

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

UNSTARRED QUESTION NO. 79

ANSWERED ON 25.11.2024

DATA BANK ON PALAEOCHANNELS

79. SHRI SANJAY KUMAR JHA

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

- (a) whether Government has created a systematic data bank on Palaeochannels as recommended by the Palaeochannels Committee (2016);
- (b) if so, the details thereof;
- (c) if not, the concrete steps Government has taken in this regard;
- (d) whether Government has taken any concrete steps regarding aquifer delineation and their development;
- (e) if so, the details district-wise and the funds allocated in this regard;
- (f) whether Government has taken any effective measures regarding artificial recharge of Palaeochannel; and
- (g) if so, the details thereof, the funds allocated in this regard, district-wise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (c) Palaeochannels, which were once active rivers or streams or parts thereof, but now buried under sediments, usually offer good ground water yield as well as potential sites for artificial ground water recharge. Central Ground Water Board (CGWB), under various studies, has generated information on traces of palaeochannels found in parts of the Rajasthan, Haryana, Gujarat and Uttar Pradesh. The information generated is made available in the public domain in report form for policy making and project planning.

(d) & (e) Central Ground Water Board (CGWB) is implementing National Aquifer Mapping and Management program (NAQUIM) in the country under Ground Water Management & regulation (GWMR) Scheme since year 2012, which envisages mapping of aquifers (water bearing formations), their characterization and development of Aquifer Management Plans to facilitate sustainable management of Ground Water Resources. Thus far, entire mappable area of the country of around 25 lakh sq. km, has been mapped under the scheme and management plans have been shared with the respective State governments as well as District authorities for taking up suitable field interventions. **State-wise area mapped is given in Table below.**

Further, there are various ground water related activities conducted under GWM&R scheme like ground water level and quality monitoring, resource assessment, several types of geophysical surveys etc., the data generated from all of which is used for aquifer mapping and studies under NAQUIM. Overall, expenditure under GWM&R scheme in the years 2021-22, 2022-23 & 2023-24 stands at Rs. 180.2 cr., 204.76 cr and 202.31 cr., respectively.

State-wise Coverage under NAQUIM

| Sl. No. | State/UT | Total Area (Sq.km) | Area targeted for coverage (sq. km) | Total Area covered (sq. km) |
|---------|-----------------------|--------------------|-------------------------------------|-----------------------------|
| 1 | Andaman & Nicobar UT | 8,249 | 1,774 | 1,774 |
| 2 | Andhra Pradesh | 1,63,900 | 1,41,784 | 1,41,784 |
| 3 | Arunachal Pradesh | 83,743 | 4,703 | 4,703 |
| 4 | Assam | 78,438 | 61,826 | 61,826 |
| 5 | Bihar | 94,163 | 90,567 | 90,567 |
| 6 | Chandigarh UT | 115 | 115 | 115 |
| 7 | Chhattisgarh | 1,36,034 | 96,000 | 96,000 |
| 8 | Dadra & Nagar Haveli, | 602 | 602 | 602 |
| 9 | Daman & Diu UT | 1,483 | 1,483 | 1,483 |
| 10 | Goa | 3,702 | 3,702 | 3,702 |
| 11 | Gujarat | 1,96,024 | 1,60,978 | 1,60,978 |
| 12 | Haryana | 44,212 | 44,179 | 44,179 |
| 13 | Himachal Pradesh | 55,673 | 8,020 | 8,020 |
| 14 | Jammu & Kashmir UT | 1,67,396 | 9,506 | 9,506 |
| 15 | Jharkhand | 79,714 | 76,705 | 76,705 |
| 16 | Karnataka | 1,91,808 | 1,91,719 | 1,91,719 |
| 17 | Kerala | 38,863 | 28,088 | 28,088 |
| 18 | Lakshadweep UT | 32 | 32 | 32 |
| 19 | Ladakh UT | 54,840 | 963 | 963 |
| 20 | Madhya Pradesh | 3,08,000 | 2,69,349 | 2,69,349 |
| 21 | Maharashtra | 3,07,713 | 2,59,914 | 2,59,914 |
| 22 | Manipur | 22,327 | 2,559 | 2,559 |
| 23 | Meghalaya | 22,429 | 10,645 | 10,645 |
| 24 | Mizoram | 21,081 | 700 | 700 |
| 25 | Nagaland | 16,579 | 910 | 910 |
| 26 | Odisha | 1,55,707 | 1,19,636 | 1,19,636 |
| 27 | Puducherry UT | 479 | 454 | 454 |
| 28 | Punjab | 50,368 | 50,368 | 50,368 |
| 29 | Rajasthan | 3,42,239 | 3,34,152 | 3,34,152 |
| 30 | Sikkim | 7,096 | 1,496 | 1,496 |
| 31 | Tamil Nadu | 1,30,058 | 1,05,829 | 1,05,829 |
| 32 | Telangana | 1,11,940 | 1,04,824 | 1,04,824 |
| 33 | Tripura | 10,492 | 6,757 | 6,757 |
| 34 | Uttar Pradesh | 2,46,387 | 2,40,649 | 2,40,649 |
| 35 | Uttarakhand | 53,484 | 11,430 | 11,430 |
| 36 | West Bengal | 88,752 | 71,947 | 71,947 |
| | Total | 32,94,105 | 25,14,437 | 25,14,437 |

(f) & (g) Water being a State subject, initiatives on water management including artificial recharge is primarily the responsibility of state governments. However, CGWB in collaboration with National Geo-physical Research Institute (NGRI) has completed heliborne geophysical studies in parts of Rajasthan, Gujarat, Haryana and Uttar Pradesh for aquifer mapping. During the studies a few stretches of palaeochannels were also identified. Major stretches of these palaeochannels were found to be conducive for taking up artificial recharge to ground water. There reports are made available in the public domain for further appropriate use by the concerned agencies. Gist of these studies are provided in the **Annexure**.

ANNEXURE REFERRED TO IN REPLY TO PART (f) & (g) OF UNSTARRED QUESTION NO. 79 TO BE ANSWERED IN RAJYA SABHA ON 25.11.2024 REGARDING “DATA BANK ON PALAEOCHANNELS”.

District-wise the details of studies taken up for aquifer mapping including study of paleochannels and fund allocated

| Parts of Districts | Gist of the study including funds allocated |
|--|---|
| Prayagraj and Kaushambi Districts of Uttar Pradesh | Data Generation for Aquifer Mapping with focus on Palaeo-Channels in parts of Ganga-Yamuna Doab. Study carried out in collaboration with NGRI with an expenditure of Rs.4.57 cr. |
| Kaushambi, Fatehpur and Kanpur Nagar Districts of Uttar Pradesh | Data generation for aquifer mapping with focus on paleochannels in part of Ganga Yamuna Doab. Study has been done in collaboration with NGRI with an estimated cost of 7.61 cr. |
| Bikaner, Churu, Ganaganagar, Jalor, Pali, Jaisalmer, Jodhpur and Sikar Districts of Rajasthan; | Study regarding High Resolution Aquifer Mapping & Management using heliborne geophysical survey was carried out during 2021-23 in Arid Region of North Western India in parts of Rajasthan, Gujarat and Haryana. During the studies a few stretches of palaeochannels were also identified with a cumulative length of around 280 kms. Major stretches of these palaeochannels were found to be conducive for taking up artificial recharge to ground water. The studies were done in collaboration with NGRI at an expenditure of Rs.52.78 cr. |
| Rajkot, Jamnagar, Morbi, Surendranagar and Devbhumi Dwarka Districts of Gujarat | |
| Kurukshetra and Yamuna Nagar Districts of Haryana | |

GOVERNMENT OF INDIA
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RAJYA SABHA

UNSTARRED QUESTION NO. 80

ANSWERED ON 25.11.2024

NAMAMI GANGE PROGRAMME

80#. DR. KALPANA SAINI

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

- (a) the present status of the Namami Gange Programme;
- (b) the details of steps taken and projects undertaken since the inception of the Scheme; and
- (c) the details of funds approved, released and achievements made so far, year-wise and State-wise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The Government of India (GoI) launched the Namami Gange Programme (NGP) in 2014-15 for the rejuvenation of river Ganga and its tributaries with a budgetary outlay of ₹ 20,000 crore, for five years, up to March 2021 and has been further extended to March 2026 with a budgetary outlay of ₹ 22,500 crore. Under the Namami Gange Programme, a diverse and holistic set of interventions for cleaning and rejuvenation of river Ganga have been taken up, that includes wastewater treatment, solid waste management, riverfront management (ghats and crematoria), ensuring e-flow, rural sanitation, afforestation, biodiversity conservation, public participation, etc. A total of 484 projects have been taken up at an estimated cost of ₹ 39,604 Crore, out of which 302 projects have already been completed and made operational.

