

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

RAJYA SABHA

STARRED QUESTION NO. *64

ANSWERED ON 29.07.2024

DEPLETING GROUNDWATER LEVEL IN PUNJAB

*64. SHRI VIKRAMJIT SINGH SAHNEY

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the status of available groundwater level as of 2024, State-wise;
- (b) whether it is a fact that Punjab's groundwater utilization stands at 163.76 per cent;
- (c) if so, whether Government has taken any steps to combat depleting groundwater in Punjab;
- (d) the number of districts in Punjab where groundwater utilization has crossed 100 percent;
- (e) whether Government is taking any steps to reduce dependence on groundwater and restore the water table; and
- (f) the expected number of people to be affected by groundwater depletion in major cities?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI C R PAATIL)

(a) to (f) : A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF STARRED QUESTION NO. *64 TO BE ANSWERED ON 29.07.2024 IN RAJYA SABHA REGARDING “DEPLETING GROUNDWATER LEVEL IN PUNJAB”.

(a) Central Ground Water Board (CGWB) is periodically monitoring the ground water levels throughout the country on a regional scale, through a network of monitoring wells. State wise details of groundwater level in the country for the month of January 2024 is given in **Annexure-I**. The perusal of data shows that about 84.29% of the wells monitored across the country have recorded water levels within the range of 10mbgl(meters below ground level) indicating ease of access to ground water.

(b) As per the latest Assessment, Stage of Ground Water Extraction (SoE), for the state of Punjab stands at 163.76%.

(c) to (e) As per the latest Assessment, there are 18 districts in Punjab where the Stage of Extraction has crossed 100%.

Water being a State subject, sustainable development and management of groundwater resources is primarily the responsibility of the State Government. However, the Central Government facilitates the efforts of the State Governments, including Punjab, 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 to combat ground water depletion and to reduce the dependence of ground water with a view to restore the water table in the State of Punjab are given below:-

- i. National Aquifer Mapping (NAQUIM) Studies have been carried out in State of Punjab by CGWB for an area of 50,369 Sq km. Based on NAQUIM studies, groundwater management plans have been prepared and reports have been shared with State and District Authorities for suitable ground water recharge interventions.
- ii. Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by CGWB in consultation with States/UTs which is a macro level plan indicating various structures for the different terrain conditions of the country including estimated cost. Master plan for the state of Punjab which envisages construction of about 11 Lakh Rain water harvesting and artificial recharge structures to harness about 1200 Million Cubic Meter (MCM) of rain-water has been shared with State Government which is devising an action plan for its suitable implementation in priority areas.
- iii. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 in which special emphasis is being given for rainwater harvesting / groundwater recharge. Currently, JSA 2024 is being implemented in all the districts of Punjab with special focus on 10 water stressed districts. Various ground water recharge and conservation related works are being taken up under the Jal Shakti Abhiyan in convergence with various Central and State schemes.
- iv. Ministry of Housing & Urban Affairs is currently implementing Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0 Scheme under which Rejuvenation of water bodies and wells in urban areas is one of the main components.

- v. Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop Scheme in the country 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. 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.
- vii. A number of Public interaction programmes have been organized in various parts of the country, including in Punjab, to promote awareness on the importance of participatory groundwater management and to reduce the dependence on groundwater.
- viii. MoJS has also issued advisories to States/UTs 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. Accordingly, Department of Agriculture, Punjab is pursuing to diversify the acreage under paddy to other less water consuming crops like maize, oilseeds etc. by extending incentives to farmers.
- ix. The Punjab Water Resources Regulation and Development Authority (PWRDA) has been established under section 3 of Punjab Water Resources (Management and Regulation) Act, 2020 to ensure conservation, management and regulation of water resources in the State
- x. In addition to the above, the Government of India has taken several other significant initiatives for the improvement of groundwater situation in the country, including in the state of Punjab, which can be seen through link below-

<https://jalshakti-dowr.gov.in/document/steps-taken-by-the-central-government-to-control-water-depletion-and-promote-rain-water-harvesting-conservation/>

(f) 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. However, it is possible to mitigate the adverse effects of ground water depletion by increasing the availability of ground water on one hand and by promoting the water use efficiency and enhanced surface water utilization on the other.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF RAJYA SABHA STARRED QUESTION NO. *64 TO BE ANSWERED ON 29.07.2024 REGARDING “DEPLETING GROUNDWATER LEVEL IN PUNJAB”

