

*Research Communication***Natural and Cultural Significance of the Himalaya**

Vishwambhar Prasad Sati, School of Earth Sciences and Natural Resources Management, Mizoram University, Aizawl, India. Email: ypsati@mzu.edu.in

Him + Alaya means ‘the abode of snow’; the Himalaya derives its name from Sanskrit. A unique natural formation on Earth, the Himalaya is the tallest and the youngest folded mountain system. It extends in an arc of about 2,400 km from the Pamir Knot in the northwest to the Arakan Yoma mountains in the southeast, covering the Western, Central, Eastern, and Trans-Himalaya, along with the Karakoram, Pir Panjal, and Zaskar mountain ranges that run parallel to it (Sati, 2026).

The Himalaya formed through destructive plate convergence, with the Tethys Geosyncline lying between the colliding plates. Its formation involved stages of collision, compression, faulting, and folding; therefore, the Himalaya is geologically sensitive, tectonically and seismically active, with valleys deepening and mountain peaks uplifting. As a result, the Himalaya is highly prone to catastrophic earthquakes. The Himalaya covers about 595,000 km², representing 0.4% of the world’s land area. It is home to about 55 million people, or about 0.7% of the world’s population. It spans five countries: India, Tibet, Pakistan, Nepal, and Bhutan (Fig. 1).

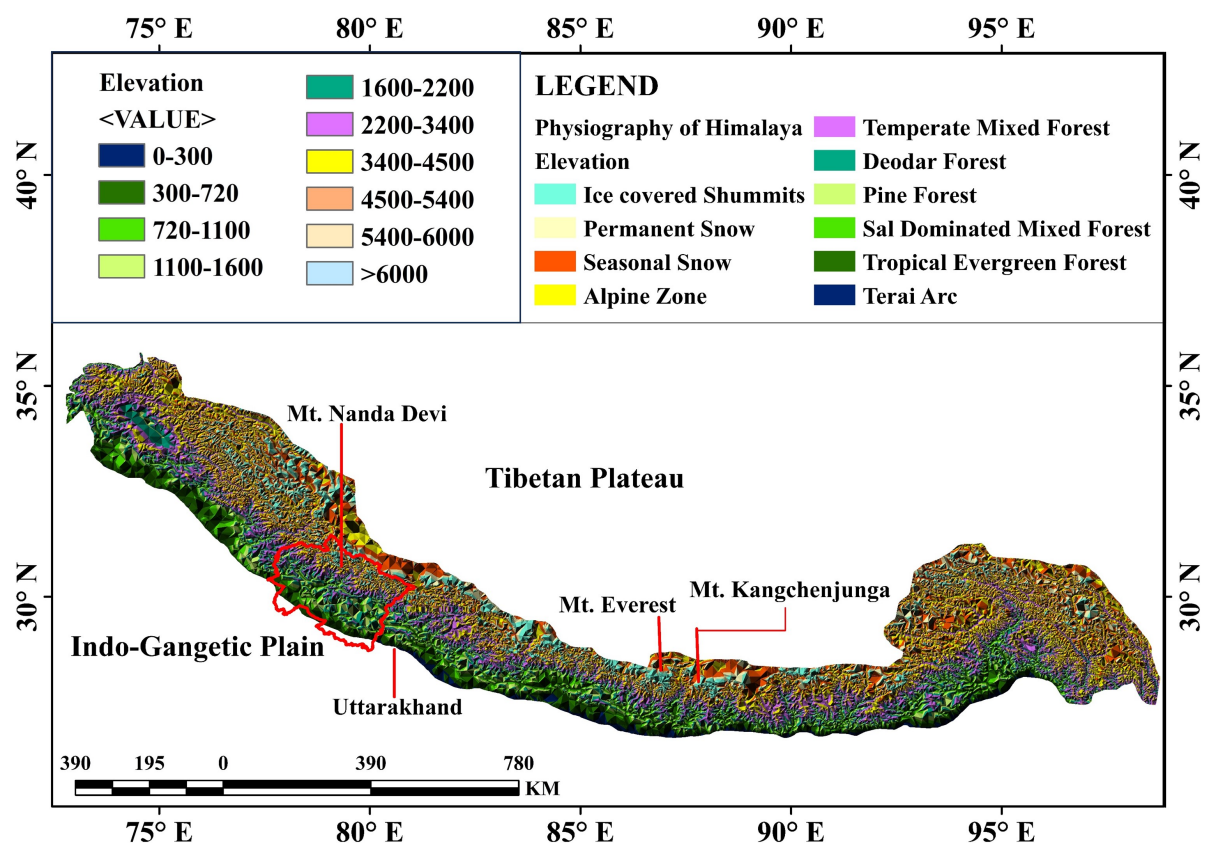


Fig. 1. The Himalayan region

Known as the ‘Water Tower of Asia’ and the ‘Third Pole,’ the Himalaya plays a crucial role in regulating climate, acting as a natural barrier, and protecting neighbouring regions. It has immense water potential – over 500 BCM annually – supported by around 17,000 glaciers

that serve as vital freshwater reserves. The Himalaya supports the livelihoods of over 600 million people across India, Nepal, Bhutan, Pakistan, Tibet, and Bangladesh, as it is the source of three of the world's largest river systems – the Indus (Sindhu), the Ganga, and the Brahmaputra. With over 80 large hydropower projects, 25 under construction, and more than 300 planned, the Himalaya has around 1,000 hydropower projects (Sati, 2019).

