

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 1693

ANSWERED ON 18.12.2023

DEPLETING GROUNDWATER LEVEL

1693. DR. AMEE YAJNIK SHRI DIGVIJAYA SINGH

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

- (a) State-wise status of available groundwater level as of 2019;
- (b) number of States where groundwater utilization has crossed 100 per cent;
- (c) whether Government is taking any steps to reduce dependence on groundwater and restore the water table; and
- (d) expected number of people to be affected by groundwater depletion in major cities?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) Central Ground Water Board is periodically monitoring the ground water levels throughout the Country on a regional scale, through a network of monitoring wells. During the November 2019, the depth to water level in the country ranged from less than 2.0 to more than 40 meters below ground level (m bgl). Out of the 14827 wells measured, 87.26% wells had depth to water level (measured in terms of mbgl – meters below ground level) in the range of 0-10 meters.

State-wise Depth to water level and distribution of percentage of wells for November 2019 is given in **Annexure** to this reply.

(b) As per the Dynamic Ground Water Resource of India – 2023, the overall Stage of Extraction of Ground water (SOE) for the country, which is a ratio of total annual ground water extracted to total annual extractable ground water, stands at 59.26%. At state level, three states viz. Haryana (135.74%), Punjab (163.76%) and Rajasthan (148.77%) and Union Territories viz. Daman & Diu (170.70%) and Dadra & Nagar Haveli (131.53%) have recorded SOE of more than 100 per cent.

(c) Water being a State subject, the issues related to development, regulation and management of ground water is primarily the responsibility of the state governments. The Central Government provides technical support and financial assistance through its institutions and various centrally sponsored schemes.

Some of the important measures taken by the Central Government for reducing the dependence on ground water and arresting the decline of ground water table in the country can be seen at <https://cdnbbsr.s3waas.gov.in/s3a70dc40477bc2adceef4d2c90f47eb82/uploads/2023/02/2023021742.pdf>

Some of them are listed below: -

- i. Government of India is implementing Jal Shakti Abhiyan (JSA) in the country in which special emphasis is being given for rainwater harvesting / groundwater recharge. First JSA was launched in 2019 in water stressed blocks of 256 districts. JSA is being continued in the year 2023-24 as well.

- 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. Ministry of Jal Shakti (MoJS) has launched Atal Bhujal Yojana in 8213 water stressed Gram Panchayats of 7 states, which is a community led scheme for participatory ground water management focussing on demand side management of ground water. Under this scheme, *inter alia*, states are incentivized for adopting water efficient water use agricultural practices like switching over to drips/sprinklers, crop diversification to less water incentive crops, mulching etc.
- iv. MoJS has also issued advisories to States/UTs to review their free/subsidized electricity policy to farmers, bring suitable water pricing policy and may work further towards crop rotation/diversification/other initiatives to reduce over-dependence on groundwater.
- v. MoJS is promoting conjunctive use of surface water and groundwater and to reduce over-dependence on groundwater, surface water based Major and Medium irrigation projects have been taken up in the country under PMKSY-AIBP scheme in collaboration with States/UTs.
- vi. Bureau of Water Use Efficiency (BWUE) has been set up under MoJS to plan and execute nation-wide program for promotion of efficient use of water in irrigation, domestic water supply, municipal and/or industrial uses in the country.
- vii. National Aquifer Mapping and Management Programme (NAQUIM) is being implemented with the objectives to delineate and characterize the aquifers geometry and develop plans for sustainable ground water management. Aquifer mapping and management program has been completed by 31.03.2023 and has covered about 25 lakh sq.km area of the country. Further, aquifer maps and management plans are being shared with the State for suitable demand side and supply side interventions.
- viii. The Central Government finances the construction of water harvesting and water conservation structures across the country through the Mahatma Gandhi National Employment Guarantee Scheme (MNREGS) and Pradhan Mantri Krishi Sinchayee Yojana- Watershed Development Component (PMKSY-WDC).
- ix. In addition, a number of States have done notable work in the field of water conservation/harvesting such as 'Mukhyamantri Jal Swavlamban Abhiyan' in Rajasthan, 'Jalyukt Shibir' in Maharashtra, 'Sujalam Sufalam Abhiyan' in Gujarat, 'Mission Kakatiya' in Telangana, Neeru Chettu' in Andhra Pradesh, Jal Jeevan Hariyali in Bihar, 'Jal Hi Jeevan' in Haryana, and Kudimaramath scheme in Tamil Nadu etc.

