GOVERNMENT OF INDIA MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

STARRED QUESTION NO. *1

ANSWERED ON 03.02.2025

'NAMAMI GODAVARI' RIVER INITIATIVE

*1 DR. AJEET MADHAVRAO GOPCHADE

Will the Minister of JAL SHAKTI be pleased to state:

- (a) actions taken by Government in collaboration with State Government to assess the irrigation needs in the Marathwada region of Maharashtra, which is experiencing water shortages that hinder agricultural growth;
- (b) whether Government has received representation for the 'Namami Godavari' river cleaning initiative similar to 'Namami Gange', the measures initiated thereon; and
- (c) whether the Central Government, in conjunction with the State Government is planning to dispatch a team of experts to Marathwada to formulate a strategy for tackling the water scarcity problem, if not, the reasons therefor, if so, the steps which will be taken thereon?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI C R PAATIL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO. *1 TO BE ANSWERED ON 03.02.2025 IN RAJYA SABHA REGARDING "'NAMAMI GODAVARI' RIVER INITIATIVE"

(a) Water, being State subject, water resources projects are planned, funded, executed and maintained by the State Governments themselves as per their own resources and priority. In order to supplement their efforts, Government of India provides technical and financial assistance to State Governments to encourage sustainable development and efficient management of water resources under various ongoing schemes.

Government of Maharashtra has informed that ultimate irrigation potential of Marathwada region is 19.50 lakh hectare, out of which 16.80 lakh hectare has been created through 1,270 completed and ongoing projects.

Government of India has included 4 major and medium projects viz. Lower Dudhna Project, Nandur Madhmeshwar Phase-II Project, Upper Kundalika Project and Upper Penganga Project, benefitting Marathwada region under Accelerated Irrigation Benefits Programme (AIBP) and Command Area Development and Water Management (CAD&WM) components of Pradhan Mantri Krishi Sinchai Yojna (PMKSY). 1.09 lakh hectare irrigation potential has been created and 52.15 thousand hectare cultivable command area has been developed through these projects till December, 2024.

Further, a Special Package scheme for completion of irrigation projects to address agrarian distress in Vidarbha and Marathwada and other chronically drought prone areas of rest of Maharashtra has also been approved by Government of India in July, 2018. 17 surface minor irrigation projects of Marathwada region have been included under this scheme. 6,183 hectare irrigation potential has been developed through these minor irrigation projects till December, 2024.

In addition, National Water Development Agency under this Ministry has prepared pre-feasibility report of three intra-State river interlinking projects benefitting Marathwada region namely Wainganga—Manjra valley link project, Nar—Par—Girna valley link project and Upper Krishna — Bhima (system of six links). Though, first two intra-State river interlinking projects have not been found techno-economically feasible.

(b) It is the primary responsibility of States/Union Territories (UTs) and Urban Local Bodies to ensure required treatment of sewage and industrial effluents to the prescribed norms before discharging into the rivers and other water bodies.

The Govt. of India has been supplementing efforts of the States/UTs by providing financial and technical assistance for abatement of pollution in rivers/tributaries in Ganga basin through the Central Sector Scheme of Namami Gange Program, and the Centrally Sponsored Scheme of National River Conservation Plan for other rivers in the country. The State/UT Governments may prepare proposals for abatement of pollution in the rivers for consideration under the above schemes.

The representation received related to Namami Godavari has been forwarded to State of Maharashtra and Telangana for taking cognizance and suitable action.

(c) No. Government of India has already approved a special package to address agrarian distress in Vidarbha and Marathwada and other chronically drought prone areas of rest of Maharashtra. Further, to address the issue of development of irrigation in water scarce drought prone areas in India, special provisions have been made in criteria for selection of projects and central funding ratio under PMKSY-AIBP. If a project has more than 50% command in drought prone area, 50% advance stage criteria has been relaxed and the project can be included since beginning of the construction with enhance funding ratio of 60 (Centre): 40 (State) in the proportion of command area falling in drought prone area.

GOVERNMENT OF INDIA MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

STARRED QUESTION NO. *3

ANSWERED ON 03.02.2025

WATER AND RAINWATER MANAGEMENT

*3 SHRI SANJAY RAUT

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the manner in which AI will be used to improve water resource management and rainwater harvesting in drought-prone regions;
- (b) the systems which are in place to leverage AI for precision irrigation and reducing water wastage in agriculture;
- (c) the manner in which AI technologies, like those developed by DHI GRAS will help in reducing water wastage in Indian agriculture and improve water resource management; and
- (d) the initiatives which are in place to promote the use of precision irrigation systems across the country, especially in regions with limited water resources?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI C R PAATIL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. *3 TO BE ANSWERED ON 03.02.2025 IN RAJYA SABHA REGARDING "WATER AND RAINWATER MANAGEMENT"

- (a) In order to improve water resource management and rainwater harvesting in drought-prone regions, the AI-based tools can be used for AI-Enabled Irrigation Scheduling, Remote Sensing and AI-Based Crop Monitoring, Automated Smart Irrigation Systems, Predictive Maintenance for Irrigation Infrastructure and Decision Support Systems. Advanced AI enhanced models can provide improved predictions of groundwater behaviour, identify vulnerable areas prone to pollution and depletion and enables proactive interventions.
- (b) The Internet of Things (IoT) based pressure and flow control valves are being used in irrigation for precision and measured irrigation. This ensures the optimum required quantity of supply of water to the crops and reduces over irrigation. The crop water use is being monitored by AI-based remote sensing applications. The AI-based maintenance system intends to measure water supply to an irrigation outlet, keeping in view factors like, seasonal variation history, availability of water, cropping pattern and the concurrent weather condition. This may ensure metering of the supplied water, accounting of the use of water by the farmer over a period of time, control of volume of water supply during excess or short rainfall.
- (c) The AI technologies (like those developed by DHI GRAS) utilizing satellite images and data processing for hydrology, water quality, environmental assessment, land cover mapping etc. can be used for analytics and software development for efficiently integrating scientific data and methods into models and decision support systems. These will facilitate reducing water wastage in Indian agriculture and improve water resource management.
- (d) The Ministry of Jal Shakti provides technical and financial assistance to State Governments to encourage sustainable development and efficient management of water resources through various schemes/programmes such as Accelerated Irrigation Benefits Programme (AIBP), Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) etc. The Ministry has been supporting the States to adopt the advanced technologies including AI in the effective implementation and monitoring of irrigation. The Department of Agriculture & Farmers Welfare (DA&FW) is also implementing Centrally Sponsored Scheme PM Rashtriya Krishi Vikas Yojana (PM-RKVY) / Per Drop More Crop (PDMC) in which it also encourages IT based solutions, use of advanced technologies of Micro Irrigation such as solar energy, Automation, use of AI, IoT etc. at the farmer level.
