सत्यमेव जयते

2023

WATER AND RELATED STATISTICS

जल एवं सम्बंधित सांख्यिकी

भारत सरकार

GOVERNMENT OF INDIA

बेसिन योजना एवं प्रबंधन संगठन

BASIN PLANNING & MANAGEMENT ORGANISATION

केन्द्रीय जल आयोग

CENTRAL WATER COMMISSION

जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग

DEPARTMENT OF WATER RESOURCES, RD & GR

जल शक्ति मंत्रालय

MINISTRY OF JAL SHAKTI

Reg. No.: CWC/2024/162

सत्यमेव जयते

जल एवं सम्बंधित सांख्यिकी - 2023

WATER AND RELATED STATISTICS - 2023

जल सम्बंधित सांख्यिकी निदेशालय/Water Related Statistics Directorate

बेसिन योजना एवं प्रबंधन संगठन/Basin Planning & Management Organisation

जल आयोजन एवं परियोजना स्कंध/Water Planning & Projects Wing

केन्द्रीय जल आयोग/Central Water Commission

(cwc.gov.in)

सितम्बर, 2024 September, 2024

Constitutional Background on Water

The Constitution of India lays down the legislative and functional jurisdiction of the Union, State and local Governments regarding 'Water'. Under the scheme of the Constitution, 'Water' is basically a State subject and the Union comes in only in the case of inter- state river waters. List II of the Seventh Schedule, dealing with subjects regarding which states have jurisdiction, has the following as Entry 17:

'Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power subject to the provisions of Entry 56 of List I (Union list), reads as follows: 'Regulation and development of inter- state rivers and river valleys to the extent to which such regulation and development under the control of the Union, is declared by Parliament by law to be expedient in the public interest'.

The Constitution has a specific article (Article 262), dealing with adjudication of disputes relating to matters of inter- state rivers or river valleys, which reads as follows:

Article 262 (1): Parliament may by law provide for the adjudication on any dispute or complaint with respect to the use, distribution or control of the waters of, or in, any inter- state river or river valley.

(2): Notwithstanding anything in this Constitution, Parliament may by law provide that neither the Supreme Court nor any other Court shall exercise jurisdiction in respect of any such dispute or complaint as is referred to in clause (1).

The recent 1992 amendments to the Constitution regarding Panchayats and Municipalities introduced the following entries in the schedules listing the subject-areas in which the State Governments and legislatures may devolve functions to such bodies, so as to make them evolve as local self-governing institutions: In the Eighth Schedule (Part IX) dealing with Panchayats, the subjects, 'Minor irrigation, Water management and Watershed development', 'drinking water' and 'maintenance of community assets' are listed. In the Twelfth Schedule (Part IX A) dealing with municipalities, the subjects 'water supply of domestic, industrial and commercial purposes' is listed. Functional responsibilities are, thus, visualised for local Governments in respect of several aspects of water use.

The two laws enacted by the Union under Article 262 and Entry 56 of List I are the Inter-State Water Disputes Act, 1956 (as amended up to 1980) and the River Boards Act, 1956. In recent years since the Constitution does not have an entry relating to 'Environment', using the residual powers, the Union has enacted laws on environment and control of pollution, which have effect on water use including ground water and its exploitation. A large number of Acts dealing with irrigation, canals and their maintenance, water rates and cess, command area development and maintenance of tanks are in force in each state.

FOREWORD

Central Water Commission is the premier Technical Organisation of India in the field of water resources and is presently functioning as an attached office of the Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Government of India. The mandate of Central Water Commission is to promote integrated and sustainable development and management of India's water resources by using state-of-the-art technology, competency and by coordinating with all stakeholders.

In order to cater to the ever-growing needs of data on water resources and related aspects, CWC brings out various publications at regular intervals. The present publication 'Water and Related Statistics-2023' is a biennial publication that is intended to cater to the ever-growing detailed data requirements of water resources planners, managers, administrators and researchers in a comprehensive manner. This publication has also been uploaded at the website of Central Water Commission for all those concerned with balanced water resources development.

Data is an indispensable part of governance and such incorporation of updated water-related information in these publications may contribute to improve the policy-making in the country. The entire team of Water Related Statistics (WRS) Directorate, under the guidance of Shri Ashok Kumar Kharya, CE (BPMO); Shri Vishnu Deo Roy, Ex-CE (PPO); Shri Yogesh Paithankar, Ex-CE (PPO) and Shri Pushkar Singh Kutiyal, former CE (PPO) of CWC, have done the excellent work by putting in extra efforts to collect and compile extensive data of the publication from various Ministries/ Departments/ Organisations/ Directorates of Central and State Governments. I also take this opportunity to commend all the data source agencies for providing the necessary data.

