March 2026

Uttarakhand Disaster and Accident Analysis Initiative - UDAAI

Social Development for Communities (SDC) Foundation
Dehradun, Uttarakhand
www.sdcuk.in

SDC Foundation is a Dehradun based environmental action and advocacy group committed to make a positive impact and secure a sustainable future for our home state Uttarakhand, the Himalayas and beyond.

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About UDAAI Monthly Reports

Uttarakhand Disaster and Accident Analysis Initiative (UDAAI) is a monthly initiative by Dehradun-based environmental action and advocacy group, Social Development for Communities (SDC) Foundation. The goal of the UDAAI reports is to document disasters and accidents in Uttarakhand, leading to human and ecological casualties. UDAAI is based on media reports in respectable publications in English and Hindi newspapers, as well as news portals. UDAAI neither attempts nor claims to document all disasters and all accidents in Uttarakhand; its focus instead is to document major casualties and non-casualty events on a regular basis.

We strongly believe that with the perils of inclement climate and unabated disasters, the ecologically fragile and earthquake-prone state of Uttarakhand needs to take many more steps to increase its disaster preparedness. We therefore see UDAAI as a document that highlights attention towards the urgent need for a holistic disaster management and accident minimisation policy framework in Uttarakhand.

It is our earnest hope that UDAAI will spur political leadership, policy makers, bureaucracy, research and academic institutions, businesses, civil society organisations, media and the citizenry at large to initiate inclusive, regular and action-oriented conversations on the subjects of resilience, mitigation and adaptation in Uttarakhand. With mainstreaming and a greater focus on the issue, there is likely to be an improvement in the planning of climate actions and disaster management in Uttarakhand.

Summary of UDAAI Report - March 2026

In March 2026, the troubling convergence of the environment degradation and lack of political support for addressing the issue resulted in a serious situation in India's Himalaya region. This demonstrates weak policy enforcement and inadequate capacity to prepare for natural disasters.

The Union government's withdrawal of the Bureau of Indian Standards' revised seismic zonation map and earthquake design code is a step backwards for policy. Had the classification of the Himalayan arc into Zone VI (highest seismic risk) and the corresponding changes in seismic design criteria been implemented, new construction would have been built with an understanding of the scientific principles behind the seismic nature of the locations where the buildings were constructed.

The withdrawal of the revised map represents a retreat from legal and regulatory requirements for building safe buildings, particularly in light of the fact that larger portions of the population in the Himalayas live in areas where moderate to high seismic events can occur. This creates questions regarding the liability of the state and potential legal failures related to compliance with the state's building code should there be future natural disasters that result in damage to infrastructure and loss of life.

The report from the International Centre for Integrated Mountain Development provides evidence of accelerated glacier melting in the Hindu Kush Himalayas, with the rate of ice loss from glaciers in that region doubling in the 21st century. This will have a direct impact on water security and increase disaster risks such as glacial lake outburst floods and affect the livelihoods and well-being of an estimated two billion people who live in the Himalaya region. The increase in glacier melting in the Himalayas also supports an argument to include climate change adaptation in the definition of environmental governance and to support the enforcement of transboundary water management programs.

The situation surrounding the ongoing subsidence crisis in Mussoorie is indicative of the ongoing standards of governance failure as demonstrated by National Green Tribunal's intervention. The lack of action by the government after previous warnings from the Joshimath crisis continues to show that environmental safeguards are not enforced adequately, particularly with regard to unregulated construction and inadequately enforced carrying capacity laws.

Ultimately, March 2026 has highlighted a serious gap between available scientific evidence, actual environmental realities, and the manner in which applicable laws are being enforced. There is a need for timely reforms in compliance, and accountability that aid in improvement of the sustainable development governance.

1. March 8, 2026:'Rollback of seismic map bad step, missed opportunity' Dehradun:

The Union govt's decision to roll back India's newly introduced seismic zonation map and revised earthquake design code has triggered concern among seismologists and geologists, many of whom said the move could weaken the country's preparedness for future major earthquakes.

The revised framework, introduced in Nov 2025 by the Bureau of Indian Standards (BIS), proposed significant updates to India's seismic design norms, including placing the entire Himalayan arc under a new Zone VI — the highest seismic risk category.

Several experts described the withdrawal as "a missed opportunity to strengthen India's disaster resilience".