(b) The steps taken by the National Mission for Clean Ganga (NMCG) under NGP to make the Ganga and its tributaries pollution-free with sustainable cleanliness are as follows:

- i. A total of 203 number of **sewerage infrastructure projects** costing ₹ 32,513 crore have been taken up for the creation & rehabilitation of Sewage Treatment Plant (STP) with treatment capacity of 6,255 Million Litres per Day (MLD) including laying of 5,249 km long sewerage networks. Of them, 125 STPs with a capacity of 3,327 MLD have been completed along with 4,532 km long sewerage network;
- ii. For **industrial pollution abatement**, 5 nos. of Common Effluent Treatment Plants (CETPs) have been sanctioned, i.e., Jajmau CETP (20 MLD), Banther CETP (4.5 MLD), Unnao CETP (2.65 MLD), Mathura CETP (6.25 MLD) and Gorakhpur CETP (4.5 MLD). Of these two projects, Mathura CETP (6.25 MLD) and Jajmau CETP (20 MLD) have been completed;
- iii. **Annual inspection of Grossly Polluting Industries (GPIs):** Inspection of GPIs started in 2017. In 2024, 4246 Grossly Polluting Industries (GPIs) have been inventorised in the 7th round of

inspection. Out of 2487 GPIs inspected so far 1425 GPIs are compliant, 572 are non-compliant and 490 are non-operational. Among the non-compliant (572 GPIs), 15 GPIs have been issued notice for closure and 557 GPIs have been issued show cause notice. These efforts have resulted in reduction in BOD load from 26 tonnes per day (TPD) in 2017 to 13.73 TPD in 2022, and about 28.6 % reduction in effluent discharge from 349 MLD in 2017 to 249.31 MLD in 2022;

- iv. At NMCG, an on-line dashboard “**PRAYAG**” has been operationalized for continuous monitoring of river water quality; the performance of Sewage Treatment Plants (STPs); etc. on the Ganga and Yamuna River;
- v. Construction of independent household toilets in **4,507 identified villages** in the five River Ganga States have been completed. All these Ganga bank villages have now been declared open defecation-free (**ODF**). Further, till date, 3,679 no's of Ganga villages have been declared ODF sustainability (**ODF Plus**);
- vi. A total no. of 139 **District Ganga Committees (DGC)** have been constituted which conducts 4M (Monthly, Mandated, Minuted, and Monitored) meetings regularly. As of date, 2024, more than 3,529 meetings have been conducted;
- vii. NMCG together with other agencies in coordination with the selected DGCs have prepared **District Ganga Plans** for 4 districts in Ramganga Basin i.e. Udham Singh Nagar in Uttarakhand, Shahjahanpur, Moradabad and Bareilly in Uttar Pradesh using a common methodology and River Basin Management framework developed by NMCG with technical support under the India-EU Water Partnership (IEWP);
- viii. Seven Ganga **Biodiversity Parks** in seven districts (Mirzapur, Bulandshahar, Hapur, Budaun, Ayodhya, Bijnore and Pratapgarh) of Uttar Pradesh;
- ix. **Wetland Conservation:** Sanctioned for conserving and managing 5 priority wetlands in Uttar Pradesh (3), Bihar (1) and Jharkhand (1);
- x. NMCG, through the State Forest Department, has implemented a **forestry intervention** project along the main stem of river Ganga. 33,024 hectares area have been afforested with an expenditure of about ₹ 398 crore;
- xi. A total of 105 lakhs of **Indian Major Carp (IMC)** fingerlings have been reared in the Ganga since 2017 to conserve fish biodiversity and prey base for river Dolphins, and ensure the livelihood of fishers in the Ganga basin under the special project implemented by Central Inland Fisheries Research Institute (CIFRI);
- xii. Science-based **species restoration programme**, rescue, and rehabilitation programme for aquatic species like Dolphins, Otters, Hilsa, Turtles, and Ghariyal in collaboration with Wild Life Institute of India (WII), Dehradun and State Forest Department, have shown marked improvements in biodiversity with increased sightings of Dolphins, Otters, Hilsa, Turtles, and other riverine species;
- xiii. **Ganga Task Force (GTF)** was raised in the state of Uttar Pradesh to assist NMCG in carrying out its mandated tasks, such as (a) Plantation of trees to check soil erosion; (b) Management of Public

Awareness / Participation campaigns; (c) Patrolling of Sensitive Rivers Areas for Biodiversity protection; (d) Patrolling of Ghats, etc;

- xiv. A cadre of Ganga Doots (45,000 nos.), Ganga Praharis (2,900 nos.) and Ganga Mitra (700 nos.) are involved in public **participatory activities**;
- xv. Comprehensive **public awareness campaigns** have been undertaken to instill a sense of responsibility and engagement among the public in efforts to clean and conserve the Ganga River. These include - Ganga Utsav, Nadi Utsav, regular cleanathons and plantation drives, Ghat Par Yoga, Ganga Aartis, etc. The efforts are also supported by dedicated cadres of Ganga saviours, such as Ganga Praharis, Ganga Vichar Manch, Ganga Doots, etc.

(c) The year-wise details of the amount released by the Government of India to the NMCG and amount disbursed by NMCG to various agencies for implementation of projects/ interventions to abate pollution, as well as to rejuvenate river Ganga and its tributaries since inception of the Namami Gange Programme to 15th November 2024 are at **Annexure I**.

No State-wise allocation is made under the Namami Gange programme. However, the amount disbursed to various agencies including State Missions for Clean Ganga, for implementation of projects/interventions under the Namami Gange Programme since its inception (FY 2014-15) till 15th November 2024, compiled State-wise, is at **Annexure-II**.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 80 TO BE ANSWERED IN RAJYA SABHA ON 25.11.2024 REGARDING “NAMAMI GANGE PROGRAMME”.

Year-wise details of the amount released by the Government of India to NMCG and amount disbursed by NMCG to various implementing/ executing agencies (FY 2014-15 to 15 November 2024)

Rs. in crore

| F.Y. | Funds released by Government of India to NMCG | Disbursement/Release by NMCG |
|--------------|--|-------------------------------------|
| 2014-15 | 326.00 | 170.99 |
| 2015-16 | 1,632.00 | 602.30 |
| 2016-17 | 1,675.00 | 1,062.81 |
| 2017-18 | 1,423.12 | 1,625.01 |
| 2018-19 | 2,307.50 | 2,626.54 |
| 2019-20 | 1,553.40 | 2,673.09 |
| 2020-21 | 1,300.00 | 1,339.97 |
| 2021-22 | 1,900.00 | 1,892.70 |
| 2022-23 | 2,220.00 | 2,258.98 |
| 2023-24 | 2,400.00 | 2,396.10 |
| 2024-25 | 1,401.60 | 1,026.47* |
| Total | 18,138.62 | 17,674.96 |

* up to 15 November 2024

Note: -

- (i) NMCG fully transited to the Treasury Single Account (TSA) system from the financial year 2022-23. Prior to TSA, grants released to the NMCG by the Government of India were non-lapsable.
- (ii) Grants disbursement by NMCG in a particular year might not have been utilized in the same year. Disbursement by NMCG during a particular year includes unspent grants carried forward from previous years.
- (iii) Out of the disbursement/release by the NMCG, unspent grants amounting to Rs.753.71 crore have been refunded by various implementing/ executing agencies to the Consolidated Fund of India.

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 80 TO BE ANSWERED IN RAJYA SABHA ON 25.11.2024 REGARDING “NAMAMI GANGE PROGRAMME”.

