

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

RAJYA SABHA
UNSTARRED QUESTION NO. 2258

ANSWERED ON 16.12.2024

STATUS OF MAHANADI INTER-STATE RIVER WATER DISPUTES

2258. DR. SASMIT PATRA

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

- (a) the status of the Mahanadi river inter-State river water disputes between Odisha and Chhattisgarh;
- (b) the steps being taken by Government to find a solution to this problem; and
- (c) the reason Government is not impleading itself before the Mahanadi Tribunal to expedite the solution of this issue?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) For adjudication of disputes relating to waters of inter-State rivers and river valley thereof, the Parliament has enacted the Inter-State River Water Disputes (ISRWD) Act, 1956. When any request under the said Act is received from any State Government in respect of any water dispute on the inter-State rivers, and the Central Government is of the opinion that the water dispute cannot be settled by negotiations, the Central Government constitutes a Water Disputes Tribunal for the adjudication of the said water dispute.

So far as Mahanadi River Water Dispute is concerned, the Government of Odisha submitted a complaint dated 19.11.2016 to the Central Government on Mahanadi River Water Dispute under section 3 of the ISRWD Act, 1956. The State of Odisha requested to Union Government for constitution of a Tribunal under section 4(1) of the said Act for adjudication of the water disputes in respect of the inter-State River Mahanadi and its basin between the riparian States of Odisha and Chhattisgarh.

The Central Government constituted a Negotiation Committee for settlement of the dispute through negotiation. The Negotiation Committee submitted its report in May, 2017 in which it was concluded that the dispute cannot be resolved by negotiation. The Government of Odisha also filed Original Suit No.1/2017 before Hon'ble Supreme Court. On the direction of Hon'ble Supreme Court, the Central Government constituted Mahanadi Water Disputes Tribunal vide Gazette Notification No. S.O. 1114(E) dated 12.03.2018 and referred the matter of water dispute raised by Odisha to the Tribunal in April, 2018 for adjudication. Presently, the matter is sub-judice before the Hon'ble Tribunal.

(c) As per Rule 3 of the Inter-State River Water Disputes Rules, 1959 framed under Section 13 of the ISRWD Act, 1956, the concerned State Government while communicating its request to the Central Government for constitution of the Tribunal, has to specify the parties to the water dispute. The Central Government is not mentioned as party to the Mahanadi River water disputes in the complaint sent by the State. Further, there is no provision in the ISRWD Act 1956 enabling the Central Government to become party before the Tribunal for proceedings under Section 5(2) of the said Act, while the Mahanadi Water Disputes Tribunal is conducting the adjudication process for report and decision u/s 5(2) of the ISRWD Act, 1956.

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RAJYA SABHA
UNSTARRED QUESTION NO. 2301

ANSWERED ON 16.12.2024

GANGA UTSAV 2024

2301. SHRI LAHAR SINGH SIROYA DR. MEDHA VISHRAM KULKARNI
 SHRI BABURAM NISHAD SHRI BABUBHAI JESANGBHAI DESAI

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

- (a) the role of Ganga Utsav in promoting conservation and reverence for Maa Ganga;
- (b) the number of district in Ganga basin which participated in Ganga Utsav 2024; and
- (c) the importance of Jan Bhagidari in water conservation?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI
(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The objective of Ganga Utsav is to invoke public awareness, participation, engagement, and behavioral changes in the people living along the Ganga basin. The Utsav highlights the significance of Jan Bhagidari in the revival of the Ganga, with a focus on encouraging stakeholder engagement and public participation towards the rejuvenation of the river Ganga.

Ganga Utsav 2024 was a blend of technical, cultural, spiritual, and educational activities aimed at river rejuvenation. For the first time, a central-level event was celebrated on the banks of the river Ganga to act as a model festival for celebrating rivers in India. The event included broad-based participation from school children, college students, river professionals, officers of Urban Local Bodies, partners of NMCG, companies, spiritual leaders, officers of the Union and State Government of Uttarakhand, and NMCG officers and staff. The event was organized on Chandi Ghat in Haridwar, Uttarakhand State.

The event included technical sessions on “Citizen-led Urban River Management”, Treated Water Reuse: Policy to Practice, and International Collaboration for river rejuvenation. A spiritual session was organized to discuss deep rooted connection between spirituality and the preservation of the river. Ganga-related films were shown along with storytelling sessions to engage youth and children with the rivers. Exhibitions by various stakeholders showcased technologies, biodiversity, initiatives, and the impact of Namami Gange and other relevant themes. Ganga Aarti strengthened the river connect with the citizens aiming at promoting sustainable development in and around the Ganga basin.

(b) There are 139 districts that have been notified as a District Ganga Committee along Ganga main stem States. More than 110 districts celebrated Ganga Utsav in 2024.

(c) People's participation is key to the conservation and efficient management of water resources. A collective effort from all spheres of society including the public at large is key to the sustainability of the various initiatives and activities toward water conservation. Reduce, Recycle, and Reuse principle for promotion of reducing water usage at the Household level, Conservation of water by Rain water harvesting, treated water reuse at the community level, etc. are some of the activities promoted for raising awareness about water conservation and sustainable water practices.

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RAJYA SABHA

UNSTARRED QUESTION NO. 2302

ANSWERED ON 16.12.2024

FLOODS IN THE COUNTRY

2302. SHRI AKHILESH PRASAD SINGH

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

- (a) the details regarding the floods in the country during the last five years, year-wise, region-wise;
- (b) whether Government has details regarding the floods during the last five years caused due to dams;
- (c) if so, the details thereof;
- (d) whether it is a fact that the country has 5745 dams of which 293 are more than 100 years old and 25 per cent of the dams are between 50 to 100 years old; and
- (e) if so, the details regarding the steps taken to make the dams better equipped to respond to climate change?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (c) Floods are primarily a natural calamity that India faces almost every year, in varying degrees of magnitude. Central Water Commission (CWC) is the nodal organisation for flood forecasting and flood monitoring in the country. CWC maintains two types of forecasting stations that operates across the country viz. Level Forecast and Inflow Forecast. The level forecasts help local administration and other agencies to decide on mitigating measures, such as evacuating people and their movable property to safer locations.

One of the functions of dams is to cater flood mitigation by providing flood cushion and regulating the flood intensity with the help of inflow forecast. CWC issues inflow forecast for various reservoirs and dams, once inflow exceeds a certain threshold value. This is used by project authorities for the optimum operation of reservoirs to ensure safe passage of floodwaters downstream and to ensure adequate storage in the reservoirs for meeting demand during the non-monsoon period.

As per CWC network, the details of Extreme floods (water level exceeding the previous highest flood level) in the last five years is given at **Annexure**.

(d) & (e) As per National Register of Large Dams (NRLD-2023 edition), compiled jointly by National Dam Safety Authority (NDSA) and CWC, there are 6138 constructed and 143 under construction dams which aggregate to total of 6281 large dams. Of these numbers, only 224 dams are

more than 100 years old and there are 1065 large dams which are 50 to 100 years old. The details of these large dams are available at <http://cwc.gov.in/publication/nrld>.

Further, Government of India has enacted Dam Safety Act, 2021. The act provides for the surveillance, inspection, operation, and maintenance of the specified dam for the prevention of dam failure-related disasters and to provide for institutional mechanisms to ensure their safe functioning and for matters connected therewith or incidental thereto.

Under the Act, two institutions at each Central (NCDS and NDSA) and State Level (SCDS and SDSO) has been established to monitor and safe upkeep of specified dams. To be better equipped to respond to climate change related dam safety issues, there is mandatory provision of Design Flood Review (DFR) of specified dams under section 38 of Dam Safety Act. Based on the revised value of DFR, the possible structural or non-structural measures are taken by dam owners for safe operation of dams.

As per notified regulations of National Dam Safety Authority: "The design flood review referred to in clause (b) of sub-section (2) of section 38 of the Act shall be carried out every ten years or such lesser period as may be determined by the National Dam Safety Authority".

Further, as per section 35 of Dam Safety Act, owner of the dam has mandatory obligation for establishment and running of the Early Warning System (EWS) for the exchange of real time hydrological and meteorological data and information related to the operation of reservoirs.

Further, DoWR, RD & GR, MoJS through CWC is implementing externally funded scheme DRIP Phase-II and III for rehabilitation of 736 selected dams of 19 States and 3 Central Agencies. Under the scheme, there is mandatory pre-requirement of Design Flood Review of dam before preparation of any rehabilitation works based on the inspection visit.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (c) OF UNSTARRED QUESTION NO. 2302 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “FLOODS IN THE COUNTRY”.

