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Women, Equity and Participatory Water Management in Brazil

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Abstract

Public participation in resource management is regarded as a central pillar of sustainable development. Water management is a foremost example, and women globally are prime users and protectors of water. Yet the effectiveness of participatory water management practices is seldom examined from a feminist perspective. This article establishes a methodological framework for such an inquiry, drawing on ecofeminist theory and the Brazilian concept of 'feminist transformative leadership' to consider gender, race and class aspects of participatory water management in Brazil.

Keywords

Brazil, civil society, democratization, ecofeminism, feminist politics, feminist transformative leadership, gender inequality, participatory governance, public participation, resource management, water management, water policy, women and environment

INTRODUCTION

Inspired by ecofeminist philosophy (Warren 2000) and the Brazilian concept of 'feminist transformative leadership' (Viezzler 2001) this article aims to call attention to and problematize the under-participation of women, and especially poor women of colour, in the new national system of water management in Brazil. As in many other countries, in Brazil water-related problems most seriously affect poor people who are mainly women and men of colour. Water problems take several forms: first, people living in informal settlements often do not have access to clean water and sewer services. Second, floods and rainfall-induced landslides threaten residents of informal settlements. Third, poor people's health is most affected by pollution in rivers, since they live near and must use this water. As gendered work and

family responsibilities make poor women the main cleaners and caregivers, poor women are the ones most affected by these interrelated water issues.

The following sections of this article consider the potential of participatory water management to address poor women's water needs, using the situation in Brazil as an example. Section two summarizes our theoretical framework and presents stylized facts regarding water-related issues in Brazil. Section three provides details on Brazil's water management framework: its history and the results so far, especially regarding women's involvement. Section four concludes by returning to the challenges of improving poor women's access to clean water and reducing water-related risks. We note several hopeful trends and make a few policy-related suggestions.

WATER AS A PROBLEM

Brazil is in the privileged position of having the world's largest resources of renewable fresh water, equivalent to 12 per cent of the fresh water on the planet's surface (UNESCO 2003).¹ In early 2006, the country approved a National Water Resources Plan – the first one in Latin America – which 'outlines programs over the next ten years in order to secure water for millions of Brazilians while safeguarding some of the world's richest aquatic life' (WWF 2006: 1). According to data from the 2000 Brazilian Census,² 78 per cent of Brazil's people had access to water services in 2000, although there were enormous discrepancies between the south and southeast and the north and northeast areas of the country. In the city of São Paulo, for instance, 98 per cent of houses had access to treated water in 2000, while in the city of Redenção in the northern state of Pará, the figure was only 7 per cent (IBGE 2006).

Almost one-third of Brazilian households are headed by women (de Melo 2005: 18). Homes headed by women have better access to clean water (85.9 per cent) than homes headed by men (75.3 per cent) (IBGE 2006: 3). The same is true for sanitation services and public waste collection. The Brazilian statistical agency IBGE concludes that 'a possible explanation for why households headed by women have better sanitation conditions is the fact that women are more careful in relation to aspects that relate to conditions of health and hygiene of the family' (IBGE 2006: 3).

About one-third of all Brazilian working women are domestic workers (de Melo 2005), for whom water is an important tool, input and determinant of the working conditions. Women in Brazil receive only 70 per cent of men's salaries. The situation is worse if crossed with race. In 2000, black or brown³ women in Brazil received 51 per cent of the average income of white women. Unfortunately, access to clean water is not the only water-related problem for poor women (and men). In the biggest cities of the southeast of Brazil, slum houses are often built too close to streams and rivers or high on slopes and hillsides. Floods and landslides caused by rain, environmental degradation and inadequate water infrastructure are regular events.

The starting point for our analysis of these issues is the ecofeminist principle that 'there are important interconnections among the unjustified dominations of women, other human Others, and non-human nature; . . . understanding the nature of these interconnections is important to an adequate understanding of and solutions to these unjustified dominations' (Warren 2000: 43). When there is a flood in a big *favela* (slum) in São Paulo, many issues are interconnected: climate change, structural adjustment, global financial inequities, unplanned urbanization, erosion of hillsides, channelization and enclosure of rivers, income inequality and environmental injustice.

In order to deal with such complex and interlinked issues, we recognize the need for 'feminist transformative leadership' as described by Brazilian ecofeminist leader Moema Viezzer (2001: 11):

First of all, (this) means much more than putting women in positions of power, even if it is important to have women as promoters of change in power positions. It must be transformative in the sense that it challenges the existing structures of power; it must be inclusive, in the sense that it takes into account the needs, interests and points of view of the majority of the marginalized and poor in society; it must be integral, in the sense that it attends to all forms of social injustice.

