04

STANDING COMMITTEE ON WATER RESOURCES

(2024-25)

EIGHTEENTH LOK SABHA

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

DEMANDS FOR GRANTS (2025-26)

FOURTH REPORT

LOK SABHA SECRETARIAT

NEW DELHI

March, 2025 / Phalguna,1946 (Saka)

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(2025-26)

Presented to Lok Sabha on11.03.2025

Laid on the Table of Rajya Sabha on 11.03.2025

LOK SABHA SECRETARIAT
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COMPOSITON OF THE STANDING COMMITTEE ON WATER RESOURCES (2024-25)

Shri Rajiv Pratap Rudy - **Chairperson**

LOK SABHA

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3. Shri Joyanta Basumatary
4. Chh. Udayanraje Pratapsinha Maharaj Bhonsle
5. Shri Isha Khan Choudhury
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17. Shri Pratap Chandra Sarangi
18. Shri Dushyant Singh
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21. Vacant

RAJYA SABHA

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26. Shri Khiru Mahto
27. Smt. Mausam Noor
28. Shri Balyogi Umeshnath
29. Shri SanjayKumar Jha
30. Shri Dhairyashil Mohan Patil
31. Smt. Seema Dwivedi

SECRETARIAT

1.	Shri Chander Mohan	-	Joint 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 (2024-25) having been authorized by the Committee to submit the Report on their behalf, present the Fourth Report on Demands for Grants (2025-26) 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 24.02.2025.

4. The Report was considered and adopted by the Committee at their sitting held on 10.03.2025.

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
10 March, 2025
19 Phalguna,1946 (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

EBR	:	Extra Budgetary Resources
EC	:	Electrical Conductivity
EFC	:	Expenditure Finance Committee
EPC	:	Engineering, Procurement and Construction
FRs	:	Feasibility Reports
FSSM	:	Fecal Sludge and Septage Management
FMBAP	:	Flood Management and Border Areas Programme
FMP	:	Flood Management Programme
FY	:	Financial Year
FR	:	Feasibility Report
GD	:	Gauge & Discharge
GLOF	:	Glacial Lake Outburst Flood
GST	:	Goods and Services Tax
GWM&R	:	Ground Water Management and Regulation
GOI	:	Government of India
Ha	:	Hectare
HDPE	:	High Density Polyethyene
HFL	:	Highest Flood Level
HKKP	:	Har Khet Ko Pani
HO	:	Hydrological Observation
HRD	:	Human Resource Development
IAs	:	Implementing Agencies
ICAR	:	Indian Council of Agricultural Research
IEBR	:	Internal External Budgetary Resources
IIT	:	Indian Institute of Technology
IIHL	:	Individual Household Latrines
ILR	:	Interlinking of Rivers
IOCL	:	Indian Oil Corporation Limited
I.P.	:	Irrigation Potential
ISRWD	:	Inter-State River Water Disputes
ISO	:	International Standards of Organization
IUCN	:	The International Union for Conservation of Nature
JJM	:	Jal Jeevan Mission
JSA	:	Jal Shakti Abhiyan
KLD	:	Kilo Litres Per Day
LA	:	Land Acquisition
LS	:	Lok Sabha
LTIF	:	Long Term Irrigation Fund
MGNREGS	:	Mahatma Gandhi National Rural Employment Guarantee Scheme
MIDH	:	Mission on Integrated Development of Horticulture
MI	:	Minor Irrigation
MLD	:	Million Litres Per Day
MMI	:	Major / Medium Irrigation
MoDW&S	:	Ministry of Drinking Water and Sanitation
MoEF&CC	:	Ministry of Environment, Forest and Climate Change
MoJS	:	Ministry of Jal Shakti
MoWR	:	Ministry of Water Resources
MoWR, RD & GR	:	Ministry of Water Resources River Development and Ganga Rejuvenation

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. The growing population, rapid industrialisation, increasing urbanisation have made water availability an important issue. Further, various issues attributed to climate change has made the situation more challenging in water sector. Hence, managing water resources in an efficient manner is of immense 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. This 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 (2025-26) with regard to Water Resources Sector

1.3 On being asked about the salient features of the Union Budget (2025-26) with regard to Water Resources Sector, the Department, in their written reply stated as under:-

"Budget Estimate (Net) for Financial Year 2024-25 is 21,323.10 crore and the Budget Estimate (Net) for the FY 2025-26 is Rs. 25,276.83 crore, a hike of Rs.3953.73 crore from BE 2024-25.

(i) Under Central Sponsored Scheme, against BE allocation of Rs.13431.48 Crore during 2024-25, funds of Rs.17643.94 crore is proposed for BE 2025-26, which is nearly an increase of Rs.4212.46 crore against BE allocation of 2024-25.

(ii) Special Package for Maharashtra Scheme has been extended till March, 2025 by Department of Expenditure. Hence no allocation has been proposed for the FY 2025-26

(iii) Under Central Sector Scheme, funds of Rs.6,198.09 crore is proposed for BE 2025-26, which is nearly Rs. 375.64 crores less than BE allocation for FY 2024-25 i.e. Rs.6573.73 crore.

(iv) Being last year of the scheme, under the ATAL JAL a substantial amount of Rs.1780.40 crore is proposed in FY 2025-26. BE allocation for the year 2024-25 was Rs. 1778.00 crore.

(v) Being last year, under the Scheme National HyrdrologyProject (NHP), only fund requirement of Rs.12.95 crore only have been proposed for FY 2025-26 for routine expenditure of NPMU and continuation of TAMC contract.

(vi) In 2025-26, Rs. 23.91 crore has also been allocated to the newly created National Dam Safety Authority which is mandated to look into various aspects of safety of the dams in the country including providing necessary direction, advice and support to the dam owners.

(vii) For implementing Polavaram Irrigation Project (PIP) under Centrally Sponsored Scheme in Andhra Pradesh (A.P.) Rs. 5936 crore is proposed in the FY 2025-26 against RE allocation of Rs.5512.50 crore for the FY 2024-25. Towards Establishment expenditure, Rs.55.00 crore is also proposed to Polavaram Project Authority (PPA)."

Budgetary Allocations for FY 2025-26

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 11 February, 2025. A total budgetary Provision of Rs.25276.83 crore has been made for the fiscal year 2025-26. The following table shows the total allocation of Budget for the DoWR, RD & GR for the year 2025-26:

Total Budgetary Allocations (2025-26)

(Rs. in crore)

Revenue	24720.49
Capital	556.34
Total	**25276.83**

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 2025-26 *vis-a-vis* 2024-25:

(Rs. in crore)

Year	Revenue (BE)	Capital (BE)	Total
2024-25	20921.15	401.95	21323.10
2025-26	24720.49	556.34	25276.83

1.6 Further, the Department in a written reply informed the Committee that it sought Rs. 24313.98 crore for FY 2025-26, and has been allocated Rs. 25276.83 crore.

Comparative Statement of Budgetary Allocation of the Department of Water Resources River Development and Ganga Rejuvenation for the fiscal year 2025-26 *vis-a-vis* 2024-25

(Rs. in crore)

Sl. No.	Item(s)	2024-25		2025-26	% increase in 2025-26 (BE) over 2024-25 (BE)
		BE	RE	BE	
1.	Establishment Expenditure of the DoWR, RD & GR	1317.89	1304.33	1434.80	8.87
Central Sector Schemes/Projects					
2.	Farakka Barrage Project	80.00	59.00	69.00	(-13.75)
3.	Dam Rehabilitation and Improvement Programme (DRIP)	46.98	42.28	50.30	7.06
4.	National Ganga Plan (Namami Gange Mission-II)	3345.70	3000.00	3400.00	1.60
5.	River Basin Management	154.79	143.00	243.00	58.98
6.	Development of Water Resources Information System	115.00	170.00	63.39	(-44.87)
7.	Ground Water Management and Regulation	325.00	240.00	509.00	56.61
8.	National Hydrology Project	661.20	492.80	13.00	(-98.30)
9.	Research & Development and National Water Mission	67.06	45.00	70.00	4.38
10.	Atal Bhujal Yojana (Atal Jal)	1778.00	600.00	1780.40	0.13
	Centrally Sponsored Schemes				
11.	PMKSY - Har Khet Ko Pani	4349.80	4480.85	4909.85	12.87
12.	PMKSY-Command Area Development and Water Management	1400.00	100.00	850.00	(-39.28)
13.	PMKSY- Accelerated Irrigation Benefit Programme and National / Special Projects	2500.00	2040.00	2500.00	0.00

14.	Polavaram Irrigation Project	NIL	5512.50	5936.00	7.68
15.	Flood Management and Border Areas Programme (FMBAP)	449.57	400.00	450.00	0.09
16.	Irrigation Census	40.00	20.00	40.00	0.00
17.	Special Package for Maharashtra	600.00	400.00	NIL	(-100.00)
18.	National River Conservation Plan – Other Basins	592.11	591.12	558.09	(-5.74)
19.	Interlinking of Rivers	4000.00	2000.00	2400.00	(-40.00)
	Total Budget	**21323.10**	**21640.88**	**25276.83**	**18.54**

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)

Year	BE	RE	Actual
2021-22	9022.57	18008.70	17215.16
2022-23	18967.88	14000.00	11962.08
2023-24	20054.67	19516.92	18538.85
2024-25	21323.10	21640.88	12655.52*
2025-26	25276.83		

** till 31 December, 2024*

1.8 The budgetary allocations of Rs.21640.88 crore has been allocated to the Department at RE stage for FY 2024-25, however, actual expenditure till 31 December, 2024 was of just Rs.12655.52 crore. When being asked about the reasons for such a meagre utilization in three quarters of FY 2024-25, the Department replied as under:-

> *"Based on the Demands from state governments and various implementing agencies who are implementing Schemes of this Department, RE allocation of Rs. 21640.88 is 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 able to spend the allocated RE for the FY 2024-25.*

1.9 Further, when asked about the possibility of full utilization of the remaining allocated fund i.e. Rs.8,985.36 (which is almost more than 40% of the RE allocation of Rs.21640.88) in the last quarter of FY 2024-25, the Department stated as under:-

> *The Expenditure till 31st December, 2024 was Rs. 12655.52 crore. However proposals worth approx Rs 3000 crore are currently under active consideration for release of funds. 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 able to spend the allocated RE for the FY 2024-25."

Implementation of Schemes/Programmes

1.10 When asked to furnish the details of the Schemes/Projects where allocation have been increased by more than 20% for FY 2025-26 viz.-a-viz. FY 2024-25 along with the reasons for such increase, the Department furnished the data as under:-

(Rs in crore)

Name of the Scheme	BE 2024-25	BE 2025-26	% increase	Reasons
River Basin Management	154.79	243.00	56.98%	Under this Scheme, Grant to Brahmaputra Board is one of the components. Brahmaputra Board is taking new initiatives in the area of improvement of Water management practices and Spring-shed management. Board has also proposed preparation/updation of master plans in a significant way and planned to start for 15 sub-basins. To meet additional demands the BE 2025-26 has been enhanced.
GWM&R	325.00	509.00	56.62%	National Aquifer Mapping and Management (NAQUIM) project under the GWMR scheme has been appraised and approved with estimate of Rs.805 crore for creating infrastructure for data generation. Tender packages for carrying out these activities have been finalized and would be executed in the year 2025-26. Hence, higher allocation has been proposed in FY 2025-26.
SMI& RRR	600.00	1100.00	83.33%	Being last financial year of 15th FC, the proposed allocation has been made to accommodate pending proposals in the department and also to achieve the set targets under the

				scheme. More projects are expected to be included under RRR&SMI scheme of PMKSY.

1.11 On being asked to state the details of the Schemes where allocations have been reduced by more than 20% for FY 2025-26 viz.-a-viz., FY 2024-25 along with the reasons for such decrease, the Department stated as follows:

(Rs in crore)

Name of the Scheme	BE allocation 2024-25	BE allocation 2025-26	% decrease	Reasons
DWRIS	115.00	63.39	44.78%	The approved outlay under DWRIS Scheme is Rs. 715 crores. Considering the expenditure up to 2023-24 and allocation for the year 2024-25, the remaining balance i.e. Rs. 63.39 crore has been proposed for the FY 2025-26.
National Hydrology Project	661.20	13.00	98.03%	NHP was originally scheduled to close on 31st March, 2024 and subsequently extended up to 30th September, 2025, subject to certain conditions which inter-alia include that no grant-in-aid would be released after FY 2024-25. Fund requirement of Rs.12.95 crore only have been proposed for FY 2025-26 for routine expenditure of NPMU and continuation of TAMC contract.
Special Package for Maha-rashtra	600	00	100%	Scheme extended till March, 2025 by Department of Expenditure. Hence no allocation has been proposed for the FY 2025-26
CADWM	1400.00	850.00	39.29%	The EFC for proposed Modernization of Command Area Development works (MCAD) scheme of MoJS as a sub scheme of PMKSY-CADWM has been approved on 01.10.2024 with lower than proposed outlay.
Interlinking of River	4000.00	2400.00	40%	BE provision of Rs.2400 crore is made in current financial year. Any

(ILR)				additional requirement will be met at RE stage.

1.12 When being asked to furnish details of new schemes / projects, if any, being taken up on which increased expenditure is expected to be incurred in FY 2025-26, the Department replied that towards implementation of Polavaram Irrigation Project (PIP) with water storage up to EL+ 41.15 meters i.e. Minimum Draw Level (MDDL), Rs. 5936 crore is proposed for the FY 2025-26.

1.13 Regarding the details of existing/continuing Schemes/Programmes that were completed during the financial year 2024-25 along with total outlays made (both at BE and RE stage) and utilization thereof, the Department furnished as under:-

"During the current FY 2024-25, following Schemes/Programme were completed. The details are as under: -

(Rs in crore)

Name of the Scheme	**BE allocation 2024-25**	**RE allocation 2024-25**	**Remarks**
Special Package for Maha-rashtra	600.00	400.00	Scheme extended till March, 2025 by Department of Expenditure. Against RE allocation of Rs. 400.00 cr. Expenditure as on 10.02.2025 is Rs.124.35 crore. Since, scheme time-period expires on 31.03.2025, no allocation has been proposed for the FY 2025-26. However, based on the request of State Govt., proposal for continuation of the scheme beyond time period, is being examined.
National Hydrology Project	661.20	492.80	NHP was originally scheduled to close on 31st March, 2024 and subsequently extended up to 30th September, 2025, subject to certain conditions which inter-alia include that no grant-in-aid would be released after FY 2024-25. Fund requirement of Rs.12.95 crore only have been proposed for FY 2025-26 for routine expenditure of NPMU and continuation of TAMC contract.