Flood Forecasting Stations which experienced Extreme Flood Situation for the period 2020-2024

Year	State	District	River	Flood Forecasting Station
2020	Assam	Sivasagar	Dikhow	Sivasagar
	Bihar	Gopalganj	Gandak	Dumariaghat
		Muzzafarpur	Gandak	Rewaghat
		Samastipur	BurhiGandak	Rosera
	Odisha	Balasore	Jalaka	Mathani Road Bridge
	Andhra Pradesh	East Godavari	Sabri	Chinturu
	Karnataka	Gulbarga	Bhima	Deongaon Bridge
2021	Bihar	Patna	Ganga	Hatidah
		Bhagalpur	Ganga	Bhagalpur
	Uttar Pradesh	Auraiya	Yamuna	Auraiya
		Buduan	Ganga	Kachlabridge
		Siddarthnagar	Rapti	Bansi
	Odisha	Balasore	Jalaka	Mathani Road Bridge
	West Bengal	Coochbehar	Teesta	Mekhliganj(R/B)
	Andhra Pradesh	Nellore	Pennar	Nellore Anicut
2022	Assam	Nagaon	Kopili	Kampur
	Bihar	Kishanganj	Mahananda	Taibpur
		Supaul	Kosi	Basua
		Siwan	Ghagra	Darauli
	Telangana	Bhupalpally	Godavari	Kaleswaram
		Kumarambheem	Wardha	Sirpur(T)
	Andhra Pradesh	AlluriSitharamaraju	Sabri	Chinturu
	Rajasthan	Karauli	Chambal	Manderial
		Dholpur	Chambal	Dholpur
	Uttar Pradesh	Balrampur	Rapti	Balrampur
		Siddharthnagar	Rapti	Bansi
2023	NCT Delhi	North Delhi	Yamuna	Delhi Railway Bridge
	Uttar Pradesh	Budaun	Ganga	Kachlabridge
	Assam	Sivasagar	Dikhow	Sivasagar
	Telangana	Kumurambheem	Wardha	Sirpur Town
	Sikkim	South Sikkim	Teesta	Melli
2024 (till Octobe r)	Assam	Jorhat	Brahmaputra	Neamatighat
		Sonitpur	Jiabharali	Jia-Bharali NT Road Crossing
		Sivasagar	Dikhow	Sivasagar
		Dibrugarh	Buridehing	Khowang
	Bihar	Sitamarhi	Bagmati	Dheng Bridge
		Muzzafarpur	Bagmati	Runisaidpur

GOVERNMENT OF INDIA
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RAJYA SABHA
UNSTARRED QUESTION NO. 2303

ANSWERED ON 16.12.2024

WATER SCARCITY PROBLEM

2303. SHRI AKHILESH PRASAD SINGH

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

- (a) whether Government has taken any steps to address the water scarcity problem highlighted by a National Green Tribunal monitoring committee that announced recently that Punjab's groundwater will drop below 300m by the year 2039;
- (b) if so, the details thereof;
- (c) whether Government has taken any steps pursuant to the 2020 block-wise groundwater resources assessment by the Central Ground Water Board (CGWB) that found that most of the districts in Punjab had over-exploited the groundwater levels;
- (d) if so, the details thereof; and
- (e) if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) The Central Ground Water Board (CGWB) monitors groundwater levels throughout the country including in the state of Punjab at regular intervals. The district-wise ground water level measured for the Month of November 2023 for the State of Punjab is given in **Annexure**. In the state of Punjab, out of the wells monitored, 64.60% wells have shown water level between 0 to 20 meters below ground level (mbgl). Further, in order to assess the long term fluctuation in ground water level in the State of Punjab, the water level data collected by CGWB in Punjab during November 2023 has been compared with the decadal mean of November (2013-2022). Analysis of water level data indicates that about 34.60% of the wells monitored have registered rise in ground water level.

Water being a State subject, addressing water scarcity problem, including taking corrective action, falls under the mandate of State governments. The Central Government complements the efforts of the States by providing technical support and financial assistance through its various centrally sponsored schemes. Some of the important steps taken by the Ministry to check ground water depletion in the country, including in the State of Punjab 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, including 10 such districts in Punjab. 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, including 50,369 sq km of Punjab, 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. Master plan for the state of Punjab recommends construction of about 11 lakh structures to harness about 1200 MCM of rain-water.
- iv. Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop (PDMC) Scheme in the country, including Punjab, 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 data available, an area of 15,173 Ha was covered under PDMC in Punjab up to Feb 2024.
- 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 Punjab. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country with 1,450 in Punjab.
- vi. Details of several other significant initiatives of the Government of India for improvement of groundwater situation in the country can be seen through the link below-
<https://jalshakti-dowr.gov.in/document/steps-taken-by-the-central-government-to-control-water-depletion-and-promote-rain-water-harvesting-conservation/>

(c) to (e) Dynamic Ground Water Resources Assessment of the country is conducted on a regular basis by CGWB in association with States/UTs and since 2022, the exercise has been made annual. As per the latest available report of 2023, the Stage of ground water Extraction(SoE), which is a ratio of total ground water extraction for all uses over total extractable ground water in the region, for the state of Punjab is assessed at 163.76%, marking a slight improvement over the SoE of 2020 when it was 164.42%. Further, the total percentage of safe assessment units in Punjab has increased from 11.33% to 13.07% during the subject period. Here it is worth mentioning that groundwater being a replenishable resource gets recharged every year through rainfall and other sources such as return flow from irrigation, canal seepage, recharge from surface water bodies etc. and with collective and consistent efforts the situation can be substantially improved.

In order to ameliorate the ground water situation in Punjab and to promote its sustainable management, the government has taken following notable initiatives:

- i. National Water Policy (2012) has been formulated by Department of Water Resources, RD & GR, envisages evolving an agricultural system which economizes on water use and maximizes value from water, and bringing in maximum efficiency in use of water and avoiding wastages. The Policy has been forwarded to all States/UTs concerned Ministries/Departments of Central Government for adoption.
- ii. MoJS is promoting conjunctive use of surface water and groundwater and to reduce over-dependence on groundwater in the country under PMKSY-AIBP scheme in collaboration with States/UTs under which surface water based Major and Medium irrigation projects have been taken up.
- iii. Based on the advisories of MoJS to States to review their free/subsidized electricity policy to farmers, bring suitable water pricing policy and to work further towards crop rotation/diversification/other initiatives to reduce over-dependence on groundwater, Department of Agriculture, Punjab is pursuing hard to diversify the acreage under paddy to other less water consuming crops by extending incentives to farmers.
- iv. Based on the advice of the Ministry of Jal Shakti, the Punjab Water Resources Regulation and Development Authority (PWRDA) has been established under section 3 of Punjab Water Resources (Management and Regulation) Act, 2020 Act to ensure conservation, management and regulation of water resources in the State.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 2303 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “WATER SCARCITY PROBLEM”.

The District-wise Ground Water Level Data for the Post-Monsoon 2023 in respect of State of Punjab

Sr. 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	Amritsar	10	0	0.0	1	10.0	2	20.0	3	30.0	4	40.0	0	0.0
2	Barnala	5	0	0.0	0	0.0	0	0.0	0	0.0	2	40.0	3	60.0
3	Bathinda	25	0	0.0	1	4.0	4	16.0	10	40.0	10	40.0	0	0.0
4	Faridkot	18	1	5.6	7	38.9	1	5.6	7	38.9	2	11.1	0	0.0
5	Fatehgarh Sahib	12	1	8.3	0	0.0	0	0.0	2	16.7	9	75.0	0	0.0
6	Fazilka	17	6	35.3	8	47.1	2	11.8	1	5.9	0	0.0	0	0.0
7	Firozpur	12	1	8.3	5	41.7	2	16.7	3	25.0	1	8.3	0	0.0
8	Gurdaspur	21	1	4.8	8	38.1	4	19.0	7	33.3	1	4.8	0	0.0
9	Hoshiarpur	23	2	8.7	4	17.4	6	26.1	4	17.4	6	26.1	1	4.3
10	Jalandhar	13	0	0.0	0	0.0	3	23.1	3	23.1	7	53.8	0	0.0
11	Kapurthala	7	0	0.0	0	0.0	0	0.0	4	57.1	3	42.9	0	0.0
12	Ludhiana	14	3	21.4	1	7.1	1	7.1	6	42.9	3	21.4	0	0.0
13	Mansa	6	0	0.0	1	16.7	1	16.7	1	16.7	3	50.0	0	0.0
14	Moga	10	0	0.0	0	0.0	0	0.0	2	20.0	6	60.0	2	20.0
15	Muktsar	11	5	45.5	5	45.5	0	0.0	1	9.1	0	0.0	0	0.0
16	Pathankot	12	3	25.0	6	50.0	2	16.7	1	8.3	0	0.0	0	0.0
17	Patiala	18	4	22.2	0	0.0	0	0.0	0	0.0	9	50.0	5	27.8
18	Rupnagar	10	1	10.0	3	30.0	2	20.0	1	10.0	3	30.0	0	0.0
19	Sangrur	9	0	0.0	0	0.0	0	0.0	0	0.0	3	33.3	6	66.7
20	SAS Nagar	13	1	7.7	5	38.5	3	23.1	2	15.4	0	0.0	2	15.4
21	SBS Nagar	5	0	0.0	0	0.0	1	20.0	1	20.0	3	60.0	0	0.0
22	Taran Taran	12	0	0.0	0	0.0	0	0.0	6	50.0	6	50.0	0	0.0
Total		283	29	10.2	55	19.4	34	12.0	65	23.0	81	28.6	19	6.7

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RAJYA SABHA

UNSTARRED QUESTION NO. 2306

ANSWERED ON 16.12.2024

WATER CONSERVATION IN CITIES OF THE COUNTRY

2306. MS. DOLA SEN

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

- (a) whether Government plans to launch any initiatives to utilize atomic energy for efficient water management in the country's cities, particularly for desalination of groundwater recharge, if so, the details thereof, if not, the reasons therefor;
- (b) whether Government has conducted studies on the status of groundwater resources in metros like Mumbai, Delhi, and Bengaluru; and
- (c) if so, the details thereof, if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Desalination using multi effect distillation technology using a small fraction of heat / electrical energy generated from nuclear reactor is used to produce potable as well as demineralized water from sea-water which has high salinity. Presently, one such plant coupled with Madras Atomic Power Station (MAPS), Kalpakkam, is operational. However, the technology is suitable at the locations where reject heat is available from sources such as Nuclear Power Plants. It has been established that Reverse Osmosis Membrane technology would be suitable for treatment of groundwater.

