GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 461

ANSWERED ON 06.02.2025

NATIONAL RIVER CONSERVATION PLAN

461. SHRI ARUN BHARTI

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

(a) the details of the funds allocated, sanctioned, disbursed and utilized under the National River Conservation Plan (NRCP) during the last two years and the current year, month-wise;

(b) the details of the rivers and stretches which are currently covered under the said plan along with the criteria adopted in this regard, State-wise;

(c) the steps taken/being taken under NRCP to control pollution caused by untreated sewage and industrial effluents in rivers particularly in the State of Bihar;

(d) the measurable outcomes achieved under NRCP in terms of improved water quality and biodiversity restoration in key river stretches; and

(e) whether the Government is infusing the new technologies and methodologies to improve the efficiency of river conservation under the NRCP and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (e) 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. The Govt. of India has been supplementing efforts of the States/UTs, including the State of Bihar, by providing financial assistance for abatement of pollution in rivers/tributaries in Ganga basin through the Central Sector Scheme of Namami Gange Program and the Centrally Sponsored Scheme of National River Conservation Plan for other rivers/tributaries in the country.

The State/UT Governments prepare the proposals for river pollution abatement projects and submit the same to this Ministry for financial assistance under NRCP. Proposals are considered subject to conformity with the scheme guidelines. Implementation/execution of projects is vested with the State Government departments and the Government of India disburses funds to the States against the sanctioned projects after reviewing the interim progress of the projects. The budget earmarked in the last 2 years, and the current financial year and the monthly disbursement to States are attached at **Annexure-I**.

Proposals are considered based on the Scheme guidelines of NRCP that can be accessed at: https://nrcd.nic.in/writereaddata/FileUpload/Guidelines_for_Report_Preparation_under_NRCP_NGR_A_Dec%202010.pdf

The Projects identified by the States for pollution abatement of various river stretches have been sanctioned under NRCP since its inception in 1995. These projects were located on 57 rivers across 100 towns in 17 States.

In case of industrial effluents, industrial units are required to treat their effluents to comply with stipulated environmental standards before discharging into rivers and water bodies. Accordingly, Central Pollution Control Board, State Pollution Control Boards/Pollution Control Committees monitor industries with respect to effluent discharge standards and take punitive action against non-complying industries under the provisions of the Environment (Protection) Act, 1986 and the Water (Prevention & Control of Pollution) Act, 1974.

The State of Bihar lies entirely in the Ganga Basin. Under the Namami Gange Programme in the State of Bihar, 38 sewerage infrastructure projects with a treatment capacity of 803 Million Litre Per Day (MLD) have been sanctioned, and 18 sewerage infrastructure projects with a capacity of 341 MLD have been completed and made operational.

So far, inter-alia, a sewage treatment capacity of 2941 million litres per day (MLD) has been created, under NRCP resulting in reduction of direct discharge of untreated sewage into the rivers thereby improving their water quality and restoring their ecology. State-wise details of river stretches covered under NRCP is at **Annexure-II**.

The identification of project and technology is done by the state government departments based on various parameters like land availability, Pollution level etc.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (e) OF UNSTARRED QUESTION NO. 461 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "NATIONAL RIVER CONSERVATION PLAN".

Funds allocated, sanctioned, disbursed and utilized under the National River Conservation Plan (NRCP) during the last two years and the current year, month-wise

Month	**Released/Disbursed/utilized/(Rs. in crore)**		
	2022-23	**2023-24**	**2024-25 (December, 2024)**
Funds Allocated/Sanctioned	**449.02**	**432.01**	**591.12**
April	-	-	-
May	-	-	-
June	1.07	-	-
July	-	-	-
August	10.00		-
September	63.00	76.91	77.33
October	27.99	27.14	66.25
November	92.25	23.74	22.50
December	24.67	29.17	10.00
January	-	-	-
February	-	142.78	-
March	213.95	91.49	-
Total:	**432.93**	**391.23**	**176.08**

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (e) OF UNSTARRED QUESTION NO. 461 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "NATIONAL RIVER CONSERVATION PLAN".

Details of the rivers and stretches which are currently covered under NRCP:

S. No.	State	Rivers/Stretches covered
1	Andhra Pradesh	Godavari
2	Telangana	Godavari & Musi
3	Jammu & Kashmir	Devika, Tawi, Jhelum & Banganga
4	Jharkhand	Subarnarekha
5	Gujarat	Sabarmati, Mindola & Tapi
6	Goa	Mandovi & Zuari
7	Karnataka	Tunga, Bhadra, Tungabhadra, Cauvery & Pennar
8	Maharashtra	Godavari, Tapi, Krishna, Panchganga & Mula-Mutha & Nag
9	Madhya Pradesh	Wainganga, Narmada & Tapti
10	Manipur	Nambul, Imphal-Manipur
11	Odisha	Brahmini, Mahanadi Coastal Area (Puri)
12	Punjab	Ghaggar, Beas & Satluj
13	Rajasthan	Jojari
14	Tamil Nadu	Adyar, Cooum, Vaigai, Vennar, Cauvery & Tamrabarani
15	Kerala	Pamba, Chitrapuzha & Periyar
16	Sikkim	Rani Chu, Tista, Rangit
17	Nagaland	Diphu and Dhansiri, Chethe, Zungki, Garu, Melak, Tapi, Punyaonganmong, Keleureu, Sedzu and Tizu, DonyungShumang, Mutsum, Marachu & Tizu

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 686

ANSWERED ON 06.02.2025

DISCONTINUATION OF WATER SUPPLY TO PAKISTAN FROM VYAS AND SATLUJ RIVERS

†686. SHRI ARUN GOVIL

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

(a) the time by which the supply of India's share of water to Pakistan from Vyas and Satluj rivers would be discontinued;

(b) whether the Government proposes to provide lease to the displaced people for fish farming in canals of hydroelectric projects so that the displaced people may get alternative employment thereby; and

(c) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) No water from the Sutlej and Beas rivers flow to Pakistan except during the monsoon season i.e. during the floods when substantial rainfall occurs in the catchment of these rivers. Such situation may arise in exceptional circumstances or, during short duration monsoons when the water levels stored by the dams become very high and there is necessity of release of water for Dam safety.

(b) to (c) As per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, in addition to the compensation package, Second Schedule provides that "In cases of irrigation or hydel projects, the affected families may be allowed fishing rights in the reservoirs, in such manner as may be prescribed by the appropriate Government." The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Compensation, Rehabilitation and Resettlement and Development Plan) Rules, 2015 further provides that the fishing rights shall be provided by the Fisheries Department in consultation with the Irrigation Department, Revenue Department or any other concerned Department of the Government.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 684

ANSWERED ON 06.02.2025

NATIONAL MISSION FOR CLEAN GANGA

†684. SHRI RAMVIR SINGH BIDHURI

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

(a) whether the National Mission for Clean Ganga (NMCG) is contributing to the reuse of treated water, biodiversity conservation and remediation of polluted river areas;

(b) if so, the details thereof; and

(c) the names of the areas where treated waste water can be reused to reduce dependence on fresh water?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) Yes. The Government of India, under the National Mission for Clean Ganga (NMCG), has been promoting the reuse of treated water, biodiversity conservation, and remediation of polluted river areas. The following initiatives have been taken up by NMCG in Ganga Basin:

1. A *National Framework for Safe* ***Reuse of Treated Water***has been developed by NMCG to guide States in formulating their reuse policies and to establish economic models for the reuse of treated wastewater. NMCG has also issued a guidance handbook for urban policymakers and city officials on safely reusing treated water, which aims to conserve freshwater resources and promote sustainable water management practices.

2. Notably, 8 MLD treated water from the Trans Yamuna STP is supplied to the Mathura Refinery for non-potable purposes and two thermal plants of Pragati Power Corporation Ltd, Delhi and Jojobera Thermal power plant , Jharkhand are using treated water of nearby STPs.

3. **Biodiversity Conservation:** Seven Biodiversity Parks in seven districts (Mirzapur, Bulandshahar, Hapur, Budaun, Ayodhya, Bijnore and Pratapgarh) of Uttar Pradesh and 5 priority wetlands in Uttar Pradesh (3), Bihar (1) and Jharkhand (1) have been sanctioned.

4. 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.

5. A total of 143.8 lakhs of Indian Major Carp (IMC) fingerlings have been ranched 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).

6. A total of 203 number of sewerage infrastructure projects costing ₹ 32,613 crore have been taken up for **remediation of polluted river areas** with treatment capacity of 6,255 MillionLitres per Day (MLD). 127 STP projects with a capacity of 3,446 MLD have been completed and made operational.

7. For industrial pollution abatement**,** 3 nos. of Common Effluent Treatment Plants (CETPs) have been sanctioned, i.e., Jajmau CETP (20 MLD), Banther CETP (4.5 MLD), and Mathura CETP (6.25 MLD). Two projects, Mathura CETP (6.25 MLD) and Jajmau CETP (20 MLD) have been completed.

(c) The Government of India has been promoting the reuse of treated water for different non-potable purposes, particularly for Industrial use, Railways, Thermal Power Plants, Municipal uses, Irrigation uses etc. to reduce dependency on fresh water.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 682

ANSWERED ON 06.02.2025

ESTABLISHMENT OF STATE AND DISTRICT YAMUNA COMMITTEES

682. SHRI AMRINDER SINGH RAJA WARRING

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

(a) whether the Government proposes to establish State and District Yamuna Committees on the lines of District Ganga Committees;

(b) if so, the details thereof and the timeline set for their implementation;

(c) the reasons for not setting up of such committees despite of such role played by similar District Ganga Committees in Ganga river cleaning efforts in view of rising levels of pollution in Yamuna river; and

(d) the steps taken/being taken by the Government to encourage corporate sector contributions, both financial and technical for the conservation of the Yamuna river?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (c) As per the Authority Notification dated 7th October 2016, State Ganga Rejuvenation, Protection and Management Committee & District Ganga Committees (DGCs) are required to be constituted in every specified District abutting River Ganga and its tributaries for the prevention, control and abatement of pollution.

(d) The Clean Ganga Fund (CGF) has been set up on 21.01.2015 to enable Resident Indians, domestic and overseas corporates, Non-Resident Indians (NRIs) and Person of Indian Origin (PIOs) to contribute towards the conservation efforts of River Ganga.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 679

ANSWERED ON 06.02.2025

SHORTAGE OF MANPOWER AT CGWA AND CGWB

679. SHRI AZAD KIRTI JHA

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

(a) whether the administrative activities of the Central Ground Water Authority (CGWA) have recently been carried out by the Central Ground Water Board (CGWB);

(b) if so, the details thereof and if not, the reasons therefor;

(c) whether CGWA and CGWB are being incapacitated due to a shortage of technical and non-technical personnel;

(d) if so, the details thereof and the actions taken/being taken by the Government to address the shortage;

(e) whether the Cadre Review Proposal is finalized for the creation of additional posts in CGWB;

(f) if so, the details thereof; and

(g) if not, the time by which the proposal would be finalized and new posts would be created?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) Central Ground Water Board (CGWB), is a multi-disciplinary scientific organization under the Ministry of Jal Shakti, entrusted with the responsibilities of providing scientific inputs for management, exploration, monitoring, assessment and augmentation of ground water resources of the country.

Further, the Central Ground Water Authority (CGWA) has been created under the Ministry of Jal Shakti under section 3(3) of the Environment (Protection) Act, 1986 for the purposes of regulation and control of ground water development and management in the country. Since ground water regulation also requires in depth knowledge of hydrogeology, local aquifer potential etc. the expertise of the officers of CGWB is also being utilized to handle this work.

(c) to (g) No.

The Ministry has taken various steps to fill up the vacancies by way of promotions from the feeder cadre as well as direct recruitments, as the case may be. To cover the gap in the interim period, the Ministry

has also permitted CGWB to hire adequate number of Young Professionals of suitable qualification and experience so as to ensure smooth functioning of the organization.

The recruitment for remaining cadres is being taken up in mission mode. In this regard, proposals have already been sent to UPSC/SSC who are taking necessary action as per their standard recruitment cycle.

Moreover, with a vision to shape CGWB into a premier scientific organization, a comprehensive cadre re-structuring has been initiated for the first time since the establishment of the organization. In the re-structuring, it has been proposed to strengthen the scientific cadre considering the future work requirements and surrender a sizable number of lower grade drilling operations related posts, which may be no longer required. Currently, the cadre review/re-structuring proposal of CGWB has been taken up with Department of Personnel & Training (DoPT) and Department of Expenditure (DoE) for necessary approvals.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 660

ANSWERED ON 06.02.2025

PRADHAN MANTRI KRISHI SINCHAYEE YOJANA IN KARNATAKA

660. DR. K SUDHAKAR

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

(a) the steps taken/proposed to be taken by the Government to provide the actual access of water to the farms and expand cultivable area under assured irrigation plan;

(b) whether the funds have been allocated to Karnataka under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) and if so, the details thereof;

(c) the number of beneficiaries under the said scheme in Karnataka;

(d) whether any subsidies and support have been given to farmers of Chikkaballapur for adopting the said scheme and if so, the details thereof; and

(e) whether any farmers of Chikkaballapur are left out from the scheme and if so, the details thereof along with the steps taken to bring all farmers under the scheme?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) Implementation of schemes for expanding cultivable area of land and increasing the actual access of water to farms for the benefit of the farmers, lies in the domain of the State Government concerned. However, Government of India promotes, and provides technical assistance, as well as partial financial assistance under its ongoing schemes for the identified irrigation projects. Some of the key initiatives of Government of India in this regard in the recent past, are given below.

1. Extension of PMKSY for the period 2021-22 to 2025-26 has been approved by Government of India, with an overall outlay of Rs. 93,068.56 crore (central assistance of Rs. 37,454 crore, debt servicing to NABARD for Rs. 20,434.56 crore and an outlay for Rs. 35,180 crore by the State Governments towards State share).
2. A special package for completion of 8 MMI and 83 surface minor irrigation (SMI) projects of Maharashtra, having estimated balance cost of Rs. 13,651.61 crore as on April, 2018, has been approved for financial assistance by Government of India during 2018-19. Central assistance component for the said package is Rs. 3,831.41 crore, with irrigation potential creation of 3.77 lakh hectare.

3. In June, 2018, Government of India has approved financial assistance to Shahpurkandi dam (National) project benefitting J&K and Punjab, for project cost of Rs. 2,715.70 crore. The approved central assistance liability for the project is Rs. 485.38 crore.
4. In September, 2018, Government of India has approved financial assistance to relining of Rajasthan feeder and Sirhind feeder benefitting the States of Punjab and Rajasthan at and approved cost of Rs. 1976.75 crore. The approved central assistance liability for the project is Rs. 982 crore.
5. In December, 2021, Government of India has approved central assistance to Renukaji dam and Lakhwar multipurpose (National) projects, in the State of Himachal Pradesh and Uttarakhand, respectively. The estimated cost of the two projects is Rs. 6,946.99 crore, and Rs. 5,747.17 crore, respectively.
6. In December, 2021, Government of India has also approved Ken-Betwa link project in the States of Madhya Pradesh and Uttar Pradesh, at an estimated cost of Rs. 44,605 crore.

(b) & (c) Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched during the year 2015-16, with an aim to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on-farm water use efficiency, introduce sustainable water conservation practices, etc.

PMKSY is an umbrella scheme, consisting of two major components being implemented by this Ministry, namely, Accelerated Irrigation Benefits Programme (AIBP), and Har Khet Ko Pani (HKKP). HKKP, in turn, consists of four sub-components: Command Area Development & Water Management (CAD&WM), Surface Minor Irrigation (SMI), Repair, Renovation and Restoration (RRR) of Water Bodies, and Ground Water (GW) Development. CAD&WM sub-component of HKKP is being implemented pari-passu with AIBP.

In addition, Per Drop More Crop (PDMC) component, implemented by Department of Agriculture, and Farmers Welfare, was a part of PMKSY from the inception of PMKSY in 2015, till December, 2021. Thereafter, it is being implemented by Department of Agriculture, and Farmers Welfare as a part of Rashtriya Krishi Vikas Yojana, and is no more a part of PMKSY. The details of funds allocated /released to Karnataka under PMKSY (AIBP, CADWM, SMI and PDMC components) are given below.

