PROBLEMS OF PUBLICNESS AND ACCESS RIGHTS: PERSPECTIVES FROM THE WATER DOMAIN

Lyla Mehta

Since the publication of Kaul, Grunberg, and Stern (1999) a growing number of issues have been examined from the viewpoint of global public goods—from climate change to financial stability and HIV/AIDS control. Some of these analyses have been textbook-like cases describing idealized situations divorced from the sociopolitical and cultural realities in which public goods (and bads) are embedded. Rather than add another issue—water—to this literature, this chapter evaluates the concept of global public goods in terms of its usefulness for guiding debates on people's access to water.

The chapter argues that more attention must be paid to two issues:

- Diverging perceptions of the nature of the good and of how it should be accessed and delivered.
- The power of different actors in determining its distribution.

Neglecting these issues can impede local, regional, and international efforts to enhance the equitable distribution of public goods, a point often overlooked in the rather idealized literature on global public goods.

Water is a contested resource: though it is often considered a common pool resource, it is rival in consumption. In many parts of the world people no longer perceive water as a common good. As a result it divides communities. Access to water reflects power asymmetries, socioeconomic inequalities, and other distribution factors such as land ownership. Moreover, the scope of water's benefits and the reach of its externalities—which struggles over its use may generate—are mostly local or national. In some cases they may have regional repercussions. But the notion of "global water wars" may be exaggerated. Thus water is far from having the properties of a global public good.

Parts of this chapter draw on Mehta (2000). The author is grateful to Arnab Acharya, Keith Bezanson, Peter Davis, Birgit Brixen Jacobsen, and Celestine Nyamu for valuable suggestions and comments.

Still, it is important to evoke the notion of water's publicness—especially given the current globalisation of water and recent moves to turn water, essentially an impure and highly localized public good, into a globalized private good. Many analysts argue that because water is increasingly scarce, it is increasingly valuable—and that this value should be made evident by pricing water and allowing markets to establish the "right" price for it.

But these developments and debates sometimes overlook the needs of poor people. Their needs should be considered by emphasizing water's central role for life in general and human well-being in particular. It can be argued that policies should make water a global public good by design. But given the contested nature of water, evoking its publicness may not be enough. Making goods public by design is only a means. The desired end of making water a public good is ensuring all people's access to it. Thus it is imperative to institutionalize access to water as a human right.¹

This chapter begins by examining situations that shape people's access to water and hence its public availability. It then explores the extent to which water has local, national, regional, or global dimensions—or even all of them in some measure. The discussion then turns to current debates on the notion of water as an economic good that would best be managed by markets or, at least, market-based mechanisms. This perspective is contrasted with the view that access to water is a human right. Finally, the chapter explores how the notion of global public goods can be used to promote people's access to water as a human right.

Is water a common or contested good?

Water is essential for all aspects of life. It is the lifeblood of ecosystems, vital for many eco-hydrological functions. In addition, rivers, wells, and seas are crucial to many people's livelihoods. For poor people, access to clean and affordable water is a prerequisite to achieving a minimum standard of health and to undertaking productive activities—particularly in rural areas, where poor people often depend on agricultural activities on both rainfed and irrigated lands. People around the world value water for both its noneconomic and economic characteristics. Water also has deep symbolic and spiritual significance in many cultures, ranging from the holy significance of the Ganga and Narmada rivers in India to the role of Balinese water temples in irrigation management in Indonesia (see Mehta and Punja forthcoming and Lansing 1987 for a discussion of the symbolic and cultural value of water.).

In recent years much prominence has been accorded to water issues at the national, regional, and international levels. Water is a key area for social and public policy and is acquiring growing importance in international development. But does that mean that water is a public good? Public goods provide benefits not confined to a single individual and, once provided, can be enjoyed by many people

for free. In other words, pure public goods are nonrival and nonexcludable in consumption. A good example is national defense.

Water generally does not exhibit such features. For example, oceans provide benefits to aquatic and human life, usually for free. But the overuse or abuse of an ocean by one group through, say, the release of effluents in location X will lead to pollution and the depletion of fish stocks in location Y, undermining people's capacity to benefit from the ocean. Thus in this case the ocean is rival in consumption. Rivers and waterways are also rival in consumption in that overuse and pollution undermine their potential benefits.

Following the conventional notion of public goods, water is usually seen as an impure public good—as a common pool resource that is nonexcludable but rival in consumption. Indeed, a vast body of work has documented how people collectively act and use various institutional arrangements in managing their water supplies, often under conditions of water scarcity. For example, pioneering work on irrigation by Coward (1985) and Uphoff (1992) analyzes the strengths of indigenous systems in managing common pool resources. Wade (1988) and Ostrom (1990) analyze the factors enhancing collective action in irrigation systems and the conditions under which local institutions are used to manage local water resources.

Many empirical studies have shown how people cooperate in times of resource pressure and scarcity (Berkes 1989; Bromley and Cernea 1989; Ostrom 1990). In addition, common property scholars have shown how Hobbesian notions of anarchy—where states, regions, and people engage in noncooperative strategies and fight over scarce resources—may not be accurate or predictable. For example, research has shown that local people and global stakeholders have deep understanding of water in their immediate environments and tend to cooperate in times of adversity to avoid the high transaction costs that would result from a failure to comply (Ostrom 1990; Ostrom and Keohane 1995). All these studies explicitly or implicitly draw on the notion of water as a common property resource. But what constitutes the commons?