(b) to (c) The Dynamic Ground Water Resources of the country is assessed jointly by Central Ground Water Board (CGWB) and State Governments including urban area like Delhi and Bengaluru. For the assessment Year 2023, the dynamic ground water resources of the urban areas of Delhi and Bengaluru is presented in **Annexure-I & Annexure-II** respectively. However, the dynamic ground water resources for the Mumbai Metropolitan area could not be assessed in 2023 due to insufficient data. Also, the investigation on groundwater recharge mechanism in National Capital Region (NCR) has been done by the Department of Atomic Energy with the aim to evaluate sustainability of groundwater resources in highly urbanized National Capital Region.

ANNEXURE REFERRED TO IN REPLY TO PART (b) to (c) OF UNSTARRED QUESTION NO. 2306 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “WATER CONSERVATION IN CITIES OF THE COUNTRY”.

Dynamic Ground Water Resources of Delhi Urban Area (as per assessment Year 2023)

Sl. No	State	District	Assessment Unit Name	Annual Extractable Ground Water Resource (Ham)	Total Extraction (Ham)	Stage Of Ground Water Extraction (%)	Categorization (Over-Exploited/ Critical/Semi-Critical/Safe/ Saline)
1	DELHI	CENTRAL	CIVIL LINES	1420.91	970.53	68.3	Safe
2	DELHI	CENTRAL	KAROL BAGH	150.11	171.83	114.47	Over-Exploited
3	DELHI	CENTRAL	KOTWALI	635.33	598.6	94.22	Critical
4	DELHI	EAST	GANDHI NAGAR	79.5	72.7	91.45	Critical
5	DELHI	EAST	MAYUR VIHAR	719.03	711.15	98.9	Critical
6	DELHI	EAST	PREET VIHAR	673.88	609.06	90.38	Critical
7	DELHI	NAZUL LAND	NAZUL LAND	458.9	314.04	68.43	Safe
8	DELHI	NEW DELHI	CHANAKYAPURI	535.32	703.67	131.45	Over-Exploited
9	DELHI	NEW DELHI	DELHI CANTONMENT	1023.75	1281.58	125.18	Over-Exploited
10	DELHI	NEW DELHI	VASANT VIHAR	1062.67	1627.27	153.13	Over-Exploited
11	DELHI	NORTH	ALIPUR	1806.39	1615.52	89.43	Semi-Critical
12	DELHI	NORTH	MODEL TOWN	535.83	518.62	96.79	Critical
13	DELHI	NORTH	NARELA	1865.92	2458.85	131.78	Over-Exploited
14	DELHI	NORTH EAST	KARAWAL NAGAR	610.64	694.88	113.8	Over-Exploited
15	DELHI	NORTH EAST	SEELAMPUR	724.34	616.84	85.16	Semi-Critical
16	DELHI	NORTH EAST	YAMUNA VIHAR	262.73	378.66	144.13	Over-Exploited
17	DELHI	NORTH WEST	KANJHAWALA	843.29	574.14	68.08	Safe
18	DELHI	NORTH WEST	ROHINI	2126.74	1299.64	61.11	Safe
19	DELHI	NORTH WEST	SARASWATI VIHAR	484.13	404.52	83.56	Semi-Critical
20	DELHI	SHAHDARA	SEEMAPURI	494.85	490.58	99.14	Critical
21	DELHI	SHAHDARA	SHAHDARA	375	448.78	119.67	Over-Exploited
22	DELHI	SHAHDARA	VIVEK VIHAR	577.45	729.74	126.37	Over-Exploited
23	DELHI	SOUTH	HAUZ KHAS	972.53	970.78	99.82	Critical
24	DELHI	SOUTH	MEHRAULI	1103.45	1300.99	117.9	Over-Exploited
25	DELHI	SOUTH	SAKET	1951.04	2269.33	116.31	Over-Exploited
26	DELHI	SOUTH EAST	DEFENCE COLONY	879.03	864.77	98.38	Critical
27	DELHI	SOUTH EAST	KALKAJI	915.8	875.52	95.6	Critical
28	DELHI	SOUTH EAST	SARITA VIHAR	568.55	567.97	99.9	Critical
29	DELHI	SOUTH WEST	DWARKA	2279.6	2275.66	99.83	Critical
30	DELHI	SOUTH WEST	KAPASHERA	2170.39	2488.16	114.64	Over-Exploited
31	DELHI	SOUTH WEST	NAJAFGARH	2494.49	1735.59	69.58	Safe
32	DELHI	WEST	PATEL NAGAR	1445.87	1395.77	96.53	Critical
33	DELHI	WEST	PUNJABI BAGH	1679.31	1484.3	88.39	Semi-Critical
34	DELHI	WEST	RAJOURI GARDEN	522.46	630.51	120.68	Over-Exploited
GRAND TOTAL				34449.23	34150.55	99.13	Critical

ANNEXURE REFERRED TO IN REPLY TO PART (b) to (c) OF UNSTARRED QUESTION NO. 2306 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “WATER CONSERVATION IN CITIES OF THE COUNTRY”.

Dynamic Ground Water Resources of Bengaluru Urban Area (as per assessment Year 2023)

Sl. No	State	District	Assessment Unit Name	Annual Extractable Ground Water Resource (Ham)	Total Extraction (Ham)	Stage Of Ground Water Extraction (%)	Categorization (Over-Exploited/ Critical/Semi-Critical/Safe/ Saline)
1	KARNATAKA	BENGALURU (URBAN)	ANEKAL	8444.71	8637.31	102.28	Over-Exploited
2	KARNATAKA	BENGALURU (URBAN)	BANGALORE (NORTH)	1600.8	3348.83	209.2	Over-Exploited
3	KARNATAKA	BENGALURU (URBAN)	BANGALORE CITY	2128.15	4626.69	217.4	Over-Exploited
4	KARNATAKA	BENGALURU (URBAN)	BANGALORE-EAST	2450.63	5007.84	204.35	Over-Exploited
5	KARNATAKA	BENGALURU (URBAN)	BANGALORE-SOUTH	4311.46	5137.7	119.16	Over-Exploited
6	KARNATAKA	BENGALURU (URBAN)	YELAHANAKA	2410.32	5439.97	225.69	Over-Exploited
GRAND TOTAL				21346.07	32198.34	150.84	Over-Exploited

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

UNSTARRED QUESTION NO. 2308

ANSWERED ON 16.12.2024

ARSENIC, MERCURY AND FLUORIDE IN GROUNDWATER

2308. SHRI R. GIRIRAJAN

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

- (a) whether Government is aware of the harmful effects on human and animals through high levels of contamination of Arsenic, Mercury and Fluoride in groundwater;
- (b) if so, the details thereof; and
- (c) whether Government has any new proposal or project for control of contamination of Arsenic, Mercury and Fluoride and if so, the details thereof and the total amount sanctioned in this regard?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Use of Ground Water for drinking purpose having Arsenic, Fluoride or Mercury above the permissible limits over a sustained period of time is known to cause several adverse health effects. As per the available research and literature, long-term consumption of water contaminated with Arsenic may lead to Arsenic poisoning or Arsenicosis, cancer of the skin, bladder, kidney, lung or diseases of the skin. Further, an excessive amount of Fluoride in drinking water may expose people to risks of crippling skeletal and/ or dental fluorosis. Similarly, high concentration of heavy metals like Mercury etc. in drinking water may lead to kidney diseases, poisoning and cancer.

(c) Water is a state subject and the responsibility of ground water management, including taking initiatives for improving ground water quality and mitigate the contamination issue, lies primarily with the state governments. The Central Government complements the efforts of the States by providing technical support and financial assistance through its various centrally sponsored schemes. However, several steps have been taken by the Central Government in this direction. Some of the important ones are mentioned below:-

- i. Central Ground Water Board (CGWB) conducts ground water quality monitoring for several contaminants including Arsenic, Fluoride and heavy metals on a regular basis throughout the country and also generates ground water quality data on a regional scale during various scientific studies. These studies indicate the occurrence of Arsenic, Fluoride and heavy metals in ground water beyond permissible limits (as per BIS) for human

consumption in isolated pockets in various States / UTs. The data on ground water quality generated by CGWB are made available in public domain through reports as well as through the web site (<http://www.cgwb.gov.in>) for use by various stakeholders. The data is also shared with concerned State Governments for taking necessary remedial measures.

ii. Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal, since August 2019, 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.
- JJM guidelines stipulate that while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
- JJM prescribes that while planning for potable water supply to household through tap water connection, priority should be given to quality-affected habitations. States/ UTs have been advised, as an interim measure, to install community water purification plants (CWPPs) in affected habitations to provide potable water to every household.
- Under JJM, a vast network of more than 2000 water quality testing laboratories have been set up in the country. Besides this, five persons, preferably women, are identified and trained from every village for testing the water samples through Field Test Kits (FTKs).
- To enable States/ UTs to test water samples for water quality, and for sample collection, reporting, monitoring and surveillance of drinking water sources, an online JJM – Water Quality Management Information System (WQMIS) portal has been developed.

Under JJM, funds are not released separately for eradication of individual contaminants like Arsenic, Fluoride or heavy metals in ground and drinking water. As per the information available on the JJM dashboard, it is seen that from the beginning of the Scheme in 2019 to 2024-25 (up to the month of November) funds to the tune of Rs. 4.3 lakh cr were allocated by the central government and an amount of Rs. 3.6 lakh cr. has been spent towards providing safe drinking water to more than 12.1 cr rural households in the country.

