GENDER AND SHIFTING WATER GOVERNANCE:
Differential Effects of Privatization, Commodification, and Democratization

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Trends in water governance emphasize devolution to local users and market-oriented policies. These trends influence how donors, policymakers, and international lending institutions approach water management. This LTC Brief reviews current knowledge of the consequences for gender equity, summarizes how the trends have played out in various locales, and identifies gaps in our understanding.

FOLLOWING THE ADOPTION of the 1992 “Dublin Principles,” along with a number of other key international agreements, there have been notable shifts in water management, such as:

- engaging users more fully; for example, devolving irrigation management to farmers
- increasing focus on women as water users and managers
- instituting market reforms in water management, particularly privatizing and/or commodifying water governance.

It is difficult to chart exactly how extensive or deep these shifts are, yet they are occurring across different regional contexts and are becoming central to the agendas of the World Bank, International Monetary Fund, and other organizations as conditions for loans or financial assistance. This brief reviews the research on these trends and offers recommendations for future studies.

Democratization and devolution

With respect to water, efforts to involve local populations and resource users in governance most often focus on the transfer of responsibility for water management to “water user groups,” “irrigation associations,” or similar local-scale organizations. Many authors argue that decentralized management is essential if communities are to benefit from water resources. Some suggest that community management is necessary to ensure long-term sustainability of resources, as it is assumed that local users will be more likely to maintain the
resource over time, invest in maintenance, or more effectively incorporate local knowledge into management decisions.

Meanwhile, financial concerns are often among the motives for transferring governance to local communities, as this is viewed as a means to reduce centralized governments’ costs and expenditures, particularly when the infrastructure is aging and becoming more costly to maintain.

Despite general trends to involve communities more fully in resource governance, women often continue to be excluded from community water governance mechanisms (Harris 2005). Much of the “gender and water” literature argues that including women more meaningfully in water management will serve a number of interests, from resource sustainability to gender equity.

Much of this literature also documents obstacles to women’s participation and particular steps that can be taken to include women more fully. Suggestions include introducing quotas for female participation, holding all-women meetings, scheduling meeting times and locations to fit with women’s schedules and cultural norms, or hiring female community organizers.

The following themes capture many of the implied benefits of enhanced women’s involvement in water governance.

*Promotes environmental and programmatic sustainability.* Some research suggests that women’s participation promotes “sustainability,” whether through improved knowledge of the resource, designing systems to better account for varied resource uses, better regulatory enforcement or greater community buy-in to governance rules. Related to this argument, some suggest that because women are responsible for family health and the time-consuming task of collecting water, they possess extensive knowledge about water quality, reliability, and availability. This knowledge can contribute to project design. Women may also have greater incentives to address water problems and maintain infrastructure (Bennett 1995).

Given these connections, the failure to include women is likely to undermine the success and sustainability of water management efforts. Excluding women from project design in India led to serious flaws, such as hand pumps that were too heavy for women to operate (Prokopy 2005). Researchers in rural Egypt noted that women had more knowledge about water supply and pollution issues. Although these women raised the issue of pollution to their husbands, male leaders failed to address the problem (Assaad et al. 1994).

In irrigation, studies suggest that including women in decision-making promotes sustainability by ensuring that the concerns and capacities of all users are recognized. In the Andes, women are increasingly responsible for irrigating fields as male migration increases. Women and men have different preferences for water access and use, with women generally preferring to use irrigation water for multiple purposes such as bathing and laundry, preferring to avoid night irrigation turns, or preferring to locate canals closer to their homes. According to Boelens and Zwarteveen (2002), when these preferences are ignored water efficiency objectives may suffer. Another dimension that relates to sustainability is the degree to which involvement of all community members contributes to more effective buy-in, monitoring, and adherence to regulations.

