GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 1513

ANSWERED ON 13.02.2025

GROUNDWATER LEVEL IN BODOLAND TERRITORIAL REGION

1513. SHRI JOYANTA BASUMATARY

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

(a) the details of the data on the groundwater levels during the last five years in Bodoland Territorial Region, district-wise;

(b) the details of initiatives taken/being taken by the Government to increase the groundwater level during the said period;

(c) whether it is a fact that contamination of water is caused by agricultural practices, including the use of fertilizers and their impact on water quality and if so, the details thereof;

(d) the steps undertaken/being undertaken by the Government to mitigate contamination from other sources, particularly in severely affected States like Rajasthan, Punjab and Karnataka; and

(e) the progress made in expanding the groundwater monitoring network, including the use of digital devices to measure water levels?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) Central Ground Water Board (CGWB) monitors groundwater levels throughout the country on a regional scale including Bodoland Territorial Region (BTR), four times in every year through its network of monitoring wells.

The district wise ground water levels measured for the period of last five years (2020-2024) in respect of Bodoland Territorial Region is mentioned in **Annexure.** Perusal of the data shows that ground water levels in the Bodoland region in the last 5 years have remained within the range of 0-10 mbgl (meters below ground level) in almost 100% of the wells analyzed, except for the year 2024, indicating ease of access to ground water.

(b) 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 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 for sustainable development of ground water resources in the country are given below:-

i. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 which is a mission mode and time bound programme for harvesting the rainfall and taking up water conservation activities. Currently, JSA 2024 is being implemented in the country with special focus on 151 water stressed districts of the country, including Baksa and Udalguri districts in BTR. JSA is an umbrella campaign under which various ground water recharge and conservation related works are being taken up in convergence with various central and state schemes.

ii. Further, CGWB has also completed the National Aquifer Mapping (NAQUIM) Project covering approximately 25 lakh square kms. of mappable area across the country, including around 61,826 sq. km in the state Assam. The Aquifer maps and management plans have been prepared for all Districts, including those of Bodoland Region, and shared with the respective State agencies for implementation. Aquifer management plans prepared under NAQUIM, propose both supply side and demand side interventions.

iii. Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by the CGWB and shared with States/UTs providing a broad outline for construction of around 1.42 crore rain water harvesting and artificial recharge structures in the country with estimated cost to harness about 185 Billion Cubic Meters (BCM) of water.

iv. Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop (PDMC) Scheme in the country, including Assam, 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. As per the information available, an area of 44,356 hactares in Assam has been covered under efficient irrigation practices under the scheme.

v. Mission Amrit Sarovar was launched by the Government of India, which aimed at developing and rejuvenating at least 75 water bodies in each district of the country, including Assam. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country with 2,966 in Assam (379 in Bodoland Region).

vi. The Central Ground Water Authority (CGWA) has been constituted under the Ministry of Jal Shakti for the purpose of regulation and control of ground water development and management in the country. Abstraction cum use of Groundwater in the country is regulated by CGWA by way of issuing NOCs as per the provisions of its Guidelines dated 24.09.2020 which have pan India applicability.

(c) It is understood that various agricultural practices like excessive use of chemical fertilizers cause contamination of ground water, especially of Nitrate, due to leaching of chemical residues into ground water. Other human activities like improper grey water management, open defecation etc. are also known to cause ground water contamination.

(d) Despite Water being a state subject, several steps have been taken by the Central Government in the direction of mitigating ground water contamination like regular quality monitoring and sharing of data by CGWB with state governments and other stakeholders, taking up construction of Arsenic and Fluoride safe wells and disseminating the technology, implementation of Water (Prevention & Control) Act, 1974 and the Environment (Protection) Act, 1986 by CPCB/SPCBs to prevent and control pollution in water etc.

But the major thrust for safeguarding the entire population of the country from the adverse effects of contaminated water has been provided by the Government by way of implementation of Jal Jeevan Mission (JJM) – Har Ghar Jal, as a noble initiative. JJM is operational in the country since August 2019, including in the states of Rajasthan, Punjab & Karnataka, with a view to make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household in the country. Under JJM, Bureau of Indian Standards' BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery and JJM guidelines also stipulate that while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.