A growing body of work points to the limitations of some of these collective action approaches in water (see Mosse 1997; Mehta 2001; Cleaver 2000; and Potanski and Adams 1998). Anthropological and sociological studies have highlighted the flaws of valorizing indigenous institutional arrangements without understanding their complexity. Criticism is also levied on ahistorical and apolitical understandings of local communities and collective action arrangements. Moreover, conventional community-based management approaches have based their analyses on simplistic notions of the community and community management. These notions tend to obscure questions about social differentiation in water management and about the power relations that shape water use even at the community level. Thus local management of natural resources can be conflict-ridden, exclusive, and characterized by competing knowledge claims (Mehta, Leach, and Scoones 2001). Members of the same society can have very different access to and control over land and water resources. For example, detailed research on water scarcity in the Indian village of Merka found that common property resources are highly contested. Their use is determined by factors such as feudal legacies, gender, class, caste, and power relations (Mehta 2001).

In such situations it is impossible to speak of water as a common good because there is no common or collective community. People see water as an issue over which they compete and are divided. Thus there is an urgent need to broaden the notion of water users. In most cases users are disparate groups with diverse institutional and social positions.

These issues suggest that the standard definition of public goods is too abstract and formal to capture real-life ambiguities in the diverse water worlds that people draw on to survive and to sustain their livelihoods. The factors that mediate or hinder access to public goods tend to be glossed over. For example, Sandler (1999) refers to groundwater pollution cleanup as a pure public good. But access to groundwater is usually inalienably linked to land rights. Thus the landless may benefit significantly less than the landed in terms of access to drinking water and irrigation.

Power relations and knowledge asymmetries are only beginning to gain currency in public goods discussions that address the role of preferences (see ODS 2001 and Sweden Ministry for Foreign Affairs 2001a). But they are often key factors in determining how public goods are delivered and accessed. Thus it is important to distinguish between the theoretical or abstract notion of water as a common pool resource and water as a real-life resource beset with problems of access. Goods may be public in theory but not in practice.

IS WATER GLOBAL OR LOCAL?

How global is water? Since the Mar del Plata Conference in 1977, there have been several international declarations on water. In addition, many supranational organizations (often referred to as global public policy partnerships; see Kaul and Ryu 2001; Reinicke 1998; and Reinicke and Deng 2000)—such as the World Commission on Dams (http://www.dams.org/), World Water Council (http://www.walrus.com/~abe/wwc/background/organization.htm), and Water Supply and Sanitation Collaborative Council (http://www.wsscc.org/)—are addressing global water problems and issues. But do these efforts make water a global public good?

To qualify as a global public good, a good's benefits or costs must be quasiuniversal. Examples include communicable disease control and the global cultural heritage. Water, by contrast, tends to be highly localized and at best regional in scope. Its availability varies over time and space and depends on such factors as climate, season, and temperature. Rainfall, vegetation, and grass cover vary from place to place, making it difficult to provide blanket statements on the global state of water.

Furthermore, most people experience and perceive water differently. In rural Kutch in western India, villagers refer to water in seven ways (sweet, saline, bland, surface, subterranean, ripe, and raw), and each type has different costs and benefits for different groups (Mehta 2002). Villagers have locally rooted notions about how water should be shared, distributed, and consumed. Thus water is rooted in and defined by its locality (Mehta 2002; Robert 1993). Even river management across basins and borders is rarely global is scope (Sweden Ministry for Foreign Affairs 2001b). Successful transboundary river management (as on the Nile) will likely facilitate dialogue in a certain region (the Middle East) but will probably not do much to enhance or undermine global peace. In such cases water is at best a regional public good.

What about notions of global water crises and global water wars? Could these be considered global public bads, universally affecting people's well-being and health? The figures are well known. An estimated 1.1 billion people lack access to safe water and almost 2.5 billion people—40 percent of the world's population—lack access to adequate sanitation (Neto and Tropp 2000, p. 227). Moreover, it has been argued that increasing global consumption of water coupled with population growth will lead to severe water shortages, with profound effects on food security, health, and human well-being (Postel 1992, 1996).

But these negative impacts will not be uniform around the world. Access to water between countries, within regions and countries, and between women and men is highly unequal. Apart from obvious geographic differences between water-rich and water-poor areas, water shortages have different effects on different social groups (Mehta 2002). The analogy of parched throats amid lush green irrigated fields is well known. Issues of power and control over water become more acute as its scarcity increases.

The speculated water wars could be global. Ismail Serageldin has asserted that many of the wars of the 21st century will be about water, not oil (Cooper 1995, p. 1115). But as Wolf (1997) argues, no major war has been fought over water in recent millenniums. By contrast, 145 water treaties were signed in the 20th century to enhance cooperation between states on water issues. Of course, water can be used as a weapon of war. If the Indus Water Treaty were violated by India or Pakistan, there would be massive destruction to lives and property—but here too the destruction would largely be regional, not global. Similarly, conflicts over the River Jordan are unlikely to affect large segments of the world population, as would a global public bad.

But even if one avoids populist statements about global water crises and water wars, there is no reason to be sanguine. Flawed management has led to polluted

and overexploited freshwater sources—including rivers, streams, lakes, wetlands, and groundwater aquifers—undermining water quality and making it unfit for human use. Moreover, freshwater withdrawals have doubled in the past 50 years (WCD 2000). Rising and competing demands have increased pressure on water resources, resulting in higher vulnerability, food insecurity, poverty, and ill health for people as well as negative impacts on the environment.

