

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI,  
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**UNSTARRED QUESTION NO. †5383**  
ANSWERED ON 25.07.2019

**ENHANCING WATER STORAGE CAPACITY**

†5383.      SHRI CHANDAN SINGH

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the natural water in the country is not available throughout the year and has remained confined to few months only;
- (b) if so, the reaction of the Government thereto;
- (c) whether the Government has accorded priority to rain water harvesting and storage of excess river water to enhance the water storage capacity; and
- (d) if so, the details thereof indicating the details of the construction of water reservoirs for surplus water storage in each State of the country during the last five years?

**ANSWER**

THE MINISTER OF STATE FOR JAL SHAKTI & SOCIAL JUSTICE AND EMPOWERMENT

(SHRI RATTAN LAL KATARIA)

(a) & (b) Yes Sir, there is spatial and temporal variability of rainfall in the country, which makes the natural water availability confined to few months only in most parts of the country.

(c) & (d) Water being a State subject, initiatives on water management & conservation including rain water harvesting is primarily States' responsibility. Central Government supports construction of water harvesting and conservation works primarily through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) aided by Pradhan Mantri Krishi Sinchayee Yojana – Watershed Development Component (PMKSY-WDC) and Pradhan Mantri Krishi Sinchayee Yojana – Per Drop More Crop. Under these Schemes, during the last three years, 17,56,027 water harvesting and conservations works have been completed for which Rs.23,435.67 crore was released as Central share.

Other measures taken by the Central Government to promote rain water harvesting / conservation are as follows:-

- Hon'ble Prime Minister has written a letter to all Sarpanchs on 08.06.2019 regarding the importance of water conservation and harvesting and exhorted them to adopt all appropriate measures to make water conservation a mass movement.

- Creation of a new Ministry of Jal Shakti for dealing with all matters relating to water at one place in an integrated manner.
- The National Water Policy (2012) has been formulated by Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR), inter-alia, advocates rain water harvesting and conservation of water and highlights the need for augmenting the availability of water through direct use of rainfall. It also, inter-alia, advocates conservation of river, river bodies and infrastructure should be undertaken in a scientifically planned manner through community participation. Further, encroachment and diversion of water bodies and drainage channels must not be allowed and wherever, it has taken place, it should be restored to the extent feasible and maintained properly.
- In compliance to the decision taken by the Committee of Secretaries, an 'Inter-Ministerial Committee' under the Chairmanship of Secretary (WR, RD & GR) has been constituted to take forward the subject of 'Push on Water Conservation Related Activities for Optimum Utilization of Monsoon Rainfall'.
- DoWR, RD & GR has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for its regulation and development, which includes provision of rain water harvesting. So far, 15 States/UTs have adopted and implemented the ground water legislation on the lines of Model Bill.
- Central Ground Water Authority (CGWA) has issued directions under Section 5 of "The Environment Protection Act, 1986" for mandatory Rain Water Harvesting / Roof Top Rain Water Harvesting for all target areas in the Country including UTs. While granting 'No Objection Certificate (NOC)' for drawing ground water, CGWA insists for mandatory rain water harvesting as per the guidelines issued.
- Central Ground Water Board (CGWB) under DoWR, RD & GR has also prepared a conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" during the year 2013, which envisages construction of 1.11 crore rain water harvesting and artificial recharge structures in the Country at an estimated cost of Rs. 79,178 crores to harness 85 Billion Cubic Metre (BCM) of water, in an area of 9,41,541 sq.km by harnessing surplus monsoon runoff to augment ground water resources.
- Besides, CGWB has taken up Aquifer Mapping and Management programme during XII Plan, under the scheme of Ground Water Management and Regulation. The Aquifer Mapping is aimed to delineate aquifer disposition and their characterization for preparation of aquifer/area specific ground water management plans with community participation. The management plans are shared with the respective State Governments for taking appropriate measures.
- DoWR, RD&GR has instituted National Water Awards to incentivise good practices in water conservation and ground water recharge.

