

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
RAJYA SABHA

UNSTARRED QUESTION NO. 2003

ANSWERED ON 07.08.2023

GROUNDWATER LEVEL/TABLE

2003. SHRI RAGHAV CHADHA

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) whether Government has surveyed the groundwater level/groundwater table in the country and if so, the details thereof;
- (b) the measures taken/proposed to be taken by Government to increase the existing groundwater level;
- (c) whether Government has formed a Committee to monitor the groundwater level; and
- (d) if so, the details of the groundwater level and the status during the last five years especially mentioning the critical areas across the country, State/UT-wise including Punjab?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) Yes sir. Central Ground Water Board (CGWB) monitors groundwater levels throughout the country on a regional scale, four times every year during the months of March to May, August, November and January.

During the November 2022, about 67.2% of the wells monitored in the country have registered the water level upto 5 mbgl. State-wise Depth to water level and distribution of percentage of wells for November 2022 is given at **Annexure**. Further, in order to assess the long-term fluctuation in ground water level, the water level data collected by CGWB during November 2022 has been compared with the decadal mean of November (2012-2021). Analysis of water level data indicates that about 61.1% of the wells monitored have registered rise in ground water level.

(b) Water being a State subject effective rainwater harvesting/recharge of groundwater for increasing its levels in the country falls under States 'mandate however, a number of steps have been taken by Central government which can be accessed through web-link <https://cdnbbsr.s3waas.gov.in/s3a70dc40477bc2adceef4d2c90f47eb82/uploads/2023/02/2023021742.pdf> Some of them are listed as under:

- i. Government of India is implementing Jal Shakti Abhiyan (JSA) in the country. First JSA was launched in 2019 in water stressed blocks of 256 districts which continued during the years 2021 and 2022 ,(across entire country both rural and urban areas) with the primary aim to effectively harvest the monsoon rainfall through creation of artificial recharge structures, watershed management, recharge and reuse structures, intensive afforestation and awareness generation etc. JSA for the year 2023 have been launched by Hon'ble President of India on 04March 2023 with the theme "Source Sustainability for Drinking Water".
- ii. Hon'ble Prime Minister has launched Amrit Sarovar Mission on 24th April 2022. The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country as a part of celebration of Azadi ka Amrit Mahotsav.

- iii. The Central Government is implementing Atal Bhujal Yojana with an outlay of Rs. 6,000 crore, in collaboration with States, in certain water stressed areas of Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh. The primary aim of the scheme is demand side management through scientific means involving the local communities at village levels leading to sustainable groundwater management in the targeted areas.
- iv. Central Ground Water Authority (CGWA) has been constituted under Section 3(3) of the "Environment (Protection) Act, 1986" for the purpose of regulation and control of ground water by industries, mining projects, infrastructure projects etc in the country. The latest guideline in this regard with pan-India applicability was notified by the Ministry on 24 September 2020 with subsequent amendment on 29 March 2023. CGWA and States issue No Objection Certificate (NOC) for extraction of groundwater to various industries/project proponents as per their jurisdiction and as per the extant guidelines.
- v. CGWB is implementing National Aquifer Mapping Program (NAQUIM) in the country and an area of 25.15 lakh sq km (the available mappable area) has been covered under the NAQUIM studies. The NAQUIM study report along-with management plans are shared with States/UTs for suitable interventions.
- vi. Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by the CGWB with States/UTs providing a broad outline of the project and expected investments. The Master Plan envisages construction of about 1.42 crore Rain water harvesting and artificial recharge structures in the country to harness 185 Billion Cubic Metre (BCM) of water. The Master plan has been shared with States/UTs for suitable interventions.
- vii. Ministry of Housing & Urban Affairs (MoHUA) has formulated Model Building Bye Laws (MBBL), 2016 for the States/UTs, wherein adequate focus has been given on requirement of rainwater harvesting and water conservation measures. As per MBBL, all buildings having a plot size of 100 Sq.m. or, more shall mandatorily include the complete proposal of rainwater harvesting. 35 States/ UTs have adopted the features of the Bye Laws.

(c) Ministry has constituted Central Level Expert Group with Members from various stake-holder Ministries/Organisations to supervise the assessment of groundwater resources in the country periodically which includes monitoring of Groundwater level as well.

(d) Groundwater (GW) level data collected by the CGWB for the entire country as on Nov 2018 indicates that around 81.10 % of monitored wells have depth to water level upto 10 m whereas, the GW level data of Nov 2022 shows around 88.7 % of monitored wells have water level upto 10m. With respect to Punjab, the GW level data for the years 2018 and 2022 indicate that 43.68 % and 39.7% of monitored wells respectively have depth to water level upto 10m.

Further, groundwater level data of Nov 2022 indicate that certain monitoring wells of Chandigarh, Delhi, Haryana, Punjab, Rajasthan and Uttarakhand have depth to water level beyond 40m.

As per 2017 assessment, 1186 (17%) assessment units out of 6881 assessment units falling in 17 States/UTs were over-exploited. As per 2022 assessment, 1006 (14%) assessment units (Mandals/Blocks/ Firkas/ Taluks etc) out of 7089 assessment units falling in 16 States/UTs are over-exploited where groundwater extraction is more than groundwater recharge. Further, some of the major states like Delhi, Haryana, Punjab, Rajasthan and Tamil Nadu have more than 25 % of assessment units as over-exploited. Punjab has 76.47 % over-exploited units.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2003 TO BE ANSWERED IN LOK SABHA ON 07.08.2023 REGARDING “GROUNDWATER LEVEL/TABLE”.