Thus the notion of global public goods is not entirely applicable to water. Water is best seen as an impure public good with local, national, or regional benefits and costs. Moreover, because access to water is mediated by power relations, it is highly unequal. Water is also a highly contested resource that is engendering active political and economic debates.

POLITICAL STRUGGLES OVER WATER

Current debates on water are guided by two opposing views. One is that water is an economic good that should be priced and would best be managed through markets or at least through market-based mechanisms, such as user fees and charges. The other view is that access to water is a human right.

The changing nature of water: from common pool resource to private good Many water debates and policies seek to shift its position on the public-private continuum. One step in this direction is being taken by those who argue that water is an economic good that should be priced in the interest of its efficient management. Another is being taken by those who believe that water services should be privatized.

Water as an economic good. Since the Dublin Declaration of 1992 (http://www. wmo.ch/web/homs/icwedece.html), water is increasingly seen as having economic value in all its competing uses. By implication it is being argued that the basic human need for safe drinking water is no longer a sufficient criterion for providing an engineered supply free of charge (Black 1998, p. 55). Because water is scarce, goes the logic, it must be used judiciously and its demand managed. Free water is considered wasted.

Accordingly, efficient resource management is equated with water having a price.² The price signal is thus evoked as a way to solve water scarcity problems. The underlying assumption in most discourses—especially those originating in donor countries—is that there is congruity between viewing water as a right and as an economic good. For example, the United Nations Children's Fund (UNICEF) and the World Water Council mention economic efficiency arguments and rights-based arguments in the same breath (see Nigam and Rasheed 1998, pp. 3–7). It is argued that even if something is a right, there is no denying the need to pay for it, as with food.

Public policy at the international level has focused on the neglect of demand management in water supply and sanitation, particularly in developing countries. By contrast, in countries such as India water supply has traditionally been considered a social welfare measure (Reddy 1999, p. 80), though many Indian households pay for public water services. But due to liberalization there has been a push to recover costs in the water sector, especially for service delivery.

Much has been made in the literature of households' willingness to pay for water (Altaf, Jamal, and Whittington 1992; Whittington and Choe 1992). Willingness to pay is usually estimated to be 1–10 percent of household spending and about 5 percent of household consumption. But recent studies are challenging these assumptions, and speak of linking willingness to pay to ability to pay (Reddy and Vandemoortele 1996; Ghosh and Nigam 1995). For example, in the water-scarce Indian state of Rajasthan, Reddy (1999) finds that willingness to pay is much less than 5 percent of consumption. Yet willingness to pay proponents usually treat households as black boxes, ignoring the power dynamics within them, the naturalization of women's water-related tasks, and the low opportunity costs attached to women's time.³

This is not to say that poor households do not pay for water. In some parts of the world poor households spend a staggering 25 percent of their income on water (Barlow 1999).⁴ In rural India private water markets exist alongside public provision. Some poor people are more willing to buy water from neighbors or water vendors than to pay fixed rates for communal water supplies. In other contexts poor people may not want to pay for communal water when they can get it for free from a local water hole. For them, free water is desirable water.

This discussion points to the tremendous variation in people's decisions about their water supplies—both within and between rural and urban areas and among men and women. In some cases water can simultaneously be a free good, an economic good, and a social good. Public and private water supplies often exist side by side, and the choices that people make about providers depend on a variety of reasons that might not seem entirely rational to outsiders. Thus there is a continuum of public and private goods in the water domain.

Uniform, nondiscriminatory water pricing may not capture all these institutional dynamics and may be unfair to poor people, particularly women. Furthermore, uniform pricing does not take into account externalities such as health issues. When people cannot afford clean water and sanitation, it can lead to the spread of diseases—with children, women, and the elderly being the most vulnerable.

In addition, the low opportunity costs attached to women's time in many parts of the world, combined with their limited decisionmaking power in households, may not lead to a pressing desire among household heads to support better water supply systems for which they would be willing to pay. Thus cultural practices and social and gender relations also influence water pricing. Market forces do not operate in a vacuum: they are influenced by social practices, cultural norms, and local institutional settings.

Could merely declaring water an economic good lead to its more prudent use? Some kind of demand management is required to curb excess water consumption by powerful actors—such as swimming pool owners in the deserts of Arizona (United States) or irrigation water lords in western India who are responsible for a declining water table. Demand-based approaches should not unduly tax poor people and should prevent rich people from being exonerated from water thefts. The polluter pays principle has proven effective in reducing industrial water pollution and water use. It could also be applied to other types of water consumption (such as irrigation use and agricultural runoff).

But it would be flawed to think that the acceptance of water as an economic good is the only way to solve water shortages or generate more efficient water use. There is a danger that pricing mechanisms might tax poor rather than rich people. To avoid that, water prices should be structured progressively, with cross-subsidies that charge rich people more for higher consumption and better services. Without such redistributive mechanisms as well as demand-based measures, skewed access to and control over water resources will continue—worsening water shortages.

Privatization of water services. In recent years water has moved away from being viewed as a common good (however impure) and public service to a commodity being managed according to economic principles (Finger and Allouche 2002, p. xiii). This change is partly due to the growing influence of powerful players—such as the World Bank and transnational corporations—that are paving the way for the privatization of water services. At the World Water Forum in The Hague (Netherlands) in 2000 and to a lesser extent at the International Conference on Freshwater in Bonn (Germany) in 2001, there were heated debates about the private sector's role in delivering water. One of the main arguments for privatizing water services is that the public sector lacks finances for all the massive investments entailed (World Bank 1994). Moreover, the public sector is made out to be too bureaucratic, inefficient, and corrupt.

