GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 4072

ANSWERED ON 30.03.2026

LARGE DAMS EXCEEDING THEIR LIFESPAN

4072 Dr. ASHOK KUMAR MITTAL:

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

(a) the total number of large dams in the country that have exceeded their designed lifespan and pose a severe structural threat;

(b) whether multiple State Governments have failed to establish functional State Dam Safety Organizations as mandated by the Dam Safety Act;

(c) the details of recent dam failures or structural breaches reported and the consequent loss of life and property;

(d) the reasons for the severe underutilization of funds allocated for the Dam Rehabilitation and Improvement Project (DRIP); and

(e) the steps taken to legally prosecute authorities failing to conduct mandatory pre-monsoon safety audits?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) There is no prescribed lifespan of a dam in our country. A dam's effective life extends as long as it reliably performs its intended functions without compromising public safety. A dams' age alone does not determine its stability or risk of structural failure. These critical infrastructures can maintain a viable operational lifespan when subjected to rigorous technical evaluations and proper upkeep. Accordingly, dams that are old but well-maintained and rehabilitated as per safety protocols continue to function safely, while any dam found to be under distress condition is addressed through the statutory framework under the Dam Safety Act, 2021.

As per the National Register of Specified dams 2025, compiled by the National Dam Safety Authority (NDSA), there are 6,545 completed and functional specified dams in the country.

As per the latest post monsoon inspections of 2025, three specified dams have been classified under Category-I (i.e., deficiencies in dams which, if left unattended, may lead to failure), 243 specified dams are in Category-II (i.e., major deficiencies in dams requiring prompt remedial measures). Rest of the specified dams of the country are in Category-III.

(b) In compliance with the provisions of the Act, all 31 dam-owning States and Union Territories have constituted their respective State Committees on Dam Safety (SCDSs) and established the State Dam Safety Organisations (SDSOs). These institutional mechanisms are operational, thereby ensuring structured oversight, coordination, and implementation of dam safety measures at the State/UT level.

(c) A summary of dam incidents and failures reported after the enactment of the Dam Safety Act, 2021 highlighting their causes, and other details is given at **Annexure.**

(d) Significant progress has been achieved under the externally aided Dam Rehabilitation and Improvement Project (DRIP-II) Scheme. The participating States and implementing agencies have accelerated key interventions, including dam rehabilitation works, safety improvement works, instrumentation, preparation of safety documentation, and capacity-building activities. Project execution has gained momentum with improved coordination among stakeholders, timely mobilization of technical resources and strengthened monitoring mechanisms.

However, the progress of works, and consequently fund utilization, at certain implementing agencies has been relatively slow. This is primarily attributable to delays in submission of comprehensive rehabilitation proposals and in converting approved proposals into awarded contracts. Further constraints include limited working seasons for execution of dam rehabilitation works, inadequate bidder participation in certain tenders, and the requirement for revisions in design and drawings during execution, particularly in technically complex rehabilitation projects.

(e) As per the provisions of Section 31 of the Dam Safety Act, 2021, every owner of a specified dam is statutorily mandated to carry out pre-monsoon and post-monsoon inspections each year for every dam under their jurisdiction. Following the enactment of the Act, there has been a significant and measurable enhancement in the frequency and coverage of dam inspection activities across the country. At present, nearly all specified dams are being inspected biannually by the respective dam owners, and detailed inspection reports are prepared and submitted to the concerned State Dam Safety Organisation (SDSO) as well as the National Dam Safety Authority (NDSA).

Further, these inspection activities are being closely monitored by both the SDSO and NDSA to ensure strict adherence to timelines and prescribed standards of reporting. The findings and recommendations emerging from these inspection reports are being utilized by the States for prioritization and implementation of requisite safety measures and remedial actions.

In instances where inspections have not been carried out, the SDSO and NDSA have issued necessary directions to the concerned dam authorities to initiate immediate corrective action and ensure compliance in a time-bound manner.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 4072 TO BE ANSWERED IN RAJYA SABHA ON 30.03.2026 REGARDING "LARGE DAMS EXCEEDING THEIR LIFESPAN".