Does/can this type of leadership happen in practice?

THE BRAZILIAN WATER MANAGEMENT SYSTEM AND WOMEN'S PARTICIPATION

In international sustainable development terms, the favoured current approach to water management is to establish Watershed Committees with substantial public involvement as well as support from various levels of government, so that water users can collectively help to decide issues of allocation, infrastructure and regulation at the watershed level (Hinchcliffe *et al.* 1999; Perkins 2004). From bio-regional, ecological and political perspectives, this approach has strong theoretical justifications and potential and it is being implemented in a growing number of countries worldwide (Shiva 2002; UNESCO 2003; Perkins 2004).

Impressively, since 1997 Brazil has had one of the most participatory water management laws in the world. It establishes Watershed Committees composed of representatives from government agencies and civil society, which are responsible for all water-related issues (Keck and Abers 2004; Ministério do Meio Ambiente 2005; Agência Nacional das Águas 2006). In legal terms this means that poor women can act as civil society representatives on the Watershed Committees for rivers close to their houses (Porto 1998: 177).

As shown in Table 1, to some degree women are present at all levels of the Brazilian water management system. The National Council of Water

*Table 1 Women's participation in Brazilian water management
a) Gender distribution on State Water Resource Councils*

	<i>Total</i>	<i>Men (%)</i>	<i>Women (%)</i>
Civil society representatives	25	20 (80)	5 (20)
Water users representatives	14	14 (100)	0 (0)
Municipal government representatives	13	13 (100)	0 (0)
State government representatives	73	67 (92)	6 (8)

Notes: Brazil's 1997 Water Law created the National Water Resources Management System to implement national water policy and co-ordinate integrated water management. It is composed of the following institutions:

- 1 The National Council of Water Resources, a consultative and deliberative body representing water users, government and civil society that co-ordinates federal, state and regional planning and arbitrates conflicts.
- 2 State Councils of Water Resources, which do the same at the state level.
- 3 Watershed Committees, which do the same at the watershed level. Civil society members are elected in special plebiscites and usually are supported by and represent the views of particular NGOs.
- 4 Government agencies in water-related areas.
- 5 The National Water Agency (ANA), linked to the Ministry of Environment, which implements national water policy, grants water use permits, supervises and charges for the use of water nationally.
- 6 Watershed Agencies, which act as executive secretaries of the Watershed Committees, offering technical, financial and administrative support for the implementation of their decisions.

The data above are for six of the existing State Councils.

Source: Sell and Machado (2005).

b) Leadership of State Watershed Committees

	<i>Total</i>	<i>Men (%)</i>	<i>Women (%)</i>
Presidents	86	82 (95)	4 (5)
Vice-Presidents	72	61 (85)	11 (15)
Executive secretary	76	53 (70)	23 (30)

Notes: There are currently more than 100 State Watershed Committees in Brazil. Watersheds that cross state boundaries have committees organized at the federal level. These data are for eighty-six State Watershed Committees, some of which had unfilled positions when the study was conducted. Elections take place every two years (Chandra *et al.* 2004: 3).

Source: Sell and Machado (2005).

Resources, for instance, has federal Environment Minister Marina da Silva as its president and includes a seat for the Special Secretary for Women's Policies.⁴ However, the under-representation of women outlined in Table 1 reveals that the current system is not inclusive. Water management

c) *Gender composition of the Alto Tiête Watershed Committee and the Piracicaba/Capivari/Jundiaí Watershed Committee, São Paulo state*

Alto Tiête Watershed Committee

	<i>Total</i>	<i>Men (%)</i>	<i>Women (%)</i>
Civil society representatives	16	13 (81)	3 (19)
Municipal government representatives	16	13 (81)	3 (19)
State government representatives	16	13 (81)	3 (19)

Notes: The 'civil society' seats are occupied by people representing environmental and citizenship NGOs, technical and professional associations, unions, commercial and industrial associations, neighbourhood and agricultural associations, public schools and universities.

Piracicaba/Capivari/Jundiaí Watershed Committee

	<i>Total</i>	<i>Men (%)</i>	<i>Women (%)</i>
Civil society representatives	17	15 (88)	2 (12)
Municipal government representatives	63	60 (95)	3 (5)
State government representatives	17	13 (76)	4 (24)

Notes: Government representatives on these committees are appointed. The process for selecting civil society representatives varies according to the state. In the State of Sao Paulo, the executive secretary effectively decides which NGOs may occupy the civil society seats on the Watershed Committee. Problems with this system have arisen, and more detailed research is needed on the complications of civil society representation in water governance.

