

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

UNSTARRED QUESTION NO. 860

ANSWERED ON 24.07.2025

MASTERPLAN FOR ARTIFICIAL RECHARGE OF GROUNDWATER

860. SMT. HARSIMRAT KAUR BADAL

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

- (a) the allocation and utilization of funds under the 'Masterplan for Artificial Recharge of Groundwater' so far, State/UT-wise;
- (b) the details regarding the State-level nodal agency that has been specified for overseeing this scheme in the different States especially in Punjab;
- (c) the number and type of structures for artificial groundwater recharge that have been planned and completed under the 'Masterplan for Artificial Recharge of Groundwater' in the country, State/UT-wise and district-wise in Punjab;
- (d) the estimated rainwater harnessing potential of these structures in the country, State-wise; and
- (e) the functional status of these structures, State/UT-wise?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) Master Plan for Artificial Recharge to Groundwater- 2020 has been prepared by Central Ground Water Board (CGWB) in consultation with States/UTs which is a macro level plan indicating various GW recharge structures for the different terrain conditions of the country. The plan aims to construct approximately 1.42 crore such structures across India, potentially harnessing about 185 Billion Cubic Meters (BCM) of rainwater. This involves identifying state and region-specific GW conservation related interventions suitable to local conditions like existing status of ground water resources, average rainfall, rock and soil structure etc.

The plan has been shared with all state governments for taking up appropriate field interventions in convergence with schemes like MGNREGS, PMKSY and other state schemes and hence no specific fund has been allotted for this purpose.

However, the Central Ground Water Board has taken up construction of several artificial recharge structures in many states for demonstrative purpose which can be further scaled up by the state governments. Check dams, Percolation Tanks, Recharge shafts etc. have been constructed in the Aspirational Districts of Warangal, YSR Kadappa and Osmanabad at a total expenditure of Rs.54.38 cr. Innovative recharge cum storage structures like Bridge-cum- Bhandaras have been built in Maharashtra with

an expenditure of Rs.30 cr. Further, around 130 anicuts, check dams etc. have been constructed in the water stressed parts of Rajasthan at an expenditure of around Rs. 120 cr.

Moreover, under the umbrella campaign of Jal Shakti Abhiyan (JSA) being implemented by this Ministry, during the period 2021-2025 construction/renovation of 1.14 crore artificial recharge, rain water harvesting and other water conservation structures at an estimated cost of Rs. 1.18 lakh cr have been coordinated across the country in convergence with MGNREGS.

(b) State Governments have been taking up implementation of Master plan as suited to their internal needs. It is not mandatory to have a Nodal agency for its implementation as the structures proposed to be constructed are to be taken up in convergence under several existing central and state schemes. As informed by the government of Punjab, the Soil and Water Conservation department has been entrusted with the responsibility of implementation of Master plan in the state in the selected priority areas.

(c) The number and type of structures for artificial groundwater recharge that have been recommended under the 'Master plan for Artificial Recharge to Groundwater' in the country, including in Punjab, is provided at **Annexure-I**. Further, based on the persuasion of this Ministry, most of the States/UTs, including Punjab have taken up the implementation in selected priority areas. However, since the Master plan is only recommendatory in nature, actual construction of structures in the field may vary in terms of location, size, type etc. as felt appropriate by the implementing agency. As per the information received, the Water Resources Department, Punjab has constructed 236 injection wells, 425 check dams, 2556 soak pits, 123 new ponds and 5 Khambati wells, spread across all the districts of Punjab, most of which are as guided by the Master plan.

(d) As per the Master Plan for Artificial Recharge to Ground Water, it is estimated that approximately 185 Billion Cubic Metres (BCM) of monsoon rainfall can be harnessed across the country. The State/UT-wise estimated rainwater harvesting potential through the proposed structures is provided at **Annexure-II**.

(e) The operation and maintenance of constructed structures falls in the purview of respective states which have to ensure that such structures are duly cleaned, maintained and repaired from time to time.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 860 TO BE ANSWERED IN LOK SABHA ON 24.07.2025 REGARDING “MASTERPLAN FOR ARTIFICIAL RECHARGE OF GROUNDWATER”.

