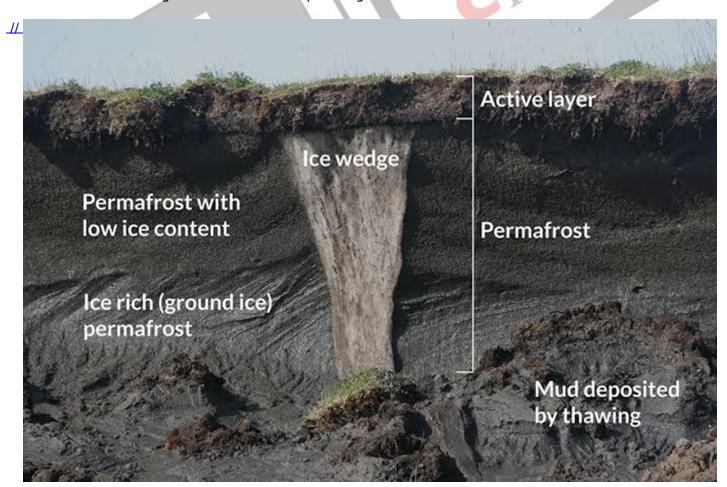


Impact of Permafrost Collapse on Himalayan Disasters

Source: TH

Glaciologists as a part of <u>India's Arctic Expedition</u>, are researching <u>permafrost</u> collapse to assess disaster risks in the Himalayas due to climate change.

- Permafrost is ground that remains frozen at or below 32°F (0°C) for at least two years, commonly found in high-latitude and high-altitude regions.
 - Permafrost is a combination of soil, rocks, and sand held together by ice, with frozen soil and ice year-round.
- Global warming leads to permafrost thaw (the melting of permanently frozen soil or rock), causing fluctuations and potential ground collapse, which can affect infrastructure.
 - There is a significant knowledge gap regarding the potential link between permafrost and disasters in the Indian Himalayas, including recent events like the South Lhonak glacial lake (Sikkim) bursting.
- Glaciologists aim to fill data gaps by studying permafrost in Arctic regions, leveraging findings for similar Himalayan topography.
 - The goal is to create **awareness among local communities** for <u>early warning systems</u> and long-term infrastructure planning.



Read more: Thawing Permafrost in Arctic and Industrial Contamination

PDF Refernece URL: https://www.drishtiias.com/printpdf/impact-of-permafrost-collapse-on-himalayan-disasters

