

**Research Project on Protection of
Indigenous Knowledge of Biodiversity
Briefing Paper 4, July 2005.**

A Gendered Perspective of Indigenous Knowledge

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Women And Environment: The Eco-Feminist Construct

It is being increasingly realised the world over that women play an important role in biodiversity management and therefore, any discussion on protection of biodiversity and the associated indigenous knowledge mandates a focus on the issue from the perspective of gender.

At the very outset, it is important to go into the nature of women's relationship with the environment and whether it is distinct from men's. Women are seen as closer to nature than men and according to some theorists, the connection between women and nature is clearly rooted in the biological processes of reproduction.ⁱ Ecofeminists argue that (1) there are important connections between the domination and exploitation of nature and women (2) In patriarchal thought, women are identified as being closer to nature and men as being closer to culture (3) Because the domination of women and the domination of nature have occurred together, women have a particular stake in ending the domination of nature.ⁱⁱ

The idea of a 'feminine principle' in nature has been elaborated by Vandana Shiva and Maria Mies (1993). Drawing on her experiences in the Garhwal region, Shiva (1984) offered an Indian rendition of ecofeminism. She is famous for her celebrated 'ecofeminism' critique of development in the context of government policy on forests.ⁱⁱⁱ Her argument is that through movements like the Chipko, what is reflected is a struggle in Indian society between two fundamentally different world-views. On the one hand is the life destroying and masculinist perspective of the commercial forestry system which treats forests as a resource to be exploited for its monetary value, and which sets up private property in forest wealth. This perspective has the backing of agencies of the state and has also colonized 'cognitively, economically and politically' the local men. On the other hand is the feminine life-conserving principle embodied in seeing the forest as a diverse and self-reproducing system, shared as a commons by a diversity of social groups. Anil Agarwal^{iv} also espouses a similar view that the penetration of the cash economy is affecting the relationships between men and the women and creating a dichotomy in their respective relationships with nature: even the Chipko experience with afforestation confirms this dichotomy between men and women and stresses the role of women in ecological regeneration.

Women's environmental action in India has a long history: three hundred years ago more than 300 members of the Bishnoi community in Rajasthan, led by a woman called Amrita Devi, sacrificed their lives to save their sacred *khejri* trees by clinging to them. They protested in this manner against agents acting on behalf of the ruler of the princely state. On learning of this incident, the ruler revoked his orders. The recent Chipko movement occurred in 1972 when women in the Garhwal region hugged trees to prevent them from being felled by contractors licensed by the state. This resistance was effective in restraining tree felling locally and it later captured the environmentalist imagination

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worldwide. Underlying the Chipko movement is an appreciation of the fact that women's interests in the environment arise from a gendered division of labour wherein they are largely responsible for the daily provisioning of fodder, water and fuel, and the Chipko as an archetype draws on this reserve.

Anil Agarwal also feels that men have become more involved with the cash economy than women have. Women continue to deal with the non- monetized, biomass-based subsistence economy of the household. Even within the same household, we can find cases of men happy to supply tones of bamboo to paper mills etc. and thus destroying nature to earn cash even though it could create greater hardships for the women in collecting daily fuel, fodder, roots, tubers etc. He says that it is not surprising that the eucalyptus based 'social forestry' proved to be a big success in the hands of men as they generated cash. It has also been found that when women become involved in afforestation, they tend to demand fuel and fodder trees, trees which can meet household needs, whereas men demand trees that can generate cash. Male trees and female trees are now becoming something of a jargon amongst those interested in involving communities in afforestation.

The Indigenous Knowledge Of Women In India

In the Indian context, it has been noted that women especially rural and tribal women are dependant on nature for drawing sustenance for themselves, their families and their societies. The destruction of nature thus becomes the destruction of women's sources for 'staying alive'. It has been argued that 'Third World women' have both a special dependence on nature and a special knowledge of nature. Unfortunately, this knowledge has been systematically marginalized under the impact of modern science. Modern reductionist science, like development, turns out to be a patriarchal project, which has excluded women as experts, and has simultaneously excluded ecology and holistic ways of knowing which understand and respect nature's processes and interconnectedness as science.^v

In India, women, with their central role in the household in village societies, have been responsible for the food and nutritional needs of their families. The proverbial "grandmother's cures" often hold the key to many curative plant uses. Even in the practice of medicine men in India, there are women who collect the plants and assist in the preparation of the medicine. Also, even today traditional birth attendants perform midwifery and other basic healthcare functions in a majority of rural societies where there is no access to modern medical facilities.

