

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 1854
TO BE ANSWERED ON 21.12.2018

Study of Climate Change Effects

1854. SHRI ANURAG SINGH THAKUR:

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

- (a) the details of the international and regional collaborations for the study of climate change effects and mitigation in the country;
- (b) the outcome of the study on Research on Glacial Lake Outburst Floods conducted by the Government; and
- (c) the details of other programmes/ schemes/policies implemented by the Government for sustainable development of Himalayan Region and in Himachal Pradesh?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(DR. MAHESH SHARMA)

(a) Intergovernmental Panel on Climate Change (IPCC), a body jointly formed by the World Meteorological Organisation and the United Nations Environment Program, periodically assesses the global climate change. Scientists from all over the world, including India contribute to the IPCC assessment reports. Nationally, a study was conducted by the Ministry of Environment, Forest & Climate Change titled “Climate Change and India: A 4X4 Assessment - A Sectoral and Regional Analysis for 2030s” which provides assessment of impacts of climate change in 2030 on four key sectors of Indian economy, namely, agriculture, water, forests and human health in four climate sensitive regions of India, viz, the Himalayan region, the Western Ghats, the Coastal region and the North-Eastern Region. Further, in the area of glaciology, an Indo–Swiss Joint Cooperation for capacity building programme has been established to study climate change effects.

(b) A study on Glacial Lake Outburst Floods (GLOF) has been supported by the Government in project mode for the South Lhonak Lake in Sikkim Himalayas. Based on the electric resistivity and bathymetric studies, the expert team suggested for siphoning. The outlet of the lake was widened to reduce the vulnerability of the lake. The volume of the lake stands monitored by the Central Water Commission.

The State Centre on Climate Change of the Himachal Pradesh Council for Science Technology & Environment has also been involved in the study of GLOFs in Himachal Pradesh. The outcome of their research reveals presence of 642 lakes, out of which 56 are mainly high altitude wetlands and the remaining 586 are the lakes formed either at the snouts of the glaciers or the supra glacier lakes existing within the glacier body in the ablation zones in the Satluj basin which includes the catchment areas in Himachal Pradesh as well as in Tibetan Himalayan Region.

(c) The Government, as part of National Action Plan on Climate Change, has launched the National Mission for Sustaining Himalayan Ecosystem (NMSHE) under which six thematic task forces anchored around six lead institutions have been set up to undertake studies to assess the health of Himalayan ecosystem in the areas of natural & geological wealth; water, ice, snow, including glaciers, Micro flora & fauna, wildlife & animal population; Forest resources & plant biodiversity; Himalayan Agriculture; and Traditional Knowledge.

An Inter-University Consortium on “The Himalayan Cryosphere: Science, and Society” has been set up with four partnering universities, to look into Cryosphere-Societal interactions, within the framework of integrated science and social-science research.

State Climate Change Cells have been established in 11 Himalayan states for climate change risk and vulnerability assessment, capacity building and public awareness.