National Water Policy

1.14 As per the Annual Report of the Department, at present the National Water Policy – 2012 is in effect. However, to address current challenges in the Water Sector, revision of National Water Policy has been envisaged and the drafting committee constituted to revise the National Water Policy, has submitted its report. In this regard when being asked to provide an overview on 'National Water Policy – 2012', the Department sated as under:-

> *"The objective of the National Water Policy, 2012 is to assess the existing situation and to propose a framework for a plan of action with a unified national perspective. In order to achieve the objective of the Policy, a number of recommendations have been made therein for conservation, development and improved management of water resources of the country. The salient features of the National Water Policy, 2012 is at* ***Annexure-I.***
> *'Water' being a state subject, steps for augmentation, conservation and efficient management of water resources are primarily undertaken by the respective State/UTs Governments. In order to supplement the efforts of the State Governments, Central Government provides technical and financial assistances to them through various central and centrally sponsored schemes and programmes. Moreover, States and UTs are being continuously encouraged to take water sector reforms in line with the NWP-2012."*

1.15 Further, regarding the current challenges in the Water Sector being faced by the Department and remedial measures taken in this regard, the Department stated as under:-

> *"Challenges are being faced in the water sector in the form of reducing per capita availability of water due to increasing population, deterioration in quality, overexploitation of ground water resources leading to decline in the ground water table in some cases, sub-optimal utilization of the created facilities and relatively lower efficiency of the facilities for water utilization. The average annual per capita availability of water has reduced from 5178 m3/ year in 1951 to 1486 m3/ year in 2021 and it is further likely to decrease due to rising population and estimated as 1367 m3/ year in 2031. On the other hand, the demand for water for various purposes is increasing due to population growth, urbanization and industrialization. Overexploitation of ground water resources resulting in considerable decline in ground water table is also being faced in many parts of the Country. Another challenge relates to pollution of river stretches and deterioration in the quality of ground water because of inadequate management of domestic sewage and industrial effluents, before they are disposed of in the rivers and water bodies. Excessive use of chemicals and fertilizers and pesticides is also a major concern.*

DoWR, RD & GR, MoJS has taken various initiatives to tackle various challenges in water sector and enhance the water availability to meet the requirement like Atal Bhujal Yojana; Pradhan Mantri Krishi Sichai Yojna (PMKSY), Accelerated Irrigation Benefit Programme (AIBP), Repair, Renovation & Restoration (RRR) of Water Bodies; Inter-linking of rivers 'Sahi Fasal' campaign; Jal Shakti Abhiyan: Catch the Rain (JSA: CTR); Namami Gange Programme, National River Conservation Plan (NRCP), implementation of Dam Rehabilitation and Improvement Project (DRIP), implementation of new projects/National projects like Pollavaram Project etc."

1.16 With regard to the current status about the revision of the present National Water Policy, the Department stated as under:-

"In view of new challenges emerged in the water resources sector and technological advancements, the revision of NWP-2012 is necessitated. Accordingly, a committee under the chairmanship of Dr. Mihir Shah (Former Member, Planning Commission) was constituted in 2019 to revise the National Water Policy. The drafting committee has submitted the draft National Water Policy (NWP) with contrary and non-coherent views from some of the key members of this Committee. The same is under consideration of the Ministry."

National Dam Safety Authority

1.17 As per the information furnished by DoWR, RD & GR, the Dam Safety Act (DSA), 2021 mandates the surveillance, inspection, operation, and maintenance of all specified dams across the country. The National Dam Safety Authority (NDSA) was established in February 2022 to implement policies, guidelines, and standards made by the National Committee on Dam Safety (NCDS). Further, Section 24 of DSA 2021 provides that where a specified dam is owned by a Central Public Sector Undertaking or where a specified dam is extended over two or more States, or where the specified dam in one State is owned by another State, then the NDSA shall be construed as the State Dam Safety Organization for the purposes of this Act. Functions of SDSO are detailed at Chapter VI of Dam Safety Act. As on date, 6600 specified dams are registered nationwide in DHARMA portal. Out of which, there are 84 such dams, being directly monitored by NDSA, as SDSO of such dams. The list of such specified dams is provided in **Annexure-II.**

1.18 On being asked about the constitution of State Committees on Dam Safety and State Dam Safety Organisations in the States/UTs concerned as per direction of the Dam Safety Act and being equipped with adequate personnel having appropriate expertise to ensure their proper functioning, the Department stated as under:-

"All dam owning States have constituted the State Committees on Dam Safety and State Dam Safety Organizations, in accordance with the provisions of the Act.

Number of posts created and filled under each SDSO is attached as ***Annexure - III.***

*Further, regarding expertise to ensure their proper functioning, NDSA has published a regulation under clause (d) of sub-section (2) of Section 54 of the Act "**Qualifications, experience, and training of individuals responsible for the safety of dams**." The regulation mandates that every individual responsible for the safety of specified dams and related activities must undergo the training formulated by the NDSA. In this regard, NDSA has finalized the topics and domains for the training and communicated to all SDSOs. Furthermore, the staff posted in SDSOs are the engineers equipped with relevant qualification and expertise to ensure proper functioning of dams."*

1.19 To the query as to whether any provision has been made in the Dam Safety Act to ensure the participation of local public representative (Member of Parliament / Member of Legislative Assembly) in the bodies / organizations under NDSA, the Department answered as follows:-

"As per the DSA 2021, there is no provision for creation of bodies / organizations under NDSA. However, as per sub-section 4 of section 36, Every owner of the specified dam shall, while preparing and updating the emergency action plan, undertake a consultation process with all disaster management agencies and other Departments of the State entrusted with disaster management and relief in the area likely to be affected and owners of other dams in the immediate vicinity likely to be affected, so as to bring coordination and transparency and allay any unwarranted fear on dam safety issues."

Brahmaputra Board

1.20 As per the information furnished by DoWR, RD & GR, the Brahmaputra Board (BB) was constituted in 1980 by an Act of Parliament for the purpose of planning and integrated implementation of measures for the control of floods and bank erosion in the Brahmaputra valley and for matters connected therewith. When being asked to provide information about the Masterplans/ Detailed Project Reports (DPRs) of multipurpose projects & Drainage Development Schemes prepared by the Board and present status about their implementation, the Department stated as under:-

"A. Preparation of Master Plans:

Out of identified 70 basins / sub-basins for preparation of Master Plan so far, 52 Master Plans including Brahmaputra Main Stem and Barak have been approved by Govt of India and submitted to the concerned states for implementation of the recommendations of the Master Plans. The detailed status has been provided in ***Annexure-IV*** *for further reference. As for monitoring the implementation of the recommendations outlined in the approved Masterplans, the Brahmaputra Board*

currently does not have a formalized, established mechanism in place for implementation of the recommendations envisaged in the master plans. However, the Board is actively engaging with the Basin States to address this gap. Efforts are being made to discuss and collaborate with the states to ensure that the recommendations are effectively implemented.

B. Preparation of DPR of MP Project:

Brahmaputra Board identified 14 major multipurpose projects for preparation of Detailed Project Report (DPR) of Multipurpose projects out of which 8 projects have been handed over to other organizations. In this regard, it is pointed out that water being state subject, the implementation of these multipurpose schemes fall within the purview of States. There is no mechanism for monitoring the status of implementation, if any, of the projects whose DPRs are handed over to the Stae Governments. However, on the basis of information available in the public domain, the status of implementation of these projects are as under: -

(i) Siang (Dihang) Dam Project:

Single Stage DPR with the objective of Hydro-power generation and Flood Control were completed by Brahmaputra Board. As desired by PMO, the project was handed over to NHPC during the year 2000. NHPC informed that Siang Lower was handed over to M/s Joyprakash Associates Ltd. (JAL) on 31.03.2009. Siang Middle to M/s Reliance Energy Ltd. (REL) and for Siang Upper, Government of Arunachal Pradesh allocated to M/s NTPC in February 2009 for preparation of PFR. Currently, a recast of the DPR is underway by NHPC.

(ii) Subansiri Dam Project: Single Stage DPR with the objective of Hydro-power generation and Flood Control were completed by Brahmaputra Board. As desired by PMO, the project was handed over to NHPC during the year 2000. As stated by NHPC the Lower Subansiri was targeted for completion within the year 2017. Subansiri Middle and Subansiri Upper were handed over to M/s Jindal Power Ltd. on 04.02.2011. However, Lower Subansiri (2000 MW) project is currently under construction.

(iii) Tipaimukh Dam Project: The DPR with the objective of Hydro-power generation and Flood Control was completed and handed over to NEEPCO in 1999-2000 as desired by PMO and subsequently from NEEPCO to NHPC. However, its implementation has been stalled due to concerns raised by Bangladesh regarding the project's adverse impact.

(iv) Bairabai Dam Project: The DPR with the objective of Hydro-power generation was ccompleted in 2000. The Government of Mizoram allotted the work of execution for Bairabi Dam Project to M/s Sikaria Power Ltd., Kolkata on 10.08.2012. It has been intimated by Government of Mizoram that Bairabi Dam Project will be completed within seven years. However, construction has yet to commence.

(v) Dibang Dam Project: The DPR with the objective of Hydro-power generation and flood control was partially completed and handed over to NHPC in 2006. Dibang Multipurpose Project of 2880 MW has been initiated by NHPC in March 2024.

(vi) Lohit Dam Project: Another project in the Brahmaputra Basin in Arunachal Pradesh, this one aims to generate 2500 MW of power. The DPR with the objective of Hydro-power generation and flood control was partially completed and handed over to private developers by the Arunachal Pradesh government in 2024.

(vii) Kynshi Stage I Dam Project: Located in Meghalaya within the Barak Basin, with the objective of Hydro-power generation of 460 MW was initiated in January 1997. The DPR was completed and handed over to private developers by the Meghalaya government in 2010. However, the project was subsequently canceled by the state government.

(viii) Kynshi Stage II Dam Project: Located in Meghalaya within the Barak Basin, with the objective of Hydro-power generation of 250 MW was initiated in November 2003. The DPR was completed and handed over to private developers by the Meghalaya government in 2010. However, the project is set to be scrapped due to the discovery of uranium deposits in the area.

(ix) Kulsi Multi-Purpose Project: This 55 MW project with major component of irrigation is located across the border between Assam and Meghalaya in the Brahmaputra Basin. Initiated in 1997, it is now designated as a National Project with an estimated cost of Rs. 1454.95 crores (as of 2018). The project aims to irrigate 26,000 hectares of land. However, its execution is currently held up due to a boundary dispute between Assam and Meghalaya.

(x) Noa-Dehing Multi-Purpose Project: Located in Arunachal Pradesh within the Brahmaputra Basin, this 75 MW project with major component of irrigation was initiated in 1984-85. It is a designated National Project. The DPR was completed and handed over to the Arunachal Pradesh government in 2021-2022 for further necessary process of techno-economic clearance.

(xi) Jiadhal Multipurpose Project: Located in Arunachal Pradesh, this 70 MW project was initiated in 2002. Work on preparing the DPRs is currently being undertaken by WAPCOS and is expected to be completed by June 2025.

(xii) Simsang Multipurpose Project: Situated in Meghalaya within the Barak Basin, this 65 MW Hydro-Power project was initiated in 1997. The project's current status is ongoing.

(xiii) Pagladiya Dam Project: Situated in Assam within the Brahmaputra Basin, with 3 MW ancillary power potential with an estimated cost of Rs. 542.90 crores, flood benefit of 40,000 hectares and irrigation potential of 54,160 hectares of land. However, construction has been halted since 2011 due to the state government's inability to provide land for the project.

(xiv) Killing Dam Project: Located across the border between Assam and Meghalaya in the Brahmaputra Basin, this 85 MW project was initiated in November 2003. However, survey and investigation work has been suspended due to law-and-order issues in the region.

Further, for obtaining the current status of implementation of the handed over projects, the concerned departments of State Governments are being requested to share the status of implementation of the projects on quarterly basis.

C. Preparation of DPR of Drainage Development Schemes:

In the Master Plans prepared by Brahmaputra Board, 41 drainage congested areas have been identified. The status of 'Survey & investigation' and Preparation of DPRs of Drainage Development Schemes and subsequent techno-economic clearance is as under-

DPRs for 15 drainage development schemes have been techno-economically cleared. Out of these, 4 Drainage Development Schemes (DDS) – Harang, East of Barpeta, Jengrai and Jakaichuk have been completed.

1.21 On being asked to furnish the total staff strength (sanctioned and actual) both in technical and non-technical cadres of the Brahmaputra Board in its offices located in various regions of the North East States and about the major problems/ hindrances/bottlenecks in recruitment process, the Department stated as under:-

"The post-wise overall Sanction Strength of Manpower of Brahmaputra Board and the actual man in position is placed below-

Staff position of Brahmaputra Board as on 01.02.2025

Group	Sl. No.	Name of post	Sanctioned Strength	Man on Position	Post Vacant
GROUP-A Statutory	1	Chairman	1	1	0
	2	Vice Chairman	1	0	1
	3	General Manager	1	1	0
	4	Financial Adviser	1	0	1
	5	Chief Engineer-I	1	1	0
	6	Secretary	1	0	1
	7	Chief Engineer-II	1	0	1
	TOTAL=		**7**	**3**	**4**
GROUP-A Non-Statutory	8	Dy. Chief Engineer	4	1	3
	9	Dy. Secretary	1	1	0
	10	Dy. Fin. Adviser	1	1	0
	11	Superintending Engineer	10	4	6
	12	Executive Engineer (Civil) (Including Under Secretary (Tech) / EE(HQ)	20	3	17
	13	Executive Engineer (Mechanical)	1	0	1
	14	Under Secy. (E)	1	1	0
	15	Principal Pvt. Secy.	1	1	0
	16	Sr. Accounts Officer	1	0	1
	17	Asstt. Executive Engineer (Civil)	28	14	14
	18	Asstt. Executive Engineer (Mech.)	2	2	0
	19	Accounts Officer	2	1	1
	20	Assistant Director (OL)	1	1	0
	TOTAL		**73**	**30**	**43**
GROUP-B	21	Section Officer (Acctt)	3	2	1
	22	Assistant Engineer (Civil/Mech.)	32	28	4
	23	Section Officer (Sectt)	4	2	2
	24	Private Secretary	4	0	4
	25	Personal Assistant	2	0	2
	26	Divn. Accountant	9	7	2
	27	Head/ Chief Draftsman	1	1	0
	28	Junior Engineer	75	53	22
	29	Draftsman Gr-I	4	0	4
	30	Assistant	13	1	12
	31	Jr. Translator	1	0	1
	GROUP - B TOTAL		**148**	**94**	**54**
GROUP-C	35	Upper Divn. Clerk	25	6	19
	36	Lower Divn. Clerk	50	19	31

Group	Sl. No.	Name of post	Sanctioned Strength	Man on Position	Post Vacant
	37	Driver Ordinary Grade	8	0	8
	38	Multi-Tasking Staff	81	49	32
	GROUP - C TOTAL		**187**	**79**	**108**
	GRAND TOTAL A+B+C =		**415**	**206**	**209**

There are no specific defined posts in the regional offices. Officers and staffs are placed as per requirement and availability. As almost 50% of the posts in all cadres are vacant there is shortage of Technical as well as non-technical staff in Brahmaputra Board. Due to limited success in filling up the vacant posts through the attempts made so far by conventional methods of recruitment, it is proposed to recruit some young professionals to meet the immediate requirement. The 83rd meeting of the Brahmaputra Board and the 13th meeting of its High-Powered Review Board, made several key recommendations aimed at addressing staffing vacancies within the organization. "

1.22 About the challenges being faced by the board in executing Masterplans/DPR in North Eastern Region and the remedial measures being taken in this regard, the Department stated as under:-

"Water being the State Subject, implementation of recommendation of Approved Master Plan is the responsibility of the State. As for monitoring the implementation of the recommendations outlined in the approved Masterplans/DPR, the Brahmaputra Board currently does not have a formalized, established mechanism in place. However, the Board is actively engaging with the Basin States to address this gap. Efforts are being made to discuss and collaborate with the states to ensure that the recommendations are effectively implemented."

1.23 The Committee expressed its concern about the extensive loss of landmass due to erosion in Majuli Island located in the State of Assam. In this regard, when being asked to furnish details and remedial measures taken, the Department furnished as under:-

"Central Water Power Research Station (CWPRS), Pune carried out study on Identification of potential erosion sites based on satellite imageries for Majuli Island along river Brahmaputra during October 2024. The conclusion of Technical Report on Identification of potential erosion sites based on satellite imageries for Majuli Island along river Brahmaputra, Assam is as under:

CWPRS has carried out the desk studies based on satellite imageries for evolving protection measures for Majuli island from flood and erosion of river Brahmaputra, Assam, India. In this report, the vulnerable reaches of the river Brahmaputra has

been identified and the protection measures should be designed taking into account of the erosion/ deposition pattern.