Sl.No.	Component of PMKSY	Central Assistance released to Karnataka (2015-16 to 2024-25) (Rs. crore)	Estimated no. of target beneficiaries (in thousands)
1.	AIBP and CAD&WM	1477.16	855.92
2.	SMI	105	6.18
3.	PDMC	3,251.79	2100

(d) & (e) Financial Assistance @ 55% for Small & Marginal farmers and @ 45% for Other farmers is provided by the Government for installation of Micro Irrigation under PDMC component of PMKSY. From 2015-16 to 2024-25, Central Assistance of Rs. 3,251.79 crore has been released to State of Karnataka for implementation of PDMC. During this period, total area of 21.07 lakh hectare has been covered under Micro Irrigation through the scheme in the State, which includes 39895 hectare of Micro Irrigation area covered in Chikkaballapura District of Karnataka State.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 650

ANSWERED ON 06.02.2025

ANNUAL GROUND WATER QUALITY REPORT, 2024

650. SHRI PRAVEEN PATEL
SHRI P C MOHAN
SHRI TEJASVI SURYA
SHRI LUMBA RAM
SHRI VISHWESHWAR HEGDE KAGERI
SHRI JASWANTSINH SUMANBHAI BHABHOR
SMT. SMITA UDAY WAGH
SHRI TAPIR GAO
SHRI BHARTRUHARI MAHTAB
SHRI KHAGEN MURMU
DR. BHOLA SINGH
DR. VINOD KUMAR BIND
SHRI P P CHAUDHARY
DR. HEMANT VISHNU SAVARA
SHRI YOGENDER CHANDOLIA
SHRI PRATAP CHANDRA SARANGI
SHRI DINESHBHAI MAKWANA
SHRI MAHESH KASHYAP
DR. RAJESH MISHRA

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

(a) the key findings of the Annual Ground Water Quality Report 2024, particularly regarding newly identified contaminants and critical areas requiring immediate intervention thereof in the country including Palghar and Jalgaon Parliamentary Constituencies in Maharashtra;

(b) whether any comparison has been made with the data of previous year to identify trends in groundwater contamination and if so, the details thereof along with the remedial measures taken/being taken by the Government in this regard;

(c) whether any assessment has been conducted regarding the effectiveness of existing groundwater quality improvement initiatives and if so, the details and outcomes thereof;

(d) whether any framework has been established for community and private sector participation in groundwater quality management and if so, the details thereof along with the outcome thereof;

(e) the details of the contaminants identified in ground water in Palghar district of Maharashtra; and

(f) the efforts being made to filter the groundwater in Sidhi Parliamentary Constituency which has coal deposits in a larger area causing extreme decline in the water quality?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) The Annual Groundwater Quality Report 2024 prepared by the Central Ground Water Board (CGWB) is based on the ground water sampling and analysis from 15,259 monitoring locations spread across the country. The major objective of the report is to study various water quality parameters like Electrical Conductivity(EC), Fluoride, Arsenic, heavy metals, Nitrate etc. in groundwater used for drinking and agriculture purposes. The

report has found the presence of above contaminants beyond the prescribed limits for human consumption in isolated pockets of some States/UTs. Apart from that, no new emerging pollutants have been identified in the report.

The detailed report containing the details of various ground water quality parameters, regions where contamination is reported, various factors having a bearing on contamination etc. can be viewed at https://cgwb.gov.in/cgwbpnm/public/uploads/documents/17363272771910393216file.pdf

Further, as per the Annual Ground Water Quality report 2024, no new contaminants have been identified in the Palghar and Jalgaon Parliamentary Constituency of Maharashtra. However, in Jalgaon Constituency, nitrate has been observed in the ground water samples from a few locations (Naseerabad, Kasoda, Adgaon,Lasgaon, Varkhedi-1 & Nimjharia) above the BIS permissible limit for drinking water.

(b) & (c) A comparative analysis of groundwater contamination trends has been carried out based on data from previous years vis'-a-vis' the data available in the Ground Water Quality Report 2024. The results for key contaminants such as nitrate, fluoride, and Electrical Conductivity (EC) between 2019 and 2023 indicate that the percentage of samples having EC beyond permissible limit has increased from 6.65% to 7.25%, that of Fluoride has increased from 7.21% to 9.03% and with regard to Nitrate, the proportion has remained constant at 19.8%

Further regarding remedial measures to combat ground water contamination, it is to submit that 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, the Central Government in this direction has taken several steps in this direction and some of the important ones are regular sharing of ground water quality data available with CGWB through Yearbooks, Half-yearly Bulletins and fortnightly Alerts etc.; Taking up special studies in ground water quality affected areas; Taking up construction of Arsenic safe wells by CGWB in the affected areas using the innovative cement sealing technology; Implementing comprehensive pollution control program by Central Pollution Control Board (CPCB) by setting industry specific discharge standards, making Effluent Treatment Plants (ETPs) mandatory for Industries, Online continuous monitoring of Discharge etc.

Moreover, 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, wherein Bureau of Indian Standards' BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery.

As a result of all these cumulative efforts, it is reported that from August 2019 to January 2025 the number of Arsenic and Fluoride affected habitations in the country have declined from 14,020 to 314 and from 7,996 to 254 respectively. These remaining habitations have also been provided clean, & safe drinking water through Community Water Purifier Plants (CWPPs).

(d) The central government has taken several important steps to ensure large scale community and private sector participation for turning ground water management into a truly peoples' movement. The notable among them are:

i. The government of India is implementing Atal Bhujal Yojana in 80 water stressed districts across 7 states which has community led sustainable management of ground water resources and demand management as its core theme.

ii. Central Ground Water Board organizes various Public Interaction Programs (PIP), Mass Awareness Programs (MAP), Tier II and Tier –III programmes on local ground water issues, including educating the public about the impacts of water contamination and promoting sustainable practices to maintain water quality.

iii. Under JJM, with a view to involve community at large and to spread awareness regarding water quality , five persons, preferably women, are identified and trained from every village for testing the water samples through Field Test Kits (FTKs). Thus far, more than 24 lakh women have been trained across the country.

iv. The Government is implementing Jal Shakti Abhiyan (JSA) in the country since 2019 with active community involvement. Jal Shakti Kendras (JSKs) have been set up under Abhiyan in various districts of the country for interacting with local community and dissemination of water related knowledge.

v. To further strengthen the momentum of Jal Shakti Abhiyan, Jal Sanchay Jan Bhagidari: A Community-Driven Path to Water Sustainability in India has been launched by the Hon'ble Prime Minister on September 6, 2024, in Surat, Gujarat 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.

vi. Further, the Ministry of Jal Shakti and its organizations, work with a very large number of Non-Governmental Organizations and academic institutions to promote public awareness and for enhancing water resource management in the country. The Ministry has entered into several MoUs with NGOs working at the grassroots level.

(e) A total of 36 nos. of samples were analysed for Palghar district all of which were found to be within the permissible limits set by BIS.

(f) CGWB carries out ground water quality monitoring every year throughout Madhya Pradesh including Sidhi Parliamentary Constituency. No such decline with respect to ground water quality was reported in Sidhi Parliamentary Constituency. Further, as per the information available on Jal Jeevan Mission dashboard, no drinking water quality affected habitations have been reported in Sidhi. However, under JJM and other schemes provision of safe tap water for drinking has been made in 90,487 households out of 1.92 lakh households.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 648

ANSWERED ON 06.02.2025

RISING LEVEL OF CONTAMINANTS IN GROUNDWATER

648. SHRI RAMPRIT MANDAL SHRI DINESH CHANDRA YADAV
PROF. SOUGATA RAY SHRI KAUSHALENDRA KUMAR
SHRI ASADUDDIN OWAISI SHRI SELVAGANAPATHI T.M.

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

(a) whether it is a fact that according to the report of the Central Ground Water Board, excessive traces of nitrates in groundwater found at alarming level in 440 districts of the country and if so, the details thereof State-wise as of 2017 and 2023 along with the reasons therefor;

(b) whether it is also a fact that nitrate in groundwater has been rapidly increasing in other districts as only 359 districts were reported in the year 2017 and if so, the details thereof;

(c) whether it is true that about 56 per cent of the country's districts have excessive nitrates and if so, the details thereof;

(d) whether it is also true that central and southern parts of the country are reporting an increasing trend of nitrates provoking worry and if so, the details thereof;

(e) whether the fluoride level in groundwater has also been found beyond the safe limit and if so, the details thereof; and

(f) whether the Government has assessed the adverse impact on human health and crops associated with such high levels of nitrates and fluoride and if so, the details thereof along with the measures taken/being taken by the Government in this regard to provide potable drinking water to the people?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) The Annual Groundwater Quality Report 2024 prepared by the Central Ground Water Board (CGWB) is based on the ground water sampling and analysis from 15,259 monitoring locations spread across the country. As per the report, localized occurrences of nitrate beyond the prescribed limits for drinking were reported in groundwater samples collected from some isolated spots, which are spread across 440 districts in India. The State-wise lists of districts wherein nitrate beyond permissible limit has been reported in one or more isolated locations for the year 2023 and 2017 are presented in **Annexure-I** & **Annexure-II** respectively.

Although the number of districts wherein nitrate beyond permissible limit has been reported in one or more isolated locations have increased from 359 in 2017 to 440 in 2023, however there is no evidence to establish its spread from one district to another. Nitrate contamination in groundwater is primarily Anthropogenic in nature, influenced by various factors such as the excessive use of fertilizers, agricultural runoff, improper wastewater management etc. Further, the increase in the number of affected districts is also attributed to enhanced sampling frequency and expanded groundwater quality monitoring in the proximity of reportedly affected areas as per updated SoP. This can be observed from the fact that despite the rise in the number of districts where contamination was reported, there has been a slight decline in the overall proportion of samples exceeding permissible nitrate levels, decreasing from 21.6% to 19.8% from 2017 to 2023.

(c) Out of 788 total districts in India, nitrate beyond permissible limit has been reported in one or more isolated spots of 440 districts in 2023.

(d) As can be seen from **Annexure- I** & **Annexure –II**, in central and Southern parts of the country, the number of districts wherein nitrate has been reported beyond permissible limit in isolated pockets between 2017 to 2023, have remained constant in Karnataka and Maharashtra, shown decline in Kerala and Madhya Pradesh and shown increase in Andhra Pradesh, Telangana and Tamil Nadu respectively.

(e) As per the Annual Groundwater Quality Report 2024, presence of Fluoride beyond the prescribed limits for drinking was reported in groundwater samples from some of the isolated parts of 263 districts in India.

(f) Drinking water having Fluoride or nitrates above the permissible limits over a sustained period is known to cause several adverse health effects. As per the available research and literature, long-term consumption of water contaminated with of Fluoride in drinking water may expose people to risks of crippling skeletal and/ or dental fluorosis. Likewise, nitrate contamination may cause birth defects in infants, thyroid complications and certain types of cancers.

Further, 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. However, several steps have been taken by the Central Government in the direction of improving groundwater quality. Some of the important ones are mentioned below:-

i. Data on ground water quality available with 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. Further, half-yearly Bulletins, carrying the gist of findings are also circulated after every round of ground water quality monitoring.

ii. 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

groundwater in parts of Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand and Assam States.

iii. Central Pollution Control Board (CPCB) in association with State Pollution Control Boards/Pollution Control Committees (SPCBs/PCCs) is implementing the provisions of the Water (Prevention & Control) Act, 1974 and the Environment (Protection) Act, 1986 to prevent and control pollution in water. CPCB has made a comprehensive programme on water pollution for controlling point sources by developing industry specific standards and general standards for discharge of effluents. As per the directives of CPCB, Online Continuous Effluent Monitoring Systems (OCEMS) are installed by the industrial units in the country for getting real time information on the effluent quality.

iv. To make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household by 2024, since August, 2019, Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal.

- Under the JJM, Bureau of Indian Standards' BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery.
- While allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
- 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).
- Under JJM, while planning for potable water supply to household through tap water connection, priority is given to quality-affected habitations. Since, planning, implementation and commissioning of piped water supply scheme based on a safe water source takes time, purely as an interim measure, States/ UTs have been advised to install community water purification plants (CWPPs) especially in Arsenic and Fluoride affected habitations.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b), (d) OF UNSTARRED QUESTION NO. 648 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "RISING LEVEL OF CONTAMINANTS IN GROUNDWATER".

The State-Wise Details of Nitrate Contamination in Ground Water for Year 2023

S.No.	State	No. of districts having NO3 >45 mg/L	Parts of districts having Nitrate > 45 mg/L
1	Andhra Pradesh	25	Alluri Sita Rama Raju, Anakapalli, Ananthapur, Annamayya, Bapatla, Chittoor, East Godavari, Eluru, Guntur, Kakinada, Konaseema, Krishna, Kurnool, Nandyal, Nellore, NTR, Palnadu, Parvathipuram Manyam, Prakasham, Sri Satya Saisrikakulam, Tirupathi, Visakhapatnam, Vizianagaram, West Godavari, YSR Kadapa
2	Bihar	15	Arwal, Bhagalpur, Bhojpur, Buxar, Jehanabad, Kaimur, Katihar, Madhepura, Madhubani, Muzzafarpur, Patna, Saharsa, Samastipur, Sheohar, Sitamarhi
3	Chhattisgarh	20	Balod, Balodabazar, Bemetara, Bilaspur, Dhamtari, Durg, Gariyabandh, Janjgir Champa, Jashpur, Kanker, Kawardha, Korba, Koriya, Mahasamund, Mungeli, Raigarh, Raipur, Rajnandgaon, Surajpur, Surguja
4	Delhi	7	New Delhi, North, North West, South, South East, South West, West
5	Gujarat	23	Ahmedabad, Amreli, Anand, Arvalli, Bharuch, Bhavnagar, Chhota Udepur, Dahod, Devbhoomi Dwarka, Jamnagar, Junagadh, Kachchh, Kheda, Morbi, Panchmahal, Porbandar, Rajkot, Sabarkantha, Surat, Surendranagar, Tapi, Vadodara, Valsad
6	Haryana	21	Ambala, Bhiwani, Faridabad, Fatehabad, Gurugram, Hisar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendragarh, Mewat, Palwal, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonipat, Yamunanagar
7	Himachal Pradesh	6	Bilaspur, Hamirpur, Mandi, Sirmour, Solan, Una
8	Jammu & Kashmir	6	Baramulla, Jammu, Kathua, Kupwara, Rajouri, Samba
9	Jharkhand	9	Chatra, Garhwa, Gumla, Hazaribagh, Latehar, Loherdaga, Palamu, Ranchi, Simdega
10	Karnataka	27	Bagalkot, Belgaum, Bellary, Bengaluru Rural, Bidar, Bijapur, Chamarajanagara, Chikballapur, Chitradurga, Davanagere, Dharwad, Gadag, Gulbarga, Hassan, Haveri, Kodagu, Kolar, Koppal, Mandya, Mysore, Raichur, Ramanagara, Shivmoga, Tumkur, Uttara Kannada, Vijayanagara, Yadgir
11	Kerala	10	Alappuzha, Idukki, Kannur, Kollam, Kozhikode, Malappuram, Palakkad, Pathanamthita, Thrissur, Trivandrum
12	Madhya Pradesh	39	Agar Malwa, Anuppur, Balaghat, Barwani, Bhind, Burhanpur, Chhindwara, Damoh, Datia, Dewas, Dhar, Guna, Gwalior, Harda, Indore, Jabalpur, Jhabua, Katni, Khandwa, Khargone, Mandla, Mandsaur, Morena, Narsinghpur, Neemuch, Panna, Rajgarh, Ratlam, Rewa, Sagar, Satna, Shahdol, Shajapur, Sheopur, Shivpuri, Sidhi, Tikamgarh, Ujjain, Umaria

13	Maharashtra	32	Ahmednagar, Akola, Amravati, Aurangabad, Beed, Bhandara, Buldhana, Chandrapur, Dhule, Gadchiroli, Gondia, Hingoli, Jalgaon, Jalna, Kolhapur, Latur, Nagpur, Nanded, Nandurbar, Nashik, Osmanabad, Parbhani, Pune, Raigad, Sangli, Satara, Sindudurg, Solapur, Thane, Wardha, Washim, Yavatmal
14	Odisha	15	Anugul, Balangir, Bargarh, Cuttack, Dhenkanal, Kendujhar, Khordha, Koraput, Mayurbhanj, Nayagarh, Nuapada, Puri, Sambalpur, Sonapur, Sundargarh
15	Pondicherry	1	Pondicherry
16	Punjab	20	Amritsar, Barnala, Bathinda, Faridkot, Fazilka, Ferozepur, Gurdaspur, Hoshiarpur, Jalandhar, Ludhiana, Mansa, Moga, Muktsar, Nawanshahr, Pathankot, Patiala, Rupnagar, Sangrur, Sas Nagar, Tarn Taran
17	Rajasthan	30	Ajmer, Alwar, Banswara, Baran, Barmer, Bharatpur, Bhilwara, Bikaner, Bundi, Chittaurgarh, Churu, Dausa, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Nagaur, Pali, Pratapgarh, Rajsamand, Sawai Madhopur, Sikar, Sirohi, Tonk, Udaipur
18	Tamil Nadu	31	Ariyalur, Chennai, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kancheepuram, Kanyakumari, Karur, Krishnagiri, Madurai, Nagapattinam, Namakkal, Nilgiris, Perambalur, Pudukkottai, Ramanathapuram, Salem, Sivaganga, Thanjavur, Theni, Thiruvannamalai, Tirunelveli, Tiruvallur, Tiruvarur, Trichy, Tuticorin, Vellore, Villupuram, Virudhunagar
19	Telangana	32	Adilabad, B.Kothagudem, Hanamkonda, J.Bhupalapally, Jagtial, Jangaon, Jogulamba, Kamareddy, Karimnagar, Kb Asifabad, Khammam, Mahabubabad, Mahabubnagar, Mancherial, Medak, Medchal Malkanjgiri, Mulugu, Nagarkurnool, Nalgonda, Narayanpet, Nirmal, Nizamabad, Pedapalle, R. Sircilla, Rangareddy, Sangareddy, Siddipet, Suryapet, Vikarabad, Wanaparthy, Warangal, Yadadri Bhuvanagiri
20	Tripura	2	North Tripura, West Tripura
21	Uttar Pradesh	48	Agra, Aligarh, Allahabad/ Prayagraj, Amethi, Amroha, Auraiya, Baghpat, Balrampur, Banda, Budaun, Bulandshahar, Chitrakoot, Etah, Etawah, Fatehpur, Firozabad, G.B. Nagar, Ghaziabad, Ghazipur, Gorakhpur, Hamirpur, Hapur, Hathras, Jalaun, Jaunpur, Jhansi, Kanpur Dehat, Kanpur Nagar, Kasganj, Kaushambi, Lalitpur, Lucknow, Mahoba, Mainpuri, Mathura, Meerut, Mirzapur, Moradabad, Pilibhit, Rampur, Sambhal, Sant Ravidas Nagar, Shahjahanpur, Shrawasti, Siddharth Nagar, Sonbhadra, Unnao, Varanasi
22	Uttarakhand	5	Almora, Dehradun, Haridwar, Nainital, Udham Singh Nagar
23	West Bengal	18	Alipurduar, Bankura, Birbhum, Cooch Behar, Dakshin Dinajpur, Darjeeling, Hooghly, Jalpaiguri, Jhargram, Malda, Murshidabad, Nadia, North 24 Parganas, Paschim Bardhaman, Paschim Medinipur, Purulia, South 24 Parganas, Uttar Dinajpur

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b), (d) OF UNSTARRED QUESTION NO. 648 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "RISING LEVEL OF CONTAMINANTS IN GROUNDWATER".