State-wise Depth to water Level and Distribution of Percentage of Wells for the Period of November, 2022

S. No.	Name of State	No. of wells Analysed	Number & Percentage of Wells Showing Depth to Water Level (mbgl) in the Range of													
			Min	Max	0-2		2-5		5-10		10-20		20-40		> 40	
					No	%	No	%	No	%	No	%	No	%	No	%
1	Andaman and Nicobar	99	0.05	4.45	87	87.9	12	12.1	0	0.0	0	0.0	0	0.0	0	0.0
2	Andhra Pradesh	730	GL	37.62	370	50.7	226	31.0	97	13.3	29	4.0	7	1.0	1	0.1
3	Arunachal Pradesh	9	2.67	7.30	0	0.0	4	44.4	5	55.6	0	0.0	0	0.0	0	0.0
4	Assam	173	0.10	18.32	74	42.8	82	47.4	13	7.5	4	2.3	0	0.0	0	0.0
5	Bihar	638	0.33	11.30	105	16.5	434	68.0	96	15.0	3	0.5	0	0.0	0	0.0
6	Chandigarh	14	2.51	53.80	0	0.0	4	28.6	2	14.3	3	21.4	3	21.4	2	14.3
7	Chhattisgarh	774	0.65	22.95	157	20.3	437	56.5	142	18.3	36	4.7	2	0.3	0	0.0
8	Dadra & Nagar	15	1.98	7.80	1	6.7	12	80.0	2	13.3	0	0.0	0	0.0	0	0.0
9	Daman & Diu	7	1.45	6.37	1	14.3	4	57.1	2	28.6	0	0.0	0	0.0	0	0.0
10	Delhi	84	0.62	66.75	8	9.5	16	19.0	26	31.0	19	22.6	10	11.9	5	6.0
11	Goa	63	1.22	12.93	5	7.9	28	44.4	26	41.3	4	6.3	0	0.0	0	0.0
12	Gujarat	709	0.12	61.42	125	17.6	271	38.2	198	27.9	82	11.6	29	4.1	4	0.6
13	Harvana	268	0.11	77.95	36	13.4	68	25.4	37	13.8	59	22.0	56	20.9	12	4.5
14	Himachal Pradesh	84	0.54	36.25	16	19.0	29	34.5	15	17.9	19	22.6	5	6.0	0	0.0
15	Jammu and	273	0.30	32.86	75	27.5	138	50.5	39	14.3	14	5.1	7	2.6	0	0.0
16	Jharkhand	178	0.26	12.80	19	10.7	109	61.2	48	27.0	2	1.1	0	0.0	0	0.0
17	Karnataka	1327	GL	27.30	467	35.2	495	37.3	320	24.1	43	3.2	2	0.2	0	0.0
18	Kerala	1412	0.05	52.82	281	19.9	454	32.2	539	38.2	125	8.9	12	0.8	1	0.1
19	Madhya Pradesh	1259	GL	37.67	239	19.0	608	48.3	326	25.9	76	6.0	10	0.8	0	0.0
20	Maharashtra	1472	0.10	40.00	358	24.3	732	49.7	320	21.7	52	3.5	10	0.7	0	0.0
21	Meghalaya	24	0.15	4.93	13	54.2	11	45.8	0	0.0	0	0.0	0	0.0	0	0.0
22	Nagaland	4	0.63	6.73	1	25.0	0	0.0	3	75.0	0	0.0	0	0.0	0	0.0
23	Orissa	1212	0.03	11.16	491	40.5	601	49.6	116	9.6	4	0.3	0	0.0	0	0.0
24	Pondicherry	4	1.06	3.45	2	50.0	2	50.0	0	0.0	0	0.0	0	0.0	0	0.0
25	Puniab	232	0.79	49.14	18	7.8	40	17.2	34	14.7	60	25.9	63	27.2	17	7.3
26	Rajasthan	890	0.06	121.55	71	8.0	226	25.4	150	16.9	158	17.8	134	15.1	151	17.0
27	Tamil Nadu	621	0.03	52.83	216	34.8	252	40.6	110	17.7	33	5.3	5	0.8	5	0.8
28	Telangana	529	GL	49.55	187	35.3	218	41.2	94	17.8	27	5.1	1	0.2	2	0.4
29	Tripura	20	0.98	6.81	5	25.0	12	60.0	3	15.0	0	0.0	0	0.0	0	0.0
30	Uttar Pradesh	634	0.15	44.14	158	24.9	250	39.4	132	20.8	72	11.4	18	2.8	4	0.6
31	Uttaranchal	45	0.20	55.20	9	20.0	11	24.4	16	35.6	6	13.3	2	4.4	1	2.2
32	West Bengal	774	0.40	30.49	102	13.2	309	39.9	216	27.9	109	14.1	38	4.9	0	0.0
Total		14577	GL*	121.55	3697	25.4	6095	41.8	3127	21.5	1039	7.1	414	2.8	205	1.4

*GL = Ground level