*Improves women’s status and boosts gender equity.* As water management and planning often determine resource access, and women have key roles with respect to familial and productive water needs, women’s participation in management mechanisms is considered essential. Some studies suggest that women are empowered through their participation, leading to improved confidence and enhanced self-reliance.
Others suggest that participation opens opportunities for women to use water to generate income, in turn improving women’s bargaining position in the household and community. In India, women’s increased access to water supply allowed them to expand their involvement in dairy cooperatives, increasing their income and improving household bargaining position (Upadhyay 2004). In South Africa, increasing women’s access to water for agriculture helped support food security for poor women excluded from the formal economy (Schreiner 2004).

**Opens possibilities for women to participate in democratic governance.** Another provocative line of argument is that increasing women’s role in resource management may also open opportunities for women to participate more fully in other aspects of community life and the democratic process. Although there is little documentation of these connections, one study in Mexico suggests that women’s participation in water management opened opportunities for women to participate in other political realms (Ennis-McMillan 2005). However, research in India found little evidence to support this outcome (Prokopy 2005).

**Reasons for caution**

Most scholars and practitioners argue that greater inclusion of women is beneficial, yet several works note possible risks of involving women more fully. These may include over-extension with respect to expectations for women’s labor, or risks to women if they overstep social and cultural norms. In sum, it appears that devolution of resource management to local communities, in general, and the increased involvement of women in particular, may have mixed and even contradictory outcomes.

These works suggest that, in addition, increased community and local-scale governance does not necessarily lead to improved management or to improved social equity. For instance, corruption or elite capture may be more likely at the community level, potentially aggravating socio-economic inequalities (Agrawal and Gibson 2001, and Ribot 1999, 2006). Case studies from southeast Asia show wealthy elites using their greater ability to attend community meetings and access information to enhance their control over natural resources (Dupar and Badenoch 2002). Despite the frequent assertion that involvement of women will improve project success, there is very little empirical evidence of these benefits. For example, a study in India found that the project outcomes of water supply projects with greater women’s participation did not differ from those with low participation, although the author concluded that greater participation did support women’s empowerment (Prokopy 2005).

Another study from India found that women’s participation did not improve project outcomes, instead further deterioration of water infrastructure occurred, albeit due to missing parts (Singh et al. 2006). Whether with respect to community participation in general, or women’s participation in particular, there is a need for caution as to what types of claims are made, as well as a need to more critically evaluate whether, and how, local-scale or participatory management mechanisms actually lead to improved outcomes.

Also, greater precision is called for in evaluations of how different members of community are differently involved in, and affected by, community management mechanisms. As one example among many, an evaluation of decentralization projects in southeast Asia showed that certain groups were not well represented in natural resources governance and received fewer benefits from projects—particularly women, the poor, and members of certain ethnic minorities (Dupar and Badenoch 2002).

Other authors caution that devolution of resource governance generally poses particular risks for women, as it is often at the local scale...
where women have the least access to decision-making mechanisms. Furthermore, while decentralization may give voice to some women, the poorest women, or women of a certain caste or ethnic group may not benefit equally. For example, in a community in India, women were more concerned with securing access to water for other members of their own caste than they were with ensuring equitable access for all women (Singh et al. 2006).

It is also necessary to examine the consequences of enrolling women’s participation and labor in resource governance. Given women’s labor requirements in the home, in agriculture, or in other reproductive and productive tasks, these additional responsibilities may be significant. Likewise, simply including women in resource governance is unlikely to be enough; policies must take into account capacities to assume resource governance roles. Specifically, initiatives that involve women in resource management but fail to provide the tools, resources, or knowledge to enable them to fulfill new responsibilities are unlikely to empower women at all. Further, because women frequently have lower education levels, often are poorer than men, and may face cultural taboos that discourage or prohibit their speaking in public, forced participation can be highly problematic. When women attended irrigation association meetings in the Andes, community members questioned their moral integrity as they were seen to be challenging gender norms (Boelens and Zwarteveen 2002). Even when women were included in water management they were often assigned tasks that provided little opportunity to exert influence over project design or management.