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

UNSTARRED QUESTION NO. 2309

ANSWERED ON 16.12.2024

PROTECTING RIVERS FROM POLLUTION

2309.# SHRI ADITYA PRASAD

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

- (a) whether the rivers in the country, particularly in Jharkhand are being polluted on a large scale due to draining of untreated sewage and wastewater from industries and hotels directly into the rivers, small rivers and drains;
- (b) if so, the total number of rivers, drains and small rivers that have been polluted in Ranchi district and other districts;
- (c) the schemes being run by Government to protect these rivers from pollution; and
- (d) the details of the said schemes and the smaller rivers and drains that have been included other than the major rivers under this scheme?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Rivers in the country are polluted and contaminated mainly due to discharge of untreated and partially treated sewage from cities/towns and industrial effluents in their respective catchments. Non-point source of pollution like erosion, transportation and sedimentation of rocks, soils, agriculture runoff, open defecation and runoff from solid waste dumping sites, etc. also contribute to pollution of river.

As per the report of the Central Pollution Control Board (CPCB) published in 2022, a total of 603 rivers in the country were monitored, and it was found that a total of 311 river stretches of 279 rivers were polluted, including 9 polluted river stretches of Ranchi and other districts of Jharkhand. List is at **Annexure.**

(c) & (d) It is the primary responsibility of the States/Union Territories/Local Bodies to ensure cleanliness of rivers. Cleaning and rejuvenation of rivers are ongoing activities. This Ministry has been supplementing efforts of the States/Union Territories (UTs)/Urban Local Bodies (ULBs) by providing financial and technical assistance for abatement of pollution in identified stretches of rivers/tributaries/minor rivers (except Ganga basin) in the country through the Centrally Sponsored

Scheme of National River Conservation Plan. Rejuvenation of river Ganga and its tributaries including minor rivers is undertaken through the Central Sector scheme of Namami Gange Program.

In the state of Jharkhand, under the Namami Gange Programme (NGP) for the rejuvenation of River Ganga and its tributaries, a total of five sewerage infrastructure projects have been sanctioned at a cost of ₹1,310.30 crore to create 261.5 million litres per day (MLD) of sewage treatment capacity. Sewage Treatment Capacity of 15.5 MLD has been created.

In addition, sewerage infrastructure is created under programs like Atal Mission for Rejuvenation & Urban Transformation (AMRUT) and Smart Cities Mission of Ministry of Housing & Urban Affairs. Further, priority for effective rejuvenation of small rivers has been accorded under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 2309 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “PROTECTING RIVERS FROM POLLUTION”.

List of 9 polluted river stretches identified in Jharkhand by CPCB in 2022

S. No	RIVER NAME	POLLUTED RIVER STRETCH/ LOCATION	Max BOD Observed	Priority Class
1	Harmu	along Ranchi	10.1	III
2	Kharkhai	along Sonari	8.0	IV
3	Subarnarekha	along Ranchi, along Muri, along Jamshedpur	10.0	IV
4	Bokaro	along Jarangdih	3.9	V
5	Damodar	along Telmucho, along Jarangdih, along Ramgarh	3.5	V
6	Garga	along Telmucho	4.9	V
7	Jumar	Nagri to Bhuti	5.3	V
8	Katri	along Moonidih	3.6	V
9	Koina	along Manoharpur	3.1	V

Category	BOD in Milligram per litre (mg/l)
Priority I	BOD exceeding 30 mg/l
Priority II	BOD between 20-30 mg/l
Priority III	BOD between 10-20 mg/l
Priority IV	BOD between 6-10 mg/l
Priority V	BOD between 3-6 mg/l

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DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
RAJYA SABHA

UNSTARRED QUESTION NO. 2310

ANSWERED ON 16.12.2024

IRRIGATION PROJECTS IN CHHATTISGARH

2310. SHRI RAJEEV SHUKLA

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

- (a) the details and the number of medium, multipurpose and major projects to be executed in the State of Chhattisgarh which are pending for the approval of the Central Water Commission;
- (b) the total hectares of land that would be brought under irrigation once each of those projects are completed;
- (c) the estimated cost of those projects;
- (d) the funds earmarked for those projects and funds released so far; and
- (e) the steps taken to expedite the clearance, and the present status of each of those projects?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (e) There is no proposal pending in Central Water Commission (CWC) with respect to techno-economic appraisal/approval of medium, multipurpose or major projects to be executed in the State of Chhattisgarh.

“In-Principle” consent has been accorded vide CWC letter dated 22.05.2020 for preparation of DPR of Bodghat Multipurpose Project, Chhattisgarh subject to the terms and conditions mentioned there in. Government of Chhattisgarh has informed that they have initiated survey and investigation for preparation of DPR for Bodghat Multipurpose project. Irrigation potential and estimated cost of the project shall be finalized after completion of survey and investigation of the project.

“In-Principle” consent has also been accorded vide CWC letter dated 31.03.2021 for preparation of DPR of Kolbirra Medium Irrigation Project, Chhattisgarh subject to the terms and conditions mentioned there in. The DPR of the project were submitted by State Government in October, 2023 to CWC, Raipur. Further information were sought from Government of Chhattisgarh in November, 2023. In reply, Government of Chhattisgarh has indicated that the scheme seems uneconomical and infeasible. Hence, the scheme has been dropped from the list of projects under examination in CWC.

In addition, Pre-Feasibility Reports (PFRs) of Upper Sikasar Reservoir Project, Kharung-Ahira Link Project, Dandapani Tank Project, Shekharpur Major Tank Project and Pairi High Dam Project of Chhattisgarh were submitted in CWC during 2019-2020 for techno-economic appraisal. These projects fall in Mahanadi basin and have inter-State aspects. Mahanadi Water Disputes Tribunal has been constituted by Government of India for adjudication of water disputes in respect of river Mahanadi and its basin. Inter-State agreements between co-basin States for implementation of these projects were not submitted. Hence proposals have been returned back by CWC to Government of Chhattisgarh.

Since, aforesaid projects are in survey and investigation and preparation of DPR stage and have not been included in any ongoing scheme of DoWR, RD&GR for central assistance, no fund has been earmarked for these projects.

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RAJYA SABHA

UNSTARRED QUESTION NO. 2311

ANSWERED ON 16.12.2024

DATA ON GROUNDWATER RECHARGE IN KARNATAKA

2311. DR. SYED NASEER HUSSAIN:

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

- (a) the details of the Atal Bhujal Yojana (ABY) – National Groundwater Management Improvement Programme in Karnataka during the last three years;
- (b) the funds allocated and utilised for these activities in Karnataka; and
- (c) the groundwater levels recovered as a result of these interventions?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Government of India is implementing Atal Bhujal Yojana, a Central Sector Scheme with a total outlay of Rs.6000 crore in 8,203 water stressed Gram Panchayats (GPs) of 229 administrative Blocks/Talukas in 80 districts of 7 States, viz., Haryana, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh for a period of 6 years from 01.04.2020. In Karnataka, the scheme is being taken up in 1199 water stressed Gram Panchayats of 41 Administrative blocks in 14 districts.

Activities performed under Atal Bhujal Yojana in Karnataka during the last three years are as below;

- Public disclosure of data in all the Atal Jal GPs through various modes of disclosure viz., central/state web portals, display board at each GP, social media, wall paintings, distribution of pamphlets/brochure, public meetings and Atal Jal Mobile application.
- Community led Water Budget and Water Security Plans (WSPs) prepared for all the 1199 GPs and updated on yearly basis.
- Groundwater monitoring system has been strengthened at GP level by providing equipment like Digital Water Level Recorders, water level indicators, rain gauges, water quality testing kits, water flow meters etc. In addition, piezometers have been constructed in GPs for monitoring of water levels.
- Under Training & Capacity Building, 07 State level trainings, 44 district level trainings, 114 block level trainings & 18355 Gram Panchayat level trainings; i.e. a total of 18520 trainings have been conducted.

- Awareness and sensitization at GP level through innovative Information Education and Communication (IEC) practices like folk dances / songs in Kannada have been used to drive the message of sustainable groundwater management.
- Convergence expenditure of more than Rs.1018 Crore towards implementation of interventions proposed under WSPs, has been achieved.
- An area of around 1.82 lakh Hectares has been brought under efficient water use practices including Drip, Sprinkler, Mulching, Crop Diversification etc.

(b) The details of funds allocated and utilized under the components of Atal Bhujal Yojana in last three years (FY 2021-22, 2022-23, 2023-24) in Karnataka is as follows -

(Amount in Rs. Cr.)

Components under Atal Bhujal Yojana	Tentative Allocation	Fund Released	Expenditure
Institutional Strengthening & Capacity Building (IS&CB)	194.51	62.30	64.82*
Incentive	1007.01	721.69	541.41
Total	1201.52	783.99	609.23

* Rs 2.52 crore spent from releases made in 2020-21.

(c) 255 gram panchayats in 18 blocks in Karnataka have shown a rise in water levels in the year 2023 due to various factors, including interventions made under Atal Bhujal Yojana.

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RAJYA SABHA
UNSTARRED QUESTION NO. 2312
ANSWERED ON 16.12.2024
CENSUS OF WATER BODIES

2312. SHRI SANJAY KUMAR JHA

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

- (a) whether Government has conducted a census of water bodies in the country;
- (b) if so, the details thereof, including State/UT-wise information, particularly in Bihar, along with the time duration and objectives of the census;
- (c) the number of water bodies existing in urban and rural areas separately, on a Statewise basis, including Bihar;
- (d) whether many water bodies, particularly in urban areas, have been encroached upon by land mafias and others; and
- (e) if so, the steps that have been taken by Government to remove such encroachments?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (c) Yes.

