



1.3 Biocultural diversity in community forestry in Nepal

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Introduction

According to the Convention on Biological Diversity, it is important to respect, preserve, and maintain the knowledge, innovations, and practices related to biodiversity of indigenous and traditional communities. The recognition of the importance of local values and knowledge of biodiversity is reflected in the gradual expansion of the concept of biodiversity to include biocultural diversity.

Traditionally, biodiversity was defined in ecological terms as involving ecosystem, species and genetic levels. The UNEP Global Environmental Outlook Report 2007 describes biodiversity as also encompassing human cultural diversity, which has impacts on the diversity of non-human species, genes and ecosystems. This acknowledges the intersection of biological diversity and cultural diversity (Pretty et al. 2009).

The linkages between biodiversity and cultural diversity have been further formalized in the concept of biocultural diversity. According to UNESCO, biocultural diversity concerns the sum of the world's differences regarding biological diversity at all its levels, cultural diversity in all its manifestations and their interactions (Persic and Martin 2008). It encompasses the variability among social and cultural groups in the representations, value systems and cultural practices concerning different biological organisms at the levels of ecosystems, species and genes.



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Certification standards for biocultural diversity

Most forest certification schemes recognize the need to conserve both biodiversity and cultural diversity. For instance, the Forest Stewardship Council (FSC) certification system explicitly includes respect for indigenous peoples and community rights (FSC Principles 2

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and 3) and for the ecological impacts on biodiversity of forest product harvesting (Principle 6). The standards related to socio-cultural aspects recognize issues such as the maintenance of legal and customary tenure or use rights of indigenous people and local communities (Principle 2.2); the maintenance of control by indigenous peoples over forest management on their lands and territories (Principle 3.1); and the protection of sites of special cultural, ecological, economic or religious significance (Principle 3.3). The standards related to biodiversity include issues such as protection of rare, threatened and endangered species and their habitats (Principle 6.2); protection of representative samples of existing ecosystems within the forest landscape (Principle 6.4); and control of adverse ecological impacts of the use of exotic species (Principle 6.9). Principle 9 emphasizes the need to conserve high conservation values.

Who decides on criteria for biocultural diversity?

Although various ecological and cultural aspects of biocultural diversity are included in forest certification schemes, they are usually formulated as separate principles. In spite of UNESCO's definition that biocultural diversity concerns not only the sum of, but also the interaction between biological diversity and cultural diversity, timber certification standards do not explicitly refer to such interactions. These interactions are reflected in the variety of human representations and values related to ecological diversity.

Although forest certification schemes acknowledge the need to recognize the range of local value and knowledge systems, certification criteria are determined not by local people but by professional experts. The criteria relate to the need to respect the forest property, access and use rights of local communities and indigenous peoples. They do not explicitly acknowledge local rights to identify needs and priorities for biodiversity conservation on the basis of local representations and values. Recent experiments in Nepal demonstrate the scope for a more participatory approach to identifying culturally-sensitive criteria for biodiversity conservation.

Participatory development of certification criteria

Nepal is recognized as one of the world's leaders in community forestry. Approximately 1.23 million hectares of forests are managed by 14,431 community forest user groups (CFUGs); these schemes benefit 1.66 million households, about 40% of all the country's households (MoFSC 2009).

A basic principle in community forestry is the need for a location-specific approach to forest management, and incorporation of local values and knowledge systems. Originally, community forestry focused on the basic forest-related needs of local communities.

Forest biodiversity is critical to the livelihoods of the people living around forests. Some indigenous communities, such as the Raute in western Nepal, are totally dependent on a variety of forest products for their livelihoods. Other indigenous communities, such as the Chepang in central Nepal, recently started to practise agriculture, but still depend on forests for many products. Even in communities that engage in agriculture, many people collect a variety of food, fodder and timber and non-timber forest products (NTFPs).

Forests also contribute to cultural identity. Cultural objects such as temples and graveyards are situated in forests, and several species, such as the Bodhi tree (*Ficus religiosa*) have religious significance.

A recent trend in community forestry acknowledges not only local forest-related needs, but the production of forest products for national and international markets. As a result, attention is now paid to whether CFUGs can comply with international certification standards. In a 2005 initiative, 21 CFUGs in Nepal were certified under the FSC to produce NTFPs (medicinal and bark products) for the international market. This certification, based on an assessment by Smartwood using international FSC standards, prompted efforts to develop a set of national standards for certification.

In light of the participatory nature of the Nepalese community forestry programme, some Nepalese foresters suggested that a participatory approach be used when developing these standards. Through a participatory approach by government foresters, NGOs and CFUGs (Shrestha and Khanal 2004) the global FSC standards will first be adapted into a set of local standards for community forests in different geographic areas; they will then be amalgamated into a national standard. In 2004 the first experiment to identify local criteria for assessing forest management was initiated by two CFUGs in Parbat district (Shrestha and Khanal 2004); these experiments are now being repeated and are currently ongoing in other regions.

