

**11**

**STANDING COMMITTEE ON WATER RESOURCES  
(2025-26)**

**EIGHTEENTH LOK SABHA**

**MINISTRY OF JAL SHAKTI  
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA  
REJUVENATION**

**DEMANDS FOR GRANTS (2026-27)**

**ELEVENTH REPORT**



**LOK SABHA SECRETARIAT**

**NEW DELHI**

**March, 2026 / Phalguna, 1947 (Saka)**

**ELEVENTH REPORT**  
**STANDING COMMITTEE ON WATER RESOURCES**  
**(2025-26)**

**(EIGHTEENTH LOK SABHA)**

**MINISTRY OF JAL SHAKTI**  
**DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA**  
**REJUVENATION**

**DEMANDS FOR GRANTS**  
**(2026-27)**

*Presented to Lok Sabha on 17.03.2026*  
*Laid on the Table of Rajya Sabha on 17.03.2026*



**LOK SABHA SECRETARIAT**  
**NEW DELHI**

**March, 2026 / Phalguna, 1947 (Saka)**

**W. R. C. No. 94**

Price : Rs.

© 2026 By Lok Sabha Secretariat

Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Sixteenth Edition) and Printed by

## CONTENT

		Page Nos.
Composition of the Committee (2025-26)		(iii)
Introduction		(v)
Abbreviations		(vi)
<b>REPORT</b>		
<b>PART I</b>		
<b>NARRATION ANALYSIS</b>		
I.	Salient features of the Union Budget (2026-27) with regard to Water Resources Sector	1
II.	Budgetary Allocations for FY 2026-27	2
III.	Utilization of Budgetary Allocations of the Department	4
IV.	Implementation of Schemes/Programmes	5
V.	Ground Water Contamination	10
VI.	Interlinking of Rivers	15
VII.	Safety of Dams	16
VIII.	Water Management in Dams / Reservoirs	21
IX.	Accelerated Irrigation Benefit Programme (AIBP) under PMKSY	23
X.	Modernization of Command Area Development and Water Management (M-CADWM) under PMKSY	26
XI.	Repair Renovation and Restoration (RRR) of Water Bodies under PMKSY (HKKP)	27
XII.	Ground Water Management & Regulation (GWM & R)	28
XIII.	Flood Management and Border Areas Programme (FMBAP)	35
XIV.	Development of Water Resources Information System (DWRIS)	37
XV.	Atal Bhujal Yojna (ABY)	38
XVI.	Namami Gange Mission-II	40
XVIII.	Management of Glacial Lake Outburst Flood (GLOFs)/ Landslide Lake Outburst Floods (LLOFs)/ Cloudburst Flood in the Hilly Regions of the country	46

	<b>PART II</b>	
	<b>Observations/Recommendations.....</b>	51
	<b>ANNEXURES</b>	
I.	State/UT-wise summary of ground water quality analysis as per Annual Ground water Quality Report 2025	75
II.	State/UT wise details of ground water contamination observed during the monitoring conducted by CGWB during last 5 Years	77
III.	Dam incident/ failure list from 2022 onwards	79
IV.	Status of Dams w.r.t. Revised Design inflow Flood carried out	91
V.	Status of Dams equipped with Early Warning System (EWS)	92
VI.	Details of AIBP Project with physical and financial progress	96
VII.	Information about M-CADWM under PMKSY	111
VIII.	Details of RRR of Water Bodies schemes during PMKSY	121
IX.	State wise details of fund allocation and financial / physical achievement under the RRR of Water Bodies schemes	122
X.	Details of RRR of Water Bodies proposals received during 2021-26 for approval under PMKSY HKKP	124
XI.	Financial Progress under Development of Water Resources Information System Scheme for the F.Y. 2021-26.	126
XII.	List of NMCG projects sanctioned for the rejuvenation of river Yamuna.	129
	<b>APPENDICES</b>	
(I)	Minutes of the Fifth Sitting of the Committee held on 18.02.2026*	
(II)	Minutes of the Seventh Sitting of the Committee held on 16.03.2026*	

\* Minutes not attached.



## **SECRETARIAT**

1. Shri Chander Mohan - Additional Secretary
2. Shri Ajay Kumar Sood - Director
3. Shri Umesh Bist - Under Secretary
4. Shri Nitin Kumar Nim - Assistant Committee Officer

## **INTRODUCTION**

I, the Chairperson, Standing Committee on Water Resources (2025-26) having been authorized by the Committee to submit the Report on their behalf, present the Eleventh Report on Demands for Grants (2026-27) of the Ministry of Jal Shakti – Department of Water Resources, River Development and Ganga Rejuvenation.

2. The Demands for Grants have been examined by the Committee under Rule 331E(1)(a) of the Rules of Procedure and Conduct of Business in Lok Sabha.

3. The Committee took evidence of the representatives of the Ministry of Jal Shakti - Department of Water Resources, River Development and Ganga Rejuvenation on 18.02.2026.

4. The Report was considered and adopted by the Committee at their sitting held on 16.03.2026.

5. The Committee wish to express their thanks to the representatives of the Ministry of Jal Shakti - Department of Water Resources, River Development and Ganga Rejuvenation for providing them the requisite written material and for making oral depositions before the Committee in connection with the examination of the subject.

6. The Committee would also like to place on record their sense of deep appreciation for the assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

**NEW DELHI**  
**16 March, 2026**  
**25 Phalguna, 1947 (Saka)**

**RAJIV PRATAP RUDY,**  
***Chairperson,***  
***Standing Committee on Water Resources***

## ABBREVIATIONS

Atal Jal	:	Atal Bhujal Yojana
AIBP	:	Accelerated Irrigation Benefit Programme
AIIB	:	Asian Infrastructure Investment Bank
AMRUT	:	Atal Mission for Rejuvenation and Urban Transformation
Appx.	:	Approximately
BBMB	:	Bhakra Beas Management Board
BCM	:	Billion Cubic Meter
BE	:	Budget Estimate
BOD	:	Biochemical Oxygen Demand
CA	:	Central Assistance
CAD	:	Command Area Development
CAMPA	:	Compensatory Afforestation Fund Management and Planning Authority
CADWM	:	Command Area Development and Water Management Programme
CCA	:	Cultivable Command Area
CCEA	:	Cabinet Committee on Economic Affairs
CEDAR	:	Centre for Ecology Development & Research
CEE	:	Committee on Establishment Expenditure
CoE	:	Centre of Excellence
CGF	:	Clean Ganga Fund
CGWB	:	Central Ground Water Board
CM	:	Chief Minister
CNA	:	Central Nodal Account
COD	:	Chemical Oxygen Demand
CPCB	:	Central Pollution Control Board
CPMU	:	Central Project Management Unit
CSMRS	:	Central Soil and Materials Research Station
CSR	:	Corporate Social Responsibility
CSS	:	Centrally Sponsored Schemes
CWC	:	Central Water Commission
CWRDM	:	Centre for Water Resources Development and Management
CWPRS	:	Central Water and Power Research Station
DDP	:	Desert Development Programme
DoDWS	:	Department of Drinking Water and Sanitation
DFG	:	Demands for Grants
DA&FW	:	Department of Agriculture & Farmers Welfare
DO	:	Dissolved Oxygen
DoWR, RD & GR	:	Department of Water Resources, River Development & Ganga Rejuvenation
DPR	:	Detailed Project Report
DRIP	:	Dam Rehabilitation and Improvement Programme
DVC	:	Damodar Valley Corporation
DWRIS	:	Development of Water Resources Information System
EAP	:	Externally Aided Project Component
EAP	:	Emergency Action Plan

MoU	:	Memorandum of Understanding
NABARD	:	National Bank for Agricultural and Rural Development
NAPCC	:	National Action Plan on Climate Change
NAQUIM	:	National Aquifer Mapping & Management Programme
NBWUE	:	National Bureau of Water Use Efficiency
NCIWRD	:	National Commission on Integrated Water Resources Development
NCDS	:	National Committee on Dam Safety
NDSA	:	National Dam Safety Authority
NEWMA	:	North East Water Management Authority
NPV	:	Net Present Value
NGP	:	National Ganga Plan
NGRBA	:	National Ganga River Basin Authority
NHAI	:	National Highways Authority of India
NHP	:	National Hydrology Project
NITI Ayog	:	National Institution for Transforming India Ayog
NMCG	:	National Mission for Clean Ganga
NMSHE	:	National Mission for Sustainable Himalayan Ecosystem
NP	:	National Project
NPP	:	National Perspective Plan
NPMU	:	National Project Monitoring Unit
NRCD	:	National River Conservation Directorate
NRCP	:	National River Conservation Plan
NRIs	:	Non Resident Indians (NRIs),
NWDA	:	National Water Development Agency
NWIC	:	National Water informatics Centre
NWM	:	National Water Mission
NWMP	:	National Water Quality Monitoring Programme
OFD	:	On-Farm Development
ODF	:	Open Defecation Free
O&M	:	Operation and Maintenance
PCCs	:	Pollution Control Committee
PDMC	:	Per Drop More Crop
PIM	:	Participatory Irrigation Management
PIO	:	Persons of Indian Origin
PIP	:	Public Interaction Programmes
PL	:	Price List
PMKSY	:	Pradhan Mantri Krishi Sinchayee Yojana
PMO	:	Prime Minister Office
PPP	:	Public-Private Partnership
PSU	:	Public Sector Undertakings
PWD	:	Public Works Department
RBC	:	Right Bank Canal
RBM	:	River Basin Management
RE	:	Revised Estimate
RISAT	:	Radar Imaging Satellite
RMBA	:	River Management Activities & Works related to Border Areas
RMIS	:	Rationalization of Minor Irrigation Statistics
RRR	:	Repair, Renovation and Restoration
R&D	:	Research and Development
RTDAS	:	Real Time Data Acquisition System
SAR	:	Synthetic Aperture Radar

SCADA	:	Supervisory Control and Data Acquisition
SFC	:	Standing Finance Committee
SNA	:	Single Nodal Account
SMI	:	Surface Minor Irrigation
SPCBs	:	State Pollution Control Boards
SPMU	:	State Project Monitoring Unit
STPs	:	Sewage Treatment Plants
SWM	:	Solid Waste Management
TAMC	:	Technical Assistance and Management Consultancy
TC	:	Technical Committee / Total Coliform
TDS	:	Total Dissolved Solids
TPGVA	:	Third Party Government Verification Agency
UGPL	:	Underground Pipeline
ULBs	:	Urban Local Bodies
UTs	:	Union Territories
UYRB	:	Upper Yamuna River Board
WSPs	:	Water Security Plans
World Bank	:	World Bank
WRD	:	Water Resources Department
WQ	:	Water Quality Stations
WUAs	:	Water User Associations

## REPORT

### PART - I

#### NARRATION ANALYSIS

Water is essential for sustenance of life and sustainable development. India has 18 percent of the world's population and against this only have 4 percent water resources. Constant challenge to water in terms of spatial and temporal variability, climate change impact, urbanisation, industrialisation, overexploitation of groundwater are some of the serious concerns in water sector for the country. Therefore, managing water resources in an efficient manner is of great importance for ensuring water security, environmental sustenance and sustainable economic development.

1.2 The Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR) comes under the jurisdiction of the Ministry of Jal Shakti and is mainly responsible for laying down policy guidelines and programmes for the development, conservation and management of water as a national resource. It is also responsible for an overall national perspective of water planning and coordination in relation to diverse uses of water; water laws and legislations; addressing inter-State and trans-boundary water issues; bilateral and multi-lateral cooperation; and general policy guidelines and programmes for assessment, development and regulation of the country's water resources. The Department is also responsible for water quality assessment; rejuvenation of River Ganga and its tributaries and also conservation and abatement of pollution in other rivers. It is also allocated the subjects pertaining to regulation and development of inter-State rivers; implementation of awards of Tribunals; technical guidance, scrutiny, clearance and monitoring of irrigation, flood control and multi-purpose projects; ground water management; flood proofing; water logging; sea erosion and dam safety.

#### **Salient features of the Union Budget (2026-27) with regard to Water Resources Sector**

1.3 On being asked about the salient features of the Union Budget (2026-27) with regard to Water Resources Sector, the Department, in their written reply stated as under:-

*Budget Estimate (Net) for Financial Year 2025-26 was Rs. 25,276.83 crore and the Budget Estimate (Net) for the FY 2026-27 is Rs. 19,912.98 crore, a dip of Rs. 5363.85 crore from BE 2025-26.*

*(i) Under Central Sector Schemes, funds of Rs. 4,749.51 crore are proposed for BE 2026-27, which is nearly Rs 1,448.58 crores less than BE allocation for FY 2025-26 i.e. Rs. 6198.09crore.*

- (ii) Being the final year of the scheme, under the ATAL JAL only Rs. 0.13 Cr. (Token) is proposed against BE allocation of Rs. 1780.40 Cr.
- (iii) Similarly, under Centrally Sponsored Schemes, against BE allocation of Rs.17643.94. Crore during 2025-26, funds of Rs.13790.46 crore is allocated for BE 2026-27, which is a decrease of Rs. 3853.48 crore against BE allocation of 2025-26.
- (iv) The proposed allocation under Polavaram Irrigation Project for the financial year 2026-27 is Rs. 3320.39 Cr against RE allocation for the FY 2025-26 of Rs. 5936.00 Cr, a decrease of Rs. 2615.61 Cr. The Polavaram Irrigation Project (phase-I) is expected to be completed during FY 2026-27.

### **Budgetary Allocations for FY 2026-27**

1.4 The Department has informed that the detailed Demands for Grants in Demand No. 62 of the DoWR, RD & GR were laid on the Table of Lok Sabha on 12 February, 2026. A total budgetary Provision of Rs.19912.98 crore has been made for the fiscal year 2026-27. The following table shows the total allocation of Budget for the DoWR, RD & GR for the year 2026-27:-

#### **Total Budgetary Allocations (2026-27)**

(Rs. in crore)

Revenue	19441.38
Capital	471.60
<b>Total</b>	<b>19912.98</b>

1.5 As per the information furnished by the Department, the following table shows the comparative analysis of the Demands for Grants (BE) for fiscal year 2026-27 vis-a-vis 2025-26:-

(Rs. in crore)

Year	Revenue (BE)	Capital (BE)	Total
2025-26	24720.49	556.34	25276.83
2026-27	19441.38	471.60	19912.98

1.6 Further, the Department in a written reply informed the Committee that it sought Rs. 21857.55 crore for FY 2026-27, and has been allocated Rs. 19912.98.83 crore.

### **Comparative Statement of Budgetary Allocation of the Department of Water Resources River Development and Ganga Rejuvenation for the fiscal year 2026-27 vis-a-vis 2025-26**

(Rs. in crore)

Sl. No.	Item(s)	2025-26		2026-27	% increase/decrease in 2026-27 (BE) over 2025-26 (BE)
		BE	RE	BE	
1.	Establishment Expenditure of the DoWR, RD & GR	1434.80	1309.21	1373.01	(-4.30 %)
<b>Central Sector Schemes/Projects</b>					
2.	Farakka Barrage Project	69.00	82.00	81.00	17.39 %
3.	Dam Rehabilitation and Improvement Programme (DRIP)	50.30	41.71	66.90	33.00 %
4.	National Ganga Plan (Namami Gange Mission-II)	3400.00	2687.00	3100.00	(-8.82 %)
5.	River Basin Management	243.00	168.05	205.00	(-15.63 %)
6.	Development of Water Resources Information System	63.39	200.00	228.00	259.67 %
7.	Ground Water Management and Regulation	509.00	425.00	425.00	(-16.50 %)
8.	National Hydrology Project	13.00	13.00	400.00	@
9.	Research & Development and National Water Mission	70.00	120.61	243.48	247.82 %
10.	Atal Bhujal Yojana (Atal Jal)	1780.40	613.00	0.13	@@
<b>Centrally Sponsored Schemes</b>					
11.	PMKSY - Har Khet Ko Pani	4909.85	4521.60	4292.85	(-12.56 %)
12.	PMKSY-Command Area Development and Water Management (CADWM)	850.00	150.00	45.00	#
13.	PMKSY- Accelerated Irrigation Benefit Programme and National / Special Projects (AIBP)	2500.00	1700.00	2250.00	(-10.00 %)
14.	PMKSY- M-CADWM	00	550.00	550.00	#
15.	Polavaram Irrigation Project	5936.00	3017.20	3320.39	(-44.06 %)
16.	Flood Management and Border Areas Programme (FMBAP)	450.00	448.46	797.00	77.11 %
17.	Irrigation Census	40.00	35.00	80.00	100.00 %
18.	Special Package for Maharashtra	00	00	00	##
19.	National River Conservation Plan – Other Basins	558.09	515.61	550.00	(-1.44 %)
20.	Interlinking of Rivers	2400.00	1808.29	1906.07	(-20.58 %)
	<b>Total Budget</b>	<b>25276.83</b>	<b>18405.74</b>	<b>19912.98</b>	<b>(-21.22 %)</b>

@The first phase of NHP Scheme has completed on 30.09.2025 and initial allocation for the next phase of the Scheme has been made in FY 2026-27 at BE level.

@@Scheme has been discontinued w.e.f.15.10.2025.

#A pilot project namely MCADWM Scheme has been launched which seeks to transform the existing CADWM Scheme.

## No fund has been allocated to the Scheme.

## **Utilization of Budgetary Allocations of the Department**

1.7 Regarding the budgetary allocations and expenditure of the Department of Water Resources, River Development and Ganga Rejuvenation for the last few years, the Department submitted the following information:-

### **DoWR, RD & GR - Allocation and Expenditure**

(Rs. in crore)

<b>Year</b>	<b>BE</b>	<b>RE</b>	<b>Actual</b>
2022-23	18967.88	14000.00	11962.08
2023-24	20054.67	19516.92	19081.62
2024-25	21323.10	21640.88	20866.65
2025-26	25276.83	18405.74	8597.22*
2026-27	19912.98		

\* till 31 December, 2025

1.8 When asked about to enumerate the reasons for more than 20 percent reduction in the budgetary allocation for FY 2026-27 vis-a-vis FY 2025-26 and whether the same would be adequate for meeting the mandate of the Department for carrying out its schemes/ programmes and will not affect their progress adversely, the Department replied as under:-

*“Considering proposals received from stakeholders i.e. States and trend of expenditure of previous year, Budget allocated for the year FY 2026-27 seems to be adequate to meet the requirement of this Department. Any additional requirement that may arise during FY 2026-27 will be taken up with Ministry of Finance, requesting them to allocate additional funds at RE Stage.*

1.9 The budgetary allocations of Rs.18405.74 crore has been allocated to the Department at RE stage for FY 2025-26, however, actual expenditure till 31 December, 2025 was of just Rs.8597.22 crore. When being asked about the reasons for such a meager utilization in three quarters of FY 2025-26, the Department replied as under:-

*“Based on the Demands from State governments and various implementing agencies who are implementing Schemes of this Department, Revised Estimates 2025-26 has been finalized and RE allocation of Rs. 18405.74 Cr. seems to be adequate. Generally, the expenditure of this department picks up from the month of November onwards i.e. after Monsoon. It is expected that this department will be able to spend the allocated RE for the FY 2025-26.*

1.10 Further, when being asked about the possibility of full utilization of the remaining allocated fund i.e. Rs.9,808.52 (which is almost more than 50% of the RE allocation of Rs.18405.74) in the last quarter of FY 2025-26 and to provide details of estimated

expenditure to be incurred in the last quarter of the FY 2025-26, the Department stated as under:-

*“The Expenditure till 9<sup>th</sup> February, 2026 is Rs. 10285.01 Crore. Generally, the expenditure of this department picks up from the month of November onwards i.e. after Monsoon. It is expected that this department will be able to spend the allocated RE for the FY 2025-26. Proposals worth approx. Rs 5000 Cr. are currently under active consideration for release, one of the major releases is Rs. 3017.20 to the Government of Andhra Pradesh for implementation of Polavaram Irrigation Project. During the current financial year, it has been made mandatory to release fund under Centrally Sponsored Scheme (CSS) through SNA Sparsh. As required Mother Sanctions have been issued under Centrally Sponsored Scheme.”*

### **Implementation of Schemes/Programmes**

1.11 When asked to furnish the details of the Schemes/Projects where allocation have been increased by more than 20% for FY 2026-27 viz.-a-viz. FY 2025-26 along with the reasons for such increase, the Department furnished the details as under:-

(Rs in crore)

<b>S. No</b>	<b>Name of the Scheme</b>	<b>BE 2025-26</b>	<b>BE 2026-27</b>	<b>% increase</b>	<b>Reasons</b>
1.	<i>Dam Rehabilitation and Improvement Project (DRIP)</i>	50.30	66.90	33%	<i>The reasons for enhanced projection are due to increased demand of Bhakra Beas Management Board (BBMB) and Damodar Valley Corporation (DVC) under Loans and Advances on account of planned physical rehabilitation works of selected dams. The fund for these two central agencies is being routed through central component of DRIP.</i>
2.	<i>Development of Water Resources Information System (DWRIS)</i>	63.39	228.00	259.68%	<i>BE for FY 2025-26 amounting to Rs. 63.39Cr was allocated in month of April,2025, which was quite less in comparison to the requirements of the Department. Subsequently, additional funds of Rs. 136.61 crore were allocated in October 2025. The Total allocated funds were of Rs.</i>

					200.00 Cr in FY 2025-26. Considering actual expenditure of previous year BE 2026-27 proposed under DWRIS scheme is Rs. 228.00 Cr.
3.	National Hydrology Project (NHP)	13.00	400.00	2976.92 %	<p>The National Hydrology Project (NHP) concluded on 30th September 2025. During FY 2025–26, as per the directions of the Department of Expenditure (DoE) vide OM dated 15.03.2023, no Grant-in-Aid was to be released to any Implementing Agencies (IAs) under NHP. Accordingly, only minimal budgetary provision amounting to INR 13 crore was kept under BE 2025–26 to meet essential expenditures related to the functioning of the National Project Monitoring Unit (NPMU), Technical and Management Consultancy (TAMC), and other regular office and establishment expenses.</p> <p>Subsequently, the Department of Economic Affairs (DEA), in its 158th Screening Committee Meeting held on 29th August 2025, considered the proposal for the next phase of the project, namely w-AMRITAM, with a total proposed outlay of INR 6,180 crore. The proposal has been posed to the World Bank for loan assistance of USD 372.1098 million (INR 3,090 crore).</p> <p>In anticipation of commencement of the w-AMRITAM project during FY 2026–27 and the requirement to release Grant-in-Aid to all Implementing Agencies under the new phase, a provision of INR 400 crore has been kept in BE 2026–27.</p> <p>Thus, the increase in allocation in FY 2026–27 over FY 2025–26 is primarily attributable to the transition from a closure phase of NHP with restricted expenditure</p>

					and no Grant-in-Aid releases to the anticipated operationalization of the next phase (w-AMRITAM), which necessitates substantial budgetary support for project implementation and fund disbursement to participating States and Central agencies.
4.	National Water Mission (NWM)	27.50	169.00	514.55%	The R&D Division and National Water Mission (NWM) are implementing the scheme titled 'Research and Development Programme in Water Sector and Implementation of National Water Mission'. The proposal for continuation of the scheme during the 16th Finance Commission cycle (2026–2031) with new component is under consideration. The enhanced allocation has been made keeping in view the expanded scope and scaling up of NWM initiatives.
5.	Research & Development (R&D)	42.50	74.48	75.25%	The enhancement in provision is aimed to provide financial support to innovators including startups, MSMEs, academic researchers, R&D institutions under Bharat-Water Innovation Network (Bharat WIN).
6.	Flood Management and Border Areas Programme (FMBAP)	450.00	797.00	77.11%	The increase in Budget Estimate (BE) for 2026–27 in respect of the Flood Management and Border Areas Programme (FMBAP) Scheme, as compared to BE 2025–26, is primarily on account of:- Ongoing committed liabilities of approved projects; <ul style="list-style-type: none"> <li>• Inclusion of new eligible flood management and border area protection projects; and</li> <li>• Anticipated pace of implementation during the extended scheme period.</li> </ul>

7.	Irrigation Census	40.00	80.00	100%	<p>The fieldwork for the 7th Minor Irrigation (MI) Census and the 2nd Census of Water Bodies, along with two new censuses, namely the 1st Census of Major and Medium Irrigation Projects and the 1st Census of Springs, is currently operational on the ground.</p> <p>Thus, major component of expenditure under this scheme, the honorarium payment, is expected to increase in FY 2026–27. As per the guidelines, funds for the 7th MI Census and the 2nd Census of Water Bodies are to be released in four installments of 25% each. The new Spring Census is being implemented on a completely reimbursement basis, and the demand for funds will be raised by the States/UTs in FY 2026–27 after completion of fieldwork. Hence, higher allocation is proposed.</p>
----	-------------------	-------	-------	------	---

1.12 On being asked to furnish details of the Schemes where allocations have been reduced by more than 20% for FY 2026-27 viz.-a-viz., FY 2025-26 along with the reasons for such decrease, the Department provided the details as under:

(Rs in crore)

S. No.	Name of the Scheme	BE allocation 2025-26	BE allocation 2026-27	% decrease	Reasons
1.	Atal Bhujal Yojana	1780.40	0.13	99.99%	As the Atal Bhujal Yojana has been closed w.e.f. 15.10.2025 and is working under the six-month payment window for completing closure activities under the Scheme, therefore, only Rs.13 lakhs have been kept in BE 2026-27 against Rs.613 cr. in RE 2025-26.

2.	Polavaram Irrigation Project (PIP)	5936.00	3320.39	44.06%	The projection commensurate with the progress of the work and releases already made to the Government of Andhra Pradesh.
3.	Interlinking of Rivers (ILR)	2400.00	1906.07	20.58%	The reduction in allocation for FY 2026-27, is in line with the actual progress of works.