I hope, this publication would be of great interest and use to all stakeholders in water resources field.

New Delhi

___ September, 2024

(Kushvinder Vohra)
Chairman, CWC

ACKNOWLEDGEMENT

There are a number of water resources development projects which have been undertaken since independence in the country with the objective to ensure rational and balanced allocation of water. The planning, development, execution and management of these projects require a sound and broad database on water resources and related aspects. Central Water Commission is the lead nodal agency in the water resources sector with overall responsibility for its balanced development has been taking care of this aspect by documenting water and related data in the form of various publications. In this endeavor, 'Water and Related Statistics-2023' is the biennial publication, intended to cater to the growing needs of data on water resources and related aspects.

Further, CWC is monitoring various multipurpose/irrigation projects in the country and is instrumental in providing central assistance to various multipurpose/irrigation projects under various schemes of Government of India. In the process, huge relevant data related to water (including financial aspects of projects) is captured. Such data is systematically presented in various publications. In this series, 'Water and Related Statistics' publication is also brought out biennially which contains statistics related to water resources potential, irrigation potential, dynamic ground water resources, physical/financial progress of PMKSY-AIBP projects, environmental performance, flood damages, land use, details of Hydrological observation network of CWC, etc.

The data/information given in this publication is based on the information sourced from various Ministries/ Departments/ Organizations/ Directorates of Central and State Governments. Emphasis has been given in presenting data in graphical and tabular form wherever possible, for better understanding and quick analysis by user.

The work of collection, compilation and finalization of data for the publication was accomplished by the officers/officials of Water Related Statistics (WRS) Directorate of Basin Planning & Management Organisation (BPMO), WP&P Wing of CWC. The officers and staff of the Directorate have done a brilliant job in giving the publication a presentable shape under the guidance of Shri Ashok Kumar Kharya, CE (BPMO); Shri Vishnu Deo Roy, Ex-CE (PPO); Shri Yogesh Paithankar, Ex-CE (PPO) and Shri Pushkar Singh Kutiyal, former CE (PPO) of CWC.

I appreciate the efforts put in by all the data source agencies which contributed the data/information and supported our efforts to bring out this publication. Suggestions/comments, if any, for further improvement of the publication, will be highly appreciated.

New Delhi

September, 2024

नवीन कुमार

(Navin Kumar)

Member (WP&P), CWC

PREFACE

Water resource challenges faced by India are considerable and can only be addressed by adopting an integrated approach that considers all uses and sources of water (surface water, ground water, etc) from the river basin/hydrological perspective. This requires sound information and knowledge on the water resource base and its uses, coupled with the availability of appropriate tools for collection, compilation, analysis and decision making. Central Water Commission (CWC) is the nodal agency in the water resources sector for promoting the integrated and sustainable development and management of India's water resources by using state-of-the-art technology and competency.

The Water Related Statistics (WRS) Directorate, Basin Planning & Management Organisation (BPMO), CWC brings out the publication on 'Water and Related Statistics' since 1989 to cater to the ever-growing needs of data on water resources and related aspects. The notable aspects of the data included in the present biennial publication on 'Water and Related Statistics-2023' inter-alia relate to water availability and requirement, irrigation development including Command Area Development & Water Management, land degradation, hydrological data, rainfall data and flood damage & flood forecasting data. A number of graphs and charts have also been included in the publication reflecting the essence of information presented in different sections.

I would like to express my deep gratitude to Shri Kushvinder Vohra, Chairman, CWC & ex-officio Secretary to the Government of India and Shri Navin Kumar, Member (WP&P), CWC & ex-officio Additional Secretary to the Government of India, for their continuous support, guidance and encouragement to bring out this publication. I am also thankful to all the data source agencies mainly various Directorates of CWC and D/o Water Resources, RD & GR, M/o Jal Shakti; Central Electricity Authority; India Meteorological Department; M/o Agriculture & Farmers Welfare and M/o Fisheries, Animal Husbandry and Dairying etc. for their cooperation and support.

The publication has been prepared through the combined efforts of the officers/officials of the Water Related Statistics (WRS) Directorate, BPMO. The efforts made by Smt. Suchitra Yadav, Joint Director; Shri Sanjeev Sharan Pandey, Deputy Director; Smt. Lalita Bisht, Senior Statistical Officer and Smt. Sarita, Junior Statistical Officer, are commendable.