The Brahmaputra River reach of about 120 km along the Majuli island is considered for this study.

- *The analysis indicated that there was continuous erosion in the region near the confluence of Subansiri and Brahmaputra (Major ChaporiNC), which extended from Katoni Goan Na Satra to Banpurai.*
- *There was major deposition observed in the region between Ratanpur Miri Gaon to Kathal Khowa Pam during 1989-1999. In the subsequent year of analysis, it was found that this deposition persisted and the river bank was stable in this reach.*
- *The bank lines around the Kamal Bari was found to be eroding initially from 1986-2009.From2009, it was observed that there was the migration of the river towards south contributing to deposition. During 2018-23 there was major deposition in this reach contributing an area of about26 km^2.*
- *An area of around 75 km^2has been eroded and 58 km^2has been deposited from 1986 to 2023 along the right bank of river Brahmaputra*
- *The area under erosion and deposition for different time periods is given in the table below*

Timeperiod	***Erosion(km^2)***	***Deposition(km^2)***
1986-1989	***21.95***	***1.22***
1989-1999	***57.56***	***33.36***
1999-2009	***24.73***	***38.86***
2009-2018	***33.61***	***22.55***
2018-2023	***10.33***	***34.61***

- *The yearly analysis during 2018-2023 indicated that there was no significant migration in the river reach apart from the area near Kamala Bari. There was a significant deposition of about 27.47km^2near the Kamala Bari during the period 2021-2022.*

The details of remedial measures taken by the Board to prevent erosion are-

1. ***Immediate Measures (2004-2005)***
   - *Plugging 20 breaches.*
   - *Strengthening 5.55 km of embankments.*
   - *Installing innovative permeable RCC porcupine screens, spurs, and dampeners.*

2. ***Phase I (2005-2011)***
   - *Closure of 3 major breaches.*
   - *Raising and fortifying 90.7 km of embankments.*
   - *Strategic repairs and construction of land spurs to stabilize vulnerable areas.*

3. ***Emergent Works (2008)***
   - *RCC porcupine installations at Bhogpur, BengenaAti, Kamalabari, and other critical locations.*

4. ***Phases II & III (Completed in 2018)***
   - *Establishment of five land spurs and construction of bank revetments.*
   - *RCC porcupine structures and elevated platforms for enhanced flood resilience.*

5. ***Phase IV (Completed)***
   - *Construction of 27 km of geo-bag revetments.*
   - *Deployment of RCC porcupine screens at 41 strategic locations.*

6. ***Phase V: Ongoing***

The Key provisions under Phase V include:

- *Installation of PSC porcupine screens at 20 locations along the southern bank in innovative patterns.*
- *Strengthening critical spurs using geo-bags to ensure future resilience.*

<u>Polavaram Project</u>

1.24 On being asked to furnish the details of Polavaram Project including its management, functioning and benefits accrued to the people in the beneficiary States, the Department replied as under:-

"Polavaram Project is a multi-purpose reservoir project contemplated across the river Godavari near Ramayyapeta village, Polavaram Mandal in Eluru district (erstwhile West Godavari District) of Andhra Pradesh. The Project is under construction in accordance with the provisions of Inter-State Agreement dated 02.04.1980 concluded among co-basin States and the Godavari Water Disputes

Tribunal (GWDT) Award 1980. All the requisite clearances have been obtained from various agencies of Government of India.

Main Components of the Project include:

- *2467.50 m length of Earth-Cum Rock Fill (ECRF) dam / Concrete dam in three gaps (Gap-I: 564m, Gap-II:1750m and Gap-III: 153.50m)*
- *1121.20 m long spillway to cater a design flood of 50 lakh Cusecs (1,41,535Cumec) with 48 Radial gates of size 16 m x 20 m.*
- *182km long Left Main Canal (LMC) and 178.81 km long Right Main Canal (RMC)*
- *The reservoir with a gross and live capacity of 194.60 TMCft and 75.20 TMCft respectively at FRL of +45.72 m (+150 ft)*
- *Hydro powerhouse with installed capacity of 960 MW [12 Nos. x 80 MW]*

Project Management:

a. *The Government of India, recognizing the importance of the Polavaram Irrigation Project(PIP), declared the Project as a National Project vide Section-90 of A.P. Re-organization Act, 2014 and was decided that Union Government shall execute the project and obtain all requisite clearances including environmental, forest, rehabilitation and resettlement norms.*
b. *In pursuance of the above Act, Central Government constituted the Governing Body to Polavaram Project Authority and Polavaram Project Authority vide Extraordinary Gazette Notification No. 129 dated 28th May, 2014.*
c. *Water Resources Department (WRD), Government of Andhra Pradesh (GoAP) is executing the civil works (Irrigation component only) and LA and R&R works of PIP on behalf of Government of India. The expenditure incurred towards the construction of PIP is being reimbursed by GoI.*
d. *Polavaram Project authority (PPA) is involved in overall coordination with all stakeholders, monitoring of PIP and facilitating reimbursement to GoAP*

Apart from above, the following committees are constituted for monitoring and supporting in execution of the Polavaram Irrigation Project

- *Dam Design Review Panel – To provide technical and strategic guidance for designs and implementation.*

- *Monitoring committee for R&R works – Committee headed by Secretary, MoTA, GoI to strengthen Monitoring mechanism for LA and R&R process including grievance redressal mechanism.*
- *Panel of Experts (PoE) – For providing holistic advice on technical challenges being faced in the project.*
- *PPA has engaged WAPCOS as Project Management Coordination Consultant at field level for better monitoring*
- *Central soil and Material research station (CSMRS) is providing Quality Audit and Quality Assurance for works of PIP.*

Project Benefits:

- *New Ayacut :7.2 Lakh Acres; (Right Main Canal- 3.2 Lakh Acres; Left Main Canal -4.0 Lakh Acres) and Stabilization of 23.5 Lakh Acres under Godavari and Krishna Delta Systems.*
- *Diversion of 80 TMC of Godavari water to Krishna River (Prakasam Barrage) as per GWDT award*
- *Hydro Power: 960 Mega Watt (MW)*
- *Domestic & Industrial water Supply: 23.44 TMC of water to the habitations and industries in and around Vishakhapatnam City including Vizag steel plant.*
- *Drinking water facility to 611 villages for a population of 28.5 Lakh enroute canals.*
- *Odisha and Chhattisgarh can utilize 5 TMC and 1.5 TMC of water respectively from backwaters of Reservoir and also can develop pisciculture in their territories.*
- *In addition, this project indirectly benefits in overall development of pisciculture, promoting Tourism, providing recreation and other benefits besides urbanization."*

1.25 When being asked about the original budget of the Project, subsequent increase with details and the present estimated budget of the Project and any timeline of its completion, the Department stated as under:-

"Estimated Cost of the Project: *The cost of Polavaram Irrigation Project was approved by the Ministry of Water Resources (MoWR) Advisory Committee in its 95thmeeting held on 20.01.2009 for Rs.10,151.04 Cr at 2005-06 Price Level (PL)*

and Planning Commission granted investment clearance in February, 2009. The Cost of the project was revised to Rs. 16,010.45 Cr at 2010-11 PL and accepted by the Advisory Committee of MoWR in its 108th meeting held on 04.01.2011 and accorded investment clearance on 08.05.2017.

The Second Revised Cost Estimate was placed before Advisory Committee in its 141st meeting held on 11.02.2019 and the same was approved for Rs. 55,548.87 Cr at 2017-18 PL. However, as per the Revised Cost Committee (RCC) constituted by MoJS the total estimated cost of PIP recommended for Rs.29,027.95Cr at 2013-14 PL and Rs.47,725.74 Cr at 2017-18 PL.

To accrue early benefits from the project, Revised Cost Estimate (RCE) for water storage up to +41.15 m level (Phase-I) was submitted by GoAP for Rs. 36,449.83 Cr at March 2023 PL which includes all the civil works of the project up to FRL i.e. EL +45.72 m and LA and R&R works up to EL +41.15 m. Union Cabinet approved the revised cost for completion of the PIP with water storage upto EL + 41.15 m at a cost of Rs. 30,436.95 Cr with balance central grant for the project limited to Rs. 12,157.53 Cr in the meeting held on 28.08.2024.

Timeline of its completion: *The works of PIP with water storage up to +41.15m is scheduled to be completed by March 2026, however, in view of technical challenges inherent to the project, provision for one year extension with the approval of MoJS is made in the latest cabinet approval."*

1.26 When being asked to furnish details about the present status of land acquisition, rehabilitation & resettlement of people displaced due to the Project, the Department stated as under:-

"The Land Acquisition and Rehabilitation & Resettlement activities are being carried out as per Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013. As per the act SC/ST PDFs and other PDFs are being paid an amount of Rs. 6.86 lakh and Rs. 6.36 lakh respectively as cash compensation. Further every SC/ST PDF is being provided land to the extent of lost land or 2.5 acres whichever is less. All the rehabilitation colonies are provided with 24 infra structure facilities as per the act. The present status of LA and R&R activities of the project up to January 2025 is as follows:

Sl. No.	Item	Water Storage Upto EL+41.15m	Overall Project
Status of Land Acquisition			
1	Land required	65,205.26**	1,27,262.79*
2	Land Acquired	51,355.51	1,00,785.83
Status of Rehabilitation & Resettlement			
1	Mandal Affected	8	8
2	Revenue Villages Affected	90	222
3	Habitations Affected	172	373
4	Habitations Shifted	38	38
5	Total R&R Colonies	121	213
6	R&R Colonies Completed	26	26
7	Total PDFs	38,060	1,06,006
8	No. of PDFs Shifted	14,356	14,356
9	Ready To Occupy	2,642	2,642

** The figure is assessed by Revised Cost Committee March, 2020 reports*
***The figure is assessed by Revised Cost Committee February, 2024 reports"*

Rain Water Harvesting

1.27 On Rain Water Harvesting in the country the Department furnished a detailed note highlighting its significance in water conservation and water security, its benefits, challenges, and future prospects in contributing to the nation's water sustainability goals, which is as under:-

"Rainwater harvesting (RWH) is increasingly recognized as a vital strategy to address India's growing water scarcity and ensure sustainable water management. With millions facing high to extreme water stress, rainwater harvesting offers a solution to the challenges posed by the overexploitation of water resources, erratic rainfall, and a rapidly increasing population. By collecting and storing rainwater, this practice can significantly alleviate water scarcity issues, offering a reliable alternative to conventional water sources, which are often insufficient or unreliable. It also helps improve groundwater recharge, making it a key solution in regions where aquifers have been depleted.

One of the major concerns in India is the over-extraction of groundwater, particularly in regions that heavily rely on it for drinking, agricultural, and industrial use. The other challenge confronting groundwater is more than 70% annual flows of rivers in monsoons and there is heavy dependence on monsoon and around 50% of rainfall is in just 15 days despite hundred days of monsoon. The live water storage is only 209m3 per capita in India as compared to 5000 m3 in USA, 60% of irrigation and 85 % of rural drinking water needs 50% of urban water is met by extraction of ground water, India extracts the highest amount of ground water in the world at 260 BCM. This overuse has resulted in declining groundwater levels and the depletion of aquifers in some areas. Rainwater harvesting aims to boost groundwater levels, offering a sustainable alternative to maintain water availability, especially during dry spells. The process of capturing and storing rainwater can also aid in recharging groundwater levels, thereby ensuring a more stable and consistent water supply. By allowing water to percolate into the ground, rainwater harvesting contributes to replenishing the aquifers, providing a crucial resource for both urban and rural areas. The challenges are that the recharge is dependent on slope of land, duration of water retention, geographical location, and availability of rechargeable area etc. Another challenge is operation and maintenance, cleaning, repair to maintain recharge efficiency, The benefits of artificial recharge structures including rainwater harvesting inter alia include, arrest - decline in ground water levels, enhanced availability of ground water, sustain drinking water sources, improved yields in irrigation wells, increase recharge in urban areas which has decreased drastically due to paving, prevent urban flooding and many more.

The future prospect of rainwater harvesting is very bright as ground water assessment reports since 2017 have shown consistent increase in groundwater recharge from Tanks, Ponds and water conservation structures which has been 11.36 BCM, in 2024 wrt 2017, which is more than the live storage capacity of 9.75 BCM and even the gross storage capacity of 12.22 BCM, of the largest earthen water storing dam in India: The Indira Sagar Dam.

So RWH is a low cost, solution with high benefits."

1.28 When being asked about financial support/grant to the States/UTs by the Government for promoting rain water harvesting in the country, the Department stated as under:-

"No financial support to States/UTs has been provided for Rain Water Harvesting by NWM in the country. However, NWM is implementing the Jal Shakti Abhiyan: Catch the Rain campaign, which is a convergence of various Central Government schemes and funds like MGNREGS, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Per Drop More Crop Repair, Renovation and Restoration Components under the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) , Compensatory Afforestation Fund Management and Planning Authority(CAMPA), Finance Commission Grants, State Government schemes, Corporate Social Responsibility (CSR) funds etc. One of the major interventions of the campaign is water conservation and rainwater harvesting, which inter-alia includes construction and repair of rainwater harvesting structures including rooftop and recharge structures."

Command Area Development and Water Management (CAD&WM)

1.29 As per the information provided by the Department the Command Area Development & Water Management (CADWM) Programme was launched in 1974-75 to enhance utilization of irrigation potential created and improve agriculture productivity and production on a sustainable basis. The Scheme was brought under the umbrella of PMKSY in 2016-17 and has been restricted to 99 prioritized AIBP projects.

CAD&WM–Allocation and Expenditure

(Rs. in crore)

Year	BE	RE	Actual
2022-23	1044.00	140.00	99.07
2023-24	400.00	236.69	174.39
2024-25	1400.00	100.00	NIL*
2025-26	850.00		

**Till 31.12.2024*

1.30 The BE provision for CAD&WM for FY 2024-25 was Rs. 1400 crore, which was reduced to Rs. 100 crore (reduction of more than 92%) at RE stage and till December, 2024 the whole fund was unutilized. For FY 2025-26, it has again been raised to Rs.850crore (BE). When being asked to give reasons in this regard, the Department explained as under:-

"The reason for reduced allocation from Rs.1400 crore at BE stage to Rs.100 crore at RE stage are follows: -

i. With respect to CADWM scheme, the BE 24-25 was Rs. 1400 Crore in which majority of allocations (Rs. 1200 Crore) were made for Modified CADWM scheme (sub scheme under PMKSY-CDWM scheme). Since the MCAD scheme could not be approved till date in the current FY, RE has been reduced.

ii. There has been no hindrance to the scheme due to reduced allocations."

1.31 . When being asked to furnish the reasons as to why the BE allocation of Rs.1400 crore in FY 2024-25 has been decreased to Rs. 850 crores in FY 2025-26 (almost -40%), the Department furnished the following information:-

"The reasons why the BE allocation of Rs.1400 crore in FY 2024-25 has been decreased to Rs. 850 crores in FY 2025-26 are as follows: -
Majority of allocations (Rs. 1200 Crore) was for MCAD scheme (sub scheme under PMKSY-CADWM). The scheme has been approved with lower than proposed allocations due to which BE 25-26 has been substantially reduced."

Atal Bhujal Yojana

1.32 The Department in a written submission informed the Committee that the Atal Bhujal Yojana (ATAL JAL) is a Central Sector Scheme with a total outlay of Rs.6000 crores, which included Rs.3000 crores assistance from World Bank. The Scheme is under implementation in 8203 water stressed Gram Panchayats of 229 administrative blocks/ Talukas in 80 districts of seven States, viz. Haryana, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh for a period of five years from 01.04.2020. Further, the Scheme has been extended up to 31.03.2026 by the Department of Expenditure. The primary objective of this Scheme is "to improve the management of groundwater resources in the water stressed areas of the selected States."The selected States account for about 37% of the total number of water-stressed (over-exploited, critical and semi-critical) blocks in India.