With respect to capacity and resource issues, this is particularly important given that it is often precisely lack of financial resources, aging infrastructure, or environmental degradation that spurs the transfer of responsibilities to communities in the first place. In such cases, governance transfer to communities, or to women in particular, may be destined to fail. In southern Africa, national governments handed off to communities irrigation infrastructure that was in a state of near total collapse. In Sierra Leone, communities lacked funds and capacity to maintain hand-pump systems, leading to situations where the benefits of devolved resource management were not realized (Ferguson and Mulwafu 2004, and Magrath 2006). These examples further demonstrate a need for caution, as local actors are increasingly given responsibility without the power, resources, or tools necessary for effective management.

Clearly shifts from state or centralized management to communities, and the increased participation of women in particular, may provide new opportunities and benefits. However, there also are significant reasons for caution, as these shifts might increase burdens on community resources, women’s labor and time, and so forth. Policymakers and donors must therefore be cautious about assuming that communities, women, and the poor will have the responsibility, time, and capacity to manage resources.

Therefore, it is not only imperative to think about how to extend participation possibilities to women and other marginalized members of communities, but also to be more attentive to why this is considered preferable, and to the broader context and implications of these shifts. While devolution and democratization may provide benefits for social equity or environmental sustainability, enhanced community participation does not necessarily lead to poverty alleviation, equity, or sustainability. While we find many interesting examples in the broader literature on gender, devolution, and democratization, we also find that research is scarce with respect to precisely how and why specific beneficial outcomes are achievable in certain cases, or not in others, highlighting this as a crucial need for further research.
Market-oriented policies

Water experts highlight the need to distinguish between commodification (use of market mechanisms used for water management, either by a public or private entity) and privatization (the shift from public to private entities). One reason why market-oriented policies are viewed as advantageous is the idea that pricing water will ensure that water flows to its most productive uses, minimizing waste and ensuring efficiency. To engage market instruments, water management initiatives increasingly emphasize full-cost recovery for water services. Another increasingly common mechanism is the creation of water markets, which allow individuals to buy and sell water rights, again with the idea that certain efficiencies will be realized with the shift from low to high value uses. These types of market instruments are referred to as the commodification of water governance.

Concurrent efforts are also underway to privatize water services. Advocates argue that private control of water, for instance management and delivery by companies such as Vivendi and Suez, will increase efficiency by avoiding costly and bureaucratic state management. Privatization is simultaneously envisioned as a remedy for the state’s historical mismanagement and poor service provision, and for financial challenges associated with dwindling state resources. States, often in response to donor and lender conditionalities that reinforce commodification and privatization trends, have decreased water services provision, reduced water subsidies, and even separated off “profitable” urban sectors from “unprofitable” rural water provision in order to pave the way for private takeover of the profitable elements.

To date there has been relatively little research specifically highlighting the gender and equity dimensions of these shifts, yet some works provide insights into several primary themes.

Recoding of water: rights, needs, and commodities. The focus on water as a commodity represents a shift from the idea of water as a public good, and, with it, a critical shift in viewing the public as citizens, or recipients of services, to consumers (see, for example, Bakker 2003). These shifts are significant, particularly as debates continue as to whether water should be viewed as a human right, a position seemingly at odds with commodification trends.

Women’s access and further marginalization. Water policy reforms related to two of the Dublin principles—those highlighting women as water managers and users, and focusing on water as an economic good—suggest a possible tension. Focusing on water as an economic good highlights water’s “productive” uses, further marginalizing domestic or other non-market uses that are typically important for women’s livelihoods and responsibilities. The emphasis on cost recovery, and the implicit endorsement of industrial, agricultural, or other “productive” uses thus highlights the need for caution as this could further marginalize domestic drinking water and other “non-productive” uses critical for health and similar concerns. This also suggests a critique of authors who suggest that women’s uses should also emphasize income generating and productive uses to improve women’s income or status (Manase, Ndamba, and Makoni 2003).