1.13 On being asked to furnish details of new Programmes /Schemes that were launched by the Ministry during the financial year 2025-26 along with the details of total outlays made (both at BE and RE stage) and utilization thereof, the Department stated as follows:-

*“The Union Cabinet chaired by the Prime Minister Shri Narendra Modi today approved the Modernization of Command Area Development and Water Management (M-CADWM) as a sub-scheme of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) for the period 2025-2026 with an initial total outlay of Rs.1600 crore.*

*The scheme aims for modernization of the irrigation water supply network to supply of irrigation water from existing canals or other sources in a designated cluster. It will make robust backend infrastructure for micro-irrigation by farmers from established source to the Farm gate up to 1 Ha with underground pressurized piped irrigation. The use of (Supervisory Control and Data Acquisition) SCADA, Internet of things technology will be used for water accounting and water management. This will increase the Water Use Efficiency (WUE) at the farm level, increase agriculture production & productivity; and thereby increase the income of farmers.*

*The projects will be made sustainable by Irrigation Management Transfer (IMT) to the Water User Society (WUS) for management of irrigation assets. The Water User Societies will be given handholding support for linking them with existing Economic Entities like Farmer Producer Organization (FPO) or Primary Agricultural Credit Society (PACS) for five years. The youth will also be attracted to farming, to adopt the modern method of irrigation. The proposed outlay is as under: -*

*(Rs. In crore/In Net)*

<b>Name of the Scheme</b>	<b>BE 2025-26</b>	<b>RE 2025-26</b>	<b>Expenditure as on 09.02.2026</b>
<b>M-CADWM</b>	0.00	550.00	46.02

1.14 Regarding the details of existing/continuing Schemes/Programmes that were completed during the financial year 2025-26 along with total outlays made (both at BE and RE stage) and utilization thereof, the Department furnished as under:-

(Rs. In crore/In Net)

<b>Name of the Scheme</b>	<b>BE 2025-26</b>	<b>RE 2025-26</b>	<b>Expenditure as on 09.02.2026</b>
<b>ATAL Bhujal Yojana</b>	1780.40	613.00	579.95

### **Ground Water Contamination**

1.15 When being asked to provide a detailed note on Ground Water Contamination in India, its sources for contamination, and corrective measures taken /are being taken in this regard, the Department sated as under:-

*“Ground water quality monitoring is conducted by the respective State Governments and the Central Ground Water Board (CGWB) under the Ministry of Jal Shakti on a regular basis. CGWB, at its level, conducts ground water quality monitoring through its network of around 17,000 monitoring stations spread throughout the country. **The data so generated indicates that ground water in India largely remains potable.** However, occurrences of a few contaminants beyond permissible limits are reported in isolated pockets of some States and UTs. Reported contamination is both due to natural geogenic factors as wells anthropogenic causes like rapid industrialization, urbanization, agricultural intensification etc.*

*Ground water contamination may occur through industrial activities and release of effluents, runoff generated from agriculture, especially from intensive farming methods using high number of chemical fertilizers and pesticides, issues with urban sewage and solid waste management, mining activities, geogenic contamination and over-exploitation of ground water.*

*With regard to remedial measures, it is submitted that despite Water being a state subject, this Ministry and other central government agencies have taken several significant steps in the direction of prevention of ground water prevention and ensuring its sustainability. Some of the important ones are provided below:*

- *The ground water quality data generated by CGWB is regularly disseminated through Annual Reports, Half-yearly Bulletins and Fortnightly Alerts for quick action by the stakeholders.*
- *While taking up aquifer mapping studies under National Aquifer Mapping & Management Programme (NAQUIM), CGWB is paying special attention to*

*ground water quality affected areas and proposing suitable management plans for checking contamination and aquifer remediation.*

- *CGWB has also developed techniques for constructing Arsenic and Fluoride safe wells and apart from taking up demonstrative construction of such wells in affected areas, is also providing technical assistance to state departments for taking up similar constructions.*
- *Government of India, in partnership with States, is implementing Jal Jeevan Mission (JJM) since August, 2019 to provide potable tap water supply of prescribed quality and on regular & long-term basis to every rural household in the country. Under JJM, while planning water supply schemes to provide tap water supply to house-holds, priority is given to quality-affected habitations. While allocating the funds to States/ UTs in a particular financial year, 10% weightage is given to the population residing in habitations affected by chemical contaminants.*
- *Improvement in ground water quality can also be achieved to some extent by taking up artificial recharge of aquifers, which helps mitigating the contamination, if present. Accordingly, Ministry of Jal Shakti and other central ministries are implementing several programmes towards this end like the annual Jal Shakti Abhiyan campaign, Jal Sanchay Jan Bhagidari (JSJB) initiative, Atal Bhujal Yojana, PMKSY and MGNREGS schemes etc.*
- *The ground water pollution also owes its origin to contamination of surface water sources for which various efforts have been made in the country like installing Sewage Treatment Plants, Effluent Treatment Plants, Intervention & Diversion and better system of sewage networks etc. Under National Mission for Clean Ganga (NMCG) and National River Conservation Plan (NRCP) supported the States/UTs government has initiated above several steps for improving the water quality of rivers in the country.*
- *The Government is taking several measures to promote sustainable agriculture in the country with a vision to discourage excessive use of chemical fertilizers and promote organic agricultural practices like implementing Soil Health Management & Soil Health Card Schemes, promoting Natural Farming through Bharatiya Prakritik Krishi Paddhati (BPKP) programme under Paramparagat Krishi Vikas Yojana (PKVY) etc.”*

1.16 Further, regarding the present legal framework available for regulation of ground water contamination and government bodies responsible for its implementation in the country, the Department stated as under:-

*“Water is a ‘State subject’ in the constitutional scheme of things and putting in place a suitable statutory and administrative mechanism for addressing ground water related issues, including the depletion and contamination aspects, is mainly*

*the responsibility of the State governments. However, the Union government has established the Central Pollution Control Board (CPCB) under the M/o Environment, Forests & Climate Change and one of the main functions of CPCB is to prevent contamination of water and to promote cleanliness of water bodies as given under the provisions of Water (Prevention and Control of Pollution) Act, 1974. The said Act has been adopted by states who have set up their respective State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs).*

*CPCB under National Water Quality Monitoring Programme (NWMP) monitors water quality of aquatic resources in the country including ground water at various locations in the country. Based on the observations, CPCB provides necessary directions to the concerned SPCB/PCC for taking remedial action.*

*Further, Ministry of Jal Shakti had drafted a Model 'Groundwater (Regulation and Control of Development and Management) Bill' 2005, providing a regulatory framework to curb indiscriminate extraction of ground water while also making provisions for rain water harvesting and artificial recharge. The Model Bill has been circulated to States and so far 21 States/UTs have adopted it.*

*Moreover, the Central Ground Water Authority (CGWA) has been constituted under the M/o Jal Shakti under section 3(3) of the Environment (Protection) Act, 1986 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. Further, 17 States/UTs have put in place their own regulatory mechanism for regulating ground water abstraction cum usage in their respective jurisdiction.*

*At the state level apart from SPCBs and State Ground Water Authorities, several other departments like Public Health & Engineering, Panchayati Raj, Water Resources, Irrigation etc. are working whose mandate touches upon improving the ground water quality and availability in their respective jurisdiction."*

1.17 As per the recent Annual Report of the Central Ground Water Board (CGWB), heavy metal contamination including uranium, lead and nitrate has been detected in Delhi's groundwater and the same is posing serious health risks for people depending on it. In this regard, when being asked to furnish the primary reasons including the time-period required to reach the threshold limit for heavy metal contamination of ground water as well as details and present position of all the States/ UTs including the States of Punjab and Bihar on the findings of CGWB on ground water contamination and corrective measures taken /are being taken, the Department stated as under:-

*“Groundwater quality monitoring is carried out by the Central Ground Water Board (CGWB) across the country, including the NCT of Delhi and the States of Punjab and Bihar. Exceedances of certain water quality parameters beyond the permissible limits prescribed for drinking water have been observed at some locations. The State/UT-wise status of groundwater contamination, including the NCT of Delhi and the States of Punjab and Bihar, as per the Annual Ground Water Quality Report – 2025, is presented in **Annexure-I**.*

*Groundwater contamination by heavy metals is generally location-specific and depends on local hydrogeological conditions and source pressures. Therefore, exceedance at a monitoring location does not imply uniform contamination across the entire area.*

*Higher exceedances of contaminants are primarily due to SOP-based targeted sampling at trend and hotspot stations. These results should not be construed as a state-wide average, as the monitoring network intentionally includes vulnerable pockets to track persistence, spread, and seasonal behaviour.*

*Corrective steps being taken for mitigation of ground water contamination are already provided at para above.*

*Overall, integrated implementation of source protection, treatment technologies, regulatory enforcement, and community participation is essential to ensure safe and sustainable groundwater quality in affected regions.”*

1.18 Further, when being asked to provide information about the identification of factories / commercial activities including polluting industries responsible for contamination of ground water particularly in Delhi and NCR region, and preventive measures taken / are being taken in this regard, the Department furnished as under:-

*“The regulatory framework for identifying and managing industrial groundwater contamination in the country including Delhi-NCR is governed by the CPCB and SPCBs under the Water Act (1974) and Environment (Protection) Act (1986). Through a mandatory consent mechanism and the tracking of Grossly Polluting Industries (GPIs), authorities identify non-compliant units, subjecting them to legal inquiries and environmental penalties for unauthorized discharges.*

*Prevention is ensured through the mandatory installation of Effluent Treatment Plants (ETPs) and Common Effluent Treatment Plants (CETPs) for small-scale clusters. To provide real-time surveillance, high-risk industries must deploy Online Continuous Effluent Monitoring Systems (OCEMS), which allow regulators to detect and halt illegal effluent discharge before it leaches into the aquifer.*

*Additionally, the Central Ground Water Authority (CGWA) regulates physical extraction by way of issuance of No Objection Certificates (NOC). Conditions stipulated for grant of NOC mandate that the industries undertake well head protection measures and injecting effluents into aquifers is strictly prohibited. The NOC conditions also encourage industrial and infrastructure projects to take up water recycling/reuse treated water and construct rain water harvesting and artificial recharge structures, effectively protecting the integrity of the groundwater table from depletion and the resulting in migration of pollutants.”*

1.19 The Department also furnished details of ground water contamination observed during the monitoring conducted by CGWB (State/UTs wise) during the last 5 years which is enclosed at **Annexure-II**.

1.20 When being asked about the health implications / long term risks associated with use of contaminated ground water and study conducted, alongwith necessary preventive measures taken / are being taken, the Department informed as under:-

*“Use of Ground Water for drinking purpose having Arsenic, Fluoride, heavy metals etc. above the permissible limits over a prolonged period of time is known to cause several adverse health effects. As per the information provided by M/o Health & Family Welfare, 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. Similarly, various other contaminants are known to produce different kinds of adverse effects.*

*Apart from taking various remedial measures for prevention and mitigation of ground water contamination which are detailed above, this Ministry is implementing Jal Jeevan Mission: Har Ghar Jal Scheme, in partnership with States to ensure the provision of contamination free safe drinking water in adequate quantity to every rural household of the country. Under the Scheme, while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants. States/ UTs have also been advised to plan and implement piped water supply schemes of bulk water transfer based, preferably, on surface water sources or alternative safe ground water sources for the villages with water quality issue.*

*Additionally, several water quality safety measures including setting up of an extensive network of testing labs, distribution of Field-Testing Kits (FTKs), installation of community water purifier plants in affected habitations etc. have been taken up under JJM.*

*As a result of cumulative efforts of the government and other stakeholders in addressing water contamination issue, there has been a significant reduction in number of habitations affected by the two major contaminants viz. Arsenic &*

*Fluoride. As reported by the states, from August 2019 to January 2026, the number of Arsenic and Fluoride affected habitations in the country have declined from 14,020 to 314 and from 7,996 to 245 respectively. These remaining habitations have also been provided clean, & safe drinking water through Community Water Purifier Plants (CWPPs).*

1.21 When being asked about the present level of heavy metal contamination being detected in Ground water in the country, the Department replied as under:-

*“The Central Ground Water Board (CGWB) generates regional groundwater quality data through monitoring programs and scientific studies conducted according to approved Standard Operating Procedures (SOP). Overall data indicates that groundwater in the country remains largely potable despite localized contaminants in isolated pockets. While sampling and analysis of basic parameters like Electrical Conductivity (EC), Fluoride, and Nitrate are done regularly, trace parameter analysis is limited to select priority elements. Heavy metals such as Chromium, Mercury, and Cadmium are analysed based on requirement only.*

*As per the CGWB Annual Ground Water Quality Report 2025, the Board analysed groundwater samples from various States/UTs for heavy metals like Iron, Lead, Arsenic, Manganese etc.*

*State-wise distribution of major contaminants such as Arsenic, Fluoride, Nitrate and heavy metals, as per the Annual Ground Water Quality Report – 2025 can be viewed through the web link provided below:*

*<https://cgwb.gov.in/cgwbpnm/public/uploads/documents/1764833633531847433file.pdf>*

### **Interlinking of Rivers**

1.22 As per the information furnished by DoWR, RD & GR, National Water Development Agency (NWDA) has been entrusted with work of Interlinking of Rivers (ILR) under National Perspective Plan (NPP) formulated by the Government of India in year 1980. Under NPP, a total of 30 link projects have been identified (16 link projects under Peninsular Component and 14 link projects under Himalayan Component). The main purpose of interlinking of rivers is to envisage inter basin transfer of water from surplus basin to deficit ones and improve water availability in drought prone and rain-fed areas.

1.23 As per the information provided by the Department budget allocations under the Scheme during the last four years are as under:-

## Interlinking of Rivers - Allocation and Expenditure

(Rs. in crore)

Year	BE	RE	Actual
2023-24	3500.00	1400.09	1390.73
2024-25	4000.09	2000.00	1954.86
2025-26	2400.00	1808.29	453.16*
2026-27	1906.7		

\*Till 31.12.2025

1.24 The budgetary allocation for Interlinking of Rivers Scheme for FY 2025-26 was Rs. 2400 crore, which was reduced to Rs. 1808.29 crore at RE stage and till December, 2025 the actual expenditure was Rs.453.16. Further, in FY 2026-27, an amount of Rs,1906.70 has been allocated to the Scheme at BE stage. On being asked to furnish the reasons as to why the budget has been reduced to Rs.1808.29 crore (around -25%) at RE stage in FY 2025-26 for the Scheme, the Department stated as under:-

*“The allocation was revised to ₹1,808.29 crore at RE stage in line with the actual progress of works, particularly on State components and the Daudhan Dam, which did not advance as originally envisaged.”*

1.25 The budgetary allocations of Rs.1808.29 crore has been allocated to the Scheme at RE stage for FY 2025-26, however, actual expenditure till 31 December, 2025 was of just Rs.453.16 crore. On being asked to furnish reasons for such a meagre utilization in three quarters of FY 2025-26, the Department replied as under:-

*“Actual expenditure was limited to ₹453.16 crore due to:*

- *Delay in progress of Daudhan Dam works post-monsoon and emergence of issues relating to additional forest land, private land, and change of land use.*
- *Slow progress in State components, with works awarded but execution starting only after monsoon.*
- *Canal renovation in Uttar Pradesh progressing cautiously as water supply to command areas had to be maintained.*
- *Lower than expected progress in Madhya Pradesh components (Lower Orr, Kotha, and Bina complex).*

1.26 When being asked about the possibility of fully utilization of the remaining allocated fund to the scheme i.e. Rs.1355.13 (which is almost around 75% of the RE allocation of Rs.1808.29 crore) in the last quarter of FY 2025-26, the Department stated that it is anticipated that Rs. 1,245.7 crore will be utilized during FY 2025-26.

### Safety of Dams

1.27 Climate change is escalating flood severity year after year, causing damage to the existing and under-construction dam projects, particularly in the Himalayan region and is

emerging as a major threat about their long-term viability. In this regard, when being asked to provide details of dams/reservoirs, ongoing dam projects got affected/damaged/ partially damaged by major floods occurred due to landslides, cloudbursts or by any natural calamity in the country and report of the structural safety audit or vulnerability assessments of these dams in the last five years as well as remedial measures taken in this regard, the Department stated as under:-

*“The details of Dam incidents/ failure including the projects affected by major floods occurred due to landslides, cloudbursts or by any natural calamity in the country are attached as **Annexure-III**.”*

*As per Dam Safety Act, the definition of Dam failure and dam incident are stated below:*

*“**Dam failure**” means any failure of the structure or operation of a dam which leads to uncontrolled flow of impounded water resulting in downstream flooding, affecting the life and property of the people and the environment including flora, fauna and riverine ecology.*

*“**Dam incident**” means all such problems occurring to a dam that have not degraded into a dam failure, and includes—*

- (i) any structural damage to the dam and the appurtenant structure;*
- (ii) any unusual reading of any instrument in the dam;*
- (iii) any unusual seepage or leakage through the dam body;*
- (iv) any unusual change in the seepage or leakage regime;*
- (v) any boiling or artesian condition noticed below the dam;*
- (vi) any sudden stoppage or unusual reduction in seepage or leakage from the foundation or body of the dam or any of its galleries;*
- (vii) any malfunction or inappropriate operation of gates;*
- (viii) occurrence of flood, the peak of which exceeds the available flood discharge capacity of the dam or seventy per cent. of the approved design flood;*
- (ix) occurrence of flood, which resulted in encroachment on the available freeboard, or the approved design freeboard;*
- (x) any unusual erosion in the near vicinity up to five hundred meters downstream of the spillway or waste-weir; and*
- (xi) any other occurrence which a prudent dam engineer may relate to dam safety concerns;*

*Teesta-III HEP of Sikkim Urja Limited and Teesta-V HEP of NHPC limited located in Sikkim: These projects were severely affected by bursting of South Lhonak glacial Lake, situated in North West Sikkim, reportedly in the late hours of 03<sup>rd</sup> October, 2023 termed as Glacial Lake outburst Flood (GLOF), causing a flash flood in the Teesta River region. NDSA, as per clause (8) of Schedule II of the Dam Safety Act, 2021 constituted a committee to examine the effect of GLOF in Teesta River on the projects.*

*The Lutti Tank, a specified dam located in Balrampur District, Chhattisgarh, failed on 02.09.2025 due to heavy rainfall occurred in the catchment area, owing to the hilly terrain surrounding the dam, the inflow increased significantly when the reservoir was already approximately 0.45 meter above Full Reservoir Level (FRL). This condition likely led to overtopping and subsequent breaching of the dam. An Independent Expert Committee was constituted by the SCDS & Engineer-in-Chief, Water Resources Department, Chhattisgarh, in compliance with the instructions of the National Dam Safety Authority (E-mail dated 03.09.2025). The Committee has been mandated to examine the causes of the breach under the provisions of Sections 16 and 19 of the Dam Safety Act, 2021, and to provide recommendations for restoration measures.”*

1.28 In view of disastrous conditions, when being asked about the steps have been taken/ are being taken by the department to strengthen safety measures for protection of lives of masses residing near dams/ reservoirs, the Department stated as under:-

*“After the implementation of Dam Safety Act 2021, steps taken to strengthen safety measures to avoid floods and minimize losses are as follows:*

- A. As per section 31(1) of Dam Safety Act, 2021, every owner of a specified dam shall undertake every year, through their dam safety unit, a pre-monsoon and post-monsoon inspections in respect of each such dam. The specified dams have been assessed with respect to their present condition and observed deficiencies during the inspection. Accordingly, the dams have been classified into the following three categories:*

**Category-I** refer to Deficiencies in dams which, if left unattended, may lead to failure

**Category-II** refers to Major deficiencies requiring prompt remedial measures.

**Category-III** refers to None or minor remedial measures in dams which are rectifiable

*Based on these inspections, if any dam falls under category-I or category-II, it is mandatory to take necessary corrective actions urgently by the dam owners, so that any dam failure or dam incident could be avoided.*

*As per section 32 of Dam Safety Act, 2021, every owner of a specified dam shall have a minimum number of such instrumentations at each specified dam and installed in such manner as may be specified by the regulations for monitoring the performance of such dam. They monitor the structural soundness of foundations, abutments, and the dam body, including uplift pressures, stress, and strain allowing engineers to detect abnormal behavior (such as excessive seepage or deformation) and take preventive action before a catastrophic failure.*

- B. As per functions 28 of second schedule of National Dam safety Authority, “Early warning systems need to incorporate appropriate framework for the exchange of real time hydrological and meteorological data and information related to operation of reservoirs by the owner of a dam”. Dam owners were requested to*

*install early warning system in all the specified dams under their jurisdiction at the earliest. They were also requested to incorporate appropriate institutional arrangements for sharing of hydrological and meteorological data among concerned project authorities to enable them to mitigate flood incidents /disasters due to various reasons like GLOF, cloud burst, excess rainfall etc.*

*Dam owners were requested to follow all the protocols and precautions before releasing water from the dam like blowing hooter/ sirens, information dissemination to all downstream habitation and local administration etc.*

*In the Himalayan region, 46 dams were identified for likely to be affected by Glacial Lake Outburst Flood (GLOF) event. Out of 46, 40 dams have already been equipped with EWS.*

- C. As per Section 33, DSA 2021, “Every owner of a specified dam shall establish a hydro-meteorological station in the vicinity of each specified dam, capable of recording such data as may be specified by the regulations.” Dam owners were requested to establish a hydro-meteorological station in the vicinity of each specified dam.*
- D. As per Section 28, DSA 2021, “Every owner of the specified dam shall ensure that a well-documented Operation and Maintenance Manual is kept at each of the specified dams and are followed at all times”. An operation and maintenance (O&M) manual for dams in flood operations provides detailed Standard Operating Procedures (SOPs) for safe and effective dam management during flood events, ensuring proper water release to minimize downstream impact and extend the structure's life. All SDSO/SCDC/ Dam owners were already sensitized in this regard.*
- E. As per section 36 of Dam Safety Act, 2021, Every owner of a specified dam, in respect of each of specified dam, shall prepare emergency action plan within five years from the date of commencement of this Act and thereafter update such plans at regular intervals as may be specified by the regulations. An emergency action plan (EAP) for dams is a written document outlining procedures to be followed in the event of a dam failure or other emergency, to minimize loss of life and property damage. Key components include contact information for authorities, dam ownership details, vicinity maps, and inundation maps showing potential flood areas, Evacuation plan, Stakeholders participation through mock drills and information sharing for disaster preparedness. All SDSO/SCDC/ Dam owners were already sensitized in this regard.*

*The measures mentioned above being enforced such as Emergency Action Plans, early warning systems, hydro-meteorological stations, and safe reservoir operation protocols, contribute towards disaster preparedness and reduction of*

downstream flood risks, thereby complementing the broader objectives of resilience building in flood-prone areas.

*The National Dam Safety Authority (NDSA) has notified regulations pertaining to dam instrumentation, format for maintenance of a log book for database, Qualifications, experience and training of individuals responsible for safety of dams, Engineers to be employed for the purpose of investigation, design and construction of specified dams, Level of competent engineers for dam safety units, Updating emergency action plan, Review of design flood of existing specified dams, Inspection, Instrumentation, Seismic Data, Risk Assessment and Evaluation of Specified Dam, Independent Panel of Experts for Comprehensive Dam Safety Evaluation of each specified dam, Vulnerability and Hazard Classifications of Dams and quality control measures for the purpose of dam construction.*

*NDSA has also issued templates for preparation of Emergency Action Plan, template for Comprehensive Dam safety evaluation and Pre-filing Standard Operating Procedure (Sop) for the Initial filling of specified dams.*

*NDSA is maintaining DHARMA Portal for a national-level database of all specified dams in the country. The DHARMA Portal serves as a repository of both static and dynamic data pertaining to over 6,600 specified dams. Being a dynamic platform, the DHARMA Portal is continuously updated by both dam owners and NDSA.”*

1.29 Further, in view of the havoc caused by landslides and cloudbursts flood due to climate change when being asked about any future planning of the Central Government to review the structure of Dams particularly in the vulnerable zone in Himalayan region to make them more strengthened to confront such major calamities, the Department replied as under:-

*“Dam owners are being sensitized for deploying automated sensors, including inclinometers (slope movement), piezometers (pore water pressure), and rain gauges to provide early warnings of potential slope failures. In case any abnormal behavior (such as excessive seepage or deformation) is detected, preventive action can be taken by dam owners before a catastrophic failure.*

*In pursuance to Section 9(1), Section 9(3), Section 24(1), Section 29, Section 35(1 (e, f)), Section 36(4), Section 37, directions were issued to dam owners to effectively manage the flood related disaster and effective communication during the flood event with all the stakeholders to minimize the consequences and make community more disaster resilient.*

*Design flood review is critical for ensuring the safety, structural integrity, and economic viability of hydraulic infrastructure like dams, bridges, and flood defenses. The status of Revised Design inflow Flood is attached as **Annexure-IV**.*

*To minimize damages from floods in the upper Himalayan region, NHPC has developed a Central Control Room and Command Stations for Early Warning System (EWS) catering to hydropower projects of NHPC as well as of other entities. Further, 46 dams were identified for likely to be affected by Glacial Lake Outburst Flood (GLOF) event. Out of 46, 40 dams have already been equipped with EWS. The detailed status is at **Annexure-V.***

### **Water Management in Dams/ Reservoirs**

1.30 When asked about the bodies/ agencies responsible for water management in Dams/ Reservoirs including discharge of water particularly during monsoon/ rainy season in the country as well as present techniques/ systems in place for the purpose and whether the same are in sync with modern international norms, the Department in its written submission, stated as follows:-

*“Water management and discharge from dams and reservoirs, particularly during the monsoon season, are primarily carried out by the respective dam owners such as State Water/Irrigation Departments, hydropower utilities and project authorities. The Central Water Commission (CWC) provides inflow forecasts for 150 reservoirs for the purpose of reservoir operations. Reservoir releases are generally guided by approved rule curves. A rule curve is a pre-defined reservoir operation guideline that specifies the desirable water levels to be maintained in a dam during different periods of the year. NDSA as per Sections 35(e) & 35(f), read with the Second Schedule of the Dam Safety Act, 2021, has directed that all dam owners/operating agencies shall ensure strict and scrupulous adherence to the approved Reservoir Rule Curve while undertaking the operation of their respective dams over a year as well as special compliance and monitoring during the period of high flood spells.”*

1.31 On being asked about the present mechanism of coordination among the concerned bodies/ agencies for integrated operations for flood management while discharging water from Dams, the Department replied as under:-

*“During the monsoon season, CWC provides real-time flood forecasts and inflow forecasts and advisories, which are shared with State authorities for timely operational decisions. Reservoir operations are generally aligned with approved rule curves and established communication protocols.”*

1.32 When being asked about the report on the study conducted by the Indian Institute of Science Education and Research on siltation in dams which reduce their effectiveness in flood control and water storage capacity in the country as well as its recommendations, immediate attention and management interventions taken in this regard, the Department stated as follows:-

*“A preliminary assessment by Indian Institute of Science Education and Research (IISER) highlights that sedimentation (siltation) is a pervasive challenge across India's major reservoirs. This natural yet accelerated process leads to a gradual reduction in effective storage capacity, directly undermining the ability of dams to manage floods, provide irrigation, and support hydropower generation.*

*The analysis, which utilized data from the Central Water Commission (CWC), reveals significant storage losses across diverse geographical regions:*

- **Affected Regions:** *The Himalayan region, Indo-Gangetic Plains, Deccan Plateau, and both East-flowing and West-flowing peninsular river basins.*
- **Primary Impact:** *Substantial sedimentation has already reduced the "live storage" of several large reservoirs.*
- **Future Projections:** *Based on long-term average trends, progressive storage loss is expected to continue over the coming decades, potentially jeopardizing drinking water supplies and energy security.*

*The study employed an indicative vulnerability framework to categorize reservoirs based on their current storage health and sedimentation rates.*

- **High-Risk Areas:** *Reservoirs in the Himalayan and Indo-Gangetic regions are flagged as relatively more vulnerable due to high silt loads and hydro-climatic variability.*
- **Operational Risk:** *The loss of capacity reduces the "buffer" needed for flood moderation, making downstream areas more susceptible to sudden releases during heavy monsoons.*

*To address these challenges, the study and existing national/state policies emphasize a multi-pronged approach:*

- **Enhanced Monitoring:** *Conducting regular sedimentation surveys using both field-based measurements and advanced remote-sensing approaches.*
- **Site-Specific Modeling:** *Moving beyond aggregated data to detailed, modeling-based investigations for individual dams to prioritize interventions.*
- **Soil Conservation:** *Implementing slope stabilization and watershed treatment programs to stop silt at the source.*
- **Afforestation:** *Increasing green cover in catchment areas to reduce soil erosion.*
- **Physical Barriers:** *Constructing upstream check dams and silt-retention structures.*
- **Selective Desilting:** *Removing accumulated silt where technically and economically feasible.*
- **Operational Adjustments:** *Improving reservoir rule curves (operation practices) to better handle sediment throughput during high-flow seasons.”*

### **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)**

1.33 PMKSY was launched during 2015-16 by the Central Government with an overarching vision to ensure access to some means of protective irrigation for all agricultural farms in the country, thus bringing much desired rural prosperity.

**PMKSY components [Implementation by the DoWR, RD & GR, Ministry of Jal Shakti]**

- Accelerated Irrigation Benefits Programme (AIBP)
- Command Area Development and Water Management (CADWM) now M-CADWM
- Har Khet Ko Pani (HKKP)-Surface Minor Irrigation (SMI) & Repair, Renovation and Restoration (RRR) of Water Bodies

**Accelerated Irrigation Benefit Programme (AIBP) under PMKSY**

1.34 As per the information furnished by the Department, a large number of irrigation projects taken up under Accelerated Irrigation Benefits Programme (AIBP) after its launch in 1996-97 were Languishing due to inadequate provision of funds. Consequently, a large amount of funds spent on these projects were locked up, and the benefits envisaged could not be achieved. A committee Under the Chairmanship of Hon'ble Minister (WR), Chhattisgarh was constituted vide MoWR, RD&GR order dated 02.03.2016 to look into the issues related to the implementation of PMKSY. The committee, in consultation with States, identified ninety-nine (99) ongoing irrigation projects under AIBP for completion in phases up to December 2019. In January 2020, the Ministry of Finance conveyed the continuation of the ongoing centrally sponsored scheme up to 31.03.2021. Further, the Union Government approved continuation of PMKSY on 15.12.2021 for the period 2021-26 along with permission for inclusion of new major and medium projects under PMKSY-AIBP. Funding of Renuka ji and Lakhwar National Projects were also approved to be funded through PMKSY-AIBP.

