

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF DRINKING WATER AND SANITATION
RAJYA SABHA
UNSTARRED QUESTION NO. 594
TO BE ANSWERED ON - 12.12.2022

CONTAMINATION OF DRINKING WATER WITH HAZARDOUS METALS

594. SHRI MOHAMMED NADIMUL HAQUE:

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the details of measures taken by Government to address the issue of fast depleting groundwater in the country;
- (b) the details of steps taken by Government to fulfill the shortage of drinking water in rural areas, where primary source of drinking water is groundwater;
- (c) whether it is a fact that drinking water is increasingly becoming poisonous with hazardous metals; and
- (d) if so, the details of steps taken by Government to detoxify drinking water?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI
(SHRI PRAHLAD SINGH PATEL)

(a) & (b) Water being a State subject, steps for augmentation, conservation and efficient management of water resources, including rural drinking water supply, are primarily undertaken by the respective State Governments. Apart from continuous efforts for rejuvenation of natural sources of water through campaigns such as the Jal Shakti Abhiyaan launched in 2019 and carried out subsequently in 2021 and 2022 too and the Atal Bhujal Yojana etc., for supporting states in their efforts for ground water recharge, Government of India provides technical and financial assistance to State Governments to encourage sustainable development and efficient management of water resources through various schemes and programmes. Details of such efforts are placed at **Annexure-I**. The important measures taken for sustainable ground water management including checking the ground water depletion and its improvement in the country are can be seen at http://jalshaktidowr.gov.in/sites/default/files/Steps%20taken%20by%20the%20Central%20Govt%20for%20water_depletion_july2022.pdf

(c) & (d) “Water” being a state subject planning, approval and implementation of drinking water supply schemes, lies with state/UT governments. Government of India is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal, since August, 2019, in partnership with States, 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.

Under the JJM, Bureau of Indian Standards’ BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery. Water safety has been one of the key priorities

under the JJM since its inception. States are advised to strictly ensure supply of safe drinking water as per these norms. Following measures have been taken under JJM to facilitate action on water quality aspects at state level –

- While allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
- The “Drinking Water Quality Monitoring & Surveillance Framework” was devised and disseminated to states in October 2021.
- To facilitate implementation of the above said Framework, 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) and so far, 15.31 lakh women have been trained.
- To enable States/ UTs to test water samples for water quality, and for sample collection, reporting, monitoring and surveillance of drinking water sources, an online JJM – Water Quality Management Information System (WQMIS) portal has been developed.
- Under JJM, 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 to provide potable water to every household at the rate of 8–10 litre per capita per day (lpcd) to meet their drinking and cooking requirements.

States/UTs have been directed to undertake testing of water quality on a periodic basis and take remedial action wherever necessary, to ensure that the water supplied to households is of prescribed quality standards (BIS:10500). As a result of the above-mentioned efforts, as reported by States/UTs, as on 08/12/22, more than 24.01 lakh water samples have been tested in the water testing laboratories and 52.66 lakh water samples through the Field Testing Kits, in 2022-23 alone. The State-wise details of water quality test reported through WQMIS is available in public domain on JJM Dashboard and can also be accessed at: <https://ejalshakti.gov.in/WQMIS/>

As reported by States/ UTs, the number of habitations with contaminants in drinking water sources beyond permissible limit, have significantly reduced in the period from 01.04.2019. The information on contaminants-wise number of quality-affected habitations since 01.04.2019 is placed at **Annexure II**.

Annexure referred in the reply to Rajya Sabha Unstarred Question No. 594 due for reply on 12.12.2022

1. Jal Shakti Abhiyan-I

Jal Shakti Abhiyan -I (JSA-I) was launched in 2019 in 1592 blocks out of 2836 blocks in 256 water stressed districts of the country to promote water conservation and water resource management by focusing on accelerated implementation of five target interventions, viz. water conservation & rain water harvesting, renovation of traditional and other water bodies/tanks, reuse and recharge of bore wells, watershed development and intensive afforestation. With this campaign, huge awareness has been generated and various stakeholders have started taking steps for water conservation.

The Phase-I started on 1st July and was completed on the 30th September 2019. The Phase-II started on 1st October and was completed on the 30th November 2019.

Interventions Progress under JSA-I was as under:-

Water Conservation & Rain Water Harvesting 2,73,256	Renovation of Traditional & Other Water Bodies/Tanks 44,497	Reuse and Recharge Structures 1,42,740
Watershed Development 1,59,354	Intensive Afforestation (Saplings planted) 12,35,99,566	Block Water Conservation Plan 1,372

State/UT-wise information is not available.

2. Jal Shakti Abhiyan: Catch the Rain campaign

National Water Mission, Ministry of Jal Shakti took up the “Jal Shakti Abhiyan: Catch the Rain” (JSA:CTR) with the theme “Catch the Rain - Where it Falls When it Falls” to cover all the blocks of all districts (rural as well as urban areas) across the country during 22nd March 2021 to 30th November 2021 - the pre-monsoon and monsoon period. The “Jal Shakti Abhiyan: Catch The Rain” campaign was launched by the Hon’ble Prime Minister on 22 March 2021, the World Water Day.

JSA:CTR campaign had five focused interventions- (1) rainwater harvesting & water conservation (2) enumerating, geo-tagging & making inventory of all water bodies; preparation of scientific plans for water conservation (3) Setting up Jal Shakti Kendras in all districts (4) intensive afforestation and (5) awareness generation.

