Women and Climate Change: Linking Ground Perspectives to the Global Scenario

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Abstract

The 18th Conference of Parties (COP-18) to the United Nations Framework Convention on Climate Change (UNFCCC) at Doha in 2012 decided to enhance the participation of women in climate negotiations. The decision was immediately dubbed the 'Doha Miracle', although it was not the first of its kind. The decision to recognise gender equality was first taken 11 years earlier at Marrakesh in 2001, but progress has been very slow. However, giving women representation in international negotiations will make little difference in the real world where women, who as a group are the most vulnerable to climate change, have no say in decision-making, even at the community level, although they are the ones who bear the brunt of climate change and the burden of adaptation. Discussing their strengths and vulnerabilities, this article suggests ways for their inclusion in order to benefit from their perspective and expertise by making the best use of existing institutions in India.

Keywords

Women, climate policy, vulnerability, adaptation, decision-making

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Introduction

Climate change has gender-specific implications in terms of both vulnerability and adaptive capacity (Dankelman, 2002) because of women's roles in society, production and domestic life. In the developing world, women are disproportionately involved in natural resource-dependent activities, such as, agriculture (Davison, 1988). Women also have to endure the burden of additional care during rehabilitation after a disaster, whereas men generally return to their pre-disaster roles outside the home. The key factors contributing to the differential vulnerability of women during natural hazards in South Asia are high levels of illiteracy, minimum mobility and work opportunities outside their homes and issues regarding ownership of resources, such as, land (Fordham, 2003).

Under such conditions, women's participation in decision-making at national and international levels would be a distant dream when their involvement even at the community level is difficult. However, their participation is the need of the hour, as they are the ones who are directly involved in the mitigation and adaptation activities. The Doha climate change conference was a step forward in this aspect. Christiana Figueres, the Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC), described the decision taken at the 18th Conference of Parties (COP-18) to enhance the participation of women in climate-change negotiations as the 'Doha Miracle' (Hone, 2013).

In fact, 'Doha Miracle' and 'Gender COP' are the two striking epithets that mark the conference, but this decision was not the first of its kind. Earlier, in 2001, a decision to recognise gender equality (Decision 36/CP.7) was adopted by the 7th Conference of Parties (COP-7) at Marrakesh, noting the importance of women's participation in achieving progress in mitigating and adapting to climate change at all levels. However, the progress on implementing this decision has been slow and women continue to be under-represented on the delegations of many countries, particularly those most vulnerable to climate impact. The Women's Environment & Development Organization (WEDO) reported in 2012 that in the five years from 2008 to 2012 women's participation had remained steady at around 30 per cent, while 2012 saw the highest ever number of women delegates. On an average, women's participation at COP meetings is slightly less than at other meetings (WEDO, 2012).

The latest decision takes a step further to hold an in-session workshop on gender balance, gender-sensitive climate policy and capacity-building activities to promote the greater participation of women in the UNFCCC (2012) process. However, it remains to be seen how these decisions tackle the vulnerabilities of women on the ground and unleash their power for the benefit of the environment. This article discusses women's strengths and vulnerabilities and suggests ways for their inclusion in order to benefit from their perspective and expertise by making the best use of existing institutions in India.

Women's Role in Environment Protection: Strengths and Vulnerabilities

Women have been active agents in movements of environmental protection and regeneration, often bringing to them a gender-specific perspective and one which needs to inform our view of alternatives (Agarwal, 1992). As far back as in 1992, the outcome of the UN Conference on Environment and Development, held in Rio de Janeiro, affirmed that the effective implementation of programmes (on sustainable and equitable development) depends on the active involvement of women in economic and political decision-making. It urged governments to ensure a role for women in national and international ecosystem management and control of environmental degradation (UNCED, 1992). There is a growing consensus that women's knowledge and practices are not only necessary and relevant but also essential for sustainable development.

However, women are also the most vulnerable, and with a limited capacity to develop and adopt strategies to reduce their vulnerability to the adverse impact of climate change (Government of India, 2009). According to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, there are individuals and groups within all societies that have insufficient capacity to adapt to climate change. For example, in the subsistence farming communities of southern Africa, women are disproportionately burdened with the costs of recovery and coping with drought (Adger et al., 2007).