I hope the publication will prove to be a useful document to the policymakers, planners, academicians and researchers. It shall be an endeavour on part of CWC to continuously improve the publication both in content and design with the help of users' feedback. Suggestions, if any, are welcome for improvement of the publication and may please be mailed at directorwris-cwc@nic.in .

September, 2024

New Delhi

(Ashok Kumar Kharya)

Chief Engineer (BPMO), CWC

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Acronyms and Abbreviations

AIBP	Accelerated Irrigation Benefits Programme
BCM	Billion Cubic Metre
BCM/yr	Billion Cubic Metre per year
BP	Basin Planning
BPMO	Basin Planning & Management Organization
CA	Central Assistance
CAD	Command Area Development
CAD&WM	Command Area Development & Water Management
CCA	Culturable Command Area
CEA	Central Electricity Authority
CGWB	Central Ground Water Board
CLA	Central Loan Assistance
cm	Centimetre
Cr	Crore
CUI	Coverage Under Irrigation
cum	Cubic Metre
cumec	Cubic Metre Per Second
cusec	Cubic Feet Per Second
CWC	Central Water Commission
DRIP	Dam Rehabilitation and Improvement Project
EMO	Environment Management Organisation
ERM	Extension, Renovation and Modernization
Exl. Met	Exclusive Meteorological Sites
FMP	Flood Management Programme
FRL	Full Reservoir Level
GD	Gauge and Discharge Site
GDQ	Gauge, Discharge and Water Quality Site
GDS	Gauge, Discharge and Sediment Site
GDSQ	Gauge, Discharge, Sediment and Water Quality Site
GIA	Gross Irrigated Area
GQ	Gauge and Water Quality Site

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Acronyms and Abbreviations

GWh	Giga Watt Hours
GW	Ground Water
GWS	Ground Water Scheme
Ha	Hectare
HEPR	Hydro Electric Potential Reassessment Division
HFL	Highest Flood Level
HKKP	Har Khet Ko Pani
HP	Horse Power
HQ	Head Quarter
IPC	Irrigation Potential Created
IPU	Irrigation Potential Utilised
ISBIG	Scheme for Bridging Irrigation Gap
ISO	Information System Organisation
IWDP	Integrated Watershed Development Project
IWRM	Integrated Water Resources Management
km	Kilometer
km^2	Square Kilometer
km^3	Cubic Kilometer
KW	Kilo Watt
KWH	Kilo Watt Hours
Lakh Ha	Lakh Hectare
LPCD	Litre per Capita per day
LTIF	Long Term Irrigation Fund
MCM	Million Cubic Metre
MCM/yr	Million Cubic Metre per year
Mha	Million Hectare
MLD	Million Litres per Day
mm	Millimetre
NABARD	National Bank for Agriculture and Rural Development
NCIWRD	National Commission on Integrated Water Resources Development
NIA	Net Irrigated Area

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Acronyms and Abbreviations

NP	National Project
NRDWP	National Rural Drinking Water Programme
NRMD	Natural Resource Management Directorate
NRSC	National Remote Sensing Centre
NSA	Net Sown Area
NWRC	National Water Resources Council
PL	Pond Level
PMKSY	Pradhan Mantri Krishi Sinchayee Yojana
PMO	Project Monitoring Organisation
P&P	Planning & Progress
PPO	Project Preparation Organisation
RDC	River Data Compilation
RGI	Registrar General of India
RRR	Repair, Renovation and Restoration
SG&Met	Snow Gauge & Meteorological Site
Sq.km	Square Kilometer
STP	Sewage Treatment Plant
SW	Surface Water
TCA	Total Cultivable Area
T&D	Transmission and Distribution Lines
Th.Ha	Thousand Hectare
TMcum	Thousand Million Cubic Metre
Ton/Ha	Ton per Hectare
UIP	Ultimate Irrigation Potential
UT	Union Territory
WM	Water Management
WP&P	Water Planning and Projects Wing
WQSS	Water Quality Sampling Station
WRIS	Water Resources Information System
WRS	Water Related Statistics
WUA	Water Users' Association

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Executive Summary

The Water Related Statistics (WRS) Directorate, presently under Basin Planning & Management Organisation (BPMO), CWC, previously under PPO, CWC, brings out various publications at regular intervals on statistics related to water resources development and management and related aspects. The present publication on 'Water and Related Statistics-2023' is a biennial publication that attempts to cover a wide range of data on water and related resources in the country. The latest available edition of this publication is of the year 2021 and it is available at the website of CWC at cwc.gov.in.

