

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 2001
ANSWERED ON 22.09.2020

DEPLETION IN GROUND WATER

2001. MS. DIYA KUMARI

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government is aware that there is a constant depletion of ground water in the country especially in the State of Rajasthan;
- (b) if so, the details thereof; and
- (c) the steps taken by the Government to handle the same?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI & SOCIAL JUSTICE AND EMPOWERMENT
(SHRI RATTAN LAL KATARIA)

(a) & (b) Yes sir, Ground water levels in some parts of the Country are declining because of continuous withdrawal necessitated by increased demand of fresh water for various uses, vagaries of rainfall, increased population, industrialization & urbanization etc.

Further, Central Ground Water Board is periodically monitoring the ground water levels throughout the Country on a regional scale, through a network of monitoring wells. In order to assess the change in water level on a long-term basis, Pre-monsoon water level data collected by CGWB during 2020 has been compared with the decadal average (2010-2019). The details in this regard are given at **Annexure-I**.

In Rajasthan, analysis of data indicates that about 41% of the wells monitored have registered a decline in ground water levels, mostly in the range of 0-2 m.

(c) Water being a State subject, initiatives on water management including conservation and water harvesting in the Country is primarily States' responsibility. Further, to supplement the efforts of the State Governments, Government of India provides technical and financial assistance to encourage sustainable development and efficient management of water resources through various schemes and programmes.

Further, a number of States have done notable work in the field of water conservation/harvesting. Of these, mention can be made of 'Mukhyamantri Jal Swavlamban Abhiyan' in Rajasthan, 'Jalyukt Shibir' in Maharashtra, 'Sujalam Sufalam Abhiyan' in Gujarat, 'Mission Kakatiya' in Telangana, 'Neeru Chettu' in Andhra Pradesh, 'Jal Jeevan Hariyali' in Bihar, 'Jal Hi Jeevan' in Haryana among others.

Government of India launched Jal Shakti Abhiyan (JSA), a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks of 256 districts in India. In this regard, teams of officers from Central Government along-with technical officers from Ministry of Jal Shakti were deputed to visit water stressed districts and to work in close collaboration with district level officials to undertake suitable interventions.

In addition, Government of India is implementing Atal Bhujal Yojana (Atal Jal), a Rs. 6000 Crore Central Sector Scheme, for sustainable management of ground water resources with community participation. Atal Jal is being implemented in 78 water stressed districts of Seven States viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

As per information received from Ministry of Housing & Urban Affairs, the Model Building Bye Laws, 2016, has been issued for guidance of the States/UTs which has a chapter on 'Rainwater Harvesting'. The provisions of this chapter are applicable to all the buildings. 33 States / UTs have adopted the rainwater harvesting provisions. The implementation of the rainwater harvesting policy comes within the purview of the State Government/Urban Local Body / Urban Development Authority.

In order to regulate the Over-exploitation and consequent depletion of ground water, the 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, which includes provision of rain water harvesting. So far, 18 States/UTs have adopted and implemented the ground water legislation on the lines of Model Bill.

Central Ground Water Board (CGWB) is implementing National Aquifer Mapping and Management program (NAQUIM), which envisages mapping of aquifers (water bearing formations), their characterization and development of Aquifer Management Plans contributing to preparation/finalization of Water Management Plans to facilitate sustainable groundwater management.

National Water Mission (NWM) under this Ministry has initiated "Catch the Rain" campaign to motivate all the stake-holders for water conservation through rain water harvesting.

Further steps taken by the Central Government for sustainable management of water resources are available at the following. URL

http://mowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Jun2019.pdf.

ANNEXURE-I

Annexure referred to in reply to parts (a) & (b) of Unstarred Question No. 2001 to be answered in Lok Sabha on 22.09.2020 regarding “DEPLETION IN GROUND WATER”.

State-wise Decadal Water Level Fluctuation with Mean [Premonsoon (2010 to 2019)] and Premonsoon 2020

