GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO.880

ANSWERED ON 08.12.2025

RAPID DEPLETION OF GROUNDWATER IN THE STATE OF PUNJAB

880. SHRI SANT BALBIR SINGH:

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

(a) the present status of groundwater reserves across the country, State-wise and districtwise, as per the latest assessment by the Central Ground Water Board;

(b) the steps taken or being taken by Government to address and mitigate the rapid depletion of groundwater reserves in vulnerable regions of the State of Punjab, particularly in over-exploited and critical blocks; and

(c) the extent, nature and severity of groundwater contamination reported across various States and districts, along with major pollutants such as Arsenic, Fluoride, Nitrate, Iron, salinity and heavy metals identified in these regions?

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 Resource is 407.75 BCM. The total Annual Ground Water Extraction of the entire country has been estimated as 247.22 BCM. Further, 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 arrived at 60.63% for the country as a whole**.** The state-wise Ground Water Resources of India (2025) is presented in **Annexure.**

The District-Wise Ground Water Resources can be seen in the National Compilation of Dynamic Ground Water Resources of India, 2025 which can be accessed at:

https://cgwb.gov.in/cgwbpnm/download/1741#page=171

(b) 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 sustainable development of ground water resources in the country, including Punjab, with a focus on over-exploited and critical areas, are given below:-

i. Efforts of the Central Government for augmenting the water/groundwater resources of the country are mainly channeled through the flagship campaign of Jal Shakti Abhiyan (JSA). JSA is a time bound and mission mode programme being conducted annually since 2019 by the M/o Jal Shakti, covering both rural and urban areas wherein all the efforts and funds under various schemes and projects are converged to deliver water harvesting and artificial recharge works on the ground.

Currently, JSA 2025 is underway in the country with special focus on over-exploited and critical districts including 20 such districts of Punjab. As per the available information under JSA, completion of around 1.21 crore water conservation and artificial recharge works has been coordinated through convergence in the country in the last 4 years, with 61,506 structures in Punjab, which has played a key role in enhancing the sustainability of ground water resources.

ii. To further strengthen the momentum of Jal Shakti Abhiyan, Jal Sanchay Jan Bhagidari: A Community-Driven Path to Water Sustainability in India has been launched by the Hon'ble Prime Minister 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.

iii. 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 now embarked upon NAQUIM 2.0, focusing on water stressed and quality affected pockets. NAQUIM 2.0 studies were taken up in priority areas of Ludhiana and Sangrur districts of Punjab under poor quality and over-exploited area category respectively, and study reports containing issue specific scientific inputs and ground water management plans have been shared with the state/district administration.

iv. 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. Master Plan for the state of Punjab recommends construction of about 11 lakh structures to harness about 1200 MCM of rain-water.

v. Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop (PDMC) Scheme in the country, including Punjab, 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.

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, including Punjab. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country, with 1,450 in Punjab, leading to enhanced water storage and ground water recharge.

vii. Based on the advisories of M/o Jal Shakti to States to review their free/subsidized electricity policy to farmers, bring suitable water pricing policy and to work further towards crop rotation/diversification/other initiatives to reduce over-dependence on groundwater, Department of Agriculture, Punjab is pursuing hard to diversify the acreage under paddy to other less water consuming crops by extending incentives to farmers.

viii. Based on the advice of the Ministry of Jal Shakti, the Punjab Water Resources Regulation and Development Authority (PWRDA) has been established under section 3 of Punjab Water Resources (Management and Regulation) Act, 2020 Act to ensure conservation, management and regulation of water resources in the State.

ix. To reduce dependence on ground water and to increase the availability of surface water, the government of Punjab has taken up several projects to extend and revive the canal networks.

(c) 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 pollutants such as arsenic, fluoride, nitrate, iron, salinity 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/17648336335318474 33file.pdf

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 880 TO BE ANSWERED IN RAJYA SABHA ON 08.12.2025 REGARDING "RAPID DEPLETION OF GROUNDWATER IN THE STATE OF PUNJAB".

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 & 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**
N.B. Minor discrepancies in numbers may arise due to rounding off at various levels.					

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