1.35 As per the information provided by the Department budget allocations under AIBP Scheme during the last five years are as under:-

**AIBP – Allocation and Expenditure**

*(Rs. in crore)*

<b>Year</b>	<b>BE</b>	<b>RE</b>	<b>Actual</b>
2022-23	3237.69	1800.00	668.607
2023-24	3122.23	1500.00	1333.85
2024-25	2500.00	2040.00	1557.71
2025-26	2500.00	1700.00	883.12*
2026-27	2250.00		

\*Till 31.12.2025

1.36 The budgetary allocation for the AIBP Scheme for FY 2025-26 was Rs. 2500 crore, which was reduced to Rs.1700 crore at RE stage and till December, 2025 the actual expenditure was Rs.883.12. Further, in FY 2026-27, an amount of Rs.2250.00 has been allocated to the Scheme at BE stage. On being asked to furnish the reasons as to

why the budget has been reduced to Rs.1700 crore (more than -30%) at RE stage in FY 2025-26 for the Scheme, the Department stated as under:-

*“The budget for PMKSY AIBP has been reduced from Rs. 2500 Crore at BE stage to Rs. 1700 Crore at RE stage. The reasons for reduced allocations at RE stage during 2025-26 under PMKSY-AIBP scheme are as follows: -*

**No uptake of Central Assistance by newly included projects**

*A substantial allocation was expected to be utilised by the newly included projects Kosi-Mechi Project, Bihar (included in April'2025), Lower Tapi Project (included in August,2025) and Tapi Barrage Project, Surat (included in October'2025). Kosi-Mechi and Tapi Barrage have not been issued any mother sanction, whereas mother sanction issued against Lower Tapi Project is yet to start utilization.*

**Lower Allocations of State Share by the State Govts. In State Budgets**

*Being a centrally sponsored scheme with substantial state share requirements, the budget allocations for central assistance under PMKSY-AIBP is proposed on the basis of the budget allocated by the state Govts. for the projects based on realistic assessment of progress. Owing to budgetary constraints of state governments with limited resources, lower allocations were made by them in state budgets for projects under PMKSY- AIBP.*

**SNA SPARSH modalities**

*Against the RE of Rs. 1700 crore, re-imburement made is Rs. 192.98 crore, and mother sanction issued is Rs. 1507.02 crore. Hence, the whole budget allotted for PMKSY-AIBP in RE 2025-26, i.e. Rs. 1700 Crores has been locked up (mother sanction – 1507.02 Cr + reimbursement- Rs. 192.98 Cr= Rs. 1700 Cr). The expenditure against mother sanction of Rs. 1507.02 Cr issued to the state govt. is gathering pace and expected to be fully utilized.”*

1.37 The Department also furnished the list of projects under the AIBP Programme along with their present status in respect of physical viz-a-viz financial targets/achievements which is enclosed at **Annexure-VI**.

1.38 Further, when being asked to furnish the funding pattern and project cost for Parwan Multipurpose Project along with physical viz-a-viz financial progress of the project for the last five years as well as expected timeline for completion and the major challenges being faced in its execution, the Department replied as under:-

**Funding Pattern**

*Parwan Multipurpose Project was included Under PMKSY-AIBP in March, 2022 with balance cost of Amount Rs. 3554.25 Cr and central assistance of Rs. 733.86 Cr. **Physical and financial progress** of project after inclusion is below:*

<b>Year</b>	<b>CA released (Rs. in Cr)</b>	<b>Expenditure as per MIS data (Rs. in Cr)</b>	<b>IP creation (Th. ha)</b>
2021-22	41.43	768	0
2022-23	0.00	327	0
2023-24	154.88	690	0
2024-25	203.40	586	20.70
2025-26	45.10	127	-

As per MIS data entered by Government of Rajasthan, physical progress of the project is 92.52%.

**Expected timeline**, as informed by Government of Rajasthan, for completion of project is June, 2026.

#### **Major challenges**

The laying of DI and HDPE pipe line for pressurized irrigation system on the field was affected due to lesser working period available due to standing crops, despite provision of crop compensation for temporary acquisition. Heavy rainfall during current FY have also affected the progress of work.

1.39 As per the information furnished by the Department, the Narayanpur Left Bank Canal (NLBC) Automation System is a pioneering, large-scale Supervisory Control and Data Acquisition (SCADA) project in Karnataka, designed to automate water distribution from the Basava Sagar Reservoir (Narayanpur Dam) to farmers' fields. It is one of India's first fully automated canal irrigation system, aiming to improve water use efficiency by 25% in the drought-prone North Karnataka region. The project, which is part of the Pradhan Mantri Krishi Sinchai Yojana (PMKSY), has significantly increased agricultural yield and improved the livelihood of farmers in the region. In this regard, when being asked to provide its funding pattern, major takeaways/learning and its anticipated benefits/goals as well as whether Govt. of India/ Department is considering replicating the project in other parts of the Country, the Department replied as under:-

*“The Narayanpur Left Bank Canal (NLBC) in Karnataka is a pioneering irrigation modernisation initiative implemented under PMKSY-AIBP, as a ERM project. The project was included under AIBP during the Year 2014-15. The total Central Assistance (CA) released to the project is Rs.999.40 crores against the total AIBP cost of Rs.2405.84 crore. Modernization in a command of 1.05 lakh hectare has been undertaken under this project.*

*The project integrates Supervisory Control and Data Acquisition (SCADA) systems for real-time monitoring and automated regulation of canal gates, discharge and water levels across the canal network. The project aims to improve water use efficiency, ensure equitable distribution up to tail-end reaches, enable water accounting and reduce operational losses through digital control and*

*telemetry. Initial outcomes indicate better regulation of flows, reduced manual intervention, enhanced transparency and improved reliability of supply, particularly for tail-end farmers. The experience demonstrates that SCADA-based canal automation can significantly strengthen irrigation governance and operational efficiency. Given the emphasis on water use efficiency under PMKSY, similar technology-driven interventions are being encouraged in other major and medium irrigation projects.”*

### **Modernization of Command Area Development and Water Management (M-CADWM) under PMKSY**

1.40 In response to furnish information about M-CADWM Programme under PMKSY alongwith its funding pattern and any role of SCADA (Supervisory Control and Data Acquisition) system in implementation of the Programme in the country, the Department provided the same as per **Annexure-VII**.

1.41 When being asked about the total projects have been included in the said Programme for implementation across the country and what was the criteria / policy of their selection, the Department, in its written reply, stated as under:-

*“A total of 34 nos. of Clusters from 23 States/UTs have been included under the M-CADWM. As per the M-CADWM Guidelines/SoP, the State Department shall submit the Proposal Report (PR) to the Empowered Committee and the Committee will carry out selection of project area for the implementation of the scheme. Further, States/UTs presented their priorities before the Empowered Committee, which were then examined by the Department and 34 nos. of clusters were selected.”*

1.42 In response to the query as to whether local public representatives (MP/MLA) were included in the process for selection of projects under the scheme or Govt. of India may consider their inclusion in future as an important public stakeholder in the consultative process in the selection procedure of projects, the Department, in its written reply, stated as under:-

*“As per extant practice and procedures views and feedback of Hon'ble MPs are taken during the process of the Consultative Committee chaired by the Departmental Minister. These views are then deliberated and factored in the scheme guideline suitably.*

*Once the schemes guidelines are finalized the projects are selected based on financial space, technical criteria, feasibility, viability and prioritization of the States”*

1.43 In response to the query about study / research has been done regarding the best practices / initiatives adopted globally in the field of micro irrigation which resulted increase in irrigation potential by improving water use efficiency and If so, whether the Department would incorporate the same while implementing the Scheme in the country, the Department, responded as under:-

*“At present, no separate dedicated study has been undertaken by the Department exclusively for identifying global best practices in micro-irrigation under M-CADWM. However, the scheme incorporates established principles of water use efficiency, pressurized piped irrigation network and promotion of micro-irrigation. Based on the learnings, National Plan for Command Area Development and Water Management will be designed, including adoption of suitable best practices globally for improving irrigation potential and water use efficiency.”*

#### **Repair Renovation and Restoration (RRR) of Water Bodies under PMKSY (HKKP)**

1.44 As per the information provided by the Department the Repair, Renovation and Restoration (RRR) of Water Bodies component is being implemented under the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Har Khet Ko Pani (HKKP) by the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti. Since inception of the scheme (under PMKSY framework), a total of 3429 water bodies has been taken up for restoration across the country. State/UT-wise details of number of water bodies and irrigation potential restored are enclosed at **Annexure-VIII**.

1.45 In response to the query about funds allocated (State/UT wise) under the Scheme by the Centre in the last five years and along with targets and achievements (both physical and financial with percentage), the Department, in its written reply, stated as under:-

*“During the last five years, Central Assistance has been released to States/UTs under the RRR of Water Bodies component as per approved annual Budget Outlay and availability of funds. State wise details of fund allocation and CA released in last five years along with physical and financial achievements are given in **Annexure-IX**.*

1.46 Further, when being asked to provide details of requests received from States/UTs for inclusion of Water Bodies under RRR Scheme for their repair renovation and restoration along with their present status, the Department stated as under:-

*“Proposals for inclusion of water bodies under the RRR Scheme are submitted by the State Governments based on their priorities and available resources. After approval by the State Technical Advisory Committee (STAC) and sanction by the State Level Sanctioning Committee (SLSC), the proposals are considered for*

approval under PMKSY-HKPP by the Ministry, subject to the availability of funds and fulfilment of eligibility criteria as per the Scheme guidelines.

During the last five years, a total of 20 proposals for Repair, Renovation and Restoration (RRR) of Water Bodies (WBs), involving a Central Assistance (CA) liability of Rs. 1,762.84 crore, were received. Out of these, 11 projects with a CA liability of Rs. 1,018.58 crore have been approved under PMKSY-HKPP. The remaining 9 proposals, involving a CA liability of Rs. 744.26 crore, are pending for approval due to budgetary constraints.

The State/UT-wise details of the proposals received are enclosed at **Annexure-X.**

1.47 Regarding the role of CSR in the restoration, management and conservation of water bodies in the country and achievements made through CSR in the last five years along with their financial contributions, the Department stated that Corporate Social Responsibility (CSR) initiatives undertaken by Public Sector Undertakings and private entities have contributed to restoration and rejuvenation of water bodies in certain States. However, CSR interventions are not directly routed through the RRR Scheme of PMKSY. Data relating to CSR expenditure is maintained by the Ministry of Corporate Affairs and respective implementing agencies.

### **Ground Water Management & Regulation (GWM & R)**

1.48 Ground Water Management and Regulation (GWM&R) Scheme is a continuing Central Sector Scheme of Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti. The scheme has been approved for continuation for the period 2021-26. The components of the scheme include i) Component I: Monitoring, Assessment, Management and Regulation and ii) Component II: Strengthening of Infrastructure for Technological Upgradation (Machinery & Equipment). In addition to this a project named National Aquifer Mapping and Management (NAQUIM) has been approved by the PIB for implementation.

1.49 As per the information provided by the Department budget allocations under GWM &R Scheme during the last five years are as under:-

#### **GWM & R – Allocation and Expenditure**

(Rs. in crore)

<b>Year</b>	<b>BE</b>	<b>RE</b>	<b>Actual</b>
2021-22	275.00	170.00	168.99
2022-23	375.00	315.00	177.18
2023-24	330.00	280.00	202.33
2024-25	335.00	240.00	232.05

2025-26	509.00	425.00	168.16*
2026-27	425.00		

*\*Till 31.12.2025*

1.50 The budgetary allocation for FY 2025-26 was Rs.509 crore. However, the same has been reduced to Rs.425 crore at RE stage and against this the actual expenditure (till the last three quarters) is only Rs.168.16 crore which shows that around 60% allocation to the scheme is yet to be utilized within the last quarter of the said fiscal year. On being asked to provide reasons for such a meagre utilization in three quarters of FY 2025-26, the Department stated as under:-

*“The underutilization of allocated funds is primarily attributable to delays in the finalization and award of tenders for construction of piezometers and wells under the PIB-approved NAQUIM project. The works commenced during 2024–25 and are targeted for completion by March 2026.”*

1.51 In response to the query as to whether the Department would be able to fully utilize the remaining allocated fund to the scheme i.e. Rs.256.84 (which is almost around 60% of the RE allocation of Rs.425 crore) in the last quarter of FY 2025-26., the Department stated as under:-

*“Out of the targeted achievements, an amount of ₹32.33 crore is unlikely to be achieved due to the following reasons:*

- *Two contracts amounting to approximately ₹18 crore could not be awarded due to court case–related issues.*
- *Approval for issuance of Letters of Award (LoA) amounting to ₹14.33 crore for two packages in Kashmir and Ladakh is still awaited.*

*An expenditure of ₹188.48 crore has already been achieved as on 31st January 2026. In addition, ₹113 crore is in the pipeline and is expected to be utilized. The remaining expenditure is expected to be incurred by the end of the financial year.”*

1.52 Further, when being asked to furnish details of various Projects / Works undertaken (State/UT wise) along with targets and achievements (both physical and financial with percentage) made under the Scheme in the last five years, the Department furnished as under:-

***“Physical Progress- GWM&R***

*The progress of continuing activities of CGWB under GWM&R scheme, such as Ground water Exploration, Geophysical Survey, Water quality analysis and water level monitoring are provided below.*

**Progress of GWM&R activities from 2021-22 to 2025-2026 (as on 31<sup>st</sup> January 2026)**

S. No	State	Ground	Water	Geophysical Surveys		Water level
		Target	Achievement	Target	Achievement	National
1	Andaman and Nicobar			140	178	87
2	Andhra	190	262	830	935	1385
3	Arunachal	4	0	1088	928	31
4	Assam	85	70	1010	983	485
5	Bihar	61	49	230	143	756
6	Chandigarh	0	0			23
7	Chhattisgarh	200	198	968	1071	1251
8	Delhi	17	13	275	234	131
9	DND, DD & Diu	0	0			39
10	Goa	12	11	1121	1150	113
11	Gujarat	196	191	691	738	1196
12	Haryana	54	47	485	453	431
13	Himachal	74	67			143
14	Jammu &	95	75	325	285	236
15	Jharkhand	113	109	210	205	687
16	Karnataka	232	230	550	521	1843
17	Kerala	80	72	275	215	1111
18	Ladakh			61	64	0
19	Lakshadweep			50	62	0
20	Madhya	188	182	2411	2321	1814
21	Maharashtra	324	335	612	668	1987
22	Manipur	0	0	0	0	4
23	Meghalaya	14	9	10	11	72
24	Mizoram			0	1	8
25	Nagaland	11	13	1305	1354	73
26	Odisha	229	239	875	900	1202
27	Puducherry	0	0			23
28	Punjab	44	39	825	730	424
29	Rajasthan	227	228	696	764	2353
30	Sikkim			1070	981	4
31	Tamil Nadu	336	333	816	827	1501
32	Telangana	161	269	902	1012	1340
33	Tripura	0	0	1355	1367	96
34	Uttar Pradesh	246	235	322	312	1265
35	Uttarakhand	14	9	240	301	229
36	West Bengal	141	138	250	218	1855
	<b>Total</b>	<b>3348</b>	<b>3423</b>	<b>19998</b>	<b>19932</b>	<b>24198</b>

**Water Quality analysis**

Year-wise total number of samples analyzed by the CGWB laboratories are given below

S. No	Regional Offices	Total Number of Samples Analyzed					
		(2021-22)	(2022-23)	(2023-24)	(2024-25)	(2025-26)	(2021-26) (Total years) 5
1	NWHR, Jammu	1345	1632	2021	1257	1344	7599
2	NWR, Chandigarh	2345	4087	4491	6006	3232	20161
3	WR, Jaipur	3423	3822	2267	4000	5604	19116
4	WCR, Ahmadabad	2500	2747	3216	2589	3335	14387
5	NCR, Bhopal	3068	5097	5356	4360	6016	23897
6	NCCR, Raipur	2297	2400	3014	3326	2408	13445
7	CR, Nagpur	2881	4201	5599	5624	5195	23500
8	NR, Lucknow	2715	5412	9416	5980	4957	28480
9	MER, Patna	2637	2215	2287	1806	1380	10325
10	ER, Kolkata	2578	2879	4438	3999	3491	17385
11	NER, Guwahati	3525	4170	4105	5231	4682	21713
12	SER, Bhubaneswar	3058	2652	2136	3725	2945	14516
13	SR, Hyderabad	2186	4735	4731	7617	5123	24392
14	SWR, Bangalore	3625	3890	2856	4245	4620	19236
15	SECR, Chennai	2844	4630	4553	2474	3198	17699
16	KR, Trivandrum	1550	1314	2117	2457	2573	10011
	<b>Total</b>	<b>42577</b>	<b>55,883</b>	<b>62603</b>	<b>64,696</b>	<b>60103</b>	<b>285,862</b>

### **Physical Progress- NAQUIM-PIB**

Activities proposed under the PIB project are proposed as part of Ground Water Management and regulation Scheme for the period 2022-26. Major activities under this project include:

- i) Data Generation for Aquifer Mapping through construction of 1135 Wells,
- ii) Construction of 7000 Piezometers and installation of 7000 Digital Water Level Recorders with telemetry devices,
- iii) Heli-borne surveys for high resolution mapping in nearly 3 lakh sq km covering arid parts of North Western India (in parts of Rajasthan, Gujarat, Punjab, Haryana and Himachal Pradesh).

**i) Construction of EW/OW as on 31<sup>st</sup> January 2026**

Package No.	State	Target Wells			Achievement as on 31st January 2026		
		EW	OW	Total	EW	OW	Total
<b>I</b>	<b>Assam</b>	2	2	4	2	2	4
	<b>Bihar</b>	3	3	6	3	3	6
	<b>Odisha</b>	45	11	56	45	8	53
	<b>West Bengal</b>	72	24	96	72	23	95
<b>II</b>	<b>Andhra Pradesh</b>	80	19	99	80	19	99
	<b>Karnataka</b>	40	10	50	40	10	50
<b>IV</b>	<b>Rajasthan</b>	115	55	170	109	43	152
	<b>Gujarat</b>	108	27	135	108	27	135
<b>V</b>	<b>Uttar Pradesh</b>	78	78	156	78	78	156
<b>III</b>	<b>Madhya Pradesh</b>	17	7	24	17	7	24
	<b>Chhattisgarh</b>	50	14	64	50	14	64
<b>III-R</b>	<b>Madhya Pradesh</b>	135	31	166	108	26	134
<b>1R-C</b>	<b>West Bengal</b>	20	6	26	8	2	10
		<b>765</b>	<b>287</b>	<b>1052</b>	<b>720</b>	<b>262</b>	<b>982</b>

**ii) Construction of Piezometers (Pz) and installation of DWLRs as on 31<sup>st</sup> January 2026**

Sr. No.	Package No.	State	Construction of Pzs.		Installation of DWLR	
			Total Target	Achievement	Total Target	Achievement
1	1	Andhra Pradesh	223	223	223	172
		Telangana	187	187	187	168

		<i>Tamil Nadu</i>	303	303	303	255
		<i>Kerala</i>	55	50	55	20
2	2	<i>Gujarat</i>	117	117	117	105
		<i>Maharashtra</i>	894	878	894	517
3	5A	<i>Rajasthan</i>	365	365	365	275
4	5B	<i>Rajasthan</i>	440	440	440	250
5	5C	<i>Rajasthan</i>	703	702	703	559
6	6	<i>Uttar Pradesh</i>	467	426	467	235
		<i>Bihar</i>	75	65	75	46
		<i>Jharkhand</i>	85	68	85	50
		<i>West Bengal</i>	149	149	149	106
		<i>Odisha</i>	34	34	34	0
7	3A	<i>Madhya Pradesh</i>	715	320	715	0
8	3B	<i>Madhya Pradesh</i>	555	455	555	368
9	3C	<i>Madhya Pradesh</i>	130	99	130	73
10	3D	<i>Chhattisgarh</i>	212	212	212	212
11	8A	<i>Jammu</i>	73	36	0	0
12	8B	<i>Kashmir</i>	25	3	0	0
13	4	<i>Delhi</i>	109	0	109	0
		<i>Punjab</i>	305	130	305	0
		<i>Haryana</i>	276	179	276	0
		<i>Himachal</i>	205	75	205	0
		<i>Uttarakhand</i>	109	39	109	0
14	7A	<i>Assam</i>	15	13	0	0
		<i>Meghalaya</i>	5	0	0	0
		<i>Arunachal Pradesh</i>	4	0	0	0
			6835	5568	6713	3411

1.53 When being asked to provide the reasons with justifications as to why since last five years there has been recurrent underutilization of budget allocated to the Scheme however, the budget has always been kept enhanced at BE stage., the Department, in its written reply, stated as under:-

*“Underutilization of allocated funds was primarily due to delay in finalization and award of tenders for construction of piezometers and wells under the PIB approved NAQUIM project. The project envisages an annual expenditure of approximately ₹125 crore, and budget provisions were accordingly made at the BE stage each year in anticipation of commencement of PIB works. The PIB works commenced during 2024–25 and are targeted for completion by March 2026.*

*However, as of now tenders for 6835 piezometers, against a target of 7000, have already been awarded and implementation on ground has also started. As of 31<sup>st</sup> January 2026, a total of 5568 piezometers has already been constructed. Similarly, against a target of 1135 exploratory wells, contracts for 1026 wells have been awarded and 982 have already been constructed. In view of above, it is expected that the physical as well as financial targets will be achieved by the end of current F.Y.*

*Following steps have been taken to expedite implementation of the project:*

- 1. A National Project Management Unit (NPMU) has been constituted in CGWB headquarters and Regional Project Management Units (RPMU) have been constituted in the respective Region Offices of CGWB to oversee implementation;*
- 2. CGWB has collaborated with the States and State Governments have designated nodal officers, with help of whom site selection for construction of piezometers and exploratory wells are being expedited.*
- 3. For compilation of information, Young Professionals are being hired and*
- 4. Periodic monitoring through meetings and field visits are also being done at Region Office, CGWB headquarters as well as Ministry Level.”*

1.54 Further, during the oral evidence held on 18.02.2026, the representative of the Department of Water Resources, River Development and Ganga Rejuvenation, on the issue of depletion of groundwater, submitted before the Committee as follows:-

*“..... सर, यह बहुत महत्वपूर्ण मुद्दा है। हमारा जो टेक्निकल विंग सेन्ट्रल ग्राउण्ड वॉटर बोर्ड है, यह पूरे देश का सर्वे करता है, जैसे 7,000 ब्लॉक्स की सर्वे करता है। वह यह देखता है कि कहां पर जितना ग्राउण्ड वॉटर रिचार्ज हो रहा है, कहीं उससे ज्यादा तो लोग एक्सट्रैक्ट नहीं कर रहे हैं। ऐसा करने के बाद कुछ क्षेत्रों को हम चिह्नित करते हैं कि यहां स्थिति क्रीटिकल है और ओवर-एक्सप्लॉयटेड है। उन ओवर-एक्सप्लॉयटेड एरियाज़ में ग्राउण्ड वॉटर एक्सट्रैक्शन को कंट्रोल करते हैं। उसकी एक गाइडलाइंस बनी हुई है। हमने कई राज्यों को यह कहा है कि वे स्वयं ही उन गाइडलाइंस को संचालित कर सकते हैं.....”*

### **Flood Management and Border Areas Programme (FMBAP)**

1.55 As per the information provided by the Department executions of the flood management works under the FMBAP scheme are planned to protect towns, villages, industrial establishments, communication links & agricultural fields from floods and erosion. Further, the Programme comprises two key components including Flood Management Programme (FMP) Component and River Management and Border Areas (RMBA) Component. Under FMP component, the Government provides Grant-in-Aid to States/Union Territories for implementing structural measures aimed at flood management, anti-erosion, river management, and anti-sea erosion. Further, under RMBA component flood control and anti-erosion work on common border rivers with neighbouring countries, including hydrological observations and flood forecasting, and investigation & pre-construction activities of joint water resources projects (with neighbouring countries) on common border rivers are being taken up with 100% central assistance.

1.56 As per the information provided by the Department budget allocations under FMBAP since 2024-25, are as under:-

#### **FMBAP– Allocation and Expenditure**

(Rs. in crore)

<b>Year</b>	<b>BE</b>	<b>RE</b>	<b>Actual</b>
2024-25	449.57	400.00	387.52
2025-26	450.00	448.46	37.85*
2026-27	797.00		

\*Till 31.12.2025

1.57 The budgetary allocations of Rs.448.46 crore has been allocated to the Scheme at RE stage for FY 2025-26, however, actual expenditure till 31.12.2025 is only 37.85 crore. In this regard, on being asked to specify reasons for such a meagre utilization in three quarters of FY 2025-26, the Department stated as follows:-

*“In respect of flood management projects, the working season for execution of civil works is largely confined to the period from November to May, as construction activities are not feasible during the monsoon months. During this period, the implementing agencies focus primarily on execution of works at site.*

*After completion of the major portion of physical works, the project authorities take up activities such as measurement of works, preparation of bills, compilation and reconciliation of expenditure statements, and obtaining Audit Certificates from the State Governments. In addition, the requisite technical, administrative, and*

*financial approvals are also required before proposals for release of central assistance can be finalized. These processes are essential to ensure compliance with prescribed financial norms.*

*As this procedural, audit, and approval-related activities are undertaken after the working season, proposals for release of funds are generally finalized and submitted towards the later part of the financial year. Consequently, the release of funds is often realized in the far end of the financial year.*

*This fact is also highlighted from the expenditure figures for the FMBAP Scheme in the current FY. Whereas the expenditure till 31.12.2025 was only 37.85 Crore, the expenditure as on date i.e. 12.02.2025 is approximately Rs. 172 Crore.”*

1.58 Further, when required to specify the reasons for almost 77 percent hike in the budgetary allocation for the Programme for FY 2026-27 vis-à-vis FY 2025-26, the Department stated as under:-

*“The increase in Budget Estimate (BE) for 2026–27 in respect of the Flood Management and Border Areas Programme (FMBAP) Scheme, as compared to BE 2025–26, is primarily on account of committed liabilities towards State Government on the projects already approved during 15<sup>th</sup> Finance Commission and earlier and new inclusion which is proposed to be included in the 16<sup>th</sup> Finance Commission (2026-31).”*

1.59 In view of the increasing severity of floods and excessive land erosion due to climate change in the border-States of the country including States of Assam, Bihar and Uttar Pradesh, on being asked as to whether the Department has made any plan with using of new advanced AI technology to minimize the menace of recurring floods and erosion in the future, the Department replied as under:-

*“Flood management and anti-erosion schemes are formulated and implemented by the concerned State Governments as per their priorities. The Union Government supplements the efforts of the States by providing technical guidance and promotional financial assistance for management of floods in critical areas.*

*With regard to the use of advanced AI technology to address recurring floods and erosion, the Central Water Commission (CWC) has recently taken important initiatives in this direction. A Smart Water Resources Modelling Organisation (SWRMO) has been established in September 2024 under CWC as a Centre of Excellence (CoE) for Smart Water Resources Management. The objective of this CoE is to act as a pioneering hub for developing in-house expertise and innovation in tackling diverse problem statements in the water sector. One of its focus areas is “Flood forecasting with inundation modelling.”*

*The to strengthen effective water resource management, enabling increased resilience towards climate CoE provides guidance to various organisations of CWC engaged in modelling activities in respect of Terms of Reference (ToRs), choice of software, and other technical aspects. It also works on developing best practices and advanced technologies variability and change.*

*One of the key initiatives currently being undertaken by SWRMO-CoE and the Flood Management Organisation (FMO), CWC, is the in-house development of AI/ML-based short-range flood forecasting models for 200 Level Flood Forecasting Stations across the country. These models are presently under development and testing. At present, CWC is also identifying potentially flood-affected areas using remote sensing techniques. Development of AI/ML-based systems has commenced specifically for Level Flood Forecasting (Time Series Forecasting). However, AI/ML-based identification and prediction of potentially affected areas is not being undertaken at this stage. After successful development and validation of AI-based level flood forecasting models, CWC may explore AI/ML-based approaches for identifying and predicting potentially affected areas in the near future.*

*The development of these AI/ML models is currently being carried out in-house by CWC. SWRMO-CoE has submitted budgetary requirements under the DWRIS Scheme for the EFC period 2026–2031, which include provisions for hiring experts/consultants and establishing international collaborations with domain experts for further development and upscaling of AI-based systems. Presently, SWRMO-CoE operates on a High-Performance Computing (HPC) server for development of AI/ML-based Level Flood Forecasting models. CWC does not currently have a supercomputer.*

*In addition to technological development, CWC has established mechanisms to provide timely alerts and early warnings to residents of potentially affected areas. The in-house developed “**FloodWatch India**” Mobile Application, launched on 17th August 2023, provides short-range level forecasts and 7-day advance flood advisories at 200 Flood Forecast Stations, real-time flood situation at additional monitoring stations, and reservoir storage position of 150 major reservoirs. The application leverages satellite data analysis, mathematical modelling, and real-time monitoring. It provides bilingual (English/Hindi) alerts in readable and audio formats and is useful to disaster management authorities at central, state, district, and local levels as well as to the general public for taking preventive measures in time.”*

### **Development of Water Resources Information System (DWRIS)**

1.60 As per the information furnished by DoWR, RD & G-R, Development of Water Resources Information System (DWRIS) is a Central Sector Scheme of the Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR),

being implemented by Central Water Commission (CWC), is the pre-requisite for accurate assessment of the water resources for planning its optimal utilization for comprehensive and sustainable development and for settling inter-state water disputes, monitoring of river water quality to examine its suitability of drinking water, irrigation and environmental impacts, Flood forecasting in rivers for disaster management etc. Central Water Commission maintains about 1543 Hydro-meteorological stations across the country under DWRIS Scheme.

