GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 2328

ANSWERED ON 13.03.2025

INTEGRATED WATER RESOURCES MANAGEMENT

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Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government has recently conducted the Second All-India State Water Ministers' Conference at Udaipur, Rajasthan and if so, the details thereof;
- (b) the manner in which the conference focused on integrated water resource management addresses Statespecific water challenges and the strategies proposed for its implementation;
- (c) whether the role of the data, technology and innovation in improving water governance and efficiency has been discussed in the said conference and if so, the details thereof along with the specific technological interventions deliberated upon;
- (d) whether the 'Jal Sanchay Jan Bhagidari' initiative promotes water conservation at the grassroots level and if so, the details thereof along with the measures to be undertaken for its nationwide expansion; and
- (e) whether the steps taken/being taken by the Government to expedite river-linking projects and if so, the details thereof along with the manner in which consensus-building among States would be ensured?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) The 2nd State Water Ministers' Conference 2025, with the theme "India@2047 – A Water Secure Nation", was organized by the Ministry of Jal Shakti in Udaipur on 18-19 February, 2025. The conference was inaugurated by the Hon'ble Minister of Jal Shakti and the Hon'ble Chief Minister of Rajasthan. The event also witnessed the esteemed presence of the Hon'ble Chief Ministers of Odisha and Tripura, along with the Hon'ble Deputy Chief Ministers of Himachal Pradesh, Chhattisgarh and Karnataka. This conference was attended by 33 Hon'ble Ministers and over 300 delegates from the Central/State

Governments, Multilateral/Bilateral Organizations etc. The discussions focused on strengthening India's water security by 2047, fostering inter-state collaboration and advancing key water conservation initiatives across the country. The conference was structured in 6 thematic sessions viz. 1. Strengthening Water Governance, 2. Water Storages Infrastructure & Augmenting the Supply, 3. Water Delivery Services with focus on Drinking Water, 4. Water Delivery Services with Focus on Irrigation & other uses, 5. Demand Management & Water Use Efficiency, 6. Integrated River & Coastal Management.

The 2nd State Water Ministers' Conference 2025 focused on Integrated Water Resource Management recognizing it as a key approach to addressing State-specific water challenges. The conference underscored that water cannot be managed in isolation and highlighted the importance of coordinated governance across multiple levels. The need for multi-level governance to ensure effective water management, from basin and sub-basin levels to state, district and municipal levels was highlighted. The discussions emphasized that Integrated Water Resource Management must integrate various water sources, including rainfall, surface water, groundwater and treated water, ensuring a holistic and sustainable approach. To operationalize Integrated Water Resource Management effectively, the conference proposed a decentralized governance structure which will enhance coordination across sectors.

(c) The 2nd State Water Ministers' Conference 2025 extensively discussed the role of data, technology and innovation in improving water governance and efficiency. Key interventions included Internet of Things (IoT)-based smart water meters under Jal Jeevan Mission (JJM) for real-time monitoring, hydrogeological maps for groundwater management and Artificial Intelligence (AI)-based systems for tracking water losses and leakages.

Many innovations in water governance and efficiency were discussed during the Conference inter-alia including the use of real-time monitoring and automation technologies. In urban water governance, Supervisory Control and Data Acquisition (SCADA) systems have been deployed for both water supply and sewerage management, enabling continuous monitoring of water distribution, leak detection and sewage treatment performance. The Navi Mumbai Municipal Corporation (NMMC) has integrated SCADA into its Sequential Batch Reactor (SBR)-based sewage treatment plants (STPs), ensuring real-time compliance with environmental standards and efficient reuse of treated wastewater and also utilises holding ponds, which act as both retention basins during normal conditions and storage during high tides to prevent water logging, as part of its integrated drainage system, which features separate storm and waste water disposal. For groundwater management, the use of hydrogeological maps (HGM Maps) was discussed as an innovation in scientific water resource planning. Tamil Nadu during 2014 developed groundwater prospect maps helping authorities identify groundwater recharge areas and design suitable interventions such as borewells, infiltration wells and open wells. In agriculture, precision irrigation technologies like drip and sprinkler systems were emphasized, along with AI & IoT-enabled smart irrigation for automated water management.

