

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 4393

ANSWERED ON 27.03.2025

IWRM IN CHHATTISGARH AND JHARKHAND

†4393. SHRI BRIJMOHAN AGRAWAL SHRI DULU MAHATO

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

- (a) whether Integrated Water Resources Management (IWRM) is still needed in Chhattisgarh;
- (b) if so, whether the Government is implementing concrete strategies to address the challenges related to water scarcity, water pollution and water conservation in Chhattisgarh and if so, the details thereof;
- (c) the role of the data, technology and innovation in water management in Chhattisgarh;
- (d) the modern technological initiatives launched by the Government in Chhattisgarh for monitoring water resources and promoting water conservation;
- (e) the manner in which water conservation has been promoted under the 'Jal Sanchay Jan Bhagidari' initiative in Chhattisgarh and Jharkhand;
- (f) whether the Government is implementing any special plan to make the said initiative more effective and if so, the details thereof;
- (g) whether the Design-Build-Operate-Transfer (DBOT) model is being used in water treatment plants in Chhattisgarh and if so, the details thereof; and
- (h) if not, whether the Government is considering for implementing this model in Chhattisgarh to make water management more effective?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) As reported by the Government of Chhattisgarh, Integrated Water Resources Management (IWRM) is essential in Chhattisgarh to ensure sustainable water use, improve water governance and address challenges related to water scarcity, pollution and conservation. To address the challenges of water scarcity, pollution and conservation, the Government of Chhattisgarh has implemented a structured approach. For water scarcity, efforts focus on identifying vulnerable areas, formulating mitigation plans, executing conservation measures and ensuring continuous monitoring. In tackling water pollution, the strategy involves identifying pollution sources, measuring contamination levels, implementing treatment plans and maintaining regular monitoring. For water conservation, key programs such as the Jal Shakti Abhiyan: Catch the Rain and Jal Sanchay Jan Bhagidari have been implemented to promote rainwater harvesting and groundwater recharge.

(c) & (d) As reported by the Government of Chhattisgarh, data, technology and innovation play a crucial role in water management in Chhattisgarh. The use of advanced data systems helps in understanding water trends, planning for present and future needs and optimizing resource allocation. To strengthen data-driven water governance, the State Project Management Unit (PMU) and the State Water Informatics Centre (SWIC) have been approved.

Several modern technological initiatives have been introduced by the government to monitor water resources and promote conservation in Chhattisgarh. Internet of Things(IoT) and Geographic Information System (GIS)-based water conservation plans have been implemented in Dhamtari and Rajnandgaon districts. Furthermore, Real-Time Data Acquisition Systems (RTDAS) have been deployed under the National Hydrology Project (NHP) across the state, enabling better monitoring, planning and management of water resources.

(e) & (f) The Government of Chhattisgarh has reported that under the Jal Sanchay Jan Bhagidari initiative, significant progress has been made in water conservation efforts in Chhattisgarh. A total of 2,62,751 groundwater recharge structures have been constructed through different funding sources and public participation. The districts of Rajnandgaon, Raipur, Bilaspur, Baloda Bazar and Raigarh have achieved notable success, securing positions among the top ten in the country for groundwater recharge efforts.

The Government of Jharkhand has reported that in the state, all district collectors have been directed to take appropriate action towards the implementation of the Jal Sanchay Jan Bhagidari initiative. Efforts are being made to sensitize and motivate the public, through local bodies, to adopt water harvesting and conservation measures.

To further enhance the effectiveness of the Jal Sanchay Jan Bhagidari initiative, the Government of Chhattisgarh plans to implement a GIS-based decision-making framework for groundwater reassessment in collaboration with the Central Ground Water Board (CGWB). This approach will be particularly focused on Rajnandgaon and Dhamtari districts, where targeted interventions will be carried out to improve water conservation and recharge strategies.

(g) & (h) The Government of Chhattisgarh has reported that the Design-Build-Operate-Transfer (DBOT) model is not currently being utilized in water treatment plants in the state. However, the Government of Chhattisgarh is exploring the potential of leveraging private sector expertise through this model to enhance efficiency and sustainability in water management.