1.61 'Flood Forecasting' is an important component under DWRIS and the Department is carrying out certain important activities under the component. However, for the last five years, in regard to financial targets, it has been merged with another component 'Opening of Hydrological Observation (HO) sites and Repair & Maintenance (R&M) sites'. On being asked to explain the reasons for non-allocation of separate fund to 'Flood Forecasting' under DWRIS despite its immense importance in preventing losses caused due to enhanced and more regular incidents of severe floods on account of cloud outburst, heavy rains, glacier melting etc. the Department replied as under:-

*"Flood Forecasting activities are an integral part of Component No. 1 of the DWRIS Scheme, namely "Running & Maintenance of Hydrological Stations". During the last five years, a total allocation of ₹846.53 crore has been made under DWRIS, out of which ₹787.66 crore (93.04%) has been allocated to Component No. 1. This reflects that substantial financial provision under DWRIS is being made for activities relating to Flood Forecasting." (Annexure-XI)*

### **Atal Bhujal Yojna (ABY)**

1.62 Atal Bhujal Yojana (Atal Jal), a Central Sector Scheme with an objective to improve the groundwater management, was implemented as a pilot project across 8,203 priority water stressed Gram Panchayats of seven States viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh and as informed by the Department, owing to substantial achievement of the objects of the Atal Bhujal Yojana, the scheme has been closed with effect from 15.10.2025.

1.63 In this regard, as apprised by the Department earlier, more States including Andhra Pradesh, Bihar, Punjab, Tamil Nadu and Telangana have requested for extending the scheme to their States and the same were under consideration. On being asked about the present position in this matter, the Department stated as under:-

*"Pursuant to closure of the Atal Bhujal Yojana w.e.f. 15.10.2025, proposal for not extending Atal Jal (Phase II) in five states viz. Andhra Pradesh, Bihar, Punjab, Tamil Nadu and Telangana, is deliberated in Ministry."*

1.64 In view of the substantial achievement of Atal Bhujal Yojana in improving groundwater management and on the basis of the success of the pilot project, on being

asked about any proposal of the Ministry to launch the Scheme in a full-fledged manner to address the problem of water stressed areas in the country, the Department, in its written reply, stated as under:-

*“There is no such proposal under consideration in the NPMU, Atal Bhujal Yojana.”*

1.65 Further, since the Scheme has achieved its mandated target and hence closed, on being asked about the efforts being taken by the Department to sustain the achievements made in the targeted water stressed Gram Panchayats, the Department replied as under:-

*“Under the scheme, supply-side interventions in the form of various groundwater recharge structures have been constructed in the implementing Gram Panchayats. After closure of the scheme, these structures have been handed over by the State Program Management Units (SPMUs) to the concerned line-departments of the States for their operation and maintenance.*

*Similarly, more than 10 lakhs farmer beneficiaries adopted the demand-side interventions including the adoption of micro-irrigation methods and other water efficient techniques.*

*During the scheme period, equipment like rain gauges, water level sounders, water quality testing kits, digital water level recorders were also installed and distributed at Gram Panchayat for rainfall and groundwater monitoring for sustainable groundwater management. The Piezometers constructed during the scheme period, installed with DLWR have been handed over by the SPMU to the concerned departments of the States for further groundwater monitoring.*

*Besides, extensive IEC and capacity building activities were carried out in the implementing Gram Panchayats to create awareness and behavior change regarding water use.”*

1.66 In response to the query as to whether the Department has identified the factors for the worsening groundwater crisis including water-intensive cropping pattern, unregulated extraction and rapid urbanization and mitigation measures taken to address groundwater depletion through regulatory, technological and behavioral interventions, the Department replied as under:-

*“Water-intensive cropping pattern, unregulated extraction and rapid urbanization in general lead to worsening groundwater crisis. Several demand and supply-side interventions, along with extensive IEC and capacity building activities for behaviour change, have been taken up to address the groundwater stress in Gram Panchayats (GPs) covered under the Atal Bhujal Yojana:*

- (i) *More than 83,500 supply-side rainwater harvesting & conservation structures (like check dams, ponds, recharge shafts, etc.) were constructed/ renovated in the areas under the Atal Bhujal Yojana.*
- (ii) *Under the scheme, several demand side groundwater management activities (like sprinkler, drip, pipeline irrigation, shifting towards low water consuming crops, Direct seeded rice, mulching, laser land leveling, poly-house, shade-net, etc.) have been implemented by the States. This has resulted in adoption of around 9.71 lakh hectare area under efficient water use agriculture practices during the scheme period in areas covered under the Atal Bhujal Yojana.*
- (iii) *More than 1.28 lakh GP-level trainings conducted in which about 3.59 lakh persons trained, along with 95 state-level, 576 district-level, and 1,307 block-level training sessions. These trainings included topics like utilization of various groundwater/ rainfall monitoring equipment, preparation of water budgets & water security plans, various rainwater harvesting techniques and efficient water saving agriculture techniques which made the community aware of the local groundwater situation and various way to manage the available water resources in a sustainable way at Gram Panchayat level.*
- (iv) *The district implementation partners appointed under Atal Bhujal Yojana hand-held the community to estimate the water budgets at GP level and prepare water security plans based on the requirements of the communities. An MIS module on water budgeting was created under the Scheme to facilitate and assist the communities in the process of preparation of Water Budget and Water Security Plans.”*

### **Namami Gange Mission-II**

1.67 As per the information provided by the Department, the Government of India (GoI) launched the Namami Gange Programme (NGP) in 2014-15 for the rejuvenation of river Ganga and its tributaries with a budgetary outlay of ₹ 20,000 crore, for five years, up to March 2021 and has been further extended to March 2026 with a budgetary outlay of ₹ 22,500 crore. Under the Namami Gange Programme, a diverse and holistic set of interventions for cleaning and rejuvenation of river Ganga have been taken up, that includes wastewater treatment, solid waste management, riverfront management (ghats and crematoria), ensuring e- flow, rural sanitation, afforestation, biodiversity conservation, public participation, etc.

1.68 As per the information provided by the Department budget allocations under FMBAP since 2024-25, are as under:-

### **Namami Gange Mission-II–Allocation and Expenditure**

(Rs. in crore)

<b>Year</b>	<b>BE</b>	<b>RE</b>	<b>Actual</b>
2024-25	3345.70	3000.00	2976.34
2025-26	3400.00	2687.00	2000.21*
2026-27	3100.00		

\*Till 31.12.2025

1.69 For FY 2025-26, a BE of Rs.3400 crore was allocated to the Scheme which was reduced to Rs.2687 crore at RE stage. Further, for FY 2026-27 BE has been reduced to Rs.3100 crore. When being asked to furnish the reasons in this regard and whether the physical targets set under the Programme for the FY 2025-26 have been achieved, the Department replied as under:-

*“The Budget Estimates for FY 2025-26 were based on projections by State level executing agencies as well as expected grounding of newly approved projects. However, various agencies including State level agencies have not been able to draw funds as projected, leading to reduction in programme budget (at the RE stage). NMCG has set a target to complete 600 MLD of sewage treatment capacity during FY 2025-26. Out of this, 327 MLD has already been completed. An additional 273 MLD is expected to be commissioned by March 2026.”*

1.70 On being asked to furnish the current status of the Sewage Infrastructure Projects (STPs) under the Programme including Projects undertaken on the tributaries of river Ganga since inception of the ‘Namami Gange Programme’ as well as details regarding the present mechanism for O&M (Operations & Maintenance) including proper monitoring of the completed projects, the Department furnished as follows:-

*“Under Namami Gange Programme, as of December 2025, a total of 218 projects at a cost of ₹ 35,698 crore have been sanctioned for the creation of 6,610 MLD STP capacity. Out of which 138 projects with total cumulative capacity 3,987 have been completed.*

*To ensure sustainability and long-term functionality of assets created under the Namami Gange Programme, major sewage treatment projects are being implemented under the Hybrid Annuity Model (HAM), wherein the concessionaire undertakes Design, Build, Finance, Operate and Transfer (DBFOT) including O&M for 15 years post-commissioning, with payments linked to performance and compliance with prescribed effluent standards. Projects are also executed under the DBOT model with defined O&M responsibility. Monitoring is carried out through SCADA-based real-time systems, Online Continuous Effluent Monitoring Systems (OCEMS) integrated with Pollution Control Boards, regular inspections by NMCG and State agencies, periodic review meetings, and centralized*

*monitoring through the PRAYAG platform to ensure effective performance and accountability.”*

1.71 When sought response on the recent findings of the National Green Tribunal (NGT) as per which STPs along the river Yamuna (a tributary to river Ganga) are non-functional or operating below standards, leading to the continued discharge of untreated sewage into the river, the Department stated as under:-

*“As per the Delhi Jal Board (DJB), 37 Sewage Treatment Plants (STPs) are operational in Delhi. Out of these, 28 STPs, with a combined treatment capacity of 3,338 MLD, have been upgraded to meet the latest CPCB/DPCC standards, while the remaining 9 STPs are functioning on old norms/ design parameters.*

*CPCB and DPCC carries out a regular and regress monitoring of the STPs. In addition, CPCB has carried out an audit on STPs located in Yamuna basin in Delhi.”*

1.72 On being asked to provide details of total STPs provisioned under Namami Gange Programme along the river Yamuna in its Delhi stretch and whether the same are fully operational and working with their full capacity, the Department stated as under:-

*“Under the Namami Gange Programme, for the rejuvenation of river Yamuna, NMCG has sanctioned, a total of 37 projects at an estimated cost of ₹7,089 crores for the creation of 2,248 MLD STP capacity, out of which 21 projects have been completed. The details of projects sanctioned under the Namami Gange Programme for the rejuvenation of the river Yamuna is enclosed in **Annexure-XII.**”*

1.73 On being asked to provide details of present status of Critically Polluted River Stretches (CPRS) under the National Water Quality Monitoring Network where Biochemical Oxygen Demand (BOD) levels continue to exceed the prescribed limit and the action taken on the number of Grossly Polluting Industries (GPIs) under the Water (Prevention and Control of Pollution) Act, 1974., the Department stated as under:-

*“Polluted River Stretches (PRS)*

- For identification of PRS, the water quality data (BOD parameter) observed at monitoring locations are considered. The PRS has been classified under five Priority Class- I to V. The **Priority I** is the most polluted one with BOD value exceeding 30 mg/l; **Priority II** indicates BOD ranging between 20 and 30 mg/l; **Priority III** is based on BOD between 10 and 20 mg/l; **Priority IV** reports BOD from 6 to 10 mg/l. **Priority V** is the least polluted PRS where BOD ranges between 3 – 6 mg/l.*

- Assessment of water quality of River Ganga main stem is carried out by CPCB through Manual Monitoring at 112 locations on fortnightly basis in 5 River Ganga main stem states namely Uttarakhand (19), Uttar Pradesh (41), Bihar (33), Jharkhand (4) and West Bengal (15).
- PRS identified on river Ganga in the reporting years 2018 & 2025 are:

State	2018		2025	
	PRS on river Ganga	BOD Range/ Priority Class	PRS on river Ganga	BOD Range/ Priority Class
<b>Uttarakhand</b>	Haridwar to Sultanpur	6.6 (IV)	Nil	-
<b>Uttar Pradesh</b>	Kannauj to Varanasi	3.5-8.8 (IV)	Bijnor to Tarighat	5.9 (V)
			Kanpur D/s (Jana Village) and Road Bridge Tarighat, Dist. Ghazipur/ Manjhighat (Interstate Locations)	6.9 (IV)
<b>Bihar</b>	Buxar to Bhagalpur	3.2-4.2 (V)	D/s Bhagalpur near Bararatghat to D/s near Cremation ghat, Khalgaon	5.5 (V)
<b>West Bengal</b>	Tribeni to Diamond Harbour	5.0-12.2 (III)	Baharampore, Murshidabad to Diamond Harbour	4.9 (V)

- On River Yamuna, three polluted river stretches have been identified in Priority I category in Delhi, Haryana & Uttar Pradesh States in the year 2018 and year 2025. Details of stretches identified on River Yamuna is given below:

State	2018		2025	
	PRS on river Yamuna	BOD Range/ Priority Class	PRS on river Yamuna	BOD Range/ Priority Class
<b>Uttarakhand</b>	-	-	Dak Patther	9 (IV)
<b>Himachal Pradesh</b>	-	-	Poanta Sahib to D/s Poanta Sahib	9 (IV)
<b>Haryana</b>	Panipat to Sonapat	4 – 55 (I)	Hathnikund to U/s Jagadhari, Mandoli	15 (III)

			Mangalaura (Yamunanagar) to Palla (Sonepat)	30 (II)
			Rahimpur ka Nagla to near Flyover Bridge (Mazawali- Palwal) to Hassanpur	55 (I)
<b>Delhi</b>	Wazirabad to Asgarpur	9-80 (I)	Palla to Asgarpur	94 (I)
<b>Uttar Pradesh</b>	Asgarpur to Etawah Shahpur to Allahabad (Balua Ghat)	12.0-55 (I)	Shahpur Town to Hamirpur District	22 (II)
			Asgarpur (NOIDA) to Mohena (Faridabad)	51 (I)

**Action taken on Grossly Polluting Industries (GPIs):**

- As a part of annual inspections, actions are taken by concerned SPCBs/PCC including issuance of show-cause notices and closure directions to defaulting GPIs potential to discharge into river Ganga, Yamuna & their tributaries.
- **During 2024**, out of **4215 GPIs**, 3363 were found operational and 852 were non-operational. Out of 3363 operational GPIs, 2770 were complying and 593 were non-complying w.r.t discharge norms or not having valid consent to operate. SPCBs/PCC issued show cause notices to 564 noncomplying GPIs and closure directions to remaining 29 non-complying GPIs.
  - Out of **1395 GPIs** operating in **Ganga main stem**, 1131 were operational and 264 nonoperational. Out of 1131 operational GPIs, 939 were complying and 192 were non-complying w.r.t discharge norms or not having valid consent to operate. SPCBs/PCC issued show cause notices to 190 non-complying GPIs and closure directions to remaining 2 non-complying GPIs.
  - Out of **2820 GPIs** operating in **Yamuna main stem**, 2232 were operational and 588 were non-operational. Out of 2232 operational GPIs, 1831 were complying and 401 were non-complying w.r.t discharge norms or not having valid consent to operate. SPCBs/PCC issued show cause notices to 374 non-complying GPIs and closure directions to remaining 27 non-complying GPIs.
- **During 2025**, inspection of all **3726 GPIs** has been completed on 28-01-2026. As on date, inspection reports of 3655 GPIs have been uploaded on portal and SPCBs/PCC have completed actions on 3273 GPIs. Out of 3273 GPIs, 2841 are operational and 432 are self-closed. Out of 2841 operational GPIs, 2166

are complied and 675 non-complied. SPCBs/PCC issued show-cause notices to 665 GIs and closure directions to remaining 10 non-complied GI.

- *Inspection of 1299 GIs operating in Ganga main stem was completed on 28-01-2026. As on date, inspection reports of 1251 GIs have been uploaded on portal and SPCBs have completed actions on 1104 GIs. Out of 1104 GIs, 936 are operational and 168 are self-closed. Out of 936 operational GIs, 831 are complied and 105 non-complied. SPCBs/PCC issued show-cause notices to 100 GIs and closure directions to remaining 05 non-complied GI.*
- *Inspection of 2427 GIs operating in Yamuna main stem was completed on 28-01-2026. As on date, inspection reports of 2404 GIs have been uploaded on portal and SPCBs/PCC have completed actions on 2169 GIs. Out of 2169 GIs, 1905 are operational and 264 are self-closed. Out of 1905 operational GIs, 1335 are complied and 570 non-complied. SPCBs/PCC issued show-cause notices to 565 GIs and closure directions to remaining 05 non-complied GI.*

### **Water Management in Forest Areas**

1.74 On being asked to furnish information about the rivers flowing through / water bodies available in Forest areas/ National Tiger Reserves/ National Parks and Wildlife Sanctuaries in the country and whether mapping of water bodies in these area, have been conducted, the Department furnished as under:-

*“As per the information obtained from the National Tiger Conservation Authority (NTCA), based on the assessment done by NTCA using data available on rivers from the Open Government Data Platform in India, Ministry of Electronics and Information Technology (MeitY), Government of India, details of rivers flowing through as well as originated from Protected Areas and Tiger Reserves of India are as under:*

*Tiger Reserves : 2531*

*Protected Areas : 3597*

*Mapping of water bodies is done as a part of the statutory Tiger Conservation Plan in tiger reserves and Water Management Plan for other Protected Areas.”*

1.75 In response to the query as to whether any study has been conducted to assess the adverse impact of various dam projects constructed across the country as well as impact of climate change on water availability in these areas, the Department stated as under:-

*“No such kind of study has been conducted. However, in respect of new projects of such nature, advice is given by the National Tiger Conservation Authority with respect to potential impacts in accordance with Section 38 O (1) (b) and Section 38 O (1) (g) of the Wildlife (Protection) Act, 1972.”*

1.76 Further, during the oral evidence held on 18.02.2026, the representative of the Department of Water Resources, river Development and Ganga Rejuvenation on the issue of water monitoring station in the National Parks across the country, submitted before the Committee, as follows:-

*“.....सर, यह नेशनल पार्क के अंदर है।”*

**Management of Glacial Lake Outburst Flood (GLOFs)/ Landslide Lake Outburst Floods (LLOFs)/ Cloudburst Flood in the Hilly Regions of the country**

1.77 On being asked to furnish a detailed note on the main causes of Glacial Lake Outburst Floods (GLOFs)/ Landslide Lake Outburst Floods (LLOFs)/ Cloudburst Floods particularly in the Hilly regions of the country and preventive measures have been taken in this regard, the Department furnished as under:-

*“A GLOF is characterized by a sudden release of huge amount of lake water along with the sediments, which in turn rushes down the stream channel and generally turns into a flash flood. Identifying and monitoring potentially hazardous glacial lakes is important due to the region’s susceptibility to GLOFs, as evidenced by the catastrophic 2013 Kedarnath tragedy where a peri-glacial lateral moraine-dammed Chorabari lake (~4000 m) burst out, causing a substantial loss of life, property, and infrastructure downstream (Bhambri et al., 2016). Last year, Sikkim witnessed a GLOF event where a rapidly expanding proglacial South Lhonak lake (~5200 m asl) burst and damaged multiple infrastructures downstream, including the largest hydropower plant in the state (Sattar, 2023).*

*Landslide Lake Outburst Floods (LLOFs) are a distinct type of flash flood that occurs when a natural dam, formed by a landslide blocking a river or stream, suddenly collapses. The process begins when a massive landslide deposits debris into a valley, obstructing the flow of water and creating an artificial lake behind the blockage. Over time, as water accumulates, pressure builds against the unstable dam. Once the dam fails—often abruptly—the stored water is released downstream in a powerful flood.*

*Cloud bursts are highly localized and are of very short duration and most of the cloudbursts occur over hilly region. IMD and WMO define a rain event as Cloudburst when the rainfall occurs at the rate of 100 mm/hour or more over a geographical area of approximately 20-30 square km. Due to these reasons most of them are unreported. Some studies have been conducted using limited data*

*which finds southern rim of the Indian Himalayas i.e. States like Himachal Pradesh and hilly areas of northeast India prone of Cloudburst. Cloudburst are localized events and suddenly occurred events, these events need dense network of surface observations such as ARG/AWS and Doppler Weather Radar (DWR) network which may provide data at each 10-15 minute. The DWR observations are available in every ten minutes in the form of cloud images and velocity of winds over the region under the range of the radar. It helps in monitoring and issuing nowcast of associated heavy rainfall activities at very short duration upto 1 hour. However, prediction of cloud burst is a challenging task not only in India but the world over. This is mainly attributed to small size, short duration and sudden development of thunderstorm and also due to the complexity of associated atmospheric processes which prevail in tropical regions like India. Currently, attempts are made using High resolution Numerical Weather Prediction (NWP) models such as HRRR by assimilating this radar data for nowcasting these events.*

*The evidences of warming/ climate change have been observed, especially over the Himalayan cryosphere, where glaciers are receding at a greater pace, resulting in the formation and evolution of glacial lakes many of which have now become a potentially hazardous lake. Hilly regions like the Himalayas are particularly prone to these hazards because of their steep slopes, fragile geology, and dense river networks. Most of these glacial lakes in the Himalayan region are known to have formed within the last half-century, including the eastern and central Himalaya where the proportion of glacial lakes are higher. The rapid evolution of these lakes and continuously changing climatic conditions has led to the increased threat of Glacial Lake Outburst Floods (GLOFs) and other associated hazards. Climate variability, with sudden changes in temperature and precipitation, intensifies the risk of floods.*

*National Remote Sensing Centre (NRSC) as one of the Central Implementing Agency under National Hydrology Project (NHP) has taken up GLOF risk assessment of glacial lakes in the Himalayan Region of Indian River Basins. This study is sponsored by Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Govt. of India with funding from World Bank. As part of this activity, an inventory of 28,043 glacial lakes of size greater than 0.25ha has been prepared for entire catchment areas of Indian Himalayan Rivers using high resolution satellite data of Resourcesat-2 LISS-IV. Out of 28,043 glacial lakes, 2,188 and 733 lakes are located in Arunachal Pradesh and Sikkim States in North East region of India. Using the glacial lakes database, Glacial Atlases of Indus, Ganga, Brahmaputra and combined Indian Himalayan river basins are prepared and shared online ([https://www.nrsc.gov.in/Atlas\\_Glacial\\_Lake](https://www.nrsc.gov.in/Atlas_Glacial_Lake)).*

*The expansion of existing lakes and the development of new glacial lakes are primarily because of increased air temperature and vary depending on topography*

and type of lake. For example, expansion rates are higher for the proglacial lakes that are connected to glaciers, than other lakes, and for the lakes present over southern slopes than others. The majority of these lakes are dammed by moraines and are very unstable because the moraines are loose and fragile debris glacier deposits that sometimes contain ice within them and are susceptible to flow under external forces like heavy rainfall, avalanches, melting of ice-cored moraine, stream erosion, and others. In case of heavy rainfall and rapid snow or ice melt these glacial lakes may breach by overflow from the dam. It has been reported that solid precipitation has reduced and liquid precipitation has increased in glacierised catchments of the High Mountain Asia (HMA), affecting the stability of moraine-dammed glacial lakes, resulting in, GLOF events.

Most glacial lakes form when a glacier retreats and meltwater fill the depressions left behind. However, natural dams, formed out of ice and terminal moraines, can also form glacial lakes. An ice dam forms when a surging glacier, may dam up meltwater as it closes off a valley and prevents it from draining. Based on process of lake formation, location, and type of damming material, glacial lakes are broadly grouped into four categories viz., Moraine-dammed, Ice-dammed, Glacier Erosion, and Other glacial lakes.

Central Water Commission (CWC) monitors **Glacial Lakes and Water Bodies (GLs&WBs)** of size greater than 10 Ha in the Himalayan Region of Indian River Basins, for the period June to October every year, using remote sensing techniques. CWC was monitoring 902 Glacial Lakes and Water Bodies (GLs&WBs) of size greater than 10 Ha included from Glacial Lake Inventory 2011 prepared by NRSC, till 2024. In the year 2025, CWC expanded monitoring works to include 1941 Glacial Lakes additionally, with water spread area above 10 Ha, sourced from the Glacial Lake Atlas of Indian Himalayan River Basins published by National Remote Sensing Centre in 2023, adding to a total of 2843 GLs&WBs. CWC has also carried out trend analysis on water spread of 100 Glacial Lakes located in India of size greater than 10 Ha, using the available monthly monitoring data since 2011 with a view to prioritize lakes. These lakes are spread across the states of Himachal Pradesh, Uttarakhand, Sikkim & Arunachal Pradesh and union territories of Ladakh & Jammu Kashmir. The lakes Glacial Lakes depicting increasing trend, no change trend and decreasing trend has been identified state-wise. State-wise flow path of the 100 Glacial Lakes has been prepared and projects and CWC Hydrological Observation stations in the enroute have been mapped, to facilitate visualization of the potential impact in the event of GLOF.

CWC has also finalized the Criteria for Risk Indexing of Glacial Lakes offering a structured approach for identifying and ranking Glacial Lakes based on their likelihood of failure and the potential damage they could cause in the event of GLOF. This has been done by evaluating key factors such as the Glacial Lake's Size, Change in Size of GL, Stability of Side Slope, Proximity to other Glacial Lakes as well as considering Downstream vulnerabilities like Habitation,

*Infrastructures like Dams, Bridges etc. This criterion was applied to 100 Glacial lakes located in India.*

*LLOFs are formed by a landslide blocking a river or stream. **National Landslide Risk Mitigation Programme (NLRMP)** which is an initiative of the National Disaster Management Authority (NDMA), Government of India, aimed at reducing the risks and impacts of landslides, particularly in vulnerable hilly and mountainous regions. Focuses on hazard mapping, monitoring, and early warning systems to reduce landslide risks.*

*The **flash flood guidance system (FFGS)** has been developed with the primary purpose of providing operational forecasters and disaster management agencies with real-time information pertaining to the threat of small-scale flash flooding throughout a specified region. The FFGS provides flood warnings based on remote-sensed precipitation (e.g., radar and satellite-based rainfall estimates) and hydrologic models. It supports the analysis of weather-related events that can initiate flash floods (e.g., heavy rainfall, rainfall on saturated soils) and incorporates adjustments based on local weather information. The system supports evaluations of the threat of flash flooding over hourly to six-hourly time scales for stream basins that range in size from 25 to 200 km<sup>2</sup> in size.”*

1.78 When being asked about up to what extent climate change and human interventions responsible for increasing frequency and severity of floods in the Himalayan regions and remedial measures taken in this regard, the Department stated as under:-

*“There are evidences of Climate change significantly increasing the frequency and severity of floods in the Himalayan region. Rising global temperatures have accelerated glacier melt, leading to the formation of unstable glacial lakes that often burst, causing Glacial Lake Outburst Floods (GLOFs). Additionally, erratic monsoon patterns and intense rainfall events have become more common, overwhelming fragile mountain ecosystems and river systems. The Himalayas are also experiencing a “snow drought,” with reduced winter precipitation, which disrupts hydrological cycles and contributes to water stress and flooding risks.*

*Human-induced factors amplify the vulnerability of the Himalayan region. Rapid urbanization, deforestation, and unregulated construction on fragile slopes destabilize land and increase runoff. Tourism-related infrastructure often disregards ecological sensitivity, further exacerbating flood risks. These human pressures, combined with climate change, create a dangerous synergy that magnifies disaster frequency and severity.*

*Remedial measures combine scientific monitoring of GLOF, technological innovation, installation of flood early warning system, ecosystem restoration,*

*community empowerment, and regional cooperation to mitigate the growing flood risks in the Himalayas.”*

1.79 In response to the query as to whether any land use zoning along the river natural course/flood plain has been done in the recent past in the Hilly regions of the Country alongwith key findings on the measures needed to be taken to check natural/man-made calamities in hilly regions as well as action taken to check unregulated encroachments along the river course/flood plain, the Department, in its written reply, stated as under:-

*“Ministry of Jal Shakti has continuously impressed upon the States the need to adopt flood plain zoning approach as an effective non-structural measure of flood management in the country. In order to enable States to undertake scientific assessment of flood plains and its zoning as a non-structural measure of flood mitigation, a technical guideline on Flood Plain Zoning have been prepared and circulated to the States/UTs in August, 2025 by Ministry of Jal Shakti.*

*In recent years, India has taken significant steps toward regulating land use zoning along river courses and floodplains, particularly in hilly regions that are prone to floods, landslides, and other calamities. The Ministry of Jal Shakti issued technical guidelines on floodplain zoning in 2025, introducing a three-tier classification system that restricts high-risk activities such as construction and industrial use in vulnerable zones. These guidelines emphasize non-structural measures like zoning, regulation of development, and curbing encroachments, which are especially critical in Himalayan states where flash floods and landslides have become frequent. Complementing this, the National Landslide Risk Mitigation Programme has focused on mapping landslide-prone areas, slope stabilization, afforestation, and drainage management to reduce disaster risks. Expert committees have also stressed the need for integrated planning that combines engineering solutions with ecological restoration and community preparedness to address both natural and man-made calamities.”*

.....

**PART – II**  
**OBSERVATIONS/RECOMMENDATIONS**

**Analysis of Demands for Grants**

2.1 The Committee observe that for the fiscal year 2026-27, the total budgetary allocation for the Department of Water Resources, River Development and Ganga Rejuvenation is Rs. 19,912.98 crore, out of which Rs. 19,441.38 crore has been allocated under the 'Revenue Section' and Rs. 471.60 crore has been allocated under the 'Capital Section'. The overall budgetary allocation for the Financial Year 2026-27 has witnessed a reduction of Rs.5,363.85 crore, representing a decline of 21.22% over the Budget Estimate (BE) of Rs.25,276.83 crore for the Financial Year 2025-26.