State wise Number and Type of Artificial Recharge Structures under Master Plan for Artificial Recharge-2020

S. No	State	CD	RS	RTRWH	PT	Gabi on	DS	Injection wells	SS D	SS Dev / WS Dev	Others	Total
1	Andhra Pradesh	13143	26209	263694	13085	0	0	0	0	0	0	316131
2	Bihar	122	5682	50000	428	0	12679	13811	0	0	8415	91137
3	Chhattisgarh	0	25687	118339	3426	0	0	0	0	0	30989	178441
4	Delhi	12	22706	304500	0	0	0	0	0	0	0	327218
5	Goa	0	0	0	0	0	0	0	0	0	931	931
6	Gujarat	3985	8607	1320947	701	0	0	0	0	0	2072	1336312
7	Haryana	335	44392	304377	0	0	0	0	0	0	393811	742915
8	Himachal Pradesh	2290	556	1050	0	108118	851	133	460	0	784	114242
9	Jharkhand	36062	1268	521692	5173	0	0	0	0	0	27455	591650
10	Karnataka	50527	436	0	9918	0	0	0	0	0	344	61225
11	Kerala	1260	0	482788	1395	196116	0	5	121	0	67943	749628
12	Madhya Pradesh	76002	76002	408938	12309	0	0	0	0	0	152085	725336
13	Maharashtra	19243	838	5646772	7188	0	0	0	0	0	8995	5683036
14	NE States	18821	0	15700	0	18835	0	0	0	11531	473149	538036
15	Odisha	1292	550	15700	1111	0	0	0	1051	0	2782	22486
16	Punjab	85	79839	551308	0	0	0	13410	0	0	455920	1100562
17	Rajasthan	32744	231	0	63158	0	0	0	0	0	674067	770200
18	Sikkim	380	0	1500	0	450	0	0	125	540	340	3335
19	Tamilnadu	7180	70460	0	2397	0	0	0	0	0	7685	87722
20	Telangana	11552	22188	555093	10636	0	0	0	0	0	0	599469
21	Uttar Pradesh	5582	5582	0	493	0	0	0	0	0	12011	23668
22	Uttarakhand	2870	0	5543	810	0	0	0	0	0	6300	15523
23	West Bengal	453	0	6740	8551	1136	0	8403	568	0	16914	42765
24	UT-Lakshadweep	0	0	9597	0	0	0	0	0	0	0	9597
25	UT-Puducherry	71	283	0	14	0	0	0	0	0	203	571
26	UT-DNH	49	0	12109	17	0	0	0	0	0	30	12205
27	UT-Chandigarh	0	10300	0	0	0	0	0	0	0	0	10300
28	UT-Jammu & Kashmir	0	0	1150	0	245	0	0	0	230	560	2185
29	UT-Ladakh	0	0	0	0	46	0	0	0	15	231	292
30	UT-Andaman & Nicobar Islands	350	0	2250	1000	150	0	0	100	170	0	4020
31	UT-DIU & Daman	0	0	14006	0	0	0	0	0	0	0	14006
	Total	284410	401816	10613793	141810	325096	13530	35762	2425	12486	2344016	14175144

Note -CD-Check dam, RS-Recharge Shaft, RTRWH-Roof Top Rainwater Harvesting, PT=Percolation Tank, DS- Desilting, SSD- Sub-Surface Dyke, SS Dev/WS Dev- Springshed Development/Watershed Development activities, Others - Other Structures

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 860 TO BE ANSWERED IN LOK SABHA ON 24.07.2025 REGARDING “MASTERPLAN FOR ARTIFICIAL RECHARGE OF GROUNDWATER”.

Scope for Artificial Recharge for Master Plan for Artificial Recharge-2020

S. No	State	Estimated rainwater harnessing potential (MCM)
1	Andhra Pradesh	1246.95
2	Bihar	66352.03
3	Chhattisgarh	8609.63
4	Delhi	94.62
5	Goa	393.16
6	Gujarat	4459.26
7	Haryana	679.26
8	Jharkhand	4898.06
9	Karnataka	12874.17
10	Kerala	12455.00
11	Madhya Pradesh	9188.29
12	Maharashtra	3871.98
13	Odisha	1786.49
14	Punjab	1200.99
15	Rajasthan	5305.00
16	Sikkim	332.41
17	Tamil Nadu	959.33
18	Telangana	1186.47
19	Uttar Pradesh	2743.00
20	Uttarakhand	33449.00
21	West Bengal	8532.86
22	UT-Puducherry	32.05
23	UT-DNH	6.50
24	UT-Andaman & Nicobar Islands	4436.05
	TOTAL	185092.56

Note: Accurate estimation for North-Eastern and Hilly states is not possible due to complex hydrogeological conditions.