State-wise Depth to Water Level Distribution of Percentage of Observation Wells for the January 2024

SN	State/ UT Name	No of well analysed	No./Percentage of Wells Showing Depth to Water Level (mbgl) in the Range of											
			0 to 2		2 to 5		5 to 10		10 to 20		20 to 40		> 40	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	Andhra Pradesh	812	114	14.0	403	49.6	205	25.2	59	7.3	21	2.6	10	1.2
2	Arunachal Pradesh	29	5	17.2	17	58.6	5	17.2	2	6.9	0	0.0	0	0.0
3	Assam	363	92	25.3	205	56.5	52	14.3	9	2.5	4	1.1	1	0.3
4	Bihar	673	38	5.6	392	58.2	229	34.0	14	2.1	0	0.0	0	0.0
5	Chhattisgarh	1052	72	6.8	557	52.9	371	35.3	47	4.5	4	0.4	1	0.1
6	Goa	80	3	3.8	37	46.3	30	37.5	10	12.5	0	0.0	0	0.0
7	Gujarat	826	88	10.7	276	33.4	288	34.9	142	17.2	28	3.4	4	0.5
8	Haryana	229	26	11.4	62	27.1	35	15.3	62	27.1	34	14.8	10	4.4
9	Himachal Pradesh	158	24	15.2	51	32.3	31	19.6	34	21.5	13	8.2	5	3.2
10	Jharkhand	450	18	4.0	192	42.7	222	49.3	18	4.0	0	0.0	0	0.0
11	Karnataka	1298	65	5.0	435	33.5	578	44.5	209	16.1	5	0.4	6	0.5
12	Kerala	1316	193	14.7	414	31.5	520	39.5	172	13.1	15	1.1	2	0.2
13	Madhya Pradesh	1472	109	7.4	505	34.3	636	43.2	199	13.5	16	1.1	7	0.5
14	Maharashtra	1943	202	10.4	793	40.8	695	35.8	222	11.4	26	1.3	5	0.3
15	Manipur	4	2	50.0	2	50.0	0	0.0	0	0.0	0	0.0	0	0.0
16	Meghalaya	66	27	40.9	35	53.0	4	6.1	0	0.0	0	0.0	0	0.0
17	Mizoram	2	1	50.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0
18	Nagaland	95	20	21.1	42	44.2	22	23.2	10	10.5	1	1.1	0	0.0
19	Odisha	1376	222	16.1	859	62.4	286	20.8	9	0.7	0	0.0	0	0.0
20	Punjab	210	15	7.1	44	21.0	36	17.1	49	23.3	53	25.2	13	6.2
21	Rajasthan	1103	22	2.0	178	16.1	212	19.2	231	20.9	195	17.7	265	24.0
22	Tamil Nadu	772	248	32.1	300	38.9	172	22.3	47	6.1	4	0.5	1	0.1
23	Telangana	302	19	6.3	140	46.4	122	40.4	20	6.6	1	0.3	0	0.0
24	Tripura	96	24	25.0	56	58.3	15	15.6	1	1.0	0	0.0	0	0.0
25	Uttar Pradesh	1090	80	7.3	496	45.5	334	30.6	146	13.4	30	2.8	4	0.4
26	Uttarakhand	176	11	6.3	50	28.4	36	20.5	35	19.9	30	17.0	14	8.0
27	West Bengal	749	149	19.9	420	56.1	158	21.1	19	2.5	3	0.4	0	0.0
28	Chandigarh	9	0	0.0	4	44.4	2	22.2	1	11.1	2	22.2	0	0.0
29	The Dadra And Nagar Haveli And Daman And Diu	36	1	2.8	19	52.8	16	44.4	0	0.0	0	0.0	0	0.0
30	Delhi	107	4	3.7	28	26.2	38	35.5	18	16.8	11	10.3	8	7.5
31	Jammu and Kashmir	303	58	19.1	126	41.6	53	17.5	33	10.9	24	7.9	9	3.0
32	Puducherry	9	7	77.8	1	11.1	1	11.1	0	0.0	0	0.0	0	0.0
	Total	17206	1959	11.4	7140	41.5	5404	31.4	1818	10.6	520	3.0	365	2.1