The State-Wise Details of Nitrate Contamination in Ground Water for Year 2017

S.No.	State	No. of districts having NO3 >45 mg/L	Parts of districts having Nitrate > 45 mg/L
1	Andhra Pradesh	13	Anantapur, Chittoor, East Godavari, Guntur, Kadapa, Krishna, Kurnool, Nellore, Prakasam, Srikakulam, Visakhapatnam, Vizianagaram, West Godavari
2	Bihar	20	Arwal, Aurangabad, Begusarai, Bhabhua, Bhagalpur, Bhojpur, Buxar, Gaya, Jehanabad, Khagaria, Madhubani, Muzaffarpur, Nalanda, Nawada, Patna, Rohtas, Samastipur, Sheikhpura, Supaul, West Champaran
3	Goa	2	North Goa, South Goa
4	Gujarat	30	Ahmedabad, Amreli, Anand, Arvalli, Banas Kantha, Bharuch, Bhavnagar, Botad, Chhota Udaipur, Dahod, Devbhumi Dwarka, Gandhinagar, Jamnagar, Junagadh, Kachchh, Kheda, Mahesana, Mahisagar, Morbi, Narmada, Navsari, Panch Mahals, Patan, Porbandar, Rajkot, Sabarkantha, Surat, Surendra Nagar, The Dangs, Vadodara
5	Haryana	18	Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Hisar, Jhajjar, Kaithal, Karnal, Mahendragarh, Mewat, Palwal, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Yamunanagar
6	Himachal Pradesh	1	Solan
7	Jammu & Kashmir	6	Reasi, Jammu, Kathua, Rajouri, Samba, Udhampur.
8	Jharkhand	17	Bokaro, Deoghar, Dhanbad, Dumka, E. Singhbhum, Giridih, Gumla, Jamtara, Khunti, Koderma, Lohardaga, Pakur, Ranchi, Sahibganj, Saraikela, Simdega, W. Singhbhum
9	Karnataka	27	Bagalkot, Bangalore Rural, Bangalore Urban, Belgaum, Bellary, Bidar, Bijapur, Chamarajanagar, Chickballapur, Chickmagalur, Chitradurga, Davanagere, Dharwad, Gadag, Gulbarga, Hassan, Haveri, Kodagu, Kolar, Koppal, Mandya, Mysore, Raichur, Shimoga, Tumkur, Udipi, Yadgir
10	Kerala	13	Ernakulam, Idukki, Kannur, Kasargod, Kollam, Kottayam, Kozhikode, Malappuram, Palakkad, Pathanamthitta, Thrissur, Trivandrum, Wayanad
11	Madhya Pradesh	48	Agar Malwa, Alirajpur, Ashok Nagar, Balaghat, Barwani, Betul, Bhind, Bhopal, Burhanpur, Chhatarpur, Chhindwara, Damoh, Datia, Dewas, Dhar, Guna, Gwalior, Harda, Hoshangabad, Indore, Jabalpur, Jhabua, Katni, Khandwa, Khargone, Mandla, Mandsaur, Morena, Narsinghpur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Rewa, Sagar, Satna, Sehore, Seoni, Shahdol, Shajapur, Sheopur, Shivpuri, Singrauli, Tikamgarh, Ujjain, Umaria, Vidisha
12	Maharashtra	32	Ahmednagar, Akola, Amravati, Aurangabad, Beed, Bhandara, Buldhana, Chandrapur, Dhule, Gadchiroli, Gondia, Hingoli, Jalgaon,

			Jalna, Kolhapur, Latur, Nagpur, Nanded, Nandurbar, Nashik, Osmanabad, Parbhani, Pune, Ratnagiri, Sangli, Satara, Sindhudurg, Solapur, Thane, Wardha, Washim, Yavatmal
13	Punjab	17	Bathinda, Faridkot, Fatehgarh Sahib, Fazilka, Ferozepur, Gurdaspur, Hoshiarpur, Jalandhar, Kapurthala, Mansa, Muktsar, Nawanshahr, Pathankot, Patiala, Rupnagar, Sangrur, SAS Nagar
14	Rajasthan	31	Ajmer, Alwar, Banswara, Baran, Barmer, Bharatpur, Bhilwara, Bundi, Chittaurgarh, Churu, Dholpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Pratapgarh, Rajsamand, Sawai Madhopur, Sikar, Sirohi, Tonk, Udaipur
15	Tamil Nadu	20	Chennai, Coimbatore, Dharmapuri, Dindigul, Erode, Kancheepuram, Kanyakumari, Karur, Krishnagiri, Namakkal, Perambalur, Salem, Thiruvannamalai, Tirunelveli, Tiruppur, Tiruvallur, Trichy, Tuticorin, Villupuram, Virudhunagar
16	Telangana	10	Adilabad, Hyderabad, Karimnagar, Khammam, Mahbubnagar, Medak, Nalgonda, Nizamabad, Ranga Reddy, Warangal
17	Uttar Pradesh	42	Agra, Aligarh, Allahabad, Baghpat, Ballia, Balrampur, Banda, Budaun, Chandawali, Chitrakoot, Etah, Faizabad, Farrukhabad, Fatehpur, Firozabad, Gaziabad, Gonda, Hamirpur, Hathras, J P Nagar, Jalaun, Jaunpur, Jhansi, Kanpur Dehat, Kanpur Nagar, Kashiramnagar (Kasganj), Kaushambi, Lalitpur, Lucknow, Mahoba, Mathura, Meerut, Mirzapur, Moradabad, Muzaffarnagar, Pilibhit, Saharanpur, Shrawasti, Sitapur, Sonbhadra, Unnao, Varanasi.
18	West Bengal	12	Bankura, Birbhum, Cooch Behar, Dakshin Dinajpur, Darjeeling, Jalpaiguri, Jhargram, Malda, Paschim Bardhaman, Paschim Medinipur, Purba Bardhaman, Purulia.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 644

ANSWERED ON 06.02.2025

WATER GRID IN MARATHWADA REGION OF MAHARASHTRA

644. DR. SHIVAJI BANDAPPA KALGE

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

(a) whether Marathwada region has been affected for shortages of water, especially Latur and Dharashiv districts of Maharashtra and if so, the details thereof; and

(b) whether the Government has taken any initiative to develop water grid in Marathwada region, if so, the details thereof and if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) Marathwada region is one of the most drought-affected areas in Maharashtra. This is a rain shadow region with an annual rainfall of only 600 mm and rainfall variability of 30%. As intimated by the Government of Maharashtra, to overcome the situation, an initiative has been taken by the State Government to develop a water grid in the Marathwada region. Under this initiative, the State Government has planned to connect 11 major dams in the region by pipeline to enable water to be conveyed from dam to dam as and when required. As further intimated by the Government of Maharashtra, 8 water supply grid schemes have been sanctioned in this region under the Jal Jeevan Mission, which is part of the Marathwada grid.

Further to intimate that the Government of India formulated a National Perspective Plan (NPP) in 1980 for the transfer of water from water-surplus basins to water-deficient basins/areas. 30 Interlinking of Rivers (ILR) projects have been identified under the NPP. National Water Development Agency (NWDA) has been entrusted with the work of ILR Projects. Under the NPP, the Damanganga - Pinjal ILR project and the Par - Tapi - Narmada ILR project have been envisaged to benefit the State of Maharashtra.

Apart from this, 20 intra-state link proposals were also received by NWDA from the State of Maharashtra. Out of these 20 link proposals, 3 proposals, viz; Wainganga–Manjra Valley intra-State link, Upper Krishna - Bhima (system of 6 links) intra-State link, and Nar–Par–Girna valley intra-State link pertain to the Marathwada region of the State. Pre-feasibility reports (PFRs) of all these intra-State link proposals have been completed by NWDA and submitted to the Government of Maharashtra. The details of the 3 intra-state link proposals concerning the Marathwada region are as under:

S.No	Name of Intra-State link	Rivers	Districts benefitted	Present status of PFR /DPR
1	Wainganga–Manjra Valley	Wainganga and Manjra	Beed, Hingoli, Parbhani	PFR completed (Not found feasible)
2	Upper Krishna–Bhima (system of 6 links)	Krishna and Bhima	Osmanabad (Dharashiv)	PFR completed
3	Nar–Par–Girna valley	Nar, Par and Girna	Aurangabad	PFR completed (Not found feasible)

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 640

ANSWERED ON 06.02.2025

JAL SANCHAY JAN BHAGIDARI INITIATIVE IN KERALA

640. SHRI RAJMOHAN UNNITHAN

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

(a) the specific steps taken/being taken by the Government to implement the Jal Sanchay Jan Bhagidari initiative in the districts of Kerala, especially in Kasargode;

(b) the details of the budget allocated for the Jal Sanchay Jan Bhagidari initiative along with the funds distributed to Kerala, district-wise and;

(c) the major challenges faced by the Government in the implementation of Jal Sanchay Jan Bhagidari in Kerala along with the steps taken/being taken to address these challenges?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) The Jal Sanchay Jan Bhagidari (JSJB) initiative, launched under the Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) campaign, aims to promote community-driven water conservation and groundwater recharge across the country, including Kerala. The initiative focuses on constructing one million artificial recharge structures through a convergent and participatory approach by leveraging multiple funding sources such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Per Drop More Crop, Pradhan Mantri Krishi Sinchayi Yojana (PMKSY), Compensatory Afforestation Fund (CAMPA), Finance Commission grants, Corporate Social Responsibility (CSR) contributions etc.

The Government has taken specific steps to facilitate implementation in Kerala, including Kasargode, by issuing an advisory on 07.10.2024, in collaboration with the Central Ground Water Board (CGWB), to District Magistrates/Deputy Commissioners and Municipal Corporations for implementation. To ensure transparency and quality monitoring, the Ministry has developed the Jal Sanchay Dashboard, an online platform for tracking recharge structures using GIS coordinates, photographs and financial details. As on 04.02.2025, 5.18 lakh recharge structures have been onboarded under the Jal Sanchay Jan Bhagidari initiative with around 2,768 recharge structures in Kerala including 387 recharge structure in Kasargode. Furthermore, 1% of recharge structures are test-checked for quality assurance. CWC and CGWB

also provide technical assistance for the creation and renovation of recharge structures to improve groundwater augmentation efforts.

Technical officers from CGWB and Central Water Commission (CWC) are assigned to each district and municipal corporation to provide guidance, with four dedicated CGWB officers stationed at National Water Mission (NWM) to support States, Ministries, Industries and NGOs in implementation. Additionally, Frequently Asked Questions (FAQs) and technical advisory documents have been prepared by CGWB in collaboration with NWM and widely disseminated through the JSA: CTR portal to assist stakeholders at all levels. Information, Education, and Communication (IEC) activities have also been undertaken to spread awareness about the initiative.

(b) The Jal Sanchay Jan Bhagidari initiative does not have a separate dedicated budget but is implemented through convergence of existing schemes and funds are made available under various Central and State programs such as MGNREGS, AMRUT, PDMC, PMKSY, CAMPA, CSR etc.

(c) Implementing Jal Sanchay Jan Bhagidari (JSJB) in any State, Kerala included, can pose a challenge due to various technical, social, economic and institutional factors. Like in a few other states, implementation of the JSJB initiative in Kerala may face several challenges, of geographic condition, slope, high-rainfall, high runoff, water logging etc, making the scope for water conservation structures for direct recharge of ground water, limited. To address this, as water may be needed in such areas too, during lean and dry seasons, rainwater harvesting structures, like Rooftop Rainwater Harvesting Structures for collection and storage of rainwater is encouraged. Additionally, land constraint, congestion, unplanned construction in urban and peri-urban areas in states with high density population, pose further challenge in constructing artificial recharge structures. In response, the Government has issued Advisory and FAQ, to promote rooftop rainwater harvesting for direct ground water recharge, rejuvenation of traditional/ existing water bodies and integrating recharge structures with existing infrastructure, in such areas. To promote behaviour change , JSJB encourages intensified community action and ownership for water conservation.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 620

ANSWERED ON 06.02.2025

CONSTRUCTION OF BARNAR RESERVOIR

†620. SHRI GIRIDHARI YADAV

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

(a) whether the work on construction of Barnar Reservoir to be carried out under Jamui district in Bihar that connecting with two States viz. Bihar and Jharkhand is pending for a long time;

(b) if so, the estimated cost of the said Reservoir along with the amount of funds allocated so far;

(c) whether the Government has fixed any timeline for completion of the said project; and

(d) if so, the details thereof and if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (d) Yes, work of construction of Barnar Reservoir in Jamui district of Bihar is pending for a long time. Water resources projects are planned, funded, executed and maintained by the State Governments themselves as per their own resources and priority. Role of Government of India is limited to being catalytic, providing technical support, and partial financial assistance to a few identified projects under the ongoing schemes of this Ministry.

The Barnar reservoir project is being implemented by the State Government of Bihar. The total expenditure on the project so far, as reported by State is Rs. 63.89 crore. The project was considered and accepted by the technical advisory committee on irrigation and flood control of erstwhile Planning Commission in 1975 for estimated cost of Rs. 8.0346 crore. The project proposal was submitted for cost revision in CWC with estimated cost of Rs. 2,302.22 crore at 2022-23 price level on 28.10.2023. The proposal was returned to State on 17.01.2024 with suggestion to prepare new DPR with updated hydrology, irrigation planning and cost estimate with 2023-24 price level. State has informed that at present the DPR of Barnar reservoir project is being replanned with pipe line network in place of open channel.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 616

ANSWERED ON 06.02.2025

AREAS WITH SEVERE GROUNDWATER LEVELS DEPLETION DECLARED AS DARK ZONES

616. SHRI DHARAMBIR SINGH

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

(a) whether the Government has any plans to declare the areas with severe groundwater levels depletion as Dark Zones and if so, the details thereof along with the criteria used for such classifications;

(b) the number of blocks in Bhiwani, Mahendragarh and Charkhi Dadri districts of Haryana declared as Dark Zones along with the specific factors contributed for their inclusion;

(c) whether the Government proposes to include the remaining blocks of these districts under the Dark Zone category and if so, the details thereof along with the timeline set in this regard;

(d) the targeted measures undertaken/being undertaken by the Government to restore groundwater levels and promote sustainable water management in the regions that already have been classified as Dark Zones; and

(e) whether the Government has any dedicated programmes to involve local farmers and communities in water conservation efforts and if so, the details thereof along with the manner in which these initiatives are likely to be implemented in the affected regions?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) Dynamic Ground Water Resource assessment is being carried out annually of each State/UT jointly by Central Ground Water Board (CGWB) and concerned State Nodal/Ground Water Department. Under the assessment, among other things, the Assessment Units (AUs), which are generally Taluks/ Blocks/ Tehsils etc. are classified into 'Safe', 'Semi-Critical', 'Critical' and 'Over-Exploited'(previously termed as Dark Zones) categories based on the prevailing 'Stage of Ground Water Extraction (SoE)'. The SoE is defined as the ratio of total Annual Ground Water Extraction for all uses (irrigation, industrial and domestic uses) over total Annual Extractable Ground Water Resources.

As per the latest 2024 Assessment, out of the total 6746 Assessment Units in the country, 751 units in various States/ UTs (11.13%) have been categorized as 'Over-exploited.

(b) According to the National Compilation of Dynamic Ground Water Resources of India, 2024, four out of the seven assessed blocks in Bhiwani district have been categorized as over-exploited. In Mahendragarh district, six out of eight blocks and in Charkhi Dadri district, two out of four blocks have been classified as over-exploited respectively, as the Stage of Extraction stands above 100% for all these Blocks. The details of assessment units classified under various categories in these districts are provided in **Annexure.**

(c) The classification is based on Annual Assessment of Ground Water resources and Stage of Extraction (SoE) which is specific to the Assessment Unit/Block involved.

