

TRADITIONAL MANAGEMENT OF NATURAL RESOURCES

Traditional institutions and systems of natural resource management

While recognition of community-based natural resources management is relatively recent in the RGOB's forest policy, its concept and traditions are deeply rooted in Bhutan's culture and history. This study captures and highlights some of the traditional beliefs and practices of forest management practiced by the Monpa community for centuries.

***Menyer* (Village Forest Guard)**

Before the Forest Act came into force, most of the forests in the three Monpa villages were managed by the community through the institution of *Menyer*. The *Mang*, households of a village, would appoint the *Menyer* on an annual or biannual basis. The *Mang*, mainly the village elders, made most of the decisions and defined the function of the *Menyer*. The *Menyer* was delegated the authority to ensure that everyone had adequate firewood and construction timber. He was also empowered with the responsibility to enforce *Reedam* (prohibition of forestry activities, including extraction of bamboo, and grazing during summer). The *Menyer* was paid in kind and exempted from the obligatory service to the community. When the first Forest Act was passed in 1969, the institution of *Menyer* was nullified as all non-registered forest was declared as state property.

In 1995 after the establishment of the Black Mountain National Park, the system of *Menyer* has been revived with major modifications. A local person is identified, trained and

appointed as *Menyer* by the park management. He is paid Nu. 1500 per month by the park and he covers the three Monpa villages - Wangling, Jangbi and Phumzur. He regulates firewood, timber, cane and bamboo collection, monitors wildlife poaching and encroachment of forest land by villagers. He also monitors outsiders harvesting forest produce from their area. Most Monpas feel that this system is good, because forest resources are conserved and everybody within the three villages has equal access to the resources. However, a few people do not like this system of regulation.

If someone in the village violates the rule, the *Menyer* discusses with the *Mang* to settle the matter. However, if it is not resolved, he reports the matter to the BMNP ranger who verifies the issue and fines the guilty. In most cases, people accept the *Menyer's* verdict. In case of forest fire, he has to mobilize local people and extinguish the fire. The person responsible for setting the fire is identified and fined as per the regulation (Nu.1000 for damage of one acre of forest area). In case of forest fire, the BMNP authorities enforce regulatory actions.

***Chunyer* (Drinking Water and Irrigation Water Watchman)**

The concept of *Chunyer* evolved in a manner similar to that of *Menyer*. The *Chunyer's* responsibilities are making sure that the traditional rights to drinking water are respected by all households, and to ensure proper distribution of water for irrigation among the landowners. The local community authorizes him to arbitrate in minor disputes among the irrigation canal owners. Unlike in the case of forest products, property rights over water are strictly enforced. The irrigation canal ownership pattern is based on land ownership and is location-specific. The expansion or conversion of the paddy-

field from other land uses requires the endorsement of the existing canal members. In case of agreement by the members, the new member would have to pay an equivalent amount in terms of labour expended by other existing members. The *Chunyer* is appointed by the *Mang* and receives no financial compensation. His input is considered as service to the community. This system has been modified after the establishment of Rural Water Supply Scheme in 1990 in Phumzur village and, in 1996 in Wangling and Jangbi villages.

***Shingnyer* (Agriculture Crop Damage Arbitrator)**

In case of crop damage arbitration, each village selects one person with a high degree of integrity, to arbitrate disputes. This person is called *Shingnyer*. His responsibilities include declaring the agricultural season's commencement. This is done by going from house to house, usually in March, and informing the household of the enforcement of the regulation for the season. From this day on, compensation and fines for crop damage by the cattle become effective. The mode of calculating compensation and litigation seem to be both practical and logical. When cattle have damaged an agricultural crop, the landowner requests the *Shingnyer* to inspect the field and make an assessment of the damage, which is done in the presence of the cattle owner. The methodology to be used for the damage assessment is jointly agreed among the three individuals, i.e. landowner, cattle owner and the *Shingnyer*. For instance, in case of paddy, the numbers of clumps are counted. During harvest time, paddy is harvested from an equal number of clumps from the cattle owner's field and the landowner is compensated with the same quantity. There are occasions when the job of *Shingnyer* can become complicated. Among the acceptable proof required to charge someone for crop damage, the cattle should

either be tied up at the damage site or witnessed by a third party. However, people generally accept the verdict given by the *Shingnyer*.

Reedam (Traditional Forms of Sanction)

The enactment of the Forest Act in 1969 saw a major change in the way in which forest resources were appropriated, both for commercial and domestic consumption. Prior to this period, it was not considered an offence to harvest any forest resources for one's own use without formal sanction from the state, with the exception of hunting endangered species. However, the Monpas developed their own informal restrictions on forest-use and sanctions for any breaches. These local systems and sanctions are followed religiously by all households which have contributed to sustainable resource utilization and conservation.

