

Soapstone Mining in Uttarakhand

Why in News?

 Recently, the Uttarakhand <u>High Court</u> took <u>suo moto cognizance</u> and criticized the authorities for failing to regulate <u>soapstone mining</u> in Bageshwar district of Uttarakhand.

Key Points

- Environmental Concerns:
 - Land Subsidence:
 - <u>Subsidence</u> is a critical issue in Uttarakhand, exacerbated by mining activities in vulnerable areas like Kanda-Kanyal in Bageshwar.
 - Mining operations, soil erosion, removal of resources, and earthquakes contribute to the problem.
 - Slope Instability:
 - Mining at lower slopes weakens structural integrity, affecting villages on upper slopes.
 - Loamy and loose soil increases susceptibility to erosion, particularly during monsoons.
 - Deficient Safety Measures:
 - Lack of green belts, retaining walls, buffer zones, slope monitoring, and protective structures accelerates erosion.
 - Water and Air Pollution:
 - Mining activities lead to <u>water scarcity</u>, contamination, and <u>air pollution</u> in the region.
- Cultural Concerns:
 - Impact on Traditional Architecture:
 - Land subsidence has damaged Kumaoni Bakhli houses, which historically demonstrated seismic resilience.
 - Damage to Heritage:
 - Cracks in the Kalika Temple floor in Kanda, a 10th-century site of cultural and religious importance, signify mining-related degradation.
 - The region's cultural practices, including **folk music, dance, and <u>handicrafts</u>**, **are also affected.**
- Administrative Lapses:
 - The State and Union governments **failed to define "semi-mechanised mining,"** yet granted environmental clearances for such activities.
 - Heavy equipment use without clear policy limits has worsened the situation.

Soapstone

- Soapstone is a soft metamorphic rock made of talc with varying amounts of <u>chlorite</u>, <u>dolomite</u>, and <u>magnesite</u>.
- Uses:
 - Soapstone is widely used in industries for making sculptures, countertops, sinks, and tiles due to its durability and aesthetic appeal.
 - It is used in stoves, fireplaces, and laboratory countertops because of its excellent

heat resistance.

- Ground soapstone serves as a filler in paper, cosmetics, and paints.
- It is also used for making utensils, handicrafts, and idols.
- Availability in India:
 - As per <u>the Indian Bureau of Mines</u>, Rajasthan (57%) and Uttarakhand (25%) hold significant reserves.
 - **Rajasthan:** The largest producer, particularly in the Udaipur, Dungarpur, and Bhilwara regions.
 - **Uttarakhand:** Notable deposits in Bageshwar, Pithoragarh, and Almora districts.
 - Tamil Nadu and Karnataka: Smaller reserves also exist.

