

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

UNSTARRED QUESTION NO. 2481

ANSWERED ON 11.08.2025

RAINWATER HARVESTING AND WASTEWATER REUSE INITIATIVES

2481. SHRI SANT BALBIR SINGH

Will the Minister of Jal Shakti be pleased to state:

- (a) national-level policies or schemes launched by Government to promote rainwater harvesting and groundwater recharge across urban and rural areas;
- (b) whether there are any projects currently underway to treat and reuse wastewater (domestic and industrial) for non-potable purposes like agriculture and landscaping; and
- (c) whether there is any financial or technical support provided to states or panchayats for implementing decentralized water reuse systems?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Water being a State subject, the aspects related to water resources including its conservation are studied, planned, funded and executed by the State Governments themselves as per their own resources and priorities. The Central Government supplements the measures and efforts being taken up by the State Governments.

However, the Government of India takes various initiatives on water conservation including rainwater harvesting and groundwater recharge. Major steps taken by the Government for water conservation and rainwater harvesting to manage the increasing water stress in the country are inter alia as follows:

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.

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) 2025, 6th in the series of JSAs, in all the districts (rural as well as urban) of the country. JSA: CTR is an umbrella campaign including construction of water conservation and rain water harvesting through convergence of various Central Government schemes 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) & State Government schemes, Corporate Social Responsibility (CSR) funds etc.

The Central Government also gives financial assistance to various States under the 15th Finance Commission tied grants which can be inter-alia utilized for rainwater harvesting. The activity of installing rainwater harvesting structures at the Gram Panchayat level has been included in the Panchayat Development Plan (PDP) for Panchayats to opt for the same as per their needs for execution from XV Finance Commission (FC) funds or any other available funds with them. Also, the 15th Finance Commission, in its report for 2021-22 to 2025-26, categorized Urban Local Bodies into Million-Plus Cities/Urban Agglomerations (excluding Delhi and Srinagar) and Non-Million Plus cities, recommending separate grants for each. For Million-Plus Cities/Urban Agglomerations (MPC/UAs), the Commission allocated more than two-thirds of the recommended grants under the Million Plus Cities Challenge Fund specifically for Solid Waste Management (SWM). The Solid Waste Management grant is strategically aimed at enhancing urban infrastructure by improving drinking water quality and supply, including rainwater harvesting and recycling, strengthening sanitation systems, and achieving higher star ratings in solid waste management.

To further strengthen JSA: CTR, “Jal Sanchay Jan Bhagidari” (JSJB) initiative was launched in Surat, Gujarat on 06th September, 2024, which focuses on intensifying community mobilization to build low cost rainwater harvesting structures in saturation mode. The Jal Sanchay programme started in Gujarat by leveraging community funds, individual donations, Corporate Social Responsibility Funds etc. for construction of low cost structures like borewells, recharge shafts, recharge pits, using locally available material, to harvest rainwater, to boost ground water level and provide low cost local tailor made solution to water issues.

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. Based on NAQUIM studies, groundwater management plans are prepared wherein crop-diversification, promotion and adoption of water use efficiency & conservation practices. CGWB 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.

Government of India has also been implementing the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) which inter-alia includes construction of water conservation and water harvesting structures. As per Schedule I of Mahatma Gandhi NREGA, Para 4(1), I. Category: A: Public works relating to Natural Resource Management: (i) Water Conservation and water harvesting structures to augment and improve ground water like underground dykes, earthen dams, stop dams, check dams and rooftop rain water harvesting structures in Government or Panchayat buildings with special focus on recharging ground water including drinking water sources.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 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.

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

Under Jal Jeevan Mission, the water supply scheme sources inter alia include groundwater (open well, borewell, tube well, handpumps, etc.), ancient & traditional surface water (river, reservoir, lake, pond, springs, etc.) and rainwater stored in small tanks used as sources for drinking water supply schemes. Further, conjunctive use of water is promoted for harmonious use of surface water, groundwater and rainwater to ensure availability of water without disruption and also to optimize utilization of sources.

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.

(b) Water being a State subject, the responsibility for the conservation, planning, evaluation, funding, and execution of water resource management including wastewater treatment rests primarily with the State Governments, based on their own priorities and available resources. The Central Government supplements the measures and efforts being taken up by the State Governments.

As part of ongoing initiatives to support States in achieving sustainable water management and conservation, the Ministry of Jal Shakti has undertaken several measures to promote the treatment and reuse of wastewater (both domestic and industrial) for non-potable purposes such as agriculture, landscaping, and horticulture. The Government of India continues to encourage the reuse of treated wastewater across a range of non-potable applications, including in the industrial and agricultural sectors.