By contrast, the private sector is invoked as being flexible, efficient, and essential. According to Ismail Serageldin, chair of the World Commission on Water for the 21st Century (http://www.worldwatercommission.org/), turning over water services to private corporations is one of the best ways to provide good services to poor people at suitable prices (Petrella 2001, p. 72). Private sector involvement in basic services has also been thrust on many African countries as part of the conditionalities imposed by the World Bank in the course of economic restructurings.

The polarized state-market opposition in global water debates seems to be missing a crucial point. If it is agreed that enhancing poor people's water security is a basic goal of water interventions, then increasing access and addressing equity concerns emerge as high priorities. The driving question thus needs to be: does privatization promote increased, more equitable access to water?

Poor people often pay much more for water than do rich people. In South Africa some poor rural residents pay 10 times more for water than do rich yet consume just one-tenth as much. Would private involvement redress this inequity? Experiences with water privatization have not always been poor-friendly. One reason involves the nature of water markets. Because water companies are usually monopolies and so face little competition, they tend not to be very responsive to user needs. Thus there has been a marked lack of incentives to service non-profitmaking sectors (such as rural residents and the urban poor) or to invest in unprofitable sectors (such as wastewater and sanitation; see Finger and Allouche 2002 and Ugaz 2001).

In many cases water prices have been raised beyond agreed levels within a few years of privatization, and people who could not pay have been cut off (Bayliss 2001; Petrella 2001).⁵ But privatization has often also enhanced efficiency—reducing leakages and improving billing and collections (Nickson 2001). In Manila (the Philippines), however, the private operator failed to protect water from environmental degradation (Finger and Allouche 2002, p. 167). And a three-country study in Africa found that although privatization lowered tariffs and improved billing and collections, high prices and disconnections hit the poorest groups in society the hardest (Bayliss 2001).

Moreover, overlapping institutional arrangements have led to confusion about responsibilities for maintenance and investment.⁶ Private companies have often ignored existing regulation. In addition, the regulatory framework so key to water privatization in, say, the United Kingdom, is badly flawed in many developing countries. Privatization also does not eliminate government's key role in capital investment, especially in short-term concessions. For the most part the global market for private water services is dominated by a few French multinational corporations. Research on French water companies has revealed a marked lack of transparency and several corruption scandals (Petrella 2001, p. 99).

Privatization of water services appears to have worked best in areas that benefited from earlier state subsidies. In countries lacking strong state investments, it remains to be seen how private corporations will ensure water provision to poor people, particularly during periods of economic insecurity and recession. In addition, privatization models focus on drinking water provision and tend to have a strong urban bias. It is not yet clear how they can be applied in rural areas where people sustain their livelihoods in a diverse and holistic manner, and where reliance on the state, donors, and nongovernmental organizations (NGOs) is greater. Moreover, it is doubtful whether the private sector will invest in sewerage and sanitation, which are less profitable than water supply.

Another dimension involves water's potential to become a tradable commodity. It is not inconceivable that in the near future, treaties on trade—such as the North American Free Trade Agreement or agreements under the World Trade Organization—will allow corporations to mine the water of water-rich areas and transport it to water-poor areas (for example, water exported from water-rich Canada to California or from Austria to southern Europe). Corporations such as Monsanto are moving into the water sector and establishing water businesses in India and Mexico, capitalizing on these countries' acute water shortages (Shiva 1999).

The amount of public money in the water sector is staggering. For example, between 1992 and 1997 the Indian government spent more than \$1.2 billion on water projects—while the World Bank spent \$900 million (Shiva 1999). If this public money were diverted to the private sector, control over this crucial resource would be a guarantor of profits in an age of grave water scarcity (both manufactured and real). Theoretically, the mass transportation of water from water-rich to water-poor areas could have humanitarian motives. But it is unlikely that corporations will be in the water business and encourage the mass transportation of water and sanitation. Thus, from being the last bastion of state intervention, water is increasingly emerging as the "last infrastructure" or "blue gold" for private investors (Barlow 1999).

The commodification of water could erode people's informal rights to free water. For example, in many poor rural communities in Bangladesh, people have access to free water from wells on private land. The sale of such water in some parts of water-abundant Bangladesh is unthinkable. How would the promotion of saleable water affect local norms of informal rights to water for all? It is hard to imagine an outcome that is anything other than detrimental for most people, especially the poorest. Far more nuanced research is required on the nexus between livelihoods, rights, and environmental integrity in issues involving the privatization of water services, at the local level and globally—for example, under the General Agreement on Trade in Services. Until the potential consequences of trade in water are fully assessed, water should not be turned into a tradable commodity.

Is access to water a human right?

In the 1970s international debates stressed the importance of water in meeting basic needs such as health and sanitation. Health care was considered a responsibility of national government, and experience—particularly from the United Kingdom in the 19th century—showed that better water supplies and sanitation were a key driver in this area. The debates highlighted the roles of the state, government, and donors in providing basic water services.

More recently, a growing number of analysts have argued eloquently that access to safe and adequate water is a human right.⁷ Advocacy for positive rights—such as access to water, food, and shelter—marks a sharp change from the negative or liberal understanding of rights that underpins notions of liberal

democracy. (For example, the right to free speech is construed as freedom from interference in expressing one's opinions rather than the right to have the information and education needed to develop opinions.) Neoliberal traditions have traditionally viewed negative civil and political rights as essential to understanding what, for example, constitutes citizenship.