The information given in the publication is collected from various Directorates of CWC, various Ministries/Departments and other organizations. It comprises three chapters along with related appendix tables. Summary tables and charts have been included within the chapters to facilitate overview and better understanding.

The structure of this publication is as follows:

- Introduction
- Chapter-1: 'Water and Related Resources'
- Chapter-2: 'Financial Performance'
- Chapter-3: 'Environmental Performance'

The introduction presents inter-alia the global water scenario and water resources at a glance in India.

Chapter 1 on 'Water and Related Resources' deals with the Inland Water Resources and other water bodies, River basin-wise catchment area, year-wise total rainfall and volume of rainfall, Water Resources Potential, Surface Storage, State and Basin-wise Hydrological Network of CWC, Assessment of Ground Water and Ground Water Exploration, Data on selected Land-use & Irrigation Statistics, Source-wise irrigated area and India-WRIS.

Besides following additional data/information have been included in the publication viz;

i. In this publication, instead of providing all the weekly data of the storage position of the important reservoirs of India by March ending provided in the previous edition of the publication for the year 2021, those for selected 6 dates only of the respective water year viz. as on 1st July, 15th August, 30th September, 15th October, 1st March & 15th May, indicating a trend of progression of monsoon during the water year and make the data informative. Wherever, weekly storage bulletin issued by WM Dte.,IMO, CWC on every Thursday doesn't match with the aforementioned dates, storage position on the date on which weekly bulletin is available and is closest to the aforementioned dates have been included in the publication. As such, 12 weeks data (6 weeks each for the water year 2021-22 and 2022-23) of the storage position of the important reservoirs of India have been provided.

ii. Basin-wise cumulative storage position in river basins across India on the aforementioned 6 dates for the water years 2021-22 and 2022-23 have been provided.

iii. The Southwest Monsoon-Rainfall distributions have also been incorporated.

Chapter 2 on 'Financial Performance' deals with the financial aspects along with physical progress of water and related sectors and schemes in the country such as details on Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) and its major components;Accelerated Irrigation Benefits Programme (AIBP) and Har Khet Ko Pani (HKKP). It also gives the details on its sub-components-National Projects, Command Area Development & Water Management (CAD&WM) Programme, Surface Minor Irrigation (SMI) Scheme, Repair, Renovation & Restoration (RRR) of Water Bodies Scheme and PMKSY-HKKP and Ground Water Scheme. It also provides the data/information on Minor irrigation census and details on the Plan-wise Financial Expenditure on Minor Irrigation (Institutional). It also provides the details on the Central sector water resources projects and Namami Gange programme.

Chapter 3 on 'Environmental Performance' presents information regarding the environmental aspects of water resources development activities, data on the degraded land and its distribution according to various types, details on flood damages and analysis of total damage. The flood damage data has been provided since 1953 to 2022. It also gives a description of the performance of the flood forecasting network with data related to flood forecasting performance since 2000 to 2022.

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Introduction

Water resources are natural resources that are potentially useful. Water resources include information on precipitation, surface and ground water storage and hydropower potential. Water resources (surface water and ground water) are renewed through the continuous cycle of evaporation, precipitation and run-off. The water cycle is driven by global and climatic forces that introduce variability in precipitation and evaporation, which in turn define run-off patterns and water availability over space and time (modulated by natural and artificial storage). Uses of water include agricultural, industrial, household, recreational and environmental activities.

All living things require water to grow and reproduce. About 97.5% of the water on the Earth is salt water and only about 2.5% is fresh water; slightly over two-thirds of this is frozen in glaciers and polar ice caps. The remaining unfrozen fresh water is found mainly as ground water, with only a small fraction present above ground or in the air. According to one estimate of water reserves on earth quoted by the Food and Agriculture Organization (FAO) of the United Nations the total water reserve on earth is about 1.4 billion km^3. However, fresh water constitutes a very small proportion of this enormous quantity available on earth. It is only about 35 million km^3 or just 2.5% of the total volume and the remaining is saline water. A large fraction of the fresh water, about 24 million km^3 or 68.7% is in the form of ice and permanent snow cover in the mountainous regions, the Antarctic and Arctic regions and another 30.1% is present as ground water. About 0.3% is available in lakes, rivers and 0.9% in soil moisture, swamp water and permafrost atmosphere.