Atal Bhujal Yojna–Allocation and Expenditure

(Rs. in crore)

Year	BE	RE	Actual
2022-23	700.00	700.00	1155.43
2023-24	1000.00	1778.00	1738.56
2024-25	1778.00	600.00	76.49*
2025-26	1780.40		

**Till 31.12.2024*

1.33 The Committee observe that the BE provision for Atal Bhujal Yojna for FY 2024-25 was Rs. 1778 crore which was reduced to Rs. 600 crore at RE stage and out of which only Rs.76.49 crore has been utilized till December, 2024. On being asked about the reasons of drastic reduction of budgetary allocation for the Scheme at RE stage i.e. Rs.600 crore and a meagre utilization of Rs.76.49 crore in the three quarters of FY 2024-25, the Department explained as under:-

*"Department of Expenditure (**DoE**) issued guidelines dated 21.05.2024, as per which Atal Bhujal Yojana (**ABY**) was to be shifted from existing CNA Model II to*

the new fund flow model (viz. Hybrid TSA Model-1A). DoE directed that no funds be released to the States until the onboarding of ABY to the new fund flow model (Hybrid TSA Model-1A) is completed. DoWR sought exemption for migration to the TSA Model IA in view of its unique nature of being a performance-based Scheme where the funds under ABY are given only after work / activities are completed and verified, making it results-focused and innovative. However, the exemption was not given by DoE.

As a result, funds of Rs.637 crore which were due to the States as per Scheme guidelines under Incentive Component of ABY after 8th round of verification by Third Party Government Verification Agency (viz. QCI) as well as funds under the under IS&CB Component of ABY could not be released to the States.

Due to such non-release of funds to the States despite being eligible under the Scheme, especially under Incentive Component of ABY, the allocation for the Scheme was revised from Rs.1778 crore in B.E. 2024-25 to Rs.600 crore in R.E. 2024-25. DoE has now allowed for funds to be released under existing arrangement till 31.03.2025."

1.34 With regard to the role and contribution of Atal Bhujal Yojana in groundwater conservation and recharge and about any measurable improvement in groundwater levels in the areas covered by the scheme, the Department stated as under:-

*"The primary objective of this Scheme is "to improve the management of groundwater resources in the water stressed areas of the selected States". The scheme aims at community led sustainable ground water management with focus on demand side management. Community participation is fundamental to the implementation of ABY and this been ensured through, regular meetings/ discussions, various modes of Information, Education and communication (**IEC**), awareness programmes and materials developed in vernacular languages.*

Major activities completed / ongoing under ABY are as under:

i. Public disclosure of data in all the ABY GPs through various modes of disclosure viz., central/ state web portals, display board at each GP, social media, wall paintings, distribution of pamphlets/ brochure, public meetings and Atal Jal Mobile application.

ii. Preparation of water budgets and community led water security plan for all 8203 ABY GPs.

iii. An amount of Rs.4,600 crore has been converged through ongoing/ new schemes for implementation of the supply side and demand side measures as proposed under WSPs.

iv. An area of around 6.7 lakh Hectares has been brought under efficient water use practices, including Drip, Sprinkler, Mulching, Crop Diversification etc.

v. More than 68,000 artificial recharge / water conservation structures have been constructed.

vi. More than 1.2 lakh training sessions have been conducted so far through which more than 10 lakh individuals trained. 45% of such trained individuals are women.

vii. 1,333 GPs and 61 blocks have shown a rise in groundwater levels in the year 2024. In the year 2023, 813 GPs and 47 blocks have shown a rise in groundwater levels.

viii. This has resulted into recharge of 2,289 MCM water, benefiting 2.98 crore people."

Namami Gange Mission-II

1.35 As per the information provided by the Department, the Namami Gange Programme (NGP) was launched in 2014-15 for rejuvenation of river Ganga and its tributaries with a budgetary outlay of Rs. 20,000 crore, for five years, up to March 2021 and has been further extended to March, 2026 with a budgetary outlay of Rs. 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.

1.36 When being asked about the current status in respect of the sanctioning and completion of the Namami Gange Programme in Ganga Mainstream areas, the Department informed that under the Namami Gange Programme for the rejuvenation of River Ganga and its Tributaries, as of December 2024, a total 488 number of projects (including sewage infrastructure) have been sanctioned at an estimated cost of ₹ 39,730 crore, out of which a total of 305 projects have been completed and made operational. The component-wise list of the Projects sanctioned and completed is as under:-

Component-wise list of the Projects Sanctioned and Completed

Sl. No.	Project-wise/ Component-Wise	Number of Projects Sanctioned	Total Sanctioned Cost (Rs. In Crore)	Number of projects completed
1.	Sewerage Infrastructure	203	32,613	127
2.	Bioremediation	19	395	10
3.	Ghats and Crematoria	109	1,811	82

4.	Solid Waste Management	14	1,468	11
5.	Industrial Effluent Treatment/Surveillance & Monitoring/R&D Projects	23	1,762	9
6.	Ecological Projects	70	951	45
7.	Livelihood Projects	11	46	2
8.	Public Outreach Projects	17	427	11
9.	Knowledge Projects	22	257	8
Total		**488**	**39,730**	**305**

1.37 Further, on being asked to furnish details about the industries responsible for pollution in the River Ganga as well as cases registered, penalty imposed and amount recovered in this regard, the Department stated as under:-

"CPCB with a joint team of technical institutes and the concerned State Pollution Control Board undertaken an annual inspection of Grossly Polluting Industries (GPIs) operating in Ganga main-stem States and its tributaries since 2017. In 2024, 4246 Grossly Polluting Industries (GPIs) have been inventorised in the 7th round of inspection. Out of 3,106 GPIs inspected so far 1,819 GPIs are compliant, 692 are non-compliant, 385 GPIs are temporarily closed and 210 GPIs are permanently closed. Among the non-compliant (692 GPIs), 17 GPIs have been issued notice for closure and 675 GPIs have been issued show cause notice."

1.38 When being asked about the Committees/ Councils/ Bodies/ Organizations/ Societies established under Namami Gange Programme, having local public representatives (MP/MLA) as a member, the Department informed as under:-

"As per the Authority Notification dated 7th October 2016, State Ganga Rejuvenation, Protection and Management Committee & District Ganga Committees (DGCs) are constituted in every specified District abutting River Ganga and its tributaries for the prevention, control and abatement of pollution.

As per the Authority Notification, every District Ganga Committee in each specified District consists of the following members, namely: -

a. The District Collector in the specified District; - Chairperson, ex-officio;

b. Two nominated representatives from Municipalities and Gram Panchayats of the specified District nominated by the State Government. - Members;

c. One representative each of the Public Works, Irrigation, Public Health Engineering, and Rural Drinking Water Departments, and State Pollution Control Board working in the specified District abutting River Ganga to be nominated by the District Collector - Member, ex-officio;

d. Two environmentalists associated with River Ganga protection activities and one representative of local industry association in the specified District to be nominated by the District Collector - Members;

e. One Divisional Forest Officer of the specified District - Member, ex-officio

f. One District official to be nominated by the District Collector. - Member;"

1.38.a During the examination of the DFG (2025-26) of the Ministry of Jal Shakti, it has come to the notice of the Committee that Members' of Parliament Road Safety Committee has been constituted through a gazetted notification by the Ministry of Road, Transport and Highways (Please see '**Annexure-V'**)

Flood Management and Border Areas Programme (FMBAP)

1.39 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.

1.40 As per the information provided by the Department budget allocations under FMBAP during the last five years are as under:-

Flood Management and Border Areas Programme- Allocation and Expenditure

(Rs. in crore)

Year	BE	RE	Actual
2020-21	750.00	115.85	97.108
2021-22	342.99	225.00	261.80
2022-23	450.00	450.00	433.204
2023-24	450.00	200.00	198.078
2024-25	449.57	400.00	37.61*

*Till 31.12.2024

1.41 During the oral evidence held on 24.02.2025, the representative of the Department of Water Resources, River Development and Ganga Rejuvenation, submitted before the Committee as follows:-

".....there are certain areas where we think we do need more money.

One is on flood management. In respect of the Flood Management Programme, I am being very honest, there are huge demands from the States, particularly flood prone States under the Flood Management Programme. We are not able to address the requirements for the States. We are seeking an enhancement.

What had also happened was, for new projects, we were limited to Rs.300 crore because the idea was that flood management is something that States could do on their own or draw upon the Disaster Relief Funds. But we think that given the climate change and the vagaries of rainfall, flood management is an area that is becoming more acutely critical going forward. Therefore, we think that some more resources for flood management are necessary....."

National River Conservation Plan (NRCP)- Other Basins

1.42 As per the information provided by the Department NRCP is a Centrally Sponsored Scheme for conservation of rivers excluding Ganga and its tributaries on cost sharing basis by providing assistance to States/UTs. The Committee further note that a Condition assessment and Management Plans (CAMP) study for six river basins including Narmada, Mahanadi, Godavari, Krishna, Cauvery and Periyar has been taken up at a sanctioned cost of Rs.75.72 crore.

1.43 Further, as per the information furnished by the Department about the budgetary provision, Rs. 558.09 has been allocated for NRCP- Other Basins Scheme for the fiscal year 2025-26.

1.44 During the oral evidence held on 24.02.2025, the representative of the Department of Water Resources, River Development and Ganga Rejuvenation, submitted before the Committee as follows:-

".....Sir, the second area where we can use more resources is under the National River Conservation Plan. Again, we are well-funded with regard to the Ganga Rejuvenation, but there are multiple polluted river-stretches in the rest of the country where we are not able to take up....."

Special Package for the State of Maharashtra

1.45 As per the information provided by the Department in July 2018, Govt. of India approved a Special Package to provide Central Assistance up to Rs.3,831.41 crore to complete 83 Surface Minor Irrigation (SMI) projects and 8 Major / Medium Irrigation(MMI) Projects in suicide prone districts in Vidarbha and Marathwada and rest of Maharashtra region of the state of Maharashtra envisages creation of additional 3.77 lakh hectare of potential. During the period from 2018-19 to 2023-24, 53 Surface Minor Irrigation projects and 02 Major/ Medium Irrigation projects have been reported completed which are responsible for creation of irrigation potential of 1,66,532 hectare through all these project during 2018-19 to 2023-24 and Central Assistance of Rs.2962.36 crore has been released so far.

1.46 With regard to budgetary provision, no fund has been allocated under the Scheme for the fiscal year 2025-26. In this regard the Department informed that the Scheme was extended till March, 2025 by Department of Expenditure. Since, scheme time-period expires on 31.03.2025, no allocation has been proposed for the FY 2025-26. However, based on the request of State Govt., proposal for continuation of the scheme beyond time period, is being examined.

Water Management in Forest Areas

1.47 When being asked about water management in forest areas, Tiger Reserves and Sanctuaries in the Country viz. the key policies and laws governing water management in forest areas, study / research being carried out about how climate change affects water availability and quality in forest areas, gaps and challenges in implementing effective water management policies and role of the Ministry in this regard, the Department stated as under:-

"The Government of India has consistently undertaken various initiatives to ensure the optimal management of water resources in forest areas. Over time, a comprehensive framework of policies, regulations, and guidelines has been developed and implemented to promote the sustainable and efficient use of these vital resources. These efforts aim to govern water management in forest areas, ensuring the protection, conservation, and sustainable use of water resources. ***National Water Policy (NWP)*** *of India, first formulated in 1987 and revised in 2012, provides a comprehensive framework for the planning and management of the country's water resources. The policy aims to ensure the sustainable and equitable use of water across all sectors, prioritizing its conservation, protection, and efficient utilization. This policy lays down strategies for the integrated*

management of water resources in India. It emphasizes the protection of watersheds, including those in forest areas, to conserve water and prevent soil erosion. The policy calls for the sustainable use of water in all sectors. Further, the Environment Protection Act, 1986, provides a legal framework for environmental protection, including water bodies in forests. Under section 3(v) of the Environment (Protection) Act, 1986 and Rule 5, sub-rule (viii) and (x) of the environment (Protections) Rules, "lands falling within 10 kms of the boundaries of national parks and sanctuaries should be notified as eco-fragile zones". The National Wildlife Action Plan (NWAP) (2002-2016) indicated that 'Areas outside the protected area network are often vital ecological corridor links and must be protected to prevent isolation of fragments of bio-diversity which will not survive in the long run. Land and water use policies will need to accept the imperative of strictly protecting ecologically fragile habitat and regulating use elsewhere'. The action plan also indicated that 'all identified areas around protected areas and wildlife corridors to be declared as ecologically fragile under the Environment (Protection) Act, 1986.

It may be also be noted that within 10 Km radius, any kind of Water Resources development project has to follow Environment Impact Assessment (EIA) notification and assessment of impacts thereto. This follows a sustainable Environment Management Plan (EMP) as well, which also form part of project DPR, appraised and implemented

Further, before commencing any project EIA studies are carried out generally. EIA study identifies, predicts and evaluates the likelihood environmental impacts of the project on the Physical, Biological and Social Environment, proposes measures to mitigate negative impacts and prepares a suitable environmental monitoring programme to monitor changes to the environment and to ensure due implementation of mitigation measures. EIA study ensures that the development project is implemented while giving due consideration for environmental sustenance from the inception itself i.e. from planning and designing of the project. The Environmental aspect addresses the common resources to be shared and possibly, protected in the area and therefore the EIA study looks beyond the immediate project interests. Additionally, the study would assess the extent of implementation of: i) Environmental Management Plan (EMP), if any; and ii) Catchment Area Treatment (CAT) Plan. The study is finally expected to make

number of Recommendations based on the assessment of impacts and extent of implementation.

Central Water Commission has carried out post-Project EIA studies of various completed water resources projects in the country to assess the change as a result of the project on several environmental and social parameters."

Management of Glacial Lake Outburst Flood (GLOFs)/ Cloudburst Flood in North-East Region/ Himalayan Regions

1.48 When being asked to provide a detailed note on Glacial Lake Outburst Flood (GLOFs) and Cloudburst Flood in the North East region of India, the Department stated 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).

The impact of warming has been observed in every part of the world, 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. 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.

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).

Further, glacial lakes were ranked for their downstream GLOF risk considering satellite derived terrain and hydrological parameters for Indus, Ganga and

Brahmaputra River basins separately. The following Table provides list of five selected glacial lakes in Brahmaputra River basin within India.

S. No.	Prioritized Glacial Lakes	State	Latitude (° N)	Longitude (° E)
1	Gochung Tso	Sikkim	27.992	88.545
2	South Lhonak	Sikkim	27.913	88.196
3	Shako Tso	Sikkim	27.975	88.616
4	Gurudongmar	Sikkim	28.006	88.713
5	Khanchung Tsho	Sikkim	27.990	88.816

According to the India Meteorological Department (IMD) a cloudburst features very heavy rainfall over a localized area at a very high rate of the order of 100mm per hour featuring strong winds and lightning. It is a remarkably localized phenomenon affecting an area not exceeding 20-30 sq. Km."

1.49 On being asked about the key factors contributing to the formation of glacial lakes and contributing to the frequency and intensity of Cloudbursts in the North East region, the Department stated as under:-

"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 glacierized 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 fills 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. Details of types of glacial lakes in North East region of India is given in following table.