But these traditions have been reluctant to award the same widespread attention to social and economic rights, because such rights have strong links to social justice and imply moving away from the neoliberal notion that people's socioeconomic status is determined by the market (Plant 1998, pp. 57–58). Over the past century, however, citizenship has increasingly been seen as encompassing social and economic rights. In fact, the distinction between negative and positive rights is highly problematic because both involve state intervention and commitments for their protection.

Supporters argue that water and sanitation are not just basic needs but fundamental human rights based on the criteria established in the 1948 Universal Declaration of Human Rights (which, incidentally, does not distinguish between negative and positive rights) and made explicit in the 1986 Convention on the Rights of the Child. Recognizing water as a human right would require creating national and international legal obligations and responsibilities, making water a focus of world attention, and stipulating a minimum allocation of water per person.

Various donors have suggested basic per capita water requirements ranging from 20–50 liters a day regardless of culture, climate, or technology. For example, South Africa's White Paper on Water Policy, considered the state of the art in water resource literature, sets the per capita allocation at 25 liters a day (http://www.polity.org.za/govdocs/white_papers/water.html). In its Vision 21 the Water Supply and Sanitation Collaborative Council defines an absolute per capita minimum of 20 liters a day (WSSCC 2000). But the council also recognizes that any estimated minimum should be qualified by considerations of culture, service levels, and distances between water sources and users. The council notes the additional health benefits that come with household connections, which usually result in minimum per capita consumption of 40 liters a day. Vision 21 also recommends that every country promote several basic hygiene practices (WSSCC 2000, p. 35). And it links the right to water with a broader vision of human development, poverty reduction, and empowerment of poor people, particularly women (WSSCC 2000, pp. 5–6, 13).

Gleick (1999) and other analysts call for a fixed allocation of water resources. But it seems more useful to insist that people all over the world have access to safe and adequate water that ensures a basic level of healthy functioning and wellbeing—as in the capabilities approach developed by Sen (1992) and more recently by Nussbaum (2000). In this approach the focus is not on the quantity of entitlements but on the principle of equality and capability to do and to be. The absolute quantity of water that people require differs based on age, gender, religion, occupation, and so on. But the principle of ensuring sufficient water to achieve a minimum capability remains the same. This minimum requirement may be extended to water for production in some cases (as recent debates in South Africa, for example, suggest). Indeed, seeing water within the capability framework would require strong state intervention and responsibility in providing access to it as a human right and as a key element of citizenship.

There are compelling arguments for viewing access to water as a human right. Significantly improving water and sanitation can reduce the spread of disease and improve people's health and well-being. It can enhance poor households' dignity and independence and free up the one to four hours a day poor women and children spend collecting water. Declaring access to water as a human right could also limit the commodification and commercialization of water, because market mechanisms are unlikely to guarantee its provision to all people—and certainly not on a fair basis.

How could the human right to water be financed? The responsibility of national governments for ensuring the minimum supply required for people's well-being and survival—that is, to achieve a minimum capability—cannot be underestimated. This could be in the form of a free lifeline of water that meets people's basic requirements based on local conditions. The 20/20 Initiative proposed at the 1995 World Summit for Social Development, aimed at achieving universal access to basic social services, suggests taxing rich people and allocating 20 percent of official development assistance and 20 percent of developing country budgets to these services (UNICEF 1994). Vision 21 recommends creating cross-subsidies, swapping debt relief for basic service delivery, and reallocating measures include increasing donor commitments to public services and urging donors to avoid requiring private investment in public services as a condition of aid.

The notion of water as a human right lacks widespread support from the powerful actors that shape global water debates, most of whom prefer to see water security for all as a goal rather than as a universal right. There are several reasons for their lack of support. Rights usually go hand in hand with responsibilities. And if the responsibility for providing water is slowly being shifted to a variety of actors with strong market leanings, ensuring the human rights of poor people might not be a top priority relative to increasing efficiency and maximizing profits. In addition, the United States has always been resistant to advancing social and economic rights, which even today weakens the political feasibility of water as a human right. Furthermore, accepting water as a universal right would require suggesting that, at least theoretically, water is a global public good by design—public in consumption, there for all to consume, and requiring strong government commitments combined with international cooperation and resource transfers.⁸

Hence there is an unresolved struggle between efforts aimed at making water more private, in the interest of efficiency; and making water public by design, in the interest of equity. This struggle often stems from the fact that people do not distinguish between water as a resource that may be free and the services involved in it delivery—which, at least in urban areas, entail costs. More important, the struggle persists because of reluctance among powerful players to acknowledge that principles of social and economic justice must not be sacrificed for reasons related to wider political economy.

CONCLUSION

This chapter began by arguing that it is difficult to view water as a global public good because its costs and benefits differ widely across the globe. Water is not a pure public good. Instead it is best seen as an impure public good or common good, bearing in mind that technical definitions of global public goods have tended to ignore users' competing claims and interests in the benefits and losses of commons.

Thus water provision needs to be organized according to the scope of the water system in question. At times it will have to be managed locally, at other times nationally, and other times regionally. In addition, constant attention must be paid to power asymmetries and inequalities in water distribution and delivery at the local, national, and regional levels. Central governments could ensure that all voices are heard.