(d) Water being a State subject, addressing water scarcity problem, including taking corrective action restore ground water levels, 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 projects and schemes. Some of the important steps taken by the Ministry to check ground water depletion and promote sustainable management of ground water resources in the country, including in Dark Zones, 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. 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. Atal Bhujal Yojana (ABY) is being implemented across 229 water stressed blocks in 80 districts across Seven States, including Haryana for participatory ground water management focusing on demand side management of ground water. One of the major objectives of this Scheme is to arrest the declining ground water levels in the identified water stressed GPs.

iii. 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, has been mapped under the scheme and management plans have been shared with the respective State governments.

iv. 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 to harness around 185 (Billion Cubic Meters) BCM of water, with estimated cost.

v. Department of Agriculture & Farmers' Welfare (DA & FW), GoI, is implementing Per Drop More Crop (PDMC) Scheme in the country 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.

vi. 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.

vii. The Central Ground Water Authority (CGWA) has been constituted under MoJS for the purpose of regulation and control of ground water development and management in the country. Abstraction cum use of Groundwater in the country is regulated by CGWA by way of issuing NOCs as per the provisions of its Guidelines dated 24.09.2020 which have pan India applicability.

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/

(e) The central government has taken several important steps to ensure large scale community participation for turning ground water management into a truly peoples' movement. The notable among them are:

i. The government of India is implementing Atal Bhujal Yojana (ABY) which has community led sustainable management of ground water resources and demand management as its core theme. Under this, Water Budget and Water Security Plan for each Gram Panchayat is prepared by the local community itself consisting of local villagers mainly of farmers.

ii. Jal Shakti Abhiyan (JSA) is being implemented in the country since 2019 with active community involvement. Jal Shakti Kendras (JSKs) have been set up under Abhiyan in various districts of the country for interacting with local community and dissemination of water related knowledge.

iii. Under Jal Jeevan Mission, with a view to involve community at large and to spread awareness regarding water quality, five persons, preferably women, are identified and trained from every village for testing the water samples through Field Test Kits (FTKs). Thus far, more than 24 lakh women have been trained across the country.

iv. To further strengthen the momentum of Jal Shakti Abhiyan, Jal Sanchay Jan Bhagidari: A Community-Driven Path to Water Sustainability in India has been launched by the Hon'ble Prime Minister on September 6, 2024, in Surat, Gujarat 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.

v. Central Ground Water Board organizes various Public Interaction Programs (PIP), Mass Awareness Programs (MAP), Tier II and Tier –III programmes on local ground water issues, including educating the public about the impacts of water contamination and promoting sustainable practices to maintain water quality.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 616 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "AREAS WITH SEVERE GROUNDWATER LEVELS DEPLETION DECLARED AS DARK ZONES".

The details of assessment units classified under OCS categories in Bhiwani, Charkhi Dadri &Mahendragarh districts of Haryana as per National Compilation of Dynamic Ground Water Resources of India, 2024

S. No	Name of District	Safe Assessment Units	Semi-Critical Assessment Units	Critical Assessment Units	Over-Exploited Assessment Units
1	**Bhiwani**	1.Bawani Khera			1.Loharu
		2.Bhiwani			2.Kairu
		3.Siwani			3.Tosham
					4.Behal
2	**Charkhi Dadri**	1.Baund			1.Jhojhu
		2.Charkhi Dadri			2.Badhra
3	**Mahendragarh**		1.Satnali	1.Nizampur	1.Kanina
					2.Nangal Chaudhry
					3.Sihma
					4.Mahendragarh
					5.Narnaul
					6.Ateli Nangal

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 609

ANSWERED ON 06.02.2025

"PRAKASHA-BURAI LIFT IRRIGATION PROJECT" IN NANDURBAR, MAHARASHTRA

†609. ADV GOWAAL KAGADA PADAVI

Will the Minister of JAL SHAKTI be pleased to state:

(a) whether the "Prakasha-Burai Lift Irrigation Project" in the Nandurbar taluka and district of Maharashtra has been pending for a long time and if so, the details thereof;

(b) whether it is a fact that the entire Nandurbar taluka and neighbouring talukas are gradually becoming drought-prone areas due to the water scarcity issue and if so, the details thereof;

(c) whether the Government has any plan to allocate and release 40% or more of the required funds for this project by considering the remaining funds to be provided by the Maharashtra State Government and if so, the details thereof;

(d) whether the funds have been allocated and distributed for the said project and if so, the details thereof; and

(e) whether any steps have been taken to prevent the Nandurbar Lok Sabha Constituency from being classified as a drought-prone area and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (d) Water being a State subject, it is for the State Government concerned to plan, execute, operate and manage the irrigation projects, and to prepare action plan to make irrigation system more extensive in the State. Role of Government of India is limited to providing technical support, and partial financial assistance for identified projects under the ongoing schemes. Further, for major and medium irrigation projects on inter-State river systems, techno-economic viability is to be appraised by Central Water Commission (CWC) under this Ministry.

Prakasha-Burai Lift Irrigation Project in Nadurbar taluka and district of Maharashtra is being constructed by Government of Maharashtra from their own financial resources. Government of Maharashtra has intimated that revised administrative approval for the project amounting to Rs. 793.95 crore has been accorded in March, 2024. Expenditure incurred on the project till date is Rs. 121.94 crore. The project has potential to irrigate 7,085 hectare drought prone area of Nandurbar and Dhule districts of Maharashtra.

No proposal for central assistance to Prakasha-Burai Lift Irrigation Project has been received in this Ministry from Government of Maharashtra.

Central Ground Water Board (CGWB) monitors groundwater levels throughout the country on a regional scale including Nandurbar district of Maharashtra, four times, every year. The district-wise water level measured for the Month of November 2024 for Nandurbar district of Maharashtra is given in **Annexure.** The perusal of data indicates that in Nandurbar district, approximately 84% of the analyzed wells fall within the 0-10 mbgl range.

The long term fluctuation in ground water level as indicated by decadal fluctuation, i.e., November, 2024 compared with the decadal mean of November water levels of ten years (2014-2023) indicate that 78% of well in Nandurbar District show rise in ground water levels. Decadal Water Level Fluctuation in respect of Nandurbar district of Maharashtra is also given in **Annexure.**

(e) Initiatives taken by Government of India for development of irrigation and augmentation of ground water in Nandurbar district of Maharashta, is outlined below:-

1. Micro irrigation in an area of 18,461 hectares in Nandurbar district of Maharashtra has been developed under Per drop More Crop (PDMC) component of Pradhan Mantri Krishi Sinchai Yojna (PMKSY)
2. Four projects of Nandurbar district of Maharashtra with coverage of 16,383 hectares area has been sanctioned under Watershed Development (WD) component of PMKSY.
3. CGWB has completed the National Aquifer Mapping (NAQUIM) Project in the entire mappable area of about 25 lakh square kilometer including Nandurbar district of Maharashtra. The Aquifer maps and management plans have been prepared and shared with the respective State agencies for implementation. The management plans include various water conservation measures through demand side and supply side interventions.
4. As a capacity building under NAQUIM studies, a total of two Tier-III trainings (Block Level Training) with 237 participants were conducted in Nandurbar and Shahada talukas in 2019. One public interaction program has been organised in Shirpur taluka, Dhule district with 47 number of participants in 2021. One-day training workshop entitled “Hamara Jal– Hamara Jeevan” on the theme of ‘Water Management for Sustainable Development’ was conducted by the State agency during India Water Week-2015 (IWW-2015) in Nandurbar district.
5. 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 envisages construction of about 1.42 crore rain water harvesting and artificial recharge structures in the country to harness 185 Billion Cubic Metre (BCM) of monsoon rainfall. For Nandurbar district of Maharashtra, 25,755 nos. of rain water harvesting structure have been proposed in the Master Plan.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (d) OF UNSTARRED QUESTION NO. 609 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING “"PRAKASHA-BURAI LIFT IRRIGATION PROJECT" IN NANDURBAR, MAHARASHTRA”.

A. Depth to Water Level Distribution of Percentage of Observation Wells Post-Monsoon 2024 in Nandurbar district of Maharashtra (Unconfined Aquifer)

District Name	No of well 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.	%
Nandurbar	19	1	5.3	13	68.4	2	10.5	3	15.8	0	0.0	0	0.0

B. Categorization of changes in water level between Mean of Post-monsoon 2014 to 2023 with Post-monsoon 2024 (Nandurbar district of Maharashtra)

District Name	No of wells analysed	No./Percentage of wells showing fluctuation to water level (m) in the range of											
		Rise						Fall					
		0 to 2		2 to 4		> 4		0 to 2		2 to 4		> 4	
Nandurbar	18	5	27.8	6	33.3	3	16.7	4	22.2	0	0	0	0

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 608

ANSWERED ON 06.02.2025

FUNDS UNDER AIBP TO UTTAR PRADESH

†608. SHRI RAMASHANKAR RAJBHAR

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

(a) the guidelines laid down by the Government for allocating funds under the Accelerated Irrigation Benefit Programme (AIBP);

(b) whether some States including Uttar Pradesh are being allocated less funds as compared to other States;

(c) if so, the details thereof and if not, the reasons therefor; and

(d) the action taken/proposed to be taken by the Government in this regard?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (d) Central assistance under PMKSY-AIBP is limited to proportionate funding of the balance cost of works components of irrigation and drinking water only, at the time of inclusion of the project under the scheme.

Latest guidelines for PMKSY-AIBP projects is available at https://pmksy-mowr.nic.in/aibp-mis/Manual/Guidelines_PMKSY_AIBP_National_Projects_%202022.pdf.

Ninety-Nine (99) ongoing Major/Medium Irrigation Projects (MMI) (and 7 phases) spread in 19 States/Union Territories were identified during 2016-17, in consultation with States, for inclusion under Pradhan Mantri Krishi Sinchai Yojana –Accelerated Irrigation Benefits Programme (PMKSY-AIBP). Further, after approval for continuation of implementation of PMKSY during 2021-26, nine projects spread in 7 States have been included under PMKSY-AIBP.

Further, central assistance is provided to the projects, as per the guidelines, on the basis of progress made by the project and matching budgetary allocations made by the State for the project in a financial year.

Four (4) projects of Uttar Pradesh have been included under PMKSY-AIBP. Rs. 1,421.82 crore has been provided as central assistance to these projects since April, 2016.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 588

ANSWERED ON 06.02.2025

PMKSY- ACCELERATED IRRIGATION BENEFIT COMPONENT IN ANDHRA PRADESH

588. SHRI KESINENI SIVANATH

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

(a) whether the Government has any data regarding the total number of projects identified, completed and under progress under the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) Accelerated Irrigation Benefit Component in the State of Andhra Pradesh;

(b) if so, the details thereof, year-wise along with the time by which the pending projects are likely to be completed;

(c) the details of the central assistance allocated and released to State of Andhra Pradesh under the said component during 2019-2025, year-wise;

(d) the details of the irrigation potential generated under the said component/projects in the State of Andhra Pradesh; and

(e) whether the Government has conducted any studies to examine the progress of the said projects in the said State and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (d) Presently, there are 8 nos major and medium irrigation projects under Pradhan Mantri Krishi Sinchayee Yojana -Accelerated Irrigation Benefit Programme in Andhra Pradesh. Details of these projects are given in **Annexure.**

(e) PMKSY-AIBP projects are regularly monitored by Central Water Commission and Monitoring reports consisting of comprehensive information on project progress & issues are regularly submitted to this Ministry. Further, there is dedicated Project Management Unit (PMU) under the Ministry to monitor progress of the projects. Apart from these, projects are regularly reviewed for progress and issues at the level of this Ministry.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (d) OF UNSTARRED QUESTION NO. 588 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "PMKSY- ACCELERATED IRRIGATION BENEFIT COMPONENT IN ANDHRA PRADESH".

Status of Projects Under PMKSY-AIBP in Andhra Pradesh **(Irrigation Potential (IP) in Thousand Hectare & Cost, Central Assistance (CA) in crore)**										
Project Name	**Completion Status/Targeted completion**	**Approved Estimated Cost of AIBP Component**	**CA eligibility as on 01.04.16**	**Central Assistance Release**						**IP Created during 2016-2024**
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	
Gundlakamma	Jun, 26	397.41	19.870	0	0	0	0	0	0	5.970
Tadipudi LIS	Dec, 25	285.74	0	0	0	0	0	0	0	2.619
Thotapally	Jun, 25	420.94	0	0	0	0	0	0	0	21.518
Tarakaram Teerta Sagaram	Jun, 26	193.5	25.044	0	0	0	0	0	0	0
Musurumilli	Dec, 26	153.52	8.609	0	0	0	0	0	0	0
Pushkara LIS	Dec, 25	196.24	0	0	0	0	0	0	0	0.198
Yerracalva	Dec, 26	89.57	0	0	0	0	0	0	0	0
Maddigedda	Completed	7.2	0	0	0	0	0	0	0	0

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 587

ANSWERED ON 06.02.2025

NOC FROM NEPAL TO CHANGE RIVER COURSE

†587. SHRI DILESHWAR KAMAIT

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

(a) the total number of rivers in the country and the names of the rivers in which the untreated sewage water of municipal areas is drained in;

(b) whether a bilateral dialogue has held on 4th January, 2025 in Birpur under Supaul district of Bihar among the representatives of Nepal and Water Resource Department of Bihar Government, Union Water Resource Department and local Member of Paliament to discuss the issue of inter-linking the rivers originating from Nepal viz. Jitadhar and Khando rivers to mainstream and if so, the details thereof;

(c) whether the Koshi, Jitadhar and Khando rivers flow by changing their course from their mainstream consequently affecting Kuanuli, Kamalpur and Dagmara villages and other blocks of Supaul district by causing heavy damage to the life and property and if so, the details thereof;

(d) whether No Objection Certificate (NOC) is required from Nepal to bring these rivers into their mainstream; and

(e) if so, the concrete steps taken/likely to be taken by the Government to seek such NOC?

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/openpdffile.phpid=UmVwb3J0RmlsZXMvMTQ5OF8xNjcyOTg4MDQ1X211ZGlhcGhvdG8xMjk5NS5wZGY=.

(b) There is no such bilateral dialogue has held on this subject on 4th January, 2025.

(c) to (e) The Koshi, Jitadhar and Khando rivers flow by changing their course from their mainstream consequently affecting Kuanuli, Kamalpur and Dagmara villages and other blocks of Supaul district causing damage to the life and property. In this connection, Water Resources Department (WRD), Govt. of Bihar has submitted the Detaled Project Report (DPR) of the project namely "Channelization of Khando River in India Portion and Jeeta Dhar in No Man's Land (with estimated cost Rs. 54.7992 crore)" to Ganga Flood Control Commission, Patna with works falling in no man's land which requires prior permission through diplomatic channel from Govt of Nepal for their construction. In this connection, site visit by members from India and Nepal of Sub-group of Joint Committee on Inundation and Flood Management (JCIFM) is proposed during 20th March 2025 to 24th March 2025.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 580

ANSWERED ON 06.02.2025

RIVER LINKING PROJECTS IN ANDHRA PRADESH

580. SHRI PUTTA MAHESH KUMAR

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

(a) the details of the total number of river-linking projects under construction, completed and presently functional across the country, State-wise, especially in Andhra Pradesh;

(b) the total amount of funds allocated and utilised for the said purpose during the last five years and the current year, project-wise, especially in Andhra Pradesh;

(c) the proposed timeline for completion of pending river linking projects across the country, especially those in Andhra Pradesh; and

(d) the details of the total benefits that would be derived on the completion of all river-linking projects across the country?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) The Government of India formulated a National Perspective Plan (NPP) for the Inter-linking of Rivers (ILR) for transferring water from surplus basins to deficit basins/areas in 1980. National Water Development Agency (NWDA) has been entrusted with the work of Interlinking of Rivers under the NPP. 30 link projects have been identified under the NPP with two components, viz; Himalayan Component (14 ILR projects) and Peninsular Component (16 ILR projects). Detailed Project Reports (DPRs) of 11 ILR projects, Feasibility Reports (FRs) of 26 ILR projects, and Pre-Feasibility Reports (PFRs) of 30 ILR projects have been completed.

(b) As this rigorous process demands a consensus among the party States; therefore, out of 30 ILR projects under the NPP, the implementation of only one project i.e. Ken-Betwa Link Project (KBLP) has been started so far. No ILR Project involving the State of Andhra Pradesh has reached the stage of implementation.

The status of funds allocated and utilized for KBLP is given at **Annexure I**. A total expenditure of Rs. 8023.37 crore has been incurred by the Government of India on KBLP till 31.12.2024.

(c) The Memorandum of Agreement (MoA) for KBLP were signed by the party States in March, 2021 and subsequently in December, 2021 the Union Cabinet approved the proposal for implementation of the project at an estimated cost of Rs. 44,605 crore, with a Central Support of Rs. 39,317 crore. The project is planned to be completed in by March 2030.