Sl.No	State	Name of Project	Max. Height (M)	Year of Completion	Date of Failure/ Incident	Details of failure/ Incident	Category (Incident / Failure)
1	Madhya Pradesh	Karam Dam	52	Under Construction	11-08-2022	Slope failure and piping. On August 11, 2022 due to heavy rainfall in catchment area water has been impounded upto RL 296 m and piping was observed at RD 430 m.	Incident
2	Madhya Pradesh	Ardala Dam		2015	12-09-2022	leakage observed with rising water level	Incident
3	Kerala	Parambikulam Dam	73.15	1967	22/09/2022	On 21.09.2022 at around 2:00 AM, Spillway Shutter No. 2 was suddenly damaged and broke out, resulting in the release of approximately 20,000 cusecs of water from the reservoir. The failure appears to have occurred due to the breaking of the left-side chain link arrangement that connected the shutter to the counterweight. As a result, the counterweight became unbalanced, causing the chain to be pulled out from the gear assembly. This led to the downward movement of the counterweight.	Incident
4	Andhra Pradesh	Sree Pothuluri Veera Brahmendra Swamy Reservoir (SPVBR)	50.5	2006	13/12/2022	The construction of the main dam was completed during 1999-2000 and first filling of the Dam was during 2005-06. Sweating and oozing was observed when the reservoir was filled upto the level 210.30 m. In December-2022, when the water level was +213.070 M and the corresponding Storage is 15.94 TMC, heavy seepage to the tune of 8 litres per second is observed in the reach from RD 1620 m to 1650 m. Sand and metal filters are laid in the oozing area for safe discharge of the seepage water.	Incident
5	Himachal Pradesh	Malana-II HEP	53	2012	24/07/2023	Overtopped due to jammed radial gates from slush and boulders, causing scouring on the left bank.	Incident
6	Madhya Pradesh	PondiJaitgarh Dam	12.15	2008	25/07/2023	Due to heavy rainfall between 23/07/23-24/07/23 the water in the reservoir reached FTL and started to spill out from waste weir. Seepage started from 24/07/2023 evening which was increasing at fast rate. Dam breached on 25/07/2023 morning between RD 220 m and RD 270 m	Failure
7	Telangana	Kaddam Dam	31	1955	27/07/2023	Excessive inflow	Incident
8	Sikkim	Teesta Basin dams (Teesta	60	2017	04-10-2023	Sudden outburst in South Lhonak Glacial Lake in Sikkim lead to Flooding (GLOF) in Teesta River on the night of 03-04 October 2023 lead to washing way of Teesta –III	Failure

		III dam, Teesta-V dam, Teesta-VI Barrage (Under-Construction), TLDP-III Dam, TLDP-IV Dam), Sikkim and West Bengal				dam and heavy damages to Teesta-V dam. TLDP-II dam and TLDP-IV dam are also affected but no major damage has been reported	
9	Telangana	(Kaleshwaram Project) Medigadda (Lakshmi) Barrage Annaram and Sundilla	20.1	2019	21/10/2023	Settlement of pier of Medigadda Barrage on the night of 21/10/2023 lead to sudden release of 2.7 lakh cusec. Construction of the Barrage was completed in 2019. Observed leakage of water in the D/S of Annaram (Saraswathi) Barrage, Telangana (The piers from 16 to 21, along with the raft have sunk to varying depths and piers tilted to varying degrees)	Failure
10	Assam	Subansiri Lower HEP	130	Underconstruction	27/10/2023	Landslide lead to obstruction of diversion tunnel and water flow through the river	Incident
11	Punjab	Ranjit Sagar Dam	147	2001	02/02/2024 & 17/04/2024	Two consecutive incidences of sliding of upstream left side spillway approach channel benches of Ranjit Sagar Dam on 02.02.2024 & 17.04.2024.	Incident
12	Maharashtra	Lohara Storage tank	15.35	2017	15/07/2024	On 15th July 2024, due to heavy rainfall and a cloudburst-like situation in the catchment area of the Lohara Storage Tank, there was a sudden increase in inflow of water. A total of 64 mm rainfall was recorded at the UrdhavPenganga Project rain gauge, Sirasm (Dist. Hingoli). As a result, the main body wall (32 m length, chainage 148 m–180 m) was partially washed out on the downstream side. Additionally, the embankment between CH 180–216 (top) and CH 195–205 (bottom) was completely drained out into the nalla portion.	Failure
13	Telangana & AP	Peddavagu Dam	22	1981	19/07/2024	Heavy rainfall and the malfunctioning of one of the three crest gates resulted in overtopping. The left flank bund and a portion of the right flank bund were breached due to heavy floods, with a discharge of 76,000 cusecs, exceeding the design capacity of 40,500 cusecs. (19/07/2024)	Failure

