

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO.305**  
TO BE ANSWERED ON 01.12.2015

**Impact of Climate Change in Himalayas**

305. SHRI THUPSTAN CHHEWANG:

Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

- (a) whether the Ministry has developed a system of monitoring the impact of recession of Glaciers in the Himalayas on a regular basis;
- (b) if so, the institution entrusted with this task and the data collected during the last ten years;
- (c) whether the institution so designated has the capability in terms of manpower, equipments and technology etc. to efficiently carry out the task assigned;
- (d) whether the Government has formulated any comprehensive Action Plan to combat the impact of climate change in the Himalayas; and
- (e) if so, the details thereof?

**ANSWER**

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI PRAKASH JAVADEKAR)

(a) to (c) Under the Himalayan Glaciological Programme sponsored by the Department of Science and Technology, Government of India, studies related to mass balance, hydro-meteorology, glacier dynamics, glacier length/area changes and climate studies of the Himalayan glaciers are being carried out. A Centre for Glaciology has been established at Wadia Institute of Himalayan Geology, Dehradun. The Centre has initiated a coordinated research initiative on Himalayan glaciology to understand the effects of climate change on the glaciers in order to develop strategies for climate change adaptability for sustaining Himalayan Eco-system.

Further, in a collaborative project with Ministry of Environment, Forest and Climate Change, Indian Space Research Organisation (ISRO) has carried out mapping of Himalayan glaciers covering Indus, Ganga and Brahmaputra basins using Indian satellite data during 2004 to 2011. The study shows that there are 34,919 glaciers spread over 75,779 sq. km. glaciated area in the entire Himalayas. Further, ISRO has monitored the glacier advance and retreat of 2018 glaciers, across the Himalayan region using satellite data of 2000-2001 and 2010-2011.

(d) & (e) The National Mission for Sustaining the Himalayan Ecosystem (NMSHE) under National Action Plan on Climate Change (NAPCC) aims at evolving conservation measures for sustaining and safeguarding the Himalayan glaciers and mountain ecosystems through establishment of monitoring network, promotion of community based management, human resource development, and strengthening regional cooperation. Major initiatives taken under NMSHE include creation of four Thematic Task Forces on Himalayan Agriculture, Traditional Knowledge systems, Forest Resources and Plant Diversity, and Fauna and Wildlife Habitats. It also includes networking of related institutions for focused research in different themes of Himalayan ecosystem. Programmes have been initiated for training in the field of glaciology, awareness programmes for community based organizations and officials related to the Indian Himalayan Region. State Climate Change Centres have been set up in the seven Himalayan states, namely, Jammu and Kashmir, Himachal Pradesh, Manipur, Mizoram, Tripura, Sikkim and Meghalaya.

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