S. No.	State	Types of Glacial Lakes				
		Moraine-dammed	Ice-dammed	Glacier Erosion	Other	Total
1	Arunachal Pradesh	91	0	2,009	88	2,188
2	Sikkim	184	72	469	8	733

A cloudburst occurs during monsoon season over the regions dominated by orography like Himalayan region, North Eastern states and the Western Ghats. They are likely to occur when monsoon clouds associated with low pressure area travel northward from the Bay of Bengal across the Ganges plains onto the Himalayas and 'burst' in heavy downpours (75-100 mm per hour). The associated convective cloud can extend up to a height of 15 km above the ground. It represents cumulonimbus convection in conditions of marked moist thermodynamic instability and deep, rapid dynamic lifting by steep orography."

1.50 When asked to provide details about the incidents of Glacial Lake Outburst Flood (GLOFs) and Cloudburst Flood occurred (with details of casualties) during the last five years in the North East region and remedial action taken by the Ministry to mitigate these challenges, the Department informed as under:-

One (01) GLOF event took place in Sikkim on 4 October 2023 during the last five years causing severe flooding of the Teesta River valley. The floods have damaged buildings, highways and the Chungthang dam downstream, and impacted life in many small villages in the valley.

Central Water Commission (CWC) has formulated and published 'Criteria for Risk Indexing of Glacial Lakes in Indian Himalayan Region' in September 2024. NDMA and SDMA's with consultation from several organizations from different ministries including NIH, NRSC, GSI, C-DAC, WIHG, etc. are involved in field observations (bathymetry and geotechnical) for the assessment of vulnerable glacial lakes identified based on the criteria established by CWC. The GLOF modelling will be carried out for these lakes to identify the vulnerable downstream regions and infrastructure. Several organizations are also involved in the development of GLOF early warning system that shall be deployed over the vulnerable basins in Himalaya.

CWC monitors 902 GLs/WBs size greater than 10 Ha as per 2011 Glacial Lake inventory of NRSC and publish monthly monitoring reports, fortnightly bulletins (100 GLs in India), Annual report which are shared with concerned stakeholders. These reports/bulletins are also e-published on CWC website for any time access by concerned. CWC has also carried out trend analysis of change on water spread area of glacial lakes, Criteria for Rapid Risk assessment and risk assessment of 100 glacial lakes in India.

The abstract of 902 GL/WB is given in following Table.

Table 1: Abstract of 902 GL/WB

Country	*State*	*No of Glacial Lakes*				*No of Water Bodies*				*Grand Total*
		Indus Basin	*Ganga Basin*	*Brahmaputra Basin*	*Total*	*Indus Basin*	*Ganga Basin*	*Brahmaputra Basin*	*Total*	
India	*Jammu & Kashmir*	*30*	*0*	*0*	*30*	*42*	*0*	*0*	*42*	*72*
	Himachal Pradesh	*10*	*0*	*0*	*10*	*5*	*0*	*0*	*5*	*15*

	Uttarakhand	*0*	*9*	*0*	*9*	*0*	*6*	*0*	*6*	*15*
	Sikkim	*0*	*0*	*42*	*42*	*0*	*0*	*1*	*1*	*42*
	Arunachal Pradesh	*0*	*0*	*9*	*9*	*0*	*0*	*25*	*25*	*35*
	Total	*40*	*9*	*51*	*100*	*47*	*6*	*26*	*79*	*179*
	India Total	*100*				*79*				*179*
Transboundary	*China*	*12*	*110*	*187*	*309*	*49*	*19*	*191*	*259*	*568*
	Bhutan	*0*	*0*	*71*	*71*	*0*	*0*	*11*	*11*	*82*
	Nepal	*0*	*64*	*0*	*64*	*0*	*9*	*0*	*9*	*73*
	Total	*12*	*174*	*258*	*444*	*49*	*28*	*202*	*279*	*723*
	Transboundary Total	*444*				*279*				*723*
Grand Total		*544*				*358*				*902*

South Lhonak glacial Lake, situated in North West Sikkim, reportedly burst in the late hours of 03rd October, 2023, causing a GLOF in the Teesta River region. Subsequently, satellite imagery from EOS-04 SAR was utilized to analyze changes in the lake's dimensions and assess the possibility of a GLOF event. The pre-event data from September 17, 2023, indicated a lake waterspread area of 161.6 hectares, with an estimated volume of 68 million Cubic Metre (MCM). Following the event, the waterspread area reduced to 65.7 hectares, corresponding to an estimated volume of approximately 19 MCM. This discharge of 49 MCM of water during the event resulted in severe flooding downstream. The reduction in the water spread area is a result of GLOF event.

After the GLOF event in Teesta River due to bursting of South Lhonak Lake in October 2023, a committee has been constituted under the chairmanship of Shri R.K. Jain, Ex Chairman, CWC involving various members including CWC. The ToR of the committee is as following:

- *To examine the causes leading to the bursting of Glacial Lake and consequent failure of Teesta-III dam and damages to other downstream dams.*

- *To interact with dam owning agencies/owners to examine and analyze the probable cause of failure of Teesta-III dams and damages to other downstream dams.*

- *To examine the status of Early Warning System installed by dam owners in Teesta basin and its performance during the recent GLOF event.*

- *To review the status of monitoring of Glacial Lake, including the frequency of monitoring and responsibility of the dam owner.*

- *To review the action taken by the Sikkim state and dam owners following the issuance of CWC advisory on GLOF in 2015 to the Sikkim state.*

- *To review the reservoir and gate operations carried out by the dam authorities during heavy discharge release.*

- *To recommend measures to prevent/minimize the recurrence of such events in future.*

- *The committee may co-opt any other member as per requirement with the permission of Chairman, NDSA.*

.....

PART – II
OBSERVATIONS/RECOMMENDATIONS

Analysis of Demands for Grants

2.1 The Committee observe that for the fiscal year 2025-26, the total budgetary allocation for the Department of Water Resources, River Development and Ganga Rejuvenation is Rs. 25,276.83 crore, out of which Rs. 24,720.49 crore has been allocated under the 'Revenue Section' and Rs. 556.34 crore has been allocated under the 'Capital Section'. The overall budgetary allocation for the Financial Year 2025-26 has witnessed a significant increase of Rs.3,953.73 crore, representing a growth of 18.54% over the Budget Estimate (BE) of Rs.21,323.10 crore for the Financial Year 2024-25.

2.2 The Committee further observe that under Central Sector Schemes Rs. 6,198.09 crore has been allocated for BE 2025-26 which is nearly Rs.375.64 crore less than the BE allocation for FY 2024-25 i.e. Rs. 6,573.73 crore. Regarding the Centrally Sponsored Schemes, a provision of Rs.17,643.94 has been made at BE level for FY 2025-26 which is nearly Rs.4,212.46 crore over and above against BE allocation for FY 2024-25 i.e. Rs. 13,431.48 crore. The major Schemes/Programmes in which the total budget allocation of the Department have been made include Polavaram Irrigation project, Pradhan Mantri Krishi Sinchayee Yojana- Har Khet Ko Pani (PMKSY-KKKP), Inter-linking of Rivers, National Ganga Plan (Namami Gange Mission-II) and Atal Bhujal Yojana (Atal Jal). The Committee also observe that some of the Schemes/Projects viz. River Basin Management, Ground Water Management & Regulation , Surface Minor Irrigation (SMI) and Repair, Renovation & Restoration (RRR) of Water Bodies have been allocated more funds in the current fiscal year 2025-26. However, DWRIS, National Hydrology Project, Special Package for Maharashtra, Command Area Development & Water Management and Inter-linking of Rivers are some the Schemes/ Projects where allocation have been reduced in the FY 2025-26.

2.3 The Committee observe that the Department has been able to utilize only 60% of its budgetary allocation till the end of three quarters of the fiscal year 2024-25. In this regard the Department informed that generally, the expenditure picks up

from the month of November onwards i.e. after Monsoon and it is expected that the Department will be able to spend the allocated RE for the FY 2024-25. As per the instructions of the Ministry of Finance, not more than 33% and 15% of Budget Estimate during a Financial Year is permissible in last quarter and last month of the Financial year, respectively. Here, the Committee express its concern about meagre utilisation of allocated budget during first three quarters of FY 2024-25 and that a considerable portion i.e almost 40% of the budget yet to be utilized within the last quarter of the FY 2024-25. However, the Committee hope that the Department would be able to spend its all allocated fund within the stipulated time period and will ensure optimum utilization of available resources. The Committee would like to be apprised of the position in the matter within three months of presentation of this Report.

(Recommendation No. 1)

National Water Policy

2.4 The Committee note that at present the National Water Policy-2012 is in effect with the objective to assess the existing situation and to propose a framework for a plan of action with a unified national perspective and to achieve this objective of the Policy, a number of recommendation have been made therein for conservation, development and improved management of water resources of the country.

2.5 The Committee observe that to address current challenges in the Water Sector, revision of National Water Policy has been envisaged and the drafting committee constituted to revise the National Water Policy has submitted its draft report with contrary and non-coherent views from some of the key Members of this Committee and the same is under consideration of the Ministry. In this context, the Committee are of the opinion that as enumerated by the Department various challenges in the water sector including reduction of per capita availability of water due to increasing population, deterioration in quality, overexploitation of ground water resources leading to decline in ground water level and relatively lower efficiency of the facilities for water utilization are multiplying in magnitude over time period. Hence, to mitigate these challenges a robust and collective approach is essential.

2.6 Therefore, the Committee urge the Ministry to take necessary decisions in the matter on urgent basis and ensure the implementation of the New National Water Policy on priority so that necessary systems be prepared to confront the current challenges in the Water Sector.

(Recommendation No. 2)

National Dam Safety Authority

2.7 The Committee note that the National Dam Safety Authority (NDSA) was established in February 2022 to implement policies, guidelines, and standards made by the National Committee on Dam Safety (NCDS). Maintaining standards of dam safety and prevention of dam failure related disasters, discharging such functions as related to implementation of the policies made by the National Committee including making regulations on the recommendations of the National Committee are some the functions of the Authority.

2.8 The Committee note that all dam owning States have constituted the Sate Committees on Dam Safety (SCDS) and State Dam Safety Organizations (SDSO), in accordance with the provisions of the Dam Safety Act. Further, with regard to availability of adequate personnel, as per the information provided, the Committee observe an acute shortage in SCDSs and SDSOs in most of the States/UTs. In this regard, the Committee are of the view that to facilitate the effective implementation of the Dam Safety Act, it is imperative that all organizations involved in Dam Safety work, commit to it with full capacity. This can only be achieved if all organizations are adequately staffed as insufficient staffing will inevitably compromise their efficiency, thereby hindering the fulfilment of the Act's objectives. Therefore, the Committee recommend that the Department take necessary measures to address this issue and ensure that all organizations are sufficiently staffed and equipped to implement the Act effectively.

(Recommendation No. 3)

2.9 The Committee further observe that the NDSA established under Dam Safety Act, 2021 has mandate to implement policies, guidelines and standards made by the National Committee on Dam Safety. Similarly, State Committee on Dam Safety and State Dam Safety Organizations were constituted under the provision of the

Act. However, the Committee felt that since the uses, functioning, safety and O&M of Dam Structures are very crucial public issues, it is imperative that a local public representative may be included in the bodies/organizations under NDSA, from the planning phase of any project, so that a seamless implementation process is ensured. This will facilitate bridging the gap between the local people and the Authority and also address the needs and concerns of local people of the area in an inclusive way. Therefore, the Committee recommend that necessary provision may be incorporated for inclusion of elected public representatives (Member of Parliament / Member of Legislative Assembly) in the bodies / organizations under NDSA by suitably amending Dam Safety Act, 2021 to further strengthen the NDSA.

(Recommendation No. 4)

<u>Brahmaputra Board</u>

2.10 The Committee note that the Brahmaputra Board (BB) was constituted in 1980 by an Act of Parliament, for the purpose of planning and integrated implementation of measures for the control of floods and riverbank erosion in the Brahmaputra valley and for matters connected therewith. The jurisdiction of Brahmaputra Board covers all the North Eastern States including Sikkim and North Bengal. The main functions of the Board are to carry out surveys and investigations and prepare Master Plan, Detailed Project Reports (DPRs) of multi-purpose projects, monitoring of FMBAP schemes and execution of anti-erosion and flood control schemes.

2.11 The Committee observed that out of the Master Plans and Detailed Project Reports (DPRs) prepared by the Board for multipurpose projects, 52 have been approved by the Government of India and submitted to the respective State Governments for implementation. However, the Committee noted that the Board lacks a mechanism to monitor the implementation of these approved plans. Furthermore, despite handing over 14 DPRs of major multipurpose projects to State Governments, none have been fully implemented. In this regard, the Board pointed out the reason that water management falls under state jurisdiction, resulting in a lack of monitoring mechanisms.

2.12 The Committee while appreciating the efforts made by the Board in North Eastern States including Sikkim and North Bengal under its mandated objectives however, express apprehension on the desired outcome of the Masterplans due to lack of proper monitoring mechanism for their effective implementation by the State Government, despite the fact that preparation of Master plans/DPRs involves a lot of time, money and public resources and their improper implementation, defeated the Department's efforts in controlling floods and riverbank erosion in the mandated area which caused immense socio-economic and environmental damage, leading to widespread displacement and destruction. The Committee, therefore, recommend that the Ministry establish an effective monitoring mechanism, to ensure timely implementation of the recommendations outlined in the Master Plans / DPRs prepared by the Board for various projects for their effective outcome and successful planning and implementations.

(Recommendation No. 5)

2.13 With regard to staff strength of the Board the Committee learned that against the total sanctioned strength of 415, only 206 personnel are presently in position. Consequently, approximately 50% of the sanctioned posts across all cadres, including technical and non-technical, are presently lying vacant. The Department attributed limited success in filling up the vacant posts through conventional methods of recruitment and a High- Powered Review Board has been entrusted to review the situation. In this context, the Committee are of the opinion that the current shortage of approximately 50% of the technical and non-technical cadre's strength, compromises the Board's work efficiency and hampers its functioning and leads to delay in achieving its objectives. Realizing the fact that the Board has a significant responsibility to control flood and erosion in the North East Region and to achieve this objective, the Board deploys various efforts, including the preparation of Master Plans and Detailed Project Reports (DPRs) for multipurpose projects, which necessitate specialized technical expertise and skills, the Committee strongly recommend that the Department must take prompt action to fill all the existing vacancies without delay, to enable the Board to execute its responsibilities efficiently and effectively.

(Recommendation No. 6)

2.14 The Committee express grave concern regarding the recurring floods and riverbank erosion caused by the Brahmaputra River in the North East Region, particularly in the State of Assam. In this regard the Brahmaputra Board has listed out various efforts to combat these problems, which include Preparation of Master Plans, DPRs of Multipurpose Projects, monitoring of FMBAP schemes, execution of anti-erosion and flood control schemes in the identified region and execution of Drainage Development Schemes. While acknowledging the endeavours made by the Board to achieve its mandated objectives, the Committee believe that much needs to be done on ground to bring these cherished goals to reality. Realising that floods and land erosion are still responsible for humanitarian crisis displacing a huge population and pushing them into economic insecurity and landlessness in North East Region, the Committee recommend that a concerted time bound action plan needs to be envisaged to address the issue comprehensively and effectively in the North East Region particularly in the State of Assam to safeguard land and livelihood in the region.

(Recommendation No. 7)

<u>Polavaram Irrigation Project</u>

2.15 The Committee note that Polavaram Irrigation Project is a multi-purpose reservoir project contemplated across the river Godavari near Ramayyapeta village, Polavaram Mandal in Eluru district (erstwhile West Godavari District) of Andhra Pradesh. The Committee further note that the Project has been declared as a national project as per section 90 of Andhra Pradesh Reorganisation Act, 2014 and Central Government is funding 100% of the remaining cost of the irrigation component only of the project, for the period starting from 01.04.2024.