Yearly disbursement under Namami Gange Programme State-wise

(Financial Year 2014-15 to 15th November 2024)

| Sl. No. | States | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
|---------|------------------|---------|---------|---------|---------|---------|----------|---------|---------|---------|---------|---------|
| 1 | Uttarakhand | 4.26 | 37.04 | 44.03 | 242.49 | 328.94 | 122.28 | 124.82 | 147.51 | 111.72 | 144.40 | 19.28 |
| 2 | Uttar Pradesh | 74.58 | 153.35 | 585.15 | 550.12 | 823.77 | 876.68 | 472.46 | 450.69 | 707.44 | 820.74 | 423.55 |
| 3 | Bihar | - | 124.23 | 88.07 | 367.18 | 673.03 | 1,185.17 | 193.84 | 250.70 | 873.39 | 878.96 | 252.50 |
| 4 | Jharkhand | 0.97 | 27.83 | 49.53 | 21.72 | 86.73 | 30.50 | 28.09 | 13.61 | 4.75 | 32.60 | 33.15 |
| 5 | West Bengal | 73.85 | 185.49 | 117.25 | 245.87 | 227.62 | 70.60 | 105.06 | 134.42 | 255.52 | 150.88 | 66.11 |
| 6 | Madhya Pradesh | - | 3.39 | 6.50 | - | - | - | - | - | - | 12.50 | 11.00 |
| 7 | Delhi | - | 4.96 | 2.17 | 81.57 | 310.69 | 214.47 | 235.00 | 405.00 | 77.33 | 161.18 | - |
| 8 | Haryana | - | 30.00 | 52.73 | 6.88 | - | - | - | - | - | - | - |
| 9 | Rajasthan | - | - | 20.00 | - | 1.25 | - | - | 50.00 | - | - | - |
| 10 | Himachal Pradesh | - | - | - | - | - | - | 1.25 | 2.50 | - | - | - |

Note 1: State-wise disbursements indicated above include funds released to (i) State Missions for Clean Ganga for Sewage Treatment Plants (STPs) and associated infrastructure, (ii) State Forest Departments for Afforestation Projects, (iii) STP Projects implemented on Hybrid Annuity Mode, (iv) Central Public Sector Enterprises for RFD/Ghat Projects, (v) D/o Drinking Water & Sanitation and State Rural Sanitation Missions for SBM/ODF interventions in Ganga Grams and (vi) Industrial Pollution Abatement Projects.

Note 2: Out of the above mentioned disbursement/release by the NMCG, unspent grants amounting to Rs. 689.71 crore have been refunded by various implementing/executing agencies to the Consolidated Fund of India

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UNSTARRED QUESTION NO. 81

ANSWERED ON 25.11.2024

ESTABLISHMENT OF JSKs

81. SHRI R. DHARMAR

Will the Minister of **Jal Shakti** be pleased to state:

- (a) the features of the Jal Shakti Kendras (JSKs);
- (b) the details of the funds sanctioned, allocated and utilized for these Kendras across the country including State of Tamil Nadu during the last three years and the current year;
- (c) the number of districts identified under this project in Tamil Nadu so far;
- (d) the details of the target set and achievements made so far;
- (e) whether Government has planned to establish JSKs in every district of Tamil Nadu; and
- (f) if so, the details thereof and the time by when it is likely to be established?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Jal Shakti Kendras(JSKs) are envisioned as dedicated resource and knowledge centers, playing a pivotal role in water conservation efforts. They provide comprehensive information on water-related issues, including best practices in conservation and effective water-saving techniques. Additionally, JSKs offer expert guidance and technical support to local communities and district administrations, enabling effective water management strategies. These centers also serve as hubs for education and capacity building, empowering stakeholders to actively participate in sustainable water conservation initiatives.

(b) Funds spent under the JSA: CTR campaign is through convergent financing from various schemes of the Central, State and local bodies like the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Per Drop More Crop, Repair, Renovation and Restoration Components under the Pradhan Mantri Krishi Sinchai Yojana (PMKSY), Compensatory Afforestation Fund Management and Planning Authority (CAMPA), Finance Commission grants etc. The Jal Shakti Kendras are to be set up from existing resources within the district through locally available both Human Resources and Infrastructure. No additional funding is given for setting up Jal Shakti Kendras. Only 4 districts were released funds of Rs 5lakhs each strictly for pilot purpose to showcase as models for replication for other JSKs . As far as Tamil Nadu and other States are concerned, no such fund has been sanctioned for Jal Shakti Kendras except to 4 districts for pilot purpose.

(c) & (d) Ministry of Jal launched Jal Shakti Abhiyan(JSA) in the year 2019. Since 2021, Jal Shakti Abhiyan has subsumed Catch the Rain(CTR) campaign and has been implementing as Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) in all the districts (rural as well as urban) of the country, including all the districts of Tamil Nadu. There are no defined targets under this campaign and the State/UTs are encouraged to undertake as many works as possible aimed at water conservation. As per the information available on JSA: CTR portal (jsactr.mowr.gov.in), till date, around 1.56 crore water-related works have been taken up under the JSA:CTR initiative.

(e) & (f) Under JSA: CTR all the States/UTs have been requested to set up JSKs in all the districts of the country including the districts of Tamil Nadu. As per information uploaded on JSA: CTR portal (jsactr.mowr.gov.in) by the State Government, JSKs has been established in all the 38 districts of Tamil Nadu through local resources.

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UNSTARRED QUESTION NO. 82

ANSWERED ON 25.11.2024

LOSS OF LIFE AND PROPERTY DUE TO CYCLONE AND FLOODS IN TAMIL NADU

82. DR. M. THAMBIDURAI

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

- (a) whether Government is aware that various districts of Tamil Nadu suffered huge loss of life and property due to cyclone and floods during the last three years;
- (b) if so, the details thereof, the extent of loss of life and property, year-wise;
- (c) whether Government has allocated funds to the State Government for providing relief to the victims of cyclone and floods;
- (d) if so, the details thereof; and
- (e) whether Government has audited or proposes to audit the funds given to the State Government to ensure that the funds are utilized properly?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) to (e) The district wise data on flood damages is not maintained centrally, however, state wise data on flood damages is compiled by Central Water Commission based on information received from concerned states. As per information provided by Tamil Nadu to Ministry of Home Affairs, the details of damages in wake of hydro-meteorological disasters during the last three years i.e from 2021-2022 to 2023-2024 are at **Annexure-I**.

The primary responsibility for disaster management rests with the State Governments concerned. The Central Government provides requisite logistics and financial support to the efforts of the State Governments. The State Governments provide financial relief to the affected people in the event of 12 notified natural disasters which includes cyclone and flood, from the State Disaster Response Fund (SDRF), already placed at its disposal, in accordance with approved items and norms of Government of India (GOI). However, in the event of disaster of a severe nature, additional financial assistance is extended from the National Disaster Response Fund (NDRF), as per laid down procedure, which includes an assessment based on the visit of an Inter- Ministerial Central Team (IMCT). The financial assistance provided under SDRF and NDRF is by way of relief and not for compensation. The details of the allocation/release of the funds under the SDRF and NDRF during 2021-22 to 2023-24 are at **Annexure-II**.

As per guidelines of SDRF/NDRF, issued by Ministry of Home Affairs, Comptroller and Auditor General of India would cause audit/performa audit of SDRF conducted every year in conformity with approved items & norms in terms of the purposes of the SDRF Guidelines. The State Government shall furnish a copy of the audit report of the Comptroller and Auditor General of India in respect of SDRF to the Ministry of Finance and Ministry of Home Affairs.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (e) OF UNSTARRED QUESTION NO. 82 TO BE ANSWERED IN RAJYA SABHA ON 25.11.2024 REGARDING “LOSS OF LIFE AND PROPERTY DUE TO CYCLONE AND FLOODS IN TAMIL NADU”.

Details of damages as reported by Tamil Nadu due to hydro-meteorological disasters during the years 2021-22 to 2023-2024

| S. N o. | State | Year | | | | | | | | | | | |
|------------------------|---------------|---------------------------------------|----------------------------------|--|---|---|----------------------------------|---|---|---|----------------------------------|---|---|
| | | 2021-22 | | | | 2022-23 | | | | 2023-2024 | | | |
| | | Human Lives lost (No.) | Cattle Lost (No.) | Houses/huts damaged (No.) | Cropped Area affected (in lakh ha. | Human Lives lost (No.) | Cattle Lost (No.) | Houses/hu ts damaged (No.) | Cropped Area affected (in lakh ha. | Human Lives lost (No.) | Cattle Lost (No.) | Houses/hu ts damaged (No.) | Cropped Area affected (in lakh ha. |
| 1 | Tamil Nadu | 128 | 6516 | 48510 | 0.83 | 16 | 508 | 435 | 1.53 | 160 | 3039 | 1606 | 0.36 |

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (e) OF UNSTARRED QUESTION NO. 82 TO BE ANSWERED IN RAJYA SABHA ON 25.11.2024 REGARDING “LOSS OF LIFE AND PROPERTY DUE TO CYCLONE AND FLOODS IN TAMIL NADU”.