14	Himachal Pradesh	Malana II	53	2012	31/07/2024	Cloud burst occurred in Malana catchment in the night of 31.07.2024 and damage to the Malana dam. Reportedly, the incident has caused damages in the downstream area due to excessive discharge from the dam	Failure
15	Himachal Pradesh	Malana-I HEP	17	2001	31/07/2025	Cloud burst occurred in Malana catchment in the night of 31.07.2024 and damage to the Malana dam. Reportedly, the incident has caused damages in the downstream area due to excessive discharge from the dam	Failure
16	Himachal Pradesh	Pandoh Dam	76.2	1977	01-08-2024	Cloud burst occurred in the upper reaches of the Beas River during early morning of 01-08-2024 which lead to very heavy ingress of trash & silt in the Pandoh reservoir. The very heavy silt load has resulted in jamming of 02 no. spillway gates of the Pandoh Dam	Incident
17	Chhattisgarh	Venika Dam	20.5	2019	02-08-2024	Overtopping of Venika dam on Mahan River which is owned by private company. Reportedly, the incident has caused damages in the downstream area due to uncontrolled spilling of water from the dam due to non-opening of radial gates.	Failure
18	Karnataka	Tungabhadra Dam	49.39	1953	10-08-2024	Spillway gate no. 19 was washed away from the groove of the spillway on 10.08.2024 at 10:50 PM.	Incident
19	Jharkhand	Bokaro barrage	11.56	1953	03-08-2024	Incident of collapse of two gates (no. 4 &8)in the morning on 3/8/24 due to heavy rainfall in Damodar River catchment resulted in large inflow into the reservoir.	Incident
20	Uttar Pradesh	Matatila Dam Lalitpur,	45.72	1964	05-05-2025	Damage to drain chute, gauge, pitching of Matatila Dam due to waves driven by strong winds.	Incident
21	Punjab	Shahpurkandi Dam Project	55.57	Underconstruction	07-06-2025	Seepage of Water Through Temporary Dyke at Power House No. 2. Water entered the working area of the Tail Race Channel portion downstream of Power House No. 2, filling the area from Elevation Level (EL) 338.00 m to EL 344.50 m. No construction activity was going on at site at that time and no damage occurred to the structure.	Incident
22	Himachal Pradesh	Parbati Stage-II	83.7	Underconstruction	25/06/2025	PARBATI-II Cloud burst incident leading to heavy silt/ sludge up to 10 to 12 feet has been deposited in the MIV floor, Protecton/ Protection wall and TRC (Tail race channel) of powerhouse has been completely Damaged, extensive damage to Jiwa Trench weir, Intake Gate, Silt Flushing Channel and other structures at the site, extensive damage to Hurla Trench weir, and other structures at the site etc.	Incident
23	Himachal Pradesh	Parbati Stage-III	43	2014	25/06/2026	Parbati-III Damages have been observed downstream of Dam Plunge pool. PP gabion crates, Wire crates and concrete blocks have been washed out on left and right bank of the plunge pool, both DT Gates have been stuck in silt.	Incident

24	Madhya Pradesh	Padariya Dam, Chhatarpur,	16.13	2013	12-07-2025	Due to excessive rainfall in the catchment, Dam overflown led to embankment breached (RD 510-590 m).	Failure
25	Chhattisgarh	Luti Tank	12.8	1982	02-09-2025	Due to very heavy rainfall in the catchment, the dam has failed due to overtopping resulting in loss of lives of people	Failure
26	Chhattisgarh	Rajadera Tank	18.69	1982	02-11-2025	A seepage issue was reported at the dam site on 1 November 2025, as observed by the Executive Engineer. The seepage occurred on the downstream slope near the toe portion and was attributed to piping. Subsequently, on 2 November 2025 at approximately 5:00 A.M., the dam breached along the right flank portion. Although some newspaper reports mentioned agricultural loss in the downstream village, the field assessment confirmed that there was no loss of life or agricultural damage. The expert team assessed that the piping failure may have occurred due to animal burrowing.	Failure
27	Karnataka	Mangala	13.1	1969	17/12/2025	On 17.12.2025 at about 1:30 a.m., a 2 m portion of the UCR wall near the sluice vent of Mangala Reservoir collapsed, causing seepage of approximately 580 cusecs. Emergency repair works were immediately undertaken using boulders and sandbags, and about 90% of the leakage has been controlled. Around 5–8 cusecs of leakage is still observed, and further repair works are in progress.	Incident
28	Karnataka	Hipparagi Barrage	26	2004	06-01-2026	On 06-01-2026, the gate plate of Gate No. 22 of Hipparagi Barrage was damaged, with about 1.30 m of the 8.23 m high gate collapsing, while the remaining 6.93 m remains intact. Water is flowing downstream through the upper portion of the collapsed gate, with an estimated discharge of approximately 6000 cusecs.	Incident

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