CONSERVATION OF ENVIRONMENT: A CASE STUDY OF THE CENTRAL HIMALAYA (INDIA)

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The Himalaya has been badly degraded owing to unprecedented anthropogenic influences beyond their carrying capacity and also because of geographical constraints and historical reasons.

In the Central Himalaya, of the total reporting area (4,880 thousand hectares) 46.7 per cent is under forest, and 36.2 per cent of the land is also not available for cultivation. Only 17.1 per cent is under agriculture. The region is ecologically fragile because of its recent origin and seismicity. The area is overwhelmingly rural, with 90 per cent of the total workforce engaged directly in agriculture and animal husbandry. The population density on the cultivated land is nearly four times greater than in the plains. In contrast to other Himalayan states, where the areas up to 3,000m and above are also populated, most of the central Himalayan population is distributed below 2,000m.

The landholdings are small and fragmented. On an average, over 80 percent of the total landholdings are below 2 hectares and less than 10 percent of the cultivated land is irrigated and under high-yielding varieties.

The problem zone (area having extensive biotic pressure all the year round) lies below 2,000m where most of the human settlements are located. Because of the high level of geological activities, the central Himalaya is vulnerable to landslides and landslips even without human interference. The susceptibility to land erosion is further aggravated by deforestation, as the catchments are subsurface systems. Most of the water is transmitted laterally to channels via a subsurface 'quick flow' process. In such systems, the soils are shallow and saturate with water rapidly and, consequently, landslides and landslips occur.

Environmental problems in the Himalayas, such as rapid population growth, continued clear felling in the forest, overgrazing and fire, cultivation on steep slopes and marginal lands, encroachment of agriculture and horticulture on forest land, underplanned/ill-planned development, ill-planned construction of roads and buildings in hazard prone zones, mining and quarrying, etc are briefly discussed.