Figure-1: World Water Distribution

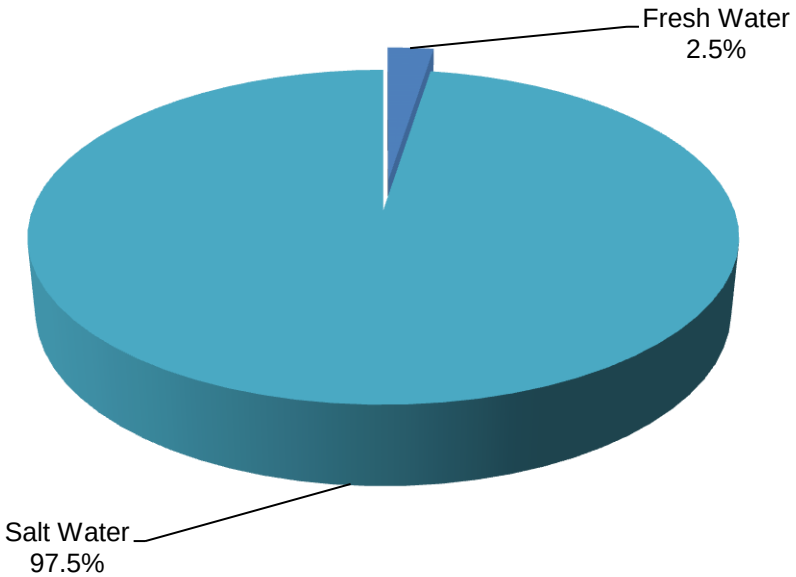
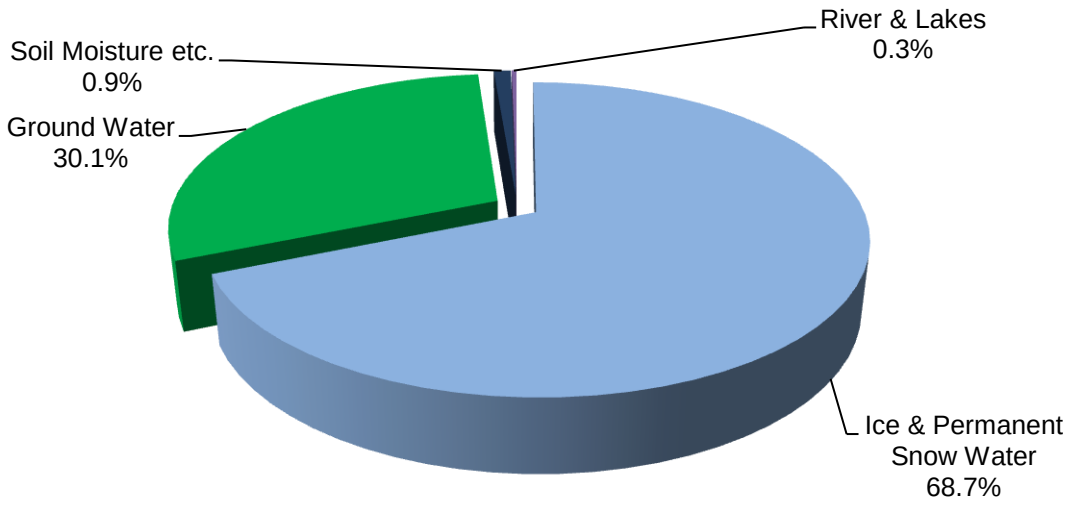


Figure-2: Fresh Water Distribution



Water is an indispensable element in every sector of the economy, be it primary, secondary or tertiary sectors. These water demands are fulfilled by various sources of water supply-surface water bodies like river, lakes and ponds; ground water and others. But these resources are under severe environmental stress due to the growing population and increased levels of developmental activities, industrialization and urbanization.

Water has cross sectoral linkages with various sectors such as food, energy, agriculture, industries and urban development and others, thus, cannot be considered in isolation, which makes it challenging for the policy makers to apportion diminishing supplies between ever-increasing demands. Factors such as demography and climate change further increase the stress on water resources and highlighting the need for water security.

In many regions, the availability of water in both quantity and quality is being severely affected by climate change, with more or less precipitation in different regions and more extreme weather events. Thus, water resource management plays an important role.

