GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 1693

ANSWERED ON 15.12.2025

DETAILS OF DAMS IN INDIA & THEIR MAINTENANCE STATUS

1693. SHRI SANT BALBIR SINGH:

Will the Minister of **Jal Shakti** be pleased to state:

(a) total number of dams existing in the country along with the year of construction of each dam and the State-wise name of these dams;

(b) whether these dams have undergone de-silting or desiltation operations since their construction;

if so, the details and timeline of such work, and if not, the reasons for non-implementation of de-silting despite repeated silt accumulation concerns; and

(c) whether Government is maintaining updated technical data on the current storage capacity of all dams and whether any studies conducted to examine the loss of live storage due to siltation, if so, the findings, and if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) As per the National Register of Specified Dams (NRSD), 2025, compiled by the National Dam Safety Authority, the country has a total of 6,628 specified dams, of which 6,545 are completed and 83 are under construction. Comprehensive State/UT-wise dam details including year of construction and storage capacity may be accessed through the NRSD link**:** https://dharma.cwc.gov.in/#/national-register-of-specified-dams-(nrsd)-2025

(b) Sedimentation in dams is a natural phenomenon and it reduces the storage capacity of reservoirs, although the rate at which this happens varies widely.

Further, water is state subject, therefore any action regarding desiltation/rejuvenation etc. are to be taken up by the respective State Govt./Project Authorities. Consequently, detailed information regarding desilting or sediment-removal operations is maintained by the respective dam owners.

The Government of India is implementing the externally funded Dam Rehabilitation and Improvement Project (DRIP) which aims to improve dam safety and efficiency. Under the scheme, there is a provision for carrying out need based de-siltation of selected dams.

Under the DRIP Phase-I program, implemented during 2012-2021, sedimentation management were studied for Kundah Palam dam, Papanasam Weir, Pillur dam (Tamil Nadu) and Maneri Bhali Stage-I

(Uttarakhand). Also, catchment area treatment for Kundah Palam Catchment was carried out. The Govt of Uttarakhand has carried out small scale de-silitation of Asan Barrage, wherein quantity of silt removed was 78,000 cubic meters.

Under the ongoing DRIP Phase II scheme with similar provisions, Tamil Nadu WRD has proposed to implement Catchment Area Treatment works for the Vaigai Reservoir. Additionally, as a pilot, Tamil Nadu Green Energy Corporation Limited. (TNGECL) has undertaken dredging activities, including the laying of silt-filled geo-tubes (25,000 cum) along the reservoir periphery, as well as open excavation of about 10,000 cum at Pillur Dam.

Government of Punjab has undertaken the de-siltation of 13 dams located in the Kandi area using its own financial resources. At present, de-siltation works are in progress at four dams namely Chohal, Siswan, Saleran, and Thana. Bhakra Beas Management Board (BBMB) has contemplated a pilot project for de-siltation of the Bhakra reservoir under the DRIP Phase-II & III Scheme in a revenue generation mode.

Most dam-owning agencies of hydroelectric projects undertake silt removal from reservoirs through periodic flushing operations, carried out in accordance with the provisions of the Operation & Maintenance (O&M) Manual, typically during the monsoon season.

A limited number of reservoirs desiltation initiatives have been undertaken in the country under revenue-generation models. Prominent examples include the Bisalpur Dam in Rajasthan and the Manglam Dam in Kerala, among others.

(c) Central Water Commission (CWC) has prepared the "Compendium on Sedimentation of Reservoirs in India 2024", which consolidates data from capacity surveys of 548 reservoirs undertaken by the CWC and various State Governments. These surveys employed both hydrographic methods and satellite-based remote sensing techniques to ensure comprehensive coverage. The compendium, finalized in August 2024 and published in two volumes (Vol. I & Vol. II), is accessible on the CWC website at: https://cwc.gov.in/en/publications.

As per the compendium, based on the information of 439 reservoirs, the computed average percentage loss in gross storage due to siltation is 19.24% and the average annual loss of gross storage is about 0.74%. Categorizations based on total percentage loss in gross capacity in 439 reservoirs is attached as **Annexure.**

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 1693 TO BE ANSWERED IN RAJYA SABHA ON 15.12.2025 REGARDING "DETAILS OF DAMS IN INDIA & THEIR MAINTENANCE STATUS".

Categorization based on total percentage loss in gross capacity in 439 reservoirs

Range of percentage loss in gross storage	No. of reservoir within the range	Average age of reservoirs in years (from impounding till last survey)
Less than 10%	155	39
10 % to 20%	127	45
20% to 30%	62	43
30% to 40%	49	44
40% to 50%	23	36
Above 50%	23	47

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