(d) No such data is available with this Department. Depletion or scarcity of ground water affects the society as a whole and the people at various social strata are affected in different degrees which depends upon time and region. In urban areas, studies indicate that encroachment of water bodies, excessive concretization of earth surface and unmindful abstraction for non-priority uses are the major reasons for depletion of ground water.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1693 TO BE ANSWERED IN RAJYA SABHA ON 18.12.2023 REGARDING “DEPLETING GROUNDWATER LEVEL”

State-wise Depth to water Level and Distribution of Percentage of Wells for the Period of November, 2019

S. No.	Name of State/UT	No. of wells Analysed	Number & Percentage of Wells Showing Depth to Water Level (mbgl) in the Range of											
			0-2		2-5		5-10		10-20		20-40		> 40	
			No	%	No	%	No	%	No	%	No	%	No	%
1	Andaman & Nicobar	90	59	65.56	29	32.22	1	1.1	1	1.11	0	0.00	0	0.00
2	Andhra Pradesh	708	343	48.45	203	28.67	103	14.5	48	6.78	9	1.27	2	0.28
3	Arunachal Pradesh	8	0	0.00	6	75.00	2	25.00	0	0.00	0	0.00	0	0.00
4	Assam	119	56	47.06	51	42.86	10	8.40	2	1.68	0	0.00	0	0.00
5	Bihar	628	182	28.98	340	54.14	101	16.08	5	0.80	0	0.00	0	0.00
6	Chandigarh	8	0	0.00	2	25.00	2	25.00	4	50.00	0	0.00	0	0.00
7	Chhattisgarh	569	74	13.01	361	63.44	115	20.21	18	3.16	1	0.18	0	0.00
8	Dadra & Nagar Haveli	17	6	35.29	10	58.82	1	5.88	0	0.00	0	0.00	0	0.00
9	Daman & Diu	9	3	33.33	5	55.56	1	11.11	0	0.00	0	0.00	0	0.00
10	Delhi	85	7	8.24	13	15.29	20	23.53	23	27.06	15	17.65	7	8.24
11	Goa	69	17	24.64	31	44.93	17	24.64	4	5.80	0	0.00	0	0.00
115	Gujarat	811	224	27.62	311	38.35	178	21.95	65	8.01	31	3.82	2	0.25
13	Haryana	288	32	11.11	55	19.10	69	23.96	61	21.18	60	20.83	11	3.82
14	Himachal Pradesh	103	29	28.16	35	33.98	22	21.36	14	13.59	3	2.91	0	0.00
15	Jammu & Kashmir	204	72	35.29	87	42.65	32	15.69	7	3.43	6	2.94	0	0.00
16	Jharkhand	274	74	27.01	153	55.84	42	15.33	5	1.82	0	0.00	0	0.00
17	Karnataka	1231	402	32.66	435	35.34	328	26.65	61	4.96	5	0.41	0	0.00
18	Kerala	1428	312	21.85	476	33.33	534	37.39	99	6.93	7	0.49	0	0.00
19	Madhya Pradesh	1364	339	24.85	609	44.65	319	23.39	80	5.87	17	1.25	0	0.00
20	Maharashtra	1644	502	30.54	687	41.79	339	20.62	84	5.11	31	1.89	1	0.06
21	Meghalaya	13	6	46.15	7	53.85	0	0.00	0	0.00	0	0.00	0	0.00
22	Nagaland	3	1	33.33	1	33.33	1	33.33	0	0.00	0	0.00	0	0.00
23	Odisha	1238	521	42.08	605	48.87	108	8.72	4	0.32	0	0.00	0	0.00
24	Pondicherry	4	3	75.00	1	25.00	0	0.00	0	0.00	0	0.00	0	0.00
25	Punjab	222	9	4.05	51	22.97	41	18.47	53	23.87	65	29.28	3	1.35
26	Rajasthan	1023	123	12.02	200	19.55	179	17.50	158	15.44	170	16.62	193	18.87
27	Tamil Nadu	655	177	27.02	188	28.70	190	29.01	75	11.45	18	2.75	7	1.07
28	Telangana	565	178	31.50	165	29.20	114	20.18	83	14.69	22	3.89	3	0.53
29	Tripura	21	8	38.10	12	57.14	1	4.76	0	0.00	0	0.00	0	0.00
30	Uttar Pradesh	660	149	22.58	249	37.73	136	20.61	100	15.15	24	3.64	2	0.30
31	Uttarakhand	49	7	14.29	10	20.41	15	30.61	10	20.41	4	8.16	3	6.12
32	West Bengal	717	162	22.59	323	45.05	130	18.13	78	10.88	24	3.35	0	0.00
Total		14827	4077	27.50	5711	38.52	3151	21.25	1142	7.70	512	3.45	234	1.6