For other ILR projects, the schedule of completion would depend upon the party States arriving at a consensus for the respective link projects and signing the link specific MoAs for their implementation.

(d) Status and benefits of ILR Projects is given at **Annexure-II.**

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 580 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "RIVER LINKING PROJECTS IN ANDHRA PRADESH".

THE STATUS OF FUNDS ALLOCATED AND UTILIZED FOR KBLP

Year	**Budget allocated (Rs. in crore)**	**Expenditure (Rs. in crore)**
2021-22	4644.46	4639.46
2022-23	1400	622.42
2023-24	3500	1392.37
2024-25	4000	1369.12 (till 31.12.2024)

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 580 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "RIVER LINKING PROJECTS IN ANDHRA PRADESH".

DETAILS OF BENEFITS FROM ILR PROJECTS UNDER THE NPP

Peninsular Component

Sl.No	Name	States benefited	Annual Irrigation (Lakh ha)	Domestic & Industrial (Mm^3)	Hydropower (MW)	Status
1	a. Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link	Andhra Pradesh (AP) and Odisha	4.43	802	445	FR completed
	b. Alternate Mahanadi (Barmul) - Rushikulya – Godavari (Dowlaiswaram) link	AP and Odisha	6.25 (0.91 + 3.52 + 1.82**)	700 +125**	210 + 240**	FR completed
2	Godavari (Polavaram) - Krishna (Vijayawada) link ****	AP	2.1	162	--	FR completed
3	a.)Godavari (Inchampalli) - Krishna (Nagarjunasagar) link	Telangana	2.87	237	975+ 70= 1045	FR completed
	b.) Alternate Godavari (Inchampalli) - Krishna (Nagarjunasagar) link*	Telangana	2.38	232	26	DPR completed
4	Godavari (Inchampalli/ SSMPP) - Krishna (Pulichintala) link	Telangana and AP	4.74 (0.36+ 4.38)	346	90	DPR completed
5	a.) Krishna (Nagarjunasagar) - Pennar (Somasila) link	AP	5.81	124	90	FR completed
	b.)Alternate Krishna (Nagarjunasagar) - Pennar (Somasila) link*	AP	1.71	236	40	DPR completed
6	Krishna (Srisailam) – Pennar link	AP	1.79	58	11	Draft DPR completed
7	Krishna (Almatti) – Pennar link	Karnataka	0.69	467		Draft DPR completed
		AP	1.57	29.83	--	
8	a.) Pennar (Somasila) - Cauvery (Grand Anicut) link	AP, Tamil Nadu & Puducherry	4.91 (0.49+ 4.36 +0.06)	1105	--	FR completed
	b.) Alternate Pennar (Somasila) - Cauvery	AP	0.51	43		DPR completed
		Tamil Nadu	1.14	618		

	(Grand Anicut) link *	Puducherry	--	62		
9	Cauvery (Kattalai) - Vaigai -Gundar link	Tamil Nadu	4.48	218	--	DPR completed
10	a. Parbati –Kalisindh - Chambal link	Madhya Pradesh (MP) and Rajasthan	Alt.I = 2.30 Alt.II = 2.20	- 13.2	--	FR completed
	b. Modified Parbati – Kalisindh-Chambal link (duly integrated with ERCP)	MP and Rajasthan	3.38 (as per draft PFR) MP – 2.58 Rajasthan-0.8	Rajasthan-Domestic-1723 MCM Industrial-286 MCM MP-Domestic-36 MCM	-	Draft PFR completed
11	Damanganga - Pinjal link	Maharashtra (only water supply to Mumbai)	--	895	5	DPR completed
12	Par-Tapi-Narmada link	Gujarat	2.28	76	21	DPR completed
		Maharashtra	0.04	--	--	
13	Ken-Betwa link	Uttar Pradesh(UP) &Madhya Pradesh	10.62 (2.51 +8.11)	194	103 MW (Hydro) & 27MW (Solar)	DPR completed & implementation started
14	Pamba - Achankovil - Vaippar link	Tamil Nadu	0.91	--	3.87	FR completed
		Kerala			504.5	
15	Bedti - Varda link@	Karnataka	1.05	38	----	DPR completed
16	Netravati – Hemavati link***	Karnataka	0.34	--	--	PFR completed

**Benefit to Odisha from Six Projects of Govt. of Odisha

For PKC links at Serial no.10 (a): Alt I- Linking with Gandhi sagar Dam, Alt. II- Linking with Rana Pratap Sagar Dam

* Due to pending consensus on Manibhadra and Inchampalli dams, an Alternate study to divert unutilized waters of the Godavari River was carried out, and DPR of Godavari (Inchampalli/ Janampet) – Krishna (Nagarjunasagar) - Pennar (Somasila) – Cauvery (Grand Anicut) link projects completed. Godavari-Cauvery (Grand Anicut) link project has been prepared comprising of Godavari (Inchampalli / Janampet) - Krishna (Nagarjunasagar), Krishna (Nagarjunasagar)- Pennar (Somasila) and Pennar (Somasila)-Cauvery (Grand Anicut) link projects. The report was further updated terminating the link canal at Manimukhta Nadi, a tributary of the Vellar River flowing adjacent to the Cauvery basin.

@ Bedti –Varda Link- DPR was prepared directly after the preparation of its PFR, no FR was prepared.

**** Godavari (Polavaram)- Krishna (Vijayawada) Link- the project has been taken up by Govt. of Andhra Pradesh.

*** Further studies have not been taken up since after the implementation of the Yettinahole project by Govt. of Karnataka, no surplus water is available in the Netravati basin for diversion through this link.

Himalayan Component

Sl. No	Name	States / countries benefited	Annual Irrigation (Lakh ha)	Domestic & Industrial (Mm^3)	Hydropower (MW)	Status
1.	Kosi-Mechi link	Bihar and Nepal	4.74 (2.99+1.75)	24	3180	PFR completed
2.	Kosi-Ghaghra link	Bihar, UP and Nepal	8.35 (6.05+1.20 +1.10)	0	--	FR completed
3.	Gandak - Ganga link	UP and Nepal	34.58 (28.80+5.78)	700	4375 (Dam PH) & 180 (Canal PH)	FR completed and circulated
4.	Ghaghra - Yamuna link	UP and Nepal	27.84 (25.30 + 2.54)	1391	10884	Draft FR completed
5.	Sarda - Yamuna link	UP and Uttarakhand	2.95 (2.65 + 0.30)	3054	6620	FR completed
6.	Yamuna-Rajasthan link	Haryana and Rajasthan	2.51 (0.11+ 2.40)	30	--	FR completed
7.	Rajasthan-Sabarmati link	Rajasthan and Gujarat	11.53 (11.21+0.32)	102	--	FR completed
8.	Chunar-Sone Barrage link	Bihar and UP	0.67 (0.13 + 0.54)	--	--	Draft FR completed
9.	Sone Dam - Southern Tributaries of Ganga link	Bihar and Jharkhand	3.07 (2.39 + 0.68)	360	95	Draft FR completed
10.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Assam, WB and Bihar	3.41 (2.05 + 1.00 + 0.36)	--	--	FR completed
11.	Jogighopa-Tista-Farakka link (Alternative to M-S-T-G)	Assam, WB and Bihar	3.559 (0.975+ 1.564+ 1.02)	265	360	PFR completed (The proposal has been dropped)
12.	Farakka-Sundarbans link	WB	1.50	184	--	FR completed
13.	Ganga(Farakka) - Damodar-Subarnarekha link	WB, Odisha and Jharkhand	12.30 (11.18+ 0.39+ 0.73)	432	--	FR completed
14.	Subarnarekha-Mahanadi link	WB and Odisha	2.16 (0.18+ 1.98)	198	20	FR completed

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 539

ANSWERED ON 06.02.2025

IRRIGATION FACILITIES TO FARMERS OF MADHYA PRADESH AND MAHARASHTRA

†539. SMT. BHARTI PARDHI

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

(a) whether there is an urgent need for improvement in irrigation facilities to increase agricultural production and if so, the details thereof;

(b) whether there is any proposal for improvement and upgradation in canal system in order to provide adequate water for irrigation to the farmers of Madhya Pradesh and Maharashtra; and

(c) if so, the details thereof along with the time by which the final decision is likely to be taken regarding the approval to the said proposal?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (c) Water being a State subject, it is for the State Government concerned to plan, execute, operate and manage the irrigation projects, and to prepare action plan to make irrigation system more extensive in the State. Role of Government of India is limited to providing technical support, and partial financial assistance for identified projects under the ongoing schemes. Further, for major and medium irrigation projects on inter-State river systems, techno-economic viability is to be appraised by Central Water Commission (CWC) under this Ministry.

Accelerated Irrigation Benefits Programme (AIBP) component of Pradhan Mantri Krishi Sinchai Yojna (PMKSY) is dedicated to creation, restoration and stabilization of irrigation potential in the country through completion of major/ medium irrigation projects/ extension, renovation and modernization of irrigation projects.

28 major and medium projects of Maharashtra and 21 major and medium projects (14 projects and 7 phases) of Madhya Pradesh have been included under PMKSY-AIBP. 17 projects each of both the States have been completed so far. An irrigation potential of 3.86 lakh hectare in Maharashtra and 1.83 lakh hectare in Madhya Pradesh has been created through these projects.

Also, 1.77 lakh hectare irrigation potential has been created in Maharashtra under Maharashtra Package scheme of this Department.

Further, Extension, Renovation and Modernization of Sanjay Sarovar Project (Upper Wainganga Project), envisaging lining of the complete canal system of the project and repair of the damaged canal structures, benefitting Seoni and Balaghat districts of Madhya Pradesh, has been accepted by the Advisory Committee of DoWR, RD &GR on Irrigation, Flood Control & Multipurpose Projects in its 152nd meeting at an estimated cost of Rs 332.54 crore at March 2023 price level. Subsequently, investment clearance to the project has also been accorded by Investment Clearance Committee in its 20th meeting. Screening Committee of PMKSY-AIBP in its meeting held on 30th July, 2024 has recommended the project for prescribed appraisal and approval process for inclusion under PMKSY-AIBP.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 536

ANSWERED ON 06.02.2025

GANGA EROSION PROJECT IN WEST BENGAL

536. SHRI ADHIKARI DEEPAK DEV

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

(a) the status of Ganga erosion project in West Bengal;

(b) the amount released and utilised for the purpose in West Bengal; and

(c) the steps taken/being taken by the Government to prevent Ganga erosion?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (c) Flood management and anti-erosion schemes are formulated and implemented by concerned State Governments as per their priority. Government of India promotes and provides technical assistance, as well as promotional financial assistance for critical areas. Union Government had implemented Flood Management Programme (FMP) during XI & XII Plans for providing central assistance to States for works related to flood control, anti-erosion, drainage development, anti-sea erosion, etc. which subsequently continued as a component of "Flood Management and Border Areas Programme(FMBAP)" for the period from 2017-18 to 2020-21 and has further been extended during 2021-22 to 2025-26.

Central Assistance of Rs. 1051.96 Crore for taking up flood management works under FMP component of FMBAP has been released to Government of West Bengal, out of which State Government of West Bengal has informed that an amount of Rs. 1047.52 Crore has been utilized so far. Under River Management & Border Areas (RMBA) component of FMBAP scheme, Central Assistance of Rs. 237.925 Cr. has been released to Government of West Bengal so far. Out of this Rs. 230.145 cr. has been utilized.

As per the request of State Government of West Bengal, a Committee comprising members from the State Government of West Bengal and concerned Central Government Departments, under the chairmanship of Chairman, Central Water Commission, has been constituted by the Department of Water Resources, River Development & Ganga Rejuvenation to undertake a joint detailed technical study for an integrated plan to combat the threat of erosion posed by Ganga-Padma river in the District of Malda, Murshidabad & Nadia in West Bengal.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 520

ANSWERED ON 06.02.2025

INTER-LINKING OF RIVERS IN BIHAR

†520. SHRI KAUSHALENDRA KUMAR

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

(a) whether the Government is considering any special scheme for inter-linking of rivers in the country;

(b) if so, the details thereof;

(c) whether any flaws have been detected in the previously implemented schemes and if so, the details thereof;

(d) whether Bihar has to bear the brunt of the catastrophic flood water released into the rivers from outside every year; and

(e) if so, the details thereof indicating the rivers in Bihar proposed to be inter-linked under the scheme along with the time by which it is likely to be completed?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) The Government of India formulated a National Perspective Plan (NPP) for Inter-linking of Rivers (ILR) for transferring water from surplus basins to deficit basins/areas in 1980. National Water Development Agency (NWDA) has been entrusted with the work of Interlinking of Rivers under the NPP. 30 ILR projects have been identified under the NPP with two components, viz; Himalayan Component (14 projects) and Peninsular Component (16 projects). Detailed Project Reports (DPRs) of 11 link projects, Feasibility Reports (FRs) of 26 link projects and Pre-Feasibility Reports (PFRs) of 30 link projects have been completed.

Details of the status of ILR projects under the NPP are given at **Annexure-I**.

(c) Ken-Betwa Link Project (KBLP) is the first ILR project under the NPP, implementation of which has started after the approval accorded by the Union Cabinet in December, 2021. The project is planned to be completed by March 2030.

(d) The State of Bihar bears the brunt of floods is on account of increased discharge in rivers of North Bihar like Gandak, Burhi Gandak, Bagmati, Kamla, Kosi, and Mahananda due to heavy rainfall in the upper catchment areas, which mainly lie in Nepal.

(e) Under the NPP, six ILR projects benefit the State of Bihar. Apart from this, ten intra-State link proposals were also received by NWDA from the Government of Bihar. PFRs of these ten intra-State links were prepared by the NWDA, out of which, three links have been found technically feasible. Details of ILR

and the three intra-State link projects found technically feasible, concerning the State of Bihar are attached in **Annexure - II.**

For ILR projects, the schedule of completion depends upon the party States arriving at a consensus for the respective ILR projects and signing of the link specific Memorandum of Agreements (MoAs) for their implementation.

As for the intra-State links, techno-economic viability in respect of Kosi-Mechi intra-State link project has been accepted by the Advisory Committee of Department of Water Resources, River Development and Ganga Rejuvenation (DoWR,RD&GR) in its meeting held on 08.03.2024 for an estimated cost of Rs. 6,282.32 crore, at Price Level 2022-23. Investment clearance for the project has been subsequently accorded by the DoWR, RD & GR and thereafter, the project has been duly recommended by the Public Investment Board (PIB) in its meeting held on 21.11.2024 for inclusion of the project under the Pradhan Mantri Krishi Sinchai Yojana - Accelerated Irrigation Benefit Programme (PMKSY-AIBP).

Further, as per the information available, three numbers of intra-State link projects, viz; Bagmati - Burhi Gandak River Link (Belwadhar), Bagmati- Burhi Gandak (Shanti Dhar) and Gandak- Akali Nala (Chhadi) – Gandaki – Mahi - Ganga link are under execution by the Government of Bihar and these projects are scheduled to be completed by 2025.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 520 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "INTER-LINKING OF RIVERS IN BIHAR".

DETAILS AND CURRENT STATUS OF ILR PROJECTS UNDER THE NPP

PENINSULAR COMPONENT

Sl. No	Name	States benefited	Status
1	a. Mahanadi (Manibhadra) - Godavari (Dowlaiswaram)link	Andhra Pradesh (AP) and Odisha	FR completed
	b. Alternate Mahanadi (Barmul) – Rushikulya – Godavari (Dowlaiswaram) link	AP and Odisha	FR completed
2	Godavari (Polavaram) - Krishna (Vijayawada) link @	AP	FR completed
3	a. Godavari (Inchampalli) - Krishna (Nagarjunasagar)link	Telangana	FR completed
	b. Alternate Godavari (Inchampalli) - Krishna (Nagarjunasagar) link *	Telangana	DPR completed
4	Godavari (Inchampalli/ SSMPP) - Krishna (Pulichintala) link	Telangana and AP	DPR completed
5	a. Krishna (Nagarjunasagar) - Pennar (Somasila) link	AP	FR completed
	b. Alternate Krishna (Nagarjunasagar) - Pennar (Somasila) link *	AP	DPR completed
6	Krishna (Srisailam) – Pennar link	AP	Draft DPR completed
7	Krishna (Almatti) – Pennar link	AP and Karnataka	Draft DPR completed
8	a. Pennar (Somasila) - Cauvery (Grand Anicut) link	AP, Tamil Nadu and Puducherry	FR completed
	b. Alternate Pennar (Somasila) - Cauvery (Grand Anicut) link *	AP, Tamil Nadu and Puducherry	DPR completed
9	Cauvery (Kattalai) - Vaigai -Gundar link	Tamil Nadu	DPR completed
10	a. Parbati –Kalisindh - Chambal link	Madhya Pradesh (MP) and Rajasthan	FR completed
	b. Modified Parbati – Kalisindh-Chambal link (duly integrated with ERCP)	MP and Rajasthan	Draft PFR completed
11	Damanganga - Pinjal link	Maharashtra	DPR completed
12	Par-Tapi-Narmada link	Gujarat and Maharashtra	DPR completed
13	Ken-Betwa link	Uttar Pradesh (UP) and MP	DPR completed & project is under implementation
14	Pamba - Achankovil - Vaippar link	Tamil Nadu and Kerala	FR completed
15	Bedti - Varda link @@	Karnataka	DPR completed
16	Netravati – Hemavati link**	Karnataka	PFR completed

* Due to pending consensus on Manibhadra and Inchampalli dams, Alternate study to divert unutilized waters of Godavari river was carried out and DPR of Godavari (Inchampalli/ Janampet) – Krishna (Nagarjunasagar) - Pennar (Somasila) – Cauvery (Grand Anicut) link projects was completed. Godavari- Cauvery (Grand Anicut) link project has been prepared comprising of Godavari (Inchampalli / Janampet) - Krishna (Nagarjunasagar), Krishna (Nagarjunasagar) - Pennar (Somasila) and Pennar(Somasila)-Cauvery(Grand Anicut) link projects.

