



Gender Mainstreaming in Biodiversity Conservation and Management in the Hindu Kush-Himalayan region

INFORMATION SHEET #4/10

Biodiversity in the Hindu Kush-Himalayan region is linked closely to people's livelihoods, their cultures, and traditions. The communities in these mountains have abundant traditional knowledge related to biodiversity management, especially in terms of preserving, enhancing, maintaining, and sustainably using agriculture, forests, and rangeland resources. Their knowledge and traditional practices are important for adapting to the impact of climate change. This knowledge, especially the different knowledge base and skills of women and men in biodiversity conservation, and their different needs for and priorities in ecosystem services, is rarely documented or brought to the attention of policy makers.

There is an urgent need to integrate gender perspectives into biodiversity research, management, conservation policies, strategies, and actions. This information sheet provides the rationale for gender mainstreaming in biodiversity conservation and management activities and suggests ways to address gender inequalities and facilitate inclusive policy development for biodiversity conservation and management.

Women and men play different roles in biodiversity management: both have knowledge about, and skills in, use and protection of biodiversity resources. Women's contributions to conserving and managing biodiversity, however, are seldom acknowledged. And even their capacity to do so remains unrecognised. One of the reasons for this is the lack of gender-differentiated perspectives in biodiversity research and documentation. Both women's and men's perspectives need to be integrated in biodiversity studies to gain a complete account of biodiversity characteristics, people-plant-wildlife relationships, causes of biodiversity loss, and the efforts required for conservation and management. Such integration would help achievement of the three objectives of the Convention on Biological Diversity (CBD) on conservation and sustainable use of biodiversity and the fair and equitable sharing of benefits from genetic resources. Climate change adds another dimension to biodiversity management, because it has direct and indirect impacts on both biodiversity and the people who depend on the services it provides. Hence, understanding the gender perspectives of climate change is crucial for developing adaptation strategies and building both women's and men's resilience to environmental changes.



- women play a significant role in crop production and diversification, traditional seed management, and forest resource management such as the use of medicinal plants;
- women are conservationists or biodiversity managers and their efforts and expertise need to be acknowledged;
- in the climate-change context, understanding and addressing different biodiversity needs of women and men will decrease their vulnerabilities and enhance their ability to cope and adapt;

Biodiversity is the variability of all life forms: it influences key ecosystem processes such as productivity, nutrient cycling, resilience, and evolution. These processes provide multiple benefits to mankind through a variety of goods and services. The continued loss of biodiversity affects the productivity of the landscapes upon which human livelihoods and economies depend. Biodiversity faces threats from climate change, changes in land use and land cover, and socioeconomic changes; and from activities such as deforestation, overexploitation of resources, and illegal harvesting. The impact of these threats to biodiversity is manifested in human lives and livelihoods.

The need for gender mainstreaming in biodiversity conservation and management

Biodiversity conservation and management represent priority issues for the eight countries of the Hindu Kush-Himalayan region (Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan). Biodiversity management facilitated by ICIMOD aims to balance ecological and socio-cultural systems, giving equal emphasis to conservation and people's livelihoods. This means supplementing conservation efforts concentrated in protected areas with community-led conservation initiatives outside protected areas.

The preamble to the CBD mentions:

"the vital role that women play in the conservation and sustainable use of biological diversity" and affirms "the need for the full participation of women at all levels of policy-making and implementation for biological diversity conservation."

Taking CBD's agenda ahead, ICIMOD is promoting gender mainstreaming in biodiversity conservation and management by spreading awareness that

- women and men have complementary knowledge and perceptions of their natural environment and the biodiversity around them;



- the different knowledge and skills of women and men provide a wide range of solutions to address issues of habitat degradation and biodiversity loss; and
- improved capacities of both women and men can promote innovation and add value to community efforts to reduce pressure on natural resources and enhance ecosystem functions and services.

Key gender issues in biodiversity conservation and management in the region

Equitable access to resources and land rights – Most rural women do not have secure land rights: this limits their access to and control over the critical biodiversity resources they need for their daily sustenance. Security of tenure provides women with flexibility to use the land to its greatest potential; it gives them the opportunity to experiment with crops and try out diverse varieties of wild plants and indigenous species. Their ability to identify, grow, use, protect, and preserve different species helps conserve genetic diversity, maintain productivity of the landscape, and restore degraded ecosystems.

Possession of productive assets – Women engage mainly in home-based subsistence farming and often possess fewer financial assets than men. This prevents women from making investments in innovative farming technologies and adopting effective means for local biodiversity management. However, in instances in which women have adopted alternative livelihood options linked to biodiversity conservation, such as ecotourism, or have introduced innovative ways of pooling their money for various community-based economic activities, the results are positive. These practices have alleviated the burden on the forests and other natural ecosystems.