- Mass awareness programmes (Trainings, Seminars, Workshops, Exhibitions, Trade Fares and Painting Competitions etc.) are conducted from time to time each year under the Information, Education & Communication (IEC) Scheme of DoWR, RD & GR in various parts of the Country to promote rain water harvesting and artificial recharge to ground water.
- The Ministry of Rural Development in consultation and agreement with the DoWR, RD & GR and the Ministry of Agriculture & Farmers' Welfare has developed an actionable framework for Natural Resources Management (NRM), titled "Mission Water Conservation" to ensure gainful utilization of funds. The framework strives to ensure synergies in Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), PMKSY, erstwhile Integrated Watershed Management Programme (IWMP) now PMKSY-WDC and Command Area Development & Water Management (CAD&WM), given their common objectives. Types of common works undertaken under these programmes/schemes are water conservation and management, water harvesting, soil and moisture conservation, groundwater recharge, flood protection, land development, Command Area Development & Watershed Management
- Department of Land Resources is currently implementing 8214 watershed development projects in 28 States covering an area of about 39.07 million ha. under the Watershed Development Component (WDC) of the PMKSY principally for development of rainfed portions of net cultivated area and culturable wastelands. The major activities taken up under the WDC-PMKSY, inter-alia, include ridge area treatment, drainage line afforestation, soil and moisture conservation, rain water harvesting, horticulture, and pasture development etc.
- Ministry of Housing & Urban Affairs has released Model Building Bye-laws, 2016 which recommends Rainwater Harvesting for all types of Building with plot size 100 sq.m or more. Barring the States/UT of Manipur, Sikkim Mizoram and Lakshadweep, all the States have incorporated the provisions in their respective building bye laws. The plans submitted to the local bodies shall indicate the system of storm water drainage along with points of collection of rain water in surface reservoirs or in recharge wells. Further, all building having a minimum discharge of 10,000 litre and above per day shall incorporate waste water recycling system. The recycled water should be used for horticultural purposes.

Central Water Commission (CWC) under Ministry of Jal Shakti carries out techno-economic appraisal of major (command area more than 10000 hectare) and medium (command area more than 2000 hectare and less than 10000 hectare) irrigation projects which are planned on Inter-State river / river basins. List of projects approved and accepted by Technical Advisory Committee (TAC) of Ministry of Jal Shakti during last five years is attached at **Annexure-I**.

**Annexure-I**

**Annexure referred to in reply to part (c) to (d) of Unstarred Question No. †5383 to be answered in Lok Sabha on 25.07.2019 regarding “Enhancing Water Storage Capacity”.**

List of projects approved and accepted by Technical Advisory Committee (TAC) of Ministry of Jal Shakti during last five years

S. No.	Meeting No	Date	Name of Project	State	Type of Project	Cost (In Cr)	CCA (in HA)
1	123rd	30.01.2014	Karanja Irrigation Project	Karnataka	Major-Revised	635.18 (2012-13)	29,227
2	123rd	30.01.2014	Kanupur Irrigation Project	Odisha	Major-Revised	1801.25 (2013)	47,709
3	123rd	30.01.2014	Rengali Irrigation Sub Project -Right Bank Canal	Odisha	Major-Revised	1962.33 (2013)	143,490
4	123rd	30.01.2014	Subarnarekha Irrigation Project	Odisha	Major-Revised	5561.57 (2013-14)	187,462
5	123rd	30.01.2014	Thoubal Multipurpose Project	Manipur	Major-Revised	1694.27 (2011)	35,160
6	123rd	30.01.2014	Karnataka Integrated and sustainable Water Resources Management Investment Program (KISWRMIP), Tranche-1	Karnataka	Medium ERM	118.75 (2012-13)	7,500
7	124th	16.10.2014	Kachhal Irrigation Project	Madhya Pradesh	Revised-Medium	91.39 (2009)	3,470
8	124th	16.10.2014	Telengiri Irrigation Project	Odisha	Medium-Revised	613.71 (2013)	13,829
9	124th	16.10.2014	Rengali Irrigation sub-project LBC-II (RD 29.177 Km to 141.00 Km)	Odisha	Major-Revised	3603.67 (2013)	177651
10	124th	16.10.2014	Kanhar Irrigation Project	Uttar Pradesh	Major-Revised	2252.29 (2013-14)	35467
11	125th	25.05.2015	Borolia Irrigation Project	Assam	Medium-Revised Cost	157.03 (PL 2013)	13562
12	125th	25.05.2015	Modernisation of Tunga Anicut Canal Network	Karnataka	ERM, Medium	239.75 (PL 2012-13)	11732
13	125th	25.05.2015	Modernisation of canal system of Bhadra reservoir Project	Karnataka	ERM, Major, Revised Cost	1175.79 (PL 2014)	177337
14	125th	25.05.2015	Sonthe Lift Irrigation Scheme	Karnataka	Major	673.9 (PL 2013-14)	16800
15	125th	25.05.2015	ERM of Rajghat Canal Project	Madhya Pradesh	ERM, Major, Revised Cost	56.83 (PL 2014-15)	164789
16	125th	25.05.2015	Dolaithabi Barrage Project	Manipur	Medium Irrigation, Revised	509.70 Cr. (PL 2013)	7545
17	126th	16.07.2015	Formation of Flood Carrier Canal from Kannadian Channel to drought prone area of Sathankulam, Thisaiyanvilay by interlinking Tamirabarani, Karumediya and Nambiyar Rivers in Tirunelveli and	Tamil Nadu	Major Irrigation	872.45 Cr. (PL 2014-15)	23040

