

EXPERTS POINT TO CLIMATE CHANGE IMPACT

Relevant for: Environment | Topic: Environmental Degradation - GHGs, Ozone Depletion and Climate Change

A deluge that resulted from a glacial melt on Nanda Devi flooded the Rishiganga river in Uttarakhand and washed away at least two hydroelectric power projects — the 13.2 MW Rishiganga hydroelectric power project and the Tapovan project on the Dhauliganga river, a tributary of the Alakananda.

There were also concerns that the excess water would further travel downstream to the river Alaknanda and threaten villages as well as hydro projects on the river.

However the India Meteorological Department has said that no rains are forecast. Officials of the Central Water Commission meanwhile said the flooding from the glacial burst has been contained.

Environmental experts have attributed the Nanda Devi glacial melt to global warming. Glacier retreat and permafrost thaw are projected to decrease the stability of mountain slopes and increase the number and area of glacier lakes, according to the latest assessment reports of the UN Intergovernmental Panel on Climate Change.

There is also high confidence that the number and area of glacier lakes will continue to increase in most regions in the coming decades, and new lakes will develop closer to steep and potentially unstable mountain walls where lake outbursts can be more easily triggered.

Farooq Azam, Assistant Professor, Glaciology and Hydrology division, IIT Indore, said such a glacial burst was an “extremely rare event”. “Satellite and Google Earth images do not show a glacial lake near the region, but there’s a possibility that there may be a water pocket in the region. Water pockets are lakes inside the glaciers, which may have erupted leading to this event. We need further analysis, weather reports and data to confirm if this indeed was the case,” he said.

Climate change has driven erratic weather patterns like increased snowfall and rainfall, warmer winters has led to the melting of a lot of snow. The thermal profile of ice, say experts, was increasing. Earlier the temperature of ice ranged from -6 to -20 degree Celsius, it is now -2 making it more susceptible to melting.

Subscribe to The Hindu digital to get unlimited access to Today's paper

Already have an account ? [Sign in](#)

Start your 14 days free trial. [Sign Up](#)

Find mobile-friendly version of articles from the day's newspaper in one easy-to-read list.

Enjoy reading as many articles as you wish without any limitations.

A select list of articles that match your interests and tastes.

Move smoothly between articles as our pages load instantly.

A one-stop-shop for seeing the latest updates, and managing your preferences.

We brief you on the latest and most important developments, three times a day.

*Our Digital Subscription plans do not currently include the e-paper, crossword and print.

You can support quality journalism by turning off ad blocker or purchase a subscription for unlimited access to The Hindu.

[Sign up for a 30 day free trial.](#)

END

Downloaded from **crackIAS.com**

© **Zuccess App** by crackIAS.com

CrackIAS.com