(e) CGWB is currently manually monitoring ground water levels through around 27,000 stations and quality through around 17,000 stations. However, realizing the significance of having high frequency data on ground water on real time basis, this Ministry has taken up the process of installing Digital Water Level Recorders (DWLRs) with telemetry systems throughout the country under its various schemes and projects like Ground Water Management & Regulation (GWM &R) Scheme, Atal Bhujal Yojana etc. The state governments are also funded for carrying out the said activity under National Hydrology Project(NHP). So far, around 24,000 DWLRs have been installed across the country under the above said schemes for providing real-time access to ground water data.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1513 TO BE ANSWERED IN LOK SABHA ON 13.02.2025 REGARDING "GROUNDWATER LEVEL IN BODOLAND TERRITORIAL REGION".

The district wise ground water levels measured for the period of last five years (2020-2024) in Bodoland Territorial Region

Depth to Water Level Distribution of Percentage of Observation Wells Post-Monsoon 2(

S No	District Name	No of wells 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	Baksa	17	2	11.8	7	41.2	4	23.5	4	23.5	0	0.0	0	0.0
2	Chirang	7	3	42.9	3	42.9	1	14.3	0	0.0	0	0.0	0	0.0
3	Kokrajhar	9	3	33.3	6	66.7	0	0.0	0	0.0	0	0.0	0	0.0
4	Udalguri	19	11	57.9	6	31.6	2	10.5	0	0.0	0	0.0	0	0.0
	Total	**52**	**19**	**36.5**	**22**	**42.3**	**7**	**13.5**	**4**	**7.7**	**0**	**0.0**	**0**	**0.0**

Depth to Water Level Distribution of Percentage of Observation Wells Post-Monsoon 2023

S No	District Name	No of wells 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	Baksa	6	2	33.3	3	50.0	1	16.7	0	0.0	0	0.0	0	0.0
2	Chirang	7	1	14.3	5	71.4	1	14.3	0	0.0	0	0.0	0	0.0
3	Kokrajhar	11	0	0.0	11	100.0	0	0.0	0	0.0	0	0.0	0	0.0
4	Udalguri	24	9	37.5	12	50.0	3	12.5	0	0.0	0	0.0	0	0.0
	Total	**48**	**12**	**25.0**	**31**	**64.6**	**5**	**10.4**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**

Depth to Water Level Distribution of Percentage of Observation Wells Post-Monsoon 2022

S No	District Name	No of wells 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	Baksa	6	1	16.7	4	66.7	1	16.7	0	0.0	0	0.0	0	0.0
2	Chirang	5	0	0.0	4	80.0	1	20.0	0	0.0	0	0.0	0	0.0
3	Kokrajhar	12	0	0.0	11	91.7	1	8.3	0	0.0	0	0.0	0	0.0
4	Udalguri	15	8	53.3	6	40.0	1	6.7	0	0.0	0	0.0	0	0.0
	Total	**38**	**9**	**23.7**	**25**	**65.8**	**4**	**10.5**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**

Depth to Water Level Distribution of Percentage of Observation Wells Post-Monsoon 2021

S No	District Name	No of wells 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	Baksa	3	2	66.7	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0
2	Chirang	4	0	0.0	4	100.0	0	0.0	0	0.0	0	0.0	0	0.0
3	Kokrajhar	9	0	0.0	8	88.9	1	11.1	0	0.0	0	0.0	0	0.0
4	Udalguri	13	6	46.2	7	53.8	0	0.0	0	0.0	0	0.0	0	0.0
	Total	**29**	**8**	**27.6**	**20**	**69.0**	**1**	**3.4**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**

Depth to Water Level Distribution of Percentage of Observation Wells Post-Monsoon 2020

S No	District Name	No of wells 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	Baksa	2	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	Chirang	2	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0
3	Kokrajhar	5	1	20.0	3	60.0	1	20.0	0	0.0	0	0.0	0	0.0
4	Udalguri	10	5	50.0	5	50.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	**19**	**8**	**42.1**	**10**	**52.6**	**1**	**5.3**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**

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