

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

UNSTARRED QUESTION NO. 4639

ANSWERED ON 21.08.2025

SILT ACCUMULATED IN RIVERS

4639. SHRI SHRIRANG APPA CHANDU BARNE:

SMT. BHARTI PARDHI:

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

- (a) the current estimated volume of silt accumulated in the rivers of Maharashtra, specifically the Godavari, Krishna, Bhima, Tapi and Narmada during the last decade;
- (b) whether the Government has conducted a comprehensive impact assessment of silt accumulation on the ecological health, water carrying capacity, flood incidence and groundwater recharge of these rivers and if so, the findings thereof;
- (c) the primary anthropogenic and natural factors contributing to increased siltation in these rivers;
- (d) the details of the specific desilting projects currently underway or planned for the major rivers in Maharashtra and Madhya Pradesh along with the timeline fixed and the budget allocated for each project;
- (e) the measured effectiveness of past and ongoing desilting operations in terms of increasing river capacity, reducing flood risk and improving riverine ecosystems; and
- (f) whether any independent evaluations of the said projects have been conducted and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (c) Erosion and deposition of silt in a river are natural regulating functions of a river. This is caused by various natural geological, geo-morphological, hydrologic, climatic factors like floods, inflow of sediment from the drainage basin, heavy rainfall and anthropogenic activities, etc. They define the river morphology which continues to change over time. Rivers tend to maintain a balance between the silt load carried and silt load deposited, maintaining a river regime.

Morphological studies of 15 major rivers have been conducted by Central Water Commission (CWC) using remote sensing technique which includes Krishna and Tapi among others. The study of Krishna river is based on the data for the period 1973 - 2011, indicating total erosion of both the banks of Krishna river as 47.5 km² (left bank 21.9 km² and right bank 25.6 km²) and total deposition of 42.2 km² (left bank 24.2 km² and right bank 18 km²). The study of Tapi river has indicated erosion and

deposition of 17.79 km² and 54.71 km² respectively on the left bank and erosion and deposition of 45.96 km² and 11.63 km² respectively on right bank of Tapi River considering 2010 satellite imagery data vis a vis bank line for the year 1971-79.

(d) to (f) Dredging/desilting of rivers is not considered techno-economic feasible due to several reasons like non-sustainability, non-availability of vast land required for the disposal of dredged material, etc. National Framework for Sediment Management (NFSM) has been published in October, 2022 by Department of Water Resources, River Development and Ganga Rejuvenation. It emphasises on reducing silt generation rather than silt removal and promotes technological innovations & best practices. The framework lays emphasis on sediment management through integrated river basin management plan giving due consideration to environment and ecology. Selective dredging in specific reaches of rivers for removal of drainage congestion, channel capacity improvement and navigation purpose are formulated and implemented by concerned States/agencies based upon local site conditions and backed by proper scientific model study.

Data on funds allocated/spent by States on desilting of rivers is not maintained centrally. The measures of desilting/dredging of rivers for flood management are formulated and implemented by the State Governments as per their priority. The Government of India supplements the efforts of State Governments by providing technical advice and promotional financial assistance for flood management in critical areas.

Narmada Valley Development Authority, Government of Madhya Pradesh, has informed that they have not planned any desilting project presently.

Water Resources Department, Government of Maharashtra has informed that removal of silt from Savitri river and its tributaries were undertaken through District Disaster Management Authority in the year 2022 and 2023 and approximately 30.25 lakh cubic meter of silt was removed. Also, 20.38 lakh cum of slit was removed from Vashishti river, Tal. Chiplun by Water Resources Department of Maharashtra State with the help of local Government bodies. Due to these river de-silting works, the flood situation has been controlled to considerable extent.
