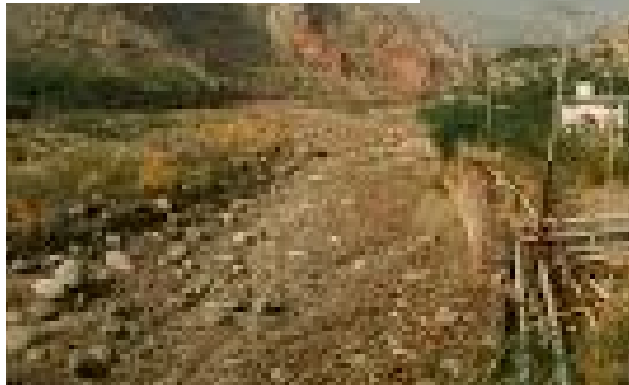


## TOWARDS SUSTAINABILITY CONSERVING MINERALS THROUGH COLLECTIVE RESPONSIBILITY & SUSTAINABLE PRACTICES

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*Rapid economic development has led to concerning exploitation of minerals not only in Himachal Pradesh but all over India. It is of utmost importance that now we join hands and work together to conserve our limited resources instead of solely relying on the government and pointing fingers, it is of absolute importance that we work on individual levels to reduce our overconsumption of minerals and come up with sustainable ways to mine.*

The Himalayas are not only home to a vast diversity of flora and fauna, including rare and endangered species like the snow leopard and the Himalayan blue sheep, but also provide numerous valuable metals like copper, limestone, lithium, zirconium and many more. The Himalayas are deeply ingrained in our culture and have held a sacred place for centuries; however, recent developmental activities have adversely affected its ecological system.

Riverbed mining in the Himalayan region has caused erosion and made the river plains far more vulnerable to flooding by allowing loose landmasses to be swept downstream, especially during the monsoon season. The rapid rate of economic development has encouraged continued and, at times, illegal riverbed mining. Such prolonged and relentless mining is extremely harmful to the present fragile Himalayan ecosystem, damaging not only flora and fauna but also riparian habitats and water quality degradation. Prominent examples of mining in the Himalayan terrain include small-scale mines of limestone, phosphorite, soapstone and magnesite in the hills of Himachal Pradesh and Uttarakhand, and coal mines of Meghalaya and Nagaland.

Himachal Pradesh lies in the western Himalayas, and most of its part has been lying in the foothills of the Dhauladhar Range, Reo Purgyil, with a height of 6,816, is the highest mountain peak. Spreading over an area of 55.78 km<sup>2</sup>, it constitutes 1.62 per cent of the total area of the country and 10.54 per cent of the total Himalayan land mass. According to geology, the rocks that cover Himachal Pradesh range in age from pre-Cambrian to modern. Thrust tectonics has upset the natural order of superposition of rocks in the lower Himalayas. In 1964-65, the Department of Industries, H.P., established the Geological Wing, which explored the State's mineral resources for scientific and commercial exploitation and the establishment of mineral-based enterprises was its main task.



Over the years, the Geological Wing's duties and scope of activity have expanded significantly. The mining sector has become a new thrust area focusing on development and regulation, leading to the creation of numerous other related issues about mining. As a result of the shifting circumstances, the mining industry in Himachal has emerged as a major economic activity that is significantly contributing to the State's economy.

The important mines of major minerals in the State are limestone, baryte, silica boulders, quartzite and rock salt and the important are building stones, slates, clay, sand, etc. The mining activities in Himachal Pradesh can be categorized into the large sector and in small sector. The large sector comprises major limestone projects for cement manufacture and the small mining sector comprises mining of minor minerals like sand, stone, bajri, slates, shale, clay, etc., which are building materials required to meet the infrastructural development of the state.

Mining activity, while profitable on many levels, harms the environment's physical, social and economic conditions. Several issues arise as a result of mining activity in and near mine sites. Examples include land degradation, subsidence and sliding, deforestation, water pollution, air pollution, noise pollution, chemical changes and so on. Mining activities have a severe effect on both wild animals and plants. The environmental problems broadly identified are scarification, damage due to the disposal of mine waste and road cuttings, debris flow, destruction of forest cover, degeneration of water potentials, flood hazards, loss of agriculture, danger to the work of public utilities and tourist attractions and hillside instability.

Thus, strict measures have been taken by the state government to curb the menace of illegal mining in the state. The goal of the state's initiatives is to safeguard the environment and stop the state exchequer from losing money due to the illicit mining of sand, gravel and stone/boulders without paying the required taxes or royalties. In the first four months of 2024, Himachal Pradesh witnessed a 38.9 per cent increase in fines collected and a 44% increase in challans issued for illegal mining compared to the same period in 2023. Dr. Yunus, the Director of Industries stated on December 9 that over 184 cases of illegal mining were registered during a statewide campaign to curb such activities. The State Government also set up a Task Force to control illegal mining and review the action taken by member departments to check illegal mining activities at different levels. The government is also trying to increase revenue through scientific mining, while at the same time taking serious steps to curb illegal mining.