Statement showing details of allocation and release of funds to Tamil Nadu under State Disaster Response Fund (SDRF) and National Disaster Response Fund (NDRF) during the years 2021-22 to 2023-2024

(Rs.in crore)

| S.No | State | Allocation under SDRF including Centre and State share | | | Centre’s Share of SDRF Released | | | Release from NDRF (For all calamities) | | |
|-------------|--------------|---|----------------|----------------|--|----------------|----------------|---|----------------|----------------|
| | | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 | 2021-22 | 2022-23 | 2023-24 |
| 1 | Tamil Nadu | 1088.00 | 142.40 | 1200.00 | 816.00 | 856.80 | 900.00 | 566.36 | - | - |

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UNSTARRED QUESTION NO. 83

ANSWERED ON 25.11.2024

'CATCH THE RAIN' CAMPAIGN

83.# SHRI NARHARI AMIN

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

- (a) the objectives of the 'Catch the Rain' campaign;
- (b) the strategies made by Government to promote this campaign;
- (c) whether Government is running any special scheme for rain water harvesting;
- (d) if so, the details thereof; and
- (e) the details of the leading States with regard to the rain water harvesting in the country?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Following the success of Jal Shakti Abhiyan conducted in 2019, “Catch the Rain” campaign was initiated during Covid-19 pandemic period in the year 2020 with the tag line “Catch the rain, where it falls, when it falls”. The campaign aimed to promote rainwater conservation by creating Rainwater Harvesting Structures (RWHS) suited to local climatic conditions and sub-soil strata, with active community participation. The government adopted a multi-pronged strategy, including awareness drives, inter-sectoral convergence and collaboration with Central and State Ministries, educational institutions and organizations like Nehru Yuva Kendra Sangathan (NYKS). Ministry of Jal Shakti in 2021 took up the “Jal Shakti Abhiyan: Catch the Rain” (JSA: CTR) subsuming Catch the Rain campaign which covered rural and urban areas of all districts (all blocks and municipalities) of the country. JSA: CTR has now become an annual feature since 2021 and the 5th edition of JSA: CTR was launched on 09.03.2024 for implementation during the period 09.03.2024 to 30.11.2024 in rural and urban areas of all districts (all blocks and municipalities) in all the States/UTs of the country.

(c) & (d) Water is a State subject and the efforts to promote water conservation including rain water harvesting in the country falls under the mandate of the State Government. Central Government supplements the efforts of the States/UTs through technical and financial support. Water conservation through rainwater harvesting is one of the foremost priorities of the Central Government. Major steps taken by the Government for water conservation and rainwater harvesting to reduce water stress in the country are as follows:

- i. Government of India has been implementing a scheme namely Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) which inter-alia includes water conservation and water harvesting structures.
- ii. Financial assistance is given to various States under 15th Finance Commission tied grants which can be inter-alia utilized for rainwater harvesting.
- iii. The Ministry of Jal Shakti has been implementing Jal Shakti Abhiyan (JSA) since 2019 on an annual basis. In the current year, Ministry of Jal Shakti is implementing Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) 2024, 5th in the series of JSAs, in all the districts (rural as well as urban) of the country. JSA: CTR is a convergence of various Central Government schemes and funds like MGNREGS, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Per Drop More Crop, Repair, Renovation and Restoration Components under the Pradhan Mantri Krishi Sinchai Yojana (PMKSY), Compensatory Afforestation Fund Management and Planning Authority (CAMPA), Finance Commission grants, State Government schemes, Corporate Social Responsibility (CSR) funds etc. One of the major interventions undertaken under the campaign includes construction and repair of rainwater harvesting structures including rooftop and water harvesting structures.
- iv. To further strengthen the momentum of Jal Shakti Abhiyan: Catch the Rain campaign, "Jal Sanchay Jan Bhagidari" initiative was launched in Surat on 6th September 2024. This initiative emphasizes the importance of Jan Bhagidari in water conservation & embodies a pledge for united action from all stakeholders, including government bodies, industries, local authorities, philanthropists, resident welfare associations (RWAs) and individuals with the aim to have a special focus on the construction of artificial recharge structures/borewell recharge shafts among other activities, which will increase storage capacity & help to augment groundwater recharge. The initiative adopts the whole-of- society, whole-of-government approach to achieve its desired objectives. The primary aim of this initiative is to focus on constructing millions of low-cost, affordable solutions for groundwater recharge in mission mode, ensuring that no drop of rainwater goes to waste.
- v. Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0 has provisions for harvesting the rainwater through storm water drains into water body (which is not receiving sewage/effluent). Through preparation of 'Aquifer Management Plan' cities target to strategize groundwater recharge augmentation by developing a roadmap for improving rain water harvesting within city limits. Through IEC campaign, awareness is created about practices for water conservation like rainwater harvesting.
- vi. Ministry of Housing & Urban Affairs has formulated guidelines for the States to adopt measures suitable to local conditions, such as Unified Building Bye Laws (UBBL) of Delhi, 2016, Model Building Bye Laws (MBBL), 2016 and Urban and Regional Development Plan Formulation and

Implementation (URDPFI) Guidelines, 2014 with adequate focus on requirement of rainwater harvesting and water conservation measures.

- vii. Central Ground Water Board (CGWB) has prepared a Master Plan for Artificial Recharge to Groundwater- 2020 in consultation with States/UTs which is a macro level plan indicating various structures for the different terrain conditions of the country including estimated cost. The Master Plan has provisions for construction of about 1.42 crore Rain water harvesting and artificial recharge structures in the country to harness 185 Billion Cubic Metre (BCM) of monsoon rainfall.
- viii. National Water Policy (2012) has been formulated by Department of Water Resources, RD & GR, which inter-alia advocates rainwater harvesting and conservation of water and also highlights the need for augmenting the availability of water through direct use of rainfall.
- ix. Department of Land Resources(DoLR) implements Watershed Development Component of Pradhan Mantri Krishi Sinchai Yojana(WDC-PMKSY) for the development of rainfed and degraded lands in the country. The activities undertaken, inter-alia, include rainwater harvesting.
- x. The activity of installing rainwater harvesting structures at the Gram Panchayat level has been included in the Panchayat Development Plan (PDP) for Panchayats to opt for the same as per their needs for execution from XV Finance Commission (FC) funds or any other available funds with them.

(e) In so far as details of the leading States/UTs in rainwater harvesting is concerned, the Central Government encourages all States and Union Territories to enthusiastically implement these schemes/campaigns and prioritize the construction of as many rainwater harvesting structures as possible within their jurisdictions. These efforts are crucial to saving and conserving rainwater for future use, ensuring sustainable water availability, and addressing regional water challenges effectively.

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
RAJYA SABHA
UNSTARRED QUESTION NO. 85
ANSWERED ON 25.11.2024

DECREASING OF GROUNDWATER LEVEL IN RAJASTHAN

85. SHRI MADAN RATHORE

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

- (a) whether any policy has been made to check the rapidly decreasing water level in the country including Rajasthan, if so, the details thereof;
- (b) the works done by Government for conservation of groundwater during the last three years and status of groundwater, State-wise;
- (c) whether Government has conducted any recent research or survey regarding the groundwater situation of other States including Rajasthan for future preparation, if not, the reasons therefor; and
- (d) the schemes being implemented by Government to conserve water in the country?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Realizing the significance of holistic and sustainable development of water resources in the country, Ministry of Water Resources had formulated the National Water Policy (NWP) in 1987 itself which was subsequently reviewed and updated in 2002 and 2012. From the ground water perspective, the NWP, inter-alia, calls for rainwater harvesting and conservation of water, mapping the aquifers of the country, proper regulation of extraction by setting up regulatory authorities and integrated development of surface and ground water. Based on the NWP, this Ministry had drafted a Model 'Groundwater (Regulation and Control of Development and Management) Bill' 2005, providing a regulatory framework to curb indiscriminate extraction of ground water while also making provisions for rain water harvesting and artificial recharge. The Model Bill has been circulated to all States/UTs and so far 21 States/UTs have adopted it.

(b) to (d) The Central Ground Water Board (CGWB) annually conducts Dynamic Ground Water Resources Assessment of the country in association with States/UTs. In 2023, the Stage of ground water Extraction (SoE) for the whole country is assessed at 59.26%. State-wise details of annual ground water recharge and extraction, as per the 2023 assessment, is provided at **Annexure –I**.

Water being a State subject, sustainable development and management of groundwater resources is primarily the responsibility of the State Governments. However, the Central Government facilitates the efforts of the State Governments by way of technical and financial assistance through its various schemes and projects. In this direction, the important steps taken by the Ministry of Jal Shakti and other central ministries for sustainable development of ground water resources in the country are given below:-

- i. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 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 Rajasthan. 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 information under JSA, a total of around 98 lakhs water conservation and rain water harvesting structures have been constructed in the country in the last 3 years, with around 4.8 lakh structures in Rajasthan. State-wise details of all such water conservation works done in last 3 years is provided in **Annexure –II**.