In traditional agriculture as well, women in India are involved in almost all the activities from seed collection and planting to harvesting, weeding, winnowing, pounding grain and storing it. According to Dr. Sahai,^{vi} it needs to be remembered that farm women and men have not only created several thousand races of food and cash crops, they have also identified valuable genes and traits in these crops and maintained them over generations through a highly sophisticated system of crossing and selection. Communities have not only developed complex systems of pest management and biological control, they have identified and managed a series of genes conferring valuable traits for commercial and

domestic needs. So it is that genes for traits as diverse as disease resistance, high salt tolerance, resistance to water logging and drought tolerance have been maintained in the repertoire of communities. Along with these commercial traits, characteristics like cooking time, taste, digestibility, milling and husking characteristics like how much grain breaks during milling operations are recognised and maintained. Women who have been the traditional custodians of the seed and responsible for its selection, are the repositories of this knowledge and in the true sense owners of this complex seed technology and know-how. According to Krishna, whether or not women first domesticated rice, its cultivation has traditionally been in the women's domain of knowledge. Studies have shown that in the proportionately small geographical areas of North East India, there is as much diversity of rice as in all of Asia.^{vii} Of the Garo in Meghalaya at the turn of the century, Bina Agarwal^{viii} citing Burling (1963) notes that "some women know of over 300 indigenous varieties of rice". Women carry the knowledge of different varieties with them, even when they are displaced from the original villages elsewhere in the region and have migrated to new settlements. Again, Mizo women possess a rich heritage of farming experience: "they use wood ash to preserve paddy seeds in bamboo baskets and tin drums, while small quantities of other seeds like maize are kept in dry gourds".^{ix}

Again, when there is erosion of biodiversity, it is women, as main food producers and caregivers in most communities, who suffer the most. The loss of biodiversity, for instance, affects women in a particular way and impacts on their daily lives, as well as on future lives and livelihoods. The richer and more diverse the forest, the easier it is for women to provide their family with the firewood and other resources they need, and the more time they have for other, possibly income-generating, activities. Conversely, deforestation may lead to water scarcity which in turn results in women having to walk further for water. The Joint Forum of Indigenous Women, North East India, in its recommendations to the Sixth National Conference of Women's Movements highlighted the fact that the main sufferers from the destruction of indigenous management technologies and the environment are women. In their cultures, women play the central role in provision of food and water. The scarcity of their normal foods has led to increasing malnutrition, especially among those who are more traditional in their ways of life, less absorbed into mainstream cultures. Women have now a greater workload in finding and harvesting food and collecting water. The decreasing fertility of their lands is also attributable to the use of new technologies, which are unsuitable, such as fertilizer and pesticide for agriculture.

Recognition Of Women's Role And Their Participation In Conserving Indigenous Knowledge

In view of the intimate relationship between women and the environment or women and indigenous knowledge of biodiversity, States are compelled to revisit their strategies to conserve indigenous knowledge by facilitating a greater participation of women. The Preamble to the Convention on Biological Diversity "recognises the vital role of women in the conservation and sustainable use of biological diversity and affirming the need for the full participation of women at all levels of policy-making and implementation for biological diversity conservation".

This is partly also due to the efforts made at the international level to create an awareness of the gender dimension of the issues. For instance, in the United Nations Fourth World Conference on Women (WCW) in Beijing, China in September 1995, the intellectual contribution of indigenous women was explicitly recognized. It accepted a paragraph in the Platform of Action that agrees to “safeguard the existing intellectual property rights” of Indigenous women. Delegates also agreed to ensure that these rights and their use are protected, respected, and maintained. The language covers "knowledge, innovations and practices ... including practices relating to traditional medicines, biodiversity and indigenous technologies” At the same WCW, a World Rural Women's Day was launched by several international NGOs and a worldwide empowerment and educational campaign is annually organised since 1997 by the Women's World Summit Foundation. The year 2001 theme was "protect your traditional knowledge".

Indigenous women met in Manukan, Sabah, Malaysia, on 4-5 February 2004, to prepare themselves for the deliberations of the Conference of the Parties to the Convention on Biological Diversity (COP 7). Here, they came out with the Manukan Declaration of the Indigenous Women's Biodiversity Network (IWBN) where they stated “as indigenous women, we have a fundamental role in environmental conservation and preservation throughout the history of our Peoples. We are the guardians of indigenous knowledge and it is our main responsibility to protect and perpetuate this knowledge. Our weavings, music, songs, costumes, and our knowledge of agriculture, hunting or fishing are all examples of some of our contributions to the world.” They also asserted that “as indigenous women, it is our priority to protect our rights over our traditional knowledge and biological resources which have to be preserved and protected for future generations. Any decision on the use and protection of our traditional knowledge and biological resources must respect the rights of Indigenous Peoples.” The Manukan Declaration is opposed to technologies and policies such as regimes on intellectual property rights, which violate the rights of Indigenous Peoples to maintain their indigenous knowledge, practices, seeds and other food related genetic resources. Pertaining to the relationship between Indigenous Women, Trade and Globalization, it protests against the appropriation and commercialization of indigenous knowledge, ceremonies, songs, dances, rituals, designs, medicines and intellectual property. Any acquisition, use or commercial application of intellectual, cultural and spiritual property of indigenous women must be done with their free, prior informed consent and respect their customary laws. To protect the knowledge of indigenous women, the Manukan Declaration states that Intellectual property regimes must be prevented from asserting patents, copyright, or trademark monopolies for products, data, or processes derived or originating from the biodiversity or knowledge of Indigenous Peoples. It also categorically says that natural life processes and prior art and knowledge are clearly outside the parameters of intellectual property rights protection. Therefore intellectual property rights protection over any genes, isolated genes, or other natural properties or processes, for any life forms, or knowledge derived from indigenous knowledge may not be utilized without the free, prior informed consent of the Indigenous communities involved.