The Committee observe that under Central Sector Schemes Rs. 4,749.51 crore has been allocated for BE 2026-27 which is nearly Rs.1,448.58 crore less than the BE allocation for FY 2025-26 i.e. Rs. 6,198.09 crore. Regarding the Centrally Sponsored Schemes, a provision of Rs.13,790.46 has been made at BE level for FY 2026-27 which is Rs.3,853.48 crore less against BE allocation for FY 2025-26 i.e. Rs. 17,643.94 crore. The major Schemes/Programmes in which the total budget allocation of the Department have been made include various schemes under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) viz. PMKSY-Har Khet Ko Pani (HKKP), PMKSY-Accelerated Irrigation Benefit Programme (AIBP), Polavaram Irrigation Project, Inter-linking of Rivers, National Ganga Plan (Namami Gange Mission-II) and Flood Management and Border Areas Programme (FMBAP). The Committee also observe that some of the Schemes/Projects viz. Dam Rehabilitation and Improvement Project (DRIP), Development of Water Resources Information System (DWRIS), National Hydrology Project (NHP) and Flood Management and Border Areas Programme (FMBAP) have been allocated more funds in the current fiscal year 2026-27.

The Committee note that the budgetary allocation (at B.E. stage) for the Department has seen a reduction of almost 21% for the FY 2026-27 viz-a-viz FY 2025-26. The Ministry attributed the same to the proposals received from the States and trend of expenditure of previous year and appraised the Committee that budget allocated for the FY 2026-27 seems to be adequate to meet the requirement of the Department. Further, the Committee also note that in FY 2025-2026, despite

reduction of Rs. 6871.09/- crore (about 27% less than BE of Rs. Rs.25,276.83 crore) at RE stage, the Department could utilize only 53% (Rs. 9808.52/- crore only) of its RE allocation till the end of three quarters of the fiscal year 2025-26. In this regard the Department informed that generally, the expenditure of this department picks up from the month of November onwards i.e. after Monsoon. It is expected that this department will be able to spend the allocated RE for the FY 2025-26. The Committee observe that some of the major important schemes/programmes of the Department including PMKSY, Interlinking of Rivers, Namami Gange Mission-II and Ground Water Management & Regulation have seen deduction in their budgetary allocation for the FY 2026-27. The Committee fail to understand the reasons for about 47% of underutilization of the allocated fund till the last three quarters of FY 2025-26 despite a substantial reduction of 27% in BE indicating lack of financial prudence as well as slow progress/implementation of important Schemes/ Programmes by the Department which are directly related to the welfare of common people of the country. The Committee, therefore, recommend that the Department should manage its resources more prudently and make all out efforts to fully and optimally utilise the available fund as well as assume a catalytic role in inspiring the efforts of States/UTs in this area so that implementation of all the schemes/programmes under the Department, efficiently and timely, be ensured.

(Recommendation No. 1)

### Ground Water Contamination

2.2 The Committee note that the Central Ground Water Board (CGWB) generates ground water quality data on a regional scale throughout the country as part of its ground water quality monitoring program and various scientific studies as per its Standard Operating Procedure (SOP). The Committee further note that ground water quality monitoring is conducted by the respective State Governments and the Central Ground Water Board (CGWB) under the Ministry of Jal Shakti on a regular basis and as per their current assessment majority of India's ground water remains potable except some isolated areas across some of the States and Union Territories where occurrences of a few contaminants beyond permissible limits have been reported which attributed to natural geogenic factors

as wells anthropogenic causes like rapid industrialization, urbanization, agricultural intensification etc.

The Committee take cognizance of the Annual Report of the Central Ground Water Board (CGWB) as per which heavy metal contamination including uranium, lead and nitrate has been detected in Delhi's groundwater and the same is posing serious health risks for people depending on it. The Committee also express concern over the ground water contamination in all the States/ UTs including the States of Punjab and Bihar. In this regard, the Department apprised the Committee that groundwater contamination by heavy metals is generally location-specific and depends on local hydro-geological conditions and source pressures. Therefore, exceedance at a monitoring location does not imply uniform contamination across the entire area. The Department also apprised the Committee about the corrective steps being taken for mitigation of ground water contamination including aquifer mapping studies under National Aquifer Mapping & Management Programme (NAQUIM), constructing Arsenic and Fluoride safe wells, implementation of Jal Jeevan Mission (JJM), artificial recharge of aquifers, promoting sustainable agriculture in the country with a vision to discourage excessive use of chemical fertilizers and promote organic agricultural practices, etc. Furthermore, the Committee note that as per the details of ground water contamination observed during the monitoring conducted by CGWB during last 5 years, contamination in terms of basic parameters like Electrical Conductivity (EC), Fluoride(F) and Nitrate (NO<sub>3</sub>), in most of the States/ UTs across the country, number of partially affected districts have increased at an alarming pace.

The Committee, while appreciating corrective measures of the Department taken in the matter, express its concern about the rising level of groundwater contamination including heavy metals across the country having serious direct and indirect health implications and in view of need for more water demand in future, recommend that the Department accelerate its endeavours and make all out efforts towards mitigation of ground water contamination in the country particularly in the regions presently most affected with severe ground water contamination by using latest available technologies including AI/ML and best global practices to address the issue.

**(Recommendation No. 2)**

### **Interlinking of Rivers**

**2.3 The Committee note that the National Water Development Agency (NWDA) has been entrusted with work of Interlinking of Rivers (ILR) under National Perspective Plan (NPP) formulated by the Government of India in year 1980. Under NPP, a total of 30 link projects have been identified (16 link projects under Peninsular Component and 14 link projects under Himalayan Component). The main purpose of interlinking of rivers is to envisage inter basin transfer of water from surplus basin to deficit ones and improve water availability in drought prone and rain-fed areas.**

**The Committee observe that the Scheme has witnessed under utilization of funds in the FY 2025-26. The budgetary allocation for the Scheme at BE level for FY 2025-26 was Rs.2400 crore, which was reduced to Rs. 1808.29 crore at RE stage and actual expenditure till 31 December, 2025 was Rs. 453.16 crore. In this regard, the Department appraised the Committee about various challenges, including delay in progress of Daudhan Dam works, slow progress in State components, canal renovation in Uttar Pradesh, lower than expected progress in Madhya Pradesh components. The Committee also observe that the Department would not be able to utilized fully all allocated fund under the Scheme during the FY 2025-26. The Committee are dismayed with the meagre utilization of fund (which is only 25% of the RE allocation ) till the last quarter of the FY 2025-26 indicating poor financial prudence as well as slow progress under an ambitious Scheme of Interlinking of Rivers which may address water scarcity, drought mitigation, and flood control in the country and ,therefore, recommend that the Department, in coordination with concerned States, take proactive approach towards fast-tracking various work under the Scheme so that optimum utilization of available fund and timely completion of project, be ensured.**

**(Recommendation No. 3)**

2.4 The Committee further observe that the Modified Parbati–Kalisindh–Chambal Link Project (MPKC Link Project) is a major river-linking and water transfer project in India designed to improve water availability in Rajasthan and Madhya Pradesh. This Link Project combines the earlier Parbati–Kalisindh–Chambal (PKC) river link with the Eastern Rajasthan Canal Project (ERCP) into one integrated plan aiming at transferring surplus monsoon water from rivers in the Chambal basin to water-scarce regions of eastern Rajasthan. In view of the importance of MPKC Link Project, the Committee urge upon the Department of Water Resources, River Development and Ganga Rejuvenation to work with the State Governments of Rajasthan and Madhya Pradesh for timebound completion of this Project.

(Recommendation No. 4)

### Safety of Dams

2.5 The Committee take cognizance of the ill-effects of climate change escalating flood severity, causing damage to the existing and under- construction dam projects, particularly in the Himalayan region and is emerging as a major threat about their long-term viability. The Committee observe that around 28 major dam incidents / failure including the projects affected by major floods occurred due to landslides, cloudbursts or by any natural calamity across the country since the year 2022 which caused destruction to the life and property of the people and the environment including flora, fauna and riverine ecology. Regarding the strengthening of safety measures for protection of lives of masses the Department apprised the Committee about the various provisions / Sections under Dam Safety Act 2021 to be scrupulously followed by each dam owner and which *inter-alia* includes a pre-monsoon and post-monsoon inspections of dams, installation of minimum number of instrument for monitoring uplift pressures, stress and strain on dams, incorporation of early warning systems, establishment of hydro-meteorological stations, ensuring of well-documented operation and Maintenance Manual in respect of each specified dam and preparation of emergency action plan. Further, the Department also apprised the Committee that design flood review is critical for ensuring the safety, structural integrity, and economic viability of hydraulic infrastructure like dams, bridges, and flood defences. Here,

the Committee observe that against the 6,667 total number of dams, revised design flood review of only 561 dams have been carried out. The Committee are of the considered opinion that, incidents of major flood, cloudbursts / landslides are increasing ever than before especially in sensitive and critical areas in the country causing not only huge loss of life and property but also posing major threat to the structural safety of existing and under construction dam projects. The Committee, therefore, recommend that the Department should expedite the process of reviewing the design structure of all the dams particularly in the upper Himalayan region and other flood/landslide/cloudburst prone zones in the country and take all remedial measures to rectify the shortcoming noticed in order to ensure safety of the dam structure as well as security of life and property during any incident of natural calamity. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 5)

#### Water Management in Dams/ Reservoirs

2.6 The Committee take cognizance of the operations of Dams/ Reservoirs including discharge of water from them particularly during monsoon/ rainy season in the country. In this regard, the Department apprised the Committee that water management and discharge from dams and reservoirs, particularly during the monsoon season, are primarily carried out by the respective dam owners such as State Water/Irrigation Departments, hydropower utilities and project authorities as per approved Reservoir Rule Curves mandated under Dam Safety Act, 2021. The Central Water Commission (CWC) provides inflow forecasts for 150 reservoirs for the purpose of reservoir operations. The Department further apprised the Committee that the respective rules under Dam Safety Act, 2021 direct all dam owners/operating agencies to ensure strict and scrupulous adherence to the approved Reservoir Rule Curve while undertaking the operation of their respective dams over a year as well as special compliance and monitoring during the period of high flood spells. However, the Committee observe that during the peak monsoon season, number of times, water discharge from dams/reservoirs causes major floods in the downstream areas and badly affect agriculture, infrastructure and human settlements in these areas. The Committee, therefore, express concern in this regard, and urge that, the Department should take necessary steps in the matter and ensure heightened monitoring and strict compliance of approved

**Reservoir Rule mandated under Dam Safety Act, 2021 by each Dam Owners to prevent and minimize damages caused due to water discharges from dams and reservoirs during high flood spells.**

**(Recommendation No. 6)**

**2.7 The Committee also take note of the study conducted by the Indian Institute of Science Education and Research on siltation in dams which reduce their effectiveness in flood control and water storage capacity across the country. In this regard, the Department informed the Committee that a preliminary assessment by Indian Institute of Science Education and Research (IISER) highlights that sedimentation (siltation) is a pervasive challenge across India's major reservoirs. This natural yet accelerated process leads to a gradual reduction in effective storage capacity, directly undermining the ability of dams to manage floods, provide irrigation, and support hydropower generation. The Department further appraised the Committee that the study reveals significant storage losses across diverse geographical regions including the Himalayan region, Indo-Gangetic Plains, Deccan Plateau, and both East-flowing and West-flowing peninsular river basins. Further, substantial sedimentation has already reduced the 'live storage' of several large reservoirs and based on long-term average trends, progressive storage loss is expected to continue over the coming decades, potentially jeopardizing drinking water supplies and energy security. Furthermore, as per the study, reservoirs in the Himalayan and Indo-Gangetic regions are flagged as relatively more vulnerable due to high silt loads and hydro-climatic variability as well as induce operational risk i.e. loss of capacity reduces the 'buffer' needed for flood moderation, making downstream areas more susceptible to sudden releases during heavy monsoons. To address these challenges, the study and existing national/ state policies emphasize a multi-pronged approach encompassing enhanced monitoring, site-specific modelling, soil conservation, afforestation, creation of physical barriers in the form of check dams and silt-retention structures, selective desilting and operational adjustments to improve reservoir rule to better handle sediment. The Committee, acknowledging the fact that sedimentation of dam/reservoir is a continuous and a natural process, thereby, reducing its storage capacity substantially and undermining its ability to manage floods, provide irrigation, and support hydropower generation. Expressing concern over the report highlighting significant storage losses across**

diverse geographical region in the Country and its near and future impacts , the Committee urge that, the department, in coordination with States/UTs / central agencies/dam authorities take all necessary corrective measures including as suggested in the study, to address the problem of siltation across the country. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 7)

### **Accelerated Irrigation Benefit Programme (AIBP) under PMKSY**

2.8 The Committee note that PMKSY-AIBP Scheme was established in 2015-16 to bridge the gap between created and utilized irrigation potential, ensuring that massive infrastructure investments actually reach farmers' fields. By accelerating completion, the government aims to increase national agricultural productivity and provide reliable water access to drought-prone regions.

The Committee observe that the budgetary allocation for the Scheme at BE level for FY 2025-26 was Rs.2500 crore, which was reduced to Rs. 1700 crore at RE stage and actual expenditure till 31 December, 2025 was Rs. 883.12 crore. In this regard, the Department attributed the same to various challenges, including no uptake of Central Assistance by newly included projects, lower allocations of State share by the State Govts. in State budgets and SNA SPARSH modalities. The Committee also observe a recurring underutilization of funds under the Scheme during the last 4 consecutive years. The Committee are of the view that AIBP is an important component of PMKSY directly related to the farmer's welfare and requires a more proactive approach by the Department towards its timely and effective implementation. However, the Committee are of the view that continuous underutilization of budgetary allocation is not only hampering achievements and progress in timely completion of irrigation projects envisaged under the Scheme but also resulting in their cost overruns. Therefore, the Committee recommend that the Department, in coordination with States, make every effort to fully and optimally utilize the budget allocated with a proactive approach in implementing the Scheme and also take necessary steps to augment its budgetary allocation so that timely and effective implementation be ensured.

(Recommendation No. 8)

**2.9 The Committee note that being a centrally sponsored scheme with substantial state share requirements, the budget allocations for central assistance under PMKSY-AIBP is proposed on the basis of the budget allocated by the state Govts. for the projects based on realistic assessment of progress and owing to budgetary constraints of state governments with limited resources, lower allocations were made by them in state budgets for projects under PMKSY- AIBP. In this regard, the Committee are of the opinion that while the current funding model of the Scheme relies on substantial state contributions, many States struggle to mobilize the required capital, leading to project delays and cost overruns. Hence, to ensure the timely completion of project under the PMKSY- AIBP Scheme, the Committee urge the Department to provide additional financial assistance to the States facing severe budgetary constraints or facilitate them to secure low-interest long-term credit facility from the National / International Financial Institutions working in the sector so that such States be enabled to complete their pending projects under the Scheme without further straining their State Exchequer. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.**

**(Recommendation No. 9)**

**2.10 Further, as appraised by the Department, the Committee note the major challenges being faced in completion of Parwan Multipurpose Project under PMKSY-AIBP Scheme including lesser working period and heavy rainfall during current Fiscal Year. Here, the Committee emphasize that the Parwan Multipurpose Project is of critical importance meant to provide essential irrigation and drinking water to the drought-prone districts of Jhalawar, Baran, and Kota. Accordingly, the Committee urge that, the Department take all necessary measures to ensure timely completion of Project, thereby extending its intended socio-economic benefits to these vulnerable regions without further delay.**

**(Recommendation No. 10)**

**2.11 The Committee would like to recapitulate that the issues relating to scarcity of water in Kathumar Assembly Constituency under Bharatpur Parliamentary constituency have been raised during various sittings of the Parliamentary Standing Committee on Water Resources. The Kathumar Assembly Constituency**

is facing significant water scarcity, especially in rural villages. The problem is linked to environmental, geographical, and infrastructure factors. The groundwater level has dropped due to excessive extraction for irrigation and at many places the deeper groundwater is saline or brackish, making it unsuitable for drinking and harmful for crops. In order to address this issue, the Committee exhort the Department to take remedial measures such as expanding the Gurgaon Canal Project or other canal Projects for taking the Yamuna river water to Kathumar on urgent basis.

(Recommendation No. 11)

**Modernization of Command Area Development and Water Management (M-CADWM) under PMKSY**

2.12 The Committee note that in order to address the challenges under CADWM Scheme and to introduce comprehensive reforms in irrigation water management, the Government approved the Modernization of Command Area Development and Water Management (M-CADWM) Scheme as a sub-scheme of PMKSY for implementation on pilot basis during FY 2025-26 and based on the learnings under pilot implementation, a National Programme will be designed. The Committee also note that a total of 34 nos. of projects/clusters in 23 States/UTs have been approved for implementation under the M-CADWM Scheme and the Detailed Design Reports (DDR) for these projects are under preparation.

In regard to the M-CADWM Scheme the Committee have taken note of instances where the primary source of water supply selected for the scheme's implementation has been found unsustainable / unavailable / insufficient. In the matter, the Committee are of the opinion that a reliable source of water supply is pre-requisite for proper implementation of the Scheme, and lack of it, will lead to the unsustainability and defeat the very purpose of this pilot project. Further, based on the learning under pilot project implementation, a National Programme would be designed, it is imperative that the verification of the main source of water supply under the Scheme is vital for a successful full flagged National Programme. Hence, the Committee recommend that, the Department rigorously review all the proposals as received from various States for all stated parameters as set in the guidelines in order to verify their credibility and to ensure viability of the primary

water sources under the Scheme prior to its implementation. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 12)

2.13 The Committee further observe that the department did not consider involving local Member of Parliament (MP) / Member of the Legislative Assembly (MLA) in the selection process and identification of projects /clusters under M-CADWM pilot Scheme. The Committee firmly believe that the local MP/MLA as a public representative, is an important stakeholder and has ground-level knowledge of regional topography, specific water availability patterns and other related issues pertaining to the local people and hence, their active involvement is fundamental to the successful identification and implementation of irrigation projects. Considering the fact that elected representative is an important stakeholder, the Committee recommend that the Department make necessary provisions for inclusion of local MP/MLA during the conceptualization, identification, selection, preparation of DDRs process of irrigation projects in order to ensure their effective participation, better formulation, and implementation and monitoring of these projects.

(Recommendation No. 13)

2.14 The Committee also note that no separate dedicated study has been undertaken by the Department exclusively for identifying global best practices in micro-irrigation under M-CADWM. In this regard, the Department apprised the Committee that the scheme incorporates established principles of water use efficiency, pressurized piped irrigation network and promotion of micro-irrigation and based on the learnings, National Plan for Command Area Development and Water Management will be designed, including adoption of suitable best practices globally for improving irrigation potential and water use efficiency. Here, the Committee believe that adopting global best practices in micro-irrigation can play a pivotal role in increasing of water efficiency and agricultural productivity of the country. Hence, to ensure the long-term sustainability of our agricultural sector and address the growing challenges of water scarcity the Committee recommend that, the Department undertaken study / research regarding the best practices / initiatives adopted globally in the field of micro irrigation which resulted increase

in irrigation potential by improving water use efficiency. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 14)

**Repair Renovation and Restoration (RRR) of Water Bodies under PMKSY (HKKP)**

2.15 The Committee note that the Repair, Renovation and Restoration (RRR) of Water Bodies component is being implemented under the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Har Khet Ko Pani (HKKP) by the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti with primary goal to revive traditional water bodies (tanks, ponds, and lakes) to enhance their storage capacity and restore irrigation potential.

The Committee observe that the scheme witnessed underwhelming progress, as both financial and physical achievements lagged behind significantly. The financial achievement under the scheme of last five year is 47.15% while physical achievement is only 34.06%. Further, number of States including Assam, Gujarat, Manipur and Nagaland depict no physical achievement under the Scheme. Here, the Committee are of the opinion that the slow pace of the RRR scheme directly hinders the objective of PMKSY- Har Khet Ko Pani leaving millions of hectares of potential irrigation untapped. Without timely restoration, these traditional water bodies continue to degrade, encroached and liable to depletion of the surrounding groundwater table. Therefore, the Committee recommend that the Department, in consultation with the respective State, take proactive measures to expedite the work progress under the Scheme so that maximum benefits be reached to the individuals at the very tail end.

(Recommendation No. 15)

**Ground Water Management & Regulation (GWM & R)**

2.16 The Committee note that Ground Water Management and Regulation (GWM&R) Scheme is a continuing Central Sector Scheme of Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti. The scheme has been approved for continuation for the period 2021-26. The components of the scheme include i) Component I: Monitoring, Assessment,

**Management and Regulation and ii) Component II: Strengthening of Infrastructure for Technological Upgradation (Machinery & Equipment).**

The Committee observe that the budgetary allocation for the Scheme at BE level for FY 2025-26 was Rs.509 crore, which was reduced to Rs. 425 crore at RE stage and actual expenditure till 31 December, 2025 was Rs. 168.16 crore. As per Department's submission the underutilization of allocated funds was primarily attributed to delays in the finalization and award of tenders for construction of piezometers and wells under PIB-approved NAQUIM projects. The Committee also observe a recurring underutilization of allocated funds under the Scheme for the last 5 years and this concern was also pointed out by the Committee in its earlier Report on DFG-2024-25. The Committee further note with concern that almost 60% of the allocated RE fund remains to be utilized in the last quarter of FY 25-26 indicating underachievement and slow progress of projects under the Scheme. Realising the fact that Groundwater Management and Regulation (GWM&R) Scheme is a pivotal government initiative tasked with executing scientific research and monitoring to oversee the nation's extensive groundwater reserves and ensuring to meet the diverse requirements of agriculture, industry, and public consumption, the Committee are of the view that Continuous underutilization of budgetary allocation could prevent the Scheme from fulfilling its core mission and reaching its intended developmental targets. The Committee, therefore, recommend that necessary approval may be obtained within stipulated timeline, factors leading to delays be identified and addressed promptly so that allocated budget be utilized efficiently.

(Recommendation No. 16)

2.17 Further, with regard to the projects/ works undertaken under the Scheme during the last five years along with targets, the Committee observe that the Department has achieved all its targets efficiently set for the duration. The Committee note that, in terms of construction of Exploratory Wells (EW) /Observation Wells (OW), the Department have constructed 982 Wells against the target of 1052. The Committee also note that against the target of 6,835, 5,568 Piezometers (Pz) have been constructed. However, regarding the installation of Digital Water Level Recorder (DWLR), the Committee observe that only 3,411 have been installed against the target of 6,713. The Committee also observe that a number of States/UTs including Odisha, Madhya Pradesh, Jammu & Kashmir,

Delhi, Punjab, Haryana, Himachal Pradesh, Uttarakhand, Assam, Meghalaya and Arunachal Pradesh reported zero installation of DWLRs till January, 2026. The Committee, while appreciate the initiatives/ works of the Department under the Scheme, express concerns about delay in installation of Digital Water Level Recorder (DWLR) particularly in various water-stressed States, however, the Committee hope that the Department would take necessary steps towards this aspect and complete the remaining installations on priority. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 17)

2.18 The Committee express concern on the scenario accelerating depletion of groundwater nationwide. Excessive extraction has caused aquifers to dry up and water tables to drop significantly. Several states, most notably Punjab and Rajasthan are facing a critical imbalance where the rate of water withdrawal is far than the natural replenishment. During the oral evidence, the Ministry apprised the Committee about the national guidelines designed to regulate groundwater extraction in over-exploited regions of the country which may be implemented by the States directly. Given the gravity of the situation, here, the Committee believe that the Department must adopt a proactive strategy to curb groundwater exploitation at National Level. Consequently, the Committee recommend that the Department prioritize collaborative efforts with State/UTs to ensure the rigorous implementation of these guidelines. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 18)

#### **Flood Management and Border Areas Programme (FMBAP)**

2.19 The Committee note that, the Flood Management and Border Areas Programme (FMBAP) comprises of two components including Flood Management Programme (FMP) and River Management and Border Areas (RMBA). Under FMP, the Government provides Grant-in-Aid to States/Union Territories for implementing structural measures aimed at flood management, anti-erosion, river management, and anti-sea erosion and under RMBA, flood control and anti-erosion work on common border rivers with neighbouring countries, including

hydrological observations, flood forecasting, and investigation & pre-construction activities of joint water resources projects (with neighbouring countries) on common border rivers, are being taken up with 100% central assistance.

The Committee express concern over the increasing severity of floods and excessive land erosion due to climate change in the border-States of the country including States of Assam, Bihar and Uttar Pradesh. In regard to future plan with using of new advanced AI technology to minimize the menace of recurring floods and erosion, the Department apprised the Committee about various measures being taken by the Department including establishment of a Smart Water Resources Modeling Organization (SWRMO) under CWC as Centre of Excellence (CoE) to act as a pioneering hub for developing in-house expertise and innovation in tackling diverse problem statements in the water sector with a focus area on “Flood forecasting with inundation modeling”, in-house development of AI/ML based short-range flood forecasting models for 200 level Flood Forecasting Stations across the country which are presently under development and testing. In addition to this the in-house developed “Flood Watch India” Mobile application to provide short-range level forecasts and 7-day advance flood advisories at 200 Flood Forecast Stations. The Committee appreciates the endeavors of the Department towards use of new advanced AI technology in Flood forecasting. The Committee also notes that budgetary requirement for the EFC period 2026-2031 has been submitted by SWRMO-CoE to the Ministry which includes provisions for hiring experts/ consultants and establishing international collaboration with domain experts for further development and upscaling of AI-based systems. The Committee further notes that SWRMO-CoE operates on a High-Performance Computing (HPC) server for development of AI/ML-based Level Flood Forecasting models and CWC presently doesn’t have a supercomputer. The Committee believes that in light of the escalating frequency and severity of climate-induced flood events, there is an urgent need to focus on advanced Artificial Intelligence (AI) and Machine Learning (ML) technologies for flood forecasting and for the purpose significant investment in advanced AI based infrastructure is necessary. Therefore, the Committee urge the Department to prioritise sanctioning of the budgetary requirement submitted by SWRMO-CoE for the EFC period 2026-2031 for effective functioning and financial strengthening as a pioneering hub under CWC in order to augment the present system with AI/ML-driven resilience model

so that loss of life and infrastructure can be minimized during major flood events. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 19)

2.20 The Committee take cognizance of the recent flood scenario in the country particularly in the State of Punjab, causing large scale destruction of life and property, crop, displacement, and infrastructure in the affected area. The heavy monsoon rains in the upper catchment areas (particularly Himachal Pradesh and Jammu & Kashmir), along with surplus water releases from several dams intensified flooding in downstream districts, particularly along the Ravi, Beas and Sutlej rivers. In this regard, the Committee, urge the Ministry to impress upon the concerned States Government to take necessary measures including construction of dams/reservoirs/ barrages in the downstream areas to control the surplus water in the monsoon season in order to mitigate the damages caused by major recurring flood events in these regions. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 20)

#### **Development of Water Resources Information System (DWRIS)**

2.21 Regarding the Development of Water Resources Information System (DWRIS), the Committee note that it is a Central Sector Scheme being implemented by Central Water Commission (CWC), and has been devised for accurate assessment of the water resources for planning its optimal utilization for comprehensive and sustainable development and for settling inter-state water disputes, monitoring of river water quality to examine its suitability of drinking water, irrigation and environmental impacts, Flood forecasting in rivers for disaster management etc. Central Water Commission maintains about 1543 Hydro-meteorological stations across the country under DWRIS Scheme.