(d) The Jal Sanchay Jan Bhagidari (JSJB) initiative was launched on September 6, 2024, in Surat, Gujarat, under Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) campaign in the virtual presence of the Hon'ble Prime Minister. The Jal Sanchay Jan Bhagidari(JSJB) initiative has emerged as an innovative initiative for intensified community action for construction of low-cost artificial recharge structures with focus on roof top rainwater harvesting structures, recharging of defunct bore wells and recharge pits made through innovative financing models like philanthropic contribution, Industrial Corporate Social Responsibility (CSR), community partnership models and for finding cost effective local solutions for water conservation. JSJB offers a scalable, sustainable approach to address depleting groundwater levels at a micro level. With artificial recharge structures and advanced monitoring systems, JSJB aims to contribute to groundwater replenishment while encouraging responsible water usage. JSJB aims to create one million low-cost recharge structures across urban and rural India, using a combination of scientific technology and traditional methods.

The key objective of the Jal Sanchay Jan Bhagidari initiative is to conserve every drop of water through collective efforts, adopting a whole-of-society and whole- of-government approach. By fostering community ownership, the initiative seeks to develop cost-effective, local solutions tailored to water challenges across regions, aiming to boost groundwater levels, promote water conservation, enhance climate resilience, and improve water quality. People with resources are encouraged to build recharge structures in their states and villages of origin. It is expected to build 1 million artificial recharge structures through Jal Sanchay – Jan Bhagidari harnessing both government and private initiative by 31st May, 2025.

The Government has taken specific steps to facilitate expansion of the JSJB initiative nationwide by issuing an advisory on 07.10.2024, in collaboration with the Central Ground Water Board (CGWB), to District Magistrates/Deputy Commissioners and Municipal Corporations for implementation. To ensure transparency and quality monitoring, the Ministry has developed the Jal Sanchay Dashboard, an online platform for tracking recharge structures using GIS coordinates, photographs and financial details. As on 10.03.2025, 7.33 lakh recharge structures have been onboarded under the Jal Sanchay Jan Bhagidari initiative. Furthermore, 1% of recharge structures are test-checked for quality assurance. CWC and CGWB also provide technical assistance for the creation and renovation of recharge structures to improve groundwater augmentation efforts.

Technical officers from CGWB and Central Water Commission (CWC) are assigned to each district and municipal corporation to provide guidance and to support States, Ministries, Industries and Nongovernmental organisations (NGOs) in implementation. Additionally, Frequently Asked Questions (FAQs) and technical advisory documents have been prepared by CGWB in collaboration with National Water Mission (NWM) and widely disseminated through the JSA: CTR portal to assist stakeholders at all levels. Information, Education, and Communication (IEC) activities have also been undertaken to spread awareness at the grassroots level.

(e) Government of India formulated a National Perspective Plan (NPP) in year 1980 and National Water Development Agency (NWDA) has been entrusted with work of Interlinking of Rivers (ILR) under NPP. Under NPP, 30 link projects have been identified, 16 link projects under Peninsular component and 14 link projects under Himalayan component. Detailed Project Reports (DPRs) of 11 link projects, Feasibility Reports (FRs) of 26 links and Pre-Feasibility Reports (PFRs) of all the 30 links have been completed.

Government has accorded top priority to ILR Programme. Government of India is making concerted efforts for consensus building among concerned States for expediting the implementation of these link projects. Interlinking of Rivers (ILR) programme is being pursued in a consultative manner by building consensus amongst party states for the implementation of matured link projects. Vigorous efforts are being made by Government to bring the concerned States on board. All the study reports (PFRs, FRs and DPRs) prepared by NWDA are circulated to concerned State Governments for their views / comments. Comments so received from States are suitably incorporated in these reports.

The State Govt. officers are invited in all the important meetings like Annual General Meetings of NWDA Society headed by Hon'ble Minister (Jal Shakti), Governing Body meetings of NWDA headed by Secretary (WR), Special Committee for Interlinking of Rivers (SCILR) meetings as well as Task Force for Interlinking of Rivers (TFILR) meetings for their active interaction and involvement in deliberations related to link projects. Also, consultation meetings are held with concerned States to deliberate their views / issues. Their issues are deliberated in all these meetings to arrive at suitable solution for taking the link projects forward for implementation.
