GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI,

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 1429

ANSWERED ON 15.12.2022

RATE OF DEPLETION OF GROUND WATER RESOURCES

1429 SHRIMATI PRATIMA MONDAL

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

(a) the average rate of depletion of ground water resources;

(b) the data on annual ground water exploitation for the last five years, State-wise;

(c) the number of districts facing overexploitation of ground water, State-wise;

(d) the reasons for the poor water management in the country; and

(e) the steps being taken by the Government to reduce exploitation of water in the country?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU**)**

(a) Availability of groundwater resources in an area depends on a number of factors like intensity & period of rainfall, geological strata of the area, number of existing recharge structures, extraction by consumers for various purposes like industrial applications, drinking/domestic purposes, irrigation etc and therefore, the increase or, depletion rate of the groundwater resources will be different for different areas.

However, the comparison of groundwater extraction between the years 2020 and 2022 (as assessed by the Central Ground Water Board (CGWB) and States) indicates decrease in extraction (on an average for the entire country) from around 244.92 Billion Cubic meter (BCM) to 239.16 BCM. Further, in order to assess the long term fluctuation in ground water level, the water level data collected by CGWB (through a set of monitoring network) during November 2021 when compared with the decadal mean of November 2011 to Nov 2020 indicates that about 70 % wells have registered rise in water level whereas, about 30% of the wells monitored have registered decline in ground water level.

(b) CGWB is not compiling the information with respect to year-wise extraction of groundwater resources, however, the State-wise details in this regard as assessed by the CGWB in collaboration with States/UTs for the last three assessments viz. for the years 2017, 2020 and 2022 are given at **Annexure I**.

(c) The groundwater resource estimation in the country is being done at assessment units (blocks, mandals, talukas etc) level. The State-wise details of over-exploited assessment units vis-à-vis total number of available assessment units in the States are given at **Annexure II**.

(d) Increased demand of fresh water for various uses, vagaries of rainfall, increased population;

industrialization, urbanization etc. have impacted the sustainable water management in the country, however, appropriate efforts are being made by the Government including all stakeholders through policy/site interventions to achieve the desired objective.

(e) Though water is a State subject, Central Government has taken a number of important measures for conservation, management of ground water including effective implementation of rain water harvesting in the country, which can be seen at http://jalshakti-dowr.gov.in/sites/default/files/Steps%20taken%20by%20the%20Central%20Govt%20for%20water_depletion_july2022.pdf

The Central Government has notified groundwater regulation guidelines dated 24.09.2020 for controlling the extraction of groundwater by various consumers/project proponents like industries, infrastructure projects and mining projects under which No Objection Certificate (NOC) for extraction has been made mandatory.

Government of India is implementing Jal Shakti Abhiyan (JSA) in the country. First JSA was launched in 2019 in water stressed blocks of 256 districts which continued during the year 2021 (across entire country both rural and urban areas) also with the primary aim to effectively harvest the monsoon rainfall through creation of artificial recharge structures, watershed management, recharge and reuse structures, intensive afforestation and awareness generation etc. JSA for the year 2021 and 2022 were launched by Hon'ble Prime Minister and Hon'ble President on 22.03.2021 and 29.03.2022 respectively.

Hon'ble Prime Minister launched Amrit Sarovar Mission on 24th April 2022. The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country as a part of celebration of Azadi ka Amrit Mahotsav.

Central Government is implementing Atal Bhujal Yojana with an outlay of Rs. 6,000 crore, in collaboration with States, in certain water stressed areas of Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh. The primary aim of the scheme is demand side management through scientific means involving the local communities at village levels leading to sustainable groundwater management in the targeted areas.

CGWB is implementing National Aquifer Mapping Program (NAQUIM) with an aim to identify the groundwater aquifer system along-with their characterization for its sustainable management. Out of the total mappable area of nearly 25 lakh sq km, nearly 24.4 lakh sq km of the area (as on 30th November 2022) in the country has been covered. The balance area has been targeted to be covered by March 2023. The NAQUIM study report along with management plans are shared with States/UTs for suitable interventions.

Water is a State subject and several States have done notable work in the field of water conservation/harvesting such as 'Mukhyamantri Jal Swavlamban Abhiyan' in Rajasthan, 'Jalyukt Shibar' 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, and Kudimaramath scheme in Tamil Nadu.