Women in Agriculture

Women, primarily those on small farms, produce 45–90 per cent of their domestically consumed food. For women growers, there is a comparative lack of assets and arable land and, in some cases, lack of the

right to own the very land they till. This relative insecurity of access and rights over resources, such as land affects their vulnerability (Agarwal, 2003; Jackson, 2003). Worldwide, women own less than 2 per cent of all property. In many countries, less than 10 per cent of women hold title to their land (Costello et al., 2009). An Oxfam International (n.d.) study on the status of women farmers in Uttar Pradesh, India, shows that only 6 per cent of them own land, less than 1 per cent have participated in government training programmes, 4 per cent have access to institutional credit and only 8 per cent have control over agricultural income. Women farmers across the country continue to labour in farms to produce food, with unequal rights to land, credit, benefits and training (Yadav, 2013) despite the fact that they comprise about 43 per cent of the global agricultural labour force (FAO, 2011). Within Asia, the sub-regional averages range from about 35 per cent in South Asia to almost 50 per cent in East Asia and Southeast Asia (FAO, 2011). Even in the tribal communities of India, rise in status has not necessarily led to the withdrawal of women from manual labour, and they continue to perform their gender-specific routine agricultural-work activities (Xaxa, 2004).

Women, Indigenous Knowledge and Practices

Many rural women depend on non-timber forest products (NTFPs) for their income, traditional medicines, nutritional supplements in times of food shortage and as seed banks for sourcing alternative plant varieties needed under changing growing conditions. Thus, the loss of biodiversity challenges the nutrition, health and livelihoods of women and their communities (FAO, 1998). Women across the developing world are adapting to the effects of climate change, sometimes drawing on ancient indigenous knowledge systems and at others using endogenous, innovative ways to survive the harshness (UN Women & Mary Robinson Foundation, 2013). Considered local and traditional, subsistence-oriented, contextual, communal, uncorrupted by the influence of the market, and passed on informally, women's knowledge is perceived to be threatened by globalisation and by Western science and technology (Oakley & Momsen, 2005). The gender of an individual actor and gendered institutional norms significantly influence the entire process of acquisition, processing and transfer of local knowledge (Kelkar, 2007).

Adaptation Linkages

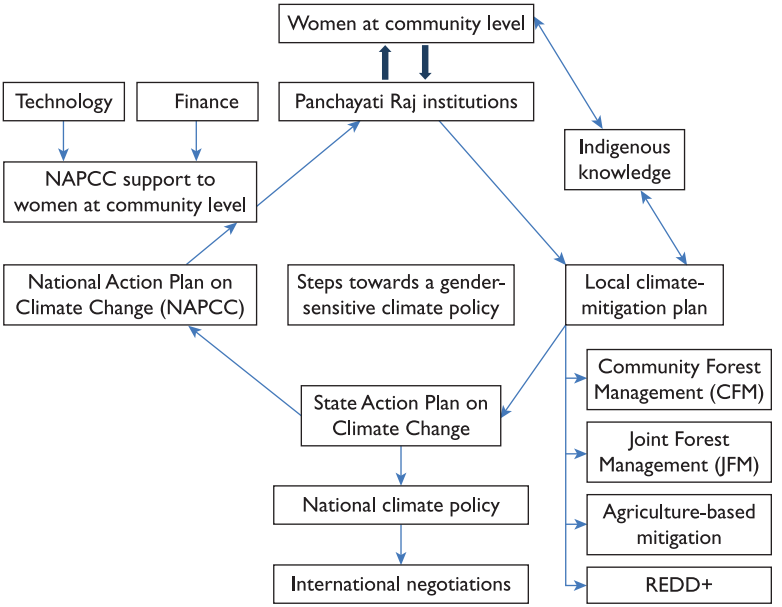
Just as they are more severely affected by natural disasters because of their social role, poverty and gender inequity, women will bear the burden of adapting despite their own insignificant contribution to greenhouse gas emissions. The increased incidence of disasters puts women at increased risk. Their vulnerability in the face of disaster is a hand dealt long before the actual disaster strikes: The fatal exposure of women to death and loss in disaster situations has been socially constructed and set in place by male-dominated societies that have established the general inequality of women throughout the globe (Juran, 2012). Roy and Venema (2002) argue that the ability of women to adapt to climate-change pressures would be enhanced using the 'capabilities approach' to direct development efforts. Using this approach, women will improve their well-being, and act more readily as agents of change within their communities. Still, they are under-represented in decision-making about climate change although their different perspectives and expertise would be of great benefit. Their active involvement in agriculture and their dependence on biomass energy would mean effective environmental management. The need to diversify energy resources and facilitate the introduction of substitution fuels for household energy consumption could well constitute the essential part of adaptation strategies (Parikh, 2007).