There are several instances of government-nongovernment organisational partnerships in the area of women's indigenous knowledge of biodiversity. For example, in Fiji, an association of female traditional healers- *Wainimate*- works in collaboration with the

Government to record knowledge of traditional medicine. In India, the National Biodiversity Strategy and Action Plan (NBSAP) process, which is being coordinated through a government-NGO- private sector partnership, has made gender issues a central concern.^x

Factors Which Hamper Women's Participation

In spite of women's strongly rooted indigenous knowledge and their participation in conserving biodiversity and associated IK which has been recognized both internationally and nationally, there are certain women groups that are critical of the "cosmetic" shift in focus by governments. They warn that women in some tribal and village areas are merely being burdened with more labour-intensive roles in government-sponsored cultural art and craft revival programmes.^{xi} There is also little representation of women in local bodies and community councils that actually take decisions over local resources.^{xii} Particularly in the Asian region including India, with its history of patriarchal societies, there are several laws and policies, such as land laws and inheritance rules, which would need to be revised for real gender equity. With limited rights to resources and equally limited say in the political processes that set the boundaries of these rights, merely attempting to protect the intellectual heritage of women would be rendered meaningless.

Available studies on customary laws and practices with regard to land inheritance reveal the predominant patrilineal culture in both tribal and non-tribal village communities. Bina Aggarwal points out that "customarily, barring a few matrilineal communities in north-east and north-west India, and exceptional circumstances (for example, the absence of male heirs) elsewhere, women in most communities have virtually no recognized inheritance rights in immovable property. Even in these cases, the rights do not always extend to inheritance in land (for example, among the Garos, land is communal property); and where it does so extend, do not usually include a right to control or to alienate. Women having usufructory rights to land is somewhat more common, but mainly confined to tribal (matrilineal or other) communities. Also, the rights, whether of inheritance or use, are usually conditional on or associated with specific rules of marriage and residence. Her study points out that even in the limited pockets where such rights have existed, there has been systematic erosion, and among other things state legislation and policies have significantly contributed to these trends. She observes that the noted erosion of women's customary claim to land, especially with privatisation, has not been made up by the progress in modern legislation, since the laws have not permeated practice. The existence of customary laws, in contradiction to the state laws, to which the state gives its acceptance, creates an anomalous situation. Many customary practices effectively limit women's capacity to assert their legal rights over property and the state legitimises this subordination of women's rights in agricultural land and other property, by retaining such customary laws of various regions.

K.S. Singh, in his study "Tribal Women and their Land Rights" points to the predominant patrilineal forms of inheritance in tribal India. He explains the reasons for the prevalence of such systems as follows: (1) that it is the lineage that reclaims land, and (2) the belief that it is the male who performs the backbreaking task of reclaiming the land. This is inspite of the fact that the role of tribal women in plough culture is far

greater than that of their non-tribal counterparts. The tribal women prepare the field for cultivation, break clod and even till the land besides performing a major role in sowing, weeding, threshing and harvesting. Despite this, women have been denied land rights and only men have the right to own land for all times. Prevention of alienation and fragmentation of land was another reason for not granting women any absolute ownership of land.^{xiii} Even in the context of North East India, where women have a visible role in the economic life of their communities, have considerable physical mobility and the freedom to take certain kinds of decisions, yet throughout the region, women have no substantial property rights. Cultivable land is the most productive asset and forms the basis for food and livelihood security, but women's rights over it are non-existent or restricted. The Khasi, Garo and Jaintia are matrilineal, tracing inheritance and descent through the female line, but authority is vested in the mother's brother. Husbands, brother and maternal uncles have the "formal managerial authority over land."^{xiv} Mizo women are liberated to work but their earnings belong to men. Naga women are generally not allowed to inherit property. The only notable exception is the Southern Angami Naga, among whom "landed property is inherited through the male line" while "movable property may be inherited by females". Here, a woman can buy land of her own and receive land bought (not inherited) by her parents.

