Conserving biodiversity through faith and beliefs in Kumaun Region, Uttarakhand

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Mankind has always been the most important as well as destructive element of biodiversity, but thanks to foresightedness, has practiced worshipping and conserving nature in the past through sacred groves. These are forest areas protected by communities due to social taboos and are dedicated either to a deity or ancestral spirits. India is a land of cultural ethos and Nature worship is a part of its cultural practice. Uttarakhand in the western Himalaya is the abode of gods and goddesses. There are many natural objects which are considered sacred such as rivers (Ganga, Yamuna), mountain peaks (Nanda Devi, Chaukhamba, Trishul, Om parbat), lakes (Roopkund, Kedar tal, Hemkund) and forest areas. These forest areas are known by various names in India. In the Kumaun region of Uttarakhand, they are known as 'Thans'. Hidimba dan, Teet ki Devi, Banri Devi, Kasar Devi, Hat Kali, Patal Bhubaneshawar (rocks and caves with calcareous tufa), Garanath, Binsar, Jageshwar, Shikhreshwar, Mayadevi Ashram and Narayan Ashram are such examples, which harbour various rare, threatened and endemic flora and fauna. There are about 13,720 sacred groves listed in India so far (Malhotra et al. 2001), out of which only one is reported from Uttarakhand. Hill people of Uttarakhand have an excellent symbiotic relationship with nature. They depend not only on flora and fauna for their living, but faith and belief in sacred groves also give them livelihood options and their cultural ethos protects nature. The present paper is an excerpt from an ongoing study of sacred groves in Kumaun region of Uttarakhand.

Ethnicity, taboos and sacred groves

Sacred groves are woven in the fabric of socio-religious values, customary taboos and sanctions. Due to these values Peepal trees in the villages near Lohaghat are worshiped. They were planted by the ancestors of the villages and are still revered. These trees are considered as family members and likewise many rituals are performed, such as the thread ceremony (a ceremony in which a holy thread is worn in shoulder by men) and marriage with other religious trees (Mangifera indica and Emblica officinalis). These trees are homes to a variety of birds in the region and provide a transit point for migratory birds, due to its staggered fruiting.



SG of famous deity Golu devta in Gairar surrounde by Pinus roxbughii forest.

Golu devta or Gol-jyu is the most worshiped god of Kumaun Hills, revered for his justice and known by various names such as Golu, Bala Goriya, Gwel Devta, Kalbisht, Ratkot Golu, Goriya baba, Dana Golu, Hariya Golu, Gorail and Ghughutiya Golu etc. Some famous temples are located at Goluchaur (Champawat), Chaura (Someshwar), Ratkote (Manan), Tarikhet, Manila, Gagrigol, Ghorakhal, Chitai, Minar, Chamarkhan, Gairar (Plate I). All these

sacred places are located either in Chir pine (Pinus roxburghii) or Oak (Quercus leucotrichophora) forests. Although their distribution is patchy, still they play a crucial role in maintaining biodiversity and provide protection to the local flora and fauna, (Dhaila-Adhikari & Adhikari 2007). Teet ki Devi and Airi Devta or Air jyu are well known local deities revered for the well being of cattle.

Most of the sacred groves are in Deodar (Cedrus deodara) forest and support various medicinal plants. Taxus baccata subsp. wallichiana is one of the most important medicinal plants in Jageshwar and hence protected. These forest areas spread over around 2-5 km². Some examples include Jageshwar and Dhauladevi in Almora district and Hat Kali and Chamunda in Pithrogarh district. Sometimes natural structures (caves and crevices) also enhance the value of the forest areas, e.g. Patal-Bhuwaneshwar in Pithoragarh and Gauri Udiyar in Bageshwar districts.

There are a number of small sacred groves in Uttarakhand, but they have not been documented due to their small size and do not come under larger Protected Area Network (PAN). Hence, it is not possible for government agencies to take any action to protect them. Belief, taboo or fetishism are the ethnic values that make the sacred groves inviolate. So the institution of sacred groves is the cradle where the faith and beliefs are nurtured together with the habitats and biodiversity (Dhaila-Adhikari and Adhikari, in press).