Ministry of Jal Shakti has conducted the 1st Census of Water Bodies in 33 States/UTs under the Centrally Sponsored Scheme “Irrigation Census” with reference year 2017-18 with 100% central assistance. The census was conducted by the Ministry of Jal Shakti, Government of India in all States/UTs including the state of Bihar through nodal departments identified in each State/UT for this purpose.

The objective of the Census of Water Bodies is to develop a national database for all water bodies by collecting information on all important aspects of the subject including their size, condition, status of encroachments, use, storage capacity, status of filling up of storage etc. The State/UT wise number of water bodies existing in urban and rural areas separately, on a State-wise basis, including Bihar is given at **Annexure I**.

(d) The State/UT wise reported number of cases of encroachment of water bodies in rural and urban areas as available from the first census of water bodies is given at **Annexure II**.

(e) Action on reported encroachment of water bodies comes under the purview of the State Government concerned.

However, the Union Government has been sensitizing the State Governments regarding importance of water bodies for socio economic development and sustainable water security to the local population. Need for taking necessary steps for keeping the water bodies encroachment free, such as inclusion of water bodies in land records and making them integral part of town planning process, strict action against encroachers, etc. are also being emphasized to the State Governments by Union Government, from time to time.

ANNEXURE I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) to (c) OF UNSTARRED QUESTION No. 2312 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “CENSUS OF WATER BODIES”.

State/UT wise number of water bodies in the first Census of Water bodies				
S.No.	States/UTs	Number of waterbodies		
		Rural	Urban	Total
1	Andaman & Nicobar Islands	3497	31	3528
2	Andhra Pradesh	190263	514	190777
3	Arunachal Pradesh	893	100	993
4	Assam	170112	2380	172492
5	Bihar	43831	1962	45793
6	Chandigarh	23	165	188
7	Chhattisgarh	33519	481	34000
8	Delhi	849	44	893
9	Goa	1406	57	1463
10	Gujarat	53156	913	54069
11	Haryana	14898	0	14898
12	Himachal Pradesh	87364	653	88017
13	Jammu & Kashmir	9687	78	9765
14	Jharkhand	106176	1422	107598
15	Karnataka	26224	789	27013
16	Kerala	49725	6009	55734
17	Madhya Pradesh	81012	1631	82643
18	Maharashtra	96343	719	97062
19	Manipur	1369	289	1658
20	Meghalaya	12798	534	13332
21	Mizoram	1436	749	2185
22	Nagaland	1287	145	1432
23	Odisha	178054	3783	181837
24	Puducherry	1050	121	1171
25	Punjab	15831	181	16012
26	Rajasthan	16750	189	16939
27	Sikkim	122	12	134
28	Tamil Nadu	99414	7543	106957
29	Telangana	63063	992	64055
30	Tripura	32140	4099	36239
31	Uttarakhand	2970	126	3096
32	Uttar Pradesh	240139	4948	245087
33	West Bengal	719654	27826	747480
	Total	23,55,055	69,485	24,24,540

ANNEXURE II

ANNEXURE REFERRED TO IN REPLY TO PARTS (d) OF UNSTARRED QUESTION No. 2312 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “CENSUS OF WATER BODIES”.

State/UT wise number of encroachments reported in the first Census of Water bodies				
S. No.	States/UTs	Rural	Urban	Total
1	Andaman & Nicobar Islands	59	0	59
2	Andhra Pradesh	3871	49	3920
3	Arunachal Pradesh	0	0	0
4	Assam	6	7	13
5	Bihar	779	92	871
6	Chandigarh	0	0	0
7	Chhattisgarh	111	0	111
8	Delhi	199	17	216
9	Goa	8	0	8
10	Gujarat	3	19	22
11	Haryana	50	0	50
12	Himachal Pradesh	42	0	42
13	Jammu & Kashmir	102	1	103
14	Jharkhand	559	1	560
15	Karnataka	948	0	948
16	Kerala	103	8	111
17	Madhya Pradesh	1750	29	1779
18	Maharashtra	251	0	251
19	Manipur	0	6	6
20	Meghalaya	6	0	6
21	Mizoram	4	3	7
22	Nagaland	1	0	1
23	Odisha	1028	20	1048
24	Puducherry	26	8	34
25	Punjab	1577	1	1578
26	Rajasthan	45	2	47
27	Sikkim	0	0	0
28	Tamil Nadu	7360	1006	8366
29	Telangana	2920	112	3032
30	Tripura	1	0	1
31	Uttarakhand	4	1	5
32	Uttar Pradesh	14923	378	15301
33	West Bengal	0	0	0
	Total	36,736	1,760	38,496

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 2314

ANSWERED ON 16.12.2024

STEPS TO MITIGATE THE WORSENING AND RECURRING FLOOD SITUATION IN BIHAR

2314. SHRI SANJAY YADAV

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

- (a) whether it is a fact that State Government's Flood Management Improvement Support Center has reported that Bihar is country's most flood affected State, with 76 per cent of the population of north Bihar is living under recurrent threat of flood devastation;
- (b) whether it is also a fact that a major reason of flood in Bihar is release of water from Nepal;
- (c) whether it is also a fact that Patna High Court has directed the Central and State Government to set up Kosi Development Authority (KDA); and
- (d) if so, the steps that are being taken to set up KDA and help mitigate the worsening and recurring flood situation in Bihar?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

- (a) The country faces the problem of flood and erosion in varying degrees in different parts including the state of Bihar.

As per Flood Hazard Atlas of Bihar (2020), prepared by National Remote Sensing Agency in association with National Disaster Management Authority and Government of Bihar, about 76% of the population in the North Bihar lives under the recurring threat of flood devastation.

As per report of "Assessment of Area affected due to floods in India" published by Central Water Commission in 2024, Bihar has flood affected area of 29.14 Lakh Hectare based on satellite data from 1986 to 2022.

- (b) The main reason for floods in the North Bihar is on account of high discharge in rivers of North Bihar like Gandak, Burhi Gandak, Bagmati, Kamla, Kosi and Mahananda due to heavy rainfall in the upper catchment areas of these rivers which mainly lie in Nepal.

- (c) & (d) The matter to set up Kosi Development Authority is under consideration of the Hon'ble Patna High Court through Civil Writ Jurisdiction Case No.4176/2022.

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RAJYA SABHA
UNSTARRED QUESTION NO. 2317

ANSWERED ON 16.12.2024

CONSERVATION OF THE GODAVARI RIVER

2317. DR. AJEET MADHAVRAO GOPCHADE

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

- (a) whether Government has received any requests to conduct an inspection of the Vishnupuri Dam in Maharashtra, if so, an update on the actions taken in this regard, whether an inspection has taken place, the plans being developed to improve the dam's water storage capacity in partnership with the Maharashtra Government;
- (b) the actions that have been taken in collaboration with the Government of Maharashtra for the conservation of the Godavari river as of now; and
- (c) whether Government is planning to allocate additional funds for the conservation of the Godavari river, if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) In pursuance of a request received from Hon'ble Member of Parliament Dr. Ajeet Gopchade to conduct the survey to identify the silt deposition in Vishnupuri Barrage via his letter dated 25.07.2024, a team of officers from the Central Water Commission (CWC) visited the Vishnupuri dam, Maharashtra on 12.11.2024 to assess the siltation problem and to propose a solution methodology.

After inspection of the dam and discussions with State Government officers related to the project, it is found out that there is no siltation of serious nature and the committee suggested and explained them to take some precautionary corrective steps in this regard.

(b) & (c) Government of India has been supplementing efforts of the States/Union Territories by providing financial and technical assistance for abatement of pollution in the identified polluted river stretches and conservation of rivers in the country through the Centrally Sponsored Scheme of National River Conservation Plan.

In Maharashtra, projects for conservation of river Godavari at Nanded, Nashik and Trimbakeshwar were sanctioned at a total cost of Rs. 87.13 crore and thus sewage treatment capacity of 127 million litres per day has been created in 4 sewage treatment plants.

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RAJYA SABHA

UNSTARRED QUESTION NO. 2318

ANSWERED ON 16.12.2024

LAUNCH OF FLOOD WATCH INDIA APP 2.0

2318. DR. PARMAR JASHVANTSINH SALAMSINH

DR. SUMER SINGH SOLANKI

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

- (a) the aims and objectives of the Flood Watch India App 2.0;
- (b) whether there is any significant increase from the number of stations covered in its initial launch;
- (c) whether the App uses any advance technology to provide accurate flood forecast; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The aim of the Flood Watch India App is to provide near real time flood information available at the monitoring/Flood Forecast (FF) stations of CWC and further disseminate the formulated river forecast at FF stations of CWC to the general public and other government stakeholders to make timely decisions for disaster preparedness. Its objectives are:

- to provide information of current flood situation at monitoring/FF stations of CWC
- to disseminate formulated short range and 7-day advisory level forecast for FF stations of CWC
- to provide information in multiple formats (readable and audio) and languages (Hindi and English)
- to provide information of storage positions of 150 major reservoirs with Pan-India coverage.

(b) The number of stations showing information of current flood condition has been increased from 200 to 592 since its initial launch. Further, this version also provides additional information regarding the storage positions of 150 major reservoirs in the country which shall help in better understanding of the possible flood situation in their downstream areas.

(c) & (d) The Flood Watch App is a visualization/dissemination tool that fetches current flood information & formulated forecast i.e. information predicted through gauge-to-gauge correlation (short range) and mathematical modeling (7-day flood advisory). It is built for both Android and iOS users.

