



Wounded Mountains

This article is based on [Wounded mountains: on Himachal landslide tragedy](#) which was published in The Hindu on 27/07/2021. It talks about the increasing incidences of natural disasters in the Himalayan states and the way forward to reduce the threat in the region.

The tragic death of nine tourists in a landslide in Kinnaur district of Himachal Pradesh is a pointer to the fragility of the ecology of the Himalayan States.

Extraordinarily heavy rain hit Himachal Pradesh recently, leaving the hill slopes unstable and causing floods in built-up areas. The descending boulders from destabilised terrain, which crushed a bridge like a matchstick, are a source of worry for cautious local residents, and the visitors.

The Himalayan ecosystem is vulnerable and susceptible to the impacts and consequences of **changes on account of natural causes, [climate change](#) resulting from anthropogenic emissions and developmental paradigms of modern society.**

Some Instances of Disasters in Western Himalaya

- Nine tourists were killed and three others injured in Himachal Pradesh's Kinnaur district when boulders fell on their vehicle during multiple landslides, triggered by heavy southwest monsoon rains.
- Earlier, heavy rain-triggered flash floods in the Kangra district of Himachal Pradesh swept away three people, buildings, and vehicles.
- Uttarakhand too has been affected with natural disasters with the [massive flash flood in Chamoli](#) in February 2021 that killed more than 80 people

Himalayan states such as Himachal Pradesh and Uttarakhand may be entering a phase of irreversible decline because of losses to their ecology and frequent landslides may become inevitable.

Threat To The Himalayan Ecology

- **Increased Intensity and Frequency of Natural Disaster:**
 - The Himalayan landscape is susceptible to landslides and earthquakes.
 - Formed due to the collision of Indian and Eurasian plates, the northward movement of the former puts continuous stress on the rocks, rendering them weak and prone to [landslides and earthquakes](#).
 - This, combined with **steep slopes**, rugged topography, **high seismic vulnerability**, and **rainfall**, makes the region one of the most disaster prone areas in the world.
- **Unsustainable Exploitation:** From the mega road expansion project in the name of national

security (Char Dham Highway) to building cascading hydroelectric power projects, from unplanned expansion of towns to unsustainable tourism, the Indian States have ignored warnings about the fragile ecology.

- Such an approach has also led to **pollution, deforestation, and water and waste management crises.**
- **Threat of Development Activity:** Mega hydropower, which is a significant source of “green” power that substitutes energy from fossil fuels, could alter several aspects of ecology, rendering it vulnerable to the effects of extreme events such as cloudbursts, flash floods, landslides and earthquakes.
 - An **incompatible model of development** in the hills, represented by big hydroelectric projects and large-scale construction activity involving destruction of forests and damming of rivers, is an invitation to harm.
- **Impacts of Global warming on the Himalayan Ecology:**
 - With the utter disregard for the fragile topography and climate-sensitive planning, the threat to ecology has increased many folds.
 - Glacier melting, resulting in an abrupt rise in water causes floods and impacts the local society.
 - Increased incidences of forest fire are also linked with warming of Himalayan region.
- **Conversion of forest to agricultural land**, and the exploitation of forests for timber, fodder and fuel wood are some of the main threats to biodiversity in this region.

Way Forward

- **Early Warning System:** It is important to have early warning and **better weather forecast systems** in order to forecast the disaster and alert the local population and tourists.
- **Regional Cooperation:** There is a need for a trans-boundary coalition of Himalayan countries to share and disseminate knowledge about the mountains and preservation of the ecology there.
- **Area Specific Sustainable Plan:** What is most critical is to review the area’s present status and draw up **a sustainable plan** that respects the specific requirements of this fragile region and the impact of the climate crisis.
- **Promote Ecotourism:** Initiating a dialogue on adverse impacts of commercial tourism and promoting **ecotourism.**
- **Sustainable Development:** Government must strive for achieving **sustainable development** not only development that is against the ecology.
 - Detailed Project Reports (DPR), **Environment Impact Assessment (EIA)** and **Social Impact Assessment (SIA)** are needed before implementing any project.

Conclusion

It is impossible to assign a real value to the costs to people and communities, together with the loss of pristine forests that weak afforestation programmes cannot replace.

From the mega road expansion project in the name of national security to building cascading hydroelectric power projects, from unplanned expansion of towns to unsustainable tourism, the Indian State has ignored warnings about the fragile Himalayan ecology. The need of the hour is that governments have a changing course to help preserve natural riches including human lives.

Drishti Mains Question

Rapid decline of Himalayana ecology and increased loss of human lives is the result of human intervention in the region. Comment.

