GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES. RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED OUESTION NO. 2635

ANSWERED ON 24.03.2025

RAPID DECLINE IN GROUNDWATER RESERVES IN THE COUNTRY

2635 SHRI DEREK O' BRIEN

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the status of groundwater reserves in the country during the last five year, year-wise;
- (b) the year-on-year rate of decline of the groundwater reserves in the country over this period;
- (c) the estimated status of groundwater reserves in the country during the next five years;
- (d) whether Government is taking any steps to conserve the groundwater resources in the country; and
- (e) if so, present status of the efficacy of the steps being taken by Government in this regard?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Dynamic Ground Water Resource Assessment of the country is being annually conducted from 2022, jointly by Central Ground Water Board (CGWB) and concerned State nodal agencies. Year-wise status of ground water reserves in the country for the period from 2020 to 2024 is provided in **Annexure**.

It can be seen that, during the subject period, annual ground water recharge in the country has increased from 436.15 Billion Cubic Meters (BCM) to 446.90 BCM, whereas, total annual ground water extraction for all purposes has remained stable from 244.92 BCM to 245.64 BCM. Further, the Stage of Ground water Extraction (SoE), which is defined as a ratio of total annual extractable ground water to total annual ground water extraction, has declined from 61.6% to 60.47%, thus indicating overall improvement in the ground water scenario.

- (c) For the purpose of having real time data, the assessment of ground water resources is being conducted annually and since the parameters are dynamic in nature, reliance is generally placed on current figures only.
- (d) & (e) Water being a State subject, sustainable development and management of groundwater resources is primarily the responsibility of the State Governments. However, the Central Government facilitates the efforts of the State Governments by way of technical and financial assistance through its various schemes and projects. In this direction, the important steps taken by the Ministry of Jal Shakti and other central ministries for conservation and sustainable development of ground water resources in the country, along with outcomes, which are a measure of their efficacy, are given below:
 - i. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 which is a mission mode and time bound programme for harvesting the rainfall and taking up water

conservation activities. Currently, JSA 2024 is being implemented in the country with special focus on 151 water stressed districts. JSA is an umbrella campaign under which various ground water recharge and conservation related works are being taken up in convergence with various central and state schemes. As per JSA dashboard, in the past 4 years construction of more than 1.07 Cr water conservation structures have been completed in the country.

- ii. Further, CGWB has also completed the National Aquifer Mapping (NAQUIM) Project covering approximately 25 lakh square kms. of mappable area across the country. Further, District-wise Aquifer maps and management plans have been prepared and shared with the respective State agencies for taking up further suitable interventions.
- iii. Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by the CGWB and shared with States/UTs providing a broad outline for construction of around 1.42 crore rain water harvesting and artificial recharge structures in the country with estimated cost to harness about 185 Billion Cubic Meters (BCM) of water.
- iv. The government of India is implementing Atal Bhujal Yojana in 80 water stressed districts of 7 states which has community led sustainable management of ground water resources and demand management as its core theme.
- v. Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop (PDMC) Scheme in the country, since 2015-16, which focuses on enhancing water use efficiency at farm level through Micro Irrigation and better on-farm water management practices to optimize the use of available water resources. From 2015-16 till December 2024, an area of 94.36 lakh ha has been covered under micro irrigation in the country through PDMC scheme.
- vi. Mission Amrit Sarovar was launched by the Government of India, which aimed at developing and rejuvenating at least 75 water bodies in each district of the country. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country.
- vii. The Central Ground Water Authority (CGWA) has been constituted under the Ministry of Jal Shakti for the purpose of regulation and control of ground water development and management in the country. Abstraction cum use of Groundwater in the country is regulated by CGWA as per the provisions of its Guidelines dated 24.09.2020 which have pan India applicability.

Owing to sustained and sincere efforts detailed above, annual ground water recharge in the country has consistently increased and recharge from tanks, ponds and water conservation structures has shown a consistent improvement with 11.36 BCM more recharge taking place annually form these structures in 2024, as compared to year 2017. Further, the percentage of 'Safe' Assessment has increased from 63.6% to 73.4 % while that of 'Over Exploited' Assessment units has declined from 16 % to 11.13 % between 2020 to 2024.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 2635 TO BE ANSWERED IN RAJYA SABHA ON 24.03.2025 REGARDING "RAPID DECLINE IN GROUNDWATER RESERVES IN THE COUNTRY".

Details of Annual Ground Water Recharge, Extraction and SoE for the last 5 years

S.No.	Parameter	GW Assessment Year			
		2024	2023	2022	2020
1	Annual GW Recharge	446.90	449.08	437.6	436.15
2	Annual Extractable GW Resource	406.19	407.21	398.08	397.62
3	Annual GW Extraction for all uses	245.64	241.34	239.16	244.92
4	Stage of GW Extraction (SoE)	60.47%	59.26 %	60.08 %	61.6 %

(all figures in Billion Cubic Meters- BCM)