Under the Swachh Bharat Mission-Grameen (SBM-G), various initiatives are being implemented to promote domestic wastewater treatment and greywater reuse at both household and community levels. Low-cost, decentralized systems such as soak pits, leach pits, and magic pits are tailored to suit local soil and space conditions for effective greywater management. Households are also encouraged to reuse greywater for kitchen gardens, reducing freshwater demand. At the community level, solutions like community leach pits, waste stabilization ponds, constructed wetlands, Phytotrid systems, DEWATS,

and soil biotechnology (SBT) are adopted based on population size, land availability, and geography. Treated wastewater from these systems is reused for irrigation, landscaping, toilet flushing, industrial use, construction, groundwater recharge, and aquaculture in rural areas.

Under AMRUT, 890 sewerage/ septage management projects worth ₹34,446.64 crore are implemented, resulting in the creation of 4,622.61 MLD of sewage treatment capacity, including 1,437 MLD for recycle and reuse. Under AMRUT 2.0, the Ministry of Housing and Urban Affairs (MoHUA) approved 586 projects worth ₹68,461.77 crore, targeting 6,964 MLD of sewage treatment capacity, of which 1,939 MLD is for recycle and reuse.

A few noteworthy cases of Reuse are as follows:

- Uttarakhand: Treated waste water of 27 MLD & 68 MLD STP's at Jagjeetpur, Haridwar is re-used for irrigation through Canal system constructed for this purpose.
- Uttar Pradesh: 8 MLD treated water supplied to IOCL, Mathura. Treated water from Bingawan STP (210 MLD) to Panki Thermal Power Plant (approx. 40 MLD). Treated water from 1.5 MLD CETP at Rooma and 20 MLD CETP at Jajmau is discharged into Irrigation channel for reuse.
- West Bengal: GoWB has notified a policy on Re-use of Treated Waste Water on 30th June, 2020.
- Delhi: 267 MGD of treated water the existing STPs is used as mandatory return flow to River Yamuna and 125 MGD is currently being reused in horticulture
- Himachal Pradesh: JSV is providing facility for bulk water user at all the STPs to enable drawing the effluent for reuse.
- Madhya Pradesh: At present 440.18 MLD of treated water from the STPs is used for irrigation/gardening purpose.
- Rajasthan: 3 CETPs (18 MLD at Balotra, 12 MLD at Pali and 9 MLD at Bhiwadi) are operating on ZLD and the treated water is reused by the member units.

A National Framework for Safe Reuse of Treated Waste Water has been published by the National Mission for Clean Ganga (NMCG). The framework gives guidelines for the formulation of State reuse policy and is intended to build appropriate market and economic models for the reuse of treated waste water.

(c) Water being a State subject, the responsibility for the conservation, planning, evaluation, funding, and execution of water resource management including wastewater treatment rests primarily with the State Governments, based on their own priorities and available resources. The Central Government supplements the measures and efforts being taken up by the State Governments.

Under Swachh Bharat Mission (Grameen) [SBM-G] Phase II, several incentives and support mechanisms are available to assist local governments in implementing greywater management. Funding

is provided based on village population, with up to ₹280 per capita for villages with populations up to 5,000 and up to ₹660 per capita for larger villages. Of the total eligible amount for Solid and Liquid Waste Management (SLWM), including greywater assets, 70% is funded under SBM-G—shared between the Central and State Governments as per guidelines (60:40 for most states, 90:10 for NE/hilly states, and 100% for Union Territories without a legislature)—while the remaining 30% must come from Gram Panchayats using 15th Finance Commission Tied Grants for water and sanitation. Each village is entitled to a minimum of ₹1 lakh for SLWM based on need. Additionally, funding can be enhanced through convergence with other sources such as MGNREGS, state schemes, CSR contributions, and locally generated revenues.

The Central Government, through the Central Sector Schemes, Centrally Sponsored Schemes and Finance Commission Grants, supplements the efforts of States and Gram Panchayats towards the creation of infrastructure in Panchayats.

Under the Fifteenth Finance Commission (XV FC), Grants to the tune of Rs. 60,750 Crore were allocated for the interim period FY 2020-2021, and Rs 2,36,805 Crore are allocated for the period FY 2021-2026 to Panchayats in all three tiers and Traditional Local Bodies and Sixth Schedule areas in 28 States. The XV FC Grants have two components Tied and Untied.

The untied grant, 40% of the total grant, under the 15th Finance Commission can be used by Rural Local Bodies (RLBs) for location-specific felt needs under 29 subjects enshrined in the Eleventh Schedule of the Constitution, except for salary or other establishment expenditure.

The tied grants, 60% of total grants, can be used for the basic services of (a) sanitation and maintenance of ODF status, which includes management and treatment of household waste, human excreta and faecal sludge management and (b) supply of drinking water. rainwater harvesting and water recycling. If any local body has fully saturated the needs of one category, it can utilise the funds for the other category.

State-wise allocation and release of Fifteenth Finance Commission Grants to the Panchayats and Rural Local Bodies during the last five years and the current year is given at **Annexure**.