S. No.	Meeting No	Date	Name of Project	State	Type of Project	Cost (In Cr)	CCA (in HA)
			Thoothukudi Districts, Tamil Nadu				
18	127th	13.11.2015	Revised Cost Estimate of Extension, Renovation and Modernisation of canals being fed from river Sutlej	Punjab	Major - ERM, Revised Cost	918.25 (PL 2013-14)	207068
19	127th	13.11.2015	Revised Cost Estimate of Relining of Sirhind Feeder from RD 119700 to 447927, Punjab	Punjab	Major - ERM, Revised Cost	671.478 (PL 2015)	69086
20	127th	13.11.2015	Revised Cost Estimate of Relining of Rajasthan Feeder from RD 179000 to 496000, Punjab	Punjab	Major - ERM, Revised Cost	1305.267 (PL 2015)	98739
21	128th	29.02.2016	Jigaon Irrigation Project	Maharashtra	New, Major	5708.11 (PL 2014-15)	101088
22	128th	29.02.2016	Indiramma Flood Flow Canal Project	Telangana	Revised - Major	5940.09 (PL 2015-16)	93587
23	129th	08.07.2016	Revised Cost Estimate of Arjun Sahayak Pariyojna	Uttar Pradesh	Major - Revised	2593.93 Cr. (PL 2015)	
24	129th	08.07.2016	Sulwade Jamphal Kanoli Lift Irrigation Scheme	Maharashtra	Major - New	2374.46 Cr. (PL 2014-15)	
25	129th	08.07.2016	Kosi-Mechi Link Project	Bihar	Major - New	4900 Cr. (PL 2015-16)	210,516
26	129th	08.07.2016	3rd Revised Cost Estimate (RCE) of Sardar Sarovar Narmada Project	Gujarat	Major - Revised	54772.94 Cr. (PL 2014-15)	17.92 Lakh
27	129th	08.07.2016	Revised Cost Estimate of Nadaun Area Medium Lift Irrigation Project	Himachal Pradesh	Medium - Revised	156.31 Cr. (PL 2015)	6,471
28	129th	08.07.2016	Damanganga- Pinjal Link Project	Maharashtra	New Drinking Water Supply Scheme	3008.49 Cr. (PL 2015)	895 MCM drinking water and 5 MW power
29	129th	08.07.2016	Ken-Betwa Link Project (Phase-I)	Madhya Pradesh & Uttar Pradesh	Major - New	18057.08 Cr. (PL 2015-16)	Power - 78 MW
30	129th	08.07.2016	Bhaunrat Dam Project	Uttar Pradesh	Medium - New	612.78 Cr. (PL 2015-16)	16,000
31	129th	08.07.2016	Project for Providing Irrigation Facilities to 15 Villages of Babina Block	Uttar Pradesh	Medium - New	246.8433 Cr. (PL 2015-16)	4,400
32	130th	30.09.2016	Burhai Reservoir Project	Jharkhand	Major - New	1520.87 Cr. (PL 2016-17)	33500
33	130th	30.09.2016	Revised Cost Estimate of Bateshwarsthan Ganga Pump Canal Scheme Phase - I	Bihar & Jharkhand	Major - Revised	828.80 Cr. (PL 2015-16)	
34	130th	30.09.2016	Arpa Bhaisajhar Barrage Project	Chhattisgarh	Major - New	1141.90 Cr. (PL 2014-15)	25000
35	130th	30.09.2016	Pawai Irrigation Project	Madhya Pradesh	Medium - New	261.54 Cr. (PL 2009)	9952
36	130th	30.09.2016	ERM of Chandrakeshar Dam Project	Madhya Pradesh	Medium - ERM	15.63 Cr. (PL 2015)	5000