Inclusion of Women in Climate Policy-making in India

Women form two-thirds of the workforce engaged in natural resource-based livelihoods, but they are missing from related plans and policies (Bose, 2014). India's village-level government system, the Panchayati Raj, can be put to use for developing community-level climate governance with inputs for the national and international levels. Panchayati institutions also have 50 per cent reservation for women. Together, these strengths of the system can pave the way for integrating local, national and international policies and actions (Figure 1).

Planning in India emphasises the promotion of people's participatory institutions and social mobilisation, particularly through the empowerment of women, to ensure the environmental sustainability of development processes. In the state of Uttarakhand, it was observed

Figure 1. Framework for the Implementation of a Gender-sensitive Climate Policy in India



Source: Author's own.

that women remain largely absent at all levels of policy formulation and decision-making in natural resource and environmental management and conservation (Government of India, 2009). The women of Nahi, a village in the Dehradun district of Uttarakhand, claim that they have benefited from a woman *sarpanch* (head of village *panchayat* or local government body) and that she has been good for the health of the forest. They stressed the need for government documentation of traditional farming practices and wanted the land they worked to be in their names, thus empowering them to better fight against climate change (Bose, 2014). Under the system of democratic decentralisation of responsibilities enshrined in the 73rd Constitutional Amendment, 1993, local bodies comprising elected representatives, one-third of which are women, have been entrusted with the responsibility of safeguarding the local environmental capital.

India has many policies and programmes for the empowerment of women, yet their condition remains dismal. The government launched the National Action Plan on Climate Change (NAPCC) in 2008,

which has eight missions, but women do not find a place in it, and it has been found inadequate (Priyadarshini, 2012). In its second national communication to the UNFCCC, India admits that a major weakness perceived during the 10th Five-Year Plan was that the economic growth was not sufficiently inclusive for many groups and gender inequality was a persistent problem. The report also stressed the fact that women are critical to the improvement of water management and governance within the overall context of poverty alleviation (Government of India, 2009).

The government should, therefore, recast the National Action Plan and add one more mission for the inclusion of women which will help solve both economic and environmental problems or lessen their risk. It is also important to incorporate gender-responsive language and analysis in each State Action Plan on Climate Change (SAPCC) along with documentation of climate-related data on women observed at the local level as validation of their traditional knowledge. A strong gender component is necessary for the successful articulation and implementation of all SAPCCs (Kapoor, 2012).

For climate policies to be effective and to reflect and respond to the needs of society, women and men must participate in climate-change decision-making and implementation on an equal basis (UN Women & Mary Robinson Foundation, 2013). Table 1 represents the present attention given to women-related climate concerns in the national communications to the UNFCCC of India, Nepal and Bangladesh. Policy changes that further reflect the inclusion of women in decision-making at ground level can change the way in which we react and adapt to climate change in the future.

Community Management and Panchayati Raj Institutions

In India, an interdisciplinary dialogue on the theme 'Community Management of Climate Change: Role of *panchayats* and *nagarpalikas*' was hosted by the M. S. Swaminathan Research Foundation to prepare a well-defined road map for empowering local communities with the knowledge and skills relevant to enhancing their capacity to manage the adverse impact of climate change. A series of consultations involving various *panchayat* leaders have been initiated to discuss the possible components of such legislation. The Constitution also devolves powers to the lower levels—'power to the people'—through the institutions of *panchayats* and *nagarpalikas* (local municipal bodies), with a view

Table 1. Present Policies in India, Nepal and Bangladesh Focusing on Women, Indigenous Knowledge and Community Participation

	India	Nepal	Bangladesh
Policy sectors	Renewable energy and energy efficiency, agriculture, forestry, sustainability, water, Himalayan ecosystem, strategic knowledge	Energy, forestry, water, agriculture, vulnerability and adaptation	Energy, forestry, agriculture, waste management, water management, coastal zone management
Women's role	People's participatory institutions and social mobilisation through empowerment of women to ensure environmental sustainability of the development process	Protection of rights of women and children Basic development processes with representation of women and men of all ethnicity and socio-economic status	Cooperative social forestry with the involvement of vulnerable women and men
Women's vulnerability	Lack of access to land and vital social networks in the community Fewer opportunities to access health facilities and education because of subjugation results in high vulnerability Limited capacity to develop and adopt strategies	Not discussed	Decline in agricultural production could isolate vulnerable women from seed production, preservation and other processing activities Absence of income during times of distress, such as, flooding, when women's labour cannot be utilised in productive activities