Geologists pointed out that India's seismic risk was far from marginal. According to experts, nearly 59% of the country's landmass and nearly 80% of the population fall under moderate to very high seismic hazard zones.

Piyoosh Rautela, geologist and former executive director of Uttarakhand State Disaster Management Authority, said the proposed revisions to the code represented a major step forward in improving the country's preparedness.

He added that the newly proposed Zone VI covering the Himalayan arc acknowledged the persistent tectonic threat along the Indo-Eurasian plate boundary similar to the ones seen during the 2001 Bhuj and 2015 Nepal earthquakes.

Experts further said the revised code introduced stronger safety measures, including improved design spectra, a 10–30% increase in base shear requirements, stricter rules for structural irregularities, and more rigorous geotechnical and dynamic analyses. At the same time, experts acknowledged that the revised code had major implications for construction practices and ongoing infra projects across the country.

8/3/2026

'Rollback of seismic map bad step, missed opportunity'

Gaurav.Talwar
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Senior geoscientist says scientists have repeatedly warned Himalayan region could witness a magnitude 8 or a larger quake in future

Dehradun: The Union govt's decision to roll back India's newly introduced seismic zonation map and revised earthquake design code has triggered concern among seismologists and geologists, many of whom said the move could weaken the country's preparedness for a future major earthquake.

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'New code was a reflection of real risks'

▶Continued from P 1

Senior geoscientist CP Rajendran termed the rollback a "bad step". "We don't know what triggered the govt to roll back such a bold policy. The new seismic code was based on the knowledge the scientific community had accumulated about earthquakes and its possible impact on India," he said.

Rajendran added that scientists repeatedly warned that the Himalayan region could witness a magnitude eight or a larger quake in future. "New code was a reflection of the real earthquake risks the country faces," Rajendran said.

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TIMES OF INDIA

MARCH 8, 2026

2. March 22, 2026: Himalayan glaciers shrinking at alarming pace, ice loss doubled in 21st C: Report

Dehradun: A recent report by International Centre for Integrated Mountain Development (ICIMOD) has painted an alarming picture on the state of glaciers in the Hindu Kush Himalaya (HKH) — which have shrunk faster than previously estimated — with new data pointing to a sharp acceleration in ice loss in the last decade.

Data revealed that the region lost 12% of its total glacier area and 9% of its ice reserves between 1990 and 2020, with the pace of loss accelerating sharply.

Prepared by Sudan Bikash Maharjan and Tenzing Chogyal Sherpa, the report points out that the glacier decline is not only ongoing but intensifying. It notes that while glaciers have been losing ice over several decades, the rate of ice loss has increased significantly in recent years, "with the average rate in the 21st century roughly twice that observed at the end of the 20th century."

The ICIMOD study, which maps over 63,000 glaciers in the region, finds that glacier retreat is no longer gradual but accelerating, particularly after 2010, and most prominently in the eastern and central HKH. Smaller glaciers have been the most vulnerable, shrinking rapidly and, in some cases, fragmenting or disappearing altogether.
The pace of glacier loss has accelerated sharply since 2010. Though located in high mountains, these glaciers are deeply connected to rivers, economies and communities downstream.

The findings highlight stark regional contrasts. While parts of the Karakoram range showed relative stability, with the glacier area declining by 0.9%, other regions experienced dramatic losses. The Ganges and Brahmaputra river basins, home to the largest glacier areas outside the Indus basin, experienced the greatest losses over the past three decades, with reductions of approximately 21% and 16%, respectively.

The HKH region, often referred to as "Water Tower of Asia", hosts the largest concentration of ice outside the polar regions and supports nearly two billion people through its major river systems. Glaciers play a crucial role in regulating river flows, particularly during dry seasons, acting as natural reservoirs that sustain agriculture, ecosystems and livelihoods downstream.

According to the report, the region contained 63,761 glaciers in 2020, covering about 55,782 sq km and holding an estimated 5,735 cubic km of ice reserves. However, the distribution of this ice is highly uneven. Large glaciers, those exceeding 10 sq km, make up just 1% of total glacier numbers but account for nearly 39% of the glacier area and 40% of ice reserves, underscoring their disproportionate importance in regional water systems.

The report further attributes the accelerating glacier loss to rising temperatures and changing precipitation patterns. Glaciers located below 5,500 metres above sea level have shown the most significant retreat, as they are closer to the equilibrium line altitude and thus more sensitive to warming. In contrast, glaciers at higher elevations have experienced relatively slower decline due to colder conditions.

