

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

UNSTARRED QUESTION NO. 2174

ANSWERED ON 20.03.2023

DYNAMIC GROUND WATER RESOURCE ASSESSMENT REPORT

2174. DR. DHARMASTHALA VEERENDRA HEGGADE

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

- (a) whether Government has recently released the Dynamic Ground Water Resource Assessment Report for the entire country for the year 2022;
- (b) if so, the details thereof, including the key findings;
- (c) the number of assessment units in the country categorized as 'Over-exploited', Statewise;
- (d) whether it is a fact that India is the largest user of groundwater in the world;
- (e) whether it is also a fact that in 20 years, about 60 per cent of all India's aquifers will be in a critical condition; and
- (f) if so, the interventions being planned by Government for efficient use of groundwater in the country?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) Yes sir.

(b) The Dynamic Ground Water Resources Assessment of the country is being carried out periodically by Central Ground Water Board (CGWB) jointly with States/UTs. As per the 2022 assessment, Total Annual Ground Water Recharge is 437.60 Billion Cubic Meter (BCM) and the Annual Extractable Ground Water Resource is 398.08 BCM. The Annual Ground Water Extraction for all uses is 239.16 BCM. The Stage of Ground Water Extraction, which is a measure of Annual Ground Water Extraction for all uses (irrigation, industrial and domestic uses) over Annual Extractable Ground Water Resources is 60.08% for the country as a whole. Assessment unit-wise groundwater resource report can be seen at web-link - <http://cgwb.gov.in/documents/2022-11-11-GWRA%202022.pdf>

(c) As per the 2022 assessment, out of the total 7089 assessment units (Block/ Taluks/ Mandals/ watersheds/ Firkas) in the country, 1006 units (14%) in 15 States/UTs have been categorized as 'Over-exploited' where the Annual Ground Water Extraction is more than Annual Extractable Ground Water Resource. The State-wise details are given at **Annexure**.

(d) Such information is not readily available, however, as per a UN report, India is among top countries with the highest shares in groundwater withdrawal in 2017.

(e) No such information is available, however, groundwater is a replenishable resource and gets replenished every year on account of recharge from rainfall & other sources and its availability depends upon fresh water demand due to increasing population, industrialization, urbanisation, vagaries of rainfall etc.

Further, as per 2022 Assessment, only 14% (i.e. 1006 assessment units) of the total assessment unit (i.e.7,089 assessment units) in the country have been categorised as ‘over-exploited’ whereas the 2017 assessment shows that around 17 % assessment units (i.e. 1186 assessment units out of 6,881 assessment units) were over-exploited . Further , 2022 assessment data when compared with 2017 assessment information indicates that Safe assessment units have increased from 63 % (i.e. 4,310 assessment units out of 6,881 assessment units during 2017) to 67 % (i.e. 4,780 assessment units out of 7,089 assessment units during 2022).

(f) Water being State subject taking suitable steps for sustainable management of groundwater is States’ responsibility, however a number of initiatives have been taken by the Central Government in this direction which can be seen at https://jalshaktidowr.gov.in/sites/default/files/Steps%20taken%20by%20the%20Central%20Govt%20for%20water_depletion_july2022.pdf

Some of the important initiatives are given as under.

- i. 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 years 2021, 2022 (across entire country both rural and urban areas) 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 2023 have been launched by Hon'ble President of India on 04 Mar 2023 with the theme “Source Sustainability for Drinking Water”.
- ii. Hon’ble Prime Minister has 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.

- iii. Central Ground Water Authority (CGWA) has been constituted under Section 3(3) of the "Environment (Protection) Act, 1986" for the purpose of regulation and control of ground water by industries, mining projects, infrastructure projects etc in the country. The latest guideline in this regard with pan-India applicability was notified by the Ministry on 24 September 2020. CGWA and States issue No Objection Certificate (NOC) for extraction of groundwater to various industries/project proponents as per their jurisdiction and as per the extant guidelines.
- iv. The 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.
- v. CGWB is implementing National Aquifer Mapping Program (NAQUIM) in the country and all the mappable area (i.e. 25.15 lakh Sq Km) of the country has been covered under the NAQUIM studies. The NAQUIM study report along-with management plans are shared with States/UTs for suitable interventions.
- vi. Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by the CGWB with States/UTs providing a broad outline of the project and expected investments. The Master Plan envisages construction of about 1.42 crore Rain water harvesting and artificial recharge structures in the Country to harness 185 Billion Cubic Metre (BCM) of water. The Master plan has been shared with States/UTs for suitable intervention.

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 2174 TO BE ANSWERED IN RAJYA SABHA ON 20.03.2023 REGARDING “DYNAMIC GROUND WATER RESOURCE ASSESSMENT REPORT”.

S.No.	State/Union Territories	Total No. of Assessed Units	Over-Exploited	
			Nos.	%
	States			
1	Andhra Pradesh	667	6	0.9
2	Arunachal Pradesh	11		
3	Assam	28		
4	Bihar	535	8	1.50
5	Chhattisgarh	146		
6	Delhi	34	15	44.12
7	Goa	12		
8	Gujarat	252	23	9.13
9	Haryana	143	88	61.54
10	Himachal Pradesh	10		
11	Jharkhand	263	5	1.90
12	Karnataka	234	49	20.94
13	Kerala	152		
14	Madhya Pradesh	317	26	8.20
15	Maharashtra	353	11	3.12
16	Manipur	9		
17	Meghalaya	12		
18	Mizoram	26		
19	Nagaland	11		
20	Odisha	314		
21	Punjab	153	117	76.47
22	Rajasthan	302	219	72.52
23	Sikkim	6		
24	Tamil Nadu	1166	360	30.87
25	Telangana	594	13	2.20
26	Tripura	59		
27	Uttar Pradesh	836	63	7.54
28	Uttarakhand	18		
29	West Bengal	345		
30	Andaman and Nicobar	36		
31	Chandigarh	1		
32	Dadra & Nagar Haveli	1	1	100.00
	Daman & Diu	2	2	100.00
33	Jammu and Kashmir	20		
34	Ladakh	8		
35	Lakshadweep	9		
36	Puducherry	4		
	Grand Total	7089	1006	14.19

Note-

Blocks- Bihar, Chhattisgarh, Haryana, Jharkhand, Kerala, Madhya Pradesh, Manipur, Mizoram, Odisha, Punjab, Rajasthan, Tripura, Uttar Pradesh, Uttarakhand, West Bengal

Taluku- Goa, Gujarat, Karnataka, Maharashtra

Mandals- Andhra Pradesh, Telangana

District- Arunachal Pradesh, Assam, Meghalaya, Nagaland, Sikkim, Dadra & Nagar Haveli, Daman & Diu, Jammu & Kashmir

Valley- Himachal Pradesh, Ladakh

Islands- Andaman & Nicobar, Lakshadweep

Firka- Tamil Nadu

Region- Puducherry

UT- Chandigarh

Tehsil- Delhi