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DAILY EDITORIAL ANALYSIS

TOPIC

RAMPANT DEVELOPMENT, NOT CLIMATE, PUSHING HIMALAYAS TO THE EDGE

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Context

• Recent disasters across Himachal Pradesh, Uttarakhand, and Jammu & Kashmir suggest that the **real accelerant is man-made disruption**, while global warming certainly exacerbates environmental stress.

Fragility of the Himalayan Ecosystem

- The Himalayan ecosystem is **inherently fragile** due to its **young geological age**, steep slopes, and dynamic weather systems. It features:
 - High seismic activity due to tectonic movements;
 - Rapid erosion and landslides triggered by deforestation and slope destabilization;
 - ISRO reports that glacial lakes in the Himalayas have expanded significantly over the past three
 decades, with some growing by over 170%—a direct consequence of warming and land-use changes,
 increasing the risk of glacial lake outburst floods (GLOFs);
- The IPCC reports confirm that the Himalayas are among the most climate-sensitive regions.
- According to the State of Environment Report by MoEFCC (2021), over 30% of Himalayan glaciers have retreated in the last five decades.
- The **National Disaster Management Authority's SACHET Portal** highlights the increasing frequency of landslides, flash floods, and avalanches in Himalayan states.
 - These disasters are often worsened by poor planning and lack of early warning systems.

Recent Devastation

- In August, Punjab faced its worst floods since 1988 as the **Sutlej, Beas, and Ravi rivers overflowed**, submerging villages.
 - Several people died across Himalayan states due to torrential rains, while **Dharali village in Uttarkashi**,
 Uttarakhand, was wiped out by a landslide-triggered deluge.
 - These disasters echo past Himalayan tragedies the **Kedarnath floods (2013)** and the **Chamoli disaster (2021)** each treated **as an 'unprecedented act of nature'.**
- **Between 2017 and 2022,** over 1,550 lives were lost and more than 12,000 homes damaged in Himachal Pradesh alone due to floods and landslides.

Man-Made Disruptions: Development vs. Ecology

- **Unplanned Development**: Widespread infrastructure projects, especially hydropower plants, highways, and tunnels, are being built without adequate environmental or disaster impact assessments.
- **Deforestation and Land Use Change**: Expanding agriculture, urbanization, and hydropower projects cause large-scale deforestation.
 - Forest Survey of India reports highlight that forest cover in some Himalayan states is shrinking due to unregulated construction.
- Hydropower & Infrastructure Development: The push for dams, tunnels, and highways has destabilized slopes.
 - Himachal Pradesh currently has 180 operational hydropower plants, with hundreds more in the pipeline.
 Uttarakhand has 40 plants running and 87 under planning.
 - These projects, combined with road-widening and tunnel construction, use heavy machinery that destabilizes slopes and amplifies disaster risks.
 - Projects under the **Char Dham Pariyojana** and **rampant tunneling** in Uttarakhand increase landslide risks.



- Tourism Pressure: Mass tourism in fragile alpine regions, especially around Himachal, Sikkim, and Uttarakhand, strains local ecosystems.
 - Solid waste, road expansion, and unregulated resorts accelerate degradation.
- **Sand Mining & Riverbed Exploitation**: Excessive mining of Himalayan rivers reduces water flow, increases flood risk, and disrupts aquatic biodiversity.

Strengthening the Himalayan Ecosystem

- National Mission for Sustaining the Himalayan Ecosystem (NMSHE): A key mission under the National
 Action Plan on Climate Change (NAPCC), it promotes research, policy formulation, and capacity building
 to sustain ecological resilience.
- National Mission on Himalayan Studies (NMHS): It supports research and pilot projects across themes like water resource management, biodiversity conservation, climate-resilient infrastructure, and waste handling.
 - It aligns with **national priorities like 'Lifestyle for Environment (LiFE)'** and global goals such as the SDGs.

Judicial Intervention & Observation

- Recently, the Supreme Court of India warned that Himachal Pradesh risked disappearing 'from the map
 of India' if reckless development continued.
 - It said that the tunnels along the Chandigarh–Manali highway became 'death traps' during rains.
- In September, visuals of tree logs floating in floods prompted Justice B.R. Gavai to warn against sacrificing forests and lives for unchecked development.

Pathways for Sustainable Development

- Development With Context: Developmental projects need to undergo lifecycle, disaster, and social impact assessments before approval, alongside genuine public consultations.
- **Eco-sensitive Zoning**: Limiting construction on fragile slopes.
- Community-based Tourism Models with waste management systems.
- Hydropower Alternatives: Prioritize micro-hydel projects over mega dams.
- Climate-resilient Infrastructure: Incorporate seismic safety and green design.
- Strengthened Early Warning Systems for landslides, GLOFs, and flash floods.
- Strict land-use planning to prevent unsafe construction.

Source: TH

Daily Mains Practice Question

Q. Critically examine how rapid development is contributing to the ecological degradation and increased disaster vulnerability of the Himalayan region.