

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
LOK SABHA  
UNSTARRED QUESTION NO. 1504  
TO BE ANSWERED ON WEDNESDAY, 4<sup>TH</sup> DECEMBER, 2024**

**COMMITTEE ON DISASTER RISK REDUCTION (CoDRR)**

1504. SHRI DHAIRYASHEEL SAMBHAJIRAO MANE:  
SHRI SUDHEER GUPTA:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has thrown a caution on Glacial lake Outburst Flood (GLOF) in a Committee on Disaster Risk Reduction (CoDRR) workshop on strategies for GLOF risk reduction recently and if so, the details thereof;
- (b) whether lack of coordination/confusion about respective roles among States and Central agencies is one of the major reasons for non implementation of any concrete policy in GLOF risk in the country;
- (c) if so, the manner in which coordinating platform, CoDRR will help in overcoming the challenges with respect to GLOF risk;
- (d) whether the Government has compiled a dynamic list of high risk glacial lakes out of total glacial lakes in the country and if so, the details thereof; and
- (e) whether the Government proposes to engage with GLOF experts from across the world and if so, the details thereof?

**ANSWER**

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR  
MINISTRY OF SCIENCE AND TECHNOLOGY  
AND EARTH SCIENCES  
(DR. JITENDRA SINGH)

- (a) Yes. The National Disaster Management Authority (NDMA) under the aegis of the Ministry of Home Affairs (MHA) has constituted the Committee on Disaster Risk Reduction (CoDRR) to provide a multi-disciplinary approach to Glacial Lake Outburst Floods (GLOF) Risk Reduction in collaboration with various Central/State government agencies and departments. Until now 8 CoDRR meetings focusing on GLOF risk mitigation have been organized by National Disaster Management Authority (NDMA). On November 11<sup>th</sup> and 12<sup>th</sup>, 2024, NDMA organized a 1 and ½ day international workshop titled ‘Strategies for Glacial Lake Outburst Flood (GLOF) Risk Reduction to create awareness amongst States/UTs and to review their efforts for GLOF Risk Reduction. At the workshop, experts came from Nepal, Bhutan, Kazakhstan, Peru and Switzerland and shared best practices in the Andes, Alps and Himalayas.
- (b) No. In October 2020, NDMA issued the Guidelines on ‘Management of Glacial Lake Outburst Floods (GLOFs)’ and ‘Compendium of Task Force Report on NDMA Guidelines Management of Glacial Lake Outburst Floods (GLOFs)’ which contains roles and responsibilities, including actions to be taken by various stakeholders, for disaster risk management of GLOF.

Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti has been identified as the lead ministry for glacial studies.

- (c) The CoDRR mechanism paves the way for a whole-of-government approach and works with the objective of 'need to share' information, technology, assessment, scientific resources and networks, with the 6 related States/UTs. The over-arching idea is to arm the States/UTs with resources and information so that they can lead the effort to mitigate risks from such glacial lakes as exist in their jurisdiction. Results of CoDRR are outstanding – all States/UTs have formed GLOF Risk Reduction units and have focused resources on the problem.
- (d) Since 2011, National Remote Sensing Centre (NRSC) has utilized satellite remote sensing technology to consistently map over 7,500 glacial lakes (of the total 28,000 in IHR) across the India. Subsequently, Central Water Commission (CWC) has undertaken continuous monitoring of these lakes, publishing a fortnightly bulletin on high-risk glacial lakes from June to October, the period most prone to GLOF events. NDMA has integrated the findings of these agencies into a consolidated and dynamic list of 195 high risk glacial lakes that are exhibiting rapid increases in surface area and could be susceptible to GLOF events.
- (e) The CoDRR International Level Workshops are designed to bring all stakeholders to a common platform to engage in scientific discourse and open avenues for collaboration. In line with the same, the aforementioned workshop, and has created collaboration for States/UTs with global experts, Indian academics and scientific institutions.

\*\*\*\*\*