Some examples of such traditional sanctions include:

- Adhere to the closed season for bamboo, cane, fern, mushroom, orchids, and wild tubers. Harvesting these forest products during the closed season is strictly prohibited by the local community and people follow this regulation sincerely.
- Protected life cycle stages for bamboo (which includes shooting and young stage)
- Follow selective harvesting:
 - Cane - only best quality and required type of cane is harvested;
 - Fern - only edible young shoots are collected;
 - Firewood - only dead/injured/deformed trees are harvested.
- Villagers are allowed to harvest a maximum of ten number of *patcha* at one time. The Monpas believe that harvesting young cane shoot can be harmful to the plant because of its low regeneration capacity.

- Fodder is not collected from forest in summer season (May to September) to allow fodder trees to regenerate.
- Trees nearby water sources, big boulders, cliff and ridges are believed to be home of local deities and protected to avoid sickness and misfortune.
- People from other villages are not allowed to collect forest products from the Monpa villages.

These local sanctions on forest resources are not reflected in formal manner in any legislation. This may be attributed to the religious and cultural belief that has been in practice for generations. Whatever the interpretation, in actual practice, it is very functional. In summer, forest operations, especially harvesting, are likely to cause more environmental damage than during the dry season. The same holds true in case of grazing by cattle. It was also reported by a few elderly Monpas that although they have local regulations for sustainable harvesting of resources, they are unable to control collection of these resources by the migratory herders from Bumthang.

Species of cultural and economic importance

As outlined in chapter three, *Bonism* is the main religion of the Monpas. Preserving the environment, sacred and natural heritage sites are an important and integral part of *Bon* value system.

Large trees, rocks (a few were identified by their ancestors in the past) are considered the domains of the local deities, *sadag* and *nye*. Trees play a major role in the rituals of purification through fumigation. The Monpas offer incense to their deities. The local plants used by Monpas as incense are *Cupressus cashmeriana*, *Canarium spp.*, *Citrus spp.*, *Cinamomum*

grandiliferum, and *Aquilaria agarlocha*. Other plants used while performing rituals or for decoration are: *Rhododendron arboreum*, *Gaultheria fragrantissima*, *Oroxylum indica* etc. Of all these plants, *Oroxylum indica* is highly valued. The sword-like fruits mature during winter and contain white papery-winged seeds. It is a sacred form of flower, and is essential while performing any rituals. Although these sacred species are used for performing rituals, there is no special spiritual attachment to these species. They are treated just like any other plant species while using them as firewood or for other purposes.



A Monpa woman offering incense (*Rhododendron arboreum*) to deities

During discussions with the Monpas, it was found that besides the above sacred plants, certain species of plants had cultural and economic value such as: *Gautheria fragrantissima*, *Quercus glauca*, *Quercus grifithii*, *Juglans regia*, *Schima wallichii*, *Pinus roxburghii*, and *Toona ciliatta*. These trees are not cut at a young stage but allowed to grow naturally in the fields to increase soil fertility, supply timber and fuel wood. *Rhododendron arboreum* is culturally valued because its flowers can be offered to local deities. *Aesandra butyracea* and other vegetable oil producing trees are valued for their use.

Culturally valued species and their ecological importance

The *Sisiseng* (*Quercus grifithii*) growing in the field including *tseri*, are culturally valued and protected by the Monpa people. Based on intuitive experience, the Monpas believe that this species does good to the crops by increasing soil fertility. It grows naturally in the fields, and makes good humus. *Sisiseng* is culturally valued also because the Monpas have a legend which is linked with this tree species.

"Once upon a time, the world was flooded with water. One of the lineage of Monpa, Takza, made a big hole in the Sisiseng tree to protect himself from the flood. Dungza, from another lineage of the Monpa, came to know about it and wanted to see the hole. Once he saw the hole and entered it, he refused to come out. Later, all people of the world died flooded with water. The Dungza lineage survived and is believed to be the ancestor of the present day Monpa, as he protected himself in the Sisiseng tree. This tree species is valued by the Monpas till today".

Oak (*Quercus spp.*) also plays an important role as an organic residue in sustainable soil fertility maintenance and the oak forest ecosystem plays a critical role in soil moisture retention outside the monsoon period. Linking ecological and social

processes is crucial for appreciating the relationship between biodiversity and ecosystems function and to utilize this relationship for human welfare through sustainable management of resources. There is greater realization now that the tree species which are socially valued often have keystone value in the ecosystem. However, the role of socially selected ecological keystone species within natural forest ecosystems in conserving and enhancing biodiversity, and indeed manipulating ecosystem function, is a critical area which has not been adequately explored. Keystone species play a crucial role in biodiversity conservation, through key functions that they perform in an ecosystem; often they are also socially and culturally valued. Therefore, they could be used for not only managing pristine ecosystems, but also for building up biodiversity in both natural and human-managed ecosystems, through appropriately conceived rehabilitation strategies that will ensure people's participation [Ramakrishnan 2001].