2.16 With regard to the present status of rehabilitation & resettlement of people displaced due to the Project, the Committee note that only 38 Habitations have been shifted so far against the total 373 Habitations affected. Further, merely 26 R&R Colonies competed against 213. Moreover, against 1,06,006 PDFs only 12,797 have been rehabilitated so far. The Committee understood that although displacement of local communities may be an unavoidable during execution of such large scale development programmes, their rehabilitation & resettlement

within a stipulate time frame is also paramount to address post displacement issues. The Committee also observed that the progress of rehabilitation and resettlement under various projects undertaken by the Ministry are very slow, resulting in jeopardizing the position of the displaced communities. Taking into cognizance, the importance of timely rehabilitation and resettlement, the Committee recommend that the Ministry expedite the rehabilitation & resettlement of people displaced, with a sensitive approach by taking all appropriate measures with timely planning and implementation, as well as monitoring of displacement and rehabilitation of the affected communities to ensure their livelihoods and habitation with all necessary infrastructure.

(Recommendation No. 8)

2.17 Further, the Committee observe that the Polavaram Project is scheduled to be completed by March 2026 with a water storage upto EL +41.15m with a provision for one more year of extension due to technical challenges. However, overall project progress as on 30 November 2024 upto EL +45.72m is only 53.46% having 76.79% and 22.58 % progress in construction and LA and R&R, respectively. Keeping in view the challenges and the present status of the progress of the project, the Committee strongly feel that the Authority needs to expedite its efforts in close coordination with all stakeholders in order and achieve its objectives by the stipulated deadline. To achieve its targeted goal, the Committee recommend that a greater emphasis need to be given on the issues of R&R, O&M, coordination with stakeholder States to resolve all major inter-state concerns and implementation of technical advice as provided by Panel of Experts to ensure safety of Dam.

(Recommendation No. 9)

2.18 The Standing Committee on Water Resources during its recent study visit to Puducherry, Mahabalipuram and Rajahmundry from 8 to 11 January, 2025 have observed that there are no permanent residential colonies near the Polavaram Project for monitoring the Project. The Committee being of the view that setting up of permanent colonies near the project sites for stationing the higher officers will go a long way in exercising better coordination and monitoring of the Projects

resulting in timely completion of the same. They therefore recommend the Department to take necessary steps in this regard.

(Recommendation No. 10)

2.19 Further, the Committee have found that Project is being executed as per the Inter-State Agreement dated 02.04.1980 between Andhra Pradesh, Odisha and Madhya Pradesh (now Chhattisgarh) and Godavari Water Disputes Tribunal Award (GWDT), 1980. However, The Andhra Pradesh Reorganisation Act, 2014 declared the Polavaram Irrigation Project as a National Project. Observing the very long time being taken in completion of the Project, the Committee would like to be briefed about the timeline of submission of various aspects of the Project including design of GAP-I & GAP-II of the Polavaram Project. Further, taking cognizance of the fact that only one Workshop involving different stakeholders including international agencies has been held so far for reviewing the progress of the project, the Committee urge upon the Department to hold regular Workshops of such nature in order to ensure timely completion of the Project. In addition to this, the Committee further recommend the Department to hold quarterly review of the progress being made in the Project. The Committee would like to be briefed about the specific timelines for completion of the Projects and the steps being taken to meet this timeline within three months from presentation of this Report.

(Recommendation No. 11)

2.20 The Committee observe that dams have traditionally played a significant role in water management, hydroelectric power generation, irrigation and flood control. However, the Committee are of the view that the Polavaram Project can be additionally developed for eco-tourism/research purposes which can also benefit the local population and enhance regional development by attracting tourists and creating employment opportunities. Accordingly, the Committee recommend that an appropriate administrative setup be created, so that quality infrastructure be envisaged for development of eco-tourism spots and also benefit research institutions/students in hydro-geological-engineering studies.

(Recommendation No. 12)

Rain Water Harvesting

2.21 The Committee note that Rainwater harvesting (RWH) has emerged as a very viable and crucial strategy to address India's escalating water scarcity, ensuring sustainable water management, and mitigating the reliance on conventional water sources. By collecting and storing rainwater, RWH can significantly alleviate water scarcity issues, providing a reliable alternative to traditional water sources that are often inadequate or unpredictable. Furthermore, RWH contributes to improved groundwater recharge, rendering it a vital and viable solution in regions where aquifers have been depleted.

2.22 The Committee observe that for promoting rain water harvesting in the country, no dedicated financial support to States/UTs has been provided by National Water Mission (NWM). On this issue, the Department apprised the Committee about the various efforts deployed by NWM in this regard including the Jal Shakti Abhiyan: "Catch the Rain campaign", which is a convergence of various Central Government schemes and funds like MGNREGS, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Per Drop More Crop Repair, Renovation and Restoration Components under the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) , Compensatory Afforestation Fund Management and Planning Authority(CAMPA), Finance Commission Grants, State Government schemes, Corporate Social Responsibility (CSR) funds etc. While acknowledging these efforts of the Government, the Committee believe that rainwater harvesting can be a versatile and effective solution to tackle water scarcity, manage storm water runoff, and support sustainable water management. Use of available rainwater harvesting techniques is vital in enhancing groundwater recharge, improving agricultural productivity and reduce dependence on traditional water sources and provision of dedicated financial support to States/UTs will definitely motivate them to make serious efforts to promote rainwater harvesting measures and ensure the participation of communities in masses. Keeping in view the fact that rainwater harvesting is increasingly recognized as a vital strategy to address water scarcity and ensure sustainable water management, the Committee recommend that the Ministry consider providing dedicated financial grant / support to the States / UTs

to promote use of rainwater harvesting through available techniques so that problem of water scarcity in the country may be mitigated to some extent.

(Recommendation No. 13)

Command Area Development and water Management (CAD&WM)

2.23 The Committee note that Command Area Development & Water Management (CADWM) Programme was launched in 1974-75 to enhance utilization of irrigation potential created and improve agriculture productivity and production on a sustainable basis. The Committee further note that the Scheme was brought under the umbrella of PMKSY in 2016-17 and has been restricted to 99 prioritized AIBP projects.

2.24 The Committee note a significant reduction in the Scheme's allocation, from Rs.1,400 crore at the Budget Estimate (BE) stage to Rs.100 crore at the Revised Estimate (RE) stage for the financial year 2024-25. . In this regard, the Department informed the Committee that Rs.1,200 crore was allocated for the Modified CADWM, but since the Scheme wasn't approved, the allocation was reduced at the RE stage. Furthermore, the Committee observe a 40% reduction in fund allocation, as Rs.850 crore has been allocated in FY 2025-26 compared to FY 2024-25. The Department attributed this reduction to the lower-than-proposed allocation for the Modified CAD Scheme. In this regard, in its earlier DFG 2024-25 Report the Committee highlighted the underutilization of funds under the Scheme and urged the Department to ensure better and prudent utilization of budget allocation with the implementation of the Modified CAD in efficient manner. The Committee further observe that the newly approved Scheme has been allocated insufficient funds, which raises concerns about its effective implementation. Furthermore, the Committee observe that the recurring underutilization of budget allocations and delays in approving the Modified Scheme requires a more proactive approach by the Department towards implementing the Scheme.

2.25 The Committee is of the view that CAD&WM is a crucial scheme of the Government for improving water management leading to increased agricultural productivity, higher farmer incomes, and socio-economic growth in rural areas

and is directly connected with the Government's vision to double farmers' incomes. Continuous underutilization of budgetary allocation is hampering achievements and progress of the Scheme. Therefore, the Committee strongly recommend that the Department make every effort to fully and optimally utilize the budget allocated with a proactive approach in implementing the Modified CAD Scheme as well as in view of the importance of the Scheme take necessary steps to augment its budgetary allocation so that proper and effective implementation of the Scheme be ensured.

(Recommendation No. 14)

2.26 Further, the Committee feel that for better implementation and optimal outcome, the water distribution network developed under Command Area Development & Water Management Scheme need to be strengthened with adequate financial provisions. To achieve the objectives all the existing canal systems are required to be upgraded and revamped in order to effective utilization of water resources by preventing water pilferages through damaged canals. The Department may also focus on using underground pipelines water network system as envisaged in the Modified CAD Scheme.

(Recommendation No. 15)

<u>Atal Bhujal Yojana (ATAL JAL)</u>

2.27 The Committee note that the Atal Bhujal Yojana (ATAL JAL) is a Central Sector Scheme with an objective to improve the management of groundwater resources in the water stressed areas of the selected States and under implementation in 8203 water stressed Gram Panchayats of 229 administrative blocks/ Talukas in 80 districts of seven States, viz. Haryana, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh for a period of five years from 01.04.2020 .The selected States account for about 37% of the total number of water-stressed (over-exploited, critical and semi-critical) blocks in India. Further, the Scheme has been extended up to 31.03.2026 by the Department of Expenditure.

2.28 Regarding the contribution of Atal Bhujal Yojana in groundwater conservation and recharge and measureable improvement in groundwater levels in the areas covered by the Scheme the Committee observe that the Scheme is being implemented since April, 2020 in 8,213 water stressed Gram Panchayats and out of which only 1333 Gram Panchayats have shown an improvement / arrest in the declining ground water levels. In this regard, the Committee is of the view that this scheme has been running for the last 5 years on incentive basis having financial implication as well as resource utilization. The Committee, while appreciating the concept and objectivity of this Scheme, express concern on its execution at ground level on the basis of its target achievement as on date. Hence, intensified efforts are required to make the Scheme more effective. While acknowledge the Government's endeavors towards groundwater recharge the Committee urge the Ministry to intensify its efforts to implement the Scheme more effectively, thereby ensuring that the allocated resources are utilized optimally.

(Recommendation No. 16)

<u>Namami Gange Mission-II</u>

2.29 The Committee note that the Government launched the Namami Gange Programme (NGP) in 2014-15 for the rejuvenation of river Ganga and its tributaries for five years, up to March 2021 and has been further extended to March, 2026. Under the Programme, a diverse and holistic set of interventions for cleaning and rejuvenation of river Ganga have been taken up, that included waste water treatment, solid waste management, river front management (ghats and crematoria), ensuring e-flow, rural sanitation, afforestation, biodiversity conservation, public participation, etc

2.30 The Committee observe that in the Committee/ Councils/ Bodies/ Organisations/ Societies established under Namami Gange Programme the Department informed that under present provisions, two elected representatives, one from the Municipalities and one from the Gram Panchayats of the District nominated as Members in the District Ganga Committee by the State Government. In the matter, the Committee feel that since, Namami Ganga Mission is a grand and ambitious programme for the rejuvenation of River Ganga and its tributaries

effecting million of people living in River Ganga Basin, the local Member of Parliament, Lok Sabha and a Member of Legislative Assembly can play a pivotal role in the effective and successful implementation of the Mission and its objectives. The Committee, therefore recommend the Ministry to make necessary provisions in their guidelines for inclusion of local MP/MLA in the bodies under NMCG in order to ensure more cohesive outcome under Nammi Ganga progarmme.

(Recommendation No. 17)

2.31 Further, the Committee also recommend that the Department make earnest endeavours to constitute a Committee comprising Members of Parliament / Members of Legislative Assembly from the districts in order to ensure effective participation of the elected representatives for better formulation, implementation and monitoring of work executed under Nammi Ganga Mission at ground level.

(Recommendation No. 18)

<u>Flood Management and Border Areas Programme (FMBAP)</u>

2.32 The Committee note that the FMBAP 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.

2.33 The Committee note that an amount of Rs. 450 crore has been allocated for the Programme for the fiscal year 2025-26. The Committee also observe that during the last fiscal year in 2024-25 the budgetary allocation to the programme was Rs.449.57 at BE stage and same was reduced to Rs.400 at RE stage. However, actual expenditure till 31 December, 2024 was of just Rs.37.61 crore which is only

9.25% of RE. During the oral evidence, the Ministry apprised the Committee of the need for additional funding for the Programme due to overwhelming demands from flood-prone States. The Ministry expressed its inability to address these demands and sought enhancement in the allocation. In this regard, the Committee failed to understand the dichotomy that the Ministry during last fiscal year, could manage to utilize only 37.61 crore out of the allocated budget and then raise demand for Rs. 450 Crore for fiscal year 2025-26. The Committee felt that underutilization of fund on one hand not only hamper the implementation and execution of various activities under FMBAP but also raising concern on the prudent budgetary provisioning by the Ministry for this important Scheme. The Committee, therefore, recommend that the Ministry carry out necessary consultations with all the States/UTs concerned well in advance to make a more realistic budgetary allocation for the Programme in order to avoid underutilization of allocated fund at later stage and to ensure optimum utilization of the available fund and apprise of the steps taken in this regard within three months of presentation of this Report.

(Recommendation No. 19)

2.34 The Committee observe that the recurring floods in various states, including Bihar, Uttar Pradesh, and Assam, are primarily attributed to rivers originating from neighbouring countries. The Government of India has been deploying various efforts at the appropriate level to tackle this issue. This cross-border river issue necessitates a collaborative approach to address the problem effectively. Recognizing the complexity of the problem, the Committee acknowledge the involvement of Ministry of External Affairs in developing a policy framework hence, an integrated approach is essential for proper coordination between the Ministry of Jal Shakti and the Ministry of External Affairs to ensure effective management. Therefore, the Committee recommend that the Ministry of Jal Shakti, in coordination with Ministry of External Affairs undertake the Cross-Border Flooding Management as an independent initiative and develop a comprehensive strategy that mitigates the severity of floods in affected regions.

(Recommendation No. 20)

National River Conservation Plan (NRCP)- Other Basins

2.35 The Committee note that NRCP is a Centrally Sponsored Scheme for conservation of rivers excluding Ganga and its tributaries on cost sharing basis by providing assistance to States/UTs. The Committee further note that a Condition assessment and Management Plans (CAMP) study for six river basins including Narmada, Mahanadi, Godavari, Krishna, Cauvery and Periyar has been taken up at a sanctioned cost of Rs.75.72 crore.

2.36 Regarding the budgetary allocation, the Committee observe that for the fiscal year 2025-26, an amount of Rs. 558.09 has been kept for NRCP- Other Basins Scheme. In this regard, while the Committee concern about the coverage of the Scheme encompassing 57 Rivers in the 17 States with a huge task of conservation and abetment of pollution, the allocation found inadequate. During the oral evidence the Ministry also highlighted about having adequate funding for the Ganga Rejuvenation under Namami Ganga Programme, however, multiple polluted river- stretches across the country remain untouched due to insufficient funding. In this regard, the Committee are of the view that all the rivers in the Country have equal importance and require same attention and remedial measures for conservation and abetment of pollution. Since abetment of pollution from all the rivers across the Country requires joint efforts with holistic approach the Committee recommend that the Department take proactive steps in augmenting sufficient budgetary allocations for effective implementation of the Scheme.

(Recommendation No. 21)

2.37 Regarding the abatement of pollution from rivers, the Committee note that the National Mission for Clean Ganga has authority under Section 5 of the Environment Protection Act, similar to the Central Pollution Control Board, but only for the Ganga and its tributaries. For management of water pollution in other rivers, the Ministry of Water Resources, RD, GR relies on the Central Pollution Control Board which is under the Ministry of Environment, Forest and Climate Change. The Committee observe that although Ministry of WR, RD & GR is the nodal Ministry for River Development & Management and allocated funds under budgetary provision by Govt. of India, abetment of river pollution, one of the major component of River Management is under the mandate of Ministry of Environment,

Forest and Climate Change. The Committee, in order to implement holistic management of Rivers in the Country, recommends that the Ministry establish a robust coordination mechanism with other Ministries of Government of India or expand its mandate to ensure comprehensive management, regulation, monitoring of all rivers in the country.

