

GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA

REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 3030

ANSWERED ON 06.08.2026

**INTEGRATED WATER GOVERNANCE AND SUSTAINABLE WATER RESOURCE
MANAGEMENT**

3030. Thiru D M KATHIR ANAND:

Will the Minister of JAL SHAKTI be pleased to state:

(a) whether the Government has examined the need for a holistic approach to water governance by treating rivers, aquifers, wetlands and other water resources as interconnected ecological systems requiring coordinated management instead of fragmented administrative oversight and if so, the details thereof;

(b) the major institutional, legal, infrastructural and inter-State challenges that impede equitable utilisation of water resources and balanced distribution among agriculture, domestic consumption, industry and environmental requirements;

(c) the reforms proposed to strengthen basin-oriented planning, integrated data-sharing, scientific hydrological assessment, real-time monitoring and evidence-based water resources management;

(d) the collaborative arrangements envisaged to enhance coordination among State Governments, local bodies, research institutions, water user associations and civil society organisations for participatory decision-making; and

(e) the long-term strategy of the Government to promote inclusive, sustainable and climate-resilient water governance based on the principle of equitable access to water for every citizen?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The Union Government has recognized the need for adopting a holistic and integrated approach to water governance, considering rivers, aquifers, wetlands and other water resources as interconnected components of the hydrological and ecological system. Accordingly, the Ministry of Jal Shakti promotes an integrated approach to water resources planning and management with emphasis on river basin-based planning, scientific assessment, technological interventions and coordinated institutional mechanisms. The National Water Policy, 2012 advocates the principles of Integrated Water Resources Management (IWRM) and emphasizes coordinated development and management of water resources at the river basin level with a view to ensuring their sustainable, equitable and efficient utilization.

(b) Water is a State subject under Entry 17 of List II of the Seventh Schedule to the Constitution and accordingly, the primary responsibility for planning, development and management of water resources rests with the respective State Governments. Nevertheless, integrated water governance is confronted with a number of institutional, legal, infrastructural and inter-State challenges. These include fragmentation of institutional responsibilities among multiple agencies, variations in State water laws and regulatory frameworks, inter-State river water disputes, inadequate storage and conveyance infrastructure, hydrometeorological variability across regions and increasing pressures arising from rapid urbanization, industrialization and agricultural water demand while ensuring environmental flow requirements. The Government of India addresses these challenges through policy support, technical guidance, financial assistance under various Central Sector and Centrally Sponsored Schemes, capacity-building initiatives and institutional mechanisms including the

framework provided under the Inter-State River Water Disputes Act, 1956, for adjudication of inter-State river water disputes.

(c) The Government is implementing several initiatives aimed at strengthening integrated water resources management. To support evidence-based water resources management, the Government has implemented various phases of Hydrology Projects, aimed at improving the extent, quality, and accessibility of water resources information. Under this project, the National Water Informatics Centre (NWIC) has been established which manages (i) Water Resources Information System (India-WRIS) as a robust, public-facing portal for integrated data-sharing; and (ii) Water Information Management System (WIMS), which integrates continuous real-time data to generate flood forecasts and basin-level hydro-meteorological assessments.

The Government of India has undertaken modernization and expansion of surface water and groundwater monitoring networks, including setting up of telemetry systems to strengthen basin-oriented planning, integrated data-sharing, scientific hydrological assessment, real-time monitoring and evidence-based water resources management. Around 39,000 Real-Time Data Acquisition System (RTDAS) stations are currently operational in the country.

(d) The Government promotes participatory decision-making through multi-tier collaborative arrangements involving all key stakeholders. To integrate scientific expertise into policy, the Ministry actively collaborates with research institutions (such as IITs, NITs, and ICAR) through dedicated R&D programmes and Purpose Driven Studies (PDS) under various schemes like National River Conservation Plan, Hydrology Projects, Dam Rehabilitation and Improvement Project, R&D scheme etc. At the grassroots level, Civil Society Organisations (CSOs) and Non-Governmental Organisations (NGOs) are formally engaged as Implementation Support Agencies (ISAs) under the Jal Jeevan Mission and as Support Agencies under the Atal Bhujal Yojana to facilitate community

mobilization and behavioural change. Furthermore, local bodies and farmers are empowered through Participatory Irrigation Management (PIM), which mandates the creation of Water User Associations (WUAs) to manage equitable water distribution and system maintenance locally. The Jal Shakti Abhiyan: Catch the Rain and Jal Sanchay Jan Bhagidari campaigns have further strengthened public participation by mobilizing local bodies, educational and research institutions, civil society organizations, Nehru Yuva Kendra Sangathan, Self-Help Groups and other stakeholders for rainwater harvesting, water conservation and source sustainability. In addition, Jal Shakti Kendras established at the district level function as knowledge and resource centres for dissemination of best practices, technical guidance, awareness generation and capacity building relating to water conservation and efficient water management.

(e) The long-term strategy of the Government is to promote inclusive, sustainable and climate-resilient water governance through integrated planning, efficient management and equitable utilization of water resources. The strategy focuses on ensuring universal access to safe drinking water through flagship programmes such as the Jal Jeevan Mission and AMRUT 2.0, augmenting water availability through rainwater harvesting, rejuvenation of traditional water bodies and watershed development, promoting water-use efficiency through demand-side management, micro-irrigation, recycling and reuse of treated wastewater, strengthening scientific groundwater management under the National Aquifer Mapping and Management Programme (NAQUIM). The Government continues to leverage scientific research, modern technologies, digital information systems, institutional reforms and participatory governance to strengthen water security and ensure sustainable management of the country's water resources for present needs and future resilience.