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ANNEXURE I

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1429 TO BE ANSWERED IN LOK SABHA ON 15.12.2022 REGARDING "RATE OF DEPLETION OF GROUND WATER RESOURCES"

State-wise data on annual ground water exploitation for the past five years

S. No.	States / Union Territories	2017		2020		2022	
		Annual Ground Water Extraction-2017 (in bcm)	Stage of Ground Water Extraction (%) -2017	Annual Ground Water Extraction-2020 (in bcm)	Stage of Ground Water Extraction (%) -2020	Annual Ground Water Extraction -2022 (in bcm)	Stage of Ground Water Extraction (%) -2022
1	Andhra Pradesh	8.90	44.15	7.63	33.26	7.45	28.81
2	Arunachal Pradesh	0.01	0.28	0.01	0.36	0.03	0.79
3	Assam	2.73	11.25	2.58	11.73	2.65	12.38
4	Bihar	13.26	45.76	13.02	51.14	13.5	44.94
5	Chhattisgarh	4.70	44.43	5.35	46.34	5.46	49.58
6	Delhi	0.36	119.61	0.29	101.40	0.36	98.16
7	Goa	0.05	33.50	0.08	23.48	0.078	23.63
8	Gujarat	13.58	63.89	13.30	53.39	13.09	53.23
9	Haryana	12.50	136.91	11.61	134.56	11.54	134.14
10	Himachal Pradesh	0.39	86.37	0.36	36.83	0.35	37.56
11	Jharkhand	1.58	27.73	1.64	29.13	1.78	31.35
12	Karnataka	10.34	69.87	10.63	64.85	11.22	69.93
13	Kerala	2.67	51.27	2.65	51.68	2.73	52.56
14	Madhya Pradesh	18.88	54.76	18.97	56.82	19.25	59.1
15	Maharashtra	16.33	54.62	16.63	54.99	16.65	54.68
16	Manipur	0.01	1.44	0.02	5.12	0.04	7.95
17	Meghalaya	0.04	2.28	0.08	4.22	0.05	3.55
18	Mizoram	0.01	3.82	0.01	3.81	0.01	3.96
19	Nagaland	0.02	0.99	0.02	1.04	0.02	2.89
20	Odisha	6.57	42.18	6.86	43.65	7.23	44.25
21	Punjab	35.78	165.77	33.85	164.42	28.02	165.99
22	Rajasthan	16.77	139.88	16.63	150.22	16.56	151.07
23	Sikkim	0.00	0.06	0.01	0.86	0.0147	6.04
24	Tamil Nadu	14.73	80.94	14.67	82.93	14.43	75.59
25	Telangana	8.09	65.45	8.01	53.32	8	41.6
26	Tripura	0.10	7.88	0.10	7.94	0.10	9.70
27	Uttar Pradesh	45.84	70.18	46.03	68.83	46.14	70.66
28	Uttarakhand	1.64	56.83	0.87	46.80	0.89	48.04
29	West Bengal*	11.84	44.60	11.84	44.60	10.07	47.01
30	Andaman and Nicobar	0.01	2.74	0.01	2.60	0.0075	1.35
31	Chandigarh	0.03	89.00	0.05	80.60	0.04	80.99
32	Dadra & Nagar Haveli	0.02	31.34	0.03	45.99	0.11	133.2
	Daman & Diu	0.01	61.40	0.03	113.38	0.057	157.927
33	Jammu and Kashmir	0.76	29.47	0.89	21.03	1.07	24.18
34	Ladakh			0.02	17.90	0.03	41.36
35	Lakshadweep	0.00	65.99	0.00	58.47	0	61.6
36	Puducherry	0.15	74.33	0.15	74.27	0.13	69.17
	Grand Total	**248.69**	**63.33**	**244.92**	**61.60**	**239.16**	**60.08**

*** The Ground Water resources assessment (2017 & 2020) as on 2013 has been considered for the State of West Bengal.**

ANNEXURE II

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 1429 TO BE ANSWERED IN LOK SABHA ON 15.12.2022 REGARDING "RATE OF DEPLETION OF GROUND WATER RESOURCES"

The State wise details of the numbers of districts have over exploited assessment units

S.No.	State/Union Territories	Total No. of Assessed Units	Over-Exploited
	States		**Nos.**
1	**Andhra Pradesh**	667	6
2	**Arunachal Pradesh**	11	
3	**Assam**	28	
4	**Bihar**	535	8
5	**Chhattisgarh**	146	
6	**Delhi**	34	15
7	**Goa**	12	
8	**Gujarat**	252	23
9	**Haryana**	143	88
10	**Himachal Pradesh**	10	
11	**Jharkhand**	263	5
12	**Karnataka**	234	49
13	**Kerala**	152	
14	**Madhya Pradesh**	317	26
15	**Maharashtra**	353	11
16	**Manipur**	9	
17	**Meghalaya**	12	
18	**Mizoram**	26	
19	**Nagaland**	11	
20	**Odisha**	314	
21	**Punjab**	153	117
22	**Rajasthan**	302	219
23	**Sikkim**	6	
24	**Tamil Nadu**	1166	360
25	**Telangana**	594	13
26	**Tripura**	59	
27	**Uttar Pradesh**	836	63
28	**Uttarakhand**	18	
29	**West Bengal**	345	
30	**Andaman and Nicobar**	36	
31	**Chandigarh**	1	
32	**Dadra & Nagar Haveli**	1	1
	Daman & Diu	2	2
33	**Jammu and Kashmir**	20	
34	**Ladakh**	8	
35	**Lakshadweep**	9	
36	**Puducherry**	4	
	Grand Total	**7089**	**1006**

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