A second initiative in participatory development of was undertaken in 2005. It involved the Ganeshman Singh Forest Conservation Award, which is presented annually by the Ministry of Forest and Soil Conservation to the most successful CFUGs. Six CFUGs in different physiographic regions identified local criteria and indicators for judging successful community forest management for the award (Pokharel and Larsen 2007).

Local opinions about biocultural diversity standards in Nepal

These two experiments provide insights into the opinions of local communities about relevant criteria for biocultural diversity. Additional information was collected by independent studies on local criteria for assessing community forestry (Smith, Chhetri and Regmi 2003) and biodiversity (Lawrence et al. 2006).

Jointly, these findings demonstrate that although local communities value biodiversity, their values regarding biodiversity are not necessarily the same as those of ecological experts. This is illustrated by an ecologically-focused study in two CFUGs reporting that biodiversity conservation was not an explicit management objective, and that biodiversity had either declined or had been altered as a result of management practices such as cleaning, weeding, thinning, selective felling and/or plantation establishment (Acharya 2004). The culturally-related local values mainly concern functional biodiversity rather than intrinsic values of biodiversity (Smith, Chhetri and Regmi 2003; Shrestha and Khanal 2004; Lawrence et al. 2006; Pokharel and Larsen 2007):

- The local ideal concerning forests is not undisturbed pristine forest, but rather a well-functioning, production-oriented forest. The villagers' appreciation of forest quality does not necessarily relate to the most biodiverse forests, but rather to those

best stocked with useful species. Locally valued biodiversity includes not only trees providing timber, fuelwood, or fodder, but also herb and shrub species that provide NTFPs, notably medicines.

- Functional biodiversity also includes a variety of ecosystem services, such as regulation of conditions related to soil, water and micro-climate. Local values recognize the need to protect endangered species — notably animals threatened by hunting — and to carefully monitor the introduction of exotic species.
- Local values emphasize the cultural significance of forests. Forest conservation and management should include the conservation of cultural sites — and the objects they contain — such as graveyards, monasteries, and locations of cultural ceremonies; their presence gives forest a high conservation value for local people. Forest value is also reflected in local knowledge about the distribution and use of a range of species and forest types; such knowledge is part of cultural identity.
- Local values of forests are reflected not only in technical practices of forest use and conservation, but in social practices of participation and benefit-sharing. Local communities are conceived of as heterogeneous rather than homogeneous groups of people (Ghimire, McKey and Aumeeruddy-Thomas 2004). Local people consider that social and economic diversity is as important as biodiversity. Local principles for forest assessment emphasize equitable distribution of different types of biodiversity to different categories of forest users, paying specific attention to poor and disadvantaged groups. They also identify the need for effective representation of women and disadvantaged and minority groups in the communities' management committees. Moreover, locals believe that outsiders who make use of indigenous knowledge regarding biodiversity should provide compensation for that use.



Conclusion and lessons learned

The experience in Nepal demonstrates the relevance of extending the concept of biodiversity to biocultural diversity and of including them, as well as standards for recognizing local representations and values, in certification schemes. Local standards for conserving biocultural diversity differ in several respects from the standards identified by ecological experts. Local people do not see biodiversity conservation as an ecological imperative for conserving the intrinsic values of nature in all its variety. Although local standards recognize the need to protect locally-acknowledged endangered species, they focus primarily on the need to conserve functional biodiversity. Functional diversity includes the provisioning, regulating and cultural services provided by biodiversity. Certification standards should focus not only on cultural aspects of forests, but on equitable sharing of forest benefits within heterogeneous communities. The Nepalese experiments demonstrate that conservation standards should recognize the diversity in cultural practices for using forest biodiversity and sharing its benefits.

Three main lessons can be learned from the Nepalese experience in terms of making forest certification more effective as a means of culturally-sensitive biodiversity conservation:

- Explicit attention should be given to both functional biodiversity and threatened biodiversity. At present, most forest certification systems focus on the provision of one dominant forest product (e.g., timber or carbon sequestration) with biodiversity conservation considered a benefit of sustainable forest management. More attention should be given to developing standards for balancing multiple uses of functional biodiversity and conservation of threatened biodiversity.
- It needs to be recognized that cultural values regarding biodiversity are expressed not only in location and group-specific practices for multiple forest uses, but in social practices for sharing diverse benefits. Standards for biodiversity conservation should focus not just on biodiversity, but on the socio-economic and cultural diversity of various forest products and services.
- Participatory approaches to standard setting for biodiversity conservation are needed. Such processes empower local communities to make use of local knowledge and deal effectively with global standards.

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