Sacred groves

During the discussions, it was learnt that there are many sacred groves in the three Monpa villages. It is taboo to damage or cut trees from the groves considered sacred, as these are considered domains of local deities locally termed as *duth*. Similarly, big rocks and trees identified by the ancestors are also considered domains of local deities and not to be harmed. It is believed that if sacred groves are damaged, the people will suffer from illness and misfortune. All the three villages offer annual rituals to local deities (*sadag*) to prevent landslides, particularly at water sources. Most of these groves are also water catchment areas.

Wangling: In *Wangling*, the major sacred groves are: *Remdang duth*, *Domtongma duth*, *Tharbi duthmo*, *Selengbi duth*, *liebi duth*, and *Keplung seng*. Among all these *duths*, *Remdang duth* is considered to host a strong deity and disturbance to this area is strictly avoided by the local community.

Jangbi has the highest number of sacred groves. The major sacred groves in *Jangbi* are: *Krong duth*, *Khepamong duth*, *Sapung duth* (forest below the *Lhakhang*), *Kiplungsen duth*, *Wamkhey duth*, *Tadungla duth*, *Ngokshila dzong* (rocky cliff), *Ngokshila chigong duth*, and *Basem duth*. Among all these *duths*, *Kiplungsen duth* is considered the abode of the highest deity and disturbance to this area is avoided by the community.

At *Sapung duth* area, there is a big sacred tree. Cattle are grazed but no trees are cut in about two hectares of the land area. Local people perform rituals twice a year to this deity (in summer and winter). First crop and *bangchang* made of first cereal are offered to this deity. This ritual is performed only by *pawo*.

In the *Wamkhey duth* area, cattle can be grazed, however, no trees are cut for fodder, firewood, timber. It is believed that people who cut the trees from this forest suffer from aches and pains. A key informant and village elder narrated that when he was young, he had cut a tree for cattle fodder and he fell sick. He claims to have suffered from backache, body-ache and he felt like an old man and was unable to move.

Phumzur: In *Phumzur*, the major sacred groves are: *Wangthangang*, *Pemthang*, *Plamthang duth*, *Nimbangchhu duth*, and *Rimcha duth*. Among all these *duths*, *Plamthang* (cane/bamboo forest) and *Nimbangchhu duth* are considered

the abodes of strong deities and disturbance to the area is avoided by the community.

It is worth mentioning that this small population that lives in very intimate harmony with nature has a number of sacred groves and sites. Their belief as well as practice of protecting these sacred sites by preventing felling of trees or other intervention, goes a long way in managing the much-needed water resources. Natural Resource Map (Annexure) of each village shows the location of sacred groves, *Tsamdo* and source of other forest products.

It has been observed that, unlike in many other villages in the country, beliefs, traditions and the culture of the Monpas have been highly instrumental in conserving the forests and natural resources of their villages. In an environment of rapid social and economic transition, it would be important to assess whether the values and traditions and their positive impact on the natural resources will still continue to exist in years to come. Are these beliefs by themselves enough to conserve these resources?

Resource use and rights of the indigenous peoples

Bhutan's forest policy places strong emphasis on conservation above all other considerations. However, it still allows people to practise their traditional use of forest products. The RGOB policies related to collection and use of some non-timber forest products have been less stringent and more considerate in areas of isolated and marginalized pockets of population such as the *Monpas*, *Khengpas*, *Lhops*, and *Brokpas*. In recent times, some of these policies and relaxation on the utilisation of forest products have changed due to designation of forests as protected areas and biological corridors which now

comprise more than 35 percent of the country's total area. A few examples of government notifications which reserve the rights of the local people to use forest resources are cited below:

November 7, 1978: The Royal Government decided that villagers in the Phuntsholing (*Lhops* in Taba and Dramteb) area could collect bamboo and cane without paying taxes or royalties. This was to encourage production of handicrafts for sale and domestic use.

May 7, 1979: The Government gave Mongar and Zhemgang villagers (*Kheng*) permission to transport "*bangchungs, palangs*" and other forest products made of bamboo and cane anywhere, as long as they were for gifts, and not for sale.

September 2, 1984: To encourage handicraft production, the government allowed Dhrumjar (*Mempa*) Trongsa villagers to collect bamboo and cane for sale or domestic use without paying taxes or royalties.