In short, unequal gendered access to resources may be perpetuated and legitimated by introducing market mechanisms into the water sector. In Zimbabwe, water permits beyond basic needs were issued according to the “productive potential” of proposed uses. This criterion favored white commercial farmers. This was all the more important as the national water policy did not include any mechanism to ensure permits for poor black women or other historically disadvantaged groups (Manase, Ndamba, and Makoni 2003).

There is also concern that when water is established as an economic good, market
mechanisms tend to dominate policy frameworks, at times resulting in little regard for context specificities. Others argue that because women make up a greater percentage of impoverished populations, often have less access to money than men, and the income they do have is more likely to be earmarked for specific uses, there may be disproportionate effects of water pricing for women and children. In South Africa, poor women chose to spend hours searching for free (and polluted) water rather than pay a minimal fee for clean water. Kasrils (2001) takes this evidence to suggest that basic needs should not be included in cost recovery efforts, as only 1-2% of the country’s water went for these purposes, with little impact on conservation goals.

Even in cases when women and impoverished populations are granted formal and legal water rights, this does not necessarily translate into the ability to maintain those rights over time. In Mexico (see box 1), instability and poverty eventually led women to sell off their land and water rights, often for prices lower than that received by males. This evidence suggests the risks associated with individuated rights mechanisms. To the degree that rights can be bought and sold, poor or vulnerable users can readily lose access.

Given this, communal and “rights”-based mechanisms might be more secure over time, especially in difficult and financially uncertain times. Thus, there is a need to revisit arguments related to the need to grant women individuated land and water rights (Agarwal 1995), as this represents an implicit endorsement of market-rights approaches. Instead, the opportunities and constraints of communal access, non-tradeable rights, or informal access mechanisms should be explored (Harris, under review).

Loss of customary or informal access. Other research studies have noted that because many women often have traditionally secured resources through informal or customary arrangements, traditional modes of access may be lost with privatization and commodification shifts (Lastarria-Cornhiel 1997). A focus on private property rights, cash cropping, and other changes that increase land value may mean that men or community elites are more likely to assert their rights rather than continue to meet the needs of women, children, or others, as is typically expected under customary systems. Work from Gambia illustrates this, as agroforestry projects and new irrigation schemes led to gender conflicts and loss of women’s access as men tried to enforce their land rights and control over household labor in the face of new income opportunities available through tree planting or irrigated cash cropping (Schroeder 1999 and Carney 1993).

Protest and social mobilization. A number of studies have documented women’s increasing roles at the forefront of protest movements, particularly resistance to privatization and commodification related trends (see box 2, next page). Women’s active role in protest is perhaps due to the differential impact of

Box 1. Gender and water rights in Mexico
The 1992 National Water Act in Mexico is consistent with a neoliberal framework, demanding decentralization of resource management, increased participation by stakeholders, and greater reliance on pricing and other mechanisms to value water as an economic good.

Ahlers (2002, 2005) analyzes what happened following the Act, when communal ejido land was privatized and public irrigation systems were transferred to users. Because the new land and water tenure system enabled rights to be bought and sold, and given the high uncertainty related to agricultural livelihoods, many poor farmers, and women, sold off their rights in relatively short order. Women, in particular, often earned less for sale of their rights than male counterparts.
privatization and commodification on men and women, and the different roles men and women have with respect to water needs in households and communities. For instance, women were among the leaders in resistance movements against water privatization in Argentina as well as in the “Water War” of Cochabamba, Bolivia.

**Research recommendations**

Most gender analyses of water governance focus on participation issues, with clear implications for democratization and devolution-related trends. In general, these analyses argue for enhanced participation of women. Fewer studies have considered gender dimensions of privatization and commodification shifts.

