2005; Mehta 2001; Mehta, Leach, and Scoones 2001.

^{lxviii} McCarthy 2005.

^{lxix} For example, in order to be financially sustainable, community-run systems often focus on (relatively) wealthier customers or neighborhoods, and/or exclude households which pose a risk of non-payment. Other “risk” factors (such as high mobility) also reduce the chances of the most disadvantaged households of gaining access to water. This illustrates the limited degree to which the urban poor are able to address issues of distributive justice; on the contrary, precisely because of their financial precariousness, they are likely to be driven to exclude other, more disadvantaged users.

^{lxx} Birchall, for example, 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).

^{lxxi} For instance, consider the degree to which consumer representatives can adequately and accurately reflect the interests of different constituencies. Other frequently voiced concerns include the likelihood of regulatory capture, and information asymmetries between consumers, the regulator, and the water supplier, not to mention the high costs of ensuring transparency and facilitating broad-based participation. Garande and Dagg 2005; Wolff and Hallstein 2005.

^{lxxii} This is another way of formulating the argument (discussed in earlier chapters) that “ownership” (i.e., public versus private) is less important than institutions (rules, norms, and laws) and governance (decision-making processes). 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 improved efficiency, accountability or managerial outcomes. This may be the case because the degree of power that consumers can effectively assert does not 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 other important barriers. See Garande and Dagg, 2005, Wolff and Hallstein, 2005.

^{lxxiii} This, of course, is consistent with the flourishing of the “new localism,” which views local involvement as necessary and positive, both as a means of supplanting higher order levels of government and as a mechanism to foster social capital. Brown and Purcell 2005, 607. Corry et al. 2004; Raco 2000; Raco and Flint 2001.

^{lxxiv} Corry et al. 2004; De Loe et al. 2002; Gibbons 2001, O’Riordan 2004.

^{lxxv} Cochrane 1986; Evans 2004.

^{lxxvi} The local trap is an analytical counterpart to Agnew’s “territorial trap,” which was originally applied to debates within international relations and political geography, but has important resonance within the environmental governance literature. See Norman and Bakker 2008.

^{lxxvii} Gibson-Graham 2006.

^{lxxviii} Fischhendler and Feitelson 2005; Gleick 1993; Kliot, Shmueli, and Shamir 2001.

^{lxxix} De Loe, DiGiantomasso, and Kreutzwiser 2002.

^{lxxx} Cochrane 1986; Taylor 2004; Van Rooy 1997, 2004.