The Committee further note that a Smart Water Resources Modeling Organization (SWRMO) has been established in September 2024 under CWC as a Centre of Excellence (CoE) for Smart Water Resources Management. The objective

of this CoE is to act as a pioneering hub for developing in-house expertise and innovation in tackling diverse problem statements in the water sector. One of its focus areas is “Flood forecasting with inundation modeling.” One of the key initiatives currently being undertaken by SWRMO-CoE and the Flood Management Organisation (FMO), CWC, is the in-house development of AI/ML-based short-range flood forecasting models for 200 Level Flood Forecasting Stations across the country. The development of these AI/ML models is currently being carried out in-house by CWC. SWRMO-CoE has submitted budgetary requirements under the DWRIS Scheme for the EFC period 2026–2031, which include provisions for hiring experts/consultants and establishing international collaborations with domain experts for further development and upscaling of AI-based systems. In this connection, the Committee express pleasure on the initiative being undertaken by the Department in regard to development of AI/ML models for flood forecasting and also for identifying and predicating potentially affected areas in the near future. However, the Committee learned that for the last five years, in regard to financial targets, flood forecasting activities have been merged with another component ‘opening of Hydrological Observation (HO) sites and Repair & Maintenance (R&M) sites’ and have combined share of 93% of the total allocation made under the Scheme. Keeping in view the immense importance of flood forecasting in mitigating the massive damages and loss of human lives, properties, live stocks etc. and the provisioning for separate budgetary allocation for initiatives in regard to development of AI/ML based models for flood forecasting, the Committee are of the view that dedicated fund may be allocated for Flood Forecasting activities under DWRIS by separating it from component ‘opening of Hydrological Observation (HO) sites and Repair & Maintenance (R&M) sites’ for all practical purpose. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 21)

### Atal Bhujal Yojana (ATAL JAL)

2.22 The Committee note that Atal Bhujal Yojana (Atal Jal), a Central Sector Scheme with an objective to improve the groundwater management, was implemented as a pilot project across 8,203 priority water stressed Gram Panchayats of seven States viz. Gujarat, Haryana, Karnataka, Madhya Pradesh,

**Maharashtra, Rajasthan and Uttar Pradesh and as appraised by the Department, owing to substantial achievement of the objects of the Atal Bhujal Yojana, the scheme has been closed with effect from 15.10.2025.**

**The Committee observe that the Scheme was implemented across seven states, encompassing nearly 37% of the nation's over-exploited arid regions and as apprised by the department, was playing a substantial role in increasing the ground water level in these arid regions. Further, in its various earlier Reports, the Committee urged the Department to extend the Scheme in all the States/UTs to cover maximum water scarce regions and districts of the country having large number of over-exploited blocks. However, the Committee also note that in pursuant to closure of the Atal Bhujal Yojana w.e.f. 15.10.2025, the requests for extending the Scheme in other States have also been declined and presently no proposal is under consideration to extend the Scheme further. In this regard, the Committee are of the view that the problem of groundwater exploitation in country has reached a critical limit, due to unregulated extraction for agriculture, which accounts the biggest portion of total usage. Further, due to climate change, unreliable monsoon patterns disrupt the traditional timing and volume of natural recharge, leaving aquifers unable to recover between seasons. In this circumstance, the continuation and expansion of community-led initiatives like the Atal Bhujal Yojana are essential, as they shift the focus from mere supply to demand-side management through water budgeting, integration of WSPs into the GPDP and crop diversification and address the structural imbalance between extraction and replenishment of Ground Water. Hence, in view of the substantial achievement of the Scheme in improving groundwater management and on the basis of the success achieved under the pilot project, the Committee recommend that the Department should consider to continue the Atal Bhujal Yojana or conceptualized a parallel scheme in line with the pilot project to further its causes and also to address the problem of unregulated ground water extraction across the country. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.**

**(Recommendation No. 22)**

## **Namami Gange Mission-II**

**2.23 The Committee note that the Namami Gange Programme (NGP) was launched in 2014-15 for the rejuvenation of river Ganga and its tributaries with a budgetary outlay of ₹ 20,000 crore, for five years, up to March 2021 and has been further extended to March 2026 with a budgetary outlay of ₹ 22,500 crore. Under the Namami Gange Programme, a diverse and holistic set of interventions for cleaning and rejuvenation of river Ganga have been taken up, that includes wastewater treatment, solid waste management, riverfront management (ghats and crematoria), ensuring e-flow, rural sanitation, afforestation, biodiversity conservation, public participation, etc.**

**The Committee observe that a total of 218 number of sewerage infrastructure projects (STPs) costing ₹ 35,698 crores has been taken up for remediation of polluted river areas with treatment capacity of 6,610 Million Liters per Day (MLD). 138 STPs with a capacity of 3,977 MLD have been completed and made operational. Further, the Committee also observe that NMCG has sanctioned 38 projects worth Rs.14,406 Cr out of which 19 projects have been completed under Hybrid Annuity Model involving unique payment structure for 40% upfront payment towards capital cost and remaining 60% payment over the project's life as annuities with interest and O&M costs spread over 15 years period. The committee, while noting with appreciation the unique payment structure of HAM for 38 sewage management projects by NMCG comprising their long term O&M costs, recommend that a similar O&M policies may also be conceived for the remaining STPs and to ensure their long term functionality considering the fact that about 83% fund of the allocated budget is being utilized for creation of STPs. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.**

**(Recommendation No. 23)**

**2.24 The Committee further note that periodic review/monitoring of STPs/CETPs, created under NGPNMCG, has completed 345 projects under Namami Gange Programme to improve water quality in the river Ganga and its tributaries (including Yamuna). Under these projects, 138 out of 218 numbers of sanctioned STPs and 2 out of 3 sanctioned CETPs have been completed. In this regard, the department has apprised the Committee that NMCG has the responsibility to**

monitor operational STPs and CETPs to access their performance on the Ganga and its tributaries (including Yamuna). The Committee, however, note that since role of Central Pollution Control Board (CPCB) and State(s) Pollution Control Board (SPCB) is paramount in monitoring of STPs and CETPs created/recalibrated under the Programme in river Ganga and its tributaries (including Yamuna), the Committee, therefore, recommend that periodic review/monitoring may also be carried out by these agencies to ensure their functional compliance as per the prescribed standard and also for additional performance evaluation.

(Recommendation No. 24)

2.25 During the deliberation on the subject “Conservation, development, Management and Abatement of Pollution in River Ganga and its tributaries under Namami Ganga Programme,” one of the points discussed pertains to Drain Monitoring. In this regard, it has come to the notice of the Committee that CPCB carried out monitoring of 716 drains discharging into river Ganga and its tributaries on half yearly basis out of which only 295 drains are tapped and diverted to STPs during pre-monsoon 2025. One of the reasons stated by the department for non-tapping of drains is the un-availability of sewage network. However, the Committee while taking a cognizance in the matter, expressed concern on the low number of tapped drains and recommend that, the Department take necessary measures for tapping of all the remaining drains to manage their discharge efficiently and effectively into river Ganga and its tributaries. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 25)

2.26 The Committee observed that on River Yamuna, three polluted river stretches have been identified in Priority-I category in the State/US of Delhi, Haryana & Uttar Pradesh in the year 2018 and year 2025 where BOD value exceed 30 mg/l. Although, the department has enumerated a number of remedial measures including annual inspections by concerned SPCBs/PCC and issuance of show-cause notices and closure directions to defaulting Gross Polluting Industries (GPIs), no improvement have been noticed in the pollutions of above river stretches for the last five years. The committee, therefore, recommend that

the Department identify all the factors responsible for the constant pollution in the said stretches of the River Yamuna and take necessary steps to mitigate in a time bound manner.

(Recommendation No. 26)

#### **Water Management in Forest Areas**

2.27 Regarding the water management Forest Areas the Committee note that the National Water Policy (NWP) of India, formulated in 1987 and revised in 2012, provides framework for the planning and management of the country's water resources. It emphasizes the protection of watersheds, including those in forest areas, to conserve water and prevent soil erosion. The Committee observe that presently more than 6000 rivers are either flowing through or have originated from Protected Forest Areas and Tiger Reserves across the country.

The Committee take cognizance about the availability of water monitoring system in Forest Areas/ National Tiger Reserves / National Parks and Wildlife Sanctuaries across the country. In this regard, during the oral evidence, the Department of Water Resources, River Development & Ganga Rejuvenation expressed their unawareness on water monitoring system in Forest Areas/ National Tiger Reserves / National Parks and Wildlife Sanctuaries due to their inability to access these areas as the same come under the purview of Ministry of Environment, Forest and Climate Change. The Committee are of the opinion that since Forest areas/ National Parks/Wildlife Sanctuaries constitute major water sources of the country, availability of water monitoring system is vital for Water Management inside these areas. Therefore, the Committee recommend that the Ministry of Jal Shakti may take a proactive approach and devise an effective mechanism in coordination with Ministry of Environment, Forest and Climate Change to set up water monitoring system inside the Forest areas/ National Parks/Wildlife Sanctuaries across the country to address the challenges related to water management inside these vital areas. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 27)

**2.28** The Committee also observe that no dedicated study has been carried out by the Department to assess the adverse impact of various dam projects constructed across the country as well as adverse impact of climate change on water availability in protected areas and Tiger Reserves. In this regard, the Department appraised the Committee that in respect of new projects, advice is given by the National Tiger Conservation Authority with respect to potential impacts in accordance with Section 38 O(1) (b) and Section 38 (O)(1)(g) of the Wildlife (Protection) Act, 1972. Here, the Committee note that more than 6000 rivers are originating / flowing through these regions and are the main source of water availability of the country and in this regard, the Committee are of the view that given the escalating and visible impacts of climate change, necessity of conducting targeted research in these areas is essential. Therefore, the Committee urge that the Ministry of Jal Shakti in coordination with Ministry of Environment, Forest and Climate Change, conduct necessary research / studies to assess the adverse impact of climate change on water availability in Forest Areas/ National Tiger Reserves / National Parks and Wildlife Sanctuaries across the country so that long-term water sustainability to the country be ensured and on the basis, timely necessary intervention and future strategic planning, for the purpose, be formulated, well in advance.

**(Recommendation No. 28)**

**Management of Glacial Lake Outburst Flood (GLOFs)/ Landslide Lake Outburst Floods (LLOFs)/ Cloudburst Flood in the Hilly Regions of the country**

**2.29** The Committee take cognizance of the increasing incidents of Glacial Lake Outburst Floods (GLOFs)/ Landslide Lake Outburst Floods (LLOFs)/ Cloudburst Floods particularly in the Hilly regions of the country in the recent causing substantial loss of life, property, and infrastructures in the country. In this regard, the department appraised the Committee that the evidence of warming / climate change have been observed, especially over the Himalayan cryosphere, where glaciers are receding at a greater pace, resulting in the formation and evolution of glacial lakes many of which have now become a potentially hazardous lake. Hilly regions like the Himalayas are particularly prone to these hazards because of their

steep slopes, fragile geology, and dense river networks. The rapid evolution of these lakes and continuously changing climatic conditions has led to the increased threat of glacial Lake Outburst (GLOFs) and other associated hazards, Climate variability, with sudden changes in temperatures and precipitation, intensifies the risk of floods. The Committee also observe that the Department are taking various corrective measures including GLOF risk assessment of glacial lakes in the Himalayan Region, monitoring of Glacial Lakes and water bodies by Central Water Commission (CWC), National Landslide Risk Mitigation Programme (NLRMP), an initiative of the National disaster Management Authority (NDMA), reduce the risks and impacts of landslides, particularly in vulnerable hilly and mountainous regions as well as focuses on hazard mapping, monitoring, and early warning systems to reduce landslide risks, and development of flash flood guidance system for providing operational forecasts with real-time information pertaining to the threat of small-scale flash flooding.

The Committee also observe that along with the factors induced by climate change, rapid urbanization, deforestation, and unregulated construction on fragile slopes as well as tourism-related infrastructure are some of the human-induced factors disregard ecological sensitivity leading further exacerbate flood risk and amplify the vulnerability of the Himalayan region and these human pressures, combined with climate change, create a dangerous synergy that magnifies disaster frequency and severity. In this regard, as apprised by the Department several Himalayan states have adopted State Action Plans on Climate Change (SAPCCs), which integrate disaster risk reduction with sustainable development including restricting construction in high-risk zones, strengthening early warning systems, and promoting eco-sensitive tourism and infrastructure. Further, the National Disaster Management Authority (NDMA) has also issued guidelines for landslide risk management, focusing on slop stabilization, afforestation, and community preparedness. In addition to these, in order to enable States to undertake scientific assessment of flood plains and its zoning as a non-structural measure of flood mitigation, a technical guideline on Flood Plain Zoning have been prepared and circulated to the States/UTs in August, 2025 by the Ministry of Jal Shakti. While, the Committee appreciate the mitigative measures and initiatives taken by the Ministry and NDMA to address GLOFs, LLOFs, and cloudburst floods in hilly regions, the Committee urge the Department to emphasize the need for

rigorous, practical, on ground implementation of all guidelines /action plans in coordination with States/agencies concerned to reduce the risks and impacts of landslides, particularly in vulnerable hilly and mountainous regions. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 29)

NEW DELHI  
16 March, 2026  
25 Phalguna, 1947 (Saka)

RAJIV PRATAP RUDY,  
*Chairperson,*  
*Standing Committee on Water Resources*

## Annexure-I

## State/UT-wise summary of ground water quality analysis as per Annual Ground water Quality Report 2025

S. No.	State	EC		Fluoride		Nitrate		Arsenic		Iron	
		No. of samples analysed	% of samples with EC > 3000 $\mu$ S/cm	No. of sample analysed	% of samples with F > 1.5 mg/L	No. of sample analysed	% of samples with NO <sub>3</sub> > 45 mg/L	No. of samples analysed	% of sample with As > 10 ppb	No. of samples analysed	% of samples with Fe > 1 mg/L
1	Andaman & Nicobar Islands	115	0	115	0	115	0	28	0	28	28.57
2	Andhra Pradesh	1135	9.78	1135	8.99	1135	24.23				
3	Arunachal Pradesh	15	0	15	6.67	15	0	15	0	15	13.33
4	Assam	145	0	145	0.69	145	1.38	154	2.6	154	18.18
5	Bihar	584	0.86	584	6.68	584	13.36	13	46.15	13	61.54
6	Chandigarh UT	9	0	9	0	9	0	8	0	8	0
7	Chhattisgarh	830	0.12	830	2.65	830	10.6	257	0	257	0
8	Dadra & Nagar Haveli and Daman & Diu	16	0	16	0	16	0				
9	Delhi	135	33.33	135	17.78	135	24.44	86	0	86	8.14
10	Goa	7	0	7	0	7	14.29	6	0	6	0
11	Gujarat	618	18.28	618	9.06	618	18.93	114	0	132	1.52
12	Haryana	811	20.59	811	21.82	811	14.18	160	1.25	160	3.13
13	Himachal Pradesh	161	0	161	1.24	161	11.8				
14	Jammu & Kashmir	247	0	247	0	247	9.31	17	11.76	12	25

S. No.	State	EC		Fluoride		Nitrate		Arsenic		Iron	
		No. of samples analysed	% of samples with EC > 3000 $\mu$ S/cm	No. of sample analysed	% of samples with F >1.5 mg/L	No. of sample analysed	% of samples with NO <sub>3</sub> > 45 mg/L	No. of samples analysed	% of sample with As> 10 ppb	No. of samples analysed	% of samples with Fe > 1 mg/L
15	Jharkhand	381	0	381	3.94	381	17.32				
16	Karnataka	398	15.08	398	16.83	398	45.48	118	1.69	118	2.54
17	Kerala	361	0	361	0.55	361	10.8	185	0	181	11.6
18	Madhya Pradesh	726	0.83	726	0.96	726	22.04	49	0	34	0
19	Maharashtra	1565	2.56	1565	1.79	1565	33.93				
20	Manipur	3	0	3	0	3	0	3	0	3	33.33
21	Meghalaya	39	0	39	0	39	0	38	0	38	13.16
22	Nagaland	67	0	67	1.49	67	10.45	66	0	66	18.18
23	Odisha	654	1.07	654	1.07	654	12.84	413	1.45	413	14.04
24	Pondicherry	9	0	9	11.11	9	11.11	7	0	7	0
25	Punjab	756	7.01	756	11.24	756	14.68	296	9.12	296	3.72
26	Rajasthan	643	47.12	643	41.06	643	50.54	100	0	100	7
27	Tamil Nadu	929	10.55	929	7.75	929	36.28	286	1.75	286	3.5
28	Telangana	1114	2.69	1114	14.99	1114	26.03				
29	Tripura	49	0	49	0	49	2.04	44	0	44	0
30	Uttar Pradesh	1333	2.33	1333	4.05	1333	8.03	612	3.76	601	23.96
31	Uttarakhand	248	0	248	1.21	248	13.31	104	0	104	29.81
32	West Bengal	875	1.49	875	0.91	875	8.91	236	19.49	236	38.98
<b>Grand Total</b>		<b>14978</b>	<b>7.23</b>	<b>14978</b>	<b>8.05</b>	<b>14978</b>	<b>20.71</b>	<b>3415</b>	<b>3.6</b>	<b>3398</b>	<b>13.48</b>

\* Samples were not collected from the states of Mizoram, Sikkim and UTs of Lakshadweep and Ladakh during the assessment year. However, sampling in these areas has been carried out for the background year 2025.

**Annexure-II**

State/UT wise details of ground water contamination observed during the monitoring conducted by CGWB during last 5 Years

S.No.	State/ UT	Total no. of districts	No. of Partially Affected District EC > 3000 µS/cm					No. of Partially Affected District Having F >1.5 mg/L					No. of Partially Affected District Having NO3 >45 mg/L				
			2024	2023	2022	2021	2020	2024	2023	2022	2021	2020	2024	2023	2022	2021	2020
1	Andaman & Nicobar Islands	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
2	Andhra Pradesh	26	23	23	13	1	0	16	17	13	1	0	27	26	13	1	0
3	Arunachal Pradesh	27	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
4	Assam	35	0	1	1	0	0	1	0	0	3	2	2	0	0	0	0
5	Bihar	38	4	5	6	0	3	12	6	10	2	0	28	15	6	12	15
6	Chandigarh UT	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Chhattisgarh	33	1	2	0	0	0	11	8	5	6	4	19	20	19	22	17
8	Dadra And Nagar Haveli	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Daman And Diu	2	0	1	1	0	0	0	0	1	0	0	0	0	1	0	0
10	Delhi	11	8	5	4	6	7	5	6	6	6	4	8	7	10	7	5
11	Goa	2	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0
12	Gujarat	33	27	24	26	25	23	22	25	22	15	23	25	23	28	29	29
13	Haryana	22	20	19	17	16	17	17	17	14	15	15	22	21	17	16	19
14	Himachal Pradesh	12	0	0	0	0	0	2	2	3	1	1	6	6	4	6	3
15	Jammu & Kashmir	20	0	0	0	0	0	0	0	1	4	2	6	6	8	8	5
16	Jharkhand	24	0	0	0	0	0	9	8	6	1	2	17	9	13	6	7
17	Karnataka	31	14	15	13	0	4	18	19	18	0	4	31	27	25	0	6
18	Kerala	14	0	0	0	0	0	1	1	1	1	0	15	10	12	11	0

S.No.	State/ UT	Total no. of districts	No. of Partially Affected District EC > 3000 µS/cm					No. of Partially Affected District Having F >1.5 mg/L					No. of Partially Affected District Having NO3 >45 mg/L				
			2024	2023	2022	2021	2020	2024	2023	2022	2021	2020	2024	2023	2022	2021	2020
19	Madhya Pradesh	55	5	5	7	7	6	6	6	8	16	12	44	39	45	48	48
20	Maharashtra	36	23	21	15	0	0	9	10	11	0	1	33	32	30	1	1
21	Meghalaya	12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
22	Mizoram	11		0	0	0	0		0	0	0	0		0	0	0	0
23	Nagaland	16	0	0	0	0	0	1	0	0	0	0	5	0	1	0	0
24	Odisha	30	6	4	2	2	3	5	10	12	8	12	17	15	21	13	22
25	Pondicherry	4	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0
26	Punjab	23	9	9	6	6	7	14	17	10	12	10	21	20	20	18	19
27	Rajasthan	50	24	26	28	29	29	30	31	30	28	30	31	30	33	31	31
28	Tamil Nadu	38	31	24	28	17	2	21	21	23	13	2	38	31	35	18	3
29	Telangana	33	15	16	6	2	0	28	28	10	2	0	33	32	10	3	0
30	Tripura	8	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0
31	Uttar Pradesh	76	11	13	11	6	1	24	27	15	16	3	48	48	44	36	13
32	Uttarakhand	13	0	0	1	0	1	2	1	1	0	0	8	5	3	3	3
33	West Bengal	23	6	5	3	3	4	5	3	3	3	6	19	18	13	12	10
	<b>Grand Total</b>	<b>763</b>	<b>227</b>	<b>218</b>	<b>189</b>	<b>120</b>	<b>107</b>	<b>261</b>	<b>263</b>	<b>225</b>	<b>153</b>	<b>134</b>	<b>506</b>	<b>443</b>	<b>414</b>	<b>301</b>	<b>256</b>

**Annexure-III**

<b>Dam incident/ failure list from 2022 onwards</b>										
<u>Sl.No</u>	PIC No.	State	Name of Project	Type	Max. Height(M)	Year of Completion	Date of Failure/ Incident	Details of failure/ Incident	Category (Incident/ Failure)	Current Status
1		Madhya Pradesh	Karam Dam	Composite dam	52	Under Construction	11-08-2022	Slope failure and piping. On August 11, 2022 due to heavy rainfall in catchment area water has been impounded upto RL 296 m and piping was observed at RD 430 m.	Incident	MoU has been signed for review consultancy with Madhya Pradesh Government and Central water Commission.
2		Madhya Pradesh	Ardala Dam			2015	12-09-2022	leakage observed with rising water level	Incident	Dam rehabilitation has been completed

3	KL12 HH0 042	Kerala	Parambikul am Dam	Compo site dam	73.1 5	1967	22/09/20 22	<p>On 21.09.2022 at around 2:00 AM, Spillway Shutter No. 2 was suddenly damaged and broke out, resulting in the release of approximately 20,000 cusecs of water from the reservoir.</p> <p>The failure appears to have occurred due to the breaking of the left-side chain link arrangement that connected the shutter to the counterweight.</p> <p>As a result, the counterweight became unbalanced, causing the chain to be pulled out from the gear assembly. This led to the downward movement of the counterweight.</p>	Incident	Broken Spillway Shutter has already been restored in December, 2022
---	--------------------	--------	----------------------	----------------------	-----------	------	----------------	--	----------	---

4	AP0 1HH 0151	Andhra Pradesh	Sree Pothuluri Veera Brahmendra Swamy Reservoir (SPVBR)	Embankment	50.5	2006	13/12/20 22	The construction of the main dam was completed during 1999-2000 and first filling of the Dam was during 2005-06. Sweating and oozing was observed when the reservoir was filled upto the level 210.30 m. In December-2022, when the water level was +213.070 M and the corresponding Storage is 15.94 TMC, heavy seepage to the tune of 8 litres per second is observed in the reach from RD 1620 m to 1650 m. Sand and metal filters are laid in the oozing area for safe discharge of the seepage water.	Incident	Sand and metal filters are laid in the oozing area for safe discharge of the seepage water. Plastic Diaphragm wall was constructed for a length of 100 m in the critical reach from RD- 1600 m to RD 1700 m as per the suggestions of the Panel of Experts.
5	HP4 4HH 0015	Himachal Pradesh	Malana-II HEP	Concrete	53	2012	24/07/20 23	Overtopped due to jammed radial gates from slush and boulders, causing scouring on the left bank.	Incident	The jammed gates were opened on 10th October after 45 days overtopping. As an immediate measure Parapet wall on right bank was removed to guide water D/S from right side.

6	MP6 4LH 1090	Madhya Pradesh	Pondi Jaitgarh Dam	Emban kment	12.1 5	2008	25/07/20 23	Due to heavy rainfall between 23/07/23-24/07/23 the water in the reservoir reached FTL and started to spill out from waste weir. Seepage started from 24/07/2023 evening which was increasing at fast rate. Dam breached on 25/07/2023 morning between RD 220 m and RD 270 m	Failure	Dam breached and non functional as of now. No loss of life reported.
7	TL47 HH0 039	Telangan a	Kaddam Dam	Compo site dam	31	1955	27/07/20 23	Excessive inflow	Incident	No structural damage to the dam during the floods as reported by Project Authority.
8	SK5 87M H00 09	Sikkim	Teesta Basin dams (Teesta III dam, Teesta-V dam, Teesta-VI Barrage (Under- Constructio n), TLDP-III Dam, TLDP-IV Dam), Sikkim and West Bengal	CFRD	60	2017	04-10- 2023	Sudden outburst in South Lhonak Glacial Lake in Sikkim lead to Flooding (GLOF) in Teesta River on the night of 03-04 October 2023 lead to washing way of Teesta -III dam and heavy damages to Teesta-V dam. TLDP-II dam and TLDP-IV dam are also affected but no major damage has been reported	Failure	A Committee to examine the effect of GLOF in Teesta basin on water resources projects was constituted. Report of the Committee has been submitted. Teesta III HEP, Sikkim Urja Ltd.- As a substantial part of CFRD dam has been washed away and the dam is non-functional. Teesta V HEP-NHPC Repair/restoration work is going on.. TLDP-III PS, NHPC:

										Power house is operational with reduced capacity. TLDP-IV PS, NHPC: Dam is operational.
9	TL16 9MH 0185	Telangana	(Kaleshwar am Project) Medigadda (Lakshmi ) Barrage Annaram and Sundilla	Barrage	20.1	2019	21/10/20 23	Settlement of pier of Medigadda Barrage on the night of 21/10/2023 lead to sudden release of 2.7 lakh cusec. Construction of the Barrage was completed in 2019. Observed leakage of water in the D/S of Annaram (Saraswathi) Barrage, Telangana (The piers from 16 to 21, along with the raft have sunk to varying depths and piers tilted to varying degrees)	Failure	A Committee is constituted for inspection and study of the designs and construction of Medigadda, Annaram, and Sundilla Barrages of Kaleshwaram Project, Telangana. Report of the Committee is expected by December 2024 end.
10	AS3 0HH 0005	Assam	Subansiri Lower HEP	Concrete	130	Under constr uction	27/10/20 23	Landslide lead to obstruction of diversion tunnel and water flow through the river	Incident	Construction of dam is completed and reservoir has been filled up to 183.20 m E.L.
11	PB2 6VH 0011	Punjab	Ranjit Sagar Dam	Emban kment	147	2001	02/02/20 24 & 17/04/20 24	Two consecutive incidences of sliding of upstream left side spillway approach channel benches of Ranjit Sagar Dam on 02.02.2024 & 17.04.2024.	Incident	the work of repair and restoration of spillway benches at RD 165m to RD 265m at elevation EL 508 m to EL 523 m has been completed ( started on 03.05.2024).

12	MH2 93H H32 42	Maharashtra	Lohara Storage tank	Embankment	15.3 5	2017	15/07/20 24	On 15th July 2024, due to heavy rainfall and a cloudburst-like situation in the catchment area of the Lohara Storage Tank, there was a sudden increase in inflow of water. A total of 64 mm rainfall was recorded at the Urdhav Penganga Project rain gauge, Sirasm (Dist. Hingoli). As a result, the main body wall (32 m length, chainage 148 m–180 m) was partially washed out on the downstream side. Additionally, the embankment between CH 180–216 (top) and CH 195–205 (bottom) was completely drained out into the nalla portion.	Failure	Instructions have been given to the concerned District Water Conservation Officer to prepare and submit a repair estimate immediately.
13	TL47 MH0 062	Telangana & AP	Peddavagu Dam	Composite dam	22	1981	19/07/20 24	Heavy rainfall and the malfunctioning of one of the three crest gates resulted in overtopping. The left flank bund and a portion of the right flank bund were breached due to heavy floods, with a discharge of 76,000 cusecs, exceeding the design capacity of 40,500 cusecs. (19/07/2024)	Failure	Earthen portion of the dam was washed away and the dam is non-functional.

14	HP4 4HH 0015	Himachal Pradesh	<u>Malana II</u>	Concrete	53	2012	31/07/20 24	Cloud burst occurred in Malana catchment in the night of 31.07.2024 and damage to the Malana dam. Reportedly, the incident has caused damages in the downstream area due to excessive discharge from the dam	Failure	Restoration of Dam, Switchyard, office building etc is being carried out.
15	HP4 4MH 0006	Himachal Pradesh	<u>Malana-I HEP</u>	Composite dam	17	2001	31/07/20 25	Cloud burst occurred in Malana catchment in the night of 31.07.2024 and damage to the Malana dam. Reportedly, the incident has caused damages in the downstream area due to excessive discharge from the dam	Failure	Restoration of Dam, Switchyard, office building etc is being carried out.
16	HP2 7HH 0003	Himachal Pradesh	<u>Pandoh Dam</u>	Embankment	76.2	1977	01-08- 2024	Cloud burst occurred in the upper reaches of the Beas River during early morning of 01-08-2024 which lead to very heavy ingress of trash & silt in the Pandoh reservoir. The very heavy silt load has resulted in jamming of 02 no. spillway gates of the Pandoh Dam	Incident	Stucked gates were successfully opened and normal operation of dam has been restored.
17	CG6 41M H03 64	Chhattisgarh	<u>Venika Dam</u>	composite dam	20.5	2019	02-08- 2024	Overtopping of Venika dam on Mahan river which is owned by private company. Reportedly, the incident has caused damages in the downstream area due to uncontrolled spilling of water from the dam due to non-opening of radial gates.	Failure	20 m Earthen dam washed away due to overtopping and the dam is non-functional.