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

UNSTARRED QUESTION NO. 2319

ANSWERED ON 16.12.2024

SEWAGE TREATMENT PLANTS (STPs) IN JAMMU AND SRINAGAR

2319. SHRI GULAM ALI

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

- (a) the current capacity of the Sewage Treatment Plants (STPs) in the cities of Jammu and Srinagar, and whether it is adequate to meet the sewage generation requirements of these cities; and
- (b) whether Government has any plans to establish new Sewage Treatment Facilities in these cities, if so, the timeline set for the completion of these facilities?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) As informed by Government of Jammu & Kashmir, installed treatment capacity of sewage treatment plants (STPs) in the cities of Jammu and Srinagar is 72.6 million litres per day (MLD) & 67 MLD against total estimated sewage generation of 77.8 MLD & 158.3 MLD respectively. In Srinagar, two STPs of capacity 60 MLD and 0.7 MLD are in different stages of implementation with completion period of 2-3 years.

It is the primary responsibility of States/Union Territories (UTs) and local bodies to ensure required treatment of sewage and industrial effluents, before discharging into recipient water bodies or land for prevention and control of pollution therein. For conservation of rivers in the country in non-Ganga Basin, this Ministry has been supplementing efforts of the States/UTs by providing financial and technical assistance under the Centrally Sponsored Scheme of National River Conservation Plan. Under this scheme, the project for conservation of Jhelum River, involving creation of sewage treatment capacity of 8 MLD in Srinagar, has been approved.

Besides, sewerage infrastructure is also created under the programs of Atal Mission for Rejuvenation and Urban Transformation, and Smart Cities Mission of Ministry of Housing and Urban Affairs.

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

UNSTARRED QUESTION NO. 2320

ANSWERED ON 16.12.2024

WATER BUDGETING

2320. SMT. JEBI MATHER HISHAM

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

- (a) the effective and scientific measures undertaken for the water budgeting process, the details of State/UT-wise;
- (b) data on State/UT-wise details regarding spending for rainwater conservation during the last five years;
- (c) the steps that have been taken to conserve water, taking into account the changing climatic conditions and accompanying repercussions, the details thereof, State/UT-wise; and
- (d) whether Government has adopted any initiative to facilitate the assessment of water health of a village as part of analysing the water situation of the village, including the groundwater level and surface water bodies, if so, the details thereof, State/UT-wise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Government of India, Ministry of Jal Shakti is implementing Atal Bhujal Yojana (Atal Jal), a Central Sector Scheme in identified water stressed areas of 80 districts of Seven States viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh to ensure sustainable groundwater management through participatory approach.

One of the key activities under Atal Jal is preparation of Water Budget, which is an account of total water availability and total water demand, at GP level with community involvement. Water budgeting under the Scheme is based on fundamental principles of hydrology and science of groundwater and estimates total water availability (surface and groundwater); evapotranspiration losses; recharge to groundwater from various artificial recharge and water conservation structures as well as water demand for various uses.

The number of Gram Panchayats for which water budget has been prepared & updated on yearly basis under Atal Bhujal Yojana are 1873 in Gujarat, 1647 in Haryana, 1199 in Karnataka, 670 in Madhya Pradesh, 1133 in Maharashtra, 1132 in Rajasthan & 549 in Uttar Pradesh respectively.

(b) As per the data shared for last 04 JSA periods by National Water Mission w.r.t Jal Shakti Abhiyan: Catch the Rain (JSA:CTR), the State/UT wise details of expenditure incurred under Mahatma Gandhi

National Rural Employment Guarantee Scheme in various categories viz. Water Conservation and Rainwater Harvesting, Renovation of Traditional Water Bodies, Reuse and Recharge Structures, Watershed Development & Intensive Afforestation is provided in **Annexure**.

(c) In the context of risks associated with climate change, the government has devised strategies on multiple fronts for tackling conditions like excessive rainfall and drought situations and several measures have been taken to conserve the available water and to store the excess. In this direction, Government of India is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 with the primary aim to effectively harvest the monsoon rainfall through creation of artificial recharge structures, watershed management, recharge and reuse structures and awareness generation etc. Currently, JSA 2024 is being implemented in the country with special focus on 151 water stressed districts of the country. Activities also include construction and desilting of existing water bodies like ponds, tanks etc. with an aim to augment storage capacity to reduce the groundwater stress.

In addition, the following significant steps have also been taken in this direction:

- 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 Meter (BCM) of water. The Master plan has been shared with States/UTs for suitable interventions.
- 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.
- Centrally sponsored scheme “Repair, Renovation & Restoration (RRR) of Water Bodies (WBs)” is a component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Har Khet Ko Pani (HKKP) being implemented by Ministry of Jal Shakti under which works like cleaning of traditional water bodies is taken up.
- National Water Mission (NWM) has been established as a dedicated agency under the National Action Plan for Climate Change (NAPCC) launched by the Government of India.
- National Water Development Agency (NWDA) has been entrusted with the work of Interlinking of Rivers (ILR) under the National Perspective Plan (NPP) with a view to transfer excess water from surplus river basins to deficit basins to establish water balance.
- For promoting efficient use of available water resources and for enhancing the conjunctive use of ground and surface water, the government is implementing several schemes with Per Drop More Crop (PDMC) of D/o Agriculture & Farmers’ Welfare, Atal Bhujal Yojana of M/o Jal Shakti PMKSY-AIBP being the notable ones.

(d) Water is a state subject and the responsibility of ground and surface water management, including taking initiatives for assessment of water health in villages, lies primarily with the state governments.

However, several steps have been taken by the Central Government in this direction. Some of the important ones are mentioned below:

- Regular level and quality monitoring and resource assessment of ground water resources of the country forms the basis of the institutional framework put in place by the Ministry of Jal Shakti for keeping a watch on water health of the nation. CGWB conducts dynamic ground water resource estimation of the country annually wherein Block-level assessment is conducted. CGWB also monitors ground water levels and quality at prescribed intervals through its vast network of monitoring wells. Data on ground water so generated is made available in public domain through reports as well as through the web site (<http://www.cgwb.gov.in>) for use by various stakeholders.
- CGWB has completed aquifer mapping for entire mappable area of 25 lakh sq. km of the country, delineating aquifer potential and characteristics at the level of districts. Based on mapping studies suitable ground water management plans have been prepared for further implementation by concerned authorities.
- Additionally, organizations like Central Water Commission (CWC) and Central Pollution Control Board (CPCB) are engaged in monitoring surface water parameters as per their respective mandates.
- To monitor overall groundwater scenario in all the Gram Panchayats (GPs) under Atal Bhujal Yojana, groundwater levels and quality are monitored through a network of designated wells on regular basis. In addition, more than 1,40,000 samples have been analysed for water quality through Field Testing Kits in the GPs.
- With the view to provide safe drinking water to all the rural households of the country, Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal, since August 2019, under which special emphasis has been placed on water quality aspect. Under JJM, Bureau of Indian Standards’ BIS:10500 standards have been adopted as prescribed norms for quality of water to be delivered and also while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
- Further, under JJM, a vast network of more than 2000 water quality testing laboratories have been set up in the country. Besides this, five persons, preferably women, are identified and trained from every village for testing the water samples through Field Test Kits (FTKs). To enable States/ UTs to test water samples for water quality, and for sample collection, reporting, monitoring and surveillance of drinking water sources, an online JJM – Water Quality Management Information System (WQMIS) portal has been developed.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2320 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “WATER BUDGETING”.