Table T1: Water Resources of India At A Glance			
Sl. No	**Items**	**Quantity**	**Unit**
1	**2**	**3**	**4**
1	Total Geographical Area (TGA) (2021-22)	328.75	Mha
2	Annual Rainfall (2022)	1257.0	mm
3	Major River Basins (as per Reassessment of Water Availability in India using Space Inputs, June, 2019)	20	Nos.
4	Catchment Area of Major River Basins (as on June, 2019)	3271953	km^2
5	Average Annual Precipitation	4000	BCM
6	Average Annual Flow (as per Reassessment of Water Availability in India using Space Inputs, June, 2019)	1999.2	BCM
7	Estimated Utilisable Surface Water Resources (as per Reassessment of Water Availability in India using Space Inputs, June, 2019)	690.1	BCM
8	Total Annual Ground Water Recharge (as per Ground Water Resources Assessment, 2022)	437.6	BCM
9	Total Annual Utilizable Water Resources	1127.7	BCM
10	Per Capita Water Availability (2011 Census)	1545	m^3/year
11	Total Cultivable Land (2021-22)	154.26	Mha
12	Gross Area Sown (2021-22)	219.16	Mha
13	Net Area Sown (2021-22)	141.01	Mha
14	Gross Irrigated Area (2021-22)	120.38	Mha
15	Net Irrigated Area (2021-22)	77.92	Mha
16	Identified Capacity (Above 25 MW) as per Reassessment Study (2017-23)	133410.03	MW
17	Capacity in Operation (Above 25 MW) (as on 31.03.2023)	42104.55	MW
18	Large Dams as per NRLD-2023	6281	Nos.
19	Large Dams Completed as per NRLD-2023	6138	Nos.
20	Under Construction as per NRLD-2023	143	Nos.
21	Live Storage Capacity of Completed Projects of Major River Basins	257.812	BCM

Sources: BP-1 Dte, DSM Dte, WM Dte of CWC; Central Ground Water Board, D/o Water Resources, RD&GR, M/o Jal Shakti; India Meteorological Department, M/o Earth Sciences; Central Electricity Authority, M/o Power; 'Land Use Statistics at a Glance 2011-12 to 2021-22', Economics Statistics & Evaluation Division, D/o Agriculture & Farmers Welfare, M/o Agriculture & Farmers Welfare

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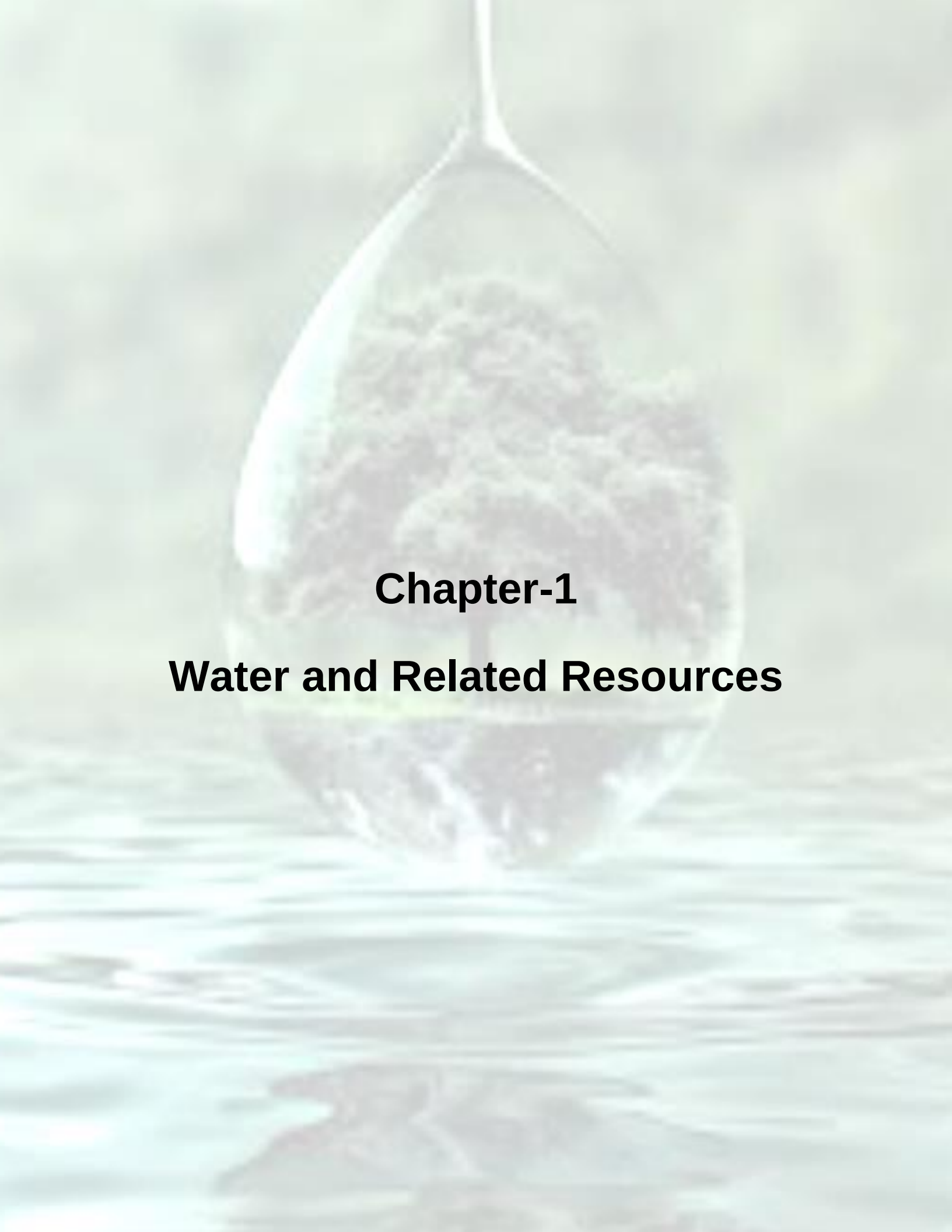