18	KA0 6HH 0036	Karnataka	<u>Tungabhadra Dam</u>	Masonry Dam	49.3 9	1953	10-08-2024	Spillway gate no. 19 was washed away from the groove of the spillway on 10.08.2024 at 10:50 PM.	Incident	<p>Temporary Stoplogs have been inserted in Gate grooves. Dam is operational. Technical Enquiry Committee recommended replacing all 33 gates. Tender for fabrication of Gate no.19 has been awarded and fabrication work is going on. Tender for fabrication of other 32 gates has also been awarded and fabrication work is going on. Deccan Chronicle 21 April 2025</p> <p>The Tungabhadra Dam authorities have floated tenders worth ₹80 crore to replace 32 gates, while the 19th gate, which was washed away last year, has already been allotted to an Ahmedabad-based company for ₹1.6 crore.</p>
----	--------------------	-----------	------------------------	-------------	-----------	------	------------	---	----------	--

19	JH8 6MH 0084	Jharkhand	Bokaro barrage	Barrage	11.5 6	1953	03-08- 2024	Incident of collapse of two gates (no. 4 & 8) in the morning on 3/8/24 due to heavy rainfall in Damodar river catchment resulted in large inflow into the reservoir.	Incident	Two Hydraulic gates were collapsed and two emergency gates have been fixed in the gate slot of the barrage and the barrage is made operational.
20	UP1 3HH 0059	Uttar Pradesh	Matatila Dam Lalitpur,	Emban kment	45.7 2	1964	05-05- 2025	Damage to drain chute, gauge, pitching of Matatila Dam due to waves driven by strong winds.	Incident	Repair/ Restoration work has been completed.
21	PB2 6HH 0015	Punjab	Shahpurka ndi Dam Project	Concre te	55.5 7	Under constr uction	07-06- 2025	Seepage of Water Through Temporary Dyke at Power House No. 2. Water entered the working area of the Tail Race Channel portion downstream of Power House No. 2, filling the area from Elevation Level (EL) 338.00 m to EL 344.50 m. No construction activity was going on at site at that time and no damage occurred to the structure.	Incident	Restored the dyke to arrest further seepage. Continuous dewatering operations are currently underway and are expected to be completed within three to four days (as per email dated 13.06.2025)

22	HP3 0HH 0016	Himachal Pradesh	Parbati Stage-II	Concrete	83.7	Under construction	25/06/20 25	PARBATI-II Cloud burst incident leading to heavy silt/ sludge up to 10 to 12 feet has been deposited in the MIV floor, Protecton/ Protection wall and TRC (Tail race channel) of powerhouse has been completely Damaged, extensive damage to Jiwa Trench weir, Intake Gate, Silt Flushing Channel and other structures at the site, extensive damage to Hurla Trench weir, and other structures at the site etc.	Incident	Restoration works are in progress.
23	HP3 0HH 0017	Himachal Pradesh	Parbati Stage-III	Embankment	43	2014	25/06/20 26	Parbati-III Damages have been observed downstream of Dam Plunge pool. PP gabion crates, Wire crates and concrete blocks have been washed out on left and right bank of the plunge pool, both DT Gates have been stuck in silt.	Incident	Restoration works are in progress.
24	MP0 8MH 0692	Madhya Pradesh	Padariya Dam, Chhatarpur	Embankment	16.1 3	2013	12-07- 2025	Due to excessive rainfall in the catchment, Dam overflowed led to embankment breached ( RD 510-590 m).	Failure	Dam is non-functional
25	CG0 3MH 0095	Chhattisgarh	Luti Tank	Embankment	12.8	1982	02-09- 2025	Due to very heavy rainfall in the catchment, the dam has failed due to overtopping resulting in loss of lives of people	Failure	Dam is non-functional

26	CG5 9MH 0325	Chhattisgarh	Rajadera Tank	Embankment	18.6 9	1982	02-11- 2025	A seepage issue was reported at the dam site on 1 November 2025, as observed by the Executive Engineer. The seepage occurred on the downstream slope near the toe portion and was attributed to piping. Subsequently, on 2 November 2025 at approximately 5:00 A.M., the dam breached along the right flank portion. Although some newspaper reports mentioned agricultural loss in the downstream village, the field assessment confirmed that there was no loss of life or agricultural damage. The expert team assessed that the piping failure may have occurred due to animal burrowing.	Failure	An expert team visited to examine the cause of the breach and provided recommendation for restoration measure and a report was prepared. Report was submitted on 3 November 2025 to the National Dam Safety Authority (NDSA) as well as the Water Resources Department (WRD) through email.
27	KA2 67L H02 41	Karnataka	Mangala	Embankment	13.1	1969	17/12/20 25	On 17.12.2025 at about 1:30 a.m., a 2 m portion of the UCR wall near the sluice vent of Mangala Reservoir collapsed, causing seepage of approximately 580 cusecs. Emergency repair works were immediately undertaken using boulders and sandbags, and about 90% of the leakage has been controlled. Around 5–8 cusecs of leakage is still observed, and further repair works are in progress.	Incident	Repair works are in progress.

28	KA0 6MH 0232	Karnataka	Hipparagi Barrage	Barrage	26	2004	06-01- 2026	On 06-01-2026, the gate plate of Gate No. 22 of Hipparagi Barrage was damaged, with about 1.30 m of the 8.23 m high gate collapsing, while the remaining 6.93 m remains intact. Water is flowing downstream through the upper portion of the collapsed gate, with an estimated discharge of approximately 6000 cusecs.	Incident	Emergency work for installation of a replacement stoplog gate is currently in progress.
----	--------------------	-----------	----------------------	---------	----	------	----------------	--	----------	---

<b>Summary</b>						
<b>S.no</b>	<b>State</b>	<b>Total no of Dams</b>	<b>Design Inlow Flood data filled on portal</b>	<b>Blank/ No data</b>	<b>Absurd value (like .000001)</b>	<b>Revised Design inflow Flood Carried Out</b>
1	Andaman nicobar	3	3	0	0	1
2	ANDHRA PRADESH	163	150	13	12	11
3	Arunanchal Pradesh	5	4	0	0	0
4	Assam	3	3	0	0	0
5	Bihar	34	32	2	0	4
6	Chhattisgarh	329	319	10	7	10
7	Goa	6	6	0	0	3
8	Gujarat	525	523	2	17	61
9	Haryana	3	3	0	0	1
10	Himachal Pradesh	30	26	4	0	10
11	Jammu and Kashmir	9	8	1	0	2
12	Jharkhand	72	55	17	0	5
13	Karnataka	232	232	0	1	76
14	Kerala	65	65	0	0	29
15	Madhya Pradesh	1372	1351	21	5	61
16	Maharashtra	2721	2689	67	12	80
17	Manipur	4	4	0	0	3
18	Meghalaya	9	9	0	0	6
19	Mizoram	3	3	0	0	0
20	Nagaland	1	1	0	0	0
21	Odisha	221	219	2	0	17
22	Rajasthan	316	314	2	4	45
23	Sikkim	10	8	0	0	2
24	Tamil Nadu	123	123	0	1	66
25	Ladakh	2	2	0	0	0
26	Punjab	16	15	1	0	12
27	Telangana	175	170	5	0	24
28	Uttar Pradesh	143	138	5	1	22
29	Uttarakhand	36	33	0	0	9
30	West Bengal	36	36	0	0	1
		<b>Total Dam-6667</b>	<b>6544</b>	<b>152</b>	<b>60</b>	<b>561</b>

## Annexure-V

	Name of the Project & IC	Developer	Sector	State	Project Status	Status of Implementation of EWS
1	Sewa II (120 MW)	NHPC	Central	Jammu & Kashmir	Commissioned	Implemented
2	Baira Siul (180 MW)	NHPC	Central	Himachal Pradesh	Commissioned	Implemented
3	Dhauliganga (280 MW)	NHPC	Central	Uttarakhand	Commissioned	Implemented
4	Nimoo Bazgo (45 MW)	NHPC	Central	Ladakh	Commissioned	Implemented
5	Chutak (44 MW)	NHPC	Central	Ladakh	Commissioned	Implemented
6	Kishanganga (330 MW)	NHPC	Central	Jammu & Kashmir	Commissioned	Implemented
7	Parbati St. II (800 MW)	NHPC	Central	Himachal Pradesh	Commissioned	Implemented.
8	Rangit (60 MW)	NHPC	Central	Sikkim	Commissioned	Implemented.
9	Subansiri Lower (2000 MW)	NHPC	Central	Arunachal Pradesh	Under Construction	Implemented
10	Chamera-III (231 MW)	NHPC	Central	Himachal Pradesh	Commissioned	Implemented
11	Panyor Lower (405 MW)	NEEPCO	Central	Arunachal Pradesh	Commissioned	Implemented
12	Kameng (600 MW)	NEEPCO	Central	Arunachal Pradesh	Commissioned	Implemented
13	Nathpa Jhakri (1500 MW)	SJVN	Central	Himachal Pradesh	Commissioned	Implemented

14	Sainj (100 MW)	HPPCL	State	Himachal Pradesh	Commissioned <b>(The Early Warning System has been fully damage due to recent flash flood/cloud burst on 31.07.2025.) The quotation for repair of the EWS has been received from M/s AIMIL Ltd. Based on the same, the detailed estimate has been prepared and submitted to the competent authority at Shimla for approval.</b>	Implemented
15	Integrated Kashang (195 MW)	HPPCL	State	Himachal Pradesh	Commissioned	Implemented
16	Shongtong Karcham (450 MW)	HPPCL	State	Himachal Pradesh	Under Construction	Implemented
17	Budhil (70 MW)	GREENKO	Private	Himachal Pradesh	Commissioned	Implemented
18	Singoli Bhatwari (99 MW)	Renew Jal Urja Private Limited	Private	Uttarakhand	Commissioned	Implemented
19	Baspa-II (300MW)	JSW EnergyLtd./ HBPCL	Private	Himachal Pradesh	Commissioned	Implemented
20	Karcham Wangtoo (1045 MW)	JSW Energy Ltd	Private	Himachal Pradesh	Commissioned	Implemented
21	Chanju-I (36 MW)	IA HYDRO ENERGY Pvt. LTD	Private	Himachal Pradesh	Commissioned	Implemented
22	Vishnuprayag (400 MW)	JPVL	Private	Uttarakhand	Commissioned	Implemented
23	Chuzachen (110 MW)	GIPL	Private	Sikkim	Commissioned	Implemented
24	Tashiding (97 MW)	SHIGA ENERGY	Private	Sikkim	Commissioned	Implemented
25	Rongnichu (113 MW)	MBPCL	Private	Sikkim	Commissioned	Implemented

26	Malana-II (100 MW)	EPPL/GREENKO	Private	Himachal Pradesh	Commissioned	Implemented
27	Bajoli Holi (180 MW)	GMR	Private	Himachal Pradesh	Commissioned	Implemented.
28	Sawra Kuddu (111 MW)	HPPCL	State	Himachal Pradesh	Commissioned	Implemented
29	Allain Duhangan (192 MW)	ADHPL	Private	Himachal Pradesh	Commissioned	Implemented
30	Pakal Dul (1000 MW)	CVPPL	Central	Jammu & Kashmir	Under Construction	Implemented
31	Kiru (624 MW)	CVPPL	Central	Jammu & Kashmir	Under Construction	Implemented
32	Tapovan Vishnugad HEP (520MW)	NTPC	Central	Uttarakhand	Under Construction	Implemented
33	Tidong-I (150 MW)	Tidong Power Generation Pvt. Ltd. (Owned by JSW)	Private	Himachal Pradesh	Under Construction	Implemented
34	Kutehr HEP (240 MW)	JSW Energy (Kutehr) Limited	Private	Himachal Pradesh	Commissioned	Implemented
35	Naitwar Mori (60 MW)	SJVN Ltd.	Central	Uttarakhand	Commissioned	Implemented
36	Shanan 110 MW	PSPCL	State	Himachal Pradesh	Commissioned	Under Implementation
37	Dikchu (96 MW)	SNEHA KINETIC/GREENKO	Private	Sikkim	Commissioned	Implemented
38	Upper Sindh-II (105 MW)	JKSPDC	State	Jammu & Kashmir	Commissioned	Under Implementation
39	Teesta III (1200 MW)	SUL	State	Sikkim	Commissioned (No longer in Operation)	Under Implementation

40	Sorang (100 MW)	HSPCL/GREENKO	Private	Himachal Pradesh	Commissioned	Implemented
41	Vishnugad Pipalkoti (444 MW)	THDC	Central	Uttarakhand	Under Construction	Implemented
42	Vyasi (120 MW)	UJVNL	State	Uttarakhand	Commissioned	Implemented
43	Maneribhali-I (90 MW)	UJVNL	State	Uttarakhand	Commissioned	Implemented
44	Maneribhali-II (Dharasu) (304 MW)	UJVNL	State	Uttarakhand	Commissioned	Implemented
45	Sanjay (Bhaba) (120 MW)	HPSEB	State	Himachal Pradesh	Commissioned	Tender for the work was floated on 22/11/2025, with scheduled
46	Malana (86 MW)	MPCL	Private	Himachal Pradesh	Commissioned	Under Implementation

**Pradhan Mantri Krishi Sinchai Yojna (PMKSY)**

**Accelerated Irrigation Benefits Programme (AIBP)**

AIBP component focuses on completion of major and medium and Extension, Renovation and Modernization (ERM) projects for creation of new irrigation potential/restoration of irrigation potential in the country.

During 2016-17, the component of PMKSY-AIBP was reviewed and ninety-Nine (99) ongoing Major/Medium Irrigation Projects (MMI) (and 7 phases) with ultimate irrigation potential of 76.09 lakh hectare and balance irrigation potential of 34.63 lakh ha have been included under Pradhan Mantri Krishi Sinchai Yojna-Accelerated Irrigation Benefits Programme (PMKSY-AIBP) during 2016-17. Total eligible central assistance was finalized as Rs. 17,002 crore. 69 projects have been completed; 26.84 lakh hectare irrigation potential has been created and Rs. 14,420.41 crore has been provided as central assistance to these projects.

Continuation of PMKSY scheme (PMKSY2.0) for 2021-26 was approved with outlays towards central assistance for AIBP and CAD&WM component amounting to Rs. 23,918 crore.

14 new AIBP projects with ultimate irrigation potential of 5.95 lakh hectare with eligible central assistance of Rs. 10,000.68 crore have been included under PMKSY2.0 i.e. after March, 2021. 01 project has been completed, Rs. 1640.08 crore have been provided as central assistance and 0.51 lakh hectare irrigation potential have been created through these projects.

Further 1.88 lakh hectare irrigation potential has been created/restored through Special Projects being funded under PMKSY-AIBP namely Shahpur Kandi National Project and relining of Rajasthan Feeder and Sirhind Feeder.

**Funding Pattern:**

<b>Category</b>	<b>Central: State</b>
<b>A.</b> Projects in 8 North-Eastern, 2. Himalayan States (Himachal Pradesh, Uttarakhand) and Union Territories of Jammu & Kashmir and Ladakh	90:10
<b>B.</b> Projects benefitting special area in other general category States, i.e., command under	60:40

Drought Prone Area Programme (DPAP) & Desert Development Programme (DDP), Tribal area, Flood prone area, Left Wing Extremist area, Bundelkhand, Vidarbha, Marathwada and KBK (Odisha)	
C. Projects in general category States benefitting areas other than at (B) above	25:75

<b>Details of Completed PMKSY-AIBP projects</b>						
<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Irrigation Potential Created (2016-25) (Th. Ha.)</b>
1	Maddigedda	10.900	0.310	0.000	0.00	0.31
2	Champamati	213.510	0.000	0.000	0.00	14.70
3	Dhansiri	425.130	0.000	0.000	116.01	21.84
4	Maniyari Tank	159.050	19.697	3.620	0.00	0.30
5	Kharung	101.040	0.000	0.000	0.00	9.21
6	Tillari (G)	1051.740	0.000	0.000	209.94	4.24
7	Rajpora Lift	65.670	2.482	2.300	0.00	0.32
8	Restoration & Modernization of Main Ravi Canal	60.010	15.292	15.286	0.00	5.52
9	Tral Lift	149.370	28.486	22.120	0.00	0.68
10	Sri Rameswar Irrigation	173.650	0.000	0.000	0.00	0.82
11	Bhima LIS	619.170	44.888	41.464	0.00	2.95
12	Karanja	339.150	35.148	35.147	0.00	4.15
13	NLBC System Project (New)	2405.840	940.504	929.400	0.00	99.70
14	Singhpur Project	180.090	4.960	1.940	0.53	6.63
15	Mahuar Project	106.930	5.550	0.000	0.00	8.77

<b>Details of Completed PMKSY-AIBP projects</b>						
<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Irrigation Potential Created (2016-25) (Th. Ha.)</b>
16	Sagad Project	195.730	6.825	2.500	14.04	2.67
17	Sindh Project Phase II	1924.830	39.463	35.517	168.15	31.51
18	Indira Sagar Project Canal Phase - I & II (km. 0 to km. 142)	1608.000	40.960	23.680	0.00	8.60
19	Omkareshwar Project Canal Phase-IV (OSP lift)	414.050	98.147	69.576	91.34	10.60
20	Indira Sagar Project Canal Phase - V (Khargone Lift )	212.120	39.279	9.510	50.66	22.61
21	Bansagar Unit 2	1648.620	91.467	68.020	0.00	5.67
22	Barriyarpur LBC	472.140	18.282	6.620	10.36	1.49
23	Sanjay sagar (Bah) Project	159.620	3.325	2.990	26.82	4.45
24	Bargi Diversion Project Phase - I (km. 16 to km 63)	432.250	9.506	8.536	15	2.01
25	Mahi Project	780.000	7.235	5.970	78.78	5.96
26	Mahan Project	434.010	11.881	8.030	29.63	5.19
27	Omkareshwar Project Canal Phase-II	353.620	36.650	16.910	0.00	3.39

<b>Details of Completed PMKSY-AIBP projects</b>						
<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Irrigation Potential Created (2016-25) (Th. Ha.)</b>
28	Omkareshwar Project Canal Phase-III	510.000	46.860	31.925	0.00	2.62
29	Indira Sagar Project Canal Phase - III	890.380	146.531	110.325	19.14	15.09
30	Indira Sagar Project Canal Phase - IV	558.620	115.699	85.470	102.95	10.20
31	Pench Project	1564.790	25.990	20.730	0.00	28.27
32	Bawanthadi (IS)	697.930	27.232	26.832	62.03	9.54
33	Lower Panzara	294.660	18.773	18.618	64.28	3.22
34	Dongargaon	52.280	5.888	5.882	11.43	0.79
35	Warna	1062.920	118.220	0.000	0.00	10.01
36	Nandur Madhmeshwar Ph-II	686.970	17.240	17.237	383.22	16.52
37	Upper Kundalika	263.720	15.089	10.923	62.37	2.70
38	Lower Dudhna	1714.050	56.256	52.799	568.35	14.25
39	Khadakpurna	1052.010	40.174	40.158	111.07	8.57
40	Dhom Balaakwadi	868.520	57.662	51.059	383.69	7.88
41	Wang project	111.920	7.630	3.960	56.71	4.63
42	Krishna Koyana Lift	2774.900	337.776	303.856	1582.89	66.20

<b>Details of Completed PMKSY-AIBP projects</b>						
<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Irrigation Potential Created (2016-25) (Th. Ha.)</b>
43	Gadnadi	602.750	4.143	3.492	149.95	4.63
44	Tillari	649.600	17.910	11.940	281.64	1.59
45	Tarali	943.260	80.540	72.064	402.22	8.57
46	Arjuna	611.540	17.690	17.680	225.50	6.81
47	Sangola Branch Canal	742.240	33.720	32.428	453.96	5.20
48	Bembla	2483.540	307.168	307.168	765.72	12.43
49	Upper Pen Ganga	1511.830	241.966	207.267	478.86	10.64
50	Lower Wardha	2915.61	230.20	216.63	1363.40	44.57
51	Dolaithabi Barrage	455.550	35.270	35.270	73.50	5.63
52	Upper Indravati(KBK)	535.880	18.000	18.000	0.00	0.56
53	Rukura-Tribal	240.220	26.348	25.120	23.79	7.65
54	RET irrigation	707.640	110.781	96.121	355.28	8.50
55	Telengiri	1276.530	208.911	199.436	275.00	15.18
56	Lower Indra (KBK)	1925.630	104.884	104.850	227.37	19.84
57	Subernarekha	10209.24	643.33	603.42	1045.25	32.51
58	Kandi Canal Extension (Ph.II)	580.130	45.762	45.756	0.00	4.60

<b>Details of Completed PMKSY-AIBP projects</b>						
<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Irrigation Potential Created (2016-25) (Th. Ha.)</b>
59	Rehabilitation of Ist Patiala Feeder and Kotla Branch Project	177.800	6.660	6.660	0.00	30.39
60	Narmada Canal	2551.030	427.823	427.816	259.01	6.71
61	Mod. of Gang Canal	635.460	32.370	30.740	0.00	0.53
62	Gollavagu Project	93.276	6.304	4.780	0.00	1.83
63	Rallivagu project	53.160	0.000	0.000	0.00	0.20
64	Mathadivagu Project	50.652	5.346	5.343	0.00	0.65
65	SriKomaram Bheem project	483.720	0.000	0.000	0.00	5.18
66	Peddavagu@Neelwai	216.47	0.00	0.00	0.00	3.65
67	SRSP St-II	1241.04	48.36	39.29	0.00	13.65
68	Bansagar Canal	3242.520	143.510	143.507	0.00	100.13
69	Saryu Nahar(NP)	5803.610	1228.578	1097.942	1899.05	542.18
<b>Total</b>		<b>68739.84</b>	<b>6562.931</b>	<b>5841.63</b>	<b>12498.89</b>	<b>1378.79</b>

**Details of Ongoing PMKSY-AIBP Projects**

<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Balance Irrigation Potential as on 01.04.2016 (Th. Ha.)</b>	<b>Irrigation Potential Created (2016-25) (Th. Ha.)</b>	<b>Physical Progress (%)</b>
1	Gundlakamma	697.39	19.87	11.79	148.59	8.96	4.98	98
2	Tadipudi LIS	794.32	0.00	0.00	55	21.47	1.62	78
3	Thotapally	1023.25	0.00	0.00	0.00	22.66	14.93	96
4	Musurumilli	169.95	14.52	7.40	0.00	0.15	0.15	98
5	Pushkara LIS	491.26	0.00	0.00	34.00	17.20	1.93	98
6	Yerracalva	124.94	0.00	0.00	0.00	1.90	0.41	97
7	Tarakaram Teerta sagaram	739.89	25.04	3.44	251.75	10.00	0.00	67
8	Borolia	295.97	9.97	0.00	0.00	10.26	0.00	56
9	Durgawati	1207.39	90.07	72.42	0.00	36.31	32.20	96
10	Punpun	685.28	106.02	37.82	0.00	10	0.00	45
11	Kelo	1182.90	51.07	46.00	0.00	12.95	8.66	92
12	Sardar Sarovar	33930.00	4797.51	4545.56	3611.03	681.00	614.90	96

Sl. No.	Name of Project	Latest Estimated Cost (Rs. crore)	Eligible central assistance under PMKSY (Rs. crore)	CA provided since April 2016 (Rs. crore)	State Share provided through NABARD (Rs. crore)	Balance Irrigation Potential as on 01.04.2016 (Th. Ha.)	Irrigation Potential Created (2016-25) (Th. Ha.)	Physical Progress (%)
13	Subernarekha Multipurpose	9579.58	1373.68	756.73	1020.44	173.75	95.32	69
14	Upper Tunga Irrigation Project	1592.32	217.76	184.04	0.00	11.00	9.24	99
15	Muvattupuzha	426.23	8.73	0.00	0.00	3.32	2.22	98.35
16	Karapuzha	162.46	14.05	0.00		6.42	0.68	31.64
17	Bargi Diversion Project Phase - II	440.49	12.94	12.24	10.15	26.50	6.55	98
18	Bargi Diversion Project Phase - III	2275.00	240.74	206.10	655.26	38.78	0.00	79
19	Bargi Diversion Project Phase - IV	1139.38	145.87	77.91	68.50	27.00	16.34	78
20	Waghur	1758.51	246.15	195.02	203.56	22.58	16.07	93

<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Balance Irrigation Potential as on 01.04.2016 (Th. Ha.)</b>	<b>Irrigation Potential Created (2016-25) (Th. Ha.)</b>	<b>Physical Progress (%)</b>
21	Aruna	1472.14	0.00	0.00	1093.54	11.71	9.10	98
22	Morna (Gureghar)	219.90	8.23	0.32	60.71	2.26	0.70	32
23	Lower Pedhi	1480.70	38.02	20.39	659.35	17.02	0.00	95
24	Nardave (Mahamadwadi)	781.85	25.78	13.72	417.99	11.36	0.17	73
25	Kudali	382.29	10.43	5.90	169.58	8.53	0.23	86
26	Gosikhurd (NP)	19375.26	1146.11	899.42	6656.26	211.32	141.24	79.64
27	Thoubal	2107.45	216.60	204.84	261.52	13.29	12.78	99
28	Anandpur Barr. Ph.-I / Integrated Anandpur Barr.	4918.00	61.32	28.01	1873.55	53.41	2.85	63
29	Kanupur	3882.00	270.28	133.91	822.60	47.74	15.24	80
30	Palemvagu project	229.45	0.00	0.00	0.00	1.87	0.16	98
31	Rajiv Bheema L.I. Scheme	2509.67	94.66	64.75	0.00	77.30	56.25	96

Sl. No.	Name of Project	Latest Estimated Cost (Rs. crore)	Eligible central assistance under PMKSY (Rs. crore)	CA provided since April 2016 (Rs. crore)	State Share provided through NABARD (Rs. crore)	Balance Irrigation Potential as on 01.04.2016 (Th. Ha.)	Irrigation Potential Created (2016-25) (Th. Ha.)	Physical Progress (%)
32	Peddavagu @ Jagannathpur	244.67	8.49	2.29	0.00	6.07	0.00	82
33	Indiramma Flood Flow Canal	9886.20	0.00	0.00	0.00	40.00	21.20	92
34	J. Chokha Rao LIS	18500.00	966.64	865.03		193.24	93.44	87
35	Arjun sahayak	2756.93	132.41	116.57	1353.80	59.49	57.64	100
36	Madhya Ganga Canal PH-II	4909.92	92.00	63.81	3178.03	105.21	68.68	94
37	Prakachik Khows Canal	56.15	3.41	2.98	0.00	0.76	0.00	93
<b>Total</b>		<b>132429.10</b>	<b>10439.64</b>	<b>8578.79</b>	<b>22605.21</b>	<b>2002.79</b>	<b>1305.88</b>	

**Details of Ongoing Special Projects**

<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Ultimate Irrigation Potential (Th. Ha.)</b>	<b>Irrigation Potential Created (Th. Ha.)</b>	<b>Physical Progress (%)</b>
1	Shahpur Kandi Dam	3394.49	485.38	485.21	0	37.17	37.17	88
2	Rajasthan Feeder	1687.36	620.41	540.00	0	98.74	82.37	80
3	Sirhind Feeder	774.80	205.76	196.73	0	69.09	69.09	80
<b>Total</b>		<b>5856.65</b>	<b>1311.55</b>	<b>1221.94</b>	<b>0</b>	<b>205.00</b>	<b>188.63</b>	

**Details of National Projects**

<b>Sl. No.</b>	<b>Name of Project</b>	<b>Latest Estimated Cost (Rs. crore)</b>	<b>Eligible central assistance under PMKSY (Rs. crore)</b>	<b>CA provided since April 2016 (Rs. crore)</b>	<b>State Share provided through NABARD (Rs. crore)</b>	<b>Ultimate Irrigation Potential (Th. Ha.)</b>	<b>Irrigation Potential Created (Th. Ha.)</b>	<b>Physical Progress (%)</b>
1	Renuka ji Dam	6946.99	5484.80	2565.97	0.00	Only drinking water component	0.00	Civil work yet to start
2	Lakhwar Multipurpose Project	5747.17	3526.32	459.06	0.00	33.78	0.00	16.00
<b>Total</b>		<b>12694.16</b>	<b>9011.12</b>	<b>3025.03</b>	<b>0</b>	<b>33.78</b>	<b>0</b>	

Details of Newly included Projects								
Sl. No.	Name of Project	Latest Estimated Cost (Rs. crore)	Eligible central assistance under PMKSY (Rs. crore)	CA provided since April 2016 (Rs. crore)	State Share provided through NABARD (Rs. crore)	Ultimate Irrigation Potential (Th. Ha.)	Irrigation Potential Created (Th. Ha.)	Physical Progress (%)
1	Jihe Kathapur project	647.69	247.34	227.60	0.00	27.50	9.99	88
2	Nadaun project	12.68	11.41	7.60	0.00	6.47	0.96	95
3	Parwan multipurpose project	3554.25	733.86	448.41	0.00	122.02	20.70	93
4	Kannadian channel *	96.13	44.22	34.74	0.00	23.04	7.60	100
5	ERM of Sukla irrigation	258.47	232.62	94.19	0.00	17.90	3.20	72
6	ERM of Loktak LIS (Ph-I)	57.71	51.94	30.79	0.00	17.40	8.06	68
7	North Koel	2431.00	1115.18	113.06	0.00	42.31	0.00	35.00
8	Jamrani Dam multipurpose project	1730.21	1557.18	596.49	0.00	57.07	0.00	21.0
9	Bodwad Parisar Sinchan yojana Stage-I	694.87	278.62	59.16	0.00	27.97	0.00	50
10	Phina Singh Multipurpose Project	313.86	282.47	11.99	0.00	8.43	0.00	54

Sl. No.	Name of Project	Latest Estimated Cost (Rs. crore)	Eligible central assistance under PMKSY (Rs. crore)	CA provided since April 2016 (Rs. crore)	State Share provided through NABARD (Rs. crore)	Ultimate Irrigation Potential (Th. Ha.)	Irrigation Potential Created (Th. Ha.)	Physical Progress (%)
11	Kosi-Mechi Intra State Link Project	6143.22	3652.56	0.00	0.00	210.00	0.00	3.00
12	Lower Tapi Stage-1 Project	1576.55	859.22	0.00	0.00	32.33	0.00	35.0
13	Lift Irrigation Scheme & Tapi Barrage project	973.44	584.06	0.00	0.00	2.37	0.00	2.0
14	Upper Siang Project	350.00	350.00	16.05				
<b>Total</b>		<b>1,88,40.08</b>	<b>1,00,00.68</b>	<b>1640.08</b>	<b>0</b>	<b>594.81</b>	<b>50.51</b>	

**\*Project Completed**

**Irrigation potential created reconciled at the end of financial year.**

**Note on Modernization of Command Area Development and Water Management  
(M-CADWM) under PMKSY**

**1. Background**

Command Area Development and Water Management (CADWM) has been a long-standing programme of the Government of India aimed at bridging the gap between irrigation potential created and irrigation potential actually utilized. Experience over several decades indicated that traditional gravity-based canal systems, open field channels and fragmented institutional arrangements resulted in significant conveyance losses, inequitable distribution, tail-end deprivation and sub-optimal water use efficiency.