A critical direction for future work relates to what it means to have devolution and privatization shifts occurring simultaneously, particularly with respect to the implications for diverse populations across contexts.

Further attention is needed to account for the risks and contradictory outcomes that may accompany any benefits associated with recent trends in water governance. There could be more attention to the specific institutions, contexts, and pathways wherein devolution and participatory management might be more consistent with goals of democratic governance, equity, or resource sustainability.

More work needs to be done on the possible risks and contradictory tendencies with respect to privatization and commodification of water, particularly with attention to socio-economic and cultural differences, including gender and other inequalities. Areas of needed research include the following.

**Evaluate how shifts in water governance and contemporary policies relate to gender and social equity concerns.** We need more evidence, and comparative evaluation, of how participation, tenure rights, and other issues crucial for equity and sustainability, bring benefits to women and other marginalized populations. Too often, assertions are made without adequate evidence. There is, to date, little empirical basis to evaluate the trends in water governance as either positive or negative (see box 3, next page).

**Distinguish between participation, devolution, privatization and marketization objectives to assess differential impacts on populations.** These shifts and goals cannot be considered a unified ensemble, and may be working at cross

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**Box 2. Women and water-related protest**

Bennett, Dávila-Poblete, and Rico (2005) detail women’s role in Latin America in protest related to water quality, service delivery, and pricing. The authors argue that women’s involvement in protest draws on notions of femininity, including notions of nurturing and motherhood, to argue for affordable and safe access to drinking water.

Others note that women’s engagement in protests serves to modify notions of citizenship, embolden citizens, shift state-society relations, and alter gender expectations. Women’s protests also highlight the increase in women’s civic responsibility and work burden. Bennett (1995, p. 78) notes that, “the workload of poor urban women now includes public protest, which has become more and more necessary as essential public services deteriorate or fail to be provided at all.”

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We need more evidence, and comparative evaluation, of how participation, tenure rights, and other issues

purposes. For instance, while greater democratic participation may create new opportunities for women, or landless populations, if this occurs concurrent with privatization shifts that create other difficulties, how do we account for the tensions and contradictions?

**Consider historical and geographical contexts.** International financial institutions often require devolution and privatization of water governance, which may aggravate
situations of indebtedness and impoverishment. Contextual factors and particular histories (colonialism, indebtedness, trade relations, etc.) are likely to be critical to understand the implications of ongoing water governance trends. **Be explicit and reflexive in assumptions and prescriptions.** It is common in the literature to argue that women be granted individuated land and water rights. However, vulnerabilities and market factors might lead to loss of these rights. It may be the case that focus on individuated rights for women or poor farmers implicitly endorses a market model, foreclosing historic, informal, or communal access-rights mechanisms that might be more resilient in times of difficulty (Harris, under review). Policy must be more precise in detailing specifically why water rights, specifically individuated water rights, constitute a solution. **Consider and develop alternatives.** There needs to be continuing discussion in the search for solutions. Research, policy and activism together need to work to better understand the implications of different policy instruments across contexts, and also to continue to enliven discussions of alternatives.

**Box 3. Threat or opportunity?**
Zwarteveen (1998) considers recent shifts related to water management from a gender perspective, specifically devolution and irrigation management transfer. She analyzes a number of the theoretical arguments from feminist economics; for instance, risks associated with the idea that certain policies do not assume women to be water users, or that planners may assume an equal ability to pay among different populations.

She notes that women’s unpaid contributions to the economy, and other non-market activity, may challenge notions of efficiency and other key assumptions that underwrite contemporary shifts in water management. She considers the empirical data related to these shifts to be inconclusive. Specifically, questions of social equity are generally not asked in evaluations of these shifts, so there is insufficient basis to actually know which of these theoretical concerns are borne out. She concludes that there is “not enough empirical data available to assess whether irrigation management transfer programs are a threat or an opportunity to gender equity” (p. 309).

**Further Reading**