Increased workload – Fetching water, fodder, and fuelwood are the most time-consuming activities for mountain women. Widespread deforestation, degradation of habitat, and desertification add to their burden when they have to travel far and are, at times, forced to extract resources from conserved areas and forests. This has serious implications for tasks and economic activities which are production based.

Education and access to information – Women in mountain areas are often deprived of basic education. Non-literacy hinders women's access to knowledge and know-how about managing biodiversity resources, especially about how to identify coping and adaptation mechanisms during crop failure, food shortages, and natural disasters. Women's



access to agricultural innovations, such as improved seeds, fertilisers, and effective farming technologies, is limited due to lack of education, training, and extension services. Women also have little access to the benefits of agrobiodiversity research and innovation and their roles and needs are often not a part of horticultural and crop improvement science.

Meaningful participation and voice – Women's representation in community networks and decision-making bodies is often minimal. Formal efforts to conserve biodiversity overlook women's conservation roles as gatherers of wild plants, plant domesticators, herbalists, propagators, and seed custodians, as well as their expertise in identifying

and using medicinal plants, wild edibles, and fodder species. On many occasions, women's collective voice and actions have hindered activities such as poaching, excessive biomass extraction, and illegal trade.

Food security – The diverse and integrated agricultural system maintained and managed by mountain women and men provides insurance

against food scarcity. In addition, women also maintain home gardens in which a wide variety of vegetables, fruits, spices, and condiments are grown. These gardens are often repositories of many uncommon wild species, or even rescued species from cleared forests. Farmers have a lot of knowledge about crop diversity that complements crop improvement, and scientists are beginning to acknowledge the usefulness of this knowledge for developing cultivars. They should focus on developing high yields and improved nutritional values in crops preferred by local people.



Key action points for mainstreaming gender in biodiversity conservation and management

Celebrating the International Year of Biodiversity, ICIMOD organised an e-discussion on Biodiversity and Gender in the Hindu Kush-Himalayan region, through Asia Pacific Mountain Network (APMN), on key issues related to gender and biodiversity. The following action points were prepared to help mainstream gender perspectives into biodiversity conservation and management based on the ideas exchanged during the e-discussion.

Document the differential knowledge of women and men about biodiversity resources – Women and men have complementary knowledge about biodiversity resources which reflects their shared responsibilities. Gender disaggregated data on the conservation, use, and management of biodiversity; and women's and men's differential needs and control over resources, need to be documented.

Develop clear guidelines, tools and methodologies to mainstream gender into biodiversity management – The systematic integration of gender perspectives into biodiversity research, programmes, and management requires tools for gender analysis that can help capture gender gaps and inequalities, as well as ways to address them.

Acknowledge and respect the role of women and men for agroecosystem management and conservation of plant genetic resources – Women from many indigenous communities play an important role in preserving high quality seeds of crop plants. Women's knowledge of rain-based agriculture and associated practices, including agroforestry, is crucial for maintaining crop genetic diversity.

Enhance the role of women and men in maintaining the ecosystem integrity and services through practical policy measures – Policies that facilitate access to, and sustainable use of, resources help communities manage biodiversity in

their own interests. Such policies, together with community led monitoring mechanisms increase community ownership and commitment towards maintaining ecosystem integrity for long term sustenance of ecosystem good and services.

Acknowledge and promote women's traditional knowledge in sustainable management of local-level biodiversity resources – Women's practical knowledge about herbs, medicinal plants, and wild greens needs to be promoted in light of the role women have in passing on traditional knowledge to their children, family, and entire communities.

Recognise women's and men's adaptations to climate change – Certain livestock breeds used in traditional transhumance practices are able to survive a wide range of climatic conditions. The home-sites and kitchen gardens maintained by women are repositories of crop genetic resources and their wild relatives. These resources form the bases for adaptation.

Promote interventions that enhance women's contributions to the health and wellbeing of the family – Women have the ability to identify, select, and grow crop varieties with great nutritional value. They also make important decisions about conserving less common species for future use. Technologies to minimise women's workloads should be promoted and policies constraining their role in food security reviewed.

Increase and encourage women's participation in decision making related to biodiversity conservation – Women's capacity to participate in management of local, community-based institutions implementing conservation initiatives should be increased through increased access to information and equitable participation in training and extension services.

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We thank the participants who contributed to the e-discussion on gender and biodiversity held from 3-21 May, 2010. Details of the e-discussion can be read at: <http://www.icimod.org/?page=1029>



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