S. No.	Meeting No	Date	Name of Project	State	Type of Project	Cost (In Cr)	CCA (in HA)
37	130th	30.09.2016	Channelisation of River Pabbar from Tikkari to Hatkoti, Tahsil Rorhu, Distt. Shimla	Madhya Pradesh	Medium - ERM	15.63 Cr. (PL 2015)	5000
38	130th	30.09.2016	Rajasthan Water sector Restructuring Project for Desert Area (RWSRPD)	Rajasthan	Major - ERM	3009.16 Cr. (PL 2016)	172988
39	130th	30.09.2016	ERM of Grand Anicut Canal System	Tamil Nadu	Major - ERM	2298.75 Cr. (PL 2014-15)	100191.09
40	131th	16.11.2016	andhra Pradesh irrigation and livelihood improvement project phase-II	andhra pradesh	New Major	2000 Cr	
41	131th	16.11.2016	Sukhahar medium irrigation project	Himachal Pradesh	New ERM	153.80 (PL 2015)	CCA of 2186 Ha and an annual irrigation 5572 Ha to benefitted approx. 24120 people
42	131th	16.11.2016	Medium Irrigation Project to various panchayatas jawalamukhi area in Distt-Kangra Himachal 47Pradesh	Himachal Pradesh	New Medium	194.474 (PL 2016)	Area annual irrigated-5957 ha benefitting Kangra district of Himachal Pradesh
43	131th	16.11.2016	project estimate for Rehabilitation , Renovation & modernisation of various distributaries system along with allied works in Punjab state (UBDC system), Punjab	Punjab	Major ERM	1112.34 Cr (PL 2015)	
44	132th	06.03.2017	Project estimate for rehabilitation , Renovation and modernisation of various distributaries system along with allied works in Punjab state (Deferred in 131th meeting)	Punjab	Major ERM	1112.34 Cr (PL 2015)	
45	132th	06.03.2017	Rajasthan water sector livelihood improvement project (RWSLIP)	Rajasthan	Major ERM	2783.60 Cr (PL 2016)	CCA of 513767 ha
46	132th	06.03.2017	Renukaji Dam Project	Himachal Pradesh	Irrigation and multipurpose project	4596.76 Cr (PL 2015-16)	
47	132th	06.03.2017	Revised cost estimate of modernisation of Ranvir canal project	J&K	Revised major-ERM	195.24 Cr (PL 2015-16)	Annual irrigation of 55418 ha benefitting Jammu & samba district
48	132th	06.03.2017	North Koel project, Jharkhand & Bihar	Jharkhand & Bihar	Revised Major	2391.37 Cr (PL 2016-17)	Annual irrigation of 111521 ha benefitting Palamu & Garhwa district of Jharkhand & Aurangabad, Gaya district of Bihar

S. No.	Meeting No	Date	Name of Project	State	Type of Project	Cost (In Cr)	CCA (in HA)
49	133th	01.05.2017	Rajasthan water sector livelihood improvement project (RWSLIP) (Again deferred due to pending compliance on the part of the State Government )	Rajasthan	Major ERM	2576.86 Cr (PL 2016 )	
50	133th	01.05.2017	Revised cost estimate of Modernization of Ranvir canal project	Jammu and Kashmir	Revised Major ERM	195.24 Cr (PL 2015-16 )	
51	135th	12.03.2018	Andhra Pradesh Irrigation and Livelihood Improvement Project Phase-II ( APILIP-II)	Andhra Pradesh	Major	2000	155910
52	135th	12.03.2018	Kanhar Barrage Project	Jharkhand	Major	1908.84 (PL 2016-17)	53283
53	135th	12.03.2018	Varkhede- Londhe Barrage Medium project	Maharashtra	Medium	526.65 Cr (PI 2016-17)	9428
54	135th	12.03.2018	Parwan Major Multipurpose project	Rajasthan	Major	6398.78 (PL 2014)	131000
55	135th	12.03.2018	Modernization of Nizamsagar project-Main Canal and Distributory system including repairs to CM & CD works	Telangana	Major, ERM	920 (PL 2016-17)	
56	136th	06.06.2018	Revised Cost Estimate of Upper Pravara (Nilwande-II) Project,	Maharashtra	RCE, Major	2232.62 (PL 2016-17)	86100
57	136th	06.06.2018	Kaleshwaram Project	Telangana	Major	80190.46 (PL 2015-16)	738851
58	137th	28.08.2018	Lower Tapi Project	Maharashtra	Major	2751.05 (PL 2016-17)	25657
59	137th	28.08.2018	Jihe Kathapur Lift irrigation Scheme	Maharashtra	Major	1061.34 (PL 2016-17)	35540
60	137th	28.08.2018	Jigaon Irrigation Project	Maharashtra	RCE, Major	7764.39 (PL 2016-17)	84240
61	138th	31.10.2018	RCE of Shaspur Kandi Dam Project Punjab	Punjab	RCE, Multipurpose	2715.70 (PL 2018)	206 MW
62	138th	31.10.2018	Modernization of Vijaynagar Channels in Tungbhadra Project under Karnataka Integrated and sustainable Water Resources investment management programme(KISWRMIP)	Karnataka	Major, EA, ERM	456.63 (PL 2017-18)	11154
63	138th	31.10.2018	Tral Lift Irrigation scheme	J&K	RCE, Medium Irrigation	170.50 ( PL 2016)	3415
64	138th	31.10.2018	Ghungshi Barrage Medium Irigation Project	Maharashtra	RCE, Medium Irrigation	498.46 (PL 2016-17)	6343

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