The harbinger

In recent years, it has been observed that a practice of devoting forest areas to local deities has become a common phenomenon. Local people have over-exploited the forests for fuel wood, fodder and other materials, which has led to a drastic change in the micro-climate of the region, resulting in drying of perennial water sources and man-animal conflicts. Therefore, the locals have developed a strategy to dedicate a part of their forest to a local deity with some rules and regulations, like what kind of sanctions should be imposed and how much area should be defined as sacred and for how long. The faith and fear of invoking the wrath of the deity stops local people from violating the rules in places like Shiyahi Devi (Almora) and Kotgari near Thal (Pithoragarh). Village folk who had migrated there in the past for better livelihoods are now turning back to their roots in search of social status, calm and serenity. Some of them are dedicating their lands to a deity (Dhaila-Adhikari and Adhikari 2007). This is not from any ecological perception nor financially motivated, but comes from faith and a call from the deity.

Services of Sacred Groves

- Providing livelihood: Most of the sacred groves besides maintaining biodiversity, provide a livelihood to the community they belong to. Hat-Kali is an excellent example of sustaining 52 families. During 'Navratras' (a period between March-April and October-November), offerings are made by devotees, which sometimes reach as many as Rs. 1,00,000 (US\$ 2222, considering 1 US\$ = Rs. 45). The community has developed a system by which all the families receive benefit during this period. Tree cutting is prohibited and only felled trees are taken away by these families. Similarly many other sacred groves provide livelihood to the community they belong.
- Conservation of water: Larger sacred groves also have their own micro-climate which increases nutrient recycling, recharge of aquifers and act as a primary source of perennial streams. For example in Shikhareshwer sacred grove in Gangolihat (Pithoragarh), the Deodar forest forms a catchment for perennial water stream (Naula).
- Refugia for rare and threatened species: The Chandhak temple of Pithoragarh has an evergreen tree 'Sweet Osmanthus' (Osmanthus fragrans) with lustrous medium sized leaves. The flowers are extremely fragrant and perfume the entire area during winter and spring. Sometimes the rituals and traditions play a crucial role in fostering threatened species like the Himalayan Griffon Vulture (Gyps himalayensis) in Hat Kali. During Navratras there is a tradition of sacrificing a buffalo with seven goats. The goats are distributed among families, while the buffalo is pushed from the hill, where the vultures (Plate II) and other animals can feast on it. Likewise, practice of 'Baisi' is another way to attract these vultures.



Congregation of vultures on Cedrus deodara tree.

Threats and challenges

The institution of sacred groves dwindling due to the following reasons:

- Diminishing traditional beliefs due to modernisation,
- Construction of roads, dams, highways and tourist resorts have lessened the ethnic values of sacred groves,
- Temples inside the sacred groves lead to clearance of the area and therefore disturbs the biodiversity. Shifting focus from the typical stone to marble idols also diverts the aim of nature worship,
- Un-touchability is also leading towards a dwindling of sacred groves, as the participation of lower castes is negligible and due to envy they cause harm to the areas,
- Heavy tourist influx deteriorates the values and the virginity of nature, and
- The families owning sacred groves are shifting their interest towards other priorities and therefore splitting the forest areas.

Recommendation and preservation efforts

There should be an awareness campaign to educate people and students through community participation. Efforts that can be made are as follows:

- To derive economic benefits for the local community must be one of the aims to ensure the well-being of sacred groves. This can be done by: a) giving training to local people as nature guides, who can tell folk tales relevant about the site; and b) some traditional art can be displayed in sacred groves through local efforts, which will bind the local community to their roots.
- Some guidelines should be given to pilgrims and tourists before entering into the groves.
- Involvement of religious leaders, priests and naturalists to provide them with knowledge on how to preserve the groves.

References

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