- 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 3.34 lakh sq km of Rajasthan, 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 for the entire country, including Rajasthan 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 to harness 185 BCM (Billion cubic meter).
- iv. MoJS is implementing Atal Bhujal Yojana, which is a community led scheme for participatory ground water management focusing on demand side management of ground water in 80 water stressed districts in 7 States, Rajasthan being one among them.
- v. CGWB implements artificial recharge projects for demonstrative purposes and in select priority areas. In the last 3 years, CGWB has taken up the project on ‘Groundwater augmentation through artificial recharge in identified water stressed areas of Rajasthan comprising Jodhpur, Jaisalmer & Sikar districts. The structures include earthen/gravity dams, check dams, anicuts and recharge shaft with ponds.
- vi. Department of Agriculture & Farmers’ Welfare (DA & FW), GoI, is implementing Per Drop More Crop Scheme in the country, including Rajasthan, 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.
- vii. 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 Rajasthan. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country.
- viii. 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/>

In addition, a number of States have done notable work in the field of water

conservation/harvesting. Some of them can be mentioned as ‘Mukhyamantri Jal Swavlamban Abhiyan’ in Rajasthan, ‘Jalyukt Shivar’ in Maharashtra, ‘Sujalam Sufalam Abhiyan’ in Gujarat, ‘Mission Kakatiya’ in Telangana, Neeru Chettu’ in Andhra Pradesh, Jal Jeevan Hariyali in Bihar, ‘Jal Hi Jeevan’ in Haryana, ‘Kudimaramath’ scheme in Tamil Nadu etc.

ANNEXURE REFERRED TO IN REPLY TO PART (b) to (d) OF UNSTARRED QUESTION NO. 85 TO BE ANSWERED IN RAJYA SABHA ON 25.11.2024 REGARDING “DECREASING OF GROUNDWATER LEVEL IN RAJASTHAN”.

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 (b) to (d) OF UNSTARRED QUESTION NO. 85 TO BE ANSWERED IN RAJYA SABHA ON 25.11.2024 REGARDING “DECREASING OF GROUNDWATER LEVEL IN RAJASTHAN”.

Water Conservation works done under Jal Shakti Abhiyan

State-wise (Period: from March 2021 to October 2024)

| Jal Shakti Abhiyan: Intervention-Wise Status Report | | | | | |
|--|--|---|---|--------------------------------|------------------------|
| *Figures Showing No. of Works Completed as reflected in JSA portal | | | | | |
| S.No. | State | *Water Conservation and Rain Water Harvesting | *Renovation of Traditional Water Bodies | *Reuse and Recharge Structures | *Watershed Development |
| 1 | ANDAMAN AND NICOBAR ISLANDS | 244 | 930 | 321 | 121 |
| 2 | ANDHRA PRADESH | 280985 | 88001 | 8084 | 103429 |
| 3 | ARUNACHAL PRADESH | 1683 | 171 | 335 | 684 |
| 4 | ASSAM | 42255 | 5838 | 909 | 45730 |
| 5 | BIHAR | 164330 | 24801 | 72705 | 78630 |
| 6 | CHANDIGARH | 319 | 8 | 0 | 0 |
| 7 | CHHATTISGARH | 192693 | 60007 | 41269 | 114873 |
| 8 | DADRA AND NAGAR HAVELI AND DAMAN AND DIU | 246 | 1 | 0 | 0 |
| 9 | DELHI | 113 | 36 | 0 | 0 |
| 10 | GOA | 72 | 88 | 15 | 59 |
| 11 | GUJARAT | 42570 | 25754 | 42907 | 93999 |
| 12 | HARYANA | 68459 | 19266 | 45582 | 15352 |
| 13 | HIMACHAL PRADESH | 37353 | 5527 | 2918 | 100586 |
| 14 | JAMMU AND KASHMIR | 39191 | 9119 | 90952 | 104965 |
| 15 | JHARKHAND | 77729 | 2026 | 32617 | 318761 |
| 16 | KARNATAKA | 372998 | 52157 | 451540 | 568627 |
| 17 | KERALA | 91987 | 41651 | 77446 | 270501 |
| 18 | LADAKH | 3292 | 118 | 14128 | 3947 |
| 19 | LAKSHADWEEP | 3 | 8 | 0 | 0 |
| 20 | MADHYA PRADESH | 435577 | 23996 | 78303 | 256838 |
| 21 | MAHARASHTRA | 38120 | 11167 | 71965 | 26385 |
| 22 | MANIPUR | 7335 | 2329 | 49 | 2313 |
| 23 | MEGHALAYA | 9800 | 1387 | 407 | 8214 |
| 24 | MIZORAM | 22772 | 974 | 2056 | 12068 |
| 25 | NAGALAND | 920 | 317 | 84 | 938 |
| 26 | ODISHA | 164237 | 29594 | 31713 | 174795 |
| 27 | PUDUCHERRY | 290 | 1718 | 0 | 21 |
| 28 | PUNJAB | 5149 | 14503 | 3310 | 23963 |
| 29 | RAJASTHAN | 309500 | 36790 | 11603 | 125305 |
| 30 | SIKKIM | 6864 | 48 | 983 | 4114 |
| 31 | TAMIL NADU | 385217 | 42793 | 534845 | 265720 |
| 32 | TELANGANA | 28040 | 24738 | 105548 | 58361 |
| 33 | TRIPURA | 66409 | 2017 | 5109 | 61759 |
| 34 | UTTAR PRADESH | 218274 | 88394 | 101681 | 933967 |
| 35 | UTTARAKHAND | 173388 | 10968 | 5427 | 96456 |
| 36 | WEST BENGAL | 96602 | 44744 | 34964 | 54225 |
| Total | | 3385016 | 671984 | 1869775 | 3925706 |

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

UNSTARRED QUESTION NO. 86

ANSWERED ON 25.11.2024

REDUCTION OF WATER STORAGE CAPACITY

86. SHRI YERRAM VENKATA SUBBA REDDY

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

- (a) whether it is a fact that the Union Cabinet has reduced water storage capacity to 41.5 meters (135 feet);
- (b) whether it is also a fact that the project is going to be completed with 41.5 meters storage capacity and the Cabinet has approved ₹ 30,436 crores for the same;
- (c) whether Government of Andhra Pradesh had earlier sent proposals for fixing water storage capacity at 45.72 meters (150 feet) and also sought revised estimates; and
- (d) if so, the reasons for reducing the capacity and not accepting the revised cost estimates of the project of ₹ 55,657 crores?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Water storage capacity of the Polavaram irrigation project has not been reduced and project is being executed in accordance with the provisions of GWDT Award-1980 with the Full Reservoir Level (FRL) at EL + 45.72m.

(b) to (d) The Second Revised Cost Estimate of Polavaram Irrigation Project submitted by Government of Andhra Pradesh was accepted by the Advisory Committee of Ministry of Water Resources, River Development and Ganga Rejuvenation on Irrigation, Flood Control & Multipurpose Projects in its 141st meeting held in February, 2019 for Rs. 55,656.87 crore.

To accrue the early benefits from the project, Government of Andhra Pradesh has submitted revised cost estimate in August, 2023 with water storage up to EL +41.15 m - Minimum Draw Down level, which included construction of the project components such as dam, spillway & appurtenant structures for Full Reservoir Level at EL + 45.72m and Land Acquisition, Rehabilitation & Resettlement works up to EL +41.15 m. Further, Government of India has approved ₹ 30,436.95 crore for 'Revised cost for completion of the Polavaram Irrigation Project with water storage up to EL +41.15 meter i.e. Minimum Draw Down level'.

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

RAJYA SABHA
UNSTARRED QUESTION NO. 89

ANSWERED ON 25.11.2024

DEVELOPMENT OF WATER BODIES

89.# DR. SUMER SINGH SOLANKI

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

- (a) whether Government proposes to develop small water bodies in villages such as ponds, canals and wells to reduce the dependency on rainwater for agriculture;
- (b) if so, the details thereof; and
- (c) if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Ministry of Jal Shakti launched the Jal Shakti Abhiyan (JSA) in the year 2019. Following the success of Jal Shakti Abhiyan conducted in 2019, “Catch the Rain” campaign was initiated during Covid-19 pandemic period in the year 2020 with the tag line “Catch the rain, where it falls, when it falls”. Ministry of Jal Shakti in 2021 took up the “Jal Shakti Abhiyan: Catch the Rain” (JSA: CTR) subsuming Catch the Rain campaign which covered rural and urban areas of all districts (all blocks and municipalities) of the country. JSA: CTR has now become an annual feature since 2021 and the 5th edition of JSA: CTR was launched on 09.03.2024 for implementation during the period 09.03.2024 to 30.11.2024 in rural and urban areas of all districts (all blocks and municipalities) in all the States/UTs of the country. Various targeted interventions under the JSA: CTR inter-alia include development of roof-top Rain Water Harvesting Structures (RWHS) and water harvesting pits in compounds; maintenance of existing RWHS & creation of new check dams/ponds; renovation of traditional WHS; removal of encroachments of tanks/lakes and in their catchment channels; de-silting of tanks, reuse and recharge of bore wells; watershed development; rejuvenation of small rivers and rivulets; revival of wetlands and protection of flood-banks etc. The development of water bodies and implementation of aforesaid measures facilitates harvesting rainwater for use during the lean seasons for drinking water, agriculture, boost groundwater levels etc.