Chapter-1

Water and Related Resources

Chapter-1

Water and Related Resources

Water resources have two facets - dynamic and static. The dynamic and renewable nature of water resources and the recurrent need for its utilisation requires that water resources be measured in terms of its flow rates. The dynamic resource measured as flow is more relevant for most developmental needs. The static or fixed nature of the resource, involving the quantity of water, the length or area of the water bodies is also relevant for some activities like pisciculture, navigation etc. Both these aspects are discussed below. In addition to that this chapter deals with River basin-wise catchment area, year-wise total rainfall and volume of rainfall, Southwest Monsoon-Rainfall distribution, Water Resources Potential, Surface Storage, State and Basin-wise Hydrological Network of CWC, Assessment of Ground Water and Ground Water Exploration, Data on selected Land-use & Irrigation Statistics, Source-wise irrigated area and India-WRIS.

1.1 Water Bodies

Inland water resources of the country are classified as: rivers and canals; reservoirs; tanks, lakes & ponds; lakes and derelict water bodies; and brackish water. Total water bodies (excluding rivers and canals) cover an area of about 8.34 Mha during 2022-23. Among these water bodies, 'tanks and ponds' have maximum area (2.75 Mha) followed by 'reservoirs' (2.67 Mha). Inland water resources are unevenly distributed over the States and are shown in Table T1. These are mainly distributed over 10 States namely Uttar Pradesh, Telangana, West Bengal, Karnataka, Andhra Pradesh, Odisha, Gujarat, Assam, Rajasthan and Tamil Nadu covering about 78.60% of the total area of inland water resources (excluding rivers and canals).

Table T 1: Inland Water Resources in India during 2022-23

Sl. No.	States	Rivers & Canals (Length in km)	Small Reservoirs		Medium & Large Reservoir		Tanks & Ponds (Ha)	Brackish Water (Ha)	Beels/ Oxbow Lakes/ Derelict Water (Ha)	Any other than Rivers and Canals (Ha)
			No.	Area (Ha)	No.	Area (Ha)				
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	11514.00	90	34693.00	26	130698.00	347888.00	56215.00	0.00	0.00
2	Arunachal Pradesh	11157.00	4	226.00	0	0.00	0.00	0.00	0.00	0.00
3	Assam	11304.48	4	3096.00	2	1863.00	94693.47	0.00	71843.50	259369.00
4	Bihar	21354.00	0	0.00	48	64466.00	122418.96	0.00	0.00	0.00
5	Chhattisgarh	3573.00	1757	43565.00	13	39035.00	120100.00	0.00	0.00	0.00
6	Delhi	50.00	0	0.00	0	0.00	10.00	0.00	0.00	0.00
7	Goa	578.50	4	484.00	1	2964.00	101.00	198.86	0.00	0.00
8	Gujarat	3865.00	686	22427.00	227	203679.00	22000.00	187000.00	0.00	0.00
9	Haryana	7197.00	14	645.00	0	0.00	16174.00	0.00	0.00	0.00
10	Himachal Pradesh	3000.00	0	0.00	5	43785.00	878.40	0.00	0.00	0.00
11	Jammu & Kashmir	26211.00	6	4230.00	2	6000.00	1701.00	0.00	0.00	21396.00
12	Jharkhand	1800.00	412	28789.60	23	104363.00	86539.00	0.00	0.00	19936.00
13	Karnataka	9630.00	34	7595.00	49	265063.00	313304.00	8000.00	0.00	0.00

