

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

STARRED QUESTION NO. *200

ANSWERED ON 12.02.2026

GROUNDWATER EXPLOITATION IN PUNJAB

*200. Smt. HARSIMRAT KAUR BADAL:

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

- (a) whether the Government is aware that Punjab has the highest rate of groundwater extraction in the country with over 75 per cent of its blocks classified as overexploited and groundwater extraction reaching 156 per cent and if so, the details thereof;
- (b) the steps taken by the Government to address the widespread contamination of groundwater in Punjab with toxic substances such as arsenic, fluoride and uranium as reported in several districts;
- (c) whether the Government has conducted any studies or assessments on the impact of declining groundwater levels and increasing salinity on agricultural productivity and public health in Punjab and if so, the details and key findings thereof; and
- (d) the measures being implemented to promote sustainable irrigation practices in Punjab due to the heavy reliance on tubewells and the reduction in canal-irrigated area?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI C R PAATIL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. *200 TO BE ANSWERED ON 12.02.2026 IN LOK SABHA REGARDING “GROUNDWATER EXPLOITATION IN PUNJAB”

(a) Dynamic Ground Water Resources of the country are being annually assessed, jointly by Central Ground Water Board (CGWB) and State Governments. As per current assessment report, 2025, the total Annual Ground Water Recharge for the state of Punjab is 18.60 Billion Cubic Meter (BCM) and the Annual Extractable Ground Water Resources is estimated as 16.80 BCM. Further, total Annual Ground Water Extraction in Punjab in 2025 has been assessed as 26.27 BCM. Based on this, 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 worked out to be 156.36% for the state of Punjab.

Further, 111 (72.55%) blocks out of 153 in Punjab have been categorized as ‘Over-exploited’ where total annual ground water extraction exceeds the extractable ground water resources. Additionally, 10 Blocks are in critical, 15 in Semi-critical and 17 in Safe category.

(b) CGWB conducts regular testing and analysis of ground water samples throughout the country, including in the state of Punjab, for various quality parameters/contaminants like Electrical Conductivity (EC), Fluoride, Nitrate, heavy metals etc. Perusal of such data available with CGWB indicates that ground water in Punjab largely remains potable with localized occurrence of Arsenic, Fluoride and Uranium in ground water in excess of the limits prescribed for drinking water use being reported in some isolated pockets.

Water is a State subject and the responsibility of taking initiatives to mitigate ground water contamination lies primarily with the state governments. However, to complement the efforts of the state governments, several steps have been taken by the Central Government to address these issues across the country, including Punjab. Some of the important ones are mentioned below:-

- i. The ground water quality data generated by CGWB including that for heavy metal contamination, is regularly disseminated through Annual Reports, Half-yearly Bulletins and Fortnightly Alerts for quick action by the stakeholders.
- ii. CGWB has also developed techniques for constructing Arsenic and Fluoride safe wells and apart from taking up demonstrative construction of such wells in affected areas, is also providing technical assistance to state departments for taking up similar constructions.
- iii. Jal Jeevan Mission (JJM) – Har Ghar Jal, being implemented by this Ministry in partnership with states, marks an important milestone for providing free potable tap water to every rural household of the country.
- iv. Improvement in ground water quality can also be achieved to some extent by taking up artificial recharge of contaminated aquifers, which dilutes the contaminants to reduce their

adverse effects. Accordingly, Ministry of Jal Shakti and other central ministries are implementing several programmes towards this end like the annual Jal Shakti Abhiyan Campaigns, Jal Sanchay Jan Bhagidari (JSJB) initiative, PMKSY and MGNREGS schemes etc.

(c) Under the National Aquifer Mapping Programme (NAQUIM) Phase 1.0, aquifer mapping for the entire mappable area of the country, including Punjab, has been carried out and district-wise ground water management plans have been shared with state/district administrations for taking up suitable field interventions, which include measures like rainwater harvesting, micro-irrigation expansion and crop diversification. Subsequently, under NAQUIM 2.0, specific studies focusing on areas facing ground water depletion and quality issues, including salinity, have been taken up, including in the State of Punjab, providing more precise and high granularity data for better informed ground water management.

(d) The government has taken up several important measures, as summarized below, for reducing dependence on ground water, encouraging conjunctive use with surface water and promoting sustainable irrigation practices in the country, including Punjab.

- i. Under various components of the umbrella Scheme of PMKSY like Repair, Renovation & Restoration (RRR), Surface Minor Irrigation (SMI) etc., the M/o Jal Shakti provides assistance to states, including Punjab for reviving/restoring traditional water bodies and enhancing irrigation through smaller surface water projects like tanks, check dams and lift irrigation, benefiting small & marginal farmers. Further, surface water based Major and Medium irrigation projects are taken up through PMKSY-AIBP component to reduce the dependence on ground water.
- ii. 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 to diversify the acreage under paddy to other less water consuming crops by extending incentives to farmers.
- iii. 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.