In addition, the Government of India launched the Mission Amrit Sarovar in the year 2022 with aim to develop at least 75 Amrit Sarovars in every district of the country. Similarly, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has provisions for creation of rain water harvesting structures. The scheme of Surface Minor Irrigation (SMI) and Repair, Renovation & Restoration (RRR) of Water Bodies, a part of Har Khet Ko Pani (HKKP) under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) are also implemented with an aim to enhance physical access of water on farm, expand cultivable

area under assured irrigation, improve on farm water use efficiency, introduce sustainable water conservation practices etc. Per Drop More Crop Scheme (PDMC) focuses on enhancing water use efficiency at farm level through Micro Irrigation. Together, these programmes and schemes facilitates harvesting rainwater for use during the lean seasons for drinking water, agriculture, boost groundwater levels etc.

(c) Does not arise.

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

UNSTARRED QUESTION NO. 92

ANSWERED ON 25.11.2024

POLLUTION IN RIVER YAMUNA

92.# DR. BHIM SINGH

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

- (a) the total number of rivers in the country alongwith details of the rivers into which untreated drain water of municipal areas is getting discharged;
- (b) the reasons for polluted Yamuna river in Delhi even after treatment of sewage water;
- (c) whether it is a fact that many STPs are not working as per the standard due to which the water of the river Yamuna is not getting cleaned; and
- (d) if so, the details of the corrective actions being taken in this regard alongwith the action ensured against STP operating companies?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) 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. The details of the same are available at:

<https://cpcb.nic.in/openpdf?file.php?id=UmVwb3J0RmlsZXNvMTQ5OF8xNjcyOTg4MDQ1X21lZGlhcGhvdG8xMjk5NS5wZGY=>

(b) The main reasons for pollution in river Yamuna in Delhi are:

- i. Discharge of untreated/ partially treated sewage into river Yamuna. As informed by Delhi Pollution Control Committee (DPCC), Gap in treatment in September, 2024 is 836.9 Million litre per day (MLD);
- ii. Absence of Common Effluent Treatment Plants (CETPs) in some approved industrial areas;
- iii. Delay in completion of new projects and rehabilitation and/or upgradation of sewage treatment projects.

(c) As per the information received from the DPCC, out of 38 nos of operational STPs only 16 STPs were found meeting the standards prescribed.

(d) The corrective actions are:

- i. As per information received from the DPCC, all the operational STPs of DJB are being monitored by DPCC every month & analysis reports are available on the website of DPCC. DPCC issues communication with the DJB to meet prescribed standards on a regular basis.
- ii. Delhi Jal Board has informed that each contract has provision of penalty in case of non-achievement of guaranteed parameters of treated effluent, etc. and, payment is withheld/recovered time to time for non-compliances. In case the agencies do not respond properly even after repeated communication there is a provision to blacklist/debar from DJB tendering. DJB has taken action on defaulting firms at various sites.
- iii. CPCB issued directions dated 12.11.2024 to Delhi Pollution Control Committee under Section 18(1) (B) of the water (prevention & control of Pollution) Act, 1974 regarding non-compliance status of Sewage Treatment Plants (STPs) installed in Delhi.
- iv. The Government of NCT of Delhi is working on the following sewage infrastructure enhancement projects: -
 - a. Rehabilitation of existing 3 STPs at Kondli Phase II, Rithala Phase I, and Yamuna Vihar Phase –II;
 - b. Upgradation and increasing capacity of existing STPs;
 - c. Construction of 2 New STPs at Okhla and Sonia Vihar;
 - d. Various interceptor sewer projects.
- v. Under the Namami Gange Programme, to rejuvenate the river Yamuna, 9 projects have been sanctioned in the NCT of Delhi to create 1,268 MLD of sewage treatment capacity at an estimated cost of ₹ 1,951 crores. Eight of these projects have been completed and are operational.
- vi. The matter is regularly reviewed in the Central Monitoring Committee(CMC) and High Level Committee(HLC) meeting and necessary directions are issued to the State agencies.

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
RAJYA SABHA
UNSTARRED QUESTION NO. 94
ANSWERED ON 25.11.2024

IMPLEMENTATION OF JAL SHAKTI MISSION IN PUNJAB

94. SHRI HARBHAJAN SINGH

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

- (a) whether Government has achieved the target of implementation of Jal Shakti Mission in the State of Punjab;
- (b) if so, the details thereof;
- (c) the details of the pending projects in Punjab relating to the Ministry of Jal Shakti; and
- (d) the timeline for implementation of the pending projects?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) The Ministry of Jal Shakti does not implement any mission called Jal Shakti Mission. However, the Ministry implements two programmes namely, Jal Shakti Abhiyan (JSA) and Jal Jeevan Mission (JJM). Jal Shakti Abhiyan (JSA) was a time-bound mission mode water conservation campaign in the July - November 2019 period in 1,592 blocks out of 2,836 blocks of 256 water-stressed districts of the country. Jalshakti Abhiyan could not be taken up in 2020 due to restrictions imposed by the Covid 19 pandemic. However, in order to maintain continuity of JSA 2019, National Water Mission under the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti started the “Catch The Rain” (CTR) Campaign in February 2020. Ministry of Jal Shakti in 2021 took up the “Jal Shakti Abhiyan: Catch the Rain” (JSA: CTR) subsuming Catch the Rain campaign which covered rural and urban areas of all districts (all blocks and municipalities) of the country. JSA:CTR campaign has five focused interventions which inter-alia includes rainwater harvesting & water conservation. JSA: CTR has now become an annual feature since 2021 and the 5th edition of JSA: CTR was launched on 09.03.2024 for implementation during the period 09.03.2024 to 30.11.2024 in rural and urban areas of all districts (all blocks and municipalities) in all the States/UTs of the country including all the districts of Punjab.

There are no defined targets under this campaign and the State Governments are encouraged to undertake as many works as possible aimed at water conservation. As per the information available on JSA: CTR portal (jsactr.mowr.gov.in), till 19.11.2024, around 1.56 crore water-related works have been taken up under the JSA initiative including around 81,000 water -related works in Punjab. Further, 695 Jal Shakti Kendras (JSKs) have also been set up across the country and JSKs are established in all the 23 districts of Punjab. Under the Jal Shakti Abhiyan: Catch the Rain (JSA: CTR), district water

conservation plans have been prepared by 612 districts across the country. All 23 districts in Punjab have also prepared their water conservation plans.

Jal Jeevan Mission (JJM): Government of India is committed to make provision for safe & potable tap water supply in adequate quantity, of prescribed quality and on a regular & long-term basis to all rural households in the country. Launched by the Government of India in August 2019 in partnership with states including Punjab. As Drinking Water is a state subject, the responsibility of planning, approval, implementation, operation, and maintenance of drinking water supply schemes, including those under the JJM, lies with State/UT Governments. The Government of India supports the States by providing both technical and financial assistance. As reported by Government of Punjab, it has achieved the target of saturating 100% rural households i.e. 34,26,749 rural households in Punjab with Functional Household Tap Connections. All 23 districts of Punjab have been certified as Har Ghar Jal districts.

(c) & (d) The details of the pending projects in Punjab relating to the Ministry of Jal Shakti, along with their implementation timelines, are as follows:

- i. One flood management project of Government of Punjab namely “Flood Protection Works along Indo-Pak border on River Ravi and its tributaries Ujh to check land erosion for the safety of village abadies, border fencing and other Defence Installations in Gurdaspur and Amritsar districts of Punjab (Phase-I)” has been included for central funding under River Management & Border Areas (RMBA) component of Flood Management & Border Areas Programme (FMBAP) scheme during XII plan with an estimated cost of Rs.29.89 Cr. Central Assistance of Rs.26.15 crore has been released to Government of Punjab for this project. Timeline for completion of the project is March 2025.
- ii. Central Assistance is being provided for one National Project namely, Shahpur Kandi in the State of Punjab (joint project of Punjab and Jammu and Kashmir) with estimated cost of Rs. 3,394.49 crore and timeline for completion of the project is December 2025.
- iii. Relining of Rajasthan Feeder and Sirhind Feeder of Punjab under Pradhan Mantri Krishi Sinchai Yojna- Accelerated Irrigation Benefits Programme (PMKSY-AIBP) in the State of Punjab with an approved cost of Rs. 1,976.75 crores – Timeline for completion project is June-2025.