** Further studies are not taken up since after implementation of Yettinahole project by Govt. of Karnataka, no surplus water is available in Netravati basin for diversion through this link.

@ Godavari (Polavaram) – Krishna (Vijayawada) link – The project has been taken up by Government of Andhra Pradesh.

@@ Bedti – Varda link – DPR was prepared directly after preparation of its PFR, no FR was prepared.

HIMALAYAN COMPONENT

Sl. No	Name	States / Countries benefited	Status
1.	Kosi-Mechi link	Bihar and Nepal	PFR completed
2.	Kosi-Ghaghra link	Bihar, UP and Nepal	FR completed
3.	Gandak - Ganga link	UP and Nepal	FR completed
4.	Ghaghra - Yamuna link	UP and Nepal	Draft FR completed
5.	Sarda - Yamuna link	UP and Uttarakhand	FR completed
6.	Yamuna-Rajasthanlink	Haryana and Rajasthan	FR completed
7.	Rajasthan-Sabarmatilink	Rajasthan and Gujarat	FR completed
8.	Chunar-Sone Barrage link	Bihar and UP	Draft FR completed
9.	Sone Dam - Southern Tributaries of Ganga link	Bihar and Jharkhand	Draft FR completed
10.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Assam, West Bengal (WB) and Bihar	FR completed
11.	Jogighopa-Tista-Farakka link (Alternative to M-S-T-G)	Assam, WB and Bihar	PFR completed (The proposal has been dropped)
12.	Farakka-Sundarbanslink	WB	FR completed
13.	Ganga(Farakka) - Damodar-Subarnarekha link	WB, Odisha and Jharkhand	FR completed
14.	Subarnarekha-Mahanadilink	WB and Odisha	FR completed

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 520 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "INTER-LINKING OF RIVERS IN BIHAR".

DETAILS OF ILR PROJECTS CONCERNING BIHAR

Sl.No	Name	States / Countries benefited	Status
1.	Kosi-Mechi ILR project	Bihar and Nepal	PFR completed
2.	Kosi - Ghaghra link	Bihar, UP and Nepal	FR completed
3.	Chunar-Sone Barrage link	Bihar and UP	Draft FR completed
4.	Sone Dam - Southern Tributaries of Ganga link	Bihar and Jharkhand	Draft FR completed
5.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Assam, WB and Bihar	FR completed
6.	Jogighopa-Tista-Farakka link (Alternative to M-S-T-G)	Assam, WB and Bihar	PFR completed (The proposal has been dropped)

DETAILS OF INTRA–STATE LINK PROPOSALS RECEIVED FROM GOVERNMENT OF BIHAR, WHICH WERE FOUND FEASIBLE

S.No	Name of Intra-State link	Rivers	Present status of PFR /DPR
1.	Kosi–Mechi intra-State link[entirely lies in India]	Kosi and Mechi	DPR completed.
2.	Burhi Gandak–Noon– Baya-Ganga	Burhi Gandak ,Noon, Baya and Ganga	DPR completed,.
3.	Kosi – Ganga	Kosi and Ganga	PFR completed

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 512

ANSWERED ON 06.02.2025

HARMFUL EFFECTS OF CONTAMINATION IN GROUNDWATER

512. THIRU D M KATHIR ANAND SMT. MANJU SHARMA SHRI KULDEEP INDORA

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

(a) whether the Government is aware of the harmful effects of high levels of arsenic, mercury and fluoride contamination in groundwater on humans and animals and if so, the details thereof;

(b) whether the Government has any new proposal or project for controlling the contamination of arsenic, mercury and fluoride along with the total amount sanctioned in this regard and if so, the details thereof;

(c) the details of the number of people found victims of health hazards caused by drinking water contaminated with high levels of arsenic, fluoride, iron, salinity and nitrate in Rajasthan, district-wise along with the steps taken/likely to be taken by the Government in this regard;

(d) whether the Government proposes to improve the water harvesting infrastructure to raise the water level in Rajasthan and if so, the details thereof; and

(e) the measures taken/likely to be taken by the Government to encourage the households to retain rainwater within the ground?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) Use of Ground Water for drinking purpose having Arsenic, Fluoride or Mercury above the permissible limits over a prolonged period of time is known to cause several adverse health effects. As per the information available Arsenic exposure can cause skin lesions, cancer, cardiovascular diseases and developmental effects in children. Likewise, excessive fluoride in the ground water can result in dental and skeletal Fluorosis. Further, Mercury contamination of water sources can lead to Minamata disease (numbness, tremors, memory loss and cognitive impairment), renal damage, developmental toxicity in fetus, cardiovascular effects etc.

(b) 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 projects and schemes. However, several steps have been taken by the Central Government in this direction like regular quality monitoring and sharing of data by Central Ground Water Board (CGWB) with state governments and other stakeholders, taking up construction of Arsenic and Fluoride safe wells and disseminating the technology, implementation of Water (Prevention & Control) Act,

1974 and the Environment (Protection) Act, 1986 by CPCB/SPCBs to prevent and control pollution in water etc.

Jal Jeevan Mission (JJM) – HarGhar Jal is a noble initiative. which is operational in the country since August 2019, with a view 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 and JJM guidelines also stipulate that while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants. Moreover, 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).

It may be appreciated that 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 January 2025) funds to the tune of Rs. 4.3 lakh cr were allocated by the central government and an amount of Rs. 3.7 lakh cr. has been spent towards providing safe drinking water to more than 12.2 cr rural households in the country.

(c) As per the information received from National Centre for Disease Control (NCDC), M/o Health & Family Welfare, no specific data regarding number of victims of health hazards caused by drinking water contaminated with high levels of arsenic, fluoride, iron, salinity and nitrate in Rajasthan is available.

(d) Despite the fact that creating rainwater harvesting and artificial recharge infrastructure is primarily the mandate of state governments, the Union government has also taken several notable initiatives in this direction and some of the important ones 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.

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. 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.

iv. Mission AmritSarovar 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 AmritSarovars have been constructed/rejuvenated in the country with around 3,138 in Rajasthan.

(e) Individual household level rooftop rain water harvesting and ground water recharge, especially in urban areas, is considered to be of immense importance for the success of water conservation efforts of the government as it is reflective of large scale community participation and ground level action by the masses.

i. Ministry of Jal Shakti has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for regulation of its development, which, *inter alia,* has the provisions for encouraging roof top rain water harvesting. So far, 21 States/UTs have adopted and implemented the ground water legislation.

ii. Ministry of Housing & Urban Affairs (MoHUA) has formulated Model Building Bye Laws (MBBL), 2016 for the States/UTs, wherein adequate focus has been given on requirement of rainwater harvesting and water conservation measures. As per MBBL, all buildings having a plot size of 100 Sq.m. or more, shall mandatorily include the complete proposal of rainwater harvesting. 35 States/ UTs have adopted the features of the Model Bye Laws.

iii. 'Jal Sanchay Jan Bhagidari'- A Community-Driven Path to Water Sustainability in India has been launched by the Hon'ble Prime Minister on September 6, 2024, in Surat, Gujarat with a vision to make rain water harvesting a mass movement in the country. Under JSJB, community led construction of rain water harvesting & artificial recharge structures across the country has been taken up in mission mode for installing such structures in various public and private buildings in towns and villages, by bringing all stakeholders together.

iv. CGWB has prepared "Guide on Artificial Recharge to Groundwater" and "Manual on Artificial Recharge to Groundwater" which contain information on various aspects of construction, operation and maintenance of these structures. Roof top rain water harvesting, suitable especially for urban habitations is also dealt with in detail.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 493

ANSWERED ON 06.02.2025

PROJECTS UNDER AMRUT 2.0 SCHEME IN KERALA

493. DR. M P ABDUSSAMAD SAMADANI

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

(a) the number of water supply projects set to be implemented across local bodies in Kerala under the second phase of the Atal Mission for Rejuvenation and Urban Transformation (AMRUT 2.0) scheme; and

(b) the current status of these projects?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0 was launched on 01 October 2021 with a Central Assistance (CA) of ₹ 66,750 crore for projects. Under the scheme, States/UTs are empowered to design, approve, prioritise and implement the projects within the broad framework of AMRUT 2.0 guidelines. Ministry of Housing and Urban Affairs (MoHUA) approves State Water Action Plans (SWAPs) under AMRUT 2.0 as per recommendation of State High Power Steering Committee (SHPSC) headed by Chief Secretary of the States/ UTs.

Under AMRUT 2.0, a total of 740 projects worth ₹3,743.43 crore (including Operations & Maintenance cost) have been approved by MoHUA in Kerala State which include 251 water supply projects worth ₹2,413.66 crore in 91 Urban Local Bodies (ULBs). The current status of projects as reported by MoHUA/Kerala (as on 27.01.2025) is as follows:

S No	Number of Projects	Amount (In Rs Crore)	Stage/Status
1	130	932.70	Awarded
2	26	368.94	Tender
3	79	640.76	Detailed Project Report (DPR)

Total works worth ₹465.19 crore have been physically completed for water supply projects.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 486

ANSWERED ON 06.02.2025

WATER HERITAGE STRUCTURES IN TAMIL NADU

486. DR. M K VISHNU PRASAD

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

(a) whether it is a fact that four Water Heritage Structures (WHSs) have been identified from the State of Tamil Nadu during Amrit Mahotsav;

(b) if so, the details thereof;

(c) the efforts made/being made by the Government in coordination with the State Government to maintain/upgrade WHSs in Tamil Nadu;

(d) whether any funds have been allocated by the Government for WHSs in 2024-25 Budget, with a particular reference to Tamil Nadu; and

(e) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) As part of the Azadi Ka Amrit Mahotsav celebrations, the National Water Mission under the Ministry of Jal Shakti has identified seventy-five ancient water conservation structures across India, designating them as "Water Heritage Structures" (WHSs). Notably, out of these 75 WHSs, 07 have been identified from Tamil Nadu. The details of these seven WHSs identified from Tamil Nadu are as follows:

S.No.	Name of the Structure	Location		
		Village/Town	District	State
1	Kallanai Dam (Grand Anicut on the Kaveri)	Thanjavur	Thanjavur	Tamil Nadu
2	Veeranam Tank	Veeranandhapuram	Cuddalore	Tamil Nadu
3	Kalingarayan Anicut	Mettunasuvampalayam / Bhavani	Erode	Tamil Nadu
4	Lower Anicut	Anaikarai	Thanjavur	Tamil Nadu
5	Buckingham Canal (Kommamur Canal)			Tamil Nadu and Andhra Pradesh
6	Noyyal River System Tanks	Several locations along the Noyyal	Coimbatore, Tirupur	Tamil Nadu
7	Vandiyur Mariamman Teppakulam	Vandiyur	Madurai	Tamil Nadu

(c) Water is a State subject, and the Central Government supports State efforts through technical and financial assistance. In this regard, the National Water Mission, Ministry of Jal Shakti, has requested State Governments to take necessary action for the conservation and restoration of these structures. States have been requested to take necessary action in this regard in consultation with the State Archaeological Departments, relevant agencies and district administration, after identifying the appropriate nodal agency.

(d) No.

(e) Does not arise.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 479

ANSWERED ON 06.02.2025

STATUS OF NATIONAL LIFT IRRIGATION PROJECT IN TELANGANA AND ANDHRA PRADESH

479. SHRI BALRAM NAIK PORIKA

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

(a) the details of status of the National Lift Irrigation Project in Telangana and Andhra Pradesh;

(b) whether the Government has any plan to grant National project status to Palamuru Rangareddy Lift Irrigation Project and if so, the details thereof and if not, the reasons therefor; and

(c) whether there is any demand from Telangana for National Project Status to the said project and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) At present, there is no National Lift irrigation project in Telangana and Andhra Pradesh.

(b) & (c) Government of Telangana has demanded the National project status to Palamuru Rangareddy Lift irrigation scheme. However, techno-economic appraisal of the project by Central Water Commission (CWC), followed by acceptance of project by the Advisory Committee on irrigation, flood control and multipurpose projects of DoWR, RD&GR is an essential pre-requisite for further considering any project for inclusion under the ongoing schemes of this Ministry.Detailed Project Report of Palamaru Rangareddy lift irrigation scheme has been submitted by Government of Telangana for techno-economic appraisal to CWC in September, 2022. As the Palamuru Rangareddy Lift irrigation scheme involves utilization of Krishna River waters and inter-state aspects of project is included in the terms of reference of the Krishna Waters Dispute Tribunal-II, the matter is now sub-judice and currently the techno-economic appraisal of Palamuru Rangareddy Lift irrigation scheme cannot be carried out.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 475

ANSWERED ON 06.02.2025

PARVAN RIVER MULTIPURPOSE PROJECT

475. SHRI DUSHYANT SINGH

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

(a) the current status of the Parvan River Multipurpose Project, which aims to improve irrigation, drinking water supply and power generation for Jhalawar and Baran districts despite its inclusion in the Accelerated Irrigation Benefit Programme (AIBP) along with the allocation of funds and the reasons for its slow progress;

(b) the specific challenges causing delays in the completion of key components of the said Project, including dam, water tunnel and irrigation infrastructure;

(c) the measures taken/being taken by the Union Government and the State Government to expedite its progress;

(d) the manner in which the Government is planning to address the concerns raised by local stakeholders about the sluggish progress of the Parvan River Multipurpose Project; and

(e) the steps taken/likely to be taken by the Government to ensure that the project will benefit the region on its completion without further delays?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (e) Parvan Multipurpose Irrigation Project is a major irrigation project of Rajasthan, being constructed by Government of Rajasthan and partially funded by Ministry of Jal Shakti under Pradhan Mantri Krishi Sinchai Yojna- Accelerated Irrigation Benefits Programme (PMKSY-AIBP). The project has annual irrigation potential of 1.22 lakh hectare through pressurized piped irrigation network in 2.01 lakh hectare cultivable command area along with drinking and industrial water supply in Jhalawar, Baran and Kota districts of Rajasthan.

Presently 88 % of dam and tunnel work and 60% of canal and piped network has been completed. An expenditure of Rs. 3,473.43 crore has been reported on irrigation and water supply components (Works) of the project till November, 2024 against the estimated cost of aforesaid components amounting to Rs. 4,605.99 crore. Further, central assistance of Rs. 364.19 crore has been provided and mother sanction of Rs. 69.49 crore has been issued to the project against eligible central assistance of Rs. 694.78 crore.

Land acquisition and rehabilitation and resettlement are major challenges for timely completion of this project. Site specific design and implementation issues are also hampering the desired pace of work.

Government of Rajasthan has intimated that issues raised by project affected people and farmers are being regularly addressed.

As mandated for PMKSY-AIBP projects, this project is being regularly monitored by the Central Water Commission under Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD&GR).