The progress of the campaign as uploaded on JSA:CTR Portal as on 28.03.2022 are as follows:-

- (i) Water Conservation & Rainwater Harvesting Structures: 16,22,957; (ii) Renovation of Traditional Water Bodies: 2,96,958; (iii) Reuse and Recharge Structures: 8,31,961; (iv) Watershed Development: 19,18,395; (v) Intensive Afforestation: 36,75,68,460; and Training Programmes/ Kisan Melas: 43,631. The above details include completed as well as ongoing works. Actual expenditure from MGNREGS funds was Rs. 65,666 crore. States/UTs have also been directed to utilise their own resources.
- (ii) As reported by the Ministry of Rural Development, more than 2.03 lakh Gram Panchayats (GPs) out of the 2.69 lakh GPs have prepared water conservation plans.
- (iii) 15.32 lakh water bodies have been enumerated with its details like its latitude and longitude, ownership, state of health, photos etc under the campaign.
- (iv) Over 16.67 lakh photos on the activities undertaken/works done under the campaign have been uploaded on the portal.

3. Jal Shakti Abhiyan: Catch the Rain – 2022 campaign

Jal Shakti Abhiyan: Catch the Rain (JSA:CTR) - 2022 has been launched by Hon'ble President on 29.03.2022 in all districts (rural as well as urban areas) of the country with the main theme "Catch the Rain, where it falls, when it falls" The campaign may be implemented from 29 March, 2022 to 30 November, 2022 - the pre-monsoon and monsoon period in the country.

The focused interventions of the campaign include (1) water conservation and rainwater harvesting which may include making of roof-top Rain Water Harvesting Structures (RWHS) on buildings and water harvesting pits in compounds; maintenance of existing RWHS & creation of new check dams/ponds; renovation of traditional WHS; removal of encroachments of tanks/lakes and in their catchment channels; de-silting of tanks, reuse and recharge of bore wells; watershed development; rejuvenation of small rivers and rivulets; revival of wetlands and protection of flood-banks, spring shed development, protection of water catchment areas etc; (2) enumerating, geo-tagging & making inventory of all water bodies; preparation of scientific plans for water conservation based on it (3) Setting up of Jal Shakti Kendras in all districts (4) intensive afforestation and (5) awareness generation.

The progress of the works completed and ongoing as on 18.11.2022 as uploaded on JSA:CTR Portal from 29.03.2022 to 18.11.2022 is as follows:

- (i) Water Conservation and RWH: 10,21,204 (ii) Renovation of Traditional Water Bodies: 2,26,924 (iii) Reuse and Recharge Structures: 6,83,289 (iv) Watershed Development: 12,69,827 (v) Intensive Afforestation: 72,58,92,603 (vi) Number of Jal Shakti Kendra established: 606 (vii) Number of water conservation plans uploaded: 256.

4. Atal Bhujal Yojana

Government of India is implementing Atal Bhujal Yojana in select water stressed areas of 7 States namely, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh

with an aim to community led sustainable ground water management. The total cost of the scheme is Rs. 6000 Rs. and the implementation period is from 2020-2025.

Under this scheme, communities are being mobilized and made aware regarding ground water situation in their area through focused IEC, training and awareness activities, which leads to preparation of water budget and Water Security Plans (WSPs). These WSPs contain various supply side interventions such as construction of check dams, farm ponds, various artificial recharge structures etc. and demand side interventions such as use of micro irrigation, pipes for irrigation, crop diversification etc. The proposed interventions are being implemented in the field through convergence of various Central/State schemes by line departments. Atal Bhujal Yojana is complementary to Jal Jeevan Mission, in the sense that this scheme, through its approach, aims at source sustainability of water for drinking as well as agriculture purposes.

5. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched by Government of India 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. it is the umbrella scheme with the motto of providing 'Har Khet Ko Pani' ensuring access to some means of protective irrigation to all agricultural farms in the country, to produce 'per drop more crop', thus bringing much desired rural prosperity.

The overreaching vision of Pradhan Mantri Krishi Sinchai Yojana (PMKSY) is to ensure access to some means of protective irrigation for all agricultural farms in the country, and to produce 'per drop more crop', thus bringing the much desired rural prosperity. The objective of the scheme is to lead to substantial increase in agricultural production and productivity thereby enhancing farm income.

Most of the projects under PMKSY-AIBP are multipurpose projects which also has drinking water component in general.

Under the PMKSY-AIBP, Ninety-Nine (99) ongoing Major/Medium Irrigation projects (and 7 phases) spread in 17 States and two Union Territories (Jammu & Kashmir and Ladakh) were prioritised with an estimated balance cost of Rs. 77,595 crore (Central share-Rs. 31,342 crore; Sate share- Rs 46,253 crore) to complete them in a time bound manner.

6. Repair, Renovation & Restoration (RRR) of Water Bodies

The scheme envisages comprehensive improvement of selected tank systems including de-silting of water bodies, improvement of catchment areas of tank commands, increase in storage capacity of water bodies, ground water recharge, improvement in agriculture, horticulture productivity, and development of tourism, cultural activities and increased availability of drinking water. Presently this scheme is part of Har Khet Ko Pani(HKKP) component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).

Annexure II

Annex referred to in the reply to Rajya Sabha Unstarred Question No. 594 due for reply on 12.12.2022

Contaminants-wise number of quality-affected habitations

Contaminant	No. of quality-affected habitations as on					
	01.04.2019	01.04.2020	01.04.2021	01.04.2022	08.12.2022	Covered with CWPP
Arsenic	14,020	4,568	1,717	800	761	559
Fluoride	7,996	5,796	1,021	670	662	433
Iron	18,599	32,134	17,220	14,205	13,726	-
Salinity	13,319	10,455	10,038	9,942	9,938	-
Nitrate	1,443	907	521	517	517	-
Heavy Metal	2,162	306	187	108	108	-
Total	57,539	54,166	30,704	26,242	25,712	992