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

RAJYA SABHA

UNSTARRED QUESTION NO. 96

ANSWERED ON 25.11.2024

AMRIT SAROVAR MISSION

96.# DR. LAXMIKANT BAJPAYEE

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

- (a) the details of targets fixed and achieved under the Amrit Sarovar Mission;
- (b) out of the proposed Amrit Sarovars in Meerut, Uttar Pradesh, the number of such sarovars completed along with the number of such Sarovars still pending for completion, the details thereof; and
- (c) the roadmap for implementation of these Amrit Sarovars under the Mission?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Mission Amrit Sarovar was launched by Hon'ble Prime Minister on April 24th, 2022, to construct or rejuvenate 75 Amrit Sarovars in every rural district (except Delhi, Chandigarh, and Lakshadweep) with a total of 50,000 sarovars across the country by 15th August 2023. As of October 2024, the construction/rejuvenation of over 68,000 Amrit Sarovar has been completed.

(b) & (c) In Meerut district of Uttar Pradesh, 153 Amrit Sarovars were identified for construction and rejuvenation across the district and all of these have been completed.

GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 99

ANSWERED ON 25.11.2024

RIVER REJUVENATION PROJECTS IN KARNATAKA

99. SHRI IRANNA KADADI

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

- (a) the number of rivers targeted under the collaboration with 12 technical institutions, along with the specific roles assigned to each institution;
- (b) the total budget allocated for the rejuvenation projects of rivers in Karnataka;
- (c) the quantitative metrics used to measure improvements in water quality, biodiversity, and ecological health of these rivers, supported by baseline and projected data; and
- (d) the detailed timeline for the completion of these projects, including key milestones achieved to date and future deadlines?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a), (c) & (d) This Ministry, on the lines of Ganga River Basin Management Plan (GRBMP) for river Ganga, has undertaken a project **Condition Assessment and Management Plan for Six River Basins** in the country namely Godavari, Narmada, Mahanadi, Cauvery, Periyar and Krishna. Following the same model adopted for GRBMP, the project has been taken up through the consortium of reputed technical Institutes in the respective basin States as below:

| River Basin | Consortium Institutes (IIT/NIT) |
|--------------------|--|
| Godavari | NEERI Nagpur & IIT Hyderabad |
| Narmada | IIT Indore & IIT Gandhinagar |
| Mahanadi | NIT Raipur & NIT Rourkela |
| Cauvery | IISc Bangalore & NIT Trichy |
| Periyar | IIT Pallakad & NIT Calicut |
| Krishna | NIT Warangal & NIT Surathkal |

The total duration of the project Condition Assessment and Management Plan for the six basins is 3 years starting from April 2024. The Consortium Institutes have been tasked with condition assessment and preparation of action plans for conservation and rejuvenation of rivers/tributaries in these basins. The project is divided into 9 missions having specific set of deliverables/ milestones. These milestones have specific timelines and are to be concluded in quarterly, bi-annually and yearly basis. In the first two quarters there are three reports, namely (i) River at a Glance, (ii) Basin Demography, and (iii) Status of Aerial/Drone Survey in River Basin.

The nine missions under this project are so designed so as to collect and collate the present condition of the rivers which will serve as the baseline data based on which a quantitative metrics will be prepared by the institutions for assessing the improvement in water quality, biodiversity, and ecological health of these rivers.

(b) Pollution abatement of river Tunga at Shimoga town, river Bhadra at Bhadravati town, river Tungabhadra at Devangere & Harihara towns, river Cauvery in K.R.Nagar, Kollegal, Nanjangud & Shrirangapatna towns and river Pennar at Bangalore town was implemented at sanctioned cost of Rs. 66.25 crore under the National River Conservation Plan, and sewage treatment capacity of 41.64 mld was created in Karnataka.

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RAJYA SABHA
UNSTARRED QUESTION NO. 100

ANSWERED ON 25.11.2024

OBJECTIONS/COMPLAINTS/GRIEVANCES TO POLAVARAM PROJECT

100. DR. SASMIT PATRA

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

- (a) details of the complaints and objections received regarding Polavaram Project with specific reference to its adverse impact on Odisha;
- (b) the steps taken by Government to ensure redressal of these complaints, objections and grievances; and
- (c) whether Government has not taken in view, the concerns of Odisha, before continuing to support and fund Polavaram project?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) A letter dated 10.07.2023 from Government of Odisha, raising concerns of Odisha due to construction of Polavaram Irrigation Project (PIP) in Andhra Pradesh has been received which highlighted the apprehensions of Odisha mainly on backwater study of PIP and extent of submergence in Odisha due to the project. For resolution of the apprehensions of Odisha mentioned in the letter and in compliance of the directions given by Hon'ble Supreme Court dated 06.09.2022 in matter of Original Suite 04/2007, several meetings have been held in Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti and Central Water Commission with the stakeholder States including Odisha and steps were taken for seeking convergence on resolution of issues.

(c) Polavaram Irrigation Project (PIP) was declared as National Project as per Andhra Pradesh Reorganisation Act, 2014. The Government of Andhra Pradesh (GoAP) is executing the project on behalf of Government of India. In supporting and funding Polavaram irrigation project, the Government of India has always taken due concern of Odisha and other stakeholder States.

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RAJYA SABHA

UNSTARRED QUESTION NO. 102

ANSWERED ON 25.11.2024

NUMBER OF DRINKABLE WATER RIVERS

102. SHRI SANT BALBIR SINGH

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

- (a) the total number of rivers in the country, State-wise;
- (b) the condition of these river waters, the number of drinkable water rivers and the number of undrinkable water rivers, States-wise;
- (c) the funds allocated by Government during the last five years for keeping the rivers clean and reviving them; and
- (d) the number of rivers that have been revived in the country and the support given to them by Government, State-wise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The country has been divided in 20 river basins, which cover all the rivers and their tributaries. Details are available at :<https://cwc.gov.in/sites/default/files/registered-water-resources-glance-2021.pdf>

(b) to (d) The Central Pollution Control Board (CPCB) in association with the State Pollution Control Boards/Pollution Control Committees in different States/Union Territories (UTs) has been monitoring the water quality of rivers and other water bodies through a network of monitoring stations under the National Water Quality Monitoring Programme (NWMP). Based on water quality monitoring results, pollution assessment of rivers has been carried out by CPCB from time to time. As per the polluted river stretches (PRS) report published by CPCB in November 2022, 311 polluted river stretches were identified on 279 rivers based on monitoring results in terms of Bio-chemical Oxygen Demand (BOD), an indicator of organic pollution. The number of PRSs has decreased from 351 identified in year 2018 to 311 in the year 2022. Further, 106 PRSs have been delisted and improvement in water quality of 74 polluted river stretches have been observed as compared to the report published in 2018. Detailed status in this regard is available at:

<https://cpcb.nic.in/openpdffile.php?id=UmVwb3J0RmlsZXNmMTQ5NF8xNjc3ODg2X21lZGlhcGhvdG8xODc0Ni5wZGY=>

The designated best use criteria specified by Central Pollution Control Board (CPCB) recommends that water is to be ingested for drinking purpose only after treatment. Drinking of raw water is not recommended as per the Indian standard. The drinking water should comply with the requirements as per BIS Standard IS 10500/2012.

Under Namami Gange Programme, Government of India has released Rs. 10,775.0 crore to the National Mission for Clean Ganga (NMCG) in the last five financial years (FY 2019-20 to FY 2024-25, up to 15 November) as budgetary support for rejuvenation of River Ganga and its tributaries. NMCG has disbursed Rs. 11,587.31 crore, including grants carried forward from previous years, to various agencies for implementation of projects/ interventions to rejuvenate river Ganga and its tributaries during the said period. Under National River Conservation Plan (NRCP) programme an amount of Rs.1244.50 crore has been released to various State Governments/Union Territory during the last five financial years. State-wise support given under Namami Gange programme and NRCP is at **Annexure**.

ANNEXURE REFERRED TO IN REPLY TO PART (b) to (d) OF UNSTARRED QUESTION NO. 102 TO BE ANSWERED IN RAJYA SABHA ON 25.11.2024 REGARDING “NUMBER OF DRINKABLE WATER RIVERS”.