Forest management trends: traditional practices, rights, and policy interventions

Prior to the enactment of the Forest Act in 1969, the Monpas had free access to the forest resources. The people could harvest forest resources without any restriction from the Government. However, it is interesting to note that they had traditional institutions and systems of forest management in place which served as a control mechanism against over extraction of forest resources as well as for equitable sharing of resources among the villagers. Traditional systems were also in place to take care of conflicts arising from the use of forest resources within their community.

In the past, each household identified and marked trees for timber, oil seeds, beehives etc. and informed others in the community. Once a household identified a particular resource, other households were not allowed to harvest those trees and products. The same system applied for *tseri*, that is, an area identified and cultivated by one household was not utilized by another household. This tradition has been passed on and maintained for generations. In case of breaches of this traditional regulation by any household, the offender is punished by the community and has to seek *shamda* (pardon) by offering *chang* (local wine) as well as meat to the original claimant of the natural resource.

Before the establishment of the Black Mountain National Park in 1995, the Monpas practised *tseri* extensively in their own land as well as in the government land. They also harvested honey from the forest. Honey was harvested and sold in the border town at Gaylegphug. There was no government restriction on the collection of honey from the forests. Collection of timber and firewood for household use was easy, as the Monpas were not required to take permits or pay royalties to the government. Until 2001, the Monpas were exempted from paying royalty for harvesting cane and bamboo. Since November 2002, the BMNP management has declared a complete ban of resin tapping. This has led to some discontent among the Monpas on the strict Forest Rules. However, they also expressed their views on both the positive and negative aspects of the implementation of this policy.

Forest was declared as state property in the year 1969. Since then, *tseri* cultivation has been banned in government land. A permit is required to harvest timber. The Black Mountain National park was declared as a national park in 1995. This policy was put in place to maintain at least 60 percent of the

total land area of the country under forest cover, with nature conservation given priority over extraction and utilization of natural resources for economic gains [NCD 2001]. Since then, the rules and regulations of Forest and Nature Conservation Act of 1995 are applicable for the protection and management of the park.

Non-timber forest products can be accessed and harvested by all. Without rights to ownership and use, communities are not encouraged to manage natural resources in a sustainable manner. The government policy aimed at control of forest use and management often undermines the authority and effectiveness of local institutions at the community level for forest management. Resource management will not be sustainable with people excluded from it. If a policy exists which permits local user groups to collect NTFPs from the forests, they would be motivated to manage and sustain communal forests for long-term.

Implication of policy interventions on local resources, BMNP conservation, and the livelihoods of the Monpa people

The Monpas believe that following the strict implementation of park regulations there is an increase in the tree and bush cover in the region. The area witnessed increased wildlife population (wild boar, bear, monkey, sambar and deer) which also resulted in increased crop and livestock depredation.

Some of the positive impacts of Forest Regulations expressed by the Monpas are as follows:

- The number of Chirpine trees increased due to decreased forest fire from *tsamdo*, *tseri*, as well as non-use of forest land for agricultural purpose;
- The forest area increased, due to the change in agriculture pattern from shifting cultivation to permanent cultivation; and,
- Barking deer, sambar, monkey and wild boar numbers have increased because hunting is prohibited.

Some negative impacts of Forest Rules expressed by the Monpas are as follows:

- *Elatostema platyphyllum* (*damburu*) and mushroom are decreasing (eaten by Himalayan Black Bear and other wild animals as their numbers are increasing);
- Timber and firewood have become less accessible to people; and
- NTFPs are not allowed to be harvested freely as in the past.

This is also emphasized by the statement from a key informant that, “*In some cases, it is good to follow Forest Rules as it helps the environment, but in some cases it is not good, as it prevents local users from collecting forest produce*”. The recent changes in the government policies, as well as the area falling under the buffer zone of the BMNP and its new regulations, have reduced the Monpa people's natural ownership of the resources. This can be a deterrent to its conservation in the long run.

Although more than 60 percent of the Monpas practise agriculture, their main source of cash income is handicraft followed by resin tapping. Handicraft is the main source of cash income with 57 percent total cash generation. Resin tapping, though practiced by a relatively small population is another 23 percent of cash generation. Most people of Phumzur weave handicrafts whereas majority of the people from Wangling tap resin, for income. Each household of

Wangling village earned about Nu. 4,000 to 6,000 in a season from sale of resin (2001). Besides handicraft and resin, sale of cane shoot, betel leaf, fern, dambru, mushroom and avocado also provides the required cash for the Monpa households.

With 89 percent of the Monpas saving less than Nu. 1000 (US\$ 20) a year, the new policy of completely banning resin taping, and restricting the harvest of cane and bamboo and other NTFPs will significantly reduce the source of income for the Monpas and further minimize their purchasing power of the essential goods such as clothes and food. Such policy changes highlight the need to provide alternative sources of cash generation for the people of Jangbi, Wangling and Phumzur.