Safeguarding water as a public good, however impure, also depends on the range and scope of the resource base. At the local level, water harvesting and microcatchment treatment, if done sensitively, can lead to both social equity and ecological regeneration. On a regional scale, river basin management can enhance both regional cooperation and ecosystem needs. In recent years integrated water management has been promoted as the best way to integrate socioeconomic and natural resource systems, with the catchment as the unit of management. Integrated management requires developing governance structures and institutions that reflect the physical and social complexities of planning, decisionmaking, and implementation and that balance the needs of people, industry, and agriculture (GWP 2000). Although integrated management is worthwhile, there is a need to ensure that it is not implemented in a top-down manner—failing to incorporate the perspectives of the disempowered—and without provisions for negotiation, conflict resolution, and deliberation.

Water rights are embedded in wider legal instruments and tenure arrangements that can be competing and conflicting, calling into question water's publicness. But water can be made more public through institutional mechanisms that protect it from overuse and misuse and that devise equitable distribution processes. These mechanisms need to be rooted in local and regional dynamics, avoiding top-down global blueprints—and with decisionmaking based on negotiated outcomes.

The poorly defined nature of water rights can lead to conflicts over access. For example, if rich farmers' land rights allow them to overexploit communal tanks, it can undermine their poor neighbors' right to water. Similarly, if a transnational corporation acquires rights to provide water in a certain area, it can affect a poor community's right to access safe and adequate water. Thus the contested nature of water rights requires an explicit acknowledgement of the human right to water in UN and international water declarations.⁹

At the 2001 Bonn Freshwater Conference many stakeholders—including representatives of governments and business—made verbal endorsements of the human right to water, but the final conference document failed to explicitly acknowledge it. Legal protection is required to ensure commitment, to provide grounds for redress in cases of accountability failures, and to mobilize resources at local and international levels. One approach to legal protection would be to institute a universal human right on access to safe and adequate water.

Even though water is rarely global in scope, there is considerable scope for international action and cooperation. As the Bonn Freshwater Conference showed, stakeholders ranging from NGOs to businesses and governments can reach consensus on key issues and recommendations for action. Moreover, international cooperation has become increasingly important given the global nature of water debates and of social movements calling for equity in the ownership and management of water resources.

Some analysts have argued that creation of a world water parliament and several regional water parliaments could formalize social and economic rights to water. These rights could be evoked in cases of competing claims over the same resource base—for example, people's right to water should take priority over economic development and national interests. There is also a need to provide mechanisms to redress grievances. For example, people could turn to an international body such as a world water court if their right to water was violated. Such a court could also help resolve interbasin disputes within regions.

These principles should also inform decisions on the provision of water. All players—NGOs, businesses, public institutions—need to work toward water justice. Empirical research is lacking on how the private sector has performed in terms of promoting poor people's access to water. Until more data exist, the international community must ensure that private participation is not imposed on developing countries as part of aid programs. In addition, national governments need to develop inclusive regulations that protect the interests of poor people (see Finger and Allouche 2002 and Ugaz 2001).

Similarly, public-private partnerships require the consent of local communities. The voices of local actors, especially women, need to be sought given that public-private partnerships rarely take place on level playing fields. National and international civil society organizations should continue to monitor public and private agencies to ensure transparency and accountability. In addition, the international community must ensure that water is not allowed to become a global commodity, tradable on the open market, because this could seriously undermine people's right to it.

Supranational organizations such as the World Commission on Dams and the Global Water Partnership (http://www.gwpforum.org/servlet/PSP) will continue to play an important role in global water governance. Donors and the international community should build on and institutionalize the recommendations made by the World Commission on Dams for decisionmaking in developing water resources. These recommendations include thoroughly investigating all options and alternatives, obtaining the free, informed, and prior consent of indigenous people, securing public acceptance of binding formal agreements among all stakeholders, and implementing arrangements for monitoring and addressing grievances from future projects (WCD 2000). The challenge in governing water resources is striking a balance between the principles of subsidiarity and global governance, bearing in mind the messy middle of institutional overlaps, power, and politics. Because water is so crucial for human survival and for the integrity of nature, efforts to make water more public and ensure everyone's access to safe and adequate supplies need to be embedded in local realities combined with global action and concern.¹⁰

Notes

1. This statement is made with full awareness of the contested, political nature of human rights declarations, of critiques of sweeping universalism, and of the need to locate rights-based discourses in local contexts (see Baxi 2002). But access to safe and adequate water is fundamental and requires unequivocal official endorsement as a human right—though notions of what this right constitutes must be subjected to discursive contest

2. One argument could be that water for production (industry and large-scale agriculture) is an economic good has investment costs, capital costs, operations and maintenance costs, and opportunity and environmental costs. See also Winpenny (1994).

3. There are several similar, perhaps more sophisticated debates about user fees in primary health care and primary education—and the two sectors offer many lessons for water.

4. In Indian slums people also pay for "free" water provided by municipal authorities through bribes to truck drivers and tap operators.

5. For example, in Manila (the Philippines), even though winning tenders had specified price levels, International Water (a U.K.-U.S. consortium) doubled prices within two years. In the highly controversial plan to privatize water services in Cochabamba, Bolivia, prices would have increased 35 percent (Hall 2000).

6. In many cases the private company provides services in an arena that had been dominated by informal vendors and local entrepreneurs. This increases people's choice but also competition and confusion. The role of informal and unregistered service providers in the delivery of water and the relationship between informal and formal providers are underresearched and unresolved.

7. See, for example, the NGO statement at the Bonn Conference on Freshwater (NGO Major Group 2001); Vision 21 of the Water Supply and Sanitation Collaborative Council (WSSCC 2000); Petrella (2001); Gleick (2000); Jolly (1998), and right-to-water@iatp.org.