S. No.	Name of State	No. of wells Analyzed	Rise						Fall						Rise		Fall		Wells showing no change	
			0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		No	%	No	%	No	%
			No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andhra Pradesh**	402	92	22.9	58	14.4	76	18.9	74	18.4	43	10.7	59	14.7	226	56.2	176	43.8	0	0
2	Arunachal Pradesh	8	1	12.5	0	0.0	1	12.5	6	75.0	0	0.0	0	0.0	2	25.0	6	75.0	0	0
3	Assam	126	72	57.1	8	6.3	2	1.6	41	32.5	2	1.6	1	0.8	82	65.1	44	34.9	0	0
4	Bihar	191	112	58.6	46	24.1	9	4.7	23	12.0	1	0.5	0	0.0	167	87.4	24	12.6	0	0
5	Chandigarh	11	3	27.3	1	9.1	1	9.1	3	27.3	0	0.0	3	27.3	5	45.5	6	54.5	0	0
6	Chhattisgarh #	602	143	23.8	58	9.6	36	6.0	253	42.0	71	11.8	28	4.7	237	39.4	352	58.5	13	2
7	Dadra & Nagar Haveli #	18	1	5.6	1	5.6	0	0.0	9	50.0	4	22.2	3	16.7	2	11.1	16	88.9	0	0
8	Daman & Diu	6	3	50.0	0	0.0	0	0.0	2	33.3	1	16.7	0	0.0	3	50.0	3	50.0	0	0
9	Delhi	80	29	36.3	7	8.8	5	6.3	20	25.0	7	8.8	12	15.0	41	51.3	39	48.8	0	0
10	Goa #	64	17	26.6	0	0.0	1	1.6	43	67.2	2	3.1	1	1.6	18	28.1	46	71.9	0	0
11	Gujarat	762	266	34.9	141	18.5	155	20.3	138	18.1	35	4.6	20	2.6	562	73.8	193	25.3	7	1
12	Haryana	252	85	33.7	11	4.4	5	2.0	79	31.3	36	14.3	36	14.3	101	40.1	151	59.9	0	0
13	Himachal Pradesh	70	41	58.6	13	18.6	1	1.4	13	18.6	2	2.9	0	0.0	55	78.6	15	21.4	0	0
14	Jammu & Kashmir	196	122	62.2	15	7.7	4	2.0	46	23.5	7	3.6	2	1.0	141	71.9	55	28.1	0	0
15	Jharkhand	89	55	61.8	17	19.1	10	11.2	5	5.6	2	2.2	0	0.0	82	92.1	7	7.9	0	0
16	Karnataka	169	53	31.4	34	20.1	15	8.9	39	23.1	20	11.8	8	4.7	102	60.4	67	39.6	0	0
17	Kerala **	380	186	48.9	7	1.8	5	1.3	152	40.0	8	2.1	22	5.8	198	52.1	182	47.9	0	0
18	Madhya Pradesh	1182	482	40.8	235	19.9	156	13.2	198	16.8	56	4.7	55	4.7	873	73.9	309	26.1	0	0
19	Maharashtra **	3620	1589	43.9	480	13.3	228	6.3	1130	31.2	127	3.5	50	1.4	2297	63.5	1307	36.1	16	0
20	Meghalaya	19	6	31.6	0	0.0	0	0.0	13	68.4	0	0.0	0	0.0	6	31.6	13	68.4	0	0
21	Nagaland	1	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	1	100.0	0	0
22	Odisha #	1064	593	55.7	110	10.3	27	2.5	311	29.2	19	1.8	4	0.4	730	68.6	334	31.4	0	0
23	Pondicherry #	6	0	0.0	0	0.0	0	0.0	5	83.3	1	16.7	0	0.0	0	0.0	6	100.0	0	0
24	Punjab	233	65	27.9	7	3.0	10	4.3	75	32.2	35	15.0	41	17.6	82	35.2	151	64.8	0	0
25	Rajasthan	946	321	33.9	122	12.9	118	12.5	194	20.5	94	9.9	96	10.1	561	59.3	384	40.6	1	0
26	Tamil Nadu #	612	126	20.6	27	4.4	17	2.8	214	35.0	129	21.1	99	16.2	170	27.8	442	72.2	0	0
27	Telangana**	732	220	30.1	153	20.9	170	23.2	105	14.3	38	5.2	46	6.3	543	74.2	189	25.8	0	0
28	Tripura	20	10	50.0	0	0.0	0	0.0	9	45.0	1	5.0	0	0.0	10	50.0	10	50.0	0	0
29	Uttar Pradesh	219	59	26.9	57	26.0	39	17.8	45	20.5	13	5.9	6	2.7	155	70.8	64	29.2	0	0
30	Uttarakhand	45	21	46.7	4	8.9	2	4.4	9	20.0	5	11.1	4	8.9	27	60.0	18	40.0	0	0
31	West Bengal	323	96	29.7	107	33.1	70	21.7	31	9.6	10	3.1	9	2.8	273	84.5	50	15.5	0	0
Total		12448	4869	39.1	1719	13.8	1163	9.3	3285	26.4	770	6.2	605	4.9	7751	62.3	4660	37.4	37	0.3

** Water Level data of State Govt. departments

CGWB data of Premonsoon 2019 compared with Decadal Average (2009-2018)

NOTE: Due to Covid 19 Pandemic and Lockdown in the Country, Premonsoon Monitoring could not be carried out in few States/UTs. So, Water Level data of State Govt is considered. Moreover, Water level monitoring could not be carried out during the prescribed Premonsoon period in few States/ UTs and hence, measured during the months of June and July 2020.