(Table 1 continued)

(Table 1 continued)

	India	Nepal	Bangladesh
Indigenous knowledge	To assess risks, evaluate, strengthen, refine and fine-tune farmers' knowledge gained over centuries of experimentation in variable climate Develop a compendium of indigenous and traditional practices	Indigenous agriculture practices to suit local environmental conditions Organic farming using indigenous technologies Small farmer-based irrigation schemes and water mills, the mills grinding purposes to be upgraded to generating power	Not discussed
Community involvement	Sustained employment for rural communities through watershed development programmes Community participation in drought mitigation and in managing renewable energy projects Community-based disaster preparedness initiative taken up in 50 villages in five districts of Jammu and Kashmir; villagers analysing local climate change, availability of water and seasonal variations	Participation of local communities in natural-resource management Community forest management for agroforestry-type projects Poverty reduction through improved management of community forest areas Popularising biogas plants in rural communities Forest Act of 1993 gives local communities the right to form forest-user groups of traditional users	Involving the community in operating and maintaining water-resource infrastructure and maintaining flood protection embankments Training in disaster preparedness Community-based management of crucial adaptation measures Developing sustainable community-based forestry systems to increase carbon storage

Source: Government of Bangladesh (2002), Government of India (2009), Ministry of Population and Environment, Nepal (2004).

to ensuring administrative efficiency in concordance with the broader concept of good governance (Government of India, 2009).

There are several participatory schemes which help deal with environmental issues at the local level. The project 'E-Publishing and Knowledge System in Agricultural Research' (E-PKSAR) provides crucial information for the accelerated and sustainable transformation of Indian agriculture. The objective is poverty alleviation and income generation through improved communication links among information generators, that is, public research organisations and its users or, in other words, researchers, farmers' groups, Panchayati Raj Institutions (PRIs), the private sector and other stakeholders (ICAR & NAIP, n.d.). The National Mission for Sustaining the Himalayan Ecosystem identifies local communities to empower them through PRIs to assume greater responsibility for the management of natural resources (Government of India, 2009).

Fortunately, Section 28(2) of the Indian Forest Act, 1927, introduced the system of Van Panchayats (VPs) at the village level to manage forests. A superior example of community participation in forest governance, it presents decentralised resource management through a formal state–community partnership. Interestingly, the region where these forest councils exist is unique in providing extensive examples of combined systems of officially constituted and informal community forest management (Mukherjee, 2003). About 12,064 VPs have been established in Uttarakhand. Under the VP rules of 2001, out of a total of nine members, there are four seats reserved for women in every VP (Negi, Chauhan & Todaria, 2012).

Likewise, community-based forest-governance institutions may be set up at the village level, headed by Gram Sabha/PRIs, provided that the Community Forest Resource Management Committee that functions under the Gram Sabha is an elected and democratically constituted body of the GS/PRI for a period of 5 years. A minimum of 50 per cent of its members should be women and the president should be a member of the Scheduled Tribes and other traditional forest dwellers (Sharma & Kohli, n.d.).

Conclusion

There is a growing consensus that women's knowledge and practices are essential for sustainable development, but their role goes unnoticed in most developing countries. Though the knowledge capital from their practices needs to be optimised, it is also women who are the

most vulnerable to climate change. For effective strategies for climate-change mitigation and adaptation, it is necessary to make women equal partners in policy-making at all levels. Though the COP-18 decision aims to solve this issue, the present circumstances do not promise it much success. Women, especially those from poorer communities, have little say in decisions at local or national levels, quite apart from the international level. However, if the politicians are willing, existing institutions (Figure 1) can be utilised in India, and possibly in several other developing countries, to involve women in the decision-making processes. The basic limitation to implementing such a course remains the non-inclusion of a mission regarding women in the NAPCC; it thus becomes difficult to include such a mission in a state action plan. There is a need to further incentivise action on women's involvement in climate policies and decision-making. Currently, PRIs and VPs clearly indicate the representation of women at the local level, and they have the potential to act as the building blocks for local climate-change mitigation actions with the greater involvement of women.

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