Under PMKSY, CADWM was earlier implemented in pari-passu mode with AIBP projects. However, field experience revealed structural, technical and institutional constraints, including difficulties in land acquisition for field channels, limited flexibility to include new command areas, weak volumetric control and inadequate participation of farmers in operation and maintenance.

In order to address these challenges and to introduce comprehensive reforms in irrigation water management, the Government approved the Modernization of Command Area Development and Water Management (M-CADWM) scheme as a sub-scheme of PMKSY for implementation on pilot basis during FY 2025–26. The scheme is now targeted to be completed by September 2026. Based on the learnings under pilot implementation, a National Programme will be designed.

Under the scheme, the projects will be made sustainable by transferring the management of irrigation to the Water User Society (WUS) through Irrigation Management Transfer (IMT). The WUS will be given handholding support for five years during the O&M period.

A total of 34 nos. of projects/clusters in 23 States/UTs have been approved for implementation under the M-CADWM Scheme till date and the Detailed Design Reports (DDR) for these projects are under preparation. Details of projects/clusters are at **Appendix-A**.

**2. Approval and Funding Pattern**

M-CADWM has been approved by the Cabinet in its meeting held on 09.04.2025 with a total outlay of ₹1600 crore for FY 2025–26, comprising Central Assistance of ₹1100 crore (including

₹100 crore for Administrative and Other Expenses) and State share of ₹500 crore. The scheme was notified vide OM dated 28.04.2025.

The scheme is being implemented as a Centrally Sponsored Scheme, with funding pattern as 60:40 for General States and 90:10 for North Eastern & Hilly States/UTs.

### **3. Objectives of M-CADWM**

The key objectives of the scheme are:

- i) To promote water security in rural areas particularly for irrigation services by adopting integrated water resources management with supply side and demand side interventions.
- ii) To expand cultivable area under assured and protected irrigation irrespective of the nature of existing command areas, by aligning command areas to administrative boundaries at the village, block and district level.
- iii) To enhance the supply side by integrating all water sources, efficient distribution and using appropriate water saving technologies and practices.
- iv) To manage the demand side effectively through water conservation, community mobilization, awareness and capacity building.

The scheme envisages modernization of irrigation water delivery by providing pressurized, underground piped networks up to the farm gate, thereby minimizing conveyance losses and improving on-farm water use efficiency. It adopts an integrated water resources management approach at the cluster level by optimally combining surface water, groundwater and other available sources to ensure sustainable and reliable water supply. Emphasis is placed on equitable, demand-based and assured delivery of irrigation services, supported by participatory irrigation management through Water User Societies, with gradual transfer of operation and maintenance responsibilities to WUS. The framework is further strengthened through deployment of modern technologies such as SCADA, IoT-based systems and satellite data for accurate water accounting, real-time monitoring and informed decision-making.

### **4. Key Reforms w.r.t. earlier programme**

- i) Cluster-based Approach: Large command areas are divided into manageable clusters, generally ranging from 50 ha to 5000 ha, to enable focused planning, implementation and management.
- ii) Pressurized Piped Irrigation Network: Replacement of open channels with underground pressurized pipelines eliminates land acquisition issues, reduces losses due to seepage and evaporation, and enables delivery of water to upland and tail-end areas.
- iii) Integration with Micro-Irrigation: M-CADWM provides robust backend infrastructure for micro-irrigation systems promoted under agriculture sector schemes, thereby enabling optimal use of surface water for drip and sprinkler irrigation.
- iv) Irrigation as a Service (IaaS): The scheme envisages performance-based service delivery, wherein irrigation service providers are responsible for assured delivery of water as per agreed service levels.
- v) Participatory Governance: Formation and strengthening of Water User Societies at cluster level, with emphasis on capacity building, transparency and financial sustainability.
- vi) Technology Adoption: Extensive use of SCADA, IoT devices, sensors and digital platforms for real-time monitoring, control and water accounting.

## **5. M-CADWM Components**

### **5.1 Non-Structural Component**

- i) State Level: State Project Management Unit with Experts, Farmer Field Training , Demonstrations & Implementation of Community Irrigation System etc.
- ii) WUS Level: Matching Grant to WUS up to Max 50 Lakh, Agency Management Fees for Beneficiaries Capacity building, Awareness of all Government schemes, handholding Support to WUS for development of WUS as FPO/FPC etc., till the end of O&M period of 5 years

### **5.2 Structural Component**

- i) Survey, Planning and Design.
- ii) System level improvements u/s up to Distributary level of the aging infrastructure
- iii) Improvement of Water Logged, Saline lands etc.
- iv) Clubbing of water resources for PPIC (reused water, existing pond or ground water source

etc.)

v) Construction of Pump House, Irrigation Management Command and control centers at 300 ha/ 1000 ha/5000 ha level (Civil Works and Porta structure).

vi) Establishment of Communication network and cloud based Automation Command Centers.

vii) Electro-Mechanical works (Pumping Machineries. Electrical substation and accessories), Primary filtration system, and Surge Protection system without transmission line.

viii) Primary Pipeline Network from water source to 300 ha Village Management System (VMS) outlet without Farm Pond.

ix) Secondary Pipeline Network from 300 ha Village Management System (VMS) outlet to 30 ha OMS Chak outlet without Farm Pond.

x) Tertiary Pipeline Distribution from 30 Ha OMS outlet to each 1 Ha manual Valve without Farmer MI system.

xi) Operation and Maintenance of five years.

## **6. Key Phases in the implementation of the Scheme**

The Scheme will be implemented in the following manner.

### **6.1 Preparatory Phase**

In the preparatory phase, the Department will set up central institutional structure, national program management unit, detailed guidelines, model documents etc. The States will also set up institutional structure notifying nodal department, project implementation authority and District M-CADWM committees. The Department will also carry out selection of blocks for the implementation of the scheme through challenge mode and sign MOUs with the respective States, Project Implementation Authorities and District MCADWM Committees to work towards modernization of command area development and water management and undertaking key reforms for efficient, sustainable and inclusive water management in the States.

### **6.2 Detailed Design Report (DDR) Phase**

Pursuant to signing of MoU, funds will be released to the States for mobilization of farmers and preparation of detailed design report. The States will set up SLSC, SPMU and DLIC and undertake activities for mobilization and formation of Water User Societies and capacity Building of WUS

concurrently. The Project Implementation Authority with the help of empaneled consultants will prepare detailed design reports etc. as per template and submit the same for scrutiny and approval of the State Government.

### **6.3 Implementation Phase**

Once the programmatic and projectized interventions are sanctioned, the Project Implementation Authority and District M-CADWM will carry out the implementation of various components and interventions including procurement of services of Irrigation Service Provider (ISP), training and capacity building of farmers and WUSs, implementation of convergence components etc. The progress will be reviewed at District, State and National level. Once the core infrastructure components enabling service delivery are completed, tested and accepted by the Project Implementation Authority, the project will be declared as commenced. Project Implementation Authorities and District M-CADWM will then initiate the steps for Irrigation Management Transfer to WUS.

### **6.4 Operation and Maintenance (O&M) Phase**

The Project Implementation Authority and District M-CADWM will ensure transfer of irrigation infrastructure to WUSs and ISP will be responsible to WUS for performance. The capacity building of WUS will be continued. A mechanism will be set up to carry out regular third party audit, make payments to ISP after deducting payments for breaches in service levels, if any. Implementation of other interventions will be followed up and monitored. Water use efficiency and other performance parameters will be monitored using IoT, SCADA and satellite based data and prepare accurate water accounts.

### **6.5 Exit Phase**

Once the irrigation management has been fully transferred to WUS, and WUS has been fully trained and empowered and can manage the irrigation system as stipulated in the irrigation management transfer, the Project Implementation Authority will exit from the project and confine to bulk supply of water to WUS and upstream systems within its control. District MCADWM committee will continue to engage, monitor and facilitate WUS and other stakeholders.

## **7. Steering & Monitoring Framework under M-CADWM**

### **National Level**

- Empowered Committee under Secretary (WR, RD&GR)
- NPMU (National Project Management Unit)
- PMC (Project Management Consultancy) – KPMG

### **State Level**

- State Steering Committee under Chief Secretary
- SPMU (State Project Management Unit)
- PIA (Project Implementing Authority) under State Govt. Department

### **District Level**

- District Level Implementation Committee (DLIC) under District Magistrate/Collector
- FRA (Farmer Relationship Agency)

### **Cluster Level**

- Empanelled Consultants for preparation of Detailed Design Report (DDR)
- ISP (Irrigation Service Provider)
- WUS (Water User Society)

## **8. Role of SCADA under M-CADWM**

Under the M-CADWM scheme, irrigation service delivery is modernized through adoption of a Pressurized Piped Irrigation Network (PPIN) integrated with SCADA-based automation and IoT technologies, enabling end-to-end control and monitoring of irrigation water from source to farm gate. The PPIN replaces conventional open field channels with underground pressurized pipelines, ensuring loss-free conveyance, prevention of unauthorized withdrawals, reliable volumetric delivery and equitable supply to head, middle and tail-end farmers. The system comprises a hierarchical distribution architecture with primary, secondary and tertiary pipelines, supported by automated regulation at village and chak levels.

Water distribution and operational control within the PPIN are managed through Village Management Systems (VMS) serving approximately 300 hectares and Outlet Management Systems (OMS) serving 20–30hectare chaks. These automated units regulate flow, pressure and scheduling of irrigation water in accordance with approved crop-wise demand, enabling

predictable, demand-based and equitable water delivery. Remote ON/OFF control and automation at OMS level further reduce the manual intervention and ensure uniform service standards across the command area. Solar powered based pump house & communication system is also one of the mandatory components which promotes renewable energy usage and to have efficient energy consumption.

The digital backbone of this system is provided by SCADA-enabled Irrigation Command and Control Centres, typically located at pump house or cluster level, which facilitate centralized monitoring and decentralized control of pumps, valves, flow meters and pressure sensors across the irrigation network. This is the mandatory component under M-CADWM. SCADA enables real-time monitoring of water flows, pressure variations, pump operation and energy consumption, along with early detection of leakages, blockages or equipment malfunction, thereby improving operational efficiency and system reliability.

In addition, integration of IoT-based field sensors and satellite-derived data supports accurate volumetric water accounting, crop water requirement assessment and irrigation scheduling. Soil moisture data, crop stage information, climatic parameters and evapotranspiration estimates enable informed decision-making, optimization of water use efficiency and improved crop productivity. This technology-enabled framework is complemented by a participatory irrigation management structure, wherein Water User Societies (WUS), supported by Farmer Relationship Agencies (FRA), utilize system-generated data for transparent, data-driven operation and sustainable long-term O&M of irrigation assets.

\*\*\*\*\*

**Appendix -A To Annexure-VII**

**Details of Projects/Clusters approved under M-CADWM**

SN	Cluster Name	Cluster CCA (Ha)	District	State / UT	Total Cost (Rs. In Cr.)	Present status of implementation
1	Peddagedda Project WUA - 3,4,5,6 Clusters	3061	Vizianagaram, Paravathipuram Manayam	Andhra Pradesh	60.76	DDR Finalization Stage
2	Dekam Rikmeng (Ledum Village)	978	East Siang	Arunachal Pradesh	19.41	DDR Finalization Stage
3	Singua FIS	1200	Kamrup	Assam	23.82	Tendering Stage
4	Mahmadpur Badal(480)	2450	Muzaffarpur	Bihar	48.6325	Tendering Stage
5	Bangra-Kishunpur	2,195	Saran	Bihar	43.57	DDR Finalization Stage
6	Bagiya	4831	Jashpur	Chhattisgarh	95.90	Tendering Stage
7	Sal, Vadaval, Mencurem /Advalpal	1,563	North Goa	Goa	31.03	DDR Finalization Stage
8	Mandvi- Mangrol Taluka Villages	6,069	Surat	Gujarat	120.46	Tendering Stage
9	Pinchhavi	523	Gir Somnath	Gujarat	10.38	Tendering Stage
10	Panihar- Choudhariwas	4,950	Hisar	Haryana	98.26	DDR Finalization Stage
11	Haroli Block, District Una	4889	Una	Himachal Pradesh	97.05	DDR Finalization Stage
12	Distributary 54 9R of Tungabhadra Left Bank Canal	2,600	Raichur	Karnataka	51.61	DDR Finalization Stage
13	Hattikuni	2,145	Yadgiri	Karnataka	42.58	DDR Finalization Stage
14	Gudariya	2,320	Khandwa	Madhya Pradesh	46.05	Tendering Stage

15	Netangaon	2,387	Khandwa	Madhya Pradesh	47.38	Tendering Stage
16	Bahuti PH2	3160	Rewa	Madhya Pradesh	62.73	Tendering Stage
17	Asoda Bhadali Branch canal of Waghur LBC	4996	Jalgaon	Maharashtra	99.17	DDR Finalization Stage
18	Pengjang	500	Churachandpur	Manipur	9.93	DDR Finalization Stage
19	Lyngkhoi FIP	170	East khasi Hills	Meghalaya	3.37	DDR Finalization Stage
20	Champhai Sub- Valley MCAD Cluster, Champhai	320	Champhai	Mizoram	6.35	DDR Finalization Stage
21	Mongleu Jalukie	200	Peren	Nagaland	3.97	DDR Finalization Stage
22	MCAD Cluster-V	3,180	Nuapada	Odisha	63.12	DDR Finalization Stage
23	SBS Nagar	856	SBS Nagar	Punjab	16.99	Tendering Stage
24	Ludhiana, Malerkotla, Fatehgarh Sahib	1500	Ludhiana, Malerkotla, Fatehgarh Sahib	Punjab	29.78	DDR Finalization Stage
25	Right Main Canal (RMC) of Bisalpur Project	5,000	Tonk	Rajasthan	99.25	DDR Finalization Stage
26	Palladam Extension canal	4,989	Tiruppur	Tamil Nadu	99.03	DDR Finalization Stage
27	Brahmacherra	135	Khowai	Tripura	2.68	DDR Finalization Stage
28	Bansgaon	224	Gorakhpur	Uttar Pradesh	4.45	DDR Finalization Stage
29	Bargadwa	149	Gorakhpur	Uttar Pradesh	2.96	DDR Finalization Stage
30	Jangal Gauri-I	152	Gorakhpur	Uttar Pradesh	3.02	DDR Finalization Stage

31	Malaon & Majhagavan	550	Gorakhpur	Uttar Pradesh	10.92	DDR Finalization Stage
32	Prajapatipur	284	Sant Kaabir Nagar	Uttar Pradesh	5.64	DDR Finalization Stage
33	Rajdhani	790	Gorakhpur	Uttar Pradesh	15.68	DDR Finalization Stage
34	Patyari	400	Samba	J&K	7.94	Tendering Stage
	<b>Total</b>	<b>69,715</b>			<b>1,383.85</b>	

\*\*\*\*

**Annexure-VIII.**

**Details of RRR of Water Bodies schemes during PMKSY**

**(2016-17 to December 2025)**

*(IP created in Thousand hectare)*

<b>S. No</b>	<b>State</b>	<b>No of Water Bodies</b>	<b>Scheme completed</b>	<b>Irrigation Potential (IP) created</b>
1	Andhra Pradesh	235	36	1.47
2	Assam	1	0	0
3	Bihar	103	73	21.81
4	Gujarat	61	33	3.9
5	Madhya Pradesh	125	125	8
6	Manipur	4	0	0.62
7	Meghalaya	9	9	0.88
8	Nagaland	19	0	0
9	Odisha	1437	1116	40.36
10	Rajasthan	189	131	19.01
11	Tamil Nadu	651	430	13.96
12	Telangana	575	532	25.55
13	Uttar Pradesh	20	20	2.35
	<b>Total</b>	<b>3429</b>	<b>2505</b>	<b>137.91</b>

**State wise details of fund allocation and financial achievement under the RRR of Water Bodies schemes**

(Rs in cr.)

State	Allocation of Fund during 2021-26	CA release upto March 25	Mother Sanction during 2025-26	Funds released as on dated	% financial achievements
Andhra Pradesh	79.78	0	9	9	11.28%
Assam	213.30	0	54	54	25.32%
Bihar	92.99	23.68	12.48	36.16	38.89%
Gujarat	10.97	5.73		5.73	52.23%
Manipur	13.67	3.7		3.7	27.07%
Nagaland	32.06	15.74	3.75	19.49	60.79%
Odisha	323.69	114.02	57	171.02	52.83%
Rajasthan	160.57	55.75	40.5	96.25	59.94%
Tamil Nadu	216.98	121.71	41.91	163.62	75.41%
Telangana	41.53	0		0	0.00%
	<b>1185.54</b>	<b>340.33</b>	<b>218.64</b>	<b>558.97</b>	<b>47.15%</b>

**State wise details of physical achievement under the RRR of Water Bodies schemes**

(Irrigation Potential in Hectare)

State	Targeted Irrigation Potential (IP)	Achieved IP	% Physical Achievement
Andhra Pradesh	12990.00	1470.00	11.32%
Assam	0	0.00	
Bihar	7474.00	1355.00	18.13%

Gujarat	2460.00	0.00	0.00%
Manipur	746.57	0.00	0.00%
Nagaland	0	0.00	
Odisha	38470.00	8211.00	21.34%
Rajasthan	11805.77	9060.00	76.74%
Tamil Nadu	13864.90	5765.91	41.59%
Telangana	8617.96	6985.35	81.06%
<b>Total</b>	<b>96429.20</b>	<b>32847.26</b>	<b>34.06%</b>

## Annexure -X

**Details of RRR of Water Bodies proposals received during 2021-26 for approval under PMKSY HKKP**

(Rs. in crore)

SN	State	Inclusion year	No of WBs	Estimated cost	Eligible CA	Remarks
<b>Approved under PMKSY-HKKP</b>						
1	Andhra Pradesh	2021-22	135	70.72	42.42	<b>Approved during PMKSY 2.0</b>
2	Nagaland	2023-24	19	35.63	32.06	
3	Odisha	2022-23	574	539.49	323.69	
4	Rajasthan	2021-22	37	124.71	74.82	
5	Rajasthan	2023-24	84	142.92	85.75	
6	Tamil Nadu	2021-22	115	71.89	43.13	
7	Tamil Nadu	2022-23	85	80.83	48.49	
8	Tamil Nadu	2022-23	100	83.77	50.26	
9	Bihar	2024-25	10	73.05	44.10	
10	Tamil Nadu	2024-25	100	100.92	60.56	
11	Assam	2024-25	1	237.00	213.30	
<b>Sub total</b>			<b>1260</b>	<b>1560.93</b>	<b>1018.58</b>	
<b>Pending for approval under PMKSY-HKKP</b>						
1	Karnataka		176	229.56	137.73	<b>Pending for approval</b>
2	Karnataka		73	149.9	89.94	
3	Karnataka		153	323.20	193.92	
4	Karnataka		55	115.90	69.54	
5	Karnataka		57	112	67.20	
6	Kerela		1	3	1.8	

7	Odisha		129	111.48	66.88	
8	Rajasthan		55	95.36	57.21	
9	Tamil Nadu		123	100.07	60.042	
	<b>Sub total</b>		<b>822</b>	<b>1240.47</b>	<b>744.262</b>	
	<b>Grand Total</b>		<b>2082</b>	<b>2801.4</b>	<b>1762.842</b>	

## Financial Progress under Development of Water Resources Information System Scheme for the F.Y. 2021-26

Amount in Rs. Crores

S. no.	Activities/Works	2021-22		2022-23		2023-24		2024-25		2025-26		Total	
		BE / RE	Expenditure	BE / RE	Expenditure	BE / RE	Expenditure	BE / RE	Expenditure	Allocated BE	Expenditure as on 31.10.2025	Allocated Amount	Expenditure as on 31.12.2025
1	Running & Maintenance of Hydrological Stations (1741 stations)	155.34 / 147.61	145.53	165.83 / 146.18	144.64	148.3 / 154.59	153.52	106.78 / 159.69	156.31	187.66	119.05	787.66	719.05*
	Monitoring of Glacial Lakes and Water Bodies												
	Running and maintenance of Water Quality Laboratories for monitoring of Water Quality at existing stations												

Collection of storage data of major reservoirs of India: R&M of existing system. Establishment of telemetry system for collection of water level data at 29 major reservoirs												
Flood Forecasting: Continuation of ongoing activity at 325 FF stations, about 1000 telemetry stations and remote stations. Setting up of 50 new FF stations and installation of 100 telemetry stations as well as Upgradation of 168 telemetry stations installed during X Plan												
Coastal Management information System (CMIS): R&M of existing	10.03 / 4.57	3.11	9.59 / 4.37	4.34	4.79 / 4.47	4.34	1.8 / 1.00	0.99	3.76	0.5	<b>16.54</b>	<b>13.28</b>

	and newly opened coastal sites													
2	Strengthening of Monitoring Unit in CWC: Monitoring visits to the projects	4.66 / 3.97	3.28	3.07 / 2.66	2.28	3.62 / 4.03	3.23	2.59 / 3.13	2.82	3.3	1.5	<b>14.91</b>	<b>13.11</b>	
3	Data bank and Information System: Procurement of various software and hardware, AMC of existing IT etc.	4.22 / 3.85	3.39	4.73 / 6.15	5.90	5.41 / 7.41	7.57	3.83 / 5.58	5.28	5.28	3.06	<b>27.42</b>	<b>25.20</b>	
4	Integrated Water Resources Management Studies	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	0.00	<b>0.00</b>	<b>0.00</b>	
<b>Total</b>		<b>174.25 / 160.00</b>	<b>155.31</b>	<b>183.22 / 159.36</b>	<b>157.16</b>	<b>162.12 / 170.50</b>	<b>168.66</b>	<b>115.00 / 169.40</b>	<b>165.40</b>	<b>200.00</b>	<b>124.11</b>	<b>846.53</b>	<b>770.64</b>	

\*Flood Forecasting activity is subcomponent Under Component no. 1 of DWRIS i.e. Running & Maintenance of Hydrological Stations and Expenditure of Flood Forecasting activities is merged with Component no 1 - R&M of HO

**List of NMCG projects sanctioned for the rejuvenation of river Yamuna**

Sl.No	Name of Project	Treatment Capacity (MLD)	Sanctioned Cost (₹ In crore)	Status
<b>A. Uttar Pradesh</b>				
1	Rehabilitation of Sewerage Infrastructure & Augmentation/Upgradation of STP (4 MLD) in Vrindavan	4	42.82	Completed
2	Rehabilitation/Renovation of Mathura sewerage scheme at Masani	67.8	460.45	Completed
3	Interception & Diversion with Rehabilitation work in Agra	177.6	842.25	Under Progress
4	Interception & Diversion and STP works Baghpat	14	77.36	Completed
5	Interception & Diversion works in Firozabad	-	51.08	Completed
6	Interception & Diversion works in Etawah	44.94	140.6	Completed
7	Interception & Diversion works in Muzaffarnagar	44.5	234.03	Completed
8	Interception & Diversion works in Budhana	10	48.76	Completed
9	Upgradation of Infrastructure of Existing CETP for Textile Printing Units at Mathura Industrial Area, Mathura (6.25MLD)	6.25	13.87	Completed
10	I&D and STP Works for balance drains in Mathura	60	292.56	Under Progress
11	Interception & Diversion works in Kairana	15	78.42	Completed
12	I&D and STP Works in Chhata	6	56.15	Under Progress
13	I&D and STP Works in Kosi	12	66.59	Under Progress
14	I&D and STP Works in Vrindavan	13	77.7	Under Progress
15	I&D and STP works in Hathras	24	128.91	Under Progress
16	I&D and STP works in Saharanpur	135	577.23	Under Progress
17	I&D and STP works in Banat	5	48.71	Under Progress
18	I&D and STP works in Babri&Bantikhera	5	55.47	Under Progress
19	I&D and STP works in Thanabhawan	10	97.19	Under Progress
20	I&D and STP works in Shamli	40	206.02	Under Progress
21	I&D and STP works in Deoband	20	134.71	Under Progress
22	I&D and STP works in Aligarh	113	496.02	Tendering
23	Tapping of Balance Drains & Augmentation of Sewage Pumping Stations (SPSs) at Agra	-	126.41	Tendering
Sub Total		827.09	4,353.31	
<b>B. Delhi</b>				
1	Rehabilitation of Trunk Sewer No.4	-	87.43	Completed
2	Rehabilitation of Trunk Sewer No.5	-	83.4	Completed
3	Rehabilitation and upgradation of Kondli Phase-I STP (45 MLD), Phase-II STP (114 MLD) & Phase-III STP (45 MLD)	204	239.11	Completed
4	Rehabilitation of Rising Mains	-	59.13	Completed
5	Rehabilitation of Trunk Sewers	-	43.92	Completed

Sl.No	Name of Project	Treatment Capacity (MLD)	Sanctioned Cost (₹ In crore)	Status
6	Rehabilitation of Rising Main	-	45.4	Completed
7	Rehabilitation and up-gradation of Phase-I STP	182	211.79	Completed
8	Construction of 564 MLD (124 MGD) Waste Water Treatment Plant (WWTP)	564	665.78	Completed
9	Construction of 318 MLD (70 MGD) at Coronation Pillar, Delhi	318	515.07	Completed
10	Construction of 4.5 MLD STP along with other allied works at Sector-A, Vasant Kunj to feed treated water to Shamsi Talab at Mehrauli, Delhi	4.5	35.83	Tendering
11	Conveyance of treated sewage from Coronation Pillar STP to the River Yamuna	-	518.88	Tendering
Sub Total		1,272.5	2,506.74	
<b>C. Himachal Pradesh</b>				
1	Sewerage scheme for Zone II & III of Paonta Sahib	3.16	11.57	Completed
Sub Total		3.16	11.57	
<b>D. Haryana</b>				
1	Sewerage and Sewage Treatment Plant (STP) in Panipat	90	129.51	Completed
2	Sewerage and Sewage Treatment Plant (STP) in Sonipat	55	88.36	Completed
Sub Total		145	217.87	
<b>Gross Total</b>		<b>2,248</b>	<b>7,089</b>	

\*\*\*\*\*