

GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO.729

ANSWERED ON 02.12.2024

GROUNDWATER DEPLETION AND INITIATIVES FOR WATER CONSERVATION

729. SHRI MUKUL BALKRISHNA WASNIK

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

- (a) the current status of groundwater levels across various regions in India, highlighting areas experiencing significant depletion;
- (b) the specific measures implemented by Government to address groundwater depletion, including the outcomes of the initiatives;
- (c) the key challenges faced in implementing water conservation initiatives, particularly in regions with severe water scarcity;
- (d) the steps taken to promote community participation and awareness in groundwater conservation efforts; and
- (e) the details of collaborations established with state governments, non-governmental organisations, and international bodies to enhance the effectiveness of water conservation strategies?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) CGWB monitors groundwater levels throughout the country four times every year. The state-wise water levels measured for the Month of November 2023 for the country is given in **Annexure**. The perusal of data indicates that about 84.8% of the wells across the country record the water level data within the range of 0-10 meters below ground level(mbgl), indicating ease of access to ground water. The data also reveals that the states of Punjab, Haryana, Rajasthan and the UT of Chandigarh are having significant percentage of wells in the >20 mbgl range indicating decline in 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 in 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. 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. CGWB has taken up National Aquifer Mapping and Management Programme (NAQUIM) with an aim to delineate aquifer disposition and their characterization. Entire mappable area of the country of around 25 lakh sq. km has been mapped under the scheme and management plans have been shared with the respective State governments for implementation.
- 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.
- iv. The Central Ground Water Authority (CGWA) has been constituted under MoJS 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.
- v. Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop (PDMC) 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. 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.. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country.

(c) The key challenges faced in implementation of water conservation initiatives, *inter alia*, include local land right and ownership issues, lack of appropriate information at the field level, non-availability of sufficient pool of skilled personnel at the grassroots level; Insufficient coordination among various agencies and stakeholders; Winning community trust and their dedicated co-operation; Insufficient Institutional Capacities at State and local Level; Lack of attention to operation and maintenance activities post construction work etc.

(d) Since no water conservation activity can be sustained over long term without ensuring community participation, the central government has taken several important steps to make ground water management a truly peoples' movement.

- i. The government of India is implementing Atal Bhujal Yojana in 80 water stressed districts across 7 states. The scheme has community led sustainable management of ground water resources and demand management as its core theme and through sustained information, education, communication (IEC) and awareness activities, it aims at ensuring active community involvement and to bring about behavioural change in people.

- ii. Central Ground Water Board organizes various Public Interaction Programs (PIP), Mass Awareness Programs (MAP), Tier II and Tier –III programmes on local ground water issues, wherein the local public is made aware of rainwater harvesting techniques and conservation of water harvesting structures.
- iii. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 under which Jal Shakti Kendras (JSKs) are being set up in every district of the country and as per the information available, already 700 JSKs have been set up. JSKs act as knowledge centres for disseminating information related to any water related issue such as water conservation methods, water use efficiency, policies on ground water, efficient irrigation techniques, water quality, grey water management etc. and as technical guidance centres to advice local people on these matters.
- iv. To further strengthen the momentum of Jal Shakti Abhiyan, Jal Sanchay Jan Bhagidari: A Community-Driven Path to Water Sustainability in India has been launched by the Hon'ble Prime Minister on September 6, 2024, in Surat, Gujarat with a vision to make rain water harvesting a mass movement in the country. By promoting community ownership and responsibility, the initiative seeks to develop cost-effective, local solutions tailored to specific water challenges across different regions.

(e) Water being a State subject, the Central Government supplements the efforts of the States and Union Territories (UTs) through technical and financial assistance. The States are an integral part of the whole effort of integrated water resource management. The Central Government provides support to States and UTs for undertaking water conservation efforts across the country through various schemes related to water resource management and also consults them to ensure their effective implementation.

Realizing the essential fact that integrated water management is a multi-stakeholder process, the Ministry of Jal Shakti and its organizations, work with a very large number of Non-Governmental Organizations and academic institutions to promote public awareness and for enhancing water resource management in the country. Notably, the Ministry has entered into several MoUs with NGOs working at the grassroots level like Rotary India Water Conservation Trust, International Water Management Institute, Foundation for Ecological Security etc. Additionally, under Atal Bhujal Yojana, several NGOs have been roped in as District Implementation Partners(DIPs) who act as a bridge between the government agencies and the community in implementation of the scheme.