Jal Shakti Abhiyan: Catch the Rain National Water Mission, Ministry of Jal Shakti Intervention-wise Expenditure : (DORD-MGNREGA) Expenditure (Rs. Lakhs)																						
S. No.	State	Water Conservation and Rainwater Harvesting				Renovation of Traditional Water Bodies				Reuse and Recharge Structures				Watershed Development				Intensive Afforestation				Grand Total
		2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	
1	ANDAMAN AND NICOBAR		61	53	27		18	39	14		1	0	0		44	51	19		2	0	5	334
2	ANDHRA PRADESH	185992	47172	35150	4048	238923	114663	100195	13501	277	21	47	7	101902	43761	35323	4552	36106	3513	7999	2461	975613
3	ARUNACHAL PRADESH	7095	1667	2830	1557	412	169	151	75	1135	322	455	445	3527	600	965	676	8515	3285	3808	2843	40532
4	ASSAM	35676	7512	8252	5683	8385	1339	2112	1005	90	4	4	11	79777	12564	15334	9113	8604	2786	1683	1278	201212
5	BIHAR	84164	59766	54236	8801	17247	11751	11487	2330	7281	472	453	109	65514	38863	33612	5964	13534	6189	2417	2194	426384
6	CHHATTISGARH	131382	39915	52181	23678	82580	19769	31456	19671	4040	1073	1349	752	37602	9809	10985	4663	16653	4188	3748	3651	499145
7	DADRA AND NAGAR HAVELI AND DAMAN AND DIU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	GOA	8	20	2	16	14	64	12	28	18	7	0	5	42	40	1	19	6	7	1	1	311
9	GUJARAT	29989	7112	3701	2289	31843	13567	7607	3186	702	344	146	94	23830	15268	7279	4003	9760	4810	2633	1756	169919
10	HARYANA	8160	1467	713	549	9419	2058	1428	929	205	2	0	0	15555	2075	1465	1314	1479	212	281	241	47552
11	HIMACHAL PRADESH	10399	3543	2772	1163	2062	899	623	268	445	156	108	73	30653	11528	7489	2835	3271	1744	1561	620	82212
12	JAMMU AND KASHMIR	21113	7653	4469	2488	4260	2047	1156	616	1346	7615	3782	1572	46700	8895	9013	3749	4363	1201	788	441	133267
13	JHARKHAND	65389	6335	0	7363	1805	217	0	123	893	14	0	11	65422	17033	0	1289	15526	9022	0	2217	192659
14	KARNATAKA	152232	57798	27956	17219	55796	18259	9474	7013	31124	5406	2420	1725	145501	60346	26915	16374	141261	62380	34858	21391	895448
15	KERALA	66594	16839	30698	2964	20378	8691	10617	1682	17560	5340	6801	473	227170	68421	119130	9070	28731	8778	15582	2112	667631
16	LADAKH	1811	328	534	267	44	22	36	28	10	433	528	57	1377	558	851	162	91	14	33	14	7198
17	LAKSHADWEEP	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4
18	MADHYA PRADESH	289962	60101	46372	17849	18735	15387	12161	3306	13452	3352	2693	720	167205	40754	32360	10858	32674	10151	8097	5030	791219
19	MAHARASHTRA	13842	8019	5325	1343	6592	7371	3014	564	1540	906	363	149	13884	6326	3310	650	40921	17965	6491	6146	144721
20	MANIPUR	16988	363	7886	6460	2573	302	3912	4221	267	1	18	0	4616	104	2367	1681	10662	201	2033	1739	66394
21	MEGHALAYA	10993	3634	2263	4348	1210	412	275	572	251	137	58	161	12777	4004	2248	3708	8297	2562	1380	1706	60996
22	MIZORAM	15690	13209	4032	36	976	684	147	8	613	452	97	7	7767	4993	1452	56	2437	1655	326	2	54639
23	NAGALAND	1786	2766	4361	471	143	981	1775	232	95	5	203	0	908	1475	3909	1170	5216	10294	14216	1248	51254
24	ODISHA	98119	48791	30291	25146	52761	27363	18593	15253	3064	2809	1921	1639	112456	56300	35881	26010	87275	32109	10040	15870	701691
25	PUDUCHERRY	2	63	16	25	1191	1382	309	16	0	0	0	0	2	0	13	0	0	0	2	0	3021
26	PUNJAB	4584	2085	1379	347	21352	9456	7362	2549	539	99	66	10	17269	8456	5803	1715	13552	9752	6294	3048	115717
27	RAJASTHAN	340715	79539	134689	121299	123062	27758	46832	38868	1442	576	842	806	96417	22271	40859	29544	59816	12497	22275	18116	1218223
28	SIKKIM	1211	672	373	203	7	44	26	11	111	59	13	9	3080	1777	1158	597	2067	1387	370	154	13329
29	TAMIL NADU	535753	234042	183325	2945	82412	41877	35262	1923	23400	3714	2585	193	221445	114273	68300	862	32314	15245	15410	1109	1616389
30	TELANGANA	4875	12061	10298	3026	20936	35471	22592	9500	94	67	53	23	14760	18670	12879	3810	7860	20173	14193	10025	221366
31	TRIPURA	28565	7357	9056	1445	2214	658	1010	270	897	146	251	38	37901	6682	7532	1018	21139	4011	3933	948	135071
32	UTTAR PRADESH	82990	83180	35773	14328	52431	68636	25551	11299	3553	637	326	88	370516	248265	125993	40737	27749	18789	4184	1683	1216708
33	UTTARAKHAND	12825	4875	3390	1729	3824	1648	1075	718	1057	312	209	104	33222	10142	8823	4730	4918	1626	1107	695	97029
34	WEST BENGAL	200281	0	0	0	138107	0	0	0	11248	0	0	0	140881	0	0	0	234531	0	0	0	725048
Total		2459185	817945	702376	279112	1001694	432965	356289	139779	126749	34482	25791	9281	2099678	834297	621300	190948	879328	266550	185743	108744	11572236
		4258618				1930727				196303				3746223				1440365				11572236

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
RAJYA SABHA
UNSTARRED QUESTION NO. 2322
ANSWERED ON 16.12.2024
JAL SANCHAY JAN BHAGIDARI PROGRAMME

2322.# SHRI NARHARI AMIN

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

- (a) the main objective of the Jal Sanchay Jan Bhagidari Programme;
- (b) whether it is a fact that this programme has been started from the State of Gujarat;
- (c) the efforts being made by Government to propagate the features of this programme and to make it accessible for the masses; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) The "Jal Sanchay Jan Bhagidari" (JSJB) initiative, launched in Surat, Gujarat on 6th September 2024, under Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) campaign focuses on intensifying community mobilization to build low cost rainwater harvesting structures in saturation mode. The jal sanchay programme has been started in Gujarat by also leveraging community funds, individual donations, Corporate Social Responsibility Funds etc for construction of low cost structures like borewells, recharge shafts , recharge pits, using locally available material, to harvest rainwater, to boost ground water level and provide local tailor made solution to water issues. This has been scaled up for pan India implementation as Jal Sanchay Jan Bhagidari initiative, whose main objective is to ensure that every drop of water is conserved through collective efforts, following a whole-of- society and whole-of-government approach. At least one million artificial recharge structures with focus on borewell recharge is targeted under this initiative.

(c) & (d) The Government has implemented extensive measures to promote the JSJB initiative in partnership with State Governments and local authorities to ensure its widespread reach and awareness. The initiative aims at forging partnership with Industry, NGOs, Trusts, Civil Societies and educational institutions to engage the broader community effectively. State Governments of Gujarat, Madhya Pradesh, Rajasthan & Bihar have proactively participated in the campaigns. Each Ministry/Department/PSUs has been requested to utilize their existing schemes and saturate construction

of recharge structures in office premises and residential premises both at headquarter and field level. Awareness campaigns are conducted through social media platforms, public events and workshops. The awareness efforts also include fostering active community participation through Resident Welfare Associations (RWAs), Self-Help Groups (SHGs) and Non-Governmental Organizations (NGOs). The initiative emphasizes mobilizing convergent funding from diverse sources inter-alia including philanthropic contributions, industrial donations and crowd funding to instill a sense of ownership among the masses.

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

UNSTARRED QUESTION NO. 2323

ANSWERED ON 16.12.2024

ASSESSMENT OF GROUNDWATER RESOURCES

2323. SMT. SULATA DEO SHRI NIRANJAN BISHI

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

- (a) the recent assessment of groundwater resources, water level, and quality, State-wise;
- (b) the current status of the targets mentioned in the CAG report (Groundwater Management and Regulation-2021); and
- (c) the details of allocation and utilization of funds under the Jal Shakti Abhiyan?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Gist of Dynamic Ground Water Resources Assessment of the country for 2023, state-wise ground water depth levels for the month of November 2023 and summary picture of ground water quality with state-wise affected areas with major contaminants are provided in **Annexure –I, II & III** respectively.

(b) The CAG Report No. 9 of 2021 on groundwater management and regulation provides observations and recommendations related to groundwater management and regulation. The report is largely recommendatory in nature. All the recommendations have been promptly acted upon and action taken report has also been submitted to CAG. Some of the important initiatives taken by this Ministry with regard to the recommendations made in the report are provided below:

- Dynamic ground water resource assessment, level and quality monitoring are being done as per prescribed frequency. Assessment is being done annually since 2022; Level monitoring is being done four times every year through a wider network of wells; New SoP for quality monitoring has been finalized prescribing sampling and analysis twice every year.
- Monitoring wells network has increased from around 15,000 in 2019 to 27,000. Moreover, installation of Digital Water Level Recorders(DWLRs) with telemetry systems throughout the country has been taken up under various schemes and projects. So far around 22,000 DWLRs have been put in place across various states, under the schemes like National Hydrology Project (NHP) and Atal Bhujal Yojana.

- Strategy for utilizing the allocated funds has been revisited. CGWB had taken several steps including outsourcing of activities, hiring of Project Management Consultant (PMC) for handling the procurement related activities and stringent monitoring at all levels. As a result of all round efforts, average annual expenditure under GWM&R Scheme has improved from nearly Rs. 116 cr./year during 2012-17 to Rs. 195 cr/year during 2021-24.
- A state of the art and highly user friendly portal called 'Bhu-Neer' has been launched for timely processing of NOC applications for ground water withdrawal.
- Aquifer mapping of the entire 25.15 lakh km² targeted to be covered under NAQUIM studies has been covered by 31st March 2023 along with preparation of ground water management plans which have been shared with State/District authorities.
- Cadre review of CGWB has been taken up to ensure timely filling up of posts.
- Ministry of Jal Shakti and other central ministries have been implementing several programmes and schemes for groundwater management in order to meet the committed targets under Sustainable Development Goals (SDGs) like Jal Shakti Abhiyan, Ground Water Management and Regulation Scheme, Atal Bhujal Yojana, National Hydrology Project, RRR component under PMKSY, Amrit Sarovar, Water conservation under MGNREGS etc.

(c) 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. 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. As per the available information, since the inception of JSA, construction of around 1.57 cr. water conservation and rain water harvesting structures have been completed/ongoing in the country and an expenditure of Rs. 1.15 lakh cr has been incurred through convergence with MGNREGS alone.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2323 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “ASSESSMENT OF GROUNDWATER RESOURCES”.