Further, to ensure successful completion of PMKSY-AIBP projects, the implementation and progress of the projects is monitored at the highest level in this Ministry. Secretary, DoWR,RD&GR takes project-wise periodic reviews of the physical and financial progress of the projects and actions to be taken by the various State Governments are finalized for early resolution of issues. The physical and financial progress of these projects is also monitored through a dedicated dashboard, backed with a management information system maintained by DoWR, RD&GR.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 473

ANSWERED ON 06.02.2025

SCHEMES FOR RAINWATER HARVESTING

473. DR. K SUDHAKAR

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

(a) the details of the schemes introduced by the Government to increase the practice of rainwater harvesting in the country;

(b) the steps taken/being taken by the Government to check the impact of water crisis and to manage the increasing problem in the country;

(c) whether any study on the groundwater tables is done in Karnataka and if so, the details thereof, particularly in Chikkaballapur, Karnataka; and

(d) the steps taken/being taken by the Government for increasing groundwater recharge and to improve groundwater tables in the country?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) & (b) Water is a State subject and the Central Government supplements the efforts of the States through technical and financial support. Water conservation through rainwater harvesting is one of the foremost priorities of the Government. Major steps taken by the Government for water conservation including rainwater harvesting thereby checking the water crisis and to manage the increasing problem 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 water conservation and rainwater harvesting.

iv. 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 targets 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.

v. 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.

vi. Government of India is implementing Atal Bhujal Yojana, in 80 districts of 7 States, viz., Haryana, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh for a period of 5 years from 01.04.2020. The scheme marks a paradigm shift from groundwater development to groundwater management.

vii. Government of India has been implementing "Pradhan Mantri Krishi Sinchai Yojana (PMKSY)" with an aim to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on farm water use efficiency, introduce sustainable water conservation practices etc. PMKSY has three components/ schemes namely Har Khet Ko Pani (HKKP), Repair, Renovation & Restoration (RRR) Scheme of Water Bodies and Surface Minor irrigation (SMI) Scheme.

viii. The Ministry of Jal Shakti has set up the Bureau of Water Use Efficiency (BWUE) under the National Water Mission on 20.10.2022, to act as a facilitator for promotion of improving water use efficiency across various sectors namely irrigation, drinking water supply, power generation, industries, etc. in the country.

ix. Mission Amrit Sarovar was implemented in the recent times with provisions for creation/rejuvenation of at least 75 Amrit Sarovars in every district of the country with the purpose to harvest and conserve water.

x. Central Ground Water Board (CGWB) has completed the National Aquifer Mapping (NAQUIM) Project in the entire mappable area of about 25 lakh sq. km. which has been shared with the

respective State agencies for implementation. The management plans include various water conservation measures through recharge structures.

xi. CGWB has also 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.

xii. CGWB, under Ground Water Management & Regulation Scheme, has also implemented several successful artificial recharge projects in the country for demonstrative purpose which enable the State Governments to replicate the same in suitable hydro-geological conditions.

xiii. 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.

xiv. 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 ridge area treatment, drainage line treatment, soil and moisture conservation, rainwater harvesting, nursery raising, pasture development, livelihoods for asset-less persons etc. WDC-PMKSY, through these interventions, seeks to ensure sustainable development through improved natural resource management and better resilience of farmers to climate change

(c) CGWB monitors groundwater levels throughout the country including the state of Karnataka, four times in every year during the months of March/April/May, August, November and January. The district-wise water level, including Chikkaballapura District, measured for the Month of November 2024 for the State of Karnataka is given in **Annexure I**. As indicated by post-monsoon 2024 water levels, approximately 83% of the analyzed wells in Chikkaballapura District recorded water levels between 0 to 2 meters below ground level.

In order to assess the long term fluctuation in ground water level in the State of Karnataka, the water level data collected by CGWB in Karnataka during November 2024 has been compared with the decadal mean of November (2014-2023). District-wise Decadal Water Level Fluctuation with Mean (Post-Monsoon 2014 to 2023) and Post-monsoon 2024 in respect of Karnataka is presented in **Annexure II**. Analysis of water level data indicates that all of the analyzed wells for Chikkaballapur district are showing an increase in water levels.

(d) The Government has undertaken several initiatives to enhance groundwater recharge and improve water tables across the country. The Jal Shakti Abhiyan (JSA) was launched in 2019 as a mission-mode water conservation campaign in 256 water-stressed districts. To sustain these efforts, the Catch The Rain (CTR) campaign was initiated in 2020, which later subsumed into Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) in

2021, covering both rural and urban areas nationwide. Now an annual campaign, JSA: CTR focuses on rainwater harvesting, water conservation and artificial recharge structures.

Expanding on this vision, the Jal Sanchay Jan Bhagidari (JSJB) initiative was launched on September 6, 2024, in Surat, Gujarat, in the virtual presence of the Hon'ble Prime Minister. This special initiative, under JSA:CTR, aims to scale up Gujarat's Jal Sanchay program nationwide, promoting collaborative community-driven water conservation efforts.

JSJB focuses on enhancing water management through low-cost, scientifically designed artificial recharge structures, ensuring active participation from local communities, industries, and other stakeholders. By fostering broad involvement, the initiative provides a sustainable solution to India's growing water challenges.

JSJB aims to create one million low-cost recharge structures across urban and rural India, using a combination of scientific technology and traditional methods. The initiative promotes active participation and sustainable water management by involving local communities, industries, NGOs, and government bodies.

It's a public-private partnership model which draws funding from not only government schemes like MGNREGA, AMRUT, PMKSY etc but also from mobilization of private finance like Industry - CSR , Philanthropy, individual donors, crowdfunding etc for people's participation, ownership and sustainability.

Additionally, the State Government of Karnataka has reported that, under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), the Karnataka Government has implemented various measures to enhance groundwater recharge and improve the water table, focusing on water conservation, watershed management and sustainable agriculture. Key initiatives include the construction of check dams, percolation tanks, farm ponds, recharge wells and borewell recharge structures, along with desilting and deepening of traditional water bodies. Watershed management efforts such as contour trenches, bunds, afforestation and gully plugging have been undertaken to help reduce runoff and improve infiltration. Additionally, community-led water budgeting, training programs and convergence with Jal Shakti Abhiyan and Atal Bhujal Yojana has further strengthened these efforts. Over the years, substantial progress has been made, with 1,46,590 water conservation works undertaken in 2024-25 and a total expenditure of ₹560.05 crore, contributing significantly to groundwater recharge and sustainable water management.

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ANNEXURE I

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 473 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "SCHEMES FOR RAINWATER HARVESTING".

District-wise Depth to Water Level Distribution of Percentage of Observation Wells Post-Monsoon 2024 (Unconfined Aquifer)															
Sr. No.	State/UT Name	District Name	No of well 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	Karnataka	Bagalkote	25	6	24.0	9	36.0	8	32.0	1	4.0	1	4.0	0	0.0
2	Karnataka	Ballari	10	4	40.0	4	40.0	2	20.0	0	0.0	0	0.0	0	0.0
3	Karnataka	Bengaluru Rural	10	4	40.0	3	30.0	2	20.0	1	10.0	0	0.0	0	0.0
4	Karnataka	Bengaluru Urban	18	7	38.9	10	55.6	1	5.6	0	0.0	0	0.0	0	0.0
5	Karnataka	Bidar	32	6	18.8	14	43.8	10	31.3	2	6.3	0	0.0	0	0.0
6	Karnataka	Chamarajanagara	17	8	47.1	3	17.6	5	29.4	1	5.9	0	0.0	0	0.0
7	Karnataka	Chikkaballapura	6	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0
8	Karnataka	Chikkamagaluru	69	17	24.6	28	40.6	23	33.3	1	1.4	0	0.0	0	0.0
9	Karnataka	Chitradurga	24	12	50.0	8	33.3	4	16.7	0	0.0	0	0.0	0	0.0
10	Karnataka	Dakshina Kannada	91	12	13.2	31	34.1	43	47.3	5	5.5	0	0.0	0	0.0
11	Karnataka	Davangere	40	26	65.0	13	32.5	0	0.0	1	2.5	0	0.0	0	0.0
12	Karnataka	Dharwad	24	10	41.7	7	29.2	5	20.8	2	8.3	0	0.0	0	0.0
13	Karnataka	Gadag	19	4	21.1	5	26.3	8	42.1	1	5.3	1	5.3	0	0.0
14	Karnataka	Hassan	62	25	40.3	18	29.0	17	27.4	2	3.2	0	0.0	0	0.0
15	Karnataka	Haveri	22	9	40.9	9	40.9	4	18.2	0	0.0	0	0.0	0	0.0
16	Karnataka	Kalaburagi	53	20	37.7	24	45.3	7	13.2	2	3.8	0	0.0	0	0.0
17	Karnataka	Kodagu	71	13	18.3	22	31.0	27	38.0	9	12.7	0	0.0	0	0.0
18	Karnataka	Kolar	20	11	55.0	9	45.0	0	0.0	0	0.0	0	0.0	0	0.0
19	Karnataka	Koppal	21	7	33.3	11	52.4	3	14.3	0	0.0	0	0.0	0	0.0
20	Karnataka	Mandya	38	19	50.0	13	34.2	6	15.8	0	0.0	0	0.0	0	0.0
21	Karnataka	Mysuru	50	23	46.0	17	34.0	7	14.0	3	6.0	0	0.0	0	0.0
22	Karnataka	Raichur	38	11	28.9	13	34.2	14	36.8	0	0.0	0	0.0	0	0.0
23	Karnataka	Ramanagara	26	13	50.0	9	34.6	3	11.5	1	3.8	0	0.0	0	0.0
24	Karnataka	Shivamogga	77	18	23.4	21	27.3	33	42.9	5	6.5	0	0.0	0	0.0
25	Karnataka	Tumakuru	35	20	57.1	12	34.3	2	5.7	1	2.9	0	0.0	0	0.0
26	Karnataka	Udupi	68	4	5.9	24	35.3	37	54.4	3	4.4	0	0.0	0	0.0
27	Karnataka	Uttara Kannada	75	18	24.0	28	37.3	24	32.0	5	6.7	0	0.0	0	0.0
28	Karnataka	Vijayanagar	16	10	62.5	6	37.5	0	0.0	0	0.0	0	0.0	0	0.0
29	Karnataka	Vijayapura	55	15	27.3	32	58.2	8	14.5	0	0.0	0	0.0	0	0.0
30	Karnataka	Yadgir	24	7	29.2	10	41.7	7	29.2	0	0.0	0	0.0	0	0.0
		Total	**1136**	**364**	**32.04**	**414**	**36.44**	**310**	**27.29**	**46**	**4.05**	**2**	**0.18**	**0**	**0.00**

ANNEXURE II

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 473 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "SCHEMES FOR RAINWATER HARVESTING".

Categorisation of changes in water level between Mean of Post-monsoon 2014 to 2023 with Post-monsoon 2024 (Unconfined Aquifers)															
Sr. No.	State/UT	District Name	No of wells analysed	No./Percentage of wells showing fluctuation to water level (m) in the range of											
				Rise						Fall					
				0 to 2		2 to 4		> 4		0 to 2		2 to 4		> 4	
1	Karnataka	Bagalkote	24	14	58.3	3	12.5	2	8.3	1	4.2	3	12.5	1	4.2
2	Karnataka	Ballari	10	3	30.0	5	50.0	0	0.0	2	20.0	0	0.0	0	0.0
3	Karnataka	Bengaluru Rural	9	7	77.8	2	22.2	0	0.0	0	0.0	0	0.0	0	0.0
4	Karnataka	Bengaluru Urban	18	10	55.6	1	5.6	0	0.0	7	38.9	0	0.0	0	0.0
5	Karnataka	Bidar	31	13	41.9	4	12.9	2	6.5	11	35.5	0	0.0	1	3.2
6	Karnataka	Chamarajanagara	16	5	31.3	4	25.0	1	6.3	5	31.3	1	6.3	0	0.0
7	Karnataka	Chikkaballapura	6	3	50.0	3	50.0	0	0.0	0	0.0	0	0.0	0	0.0
8	Karnataka	Chikkamagaluru	67	41	61.2	10	14.9	3	4.5	13	19.4	0	0.0	0	0.0
9	Karnataka	Chitradurga	24	9	37.5	8	33.3	6	25.0	1	4.2	0	0.0	0	0.0
10	Karnataka	Dakshina Kannada	89	63	70.8	5	5.6	2	2.2	16	18.0	1	1.1	0	0.0
11	Karnataka	Davangere	38	25	65.8	4	10.5	1	2.6	7	18.4	1	2.6	0	0.0
12	Karnataka	Dharwad	24	12	50.0	7	29.2	4	16.7	1	4.2	0	0.0	0	0.0
13	Karnataka	Gadag	19	8	42.1	6	31.6	3	15.8	2	10.5	0	0.0	0	0.0
14	Karnataka	Hassan	62	35	56.5	8	12.9	9	14.5	9	14.5	0	0.0	1	1.6
15	Karnataka	Haveri	21	8	38.1	4	19.0	6	28.6	3	14.3	0	0.0	0	0.0
16	Karnataka	Kalaburagi	51	31	60.8	8	15.7	1	2.0	11	21.6	0	0.0	0	0.0
17	Karnataka	Kodagu	65	43	66.2	3	4.6	3	4.6	13	20.0	2	3.1	0	0.0
18	Karnataka	Kolar	19	12	63.2	4	21.1	0	0.0	3	15.8	0	0.0	0	0.0
19	Karnataka	Koppal	20	12	60.0	3	15.0	3	15.0	2	10.0	0	0.0	0	0.0
20	Karnataka	Mandya	34	19	55.9	3	8.8	1	2.9	7	20.6	4	11.8	0	0.0
21	Karnataka	Mysuru	47	28	59.6	9	19.1	2	4.3	7	14.9	1	2.1	0	0.0
22	Karnataka	Raichur	36	18	50.0	0	0.0	2	5.6	10	27.8	4	11.1	1	2.8
23	Karnataka	Ramanagara	26	17	65.4	1	3.8	1	3.8	7	26.9	0	0.0	0	0.0
24	Karnataka	Shivamogga	75	50	66.7	2	2.7	0	0.0	22	29.3	1	1.3	0	0.0
25	Karnataka	Tumakuru	33	19	57.6	6	18.2	3	9.1	4	12.1	1	3.0	0	0.0
26	Karnataka	Udupi	58	30	51.7	0	0.0	1	1.7	22	37.9	4	6.9	1	1.7
27	Karnataka	Uttara Kannada	75	34	45.3	2	2.7	0	0.0	36	48.0	0	0.0	2	2.7
28	Karnataka	Vijayanagar	16	6	37.5	4	25.0	5	31.3	1	6.3	0	0.0	0	0.0
29	Karnataka	Vijayapura	54	23	42.6	7	13.0	5	9.3	15	27.8	1	1.9	1	1.9
30	Karnataka	Yadgir	20	13	65.0	1	5.0	0	0.0	4	20.0	2	10.0	0	0.0
		Total	**1087**	**611**	**56.21**	**127**	**11.68**	**66**	**6.07**	**242**	**22.26**	**26**	**2.39**	**8**	**0.74**

*7 wells show no change in water level.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 472

ANSWERED ON 06.02.2025

GROUNDWATER RESOURCES IN TAMIL NADU

472. SHRI ROBERT BRUCE C

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

the steps taken/being taken by the Government to improve groundwater resources in Tirunelveli district of Tamil Nadu?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

Water being a state subject and the responsibility of ground water management, including taking initiatives for improvement of ground water resources, 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 projects and schemes. However, the Central Government has taken several steps in the direction of sustainable management of ground water resources of the country, including in Tirunelveli district of Tamil Nadu and some of the important ones are mentioned 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 underway across 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. In the past 3 years, construction of total 16,309 water conservation structures has been completed/ongoing under JSA in Tirunelveli district in Tamil Nadu.

ii. National Aquifer Mapping Studies have been carried out for the entire mappable area of the country including Tamil Nadu. The total mappable area of Tirunelveli district has been covered under National Aquifer Mapping and Management Programme (NAQUIM). The District-wise groundwater management plans, containing recommendations for both demand and supply side interventions have been prepared and shared with State and District Authorities for implementation.

iii. The Dynamic Ground Water Resources of the country are being annually assessed jointly by Central Ground Water Board (CGWB) and respective State Governments. As per the latest assessment in the year 2024, the Stage of Ground Water Extraction, which is a measure of Annual Ground Water Extraction for all uses (irrigation, industrial and domestic uses) over Annual Extractable Ground Water Resource is 43% for Tirunelveli district, indicating that the District is under 'Safe' category.

iv. 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 rainwater harvesting and artificial recharge structures in the country to harness 185 Billion Cubic Metre (BCM) of water. The Master plan has been shared with States/UTs for suitable interventions .A total of 5,207 nos. of Rain water harvesting and Artificial recharge structures have been recommended for the Tirunelveli District in Tamil Nadu.

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 Tamil Nadu. As an outcome nearly 69,000 Amrit Sarovars have been constructed/rejuvenated in the country with 70 in Tirunelveli District in Tamil Nadu.

vi. A total of 31 nos. Digital Water Level Recorders (DWLRs) have been installed in Tirunelveli district to monitor the ground water level fluctuation and 2 nos. DWLRs with quality monitoring features have been installed. The data of said DWLRs are being shared with State Government for planning and management.

vii. Central Ground Water Board organizes various Public Interaction Programs (PIP), Mass Awareness Programs (MAP), Tier II and Tier –III programmes on local ground water issues, including educating the public about the impacts of water contamination and promoting sustainable practices to maintain water quality. In Tirunelveli district, two PIPs have been organized so far.

viii. Further, as per the information received from the Water Resources Department of Tamil Nadu, the State government has constructed 21 check dams and one artificial recharge structure each in Gadananadhi sub basin and Thamirabarani sub basin in Tirunelveli district.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 469

ANSWERED ON 06.02.2025

PMKSY-HAR KHET KO PANI IN ANDHRA PRADESH

469. SHRI LAVU SRI KRISHNA DEVARAYALU

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

(a) the details of the number of water bodies selected under the Repair, Renovation and Restoration (RRR) of Water Bodies sub-component of the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) - Har Khet Ko Pani in the country, State/UT-wise;

(b) the number of water bodies selected for funding under the RRR component in Andhra Pradesh and the total funds sanctioned and disbursed to the State for this purpose;

(c) whether the Government has taken note that none of the selected water bodies in Andhra Pradesh have been repaired, renovated or restored so far and if so, the reasons for the delay; and

(d) whether the Government has received any requests from Andhra Pradesh for additional funds to ensure the timely completion of these projects and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) The details of the number of water bodies selected under the Repair, Renovation, and Restoration (RRR) of Water Bodies sub-component of the PMKSY-HKKP is given in **Annexure**,

(b) The Details are as under;

Scheme name	**Year of inclusion**	**Estimated Cost** *(Rs in crore)*	**Eligible Central share (CA)** *(Rs in crore)*	**CA released** *(Rs in crore)*
100 RRR	2018-19	66.77	40.06	2.70
135 RRR	2021-22	70.72	42.42	0.00

(c) & (d) Out of the 100 RRR of water bodies included for central assistance under PMKSY-HKKP in 2018-19, restoration works on 36 water bodies has been completed. Since the repair, renovation, and restoration of water bodies fall under the jurisdiction of individual states, it is the responsibility of the respective State Governments to plan and implement the rejuvenation of water bodies based on priority and available funds. The role of the Government of India is limited to providing technical support and partial financial assistance upon the request of the concerned State Government for these efforts under the Repair, Renovation, and Restoration (RRR) component of the Pradhan Mantri Krishi Sinchayee Yojana – Har Khet Ko Pani (PMKSY-HKKP).