One of the world's 12 biodiversity hotspots, the Himalaya is known for its rich and valuable agro-biodiversity. It hosts over 10,000 plant species, more than 1,000 faunal species, and 8,000–10,000 traditional crop varieties. A large proportion of the population – over 70% - depends on agriculture, livestock, and forests for their livelihoods. The river valleys of the Ganga, Yamuna, and Brahmaputra form some of the world's largest and most fertile plains, supporting millions of livelihoods.

The Himalaya is not only rich in natural resources but also holds great cultural and spiritual significance. It is regarded as the embodiment of Shiva and Shakti, and the great Hindu epics such as the Ramayana, Mahabharata, and Matsya Purana mention its importance. According to legend, Lakshmana regained consciousness after receiving the Sanjivani herb brought from the Himalaya. Lord Krishna told Arjuna that among his various forms, he is the Himalaya. It is also believed that when the Earth was submerged in water, only the Himalaya remained. Sacred sites such as Kailash-Mansarovar, high-altitude pilgrimage centres, Devalayas, Shivalayas, Shakti Peeths, and Jyotirlingas are considered the abodes of gods and goddesses. The Ganga, revered by Hindus as 'Mother,' originates in the Himalaya and sustains millions of lives; taking a holy dip in it is believed to liberate the soul from the cycle of birth and death. The Himalaya is also considered the land where the Vedas were composed and where sages and saints performed yajnas for the welfare of life on Earth (Sati, 2022).

Over the past decades, the Himalaya has been facing enormous challenges to its existence, as well as to the millions of people whose livelihoods depend on its resources. Its natural, cultural, economic, and environmental richness has been deteriorating, and its traditional culture is gradually eroding. Traditional agriculture is declining. More than 20% of the region's population has been forced to migrate to urban centres in search of better livelihoods, partly due to climate change. About 1,700 villages have become ghost villages, a large share of arable land has been abandoned, and over 10% of natural springs have dried up. More than 15% of Himalayan flora, 10–20% of fauna, and over 1,000 traditional crop landraces are under threat. Nearly two billion people who depend on Himalayan rivers are likely to be affected by water scarcity. Due to climate-induced hazards – such as debris flows, flash floods, landslides, and mass movements – over 650 hydropower projects (about one in every four) are under threat. Of the approximately 17,000 glaciers, nearly one-third are already at risk. Natural disasters are increasing; the Central Himalaya experienced over 200 major natural disasters between 2000 and 2022. Unplanned and irrational infrastructure development has further intensified the frequency and severity of disasters in the Himalayan region (Sati, 2026).

This article emphasises that celebrating Himalaya Day should not be limited to just one day, but should be observed throughout the year. Encouraging environmental protection, cultural preservation, and regional cooperation is essential to safeguard the Himalaya's vital ecosystem for future generations. Himalayan communities' traditional livelihoods, including agriculture and livestock farming, need to be adapted sustainably to build resilience to environmental and socio-economic challenges.

Methods can be developed to build resilience against the harsh conditions the Himalaya faces, such as earthquakes, landslides, climate change, declining agriculture, and glacier melt. People in India, Nepal, and Bhutan already practice sustainable methods like terrace farming and forest conservation, and these need further strengthening. The region's rich biodiversity, including species such as the snow leopard, reflects its ecological strength. Cultural traditions

and community cooperation further strengthen resilience, helping the region cope with change and maintain balance sustainably.

Technological interventions and vulnerability analysis in infrastructure projects such as roads and hydropower, along with suitability analysis for selecting crops under climate change, will make this day more meaningful.

References

- Sati, V. P. 2026. Natural Disasters in the Himalaya: Case Studies, Impacts, and Responses. Springer Nature, Cham, ISBN: 978-3-032-17374-4. <https://link.springer.com/book/9783032173744>
- Sati, V. P. 2026. Exploring the Mystical Himalaya: Cultures, Economies, and Environment. Springer Nature, Cham, ISBN: 978-3-032-14275-7. <https://link.springer.com/book/9783032142740>
- Sati, V. P. 2019. *Himalaya on the Threshold of Change*. Springer International Publishers, Switzerland, ISBN 978-3-030-14179-0, P. 250, Advances in Global Change Research series, Scopus Indexed
- Sati, V.P. 2022. *Uttarakhand: Society, Culture, and Pilgrimages*, Delhi, Today and Tomorrow, Printers and Publishers, ISBN: 97-8939-173423-7