(Recommendation No. 22)

Special Package for the State of Maharashtra

2.38 The Committee note that In July 2018, Govt. of India approved a Special Package to provide Central Assistance up to Rs.3,831.41 crore to complete 83 Surface Minor Irrigation (SMI) projects and 8 Major / Medium Irrigation(MMI) Projects in suicide prone districts in Vidarbha and Marathwada and rest of Maharashtra region of the state of Maharashtra envisages creation of additional 3.77 lakh hectare of potential. The Committee further note that 53 Surface Minor Irrigation projects and 02 Major/ Medium Irrigation projects have been reported completed which are responsible for creation of irrigation potential of 1,66,532 hectare through all these project during 2018-19 to 2023-24 and Central Assistance of Rs.2962.36 crore has been released so far.

2.39 In this regard, the Committee observe that no budgetary allocation for the Scheme has been made for the FY 2025-26. In this regard the Department apprised the Committee that the Scheme was extended till March, 2025 and since the same expires on 31.03.2025 no allocation has been proposed for the FY 2025-26 however, in this regard, based on the request of State Govt., proposal for continuation of the Scheme beyond time period, is being examined. In this regard, the Committee observe that the Scheme is far behind from its target set for completion. Only 53 out of 83 SMI Projects and 2 out of 8 MMI projects have been completed so far and less than half of total irrigation potential envisaged in the Scheme, has been achieved. In this context, the Committee of the opinion that the Scheme is meant for drought-prone and water-stressed regions which are still facing severe groundwater depletion and irrigation challenges and to improve the condition of these areas, central assistance is still needed. Therefore, the Committee urge the Ministry to consider the request of the State favourably and

make necessary provision of allotment of fund to complete that remaining projects so that benefits envisaged with the Scheme are fully realized.

(Recommendation No. 23)

India- Water Resource Information System (WRIS)

2.40 The Committee note that under the Ministry of Jal Shakti India- Water Resource Information System (WRIS) is a repository of nation-wide water resources data, providing a 'Single Window' source of updated data on water resources including available water bodies in the country like ponds, tanks, lakes etc. This portal enables stakeholders to easily access, analyse, manage and share relevant data and helps in assessment, monitoring, planning and development of water resources for Integrated Water Resources Management (IWRM) by utilizing advanced technologies like Geographic Information System (GIS) and Remote Sensing.

2.41 Further, during the oral evidence, the Committee took cognizance of cases where schemes were formulated for the water bodies on the basis of mapping available on the portal however the same were reported to be scrapped due to discrepancies between the mapped data and the actual physical conditions. In this connection, the Committee are of the opinion that information available on the Water Resources Information System portal must be accurate and up-to-date to enable States / UTs and other stakeholders to utilize the same purposefully and effectively. Further, the Committee also took note of NAKSHA programme recently launched by Ministry of Rural Development, Government of India and the advance technology being used for mapping the information in the said programme. Keeping in view the importance of accurate and updated reliable data on Water Resources that needs to be maintained at National Level, the Committee urge the Ministry to upgrade its present technology of mapping of water bodies in the country to ensure authenticity of the data compiled for effective utilization by all stakeholders/users.

(Recommendation No. 24)

Water Management in Forest Areas

2.42 With regard to water management in Forest Areas the Committee observe that National Water Policy (NWP) of India, first formulated in 1987 and revised in 2012, provides a comprehensive 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. Further, the Environment Protection Act, 1986, provides a legal framework for environmental protection, including water bodies in forests. Under section 3(v) of the Environment (Protection) Act, 1986 and Rule 5, sub-rule (viii) and (x) of the environment (Protections) Rules, "lands falling within 10 kms of the boundaries of national parks and sanctuaries should be notified as eco-fragile zones".

2.43 The Committee note that most of the major rivers transverse through various National Parks/ Sanctuaries en-route to their course. However, management of all the forest areas, Tiger Reserves and Sanctuaries in the Country broadly come under the preview of Ministry of Environment, Forest and Climate Change. Further during the oral evidence, the Ministry of WR, RD & GR expressed its inability to access these areas and also lack of any coordination with the MoE,F&CC for River management and water bodies in such areas. In this regard, the Committee feel that Forest Areas, Tiger Reserves and Sanctuaries play a very pivotal role in maintaining the eco-system of the country and in view of the adverse effects of climate change, the proactive management of water resources in these areas are necessary. The Committee, therefore, urge the Ministry to coordinate with the MoE,F&CC and ensure its accessibility / active involvement in River management and other water bodies in forest areas, Tiger Reserves and Sanctuaries in the country and ensure sustainability of flora and fauna in these areas.

(Recommendation No. 25)

Management of Glacial Lake Outburst Flood (GLOFs)/ Cloudburst Flood in North-East Region/ Himalayan Regions

2.44 The incidents of Glacier Lake Outburst Flood (GLOFs), Cloudburst flood, avalanches caused due to glacier outburst in North Eastern Region and Himalayan regions in India has seen substantial hike in recent past. Climate Change is the main factor for these natural calamities. The impact of warming due to climate changes has been observed in every part of the world, especially over the Himalayan cryosphere, where glaciers are receding at a greater pace, resulting in the formation and evolution of glacier lakes, many of which have become a potentially hazardous lake. Most of these glacier lakes in the Himalyans region are known to have formed within the last half-century. The rapid evolution of these lakes and continuously changing climatic conditions has led to the increase threat of Glacier Lake Outburst Floods (GLOFs) and other associated hazards.

2.45 The Committee observe that Ministry of Jal Shakti, Dept of WR, RD and GR, has taken various initiatives including carrying out study on Glacier risk assessment of glacier lakes in the Himalayan Regions of Indian River Basins through National Remote Sensing Centre, one of the Central Implementing Agency under National Hydrology Project. The Glacier lakes database thus compiled has been used to prepare Glacier Atlases of Indus, Ganga, Brahmaputra and combined Indian Himalayan River basins and shared online on NRSC portal. Further, CWC has formulated and published 'Criteria for Risk Indexing of Glacier Lakes in Indian Himalayan Region' in September 2024. NDMA and SDMA's with consultation from several organizations from different Ministries including NIH, NRSC, GSI, C-DAC, WIHG, etc are involved in field observations for the assessment of vulnerable glacial lakes identified bases on the criteria established by CWC.

2.46 The Committee note that in the recent past, GLOF event in Sikkim due to bursting of South Lhonak Lake in October 2023 resulted severe flooding of the Teesta River valley causing severe damage to the buildings, highways and impacted life in many small villages in the valley. More recently, a Glacier burst has caused massive avalanche in Chamoli district in Uttrakhand causing severe loss of life and property.

2.47 The Committee while taking cognizance of various measures/technical interventions being taken by the Ministry and other agencies concerned in regard to Weather forecasting has observed that the incidents of Glacier Lake Outburst Flood (GLOFs), Cloudburst flood, avalanches caused due to glacier burst become more frequent in vulnerable basins in North Eastern Regions and Himalayan Regions causing severe loss of life and material. The Committee ,therefore, recommend that a more pro-active, comprehensive and integrated approach has to be taken by the Ministry with all the agencies concerned using latest technological interventions including use of Artificial Intelligence and Data Analytics for early warning system on forecasting for effective risk management in all vulnerable areas.

(Recommendation No. 26)

2.48 The Committee while recognizing that only risk prevention measures are not sufficient to mitigate challenges posed by such natural calamities also recommend that all factors such as climate changes, global warming, deforestation etc. responsible for their trigger needs to be identified and addressed promptly by proper planning, and coordination by all stakeholders at every level.

(Recommendation No. 27)

<u>Salinity of Groundwater due to Seawater Ingress in Costal Regions</u>

2.49 The Standing Committee on Water Resources during its recent study visit to Puducherry, Mahabalipuram and Rajahmundry from 8 to 11 January, 2025 have found that Yanam taluk/region of UT of Puducherry has been categorized as "Saline" during the last 10 years. The salinity in groundwater in the region is due to the inland salinity originated by the depositional environment in the geological past. Further, they have also found out that of the 1202 assessment units (Firkas) in Tamil Nadu, 34 units have been categorized as saline based on the Annual Assessment of Dynamic Ground Water Resources of Tamil Nadu. The Committee observe that saline water intrusion poses challenges to freshwater availability and

agricultural activities. In view of this, the Committee urge upon the Department to take remedial measures to address the problem of salinity of groundwater due to seawater ingress in costal regions of the country.

(Recommendation No. 28)

NEW DELHI
..... March, 2025
..... Phalguna,1946 (Saka)

Rajiv Pratap Rudy
Chairperson,
Standing Committee on Water Resources

Annexure-I

The salient features of National Water Policy (2012) are as follows

1. Water, after meeting the pre-emptive needs for safe drinking water and sanitation, achieving food security, supporting poor people dependent on agriculture for their livelihood and high priority allocation for minimum eco-system needs, be treated as economic good so as to promote its conservation and efficient use.
2. Ecological needs of the river should be determined recognizing that river flows are characterized by low or no flows, small floods (freshets), large floods and flow variability and should accommodate development needs. A portion of river flows should be kept aside to meet ecological needs ensuring that the proportional low and high flow releases correspond in time closely to the natural flow regime.
3. Adaptation strategies in view of climate change for designing and management of water resources structures and review of acceptability criteria has been emphasized.
4. A system to evolve benchmarks for water uses for different purposes, i.e., water footprints, and water auditing be developed to ensure efficient use of water. Project financing has been suggested as a tool to incentivize efficient & economic use of water.
5. Setting up of Water Regulatory Authority has been recommended. Incentivization of recycle and re-use has been recommended.
6. Water Users Associations should be given statutory powers to collect and retain a portion of water charges, manage the volumetric quantum of water allotted to them and maintain the distribution system in their jurisdiction.
7. Removal of large disparity in stipulations for water supply in urban areas and in rural areas has been recommended.
8. Water resources projects and services should be managed with community participation. Wherever the State Governments or local governing bodies so decide, the private sector can be encouraged to become a service provider in public private partnership model to meet agreed terms of service delivery, including penalties for failure.
9. Adequate grants to the States to update technology, design practices, planning and management practices, preparation of annual water balances and accounts for the site and basin, preparation of hydrologic balances for water systems, and benchmarking and performance evaluation etc.

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Annexure-II

The list of Specified Dams

S.No.	Dam Name	State	Dam Owner
1	Panyor Lower Dam.	Arunanchal Pradesh	North Eastern Electric Power Corporation Ltd (NEEPCO)
2	Bichom Dam	Arunanchal Pradesh	North Eastern Electric Power Corporation Ltd (NEEPCO)
3	Pare Dam	Arunanchal Pradesh	North Eastern Electric Power Corporation Ltd (NEEPCO)
4	Tenga Dam	Arunanchal Pradesh	North Eastern Electric Power Corporation Ltd (NEEPCO)
5	SUBANSIRI LOWER DAM	Arunanchal Pradesh	National Hydroelectric Power Corporation (NHPC)
6	KHANDONG DAM (Khangdong Power Station)	Assam	North Eastern Electric Power Corporation Ltd (NEEPCO)
7	Umrong dam (Kopili Power Station)	Assam	North Eastern Electric Power Corporation Ltd (NEEPCO)
8	BATANE	Jharkhand	Jharkhand Water Resources Department (JH WRD)
9	KONAR	Jharkhand	Damodar Valley Corporation
10	MAITHON	Jharkhand	Damodar Valley Corporation
11	PANCHET HILL	Jharkhand	Damodar Valley Corporation
12	TILAIYA	Jharkhand	Damodar Valley Corporation
13	Bokaro barrage	Jharkhand	Damodar Valley Corporation
14	Tuirial Dam	Mizoram	North Eastern Electric Power Corporation Ltd (NEEPCO)
15	Doyang Rockfil impervious Dam	Nagaland	North Eastern Electric Power Corporation Ltd (NEEPCO)
16	MANDIRA	Odisha	STEEL AUTHORITY OF INDIA LIMITED (SAIL)
17	RANGIT	Sikkim	National Hydroelectric Power Corporation (NHPC)
18	TEESTA -V	Sikkim	National Hydroelectric Power Corporation (NHPC)
19	MASSANJORE	Jharkhand	West Bengal Irrigation Waterways Department(WB IWD)
20	TEESTA LOW DAM-III BARRAGE	West Bengal	National Hydroelectric Power Corporation (NHPC)
21	TEESTA LOW DAM-IV	West Bengal	National Hydroelectric Power Corporation (NHPC)
22	Farakka Barrage	West Bengal	Farakka Barrage Project,DOWR,RD&GR
23	PONG(Beas Dam)	Himachal Pradesh	Bhakra Beas Management Board
24	PANDOH (BBMB)	Himachal Pradesh	Bhakra Beas Management Board

25	BHAKRA (BBMB)	Himachal Pradesh	Bhakra Beas Management Board
26	BAIRA SIUL (NHPC)	Himachal Pradesh	National Hydroelectric Power Corporation (NHPC)
27	CHAMERA -II (NHPC)	Himachal Pradesh	National Hydroelectric Power Corporation (NHPC)
28	CHAMERA III (NHPC)	Himachal Pradesh	National Hydroelectric Power Corporation (NHPC)
29	PARBATI II (NHPC)	Himachal Pradesh	National Hydroelectric Power Corporation (NHPC)
30	PARBATI III (NHPC)	Himachal Pradesh	National Hydroelectric Power Corporation (NHPC)
31	CHAMERA I (NHPC)	Himachal Pradesh	National Hydroelectric Power Corporation (NHPC)
32	Dhaulasidh dam	Himachal Pradesh	Satluj Jal Vidyut Nigam Limited
33	NTPC-KOLDAM	Himachal Pradesh	National Thermal Power Corporation Limited
34	NATHPA JHAKRI (SJVNL)	Himachal Pradesh	Satluj Jal Vidyut Nigam Limited
35	LUHRI Stage-I (SJVNL)	Himachal Pradesh	Satluj Jal Vidyut Nigam Limited
36	PAKAL DUL (Drangdhuran) HEP	Jammu and Kashmir	National Hydroelectric Power Corporation (NHPC)
37	URI-I Barrage	Jammu and Kashmir	National Hydroelectric Power Corporation (NHPC)
38	DUL DAM	Jammu and Kashmir	National Hydroelectric Power Corporation (NHPC)
39	SEWA II	Jammu and Kashmir	National Hydroelectric Power Corporation (NHPC)
40	URI-II DAM	Jammu and Kashmir	National Hydroelectric Power Corporation (NHPC)
41	KISHANGANGA DAM	Jammu and Kashmir	National Hydroelectric Power Corporation (NHPC)
42	SALAL (Rockfill Dam) NHPC	Jammu and Kashmir	National Hydroelectric Power Corporation (NHPC)
43	SALAL (Concrete Dam) NHPC	Jammu and Kashmir	National Hydroelectric Power Corporation (NHPC)
44	NIMOO BAZGO DAM	Ladakh	National Hydroelectric Power Corporation (NHPC)
45	Chutak Barrage	Ladakh	National Hydroelectric Power Corporation (NHPC)
46	Gangau weir	Madhya Pradesh	Uttar pradesh water resource department(UP WRD)
47	NANGAL	Punjab	Bhakra Beas Management Board
48	DHAULIGANGA DAM	Uttarakhand	National Hydroelectric Power Corporation (NHPC)
49	TANAKPUR BARRAGE	Uttarakhand	National Hydroelectric Power Corporation (NHPC)
50	Vishnu Gad Pipalkoti	Uttarakhand	THDC INDIA LIMITED