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 469 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "PMKSY-HAR KHET KO PANI IN ANDHRA PRADESH".

Sl. No.	State	No of WBs included	Year of inclusion	Estimated Cost (Rs. Crore)
1	Andhra Pradesh	100	2018-19	66.77
		135	2021-22	70.72
2	Bihar	27	2018-19	64.93
		66	2019-20	96.97
3	Gujarat	61	2018-19	102.91
4	Nagaland	17	2023-24	35.63
5	Odisha	103	2017-18	87.51
		574	2022-23	539.49
6	Rajasthan	36	2017-18	95.46
		37	2021-22	124.71
		84	2023-24	142.92
7	Tamil Nadu	49	2018-19	23.43
		89	2019-20	46.81
		9	2020-21	4.17
		115	2021-22	71.89
		85	2022-23	80.83
		100	2022-23	83.77
8	Telengana	176	2017-18	120.49
		147	2017-18	162.71
		70	2017-18	50.53
Grand Total		**2080**		**2072.63**

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 468

ANSWERED ON 06.02.2025

FRAMEWORK FOR TRADEABLE WATER CREDITS

468. SHRI ADITYA YADAV

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

(a) whether the Government is cognizant that there is need for a market-based solution for developing a framework for tradeable water credits on line of carbon credits, which provides incentives for water conservation and quality improvement;

(b) if so, the details thereof; and

(c) the initiatives taken/proposed to be taken by the Government keeping in mind that the framework should include project design, activities and certification to reduce water consumption, with a defined water quality output?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) to (c) The Central Government has notified Green Credit Rules 2023 on 12th October 2023 under the Environment Protection Act 1986 to encourage voluntary environmental positive actions resulting in issuance of Green Credits.

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GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 466

ANSWERED ON 06.02.2025

ARTIFICIAL WATER RECHARGE STRUCTURE

466. DR. D. PURANDESWARI SHRI MUKESHKUMAR CHANDRAKAANT DALAL

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

(a) the data on the number of artificial water recharge structures established in each State, along with the expenditure incurred for the maintenance;

(b) the details of the Corporate Social Responsibility funds raised for construction of the artificial water recharge structures under the initiative;

(c) the existing number of rainwater harvesting structure in each State along with the number of the households agreed to collaborate to participate in the initiative; and

(d) the estimated impact on groundwater levels after the implementation of the artificial water recharge structure along with the steps taken/being taken by the Government for curbing the challenges faced in the implementation of the initiative?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) Water is a State subject and the Central Government supplements the efforts of States/UTs through technical and financial assistance including creation of artificial recharge structures. National Water Mission, Ministry of Jal Shakti has been implementing Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) on an annual basis and JSA: CTR 2024 is the fifth edition in the series of implementation of JSA: CTR. The campaign has five focused interventions which inter-alia include rainwater harvesting and water conservation under which artificial recharge structures are created/renovated. These artificial recharge structures include check dams, pond/tank, trench, rooftop harvesting structures, other rainwater recharge/water conservation structures, restoration of traditional water bodies, soak pits, stabilization pond, other reuse/recharge structures, gully plug, percolation tank, staggered trenches etc. The State-wise details of these structures established during 2021 to 2024 under the interventions water conservation and rainwater harvesting; renovation of traditional and other water bodies/tanks; reuse and recharge structures and watershed development for the period 2021 to 2024 are given at **Annexure**. In so far as expenditure incurred for the maintenance of these structures is concerned, since maintenance is a continuous and regular process, States utilise their own funds for maintaining these structures. JSA: CTR works on convergent financing utilising the funds from different Central, State Government schemes such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Pradhan Mantri Krishi Sinchayi Yojana (PMKSY), Per

Drop More Crop (PDMC), Compensatory Afforestation Fund Management and Planning Authority (CAMPA), 15th Finance Commission grants, Corporate Social Responsibility (CSR) funds etc.

(b) JSA: CTR campaign in its implementation uses convergent financing including CSR funds. Expanding on this vision, the Jal Sanchay Jan Bhagidari (JSJB) initiative was launched on September 6, 2024, in Surat, Gujarat, in the virtual presence of the Hon'ble Prime Minister. JSJB aims to create one million low-cost recharge structures across urban and rural India, using a combination of scientific technology and traditional methods. The initiative promotes active participation and sustainable water management by involving local communities, industries, NGOs and government bodies. It's a public-private partnership model which draws funding from not only government schemes but also from mobilization of private finance like Industry - CSR, Philanthropy, individual donors, crowdfunding etc for people's participation, ownership and sustainability. Corporate Social Responsibility (CSR) is playing a pivotal role in strengthening the Jal Sanchay Jan Bhagidari initiative, with multiple stakeholders coming forward to support water conservation efforts. The states of Gujarat, Madhya Pradesh, Rajasthan and Bihar along with philanthropists and corporate entities have pledged their support to this initiative, ensuring a collaborative approach to addressing water security. Inspired by the success of this initiative under, the Government of Rajasthan has launched the "Karmabhumi se Matrabhumi" scheme, encouraging people to contribute to water conservation in their native regions.

(c) Water is a State subject, and each State/UT independently funds the creation of rainwater harvesting structures. Under the Jal Shakti Abhiyan: Catch the Rain (JSA: CTR) campaign, rainwater harvesting structures have been developed across the country, through convergent action. The State-wise details of these structures created under JSA: CTR since 2021 are already provided in **Annexure.**

The 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 for individual households, group housing societies and other infrastructure projects. States and UTs have been encouraged to adopt these guidelines to promote effective water conservation practices. National Water Mission, Ministry of Jal Shakti does not maintain the number of households who have agreed to participate in the initiative. However, JSJB initiative, encourages Resident Welfare Associations (RWAs), individual households, group housing societies industries, government, urban and rural local bodies, NGOs, civil societies etc to participate in this initiative

(d) Implementing water conservation initiatives in regions presents several challenges. One of the primary concerns is the availability and quality of source water, which directly impacts the feasibility of artificial recharge. Additionally, the construction of Artificial Recharge (AR) and Water Conservation (WC) structures is highly site-specific, requiring careful assessment of the area's feasibility and the storage capacity of underlying aquifers. To address these challenges, the Government has undertaken several key initiatives. The National Aquifer Mapping (NAQUIM) Project, covering approximately 25 lakh square kilometers, has resulted in the development of aquifer maps and groundwater management plans. These plans, shared with state agencies,

include both demand-side and supply-side interventions to enhance water conservation. In addition, 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 envisages construction of about 1.42 crore , Rain water harvesting and artificial recharge structures in the country to harness 185 Billion Cubic Metre (BCM) of monsoon rainfall. Detailed Project Report (DPR) has to be prepared by the concerned line department of the respective State Government at an implementable level like any other water supply project or city development project. Implementation of the existing schemes is with the respective State Government. The Master Plan for Artificial Recharge to Groundwater- 2020 circulated to all the States/UTs and is implemented in one district in each state through convergence with state schemes. Technical advisory and simple Frequently Asked Questions (FAQs) have been developed by CGWB in collaboration with NWM for guidance & widely disseminated to the community by all stakeholders and are available on the JSA: CTR portal.

The Ground Water Resources Assessment by CGWB, in collaboration with State Governments, shows a significant rise in groundwater recharge due to sustained conservation efforts. Recharge from tanks, ponds and water conservation structures increased from 13.98 Billion Cubic Meters (BCM) in 2017 to 25.34 BCM in 2024, reflecting the success of water conservation. A steady upward trend is evident, with recharge volumes of 23.47 BCM in 2022, 24.99 BCM in 2023 and a peak of 25.34 BCM in 2024. While these gains highlight effective interventions by both State and Central Governments, groundwater level improvements are influenced by multiple factors, including rainfall and strategic water management practices.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (c) OF UNSTARRED QUESTION NO. 466 TO BE ANSWERED IN LOK SABHA ON 06.02.2025 REGARDING "ARTIFICIAL WATER RECHARGE STRUCTURE".

State-wise details of artificial recharge structures established during 2021 to 2024 under the interventions of Jal Shakti Abhiyan: Catch the Rain (JSA: CTR)

S No	State	JSA Year	Water Conservation and Rain Water Harvesting	Renovation of Traditional Water Bodies	Reuse and Recharge Structures	Watershed Development	Total Water Related Works (Year-wise)
1	ANDAMAN AND NICOBAR ISLANDS	2021	53	880	56	12	**1001**
		2022	122	38	113	41	**314**
		2023	68	42	188	115	**413**
		2024	81	29	198	56	**364**
2	ANDHRA PRADESH	2021	179098	32594	1999	42166	**255857**
		2022	105398	34828	872	35820	**176918**
		2023	104729	51440	13428	58131	**227728**
		2024	79695	41828	13902	47726	**183151**
3	ARUNACHAL PRADESH	2021	694	18	173	462	**1347**
		2022	1079	171	163	309	**1722**
		2023	932	123	320	531	**1906**
		2024	1752	146	300	810	**3008**
4	ASSAM	2021	20380	22401	101	21265	**64147**
		2022	15273	2138	36	15905	**33352**
		2023	16836	1722	2133	17447	**38138**
		2024	24163	2437	3415	27525	**57540**
5	BIHAR	2021	50101	9251	43953	28954	**132259**
		2022	51872	8565	11951	25515	**97903**
		2023	90464	11447	26028	43709	**171648**
		2024	99627	9439	32426	50506	**191998**
6	CHANDIGARH	2021	120	0	0	0	**120**
		2022	0	0	0	0	**0**
		2023	0	0	0	0	**0**
		2024	199	8	0	0	**207**
7	CHHATTISGARH	2021	58228	15146	8269	42393	**124036**
		2022	64589	12994	18178	36669	**132430**
		2023	65180	16670	10701	39657	**132208**
		2024	79669	38018	19244	50521	**187452**
8	DADRA AND NAGAR HAVELI AND DAMAN AND DIU	2021	94	0	0	0	**94**
		2022	24	1	0	0	**25**
		2023	115	1	0	0	**116**
		2024	16	0	1	3	**20**
9	DELHI	2021	52	34	0	0	**86**
		2022	1	1	0	0	**2**
		2023	58	1	0	0	**59**
		2024	2	0	0	0	**2**
10	GOA	2021	9	17	19	44	**89**
		2022	59	79	20	51	**209**
		2023	15	59	9	19	**102**
		2024	51	123	49	71	**294**
11	GUJARAT	2021	18655	11458	20162	33453	**83728**
		2022	22062	10114	26992	39934	**99102**

		2023	8585	8122	11502	40443	**68652**
		2024	20457	11771	42436	58632	**133296**
12	HARYANA	2021	49771	9533	26312	7800	**93416**
		2022	11376	5479	11015	3419	**31289**
		2023	5525	4150	5111	5676	**20462**
		2024	4541	4652	4308	8294	**21795**
13	HIMACHAL PRADESH	2021	14011	2505	1046	39810	**57372**
		2022	13429	2454	1101	40287	**57271**
		2023	18806	1981	1229	45408	**67424**
		2024	21478	2020	1529	61502	**86529**
14	JAMMU AND KASHMIR	2021	24596	5770	1882	47406	**79654**
		2022	15712	3392	117145	48650	**184899**
		2023	18074	3641	63172	68254	**153141**
		2024	32650	3464	15524	68619	**120257**
15	JHARKHAND	2021	64934	1120	30910	276758	**373722**
		2022	26536	1135	11019	134209	**172899**
		2023	2313	329	873	196	**3711**
		2024	30117	334	2680	170202	**203333**
16	KARNATAKA	2021	184651	22713	261330	225920	**694614**
		2022	130601	20289	184600	210779	**546269**
		2023	121275	20478	112191	236151	**490095**
		2024	131159	24095	82152	225505	**462911**
17	KERALA	2021	44219	14921	36293	114631	**210064**
		2022	28066	13237	28407	92946	**162656**
		2023	39411	22604	50404	138275	**250694**
		2024	34659	17903	44504	133381	**230447**
18	LADAKH	2021	1230	34	10	1301	**2575**
		2022	1354	52	13032	2151	**16589**
		2023	1432	80	13358	2341	**17211**
		2024	1649	55	1404	880	**3988**
19	LAKSHADWEEP	2021	2	1	0	0	**3**
		2022	3	12	0	0	**15**
		2023	0	15	0	0	**15**
		2024	1	1	0	0	**2**
20	MADHYA PRADESH	2021	164941	7118	55776	170692	**398527**
		2022	256949	14626	33066	90399	**395040**
		2023	89359	10632	28457	87719	**216167**
		2024	97254	8143	19602	62983	**187982**
21	MAHARASHTRA	2021	7220	1796	25399	10907	**45322**
		2022	21390	5800	39279	11747	**78216**
		2023	18905	3960	31753	10131	**64749**
		2024	21216	3449	18775	10315	**53755**
22	MANIPUR	2021	6256	1703	42	1990	**9991**
		2022	712	216	20	362	**1310**
		2023	3312	1393	17	1633	**6355**
		2024	4804	1625	48	2108	**8585**
23	MEGHALAYA	2021	3540	659	175	3689	**8063**
		2022	3374	408	134	2900	**6816**
		2023	4340	681	251	4128	**9400**
		2024	5690	658	279	5832	**12459**
24	MIZORAM	2021	6499	405	1025	3842	**11771**
		2022	5407	294	292	2431	**8424**
		2023	8162	243	436	3903	**12744**

		2024	7903	168	628	5504	**14203**
25	NAGALAND	2021	323	38	41	248	**650**
		2022	506	256	41	520	**1323**
		2023	785	254	82	1081	**2202**
		2024	242	94	31	626	**993**
26	ODISHA	2021	76114	13571	12018	89543	**191246**
		2022	88375	18338	19769	103558	**230040**
		2023	78342	16494	13731	61291	**169858**
		2024	63394	11396	11728	50984	**137502**
27	PUDUCHERRY	2021	6	461	0	2	**469**
		2022	5	603	0	6	**614**
		2023	265	874	0	14	**1153**
		2024	41	726	12	8	**787**
28	PUNJAB	2021	1719	6613	1356	10611	**20299**
		2022	2357	6879	859	9820	**19915**
		2023	2396	7351	2072	13700	**25519**
		2024	2732	7943	1575	12759	**25009**
29	RAJASTHAN	2021	178187	19693	1702	74852	**274434**
		2022	76121	13642	7816	42664	**140243**
		2023	147566	15989	3635	24305	**191495**
		2024	144051	18725	2956	35224	**200956**
30	SIKKIM	2021	944	15	443	1886	**3288**
		2022	705	43	578	2059	**3385**
		2023	5763	30	454	1926	**8173**
		2024	462	12	566	2133	**3173**
31	TAMIL NADU	2021	208835	14935	204342	101805	**529917**
		2022	104126	13327	245488	71057	**433998**
		2023	111432	19813	184761	97762	**413768**
		2024	74992	5459	78434	126678	**285563**
32	TELANGANA	2021	3689	4646	9498	6045	**23878**
		2022	13286	11254	56055	30465	**111060**
		2023	14665	13669	51047	27317	**106698**
		2024	14167	21030	25581	26080	**86858**
33	TRIPURA	2021	33331	995	1662	38551	**74539**
		2022	15604	634	1127	26287	**43652**
		2023	25703	740	2283	17544	**46270**
		2024	26355	413	2644	16401	**45813**
34	UTTAR PRADESH	2021	86599	35944	44610	407109	**574262**
		2022	112283	53502	39264	494147	**699196**
		2023	101619	45078	49372	401270	**597339**
		2024	113349	41321	26964	515519	**697153**
35	UTTARAKHAND	2021	17340	4623	2559	40895	**65417**
		2022	30559	5069	2734	44491	**82853**
		2023	134487	3334	1239	34262	**173322**
		2024	15730	3335	1482	38914	**59461**
36	WEST BENGAL	2021	121236	55813	39433	73871	**290353**
		2022	22455	7912	1323	9108	**40798**
		2023	1438	346	19	272	**2075**
		2024	228	60	1	36	**325**
Grand Total			**5266380**	**1149872**	**2840719**	**6848567**	**16105538**

Source: JSA: CTR portal (jsactr.mowr.gov.in)

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