

## **One-Day Seminar on strengthening Disaster Preparedness and Climate Resilience held in Leh**

Leh, March 27, 2026: A one-day seminar on disaster management titled “Resilient Himalayas: Assessing GLOFs, Cloudbursts and Water Hazards for Enhanced Disaster Emergency Preparedness” was successfully conducted in Leh today.

The seminar brought together experts, administrators, scientists, and stakeholders to deliberate on hazard assessment, early warning systems, capacity building, and climate resilience strategies tailored to the unique challenges of the Himalayan region.

The Chief Guest, Administrative Secretary Smt. Bhanu Prabha, in her address, emphasized the fragile and sensitive ecological balance of Ladakh. Highlighting the increasing risks of Glacial Lake Outburst Floods (GLOFs), cloudbursts, and water-related hazards, she noted that the region’s remote terrain often delays response efforts, making preparedness and awareness critical.

She underlined Ladakh’s strategic and environmental importance as part of the trans-Himalayan “Third Pole,” stressing the urgent need to address climate change impacts on glaciers and vulnerable landscapes. She also referred to recent academic initiatives by the University of Ladakh focusing on GLOF detection and mitigation strategies, and called for collaborative, action-oriented approaches involving all stakeholders.

The seminar featured insightful technical sessions by distinguished resource persons. Ms. Fatima Amin, Scientist in Disaster Risk Reduction and Sustainability from IIT Roorkee, presented on developing an indicator-based climate resilience framework for Leh city. Her presentation covered integrated approaches to disaster risk reduction, climate adaptation strategies, and methodologies to enhance urban resilience in mountain ecosystems.

Shri Sonam Lotus, Director/Scientist at IMD Leh, spoke on shifting precipitation patterns and weather dynamics in Ladakh. He highlighted the increasing variability in weather conditions, including flash floods, heavy snowfall, and GLOFs, and emphasized the importance of timely weather advisories and early warning dissemination to remote communities. He also discussed advancements in forecasting systems, including the Bharat Forecast System and Mission Mausam, which have significantly improved weather services in the region.

Shri Basit Afzal, Founder of Acres of Ice, explored innovative solutions in his presentation on converting glacial lake risks into sustainable water storage through automated ice reservoirs. He discussed field implementations, case studies such as the 2014 Gya village incident, and the potential of such technologies to mitigate GLOF risks while addressing water scarcity.

Dr. Stanzin Passang, Project Manager at SEOC/DMRR&R, delivered a session on early warning systems for GLOFs and cloudbursts, including a live demonstration of an ultrasonic LoRa-based water level monitoring and alert system. He elaborated on communication technologies, hazard profiling, and mechanisms for strengthening disaster response infrastructure in Ladakh.

The seminar concluded with a vote of thanks by Dr. Stanzin Passang, who expressed gratitude to all speakers, participants, and collaborating agencies. He reaffirmed the administration’s commitment to organizing more such knowledge-sharing platforms in the future.

The event was attended by senior officials, including representatives from the Indian Army, NDRF, and various government departments, reflecting a strong multi-agency commitment toward enhancing disaster preparedness and resilience in Ladakh.

