

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 3449

ANSWERED ON 23.03.2026

ASSESSMENT OF GROUNDWATER DEPLETION ACROSS VARIOUS STATE

3449. SHRI JOSE K. MANI:

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

- (a) whether Government has conducted an assessment of groundwater depletion across various States;
- (b) if so, the details thereof;
- (c) whether Government proposes stricter regulations for groundwater extraction; and
- (d) the steps taken to promote sustainable water management practices?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Dynamic Ground Water Resource Assessment of the country is carried out annually by the Central Ground Water Board (CGWB) in coordination with State Governments. As per the latest assessment for 2025, the total Annual Ground Water Recharge in the country is 448.52 Billion Cubic Meters (BCM) and the Annual Extractable Ground Water Resource is 407.75 BCM. The total Annual Ground Water Extraction has been assessed as 247.22 BCM. Accordingly, the Stage of Ground Water Extraction (SoE), defined as the ratio of Annual Ground Water Extraction to Annual Extractable Ground Water Resource for all uses, is 60.63% for the country as a whole. The state-wise Ground Water Resources of India (2025) are given in **Annexure**.

The assessment data further indicates that total annual ground water recharge has increased from 432 BCM in 2017 to 448.52 BCM in 2025. During the same period, the percentage of safe assessment units increased from 62.6% to 73.14%, while the over-exploited units declined from 17.2% to 10.8%.

(c) Extraction of Groundwater is regulated by Central Ground Water Authority (CGWA) in 19 States/UTs by way of issuing NOCs as per the provisions of its Guidelines dated 24.09.2020. Remaining 17 States/UTs have their own regulatory frameworks/mechanism. The Guidelines stipulate that all project proponents, like infrastructure projects, mines, industries etc. extracting ground water should compulsorily obtain a No Objection Certificate (NOC) from CGWA. Additionally, the following stringent measures have been mandated by the Guidelines to regulate over extraction:

- NOC shall not be granted to new industries in over-exploited areas, except for MSMEs.
- NOC shall be granted only in case of non-availability of sufficient quantity of local government water supply.
- Industries shall adopt water efficient practices to reduce dependence on ground water and those industries extracting more than 100 Kilo Litres/Day (KLD) of ground water shall undertake biennial water audit.
- All projects must mandatorily install water flow meters and ground water extraction data should be regularly shared with CGWA for monitoring and ensuring compliance.
- Ground water extraction charges are being levied on all the project proponents, which increase proportionately based on consumption.
- Hefty Environmental Compensation (EC) charges for unlawful extraction and penalties for non-compliance with NOC conditions are being imposed as deterrent measures.

(d) Water being a State subject, sustainable development and management of water and 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. The major steps taken in this direction, including the latest initiatives are provided below:

- i. Efforts of the Government for augmenting the water/groundwater resources of the country are mainly channeled through the flagship campaign of Jal Shakti Abhiyan (JSA), an annual mission mode programme for taking up water harvesting and artificial recharge activities. As per the available information, under JSA, more than 2 cr water conservation and artificial recharge works have been taken up through convergence in the country so far, which has played a key role in enhancing the sustainability of ground water resources.
- ii. To further strengthen the momentum of JSA, Jal Sanchay Jan Bhagidari (JSJB) initiative has been launched by the Hon'ble Prime Minister in 2024 with a vision to make rain water harvesting a mass movement in the country. By promoting community ownership and responsibility, the initiative seeks to develop cost-effective, local solutions tailored to specific water challenges across different regions. Thus far, more than 46 lakh rain water harvesting and artificial recharge structures have been constructed across the country under this initiative.
- iii. M/o Jal Shakti has successfully demonstrated the efficacy of community led participatory ground water management through Atal Bhujal Yojana, which was implemented in 8,203

water stressed Gram Panchayats across 7 States. Construction of various rain water harvesting and recharge structures like check dams, ponds, shafts etc. as well as promotion of micro irrigation was taken up through convergence and by use of incentive funds under the scheme.

- iv. 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 leading to enhanced water storage and ground water recharge.
- v. Department of Agriculture & Farmers' Welfare (DA & FW) is implementing Per Drop More Crop Scheme since 2015-16, which focuses on enhancing water use efficiency at farm level through Micro Irrigation leading to conservation of ground water.
- vi. After the successful completion of NAQUIM 1.0, which mapped country's aquifers and provided a macro-level understanding of our nation's groundwater resources, the Central Ground Water Board has 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 sustainable groundwater management.
- vii. CGWB has also prepared the Master Plan for Artificial Recharge to Groundwater- 2020 for the entire country and shared with States/UTs, for serving as a technical guidebook for construction of rain water harvesting and artificial recharge structures.

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 3449 TO BE ANSWERED IN RAJYA SABHA ON 23.03.2026 REGARDING “ASSESSMENT OF GROUNDWATER DEPLETION ACROSS VARIOUS STATE”.

STATE-WISE GROUND WATER RESOURCES OF INDIA, 2025

S. No.	States / Union Territories	Total Annual Ground Water Recharge (in BCM*)	Annual Extractable Ground Water Resource (in BCM)	Annual GW Extraction for all uses (in BCM)	Stage of Ground Water Extraction (%)
1	Andhra Pradesh	26.34	25.02	7.88	31.51
2	Arunachal Pradesh	3.69	3.29	0.01	0.41
3	Assam	26.36	20.29	2.93	14.45
4	Bihar	34.51	31.32	14.47	46.20
5	Chhattisgarh	14.30	13.07	6.30	48.18
6	Goa	0.38	0.31	0.07	23.30
7	Gujarat	27.58	25.61	14.33	55.95
8	Haryana	10.27	9.30	12.72	136.75
9	Himachal Pradesh	1.12	1.01	0.39	38.50
10	Jharkhand	6.15	5.63	1.85	32.89
11	Karnataka	19.27	17.41	11.58	66.49
12	Kerala	5.45	4.93	2.46	49.95
13	Madhya Pradesh	36.07	34.15	20.26	59.32
14	Maharashtra	33.89	31.99	16.57	51.79
15	Manipur	0.44	0.40	0.04	9.09
16	Meghalaya	1.84	1.54	0.08	5.24
17	Mizoram	0.21	0.19	0.01	4.03
18	Nagaland	0.55	0.50	0.02	4.72
19	Odisha	17.44	16.02	7.81	48.75
20	Punjab	18.60	16.80	26.27	156.36
21	Rajasthan	12.87	11.62	17.10	147.11
22	Sikkim	0.24	0.22	0.01	5.87
23	Tamil Nadu	22.61	20.46	15.04	73.50
24	Telangana	21.93	19.84	9.26	46.69
25	Tripura	1.53	1.24	0.12	10.06
26	Uttar Pradesh	73.39	66.97	46.89	70.00
27	Uttarakhand	2.13	1.95	1.05	53.92
28	West Bengal	25.85	23.50	10.62	45.19
29	Andaman And Nicobar	0.38	0.35	0.01	2.27
30	Chandigarh	0.05	0.05	0.03	67.00
31	Dadra and Nagar Haveli and Daman and Diu	0.13	0.12	0.05	40.45
32	Delhi	0.38	0.35	0.32	92.10
33	Jammu And Kashmir	2.30	2.07	0.51	24.73
34	Ladakh	0.07	0.06	0.02	30.93
35	Lakshadweep	0.01	0.01	0.00	57.79
36	Puducherry	0.19	0.17	0.13	75.98
	Grand Total	448.52	407.75	247.22	60.63

*BCM -Billion Cubic Meters
