

# HIMANSH

March 12, 2021

## What is HIMANSH?

### It is India's remote, high-altitude station opened in Himalaya

As part of the Indian government's initiatives to better study and quantify the Himalayan glacier responses towards the climate change, National Centre for Antarctic and Ocean Research (NCAOR), Goa, under the Ministry of Earth Sciences has established a high altitude research station in Himalaya called HIMANSH (literally meaning, a slice of ice), situated above 13,500 ft (> 4000 m) at Sutri Dhaka, Chandra basin, Lahaul-Spiti District of Himachal Pradesh

The station was unveiled on Sunday 9th October 2016

## More about HIMANSH

- **Objectives:** To facilitate Himalayan Cryosphere Studies in Chandra basin to study the dynamics and the rate of change of Himalayan glaciers to understand its impact on hydrology and climate. \
- Since Upper Himalaya has been dominated by very harsh climate and terrain conditions, the station will enable scientists and field staff to stay in relatively weather resistant environment and carry out field experiments and monitoring on a continuous basis.
- HIMANSH has been established under the NCAOR program "Cryosphere and Climate" for proper monitoring of glaciers to understand dynamics, mass budget, energy and hydrological balance of Chandra basin.
- It has a Laboratory unit equipped with various scientific instruments such as Steam Drill, Ground Penetrating Radar, Global Positioning System, Snow Fork, Snow/Ice Corer, Flow Tracker, Water Level Recorder, Automatic Weather Station, Radiometer etc for

Glaciological Research.

- **Observations:** A total of six glaciers (280 km<sup>2</sup> glacier area) of Chandra basin name Sutri Dhaka, Batal, Bara Shigri, Samudra Tapu, Gepang Gath and Kunjum have been monitoring for mass, energy and hydrological balance including surface flow, ice flux, terminal fluctuation using this station "HIMANSH".
- Apart from above two Automatic Weather Stations (AWS) and five Water Level Recorders (WLRs) have been installed over glacier surface and along with a stretch of 120km of Chandra River respectively for energy and hydrological budget calculation.
- This all generated data will help to understand glacier behaviours in respect to climate including quantification of hydrological contribution to Chandra basin (upper Indus basin).

### **National Centre for Polar and Ocean Research (NCPOR) (erstwhile NCAOR)**

- It is India's premier R&D institution responsible for the country's research activities in the polar and Southern Ocean realms.
- It was established as an autonomous Research and Development Institution of the Ministry of Earth Sciences (formerly Department of Ocean Development)
- NCPOR was formerly known as the National Centre for Antarctic and Ocean Research (NCAOR) & is situated in Vasco da Gama, Goa
- NCPOR is known for its participation in global experiments, hosting of international conferences and in the leadership of international committees concerned with Antarctic science.