socio cultural transformation in the state in the last century, has led to an erosion of traditional thoughts. Population expulsion and unemployment also compel people to exploit these SGs, leading to a rapid dwindling of many rare and threatened taxa of both plants and animals from the region. In this context, an extensive awareness programme is needed to educate the locals about SGs. The State Forest Department and MoEF can join hands with the local NGOs to create a network of all the SGs and bring them under State-sponsored conservation programmes. The Tourism Department also should come forward to focus on SGs as a destination for tourists. The local community should be provided with adequate funds and the responsibility to manage the SGs. This will help in the protection of the SGs. Eco-restoration and afforestation programmes of the government conservation agencies should also include these degraded SGs.

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Threat to medicinal plants of Kumaon Himalaya

The biological diversity in the Indian Himalayan Region (IHR) has been a source of medicine for millions in the country and elsewhere. At present, the pharmaceutical sector is using 280 medicinal plant species, out of which 175 are from the IHR[1]. This region supports approximately 1748 plant species of known medicinal value[2].

At present we are witnessing a sharp decrease in the biological species all across the globe, especially in the Kumaon region, perhaps as it forms one of the major hotspots among all sectors of the western Himalayas. The 2007 IUCN Red data list reveals that the number of threatened plant species is increasing gradually (http://www.iucnredlist.org). The region has developed endemic flora and shrinkage of natural habitats. Many of these endemic species of drug plants have become scarce and need adequate protection. Destructive harvesting of the medicinal plants has posed a serious threat in the Kumaon Himalaya. Another important reason is the over-exploitation and unscientific tapping by the local tribal groups, which has resulted in the loss of important gene pools and in turn a loss of irreplaceable capital. The major tribal communities like Bhotias, Boaxas, Tharus, Rajis, Jaunsaries, Shaukas, Kharvar and Mahigiri rely heavily and directly on these genetic species and ecosystem diversity to support their livelihood. Lack of alternate income forces them to over-exploit natural resources. Destructive nature of use pattern, i.e. roots (10%), whole plant (16%), bark/wood/resin (19%) indicates threat from harvesting. Hence, deliberately or unknowingly, they are causing huge problems to the medicinal plants. Further, the study trips planned by various Indian universities and other organizations for students to explore and collect different plant species in their natural habitats are also responsible for the loss of important plant species. Plant collection is the prime objective of such trips and they put tremendous pressure on the natural habitat of plants, thus leading to biodiversity loss. It is of utmost importance that the diversity of these medicinal plants should be conserved for future use. For this, efforts should be devoted to the preservation of types in natural habitats. Awareness should be enhanced among the local people and tribal communities through common meetings. They should be engaged at every stage in the programmes planned to improve the natural resources and biodiversity. Tours should be planned in such a way that the plants in the wild are not harmed. A broad base and long-term strategy should be formulated for the conservation of medicinal plants in the Himalayan region. Thus the loss of biological species is not only an ethical tragedy, but also a social, economic and cultural one.

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