Further, International organizations such as the World Bank, Asian Development Bank, European Union, Physikalisch-Technische Bundesanstalt (PTB), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Organization for Industrial, Spiritual and Cultural Advancement (OISCA) etc are associated with the Ministry in various capacities aimed at improving water resource management.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 729 TO BE ANSWERED IN RAJYA SABHA ON 02.12.2024 REGARDING "GROUNDWATER DEPLETION AND INITIATIVES FOR WATER CONSERVATION".

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

Sr. No.	State 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	809	109	13.5	382	47.2	241	29.8	54	6.7	16	2.0	7	0.9
2	Arunachal Pradesh	28	12	42.9	8	28.6	7	25.0	1	3.6	0	0.0	0	0.0
3	Assam	318	125	39.3	156	49.1	30	9.4	6	1.9	1	0.3	0	0.0
4	Bihar	784	116	14.8	525	67.0	139	17.7	4	0.5	0	0.0	0	0.0
5	Chhattisgarh	1046	172	16.4	628	60.0	228	21.8	16	1.5	2	0.2	0	0.0
6	Goa	82	17	20.7	38	46.3	21	25.6	6	7.3	0	0.0	0	0.0
7	Gujarat	753	105	13.9	305	40.5	215	28.6	96	12.7	26	3.5	6	0.8
8	Haryana	985	71	7.2	160	16.2	154	15.6	198	20.1	253	25.7	149	15.1
9	Himachal Pradesh	171	30	17.5	69	40.4	30	17.5	26	15.2	12	7.0	4	2.3
10	Jharkhand	396	51	12.9	216	54.5	114	28.8	8	2.0	7	1.8	0	0.0
11	Karnataka	1264	228	18.0	504	39.9	454	35.9	75	5.9	3	0.2	0	0.0
12	Kerala	1377	323	23.5	477	34.6	485	35.2	85	6.2	5	0.4	2	0.1
13	Madhya Pradesh	1470	151	10.3	654	44.5	501	34.1	147	10.0	12	0.8	5	0.3
14	Maharashtra	1658	248	15.0	706	42.6	526	31.7	141	8.5	32	1.9	5	0.3
15	Meghalaya	51	23	45.1	27	52.9	1	2.0	0	0.0	0	0.0	0	0.0
16	Mizoram	2	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
17	Nagaland	10	0	0.0	6	60.0	3	30.0	1	10.0	0	0.0	0	0.0
18	Odisha	1370	528	38.5	694	50.7	142	10.4	6	0.4	0	0.0	0	0.0
19	Punjab	283	29	10.2	55	19.4	34	12.0	65	23.0	81	28.6	19	6.7
20	Rajasthan	1061	27	2.5	171	16.1	195	18.4	234	22.1	194	18.3	240	22.6
21	Tamil Nadu	857	186	21.7	359	41.9	239	27.9	60	7.0	11	1.3	2	0.2
22	Telangana	623	58	9.3	278	44.6	204	32.7	72	11.6	9	1.4	2	0.3
23	Tripura	96	26	27.1	57	59.4	13	13.5	0	0.0	0	0.0	0	0.0
24	Uttar Pradesh	1092	179	16.4	481	44.0	265	24.3	133	12.2	30	2.7	4	0.4
25	Uttarakhand	171	17	9.9	48	28.1	35	20.5	31	18.1	25	14.6	15	8.8
26	West Bengal	736	224	30.4	413	56.1	85	11.5	14	1.9	0	0.0	0	0.0
27	Andaman and Nicobar	111	103	92.8	8	7.2	0	0.0	0	0.0	0	0.0	0	0.0
28	Chandigarh	14	0	0.0	5	35.7	2	14.3	2	14.3	4	28.6	1	7.1
29	Daman & Diu and Dadra & Nagar Haveli	30	7	23.3	17	56.7	6	20.0	0	0.0	0	0.0	0	0.0
30	Delhi	119	9	7.6	30	25.2	39	32.8	26	21.8	11	9.2	4	3.4
31	Jammu & Kashmir	385	96	24.9	173	44.9	59	15.3	27	7.0	21	5.5	9	2.3
32	Puducherry	9	2	22.2	5	55.6	2	22.2	0	0.0	0	0.0	0	0.0
	Total	18161	3274	18.0	7655	42.2	4469	24.6	1534	8.4	755	4.2	474	2.6