	HEP		
51	LATA TAPOVAN (NTPC)	Uttarakhand	National Thermal Power Corporation Limited
52	KOTESHWAR HEP	Uttarakhand	THDC INDIA LIMITED
53	TEHRI HPP	Uttarakhand	THDC INDIA LIMITED
54	SHARDA SAGAR DAM	Uttarakhand	Uttar pradesh water resource department(UP WRD)
55	Naitwar Mori H.E Project Dam	Uttarakhand	Satluj Jal Vidyut Nigam Limited
56	RAJGHAT	Uttar Pradesh	Uttar pradesh water resource department(UP WRD)
57	DHORA	Uttarakhand	Uttar pradesh water resource department(UP WRD)
58	RANGAWAN	Madhya Pradesh	Uttar pradesh water resource department(UP WRD)
59	BHIMGODA BARRAGE	Uttarakhand	Uttar pradesh water resource department(UP WRD)
60	RAM GANGA SADDLE DAM	Uttarakhand	Uttar pradesh water resource department(UP WRD)
61	BARIYARPUR WEIR	Madhya Pradesh	Uttar pradesh water resource department(UP WRD)
62	BANBASA BARRAGE	Uttarakhand	Uttar pradesh water resource department(UP WRD)
63	NANAK SAGAR DAM	Uttarakhand	Uttar pradesh water resource department(UP WRD)
64	OKHLA BARRAGE	Uttar Pradesh	Uttar pradesh water resource department(UP WRD)
65	BAIGUL DAM	Uttarakhand	Uttar pradesh water resource department(UP WRD)
66	RAM GANGA DAM	Uttarakhand	Uttar pradesh water resource department(UP WRD)
67	Chouldari Dam	Andaman and Nicobar Island	Military Engineer Services (South)
68	Jalaput dam (S.H.E.S)	Andhra Pradesh	Andhra Pradesh Power Generation Corporation(APGENCO)
69	Srisailam Project (N.S.R.S.P)	Andhra Pradesh	Andhra pradesh Water Resources Department(AP WRD)
70	Tungabhadra Dam	Karnataka	Karnataka Water Resources Department(KT WRD)
71	Lakya Dam	Karnataka	kudremukh Iron Ore Company Ltd (KIOCL)
72	Parambikulam	Kerala	Tamil Nadu Water Resources Department(TN WRD)
73	Peruvarippallam	Kerala	Tamil Nadu Water Resources Department(TN WRD)
74	Nagarjuna Sagar Project	Telangana	Telangana Irrigation and CAD Department(TICD)
75	Periyar	Kerala	Tamil Nadu Water Resources Department(TN WRD)
76	Thunakkadavu	Kerala	Tamil Nadu Water Resources

			Department(TN WRD)
77	Kali Dam	Gujarat	Indian Railway
78	Shivsagar dam	Maharashtra	Military Engineer Services (West)
79	GIP Dam	Maharashtra	Indian Railway
80	Palasdhari dam	Maharashtra	Indian Railway
81	Bhusi Dam	Maharashtra	Indian Railway
82	Rada Dam	Maharashtra	Indian Railway
83	INDIRA SAGAR	Madhya Pradesh	Narmada Hydroelectric Development Corporation Ltd
84	OMKARESHWAR	Madhya Pradesh	Narmada Hydroelectric Development Corporation Ltd

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Annexure-III

INCUMBENCY STATUS OF SDSO

S. NO.	STATE	TOTAL NO OF EXISTING SPECIFIED DAMS AS PER DHARMA	POST CREATED	REGULAR APPOINTMENT TO THE POST	% REGULAR POSTING	DAMS PER UNIT MANPOWER
1	ANDAMAN AND NICOBAR	2	8	0	0	0
2	ANDHRA PRADESH	160	115	115	100	1
3	ARUNACHAL PRADESH	0	INFORMATION NOT PROVIDED			
4	ASSAM	1	INFORMATION NOT PROVIDED			
5	BIHAR	27	44	18	41	2
6	CHATTISGARH	313	50	0	0	0
7	GOA	6	0	0	0	0
8	GUJARAT	522	35	16	46	33
9	HARYANA	3	8	2	25	2
10	HIMACHAL PRADESH	14	12	7	58	3
11	JAMMU & KASHMIR	2	INFORMATION NOT PROVIDED			
12	JHARKHAND	61	INFORMATION NOT PROVIDED			
13	KARNATAKA	229	57	38	67	6
14	KERALA	61	33	7	21	9
15	MADHYA PRADESH	1362	62	10	16	136
16	LADAKH (UT)	0	INFORMATION NOT PROVIDED			
17	MAHARASHTRA	2671	160	82	51	33
18	MANIPUR	4	INFORMATION NOT PROVIDED			
19	MEGHALAYA	9	0	0	0	0
20	MIZORAM	2	INFORMATION NOT PROVIDED			
21	NAGALAND	0	INFORMATION NOT PROVIDED			
22	NDSA EAST & NORTH EAST	21	INFORMATION NOT PROVIDED			
23	NDSA NORTH	39	0	0	0	0
24	NDSA SOUTH	10	9	9	100	1
25	NDSA WEST	8	22	3	14	1
26	ODISHA	207	93	48	52	4
27	PUNJAB	14	8	8	100	2
28	RAJASTHAN	312	0	0	0	0
29	SIKKIM	7	0	0	0	0
30	TAMIL NADU	123	52	20	38	6
31	TRIPURA	1	INFORMATION NOT PROVIDED			
32	TELANGANA	157	37	0	0	0
33	UTTAR PRADESH	136	29	15	52	10
34	UTTARAKHAND	21	0	0	0	0
35	WEST BENGAL	33	17	7	41	5

*Number of Specified as per dharma portal as on 14.02.2025.

Annexure-IV

Sl. No.	Master Plan	Status
A	**Main River**	
1	Brahmaputra Main Stem-Master plan part-I	Approved by Government of India and submitted to the State Government for implementation of the recommendations
2	Barak & its tributaries-Master plan part-II	
B	**Tributaries-Part -III**	Approved by Government of India and submitted to the State Government for implementation of the recommendations
1	Buridehing	
2	Dikhow	
3	Dhansiri	
4	KopilliKollong	
5	Puthimari	
6	Ranganadi	
7	Gumti	
8	Pagladiya	
9	Noa-nadi	
10	Dikrong	
11	Muhuri	
12	Jia-Bharali	
13	Manu	
14	Champamati	
15	Disang	
16	Jinary	
17	Na-Noi	
18	Juri	
19	Burima	
20	Dhalai	
21	Jiadhal	
22	Bharalu	
23	Lohit	
24	Majuli island (Special Case)	
25	Khowai	
26	Ghiladhari	
27	Jinjiram	
28	Dhaleswari	
29	Moridhal	
30	Jhanji	
31	Subansiri	
32	Gaurang	
33	Haora	
34	Gabharu	
35	Gadadhar	

36	Bhogdoi	
37	Belsiri	
38	Kulsi-Deosila	
39	Depota	
40	Dhansiri (North)	
41	Barnadi	
42	Buroi	
43	Brahmajan	
44	Beki-Manas-Aie	
45	Dudhnoi-Krishnai	
46	Bargang	
47	Tipkai	
48	Jaldhaka	
49	Simsang	
50	Torsa	
51	Teesta	Sub-basin Master Plans under preparation
52	Kynshi	
53	Sankosh - Raidak	
54	Umngot	
55	Dareng	
56	Lubha	
57	Kolodyne	
58	Tuichang	
59	Umsohryngkew	
60	Bugi	
61	Umiew	
62	Myntdu	
63	Imphal River	
64	Ganol	To be taken up for preparation of masterplan
65	Tangani	
66	Waikhyrwi	
67	Umtru	
68	Feni River	

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Annexure 1

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

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सड़क परिवहन और राजमार्ग मंत्रालय

अधिसूचना

नई दिल्ली, 19 दिसम्बर, 2019

सं. आरटी-25043/03/2017-आरएस.—पूर्व अधिसूचनाओं का अधिक्रमण करते हुए एतद्द्वारा सड़क प्रयोक्ताओं के बीच जागरूकता को बढ़ावा देने के लिए देश के प्रत्येक जिले में जिले से माननीय संसद सदस्य (लोकसभा) की अध्यक्षता में संसद सदस्य सड़क सुरक्षा समिति का गठन किया गया है। यदि जिले में एक से अधिक संसद सदस्य (सांसद) हैं, तो सबसे वरिष्ठ संसद सदस्य समिति का अध्यक्ष होगा। जिले में निवास करने वाले माननीय संसद सदस्य (राज्य सभा) विशेष आमंत्रित सदस्य होंगे। समिति में निम्नलिखित सदस्य शामिल होंगे: -

i. जिला कलेक्टर - सदस्य सचिव
ii. पुलिस अधीक्षक
iii. मुख्य कार्यकारी अधिकारी, जिला परिषद
iv. नगर निगम या विकास प्राधिकरण के मेयर/अध्यक्ष
v. जिले के सभी विधान सभा सदस्य (एमएलए)
vi. जिलों के सभी सब डिविजनल मजिस्ट्रेट
vii. अध्यक्ष द्वारा नामित 3 गैर सरकारी संगठन (एनजीओ)
viii. स्टेक होल्डर विभागों, संस्थानों और ऑटोमोबाइल डीलरों के जिला स्तरीय अधिकारी (डीएलओ)
ix. ट्रेड एसोसिएशन का प्रतिनिधि
x. जिला सिविल सर्जन
xi. जिला शिक्षा अधिकारी
xii. जिले में लोक निर्माण विभाग (पीडब्ल्यूडी) के वरिष्ठ अधिकारी

xiii. जिले के लिए पीडब्ल्यूडी का राष्ट्रीय राजमार्ग डिवीजन का प्रभारी अधिकारी

xiv. जिले के लिए एनएचएआई का प्रभारी अधिकारी

xv. जिला मुख्यालय से परिवहन विभाग से क्षेत्रीय परिवहन अधिकारी (आरटीओ)/सहायक क्षेत्रीय परिवहन अधिकारी (एआरटीओ)

2. जिला सड़क सुरक्षा समिति के विचारार्थ मुद्दे निम्नानुसार होंगे: -

(i) जिले में सड़क सुरक्षा क्रिया-कलापों की निगरानी

(ii) सड़क दुर्घटनाओं के आंकड़ों की निगरानी

(iii) सड़क दुर्घटना के कारणों को पहचानना और उसका अध्ययन

(iv) राष्ट्रीय/राज्यों सड़क सुरक्षा परिषद को सुझाव प्रदान करना

(v) प्रोटोकॉल के अनुसार ब्लैक स्पॉटों की पहचान तथा सुधार से संबंधित कार्य की समीक्षा और निगरानी तथा सभी सड़क इंजीनियरिंग उपाय

(vi) सड़क सुरक्षा मानकों का कार्यान्वयन सुनिश्चित करना

(vii) दुर्घटना/घातकता में कमी लाने के लिए विशिष्ट लक्ष्यों के साथ जिले के लिए सड़क सुरक्षा कार्य योजना तैयार करना तथा उसका क्रियान्वयन करना

(viii) 4-ई के कार्य अर्थात शिक्षा, प्रवर्तन, आपातकालीन देखभाल और इंजीनियरिंग के क्रियान्वयन पर चर्चा करना और उन्हें कारगर बनाना

(ix) गति सीमा और यातायात को सुचारू बनाने के उपायों की समीक्षा करना

(x) जिले में नेक व्यक्तियों को प्रेरित करने के लिए कार्य-नीतियां बनाना

(xi) नगर/शहर तथा जिले में ग्राम पंचायत में यातायात पार्क-सह-प्रशिक्षण केंद्र की स्थापना

(xii) जिले में सड़क सुरक्षा अभियान को बढ़ावा देना

(xiii) सड़क सुरक्षा से संबंधित किसी अन्य मुद्दे पर चर्चा करना

3. समिति एक तिमाही में कम-से-कम एक बैठक या ऐसी आवृत्ति पर बैठक करेगी जैसा कि वह तय कर सकती है। पिछले बैठकों के निर्णयों पर की गई कार्रवाई के साथ बैठक का कार्यवृत्त पुलिस महानिदेशक और राज्य के परिवहन आयुक्त को भेजा जाएगा। इसे सड़क परिवहन और राजमार्ग मंत्रालय की वेबसाइट पर भी अपलोड किया जाएगा।

4. इसे माननीय सड़क परिवहन और राजमार्ग मंत्री ने अनुमोदित कर दिया है।

अभय दामले, संयुक्त सचिव (परिवहन)

नोट: पूर्ववर्ती अधिसूचनाएं (i) आरटी-25043/03/2017-आरएस दिनांकित 28 सितंबर, 2017

(ii) आरटी-25043/03/2017-आरएस दिनांकित 30 अगस्त, 2019

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

NOTIFICATION

New Delhi, the 19th December, 2019

No. RT-25043/03/2017-RS.—In supersession of earlier notifications, **Member of Parliaments' Road Safety Committee** is hereby constituted in each district of the country to promote awareness amongst road users under the chairmanship of Hon'ble Member of Parliament (Lok Sabha) from the district. If the district has more than one Member of Parliament (M.P.), then the senior most M.P. would be the Chairman of the Committee. The Hon'ble Member of Parliament (Rajya Sabha), residing in the district, shall be special invitee. The Committee shall comprise of following members –

i. District Collector – Member Secretary
ii. Superintendent of Police
iii. Chief Executive Officer, Zila Parishad
iv. Mayor/Chairman of the Municipal Corporation or Development Authority
v. All Members of Legislative Assembly (MLA) of District
vi. All Sub Divisional Magistrate of Districts
vii. 3 Non-Government Organization (NGO) as nominated by Chairman
viii. District Level Officer (DLO) of Stake Holder Departments, Institutions and Automobile Dealers
ix. Representative of Trade Association
x. District Civil Surgeon
xi. District Education Officer
xii. Senior most officer of Public Works Department (PWD) in the district
xiii. Officer-in-Charge of National Highways Division of PWD for the district
xiv. Officer-in-Charge of NHAI for the District
xv. Regional Transport Officer (RTO)/Assistant Regional Transport Officer (ARTO) from the Transport Department from district Head Quarter

2. The terms of reference of the District Road Safety Committee shall be as under:

(i) Monitoring of road safety activities in the district
(ii) Monitoring of road accidents data
(iii) Identification and study of causes of road accidents
(iv) To provide suggestions to the National/States Road Safety Council
(v) Reviewing and monitoring of the work relating to identification & rectification of black spots as per protocol and all road engineering measures
(vi) Ensuring implementation of road safety standards
(vii) Create and implement road safety action plan for the district with specific targets for accident/fatality reduction
(viii) To discuss and strengthen the implementation of 4 E's Programme i.e. Education, Enforcement, Emergency care and Engineering
(ix) Reviewing of the speed limits and traffic calming measures
(x) Formulation of strategies to motivate Good Samaritans in the district
(xi) Establishment of traffic park-cum-training centre at town/city and Gram Panchayat in a district
(xii) Promoting road safety campaign in the District
(xiii) To discuss any other issue related to road safety

3. The Committee will meet at least once in a quarter or at such frequency as it may decide. Minutes of the meeting along with action taken on the decisions of the previous meetings shall be sent to the Director

General of Police and Transport Commissioner of the State. The same shall also be uploaded on the website of the Ministry of Road Transport and Highways.

4. This issues with the approval of Hon'ble Minister of Road Transport and Highways.

ABHAY DAMLE, Jt. Secy. (Transport)

Note: Earlier Notifications (i) RT-25043/03/2017-RS dated 28th September, 2017

(ii) RT-25043/03/2017-RS dated 30th August, 2019