8. Practically, this would not be possible given all the constraints outlined in the first two sections of this chapter.

9. It is problematic that several major references on human rights have no specific citations related to water (see Gleick 1999). Whether water is implied, as suggested by Gleick (1999), is open to question.

10. This is in keeping with contemporary human rights debates that accept the complicated, historical nature of these rights and argue for cultural variation and contextualization without changing the definition of the rights (see Cowan, Dembour, and Wilson 2001).

REFERENCES

- Altaf, Mira Anjum, Haroon Jamal, and Dale Whittington. 1992. "Willingness to Pay for Water in Rural Punjab, Pakistan." Water and Sanitation Report 4. United Nations Development Programme–World Bank Water and Sanitation Programme, Washington, D.C.
- Barlow, Maude. 1999. "Blue Gold: The Global Water Crisis and the Commodification of the World's Water Supply." International Forum on Globalization, San Francisco, Calif.
- Baxi, Upendra. 2002. *The Future of Human Rights*. New Delhi: Oxford University Press.
- Bayliss, Kate. 2001. "Water Privatisation in Africa: Lessons from Three Case Studies." University of Greenwich, Public Services International Research Unit.
- Berkes, Firket. 1989. Common Property Resources: Ecology and Community-Based Sustainable Development. London: Belhaven Press.
- Black, Maggie. 1998. "Learning What Works: A 20 Year Retrospective View on International Water and Sanitation Cooperation." United Nations Development Programme–World Bank Water and Sanitation Programme, Washington, D.C.
- Bromley, Daniel, and Michael Cernea. 1989. "The Management of Common Property Natural Resources: Some Conceptual and Operational Fallacies." Discussion Paper 57. World Bank, Washington, D.C.
- Cleaver, Frances. 2000. "Moral Ecological Rationality, Institutions and the Management of Common Property Resources." *Development and Change* 31 (2): 361–83.

- Cooper, Mary H. 1995. "Global Water Shortages." *Congressional Quarterly Researcher* 5 (47): 1113–34.
- Cowan, Jane, Marie-Bénédicte Dembour, and Richard A. Wilson. 2001. *Culture and Rights: Anthropological Perspectives.* Cambridge: Cambridge University Press.
- Coward, E. Walter Jr.. 1985. "Technical and Social Change in Currently Irrigated Regions: Rules, Roles and Rehabilitation." In Michael M. Cernea, ed., *Putting People First: Sociological Variables in Rural Development*. Oxford: Oxford University Press.
- Finger, Matthias, and Jeremy Allouche. 2002. Water Privatisation: Trans-national Corporations and the Re-regulation of the Water Industry. London: Spon Press.
- Ghosh, Ghourishankar, and Ashok Nigam. 1995. "Comments on 'Financing Water Supply and Sanitation under Agenda 21' by John Briscoe and Mike Garn." *Natural Resources Forum* 19 (1): 161–65.
- Gleick, Peter H. 1999. "The Human Right to Water." Water Policy 1 (5): 487-53.
 - ——. 2000. The World's Water 2000–2001: The Biennial Report on Freshwater Resources. Washington, D.C.: Island Press.
- GWP (Global Water Partnership). 2000. "Integrated Water Resources Management." Technical Advisory Committee Background Paper 4. Stockholm.
- Hall, David. 2000. "Water Privatisation—Global Domination by a Few." Corporate Watch 12 (autumn). [http://www.corporatewatch.org.uk/magazine/issue12/ cw12w1.html].
- Jolly, Richard. 1998. "Water and Human Rights: Challenges for the Twenty-First Century." Address at the Conference of the Belgian Royal Academy of Overseas Sciences, 23 March, Brussels.
- Kaul, Inge, and Grace Ryu. 2001. "Global Public Policy Partnerships: Seen through the Lens of Global Public Goods." In *Global Public Goods: Taking the Concept Forward*. Office of Development Studies Discussion Paper 17. United Nations Development Programme, New York.
- Kaul, Inge, Isabelle Grunberg, and Marc A. Stern, eds. 1999. *Global Public Goods: International Cooperation in the 21st Century.* New York: Oxford University Press.
- Lansing, Stephen. 1987. "Balinese 'Water Temples' and the Management of Irrigation." *American Anthropologist* 89 (2): 326–41.
- Mehta, Lyla. 2000. "Water for the Twenty-First Century: Challenges and Misconceptions." IDS Working Paper 111. Institute of Development Studies, Brighton, U.K.

—. 2001. "Water, Difference and Power: Unpacking Notions of Water 'Users' in Kutch, India." *International Journal of Water* 1 (3–4).

—. 2002. "The Naturalisation of Scarcity: The Politics and Poetics of Water in Kutch, India." Brighton: Institute of Development Studies.