A National Framework for Safe Reuse of Treated Waste Water has been published by the National Mission for Clean Ganga (NMCG). The framework gives guidelines for the formulation of State reuse policy and is intended to build appropriate market and economic models for the reuse of treated waste water.

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 2481 TO BE ANSWERED IN RAJYA SABHA ON 11.08.2025 REGARDING “RAINWATER HARVESTING AND WASTEWATER REUSE INITIATIVES”.

Year-wise allocation and release of Fifteenth Finance Commission (XV FC) Grant to Rural Local Bodies as on 01.08.2025

(Rs. in crores)

Sl. No.	States	2020-21		2021-22		2022-23		2023-24		2024-25	
		Allocation	Release	Allocation	Release	Allocation	Release	Allocation	Release	Allocation	Release
1	Andhra Pradesh	2625.00	2625.00	1939.00	1917.85	2010.00	1976.75	2031.00	1997.45	2152.00	2109.97
2	Arunachal Pradesh	231.00	231.00	170.00	170.00	177.00	35.40	179.00	0.00	189.00	0.00
3	Assam	1604.00	1604.00	1186.00	1186.00	1228.00	1228.00	1241.00	1241.00	1315.00	0.00
4	Bihar	5018.00	5018.00	3709.00	3709.00	3842.00	3842.00	3884.00	3855.33	4114.00	4109.01
5	Chhattisgarh	1454.00	1454.00	1075.00	1075.00	1114.00	1114.00	1125.00	1125.00	1192.00	1185.25
6	Goa	75.00	75.00	55.00	55.00	57.00	48.46	58.00	21.55	62.00	0.00
7	Gujarat	3195.00	3195.00	2362.00	2362.00	2446.00	2446.00	2473.00	2473.00	2619.00	1271.50
8	Haryana	1264.00	1264.00	935.00	935.00	968.00	967.30	979.00	953.59	1036.00	1012.51
9	Himachal Pradesh	429.00	429.00	317.00	317.00	329.00	329.00	332.00	318.04	352.00	229.19
10	Jharkhand	1689.00	1689.00	1249.00	1249.00	1293.00	1293.00	1307.00	1307.00	1385.00	0.00
11	Karnataka	3217.00	3217.00	2377.00	2375.50	2463.00	2093.55	2490.00	2086.59	2637.00	2133.25
12	Kerala	1628.00	1628.00	1203.00	1203.00	1246.00	1246.00	1260.00	1260.00	1334.00	1334.00
13	Madhya Pradesh	3984.00	3984.00	2944.00	2944.00	3050.00	3050.00	3083.00	2819.24	3265.00	1629.45
14	Maharashtra	5827.00	5827.00	4307.00	4267.16	4461.00	3696.71	4510.00	3629.21	4776.00	3169.72
15	Manipur	177.00	177.00	131.00	65.50	135.00	0.00	137.00	0.00	145.00	0.00
16	Meghalaya	182.00	182.00	135.00	67.50	140.00	0.00	141.00	0.00	149.00	0.00
17	Mizoram	93.00	93.00	69.00	69.00	71.00	71.00	72.00	0.00	76.00	0.00
18	Nagaland	125.00	125.00	92.00	92.00	96.00	48.00	97.00	0.00	102.00	0.00
19	Odisha	2258.00	2258.00	1669.00	1669.00	1728.00	1728.00	1747.00	1746.91	1851.00	1851.00
20	Punjab	1388.00	1388.00	1026.00	1026.00	1062.00	1062.00	1074.00	1058.35	1138.00	788.90
21	Rajasthan	3862.00	3862.00	2854.00	2854.00	2957.00	2955.34	2989.00	2847.96	3166.00	2803.69
22	Sikkim	42.00	42.00	31.00	31.00	33.00	33.00	33.00	33.00	35.00	32.34
23	Tamil Nadu	3607.00	3607.00	2666.00	2666.00	2761.00	2761.00	2791.00	2791.00	2957.00	2270.74
24	Telangana	1847.00	1847.00	1365.00	1365.00	1415.00	1415.00	1430.00	1424.18	1514.00	0.00
25	Tripura	191.00	191.00	141.00	141.00	147.00	147.00	148.00	148.00	157.00	156.31
26	Uttar Pradesh	9752.00	9752.00	7208.00	7208.00	7466.00	7466.00	7547.00	7547.00	7994.00	7994.00
27	Uttarakhand	574.00	574.00	425.00	418.70	440.00	439.21	445.00	444.13	471.00	234.91
28	West Bengal	4412.00	4412.00	3261.00	3261.00	3378.00	3378.00	3415.00	3415.00	3617.00	3472.22
	Total	60750.00	60750.00	44901.00	44699.22	46513.00	44869.71	47018.00	44542.51	49800.00	37787.97