STATE-WISE GROUND WATER RESOURCES OF INDIA, 2023 (in bcm)

S.No.	State	Total Annual Ground Water Recharge	Annual Extractable Ground Water	Current Total Ground Water Extraction	Stage of Ground Water Extraction (%)
1	Andhra Pradesh	27.83	26.45	7.48	28.3
2	Arunachal Pradesh	4.65	4.16	0.02	0.42
3	Assam	27.26	20.93	2.63	12.54
4	Bihar	33.96	30.72	13.75	44.76
5	Chhattisgarh	13.34	12.18	5.75	47.17
6	Delhi	0.38	0.34	0.34	99.13
7	Goa	0.396	0.317	0.068	21.37
8	Gujarat	27.35	25.41	13.13	51.68
9	Haryana	9.55	8.69	11.8	135.74
10	Himachal Pradesh	1.11	1.01	0.35	34.95
11	Jharkhand	6.25	5.73	1.8	31.38
12	Karnataka	18.93	17.08	11.32	66.26
13	Kerala	5.53	5.01	2.73	54.55
14	Madhya Pradesh	35.47	32.85	19.3	58.75
15	Maharashtra	32.76	30.95	16.66	53.83
16	Manipur	0.52	0.47	0.04	7.99
17	Meghalaya	1.83	1.51	0.07	4.58
18	Mizoram	0.22	0.2	0.01	3.70
19	Nagaland	0.6	0.54	0.02	3.76
20	Odisha	17.35	15.94	7.39	46.33
21	Punjab	18.84	16.98	27.8	163.76
22	Rajasthan	12.45	11.25	16.74	148.77
23	Sikkim	0.243	0.219	0.012	5.54
24	Tamil Nadu	21.59	19.51	14.42	73.91
25	Telangana	23.14	20.92	8.09	38.65
26	Tripura	1.36	1.09	0.11	9.92
27	Uttar Pradesh	71.83	65.57	46.4	70.76
28	Uttarakhand	2.02	1.85	0.95	51.69
29	West Bengal	26.29	23.9	10.71	44.81
30	Andaman And Nicobar	0.618	0.557	0.008	1.37
31	Chandigarh	0.054	0.048	0.037	75.41
32	Dadra & Nagar Haveli	0.09	0.08	0.11	131.53
	Daman & Diu	0.035	0.033	0.057	170.70
33	Jammu And Kashmir	4.94	4.46	1.08	24.20
34	Ladakh	0.09	0.08	0.03	37.05
35	Lakshadweep	0.014	0.005	0.003	61.723
36	Puducherry	0.20	0.18	0.13	70.27
	Grand Total	449.08	407.21	241.34	59.26

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2323 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “ASSESSMENT OF GROUNDWATER RESOURCES”.

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

S N	State Name	No of well anal ysed	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 & 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

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2323 TO BE ANSWERED IN RAJYA SABHA ON 16.12.2024 REGARDING “ASSESSMENT OF GROUNDWATER RESOURCES”.

State Wise Number of Partly Affected Districts (cumulative) with major Contaminants in Ground Water of India in 2022-23

S.No.	State/ UT	Salinity (EC above 3000 micro mhos/ cm) (EC : Electrical Conductivity)	Fluoride (above 1.5 mg/l)	Nitrate (above 45 mg/l)	Arsenic (above 0.01 mg/l)	Iron (above 1mg/l)
1	Andhra Pradesh	23	19	26	7	12
2	Telangana	16	29	32	1	9
3	Assam	1	17		21	29
4	Arunachal Pradesh					7
5	Bihar	7	19	32	27	35
6	Chhattisgarh	1	23	24	4	23
7	Delhi	8	8	11	5	5
8	Goa					2
9	Gujarat	28	30	32	12	14
10	Haryana	18	21	21	18	20
11	Himachal Pradesh		2	7	1	5
12	Jammu & Kashmir		4	10	3	10
13	Jharkhand		17	23	4	23
14	Karnataka	30	31	30	3	22
15	Kerala	4	6	14	1	14
16	Madhya Pradesh	21	44	51	9	47
17	Maharashtra	29	22	31		24
18	Manipur		1		2	4
19	Meghalaya		5			8
20	Nagaland		3			5
21	Odisha	18	26	32	5	31
22	Punjab	12	19	23	17	19
23	Rajasthan	32	33	33	10	33
24	Tamil Nadu	29	30	33	14	16
25	Tripura		3		3	8
26	Uttar Pradesh	21	43	67	45	75
27	Uttarakhand	1	1	5	5	8
28	West Bengal	9	12	18	11	22
29	Andaman & Nicobar	1				3
30	Daman & Diu	1	1	2	1	
31	Puducherry			2	1	
	Total	Parts of 310 districts in 21 states & UTs	Parts of 469 districts in 27 states & UTs	Parts of 559 districts in 23 states & UTs	Parts of 230 districts in 25 states & UTs	Parts of 533 districts in 29 states & UTs

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

UNSTARRED QUESTION NO. 2324

ANSWERED ON 16.12.2024

INTERLINKING OF RIVERS

2324. SHRI AYODHYA RAMI REDDY ALLA

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

- (a) the potential benefits of the Wainganga-Nalganga river linking project, and whether it will impact the water availability in the Buldhana district;
- (b) whether the potential synergies and trade-offs between interlinking of rivers and other water management strategies, such as water storage, conservation, and efficiency measures; and
- (c) whether the construction of 426.52 km of link canals will affect the local ecosystem and wildlife habitats and the potential social implications of the project, including the impact on local communities and their access to water?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The Wainganga (Gosikhurd) - Nalganga (Purna Tapi) intra-State link project takes off from the right flank of the Gosikhurd dam and traverses a length of about 427 Kilometre (km) through six districts of Maharashtra. As per the Detailed Project Report (DPR), the link project envisages diversion of 1772 Million Cubic Meters (MCM) of water from the Gosikhurd (Indira Sagar) project on Wainganga river in Pranhita sub-basin of Godavari basin for extending irrigation, domestic and industrial water supply benefits in six districts of Vidarbha region of Maharashtra, viz; Nagpur, Wardha, Amravati, Yeotmal, Akola and Buldhana, before outfalling into Nalganga project on Nalganga river in Tapi basin.

The link canal envisages to provide irrigation benefits to about 371277 hectare (ha) of new command area, utilising 1286 MCM of water. Out of this, 38214 ha area lies in Shegaon and Motala tehsils of Buldhana district utilising 140 MCM. 32 MCM of water is envisaged to be provided for drinking water supply to the enroute villages/towns lying in the command area in the above cited six districts and 397 MCM to industries in the vicinity of the link project, while the transmission losses work out to be 57 MCM. Further, since the diversion of 1772 MCM of water has been envisaged through the proposed link canal during the three monsoon months of July to September, which constitutes the prime flood season, the project would also help in mitigation of the intensity of flood in the downstream.

(b) As intimated by the Government of Maharashtra, most of the command area of the scheme is drought prone. The existing water conservation measures are not enough to cater to the needs of domestic water supply, industries and irrigation. The scheme has therefore been envisaged to supplement water in the command area, by way of construction of 31 new dams and use of 6 existing dams along with about 427 km long main canal.

(c) At DPR stage of Wainganga (Gosikhurd)-Nalganga (Purna Tapi) intra-State link project, all the parameters for Environmental Impact Assessment (EIA) and Environmental Management Plan as well as Socio-Economic Studies with Resettlement and Rehabilitation Plan have been duly considered. The impact of construction as well as operation phases of project on various aspects of ecosystem has been assessed.

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

RAJYA SABHA
UNSTARRED QUESTION NO. 2325

ANSWERED ON 16.12.2024

IDENTIFYING POLLUTED STRETCHES

2325. DR. KANIMOZHI NVN SOMU

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

- (a) whether the National Green Tribunal (NGT) has identified polluted stretches in various rivers in different States including in Tamil Nadu;
- (b) if so, the details thereof;
- (c) whether the order of the NGT to clean polluted river stretches has not been implemented till now;
- (d) if so, the details thereof, State-wise, particularly Tamil Nadu, alongwith the reasons for not implementing the NGT order; and
- (e) by when the same is likely to be implemented?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (e) Central Pollution Control Board (CPCB) has laid a water quality monitoring network across the country with assistance of State Pollution Control Boards/ Committee under the National Water Quality Monitoring programme. In last report published in November, 2022, 603 rivers were monitored in the country. 311 polluted river stretches (PRS) have been identified in 279 rivers. 10 PRS in 10 rivers in Tamil Nadu have been identified. The number of polluted stretches in the country has decreased from 351 in 2018 to 311 in the year 2022. The details of the same are available at:

<https://cpcb.nic.in/openpdf?file.php?id=UmVwb3J0RmlsZXMTQ5OF8xNjcyOTg4MDQ1X2I1ZGIhcGhvdG8xMjk5NS5wZGY=>

The National Green Tribunal (NGT) has issued orders from time to time related to polluted river stretches. In Original Application No. 673/2018, in which the NGT directed that all States/UTs should prepare action plans for the rejuvenation of polluted river stretches in the country identified in 2018 by CPCB. As per the direction, the implementation of said action plans has to be reviewed at all States/UTs and the central level.

In compliance of these orders the States have got their action plan prepared and got approved from the competent authority. For monitoring, Central Monitoring Committee (CMC) has been constituted at Central level under the Chairmanship of the Secretary, Department of Water Resources, River

Development and Ganga Rejuvenation, Ministry of Jal Shakti, Govt. of India. So far, 19 CMC meetings have been held.

Cleaning/rejuvenation of rivers is an ongoing activity. It is the primary responsibility of States/Union Territories (UTs) and Urban Local Bodies to ensure required treatment of sewage and industrial effluents to the prescribed norms before discharging into the rivers and other water bodies.

For conservation of rivers, the Ministry has been supplementing efforts of the States/UTs by providing financial and technical assistance for abatement of pollution in identified stretches of the rivers in the country through Central Sector scheme of “Namami Gange” for the rivers in Ganga basin, and Centrally Sponsored Schemes of National River Conservation Plan (NRCP) for other rivers. Apart from this sewerage infrastructure is created under programs like Atal Mission for Rejuvenation & Urban Transformation (AMRUT) and Smart Cities Mission of Ministry of Housing & Urban Affairs.