Source: Sister Watersheds Project (2005).

committees are more specialized in focus than other government bodies, and thus even harder for women to enter. Water in Brazil has historically been linked with hydroelectric dams and energy, and therefore it has traditionally been a subject area for engineers – a profession that is still dominated by men. Changing the culture of water management will take some time.

Monica Porto, an expert on Brazilian water management, maintains that women's participation as professionals in the water sector is growing rapidly and, in consequence, gender distribution is not the main issue to be discussed. In her view the need for a sufficient number of trained and competent professionals is an issue that prevails over gender *per se* (Porto 2000: 91). But even as professional women participate, poor and racialized women are still excluded. And they are the ones who suffer most from water-related problems.

In our view, moreover, the crucial point is women's active involvement in terms of their contributions, proposals and effects on the water management culture. Since Brazil's water management structure now has a ten-year history, it is time to begin documenting the nature and results of women's

involvement. A preliminary study of the participation of all civil society representatives on Watershed Committees, both women and men (Chandra *et al.* 2004), highlights asymmetries between the ability of government and civil society representatives to follow the technical aspects of the committees' work, resulting in some dominance by government members. But it also points to real advances in education for both committee members and the general public about watershed issues (Chandra *et al.* 2004). The study indicates that issues such as committee meeting times and locations, the need for transportation subsidies and administrative backup for civil society representatives and the diverse interests of civil society groups, all complicate the ability of civil society representatives to participate equally with government officials (Chandra *et al.* 2004).

A number of commentators have remarked on women's extensive leadership in Brazilian NGOs and neighbourhood associations, despite their relatively low participation at high levels in Brazilian politics (Alvarez 1999; Silva 2000). The less-formal processes of NGOs make it easier and more attractive for women of all classes to become publicly engaged (Moraes and Perkins 2007). Working as organized civil society representatives from outside government offers women the possibility of influencing public policy while maintaining considerable personal autonomy, and this tradition in Brazil may soon spread to the quasi-governmental Watershed Committees if they are open to adopting some of the characteristics of NGOs: flexible meeting times, a climate of supportive interchanges among members, transparency and opportunities for education and training of members and creative approaches to problem-solving.

There are many race and class-based barriers to the active participation of poor, racialized women in water management structures. These include the times and locations of meetings, the lack of childcare or transport subsidies, the open prejudice of some committee members, internalized oppression, education and time requirements for participation, restricted ambits of action, frustrating bureaucracies, skewed priorities and the near-absence of organized constituency groups for local political representation on water issues. Difficulties abound which differentially affect poor women, especially those of colour.

CONCLUSION

Despite Brazil's progressive water governance system, there is little indication yet that poor women are moving into positions of leadership on water management issues. However, like everywhere, women are often the local leaders, organizers and activists on water and other environmental issues, in community groups and NGOs.

Strong barriers impede women's political involvement, including gender roles and family responsibilities; the unpaid nature and time commitment required for this work; differential access to education (especially on technical

issues) and public speaking training for women and men; and the constraints of a macho culture in general (Perkins 2005). Training for potential women leaders and committee members in specialized areas could help to address these barriers (CAP-NET 2006). General environmental education will also help to increase participation. Certainly the desire and interest exists in poor communities for improvements in water management, and organizing via NGOs is a well-developed political strategy, especially for women. Given water's central importance in many women's lives, participatory water management structures may serve as a bridge for women's increasing political involvement.

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Notes

- 1 However, 45 million Brazilians still do not have access to clean drinking water, and the country's water is unevenly distributed: 93 per cent of the population depends on 30 per cent of the water resources.
- 2 The Brazilian Institute of Geography and Statistics recently launched a 'National System of Information on Gender', which is available at www.ibge.gov.br. The data cited here are mostly from a summary called 'As Mulheres como Alvo das Políticas Públicas Brasileiras' ('Women as the Target of Brazilian Public Policy').
- 3 The statistical agency in Portuguese uses the word 'pardo', which means a light brown colour used to indicate people with African, Indigenous and/or White descendants - mixed (like almost everybody in Brazil). On the complexities of race in Brazil, see Ferreira (2004); Dos Santos (2006).
- 4 Even in the progressive Labour Party government in Brazil, there are only four women ministers, and they are in the less-powerful social and environmental areas.

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