The implications of these changes are far-reaching. The report warns that glacier retreat is directly linked to increasing risks of hazards such as glacial lake outburst floods (GLOFs), avalanches, landslides and debris flows.

22/3/2026

Himalayan glaciers shrinking at alarming pace, ice loss doubled in 21st C: Report

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File photo

Data revealed the region lost 12% of its total glacier area and 9% of its ice reserves between 1990 and 2020

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TIMES OF INDIA

MARCH 22, 2026

DELHI / DEHRADUN

TIMES REGION

'Smaller glaciers shrinking faster, some disappearing completely'

Poses Serious Implications For 2 Bn People: Report

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WARMING PEAKS

The pace of glacier loss has accelerated sharply since 2010. Though located in high mountains, these glaciers are deeply connected to rivers, economies and communities downstream. Their retreat is increasing uncertainty over water availability and heightening risks from hazards such as glacial lake outburst floods, landslides and avalanches," said Pema Gyamtsho, DG ICIMOD.

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3. March 29, 2026: Mussoorie following Joshimath crisis? NGT sends notice

Dehradun: The National Green Tribunal has issued a notice to Uttarakhand's chief secretary over "continued inaction" on environmental concerns in Mussoorie, despite the issue being flagged in the aftermath of the 2023 Joshimath crisis.

The tribunal has directed the chief secretary to file a comprehensive affidavit within four weeks detailing steps taken to implement its earlier orders. It has also asked counsel for the Uttarakhand Pollution Control Board to submit a response.

The tribunal took cognisance of the matter based on newspaper reports that drew a direct parallel between Mussoorie and Joshimath, where unchecked construction, excessive tourism pressure, and poor drainage triggered widespread land subsidence in 2023.

The crisis forced hundreds of families to evacuate their homes, sparking a national debate on the sustainability of development in ecologically fragile Himalayan towns. Several buildings in Joshimath, including hotels and residential structures, developed deep cracks and parts of the town were subsequently declared "unsafe" for habitation.

The reports warned that Mussoorie is showing early signs of stress, with unregulated construction and increasing infrastructure pressure on its sensitive slopes raising concerns of a potential repeat of such a disaster. Taking suo motu cognisance of these reports, the NGT had earlier directed the state govt to submit a comprehensive response outlining preventive and remedial measures.

On March 24, the bench observed that despite its earlier directions, "no concrete action appeared to have been taken on the ground". It also examined a report submitted by the additional secretary and found that it "failed to adequately address the key issues flagged in the tribunal's May 8, 2025 order."

In the previous order, the tribunal had directed the state to implement 19 specific action points, along with other remedial measures based on sound scientific principles, to ensure development in the fragile Himalayan region does not exceed its carrying capacity. It had also stressed fixing accountability and mandated submission of an action taken report within six months, noting that compliance remains "unclear". The next hearing is on July 14.

Mussoorie following Joshimath crisis? NGT sends notice

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No remedial measures taken on ground: NGT

▸Continued from P 1

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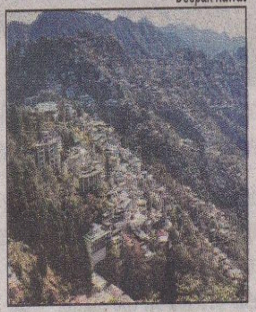
Deepak Rawat



Mussoorie is showing early signs of stress, with increasing infra pressure

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MARCH 29, 2026

About Social Development for Communities (SDC) Foundation

SDC Foundation is a Dehradun-based environmental action and advocacy group engaged in communication, citizen engagement and capacity building in the Himalayan state of Uttarakhand. The foundation works in partnership with institutions of Government of India, Government of Uttarakhand and other stakeholders such as research & academic institutions, community groups, civil society, media partners, NGOs, businesses & trade bodies, schools & colleges in the state.

Climate and environment conservation, waste management, sustainable urbanisation and a basket of sustainable development issues are key focus areas of the foundation.

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PS: Errors or omissions in UDAAI documentation, if any, are purely unintentional. In case any errors or key omissions are detected or any fresh updates are available for events that are already documented, SDC Foundation may kindly be notified at the email address contactsdcuk@gmail.com. We shall make the necessary corrections in subsequent versions of the monthly reports of UDAAI.