GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3109
ANSWERED ON 18.12.2025

SILTATION LEVELS IN RESERVOIRS AND DAMS UNDER BBMB

3109. SHRI ANURAG SINGH THAKUR:

Will the Minister of POWER
be pleased to state:

(a) the present siltation levels in reservoirs and dams under Bhakra Beas Management Board (BBMB) and Satluj Jal Vidyut Nigam Limited (SJVNL) along with major desiltation and sediment-management steps taken by the Government to restore designed storage capacity;

(b) the recent actions initiated by the Union Government to accelerate desiltation in these reservoirs for improving hydropower sustainability and strengthening downstream flood-mitigation;

(c) the desiltation, dredging, catchment-area treatment, reforestation and flushing-related proposals submitted by BBMB and SJVNL that are currently pending with the Himachal Pradesh Government and the steps being taken by the Government to facilitate their timely clearance;

(d) whether BBMB and SJVNL are considering additional measures such as advanced dredging technologies, updated hydrographic surveys and predictive sediment-modelling systems to address high silt inflow, if so, the details thereof; and

(e) whether the integrated financial, technical and policy support the Ministry plans to extend to BBMB and SJVNL to prevent further storage-loss, enhance reservoir safety and strengthen national water and energy security and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Bhakra Beas Management Board (BBMB) operates two storage dams namely Bhakra dam and Pong dam in Himachal Pradesh. As on date, Bhakra reservoir has lost about 26% of its total gross storage of 9.87 BCM and about 19% of its live storage of 7.43 BCM. Pong reservoir has lost about 14% of its total gross storage of 8.57 BCM and about 12% of its live storage of 7.30 BCM. Further, BBMB also operates two diversion structures namely Nangal dam and Pandoh dam, where flushing of silt is carried out during monsoons.

.....2.

Satluj Jal Vidyut Nigam Limited (SJVNL) has two projects with dam/barrage structures namely Nathpa Jhakri Hydro Power Station (HPS) (1500 MW) and Naitwar Mori HPS (60 MW). Both projects are run-of-river schemes with small pondage. As on date, Nathpa reservoir is maintaining 100% gross storage of 3.43 MCM and live storage of 3.03 MCM. Further, Naitwar reservoir is maintaining 100% gross storage of 0.281 MCM and live storage of 0.206 MCM. Silt flushing is carried out as required, particularly during the monsoon season, to preserve live storage capacities.

(b) : Considering the requirement of sediment management of reservoirs on priority, Government of India has initiated some proactive actions to support the dam owners to take up sediment management activities. As a step forward, a "Handbook for Assessing and Managing Reservoir Sedimentation" has been published by Central Water Commission in 2019 as a guiding document to plan and execute sediment management activities by the dam owners. Further, Department of Water Resources, Ministry of Jal Shakti has published a framework document titled "National Framework for Sediment Management" in October 2022 to provide guidance and support for sediment management across river basins.

(c) : Regarding desiltation and sediment-management, BBMB has submitted a proposal for de-siltation/ dredging of its dams to the Government of Himachal Pradesh. However, no such proposal in respect of SJVNL is pending with the Government of Himachal Pradesh.

(d) : BBMB is exploring the possibility of deep dredging operations without lowering water levels. Further, SJVNL has proposed for conducting regular bathymetric surveys, used to measure the depth and underwater topography of the reservoir, for the Nathpa Dam to monitor sediment accumulation and to plan reservoir flushing for optimising storage capacity.

(e) : Under Dam Rehabilitation and Improvement Project (DRIP) phase II and III, BBMB is being supported for improvement of safety aspects of selected dams for sustainable water storage, efficient dam management and flood control aspect.

****