

**GOVERNMENT OF INDIA  
EARTH SCIENCES  
LOK SABHA**

UNSTARRED QUESTION NO:6446  
ANSWERED ON:06.05.2015  
CRYOSPHERE STUDIES IN HIMALAYAS  
Jena Shri Rabindra Kumar

**Will the Minister of EARTH SCIENCES be pleased to state:**

- (a) the details of facilities provided for the implementation of the project of Cryosphere studies in the Himalayas;
- (b) the monitoring mechanism for effective implementation of this project;
- (c) the details of funds allocated for the development of this project during the last three years and the current year; and
- (d) the extent to which this project has been operational?

**Answer**

MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI Y.S.CHOWDARY)

(a) Madam, Cryosphere studies in the Himalayas have been initiated under this project with the observations and monitoring of two glaciers namely 'Sutri Dhaka' and 'Batal' in the Chandra Basin in Himachal Pradesh. Observation Stations for discharge measurements of melt water from both these glaciers and installation of wooden stakes for monitoring their movement is continuing from June, 2013. Ice Core Laboratory and Geochemical Laboratory exist at National Centre for Antarctic and Ocean Research (NCAOR) under Ministry of Earth Sciences for analysis of ice cores and water melt samples. Thickness of the glaciers along different transects have been initiated by Ground Penetrating Radar (GPR). Satellite data analysis also constitutes part of the mass balance studies for the glaciers.

(b) Standing Committee of Experts assesses and monitors the implementation of this project.

(c&d) The project has been operational from June, 2013 onwards and Rs. 25 Lakhs and Rs. 24 Crores were allocated for 2013-14 and 2014-15, respectively. Observations were made and samples collected in August-September, 2013 and from mid July to September, 2014. Experiments and observations will be continued during summer 2015 (July to September)