

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

LOK SABHA

UNSTARRED QUESTION NO.1767

ANSWERED ON 01.08.2024

WATER STRESS IN PUNJAB

1767. DR. DHARAMVIRA GANDHI

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

- (a) whether it is a fact that Punjab is seventeen years away from Day Zero as stressed by the National Green Tribunal (NGT) Monitoring Committee;
- (b) if so, the steps taken by the Government in this regard along with the funds allocated to Punjab to address this issue and their outcomes so far;
- (c) whether the the Government proposes to rejuvenate the depleting ground water table in Punjab; and
- (d) if so, the funds allocated and schemes devised to tackle the situation in Punjab?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Central Ground Water Board (CGWB) carries out assessment of Dynamic Ground Water Resources every year through a collaborative effort of the respective State Governments. An analysis of District-wise Decadal Water Level Fluctuation with Mean (Post-Monsoon 2013 to 2022) and Post-monsoon 2023 in respect of Punjab reveals that about 34.65% of the wells monitored have registered rise in ground water levels, mostly in the range of 0.0 – 2.0 metre. Further, fall in groundwater levels have also been observed in 65.34% analysed wells which is mostly in the range of 0.0-2.0 metre. Decline of more than 4.0 metre has also been observed in some wells. The details of aforesaid data is **annexed**. However, groundwater being a replenishable resource gets recharged every year through rainfall and other sources such as return flow from irrigation, canal seepage, recharge from surface water bodies etc. In addition, groundwater is also available in deeper aquifers below the earth.

(b) to (d) Water being a State subject, the efforts to effectively manage groundwater resources fall in the mandate of State Government. The Central Government supplements the efforts of the State Government through technical and financial support. Major steps taken by the Ministry to check ground water depletion in the State of Punjab are as below:

- National Aquifer Mapping Studies have been carried out in Punjab for an area of 50,369 sq km. Based on National Aquifer Management (NAQUIM) studies, groundwater management plans have been prepared and reports have been shared with State and District Authorities for implementation.
- NAQUIM 2.0 studies are carried out in priority areas of Ludhiana and Sangrur districts under poor quality and over-exploited area category respectively in Punjab to provide issue based scientific inputs for groundwater management.

- 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 artificial recharge for State of Punjab covering an area of 48537 sq km has been prepared & shared with State Government.
- Ministry has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for regulation of its development. So far, 21 States/UTs have adopted and implemented the ground water legislation including Punjab.
- 34 public interaction programs have been organized in various parts of Punjab in which 3148 people participated.
- Punjab has installed 1044 nos. Digital Water Level Recorder (DWLR) with Telemetry under National Hydrology Project to monitor ground water level in the State with allocation of Rs. 11.90 crores for this activity.
- Roof Top Rain Water Harvesting has been made mandatory in all buildings above 200 sq. yds.
- The Punjab Water Resources Regulation and Development Authority (PWRDA) has been established under section 3 of Punjab Water Resources (Management and Regulation) Act, 2020 for the purpose of ensuring conservation, management and regulation of water in the State in accordance with the Integrated State Water Plan (ISWP).
- Apart from this, the important steps taken by the Central Government for sustainable ground water management in the country can be seen at <https://cdnbbsr.s3waas.gov.in/s3a70dc40477bc2adceef4d2c90f47eb82/uploads/2024/07/20240716706354487.pdf>.

CGWB is implementing the Central Sector Scheme on ‘Ground Water Management & Regulation’ under which the funds allocated jointly (for Punjab, Haryana and Chandigarh UT, being a single field office) for last five years are given below:

Year	Allocation (in Lakhs)
2023-24	657.56
2022-23	773.78
2021-22	462.42
2020-21	263.68
2019-20	383.58

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1767 TO BE ANSWERED IN LOK SABHA ON 01.08.2024 REGARDING “WATER STRESS IN PUNJAB”.

District-wise Decadal Water Level Fluctuation with Mean (Post-Monsoon 2013 to 2022) and Post-monsoon 2023 in respect of Punjab

Sr. No.	District Name	No of wells analysed	No./Percentage of wells showing depth to water level (mbgl) in the range of												Total No./% of Well			
			Rise						Fall						Rise		Fall	
			0 to 2		2 to 4		> 4		0 to 2		2 to 4		> 4		No.	%	No.	%
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
1	Amritsar	6	0	0	1	16.7	0	0	4	66.7	1	16.7	0	0	1	16.67	5	83.33
2	Barnala	3	0	0	0	0	0	0	0	0	0	0	3	100	0	0.00	3	100.00
3	Bathinda	16	1	6.3	0	0	0	0	6	37.5	1	6.3	8	50	1	6.25	15	93.75
4	Faridkot	14	4	28.6	0	0	0	0	6	42.9	4	28.6	0	0	4	28.57	10	71.43
5	Fatehgarh Sahib	8	3	37.5	1	12.5	0	0	3	37.5	1	12.5	0	0	4	50.00	4	50.00
6	Fazilka	10	3	30	0	0	0	0	7	70	0	0	0	0	3	30.00	7	70.00
7	Firozpur	3	2	66.7	0	0	0	0	1	33.3	0	0	0	0	2	66.67	1	33.33
8	Gurdaspur	11	3	27.3	0	0	0	0	6	54.5	1	9.1	1	9.1	3	27.27	8	72.73
9	Hoshiarpur	18	11	61.1	1	5.6	1	5.6	3	16.7	2	11.1	0	0	13	72.22	5	27.78
10	Jalandhar	9	2	22.2	0	0	1	11.1	2	22.2	2	22.2	2	22.2	3	33.33	6	66.67
11	Kapurthala	6	2	33.3	0	0	0	0	3	50	0	0	1	16.7	2	33.33	4	66.67
12	Ludhiana	8	0	0	1	12.5	2	25	2	25	2	25	1	12.5	3	37.50	5	62.50
13	Mansa	3	0	0	0	0	0	0	1	33.3	1	33.3	1	33.3	0	0.00	3	100.00
14	Moga	5	0	0	0	0	0	0	1	20	2	40	2	40	0	0.00	5	100.00
15	Muktsar	8	2	25	0	0	0	0	6	75	0	0	0	0	2	25.00	6	75.00
16	Pathankot	11	4	36.4	0	0	0	0	6	54.5	0	0	1	9.1	4	36.36	7	63.64
17	Patiala	7	0	0	2	28.6	1	14.3	0	0	2	28.6	2	28.6	3	42.86	4	57.14
18	Rupnagar	7	5	71.4	1	14.3	0	0	1	14.3	0	0	0	0	6	85.71	1	14.29
19	Sangrur	5	0	0	0	0	0	0	0	0	0	0	5	100	0	0.00	5	100.00
20	SAS Nagar	6	3	50	1	16.7	0	0	2	33.3	0	0	0	0	4	66.67	2	33.33
21	SBS Nagar	4	0	0	0	0	1	25	2	50	1	25	0	0	1	25.00	3	75.00
22	TaranTaran	8	2	25	0	0	0	0	2	25	4	50	0	0	2	25.00	6	75.00
	Total	176	47	26.7	8	4.5	6	3.4	64	36.4	24	13.6	27	15.3	61	34.66	115	65.34
