

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 89
TO BE ANSWERED ON 21.07.2025

Action Plan to Conserve Himalayan Ecology

89. SHRI GANESH SINGH:

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

- (a) whether the Government has formulated any long-term and inclusive action plan to conserve the Himalayan ecology, control glacier degradation and enhance climate resilience in hilly areas;
- (b) if so, the details thereof;
- (c) whether any monitoring system or performance monitoring mechanism has been put in place to ensure that initiatives like "Green Credit" and "Compensatory Afforestation" are implemented as genuine sustainable conservation measures rather than mere formalities; and
- (d) if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) & (b) The Government of India is implementing the National Action Plan on Climate Change (NAPCC), which comprises missions in specific areas of solar energy, energy efficiency, water, agriculture, Himalayan eco-system, sustainable habitat, green India, human health, and strategic knowledge on climate change. Amongst these missions, the Department of Science and Technology (DST) leads two key initiatives: (1) the National Mission for Sustaining the Himalayan Ecosystem (NMSHE), which monitors and assesses the Himalayan ecosystem, and (2) the National Mission on Strategic Knowledge for Climate Change (NMSKCC), which builds capacities in climate science, adaptation, and mitigation.

The Ministry of Environment, Forest and Climate Change has also established the G.B. Pant National Institute of Himalayan Environment, Almora as a focal agency to advance scientific knowledge and to evolve integrated management strategies for conservation of biodiversity and natural resources in the Indian Himalayan Region (IHR). The Ministry has also launched the National Mission on Himalayan Studies (NMHS) to support the sustenance and enhancement of the ecological, natural, cultural, and socio-economic capital assets and values of the IHR.

The Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR) under Ministry of Jal Shakti (MoJS) has established a Centre for Cryosphere and Climate

Change Studies (C4S) at the National Institute of Hydrology (NIH), Roorkee. The focus of the Centre is to study the impact of climate change on water resources of the IHR. Further, a Steering Committee on 'Monitoring of Glacier' has been constituted by the MoJS, under the Chairmanship of Secretary, DoWR, RD & GR, to monitor and coordinate the work carried out by various ministries and organizations on the Himalayan glaciers.

Ministry of Earth Sciences (MoES) through its autonomous institute, the National Centre for Polar and Ocean Research (NCPOR) monitors six glaciers in the Chandra basin (2437 km^2 area) in western Himalaya. A state-of-the-art field research station 'Himansh' established in Chandra basin is operational since 2016 for conducting field experiment and expeditions to glaciers. These contribute to understanding of the long-term glacier response and formulation of monitoring strategies for the Himalaya.

Additionally, the Geological Survey of India (GSI) carries out glaciological studies in the Himalayan region for scientific understanding. These studies include assessment of glacier mass balance, fluctuations in the glacier fronts, studies related to societal issues, viz. Glacial Lake Outburst Floods (GLOFs) etc. The Wadia Institute of Himalayan Geology (WIHG) under DST also plays a key role in glacier monitoring and hazard assessment across the Indian Himalayan Region. WIHG conducts field-based glaciological investigations, satellite-based glacier change analysis, and hydrological assessments to evaluate the impacts of climate change.

(c) & (d) The Green Credit Programme (GCP) encourages Public Sector Undertakings to undertake eco-restoration and tree plantation activities in degraded forest lands. Accordingly, the State Forest Departments identify degraded forest lands under the control and management of Forest Departments which can be selected by Public Sector Undertakings to undertake eco-restoration and tree plantation activities. The detailed modalities for taking up tree plantation under Green Credit Programme has been brought out by the Ministry during February 2024. Transparency and accountability of GCP is enabled through methodologies, guidelines and digital processes.

With regard to initiatives supported through Compensatory Afforestation Fund Management and Planning Authority (CAMPA), the States and UTs carry out comprehensive internal and third party monitoring to monitor the utilisation of funds, quality of afforestation and other related activities. Internal monitoring is carried out by the officials of the State Forest Department regularly and third party monitoring is conducted by engaging a professional entity. The assessment of various activities helps in identifying shortcomings and gaps in implementation, which are addressed from time to time for improving the quality of afforestation and other eco-restoration works.