Speaking of other factors, which lead to marginalization of women's IK, Krishna^{xv} says that the swift transformation of production systems, land use and livelihoods in recent decades has affected gender relations, leading in many cases to marginalizing women's knowledge and expertise while increasing their labour. Gender roles are not fixed and are being constantly re-determined by changes in the family structure, the impact of market forces, technical inputs and information. Moreover, even as the gender gap remains unbridged in the domain of the so-called old economic rights (such as the right to land and waged employment), new rights (such as environmental and human rights) and emerging communitarian rights (such as those related to indigenous knowledge technologies) have come into focus. Instead of this being treated as an opportunity to provide an empowering climate, the apprehension is that the new and emerging public policies, legal initiatives and institutions may actually be strengthening the old inequities, if not creating fresh gender gaps. Analysing the evidence for South Asia as a whole, Meinzen-Dick and Zwartveen (1998: 179-80) have shown that women's participation in water-user organizations in Sri Lanka, Nepal, Pakistan and India is 'much lower' than men's. They say this is despite women's involvement in irrigated agriculture, and even in agricultural decision making. Rules, which exclude women, are easily discerned.

Conclusion

In the quest for alternatives to the use of conventional intellectual property rights in the protection of indigenous knowledge, there are attempts being made by NGOs, indigenous groups and local communities towards strengthening community rights, campaigning for farmers' rights and demanding recognition and respect for customary and indigenous law. However, in all these attempts, it is crucial to look into the issues from a gendered perspective. Keeping in mind the vital importance of women's knowledge to the preservation of biodiversity, the following recommendations made by Helene Gregoire of

Cornell University, New York and Ashley Lebnner of Cambridge University may be worth mentioning:

1. Recognise indigenous knowledge as a 'gendered science', which would help "legitimise and strengthen rural women's and men's separate, shared and interlocking knowledge as tools to shape their own futures"
2. Ensure that women are not simply 'added' to the Convention on Biodiversity but rather that biodiversity is redefined in broader, more inclusive and fluid terms. This "implies a definition based on the diverse experiences and the distinct sciences of many different groups"
3. Address the different structural positions of women and men and the question of access and control of resources (including land) as shaping the use of resources and the systems of traditional ecological knowledge.
4. Advocate the 'cultivation of diversity' through decentralisation and local democratic control.
5. Rectify the gender bias in many organisations and programs working with IK.
6. Create a network of supporting institutions in which women would have a voice;
7. Allow for alternative development models based on IK and which focus on diversity and locality rather than on technological progress and the domination of nature.
8. Consult community members to determine the ways in which IK could best benefit them.^{xvi}

ⁱ An extreme form of this position is that taken by Ariel Kay Salleh who grounds even women's consciousness in biology and in nature. She argues: "Women's monthly fertility cycle, the tiring symbiosis of pregnancy, the wrench of childbirth and the pleasure of suckling an infant, these things already ground women's consciousness in the knowledge of being coterminous with nature" (cited in Menon, N., 1999, *Gender and Politics in India*, New Delhi: Oxford University Press).

ⁱⁱ Menon, N., *op.cit.*

ⁱⁱⁱ Shiva, V., "Colonialism and the Evolution of Masculinist Forestry" in Menon, N. (ed.), *op.cit.*, pp 39-71.

^{iv} Agarwal Anil, "An Indian Environmentalist's Credo" in Guha, Ramachandra (ed.), 1994, *Social Ecology*, New Delhi: Oxford University Press, pp.346-386.

^v Shiva, V., 1988, *Staying Alive: Women, Ecology and Survival*, London: Zed Books

^{vi} Sahai, S., "The Importance of Indigenous Knowledge"

^{vii} Krishna, S., "Gendered Price of Rice in North-Eastern India", *Economic and Political Weekly*, June 18, 2005.

^{viii} Aggarwal, B., 1994, *A Field of One's Own: Gender and Land Rights South Asia*, New Delhi: Cambridge University Press.

^{ix} Krishna, S., *op.cit.*

^x GRAIN and Kalpavriksh Environmental Action Group, 2002, *Traditional Knowledge of Biodiversity in Asia- Pacific: Problems of Piracy and Protection*, GRAIN Publications.

^{xi} *ibid.*

^{xii} *ibid.*

^{xiii} Kusumba, B., *Gender and Social Movements*, New Delhi: Rawat Publications.

^{xiv} Krishna, S., *op.cit.*

^{xv} Krishna, Sumi, "A 'Genderscape' of Community Rights in Natural Resource Management" in Krishna, Sumi (ed.), 2004, *Livelihood and Gender: Equity in Community Resource Management*, New Delhi: Sage Publications India Pvt. Ltd.

^{xvi} Gregoire, H. and A. Lebnner, *Re-evaluating Relevance: Intellectual Property Rights and Women's Traditional Environmental Knowledge*.

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