(I) State-wise details of rivers covered (As on 31.10.2024) under the Namami Gange Programme for Sewage Infrastructure Projects

| Sl. No. | State/UT | Rivers covered | Sanctioned Cost (Rs. In crore) | Funds Released by Govt. (Rs. in crore) | STP capacity (in MLD) |
|-------------|--------------------------------------|---|-----------------------------------|---|--------------------------|
| 1. | Uttarakhand | Ganga, Rispna & Bindal River, Dhela, Suswa, Kosi | 1,743.45 | 842.33 | 244.15 |
| 2. | Uttar Pradesh | Ganga, Ramganga, Yamuna, Saryu, Gomti, Kali East, Karvan, Krishni, Kali West, Saryu, Dhamola, | 14,823.48 | 5,878.76 | 2,491.07 |
| 3. | Bihar | Ganga, Gandak, Kosi, Ramrekh, Harbora, Burhi, Sone, Kiul, Sirsiya, Pondai River | 7,089.26 | 4,342.43 | 803.10 |
| 4. | Jharkhand | Ganga, Damodar | 1,310.30 | 264.07 | 261.50 |
| 5. | West Bengal | Ganga, Damodar, Jalangi | 4,437.22 | 1,858.68 | 767.24 |
| 6. | Haryana | Yamuna | 217.87 | 217.94 | 145.00 |
| 7. | Delhi | Yamuna | 1,951.03 | 1,942.12 | 1,268.00 |
| 8. | Himachal Pradesh | Yamuna | 11.57 | 3.75 | 1.72 |
| 9. | Rajasthan | Chambal | 258.48 | 187.04 | 36.00 |
| 10. | Madhya Pradesh | Kanh & Saraswati, Kshpira, Chambal | 669.92 | - | 237.38 |
| 11. | Modular STPs Decentralized Treatment | | 410.00 | - | - |
| Grand Total | | | 32,922.58 | 15,536.82 | 6,255.15 |

(II) State-wise details of rivers covered (As on 31.10.2024) under National River Conservation Plan (excluding river Ganga and its tributaries)

| S. No. | State/UT | Rivers covered | Sanctioned Cost (Rs. in crore) | Funds Released by Govt. (Rs. in crore) | STP capacity created (in MLD) |
|--------------|-----------------|---|--------------------------------|--|-------------------------------|
| 1 | Andhra Pradesh | Godavari | 110.21 | 273.06 | 30.00 |
| 2 | Telangana | Godavari & Musi | 345.72 | | 621.46 |
| 3 | Jammu & Kashmir | Devika, Tawi & Jhelum and Banganga | 342.65 | 139.05 | 13.60 |
| 4 | Jharkhand | Subarnarekha | 3.14 | 4.26 | 0 |
| 5 | Gujarat | Sabarmati, Mindola & Tapi | 1875.29 | 1027.64 | 696.97 |
| 6 | Goa | Mandovi & Zuari | 95.23 | 28.93 | 12.50 |
| 7 | Karnataka | Tunga, Bhadra, Tungabhadra, Cauvery & Pennar | 66.25 | 47.83 | 41.64 |
| 8 | Maharashtra | Godavari, Tapi, Krishna, Panchganga, Mula-Mutha & Nag | 3109.85 | 501.66 | 260.00 |
| 9 | Madhya Pradesh | Wainganga, Narmada & Tapti | 20.16 | 12.46 | 7.95 |
| 10 | Manipur | Nambul, Manipur & Imphal | 190.12 | 84.21 | 16.00 |
| 11 | Odisha | Brahmini, Mahanadi & Coastal Area (Puri) | 92.74 | 63.40 | 50.00 |
| 12 | Punjab | Ghaggar, Beas & Satluj | 774.43 | 516.14 | 663.20 |
| 13 | Rajasthan | Jojari | 172.60 | | |
| 14 | Tamil Nadu | Adyar, Cooum, Vaigai, Vennar, Cauvery & Tamrabarani | 908.13 | 623.65 | 477.66 |
| 15 | Kerala | Pamba, Chitrapuzha & Periyar | 115.76 | 7.78 | 4.50 |
| 16 | Sikkim | Rani Chu, Tista | 569.08 | 368.41 | 20.12 |
| 17 | Nagaland | Diphu, Dhansiri, Chethe, Zungki, Garu, Melak, Tapi, Punyaonganmong, Keleureu, Sedzu, Tizu, Donyung, Shumang, Mutsum and Marachu | 140.12 | 68.33 | 25.43 |
| Total | | | 8931.48 | 3766.81 | 2941.03 |

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UNSTARRED QUESTION NO. 103

ANSWERED ON 25.11.2024

STUDY OF GROUNDWATER

103. SHRI NEERAJ SHEKHAR

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

- (a) whether as per the MoU of Central Ground Water Board (CGWB) with Geological Survey of India (GSI) in 2022 for the study of Uranium, Lead, Arsenic, Fluoride and Mercury contamination of groundwater in parts of Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand and Assam States, eight studies were to be undertaken;
- (b) if so, the details thereof;
- (c) the details of studies undertaken and are yet to be completed along with the reasons therefor; and
- (d) the outcome of completed studies for heavy metal contamination in groundwater Statewise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Central Ground Water Board (CGWB) has entered into an MoU with Geological Survey of India (GSI) in 2022 for the study of Uranium, Lead, Arsenic, Fluoride and Mercury contamination of ground water in parts of Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand and Assam States. The objectives of the MoU are to assess the level of contaminants in water from diverse sources such as dug wells, hand pumps, deep bore wells/tube wells, and surface water used for drinking water and irrigation. Additionally, it includes the analysis of these elements in soil, sediments, rocks, and anthropogenic wastes. The objectives also involve studying the spatial and depth-wise distribution of these elements, correlating them with geological aspects, and suggesting mitigation measures. The MoU is valid for a period of 5 years from the date of signing.

A total of 08 studies have been taken up under the MoU in the states of Andhra Pradesh (1 Study), Assam (1), Bihar (3), Chhattisgarh (1), Punjab & Haryana (1), and Uttar Pradesh (1). Out of 8 studies taken up under the MoU, five have been completed viz. 3 studies in Bihar and one each in Chhattisgarh and Andhra Pradesh.

(c) Studies taken in Assam and Punjab & Haryana are of two year duration and are as per schedule. The study in Uttar Pradesh is in final stage. The details of the studies are as follows:

| State/UT | Title | Study duration (No. of years) starting and ending year | Reasons for delay |
|------------------|---|---|------------------------|
| Punjab & Haryana | Geo-environmental studies of trace element and heavy metal contamination in the groundwater of Punjab and Haryana | 2 Years (2023-24 & 2024-25) | As per schedule |
| Assam | Study on Uranium, Lead, Arsenic, Fluoride and Mercury Contamination of Ground Water in the industrial area of North Guwahati, Kamrup, Assam | 2 yrs (2023-24 to 2024-25) | As per schedule |
| Uttar Pradesh | Study on Uranium, Fluoride contamination of Ground Water in Mathura, Hathras and Aligarh Districts of UP | 2 Years (2022-23 & 2023-24) | Delay in core drilling |

(d) The details and major findings of the completed studies along with heavy metal contamination aspect is provided below :

| State/UT | Study Title | Major Findings |
|----------------|--|--|
| Andhra Pradesh | Uranium Contamination in Ground Water in & around Tummalapalle Uranium Deposit, Vemula Mandal, YSR Kadapa district, A.P | Sporadic occurrence of Uranium found, which is mainly attributable to geo-genic factors. High Uranium concentration zones are observed in areas that are mostly characterized by Peninsular gneissic rock. Additionally, concentrations beyond permissible limits in respect of the following heavy metals were reported: Mn (6% samples), Fe (16% samples), Ni (2% samples), As (1% samples), Se (6% samples), Pb (4% samples) and U (42% samples). |
| Bihar | Arsenic Contamination in Maner block (Patna district) and Barhara Block (Bhojpur District) | 21% of the analysed samples showed more than permissible concentration of Arsenic: Higher concentration of Arsenic in groundwater in interfluvial zones of the Ganges and Sone river. |
| Bihar | Uranium contamination in parts of Bhagalpur, Bihar Sharif, Gopalganj, Katihar Madhepura, Muzaffarpur, Nawada, Purnea, Siwan & Vaishali district. | Only 17 no of GW samples out of 343 Groundwater and Soil samples had more than permitted Uranium Concentration; The contamination appears to be site specific rather than of general nature. |
| Bihar | Fluoride contamination in Amas Block, Gaya district | Around 41% of the samples analysed showed more than permissible Fluoride concentration; It is inferred that rocks of the Chhotanagpur Gneissic Complex are the prime source of Fluoride contamination in soil and groundwater. |
| Chhattisgarh | Fluoride contamination in Bagbahara area, Mahasamund and Gariabandh district, Chhattisgarh. | Around 31% of the samples analysed showed more than permissible Fluoride concentration; Contamination mainly due to geogenic factors and observed mainly along a 5-6 km wide and 35-40 km long shear zone; Additionally, concentrations beyond permissible limits in respect of the following heavy metals were reported: Mn (25.5% samples), Fe (12% samples), |

The complete study reports have been made available in public domain on the website of CGWB.