- Mehta, Lyla, and Anand Punja. Forthcoming. "Changing Water Worlds: Official and Resettlers' Perceptions of the Water/Wellbeing Nexus in Gujarat." In Amita Baviskar, ed., *The Cultural Politics of Water*. New Delhi: Oxford University Press.
- Mehta, Lyla, Melissa Leach, and Ian Scoones. 2001. "Editorial: Environmental Governance in an Uncertain World." *IDS Bulletin* 32 (4).
- Mosse, David. 1997. "The Symbolic Making of a Common Property Resource: History, Ecology, and Locality in a Tank-irrigated Landscape in South India." *Development and Change* 28 (3): 467–504.
- Neto, Frederico, and Hakan Tropp. 2000. "Water Supply and Sanitation Services for All: Global Progress during the 1990s." *Natural Resources Forum* 24 (3): 225–35.
- NGO Major Group. 2001. "NGO Statement at the Bonn Conference on Freshwater." Email communication from the International Rivers Network, 7 December.
- Nickson, Andrew. 2001. "Tapping the Market. Can Private Enterprise Supply Water to the Poor?" *Insights* 37.
- Nigam, Ashok, and Sadig Rasheed. 1998. "Financing of Freshwater for All: A Rights Based Approach." UNICEF Staff Working Paper EPP-EVL-98_003. United Nations Children's Fund, New York.
- Nussbaum, Martha. 2000. Women and Human Development: The Capabilities Approach. New Delhi: Kali for Women.
- ODS (Office of Development Studies). 2001. "Global Public Goods: Taking the Concept Forward." Discussion Paper 17. United Nations Development Programme, New York.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- Ostrom, Elinor, and Robert O. Keohane, eds. 1995. *Local Commons and Global Interdependence: Heterogeneity and Co-operation in Two Domains.* Cambridge, Mass.: Harvard University, Center for International Affairs.
- Petrella, Riccardo. 2001. *The Water Manifesto: Arguments for a World Water Contract.* London: Zed.
- Plant, Raymond. 1998. "Citizenship, Rights, Welfare." In Jane Franklin, ed., Social Policy and Social Justice. Cambridge: Polity Press.
- Postel, Sandra. 1992. The Last Oasis: Facing Water Scarcity. London: Earthscan and Worldwatch Institute.
 - ——. 1996. *Dividing the Waters: Food Security, Ecosystem Health, and the New Politics of Scarcity.* Washington, D.C.: Worldwatch Institute.
- Potanski, Tomasz, and William M. Adams. 1998. "Water Scarcity, Property Regimes and Irrigation Management in Sonjo, Tanzania." *Journal of Development Studies* 34 (4): 86–116.
- Reddy, Ratna V. 1999. "Quenching the Thirst: The Cost of Water in Fragile Environments." *Development and Change* 30 (1): 79–113.

- Reddy, Sanjay, and Jan Vandemoortele. 1996. "User Financing of Basic Social Services: A Review of Theoretical Arguments and Empirical Evidence." UNICEF Staff Working Papers, Evaluation, Policy, and Planning Series. United Nations Children's Fund, New York.
- Reinicke, Wolfgang H. 1998. *Global Public Policy: Governing Without Government?* Washington, D.C.: Brookings Institution Press.
- Reinicke, Wolfgang H., and Francis Deng. 2000. *Critical Choices: The United Nations Networks and the Future of Global Governance*. Ottawa: IDRC Publishers.
- Robert, Jean. 1993. "Water for All: Common Right, Public Service or Commodity?" Habitat International Coalition, New York.
- Sandler, Todd. 1999. "Intergenerational Public Goods: Strategies, Efficiency and Institutions." In Inge Kaul, Isabelle Grunberg, and Marc A. Stern, eds., Global Public Goods: International Cooperation in the 21st Century. New York: Oxford University Press.
- Sen, Amartya. 1992. Inequality Re-examined. Oxford: Clarendon Press.
- Shiva. Vandana. 1999. "Monsanto's Expanding Monopolies." Email communication from the International Rivers Network, October.
- Sweden Ministry for Foreign Affairs. 2001a. *Financing and Providing Global Public Goods: Expectations and Prospects.* Report prepared by Francisco Sagasti and Keith Bezanson on behalf of the Institute of Development Studies. Stockholm.

—. 2001b. *Transboundary Water Management as an International Public Good.* Report prepared by the Overseas Development Institute and Arcadis Euroconsult. Stockholm.

- Ugaz, Cecilia . 2001. "A Public Goods Approach to Regulation of Utilities." WIDER Discussion Paper. World Institute for Development Economics Research, Helsinki, Finland.
- UNICEF (United Nations Children's Fund). 1994. *Implementing the 20/20 Initiative*. New York.
- Uphoff, Norman. 1992. Learning from Gal-Oya: Possibilities for Participatory Development and Post-Newtonian Social Science. Ithaca, N.Y.: Cornell University Press.
- Wade, Robert. 1988. Village Republics: Economic Conditions for Collective Action in South Africa. Cambridge: Cambridge University Press.
- Whittington, Dale, and Minja Kim Choe. 1992. "Economic Benefits Available from the Provision of Improved Potable Water Supplies." WASH Technical Report 77. Washington, D.C.
- Winpenny, James. 1994. *Managing Water as an Economic Resource*. London and New York: Routledge
- Wolf, Aaron. 1997. "Water Wars' and Water Reality: Conflict and Cooperation along International Waterways." Paper presented at the High Level Group on International Water Management in the 21st Century, 18–20 December, Valencia, Spain.

- World Bank. 1994. World Development Report 1994: Infrastructure for Development. New York: Oxford University Press.
- WCD (World Commission on Dams). 2000. *Dams and Development: A New Framework for Decision-Making*. London: Earthscan. [www.dams.org/report/].
- WSSCC (Water Supply and Sanitation Collaborative Council). 2000. "Vision 21: A Shared Vision for Hygiene, Sanitation and Water Supply and A Framework for Action. Also Forming the Water for People Component of the World Water Vision." Geneva. [http://www.wsscc.org/].