GOVERNMENT OF INDIA MINISTRY OF JAL SHAKTI, DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION LOK SABHA STARRED QUESTION NO. *192 ANSWERED ON 04.07.2019

SILT ACCUMULATION IN DAMS/ RESERVOIRS/LAKES

*192. SHRI SUDHEER GUPTA

Will the Minister of JAL SHAKTI be pleased to state:

(a) whether the Government has made any survey/study about the silt accumulation in the dams/reservoirs/lakes across the country and if so, the details thereof along with the dams which have reduced the water holding capacity more than 50 per cent;

(b) whether the Government has any proposal to remove silt therefrom and received any proposals from certain States for adopting new technology for the purpose;

(c) if so, the details thereof, State-wise and the action taken on the said proposals;

(d) whether the Government is establishing any new mechanism using modern technology to remove silt from such dams/reservoirs to bring them back to their full water holding capacity and if so, the details thereof including the details of such technology; and

(e) whether the Government has planned any silt-removal programme in the country and if so, the details thereof, State-wise?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI GAJENDRA SINGH SHEKHAWAT)

(a) to (e) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF LOK SABHA STARRED QUESTION NO.*192 TO BE ANSWERED IN LOK SABHA ON 04.07.2019 REGARDING "SILT ACCUMULATION IN DAMS/ RESERVOIRS/LAKES" RAISED BY SHRI SUDHEER GUPTA.

(a) Central Water Commission (CWC) has conducted sedimentation assessment studies on 243 Reservoirs through Hydro Graphic survey and live storage capacity assessment studies of 126 Reservoirs through Remote Sensing Technique.

As per the study, the reservoirs have experienced annual rate of siltation in live storage zone in the range of 0-1% normally. Six reservoirs viz. Sanandro, Gujarat (57.33% in 30 years), Baira, HP (84.27% in 30 years), Mhaswad, Maharashtra (52.04% in 102 years), Kundah, Tamil Nadu (63.07% in 22 years), Nizamsagar, Telangana (60.47% in 62 years), Chandan, Bihar (52.24% in 37 years) have experienced a loss of more than 50% of gross storage capacity.

(b) to (e) While designing a water storage project, provision for the Dead Storage is kept to accommodate the silt coming from upstream catchment. The Dead Storage is so kept as to accommodate the silt for 100 years of project life assuming a certain design rate of siltation which is based on certain factors. Any deposition of silt in the dead storage zone does not affect the performance of the reservoir.

De-siltation of dams to increase its storage capacity is primarily the responsibility of dam owners who are generally State Governments or Central/ State PSUs.

Usually de-silting of large dams is not techno-economically feasible. Under the World Bank assisted Dam Rehabilitation & Improvement Project (DRIP) there is a need based provision for desiltation of dams and desiltation works of three dams viz. Kundahapalam (Tamil Nadu), Papanasam (Tamil Nadu) and Asan Barrage (Uttarakhand) has been taken up.
