GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 1682

ANSWERED ON 15.12.2025

GROUNDWATER DEPLETION, OVER-EXPLOITATION AND QUALITY MONITORING

1682 #. SHRI SHAMBHU SHARAN PATEL:

SHRI JAGGESH:

SHRI BRIJ LAL:

SMT. KIRAN CHOUDHRY:

Will the Minister of **Jal Shakti** be pleased to state:

- (a) the major findings of the latest Dynamic Groundwater Resources Assessment, including the number of over-exploited and critical blocks identified across the country;
- (b) the extent of groundwater contamination reported due to Arsenic, Fluoride, Nitrate or heavy metals in the most recent monitoring cycle, State-wise;
- (c) the progress made under the National Aquifer Mapping and Management Programme (NAQUIM), including areas mapped and aquifer management plans prepared to date;
- (d) whether Government proposes to revise norms for granting groundwater extraction permissions for industrial or commercial purposes; and
- (e) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Dynamic Ground Water Resources of the country are being annually assessed, jointly by Central Ground Water Board (CGWB) and State Governments. As per the 2025 assessment, the total Annual Ground Water Recharge in the country is 448.52 Billion Cubic Meter (BCM) and the Annual Extractable Ground Water Resources is estimated as 407.75 BCM. Further, total Annual Ground Water Extraction of the entire country for the year 2025 has been assessed as 247.22 BCM. Based on this, the Stage of Ground Water Extraction (SoE), which is a measure of Annual Ground Water Extraction for all uses (irrigation, industrial and domestic uses) over Annual Extractable Ground Water Resource is worked out to be 60.63% for the country as a whole.

Regarding categorization of units in terms of their stage of ground water extraction, out of the total 6762 Assessment Units (Blocks/Taluks/Mandals) in the country, 730 (10.80%) units have been categorized as 'Over- exploited' indicating ground water extraction exceeding the annually replenishable ground water

recharge. Further, 201 units (2.97 %) have been categorized as 'Critical', 758 units (11.21 %) as 'Semicritical' and 4946 units (73.14 %) are in 'Safe' category. Additionally, 127 assessment units (1.88%) are categorized as 'saline'.

(b) Central Ground Water Board (CGWB) generates ground water quality data of the country on a regional scale as part of its ground water quality monitoring program and various scientific studies conducted as per the approved Standard Operating Procedure (SOP). Overall, the data on ground water quality indicates that the ground water in the country remains largely potable with localized occurrences of contaminants in isolated pockets.

State-wise distribution of major contaminants such as Arsenic, Fluoride, Nitrate and heavy metals, as per the Annual Ground Water Quality Report – 2025 can be viewed through the web link provided below: https://cgwb.gov.in/cgwbpnm/public/uploads/documents/1764833633531847433file.pdf

(c) NAQUIM studies have been taken up across the country by the Central Ground Water Board (CGWB) for delineation and characterisation of aquifers and preparation of plans for ground water management. NAQUIM was initiated as a part of the 'Ground Water Management and Regulation' scheme and the entire mappable area of the country of about 25 lakh sq. kms has been mapped. State-wise details of coverage area under NAQUIM is presented in **Annexure.**

Further, ground water management studies/ plans have been prepared for the entire targeted area across the country covering all the 14 Principal aquifers and 42 major aquifers and District-wise aquifer maps and management plans for 654 Districts of the country, which include both supply side and demand side measures for sustainable management of ground water resources, have been shared with the concerned State/District administrations for taking up suitable field interventions.

Moreover, after the successful completion of NAQUIM 1.0, CGWB has now embarked upon NAQUIM 2.0, focusing on water stressed and quality affected pockets. Under NAQUIM 2.0 state-of-the-art technologies are harnessed, for generating highly detailed, scientific data which serve as an important tool for making informed decisions for improved groundwater management. Thus far, around 68 studies/reports have been completed under NAQUIM 2.0.

(d) & (e) The Ministry of Jal Shakti is currently conducting stakeholder consultations on ground water extraction Guidelines.

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 1682 TO BE ANSWERED IN RAJYA SABHA ON 15.12.2025 REGARDING "GROUNDWATER DEPLETION, OVER-EXPLOITATION AND QUALITY MONITORING".

State-wise details of coverage area under NAQUIM

Sl.No	.State/UT	Total	Area targeted	for Coverage till March
		Area (Sq.km)	coverage (sq. km)	2023 (sq. km)
1		8,249	1,774	1,774
	Nicobar UT			
2	Andhra Pradesh	1,63,900	1,41,784	1,41,784
3	Arunachal Pradesh	83,743	4,703	4,703
4	Assam	78,438	61,826	61,826
5	Bihar	94,163	90,567	90,567
6	Chandigarh UT	115	115	115
7	Chhattisgarh	1,36,034	96,000	96,000
8	Dadra & Nagar Haveli,	602	602	602
9	Daman & Diu UT	1,483	1,483	1,483
10	Goa	3,702	3,702	3,702
11	Gujarat	1,96,024	1,60,978	1,60,978
12	Haryana	44,212	44,179	44,179
13	Himachal Pradesh		8,020	8,020
14	Jammu & Kashmir UT	1,67,396	9,506	9,506
15	Jharkhand	79,714	76,705	76,705
16	Karnataka	1,91,808	1,91,719	1,91,719
17	Kerala	38,863	28,088	28,088
18	Lakshadweep UT	32	32	32
19	Ladakh UT	54,840	963	963
20	Madhya Pradesh	3,08,000	2,69,349	2,69,349
21	Maharashtra	3,07,713	2,59,914	2,59,914
22	Manipur	22,327	2,559	2,559
23	Meghalaya	22,429	10,645	10,645
24	Mizoram	21,081	700	700
25	Nagaland	16,579	910	910
26	Odisha	1,55,707	1,19,636	1,19,636
27	Puducherry UT	479	454	454
28	Punjab	50,368	50,368	50,368
29	Rajasthan	3,42,239	3,34,152	3,34,152
30	Sikkim	7,096	1,496	1,496
31	Tamil Nadu	1,30,058	1,05,829	1,05,829
32	Telangana	1,11,940	1,04,824	1,04,824
33	Tripura	10,492	6,757	6,757
34	Uttar Pradesh	2,46,387	2,40,649	2,40,649
35	Uttarakhand	53,484	11,430	11,430
36	West Bengal	88,752	71,947	71,947
	Total	32,94,105	25,14,437	25,14,437
