

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO. 4050

ANSWERED ON 19.12.2024

FLOOD MANAGEMENT SYSTEM IN PUNJAB

4050. SHRI CHARANJIT SINGH CHANNI

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) whether the Government has carried out any recent assessment of flood management systems in Punjab and if so, the details thereof;
- (b) the reasons behind frequent flooding in major districts of Punjab despite central assistance; and
- (c) the steps taken/being taken by the Government to improve the river basin management and increase the flood bearing capacity of rivers like Sutlej and Beas?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (c) A committee was constituted by Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti for "Joint flood management study in wake of the extensive floods in the State of Himachal Pradesh, Punjab and Uttarakhand in July-August 2023" headed by Chairman, Central Water Commission (CWC) with members drawn from States of Himachal Pradesh, Punjab and Uttarakhand and other experts organizations.

The intense rainfall spell during the July and August of 2023 affected major rivers such as the Sutlej, Beas and Ravi, resulting in extensive flooding across the State of Punjab.

The committee has submitted recommendation with respect to following Terms of Reference (ToR):

- i. Feasibility of establishing Hydrological Observation (HO) sites and flood forecasting sites in the catchment of Sutlej and Beas rivers.
- ii. Integrate the inflow/flood forecasting network of Bhakra-Beas Management Board (BBMB) to the platform of Water Information Management System/ National Water Information Centre (WIMS/NWIC).
- iii. Review of Rule Curves of Pong and Bhakra dams.
- iv. Feasibility of better flood plain management and measures to avoid encroachment of channels downstream of the dams to maintain its design discharge carrying capacity.

- v. Measures for better operation and maintenance (O&M) of embankments to prevent breaches causing damages

Indian Meteorological Department (IMD) on the request of Central Water Commission (CWC) has established a new Flood Meteorological Office (FMO) at Shimla for the river sub basins of Satluj, Beas and Ranjit Sagar Dam.

The committee has recommended establishing eight new HO sites which has been verified by CWC in the Beas Basin to improve flood risk management and water resource planning. These new eight HO sites in Beas basin have been approved by the CWC.

The committee recommended for integration of data from all Hydro-meteorological Stations into the WIMS portal to enhance data coordination and management. A Memorandum of Understanding (MoU) between BBMB and the Himachal Pradesh Government was signed in order to formalize data sharing.

The Rule Curves for Bhakra and Pong dams have been developed and provided to BBMB to make informed decisions about reservoir operations. CWC has also carried out flood routing studies for Bhakra and Pong Dams and provided to BBMB for facilitating safe operation of dams as per the needs.

CWC has also assessed Sutlej River's discharge capacity with the suggestion for its further improvement with high-resolution Digital Elevation Models (DEMs). The committee recommended better flood plain management to avoid encroachment of channels downstream of the dams to maintain its design discharge carrying capacity.

The committee also recommended for regular inspection and maintenance of embankments to address wear and damage issue due to changing flood risks.
