
Forest conservation in the Himalaya

WITH SPECIAL REFERENCE TO NORTH EAST INDIA

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The Himalaya, once considered a holy place, is now at great stake due to fast and continuous deforestation. Consequently, the agriculture, industry, climate, water resources, and the people living therein as well as those living in the plains below, have been badly hit in more ways than one.

Deforestation in the historical perspective

The process of deforestation in the northeast Himalaya started along with the colonization by the people from outside. Till 1839 in Darjeeling only speculations were being made to start cattle and sheep farming and clear the forests. Some time after the annexations by the British the construction of roads started along with the plantation of tea and cinchona in the west of Teesta river and agricultural cultivation in the east of it. The most spectacular change in Darjeeling is supposed to have started only after 1866 when all the subdivisions of Darjeeling had been annexed. It was after this year that large tracts of forest land were brought under cultivation, the primitive system of jhum cultivation was replaced with terraced cultivation, new crops like tea, cinchona, potato, cardamom and orange were introduced and the communication network was broadened and improved.

All these activities needed enormous labour force but the region itself was virtually short of it! Inevitably, the British had to encourage the settlement of Nepalis in this region.

The Nepalese immigration, keeping aside the 'aboriginal Nepalis like Limbus and Mangars, had started during the mid-eighteenth century when king Prithivi Narayan Shah invaded the

Kathmandu Valley and other parts of Nepal and finally consolidated it in 1769. However, it is said that the large scale Nepalese settlement started only after the deputation of J.C. White as the Political Officer in Sikkim in 1888. His entry into Sikkim marked the turning point in the history of Sikkim. He cancelled the traditional form of land tenure system under which the lands belonged to the Maharaja or the Kazis (landlords with wide civil, administrative and judicial powers) by virtue of the deeds of grant from the Maharaja. He also opened the waste lands and encouraged the Paharia (Nepali) settlers. At present, only 265.21 thousand hectares or 33.3 per cent of the total geographical area of Sikkim are under forest. In Darjeeling, the forest area is 118.3 thousand hectares or 33.1 per cent. These figures are quite high compared to the national figure of 22.7 per cent, but much lower, compared to the figures of developed countries like Japan and Russia where the percentages of forest areas are 69 and 41 respectively.

The above figures on Darjeeling and Sikkim represent the areas under forest departments and not the area under trees. For example, large areas of Mangbar forest in Kalimpong and the forest around Rambhi town and across Rieng Khola are totally denuded but the records do not show any decrease in the forest land. This difference between the 'area under forest' and the 'area under trees' is true not only of this region but the whole of Himalaya. For instance, it was revealed that in Uttarkashi (U.P.) district 83 per cent area was reported as forest but the actual area under trees was found to be 15 per cent only. These figures could be availed with the efforts of the Uttarkashi Forest movement, but in an absence of any such movement in the region the actual area under the trees is not known. My own visits to the different parts of the northeast Himalaya show that the actual area under trees should be less than 60 per cent of the official record.

At present the conservation of forest has become a necessity for various economic and environmental reasons. It may be recalled that until 1863 in Bengal there was virtually no attempt at conserving the forests. A proposal to conserve the forests was first made in 1862 by Sir Dietrich Brandis. Dr. Anderson became the first Conservator of Forests in 1864 and the forest reservations were

notified in the official Gazette on 13th May, 1865. During 1868-69, the total reserved forest of the British Sikkim was about 17 square miles. The forest management rules under Act VII of 1865 were published in the Calcutta Gazette in 1871 which recognized two classes of forest—open and reserved. In 1871-72, all forests in the British Sikkim were declared as Forest Reserves. In 1872-73, Dr. Schlich joined as the Conservator of Forest. During 1874-75, Jalpaiguri and Darjeeling divisions were created comprising the forest areas then called 'Bhutan Duars' and 'British Sikkim'. Later, the Indian Forest Act (Act VII) of 1878 was enacted to replace the Government Forest Act of 1865.

The reservation of forests during the colonial rules was, however, for commercial exploitation which in turn meant an introduction of 'state capitalism' on a 'primitive' social and technological milieu (Dr. B.K. Roy Burman). It is also written that nothing was done to improve the productive technology and provide alternative sources of income or employment for the people after the forests were taken away by the state. The modus operandi of forest administration continued as usual even after independence. One scholar (R. Tucker) writes that after 1920 the polarization between the administration and the people has developed into intermittent conflict as the latter began to resist the forest laws and the infringement upon their traditional rights. The World War II also enhanced the control of the state on the forests enormously. As the Government control over the forest resources gradually increased so did the apathy between the people and the state.

The dwindling forest resources

The ecological conditions of the northeast Himalayan range from tropical to the alpine forests resulted into a rich variety of flora.

More recently, one scholar (M.S. Mani) has classified the forests of this region into five types (i) humid tropical rain forest—from plains to 700-900 metres, (ii) evergreen forest—700-900 metres to 1500-1700 metres; (iii) quercus-rhododendrons forest—

1500-1700 metres to 2500-2800 metres, (iv) conifer forest—2500-2800 metres to 3600 metres, and (v) subalpine vegetation—3000 metres to 3600 metres. He also draws a clear difference in the nature of forest between the western and eastern Himalaya. In the former, the lowest region has dry tropical forest followed by sub-tropical, quercus-rhododendrons, betula-juniper, alpine and steppes with the same altitude variations as that of the eastern Himalaya.

The mixed nature of the forests is being destroyed in the process of clear-felling which is rampant in this region. The Northern Circle of the West Bengal Forest Development Corporation (SBFDC) with its headquarter in Sadar town alone cleans 2,477 hectares of forest every year. Afforestation is taking place in many areas but it is mainly a monoculture of pine trees which, besides its industrial value for the pulp factory located in some plain areas, has only disadvantages to bring for the region itself. Of the many disadvantages of the pine trees, my study finds the following to be the main:

(i) the soil below such trees becomes acidic and there is no undergrowth to make the conservation of top soil possible; (ii) the leaves of these trees usually do not fall and whatever little fall takes place, it takes a long time to decompose due to a high oil content in them and thereby creates the problem of natural manuring; (iii) birds which control the insects/pests in the agricultural field never sit on these trees, which results into an increased pestering of the agricultural crops by the insects/pests; and (iv) the villagers cannot use the leaves of these trees as a fodder and have to suffer more from the fodder shortage.