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Table T 1: Inland Water Resources in India during 2022-23

Sl. No.	States	Rivers & Canals (Length in km)	Small Reservoirs		Medium & Large Reservoir		Tanks & Ponds (Ha)	Brackish Water (Ha)	Beels/ Oxbow Lakes/ Derelict Water (Ha)	Any other than Rivers and Canals (Ha)
			No.	Area (Ha)	No.	Area (Ha)				
1	2	3	4	5	6	7	8	9	10	11
14	Kerala	3220.00	37	10491.00	10	23714.00	27625.00	65213.00	0.00	0.00
15	Madhya Pradesh	17088.00	3385	13034.00	27	230703.00	79312.00	0.00	0.00	0.00
16	Maharashtra	26065.00	2415	131366.70	81	128535.00	80190.30	12024.80	0.00	5560.00
17	Manipur	1647.00	5	960.00	1	1182.00	11894.80	0.00	29161.00	0.00
18	Meghalaya	4757.76	7	717.53	0	0.00	4690.94	0.00	303.11	302.54
19	Mizoram	1750.00	3	10.00	2	8000.00	5759.10	0.00	10.00	0.00
20	Nagaland	1600.00	0	0.00	1	2258.00	3623.00	0.00	1110.00	0.00
21	Odisha	24877.75	603	34608.00	8	165771.00	154808.00	32587.00	180000.00	0.00
22	Punjab	868.00	12	686.75	1	3100.00	16812.50	0.00	0.00	0.00
23	Rajasthan	30000.00	2388	145823.00	48	254475.00	30266.00	50.00	0.00	0.00
24	Sikkim	1600.00	9	200.56	NA	NA	1579.00	0.00	0.00	0.00
25	Tamil Nadu	7420.00	54	16059.00	8	62015.00	218691.13	56000.00	7000.00	35283.84
26	Telangana	3492.00	53	27017.00	40	184581.00	520302.00	0.00	0.00	0.00
27	Tripura	1080.00	0	0.00	1	3049.34	30171.40	0.00	0.00	0.00
28	Uttarakhand	2686.00	0	0.00	7	20587.00	916.14	0.00	0.00	50.00
29	Uttar Pradesh	70000.00	53	3223.00	29	144693.00	145808.68	0.00	34935.10	1458000.00
30	West Bengal	27859.00	52	28050.00	31	14077.00	288385.00	91130.00	42081.00	150000.00
31	Andaman & Nicobar Islands	0.00	7	367.00	0	0	195.40	618.806	0.00	0.00
32	Chandigarh	0.00	0	0.00	3	300.00	2.06	0.00	0.00	0.00
33	Dadar & Nagar Haveli and Daman & Diu	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0.00
34	Ladakh	4570.00	1	1.50	1	250.00	7.52	97700.00	0.00	0.00
35	Lakshadweep	0.00	0	0.00	0	0.00	184.00	0.00	0.00	0.00
36	Puducherry	92.09	NA	303.33	NA	1357.12	473.09	82.49	0.00	0.00
All India		**341906.58**	**12095**	**558668.97**	**666**	**2110563.50**	**2747504.90**	**606819.96**	**366443.71**	**1949897.40**

Source: D/o Fisheries, M/o Fisheries, Animal Husbandry and Dairying

Note: Small Reservoirs - <1000 Ha, Medium Reservoirs - 1000 to 5000 Ha & Large Reservoirs - >5000 Ha; 'No.': Number;

1.2 Rivers

India is blessed with many rivers with varying catchment areas and water resources potential. The estimate of area of rivers and canals in the country is not available. However, their total length in the country is about 3.42 Lakh km. According to the total length of rivers and canals, States and UTs have been classified and presented in Table T2. Uttar Pradesh, Rajasthan, West Bengal, Jammu & Kashmir and Maharashtra have the highest total length of rivers and canals.

Table T2: States by Total Length of Rivers and Canals

Length (km)	Name of States/UT
1	2
<500	Puducherry, Delhi, Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli and Daman & Diu, Lakshadweep
500-999	Punjab, Goa
1000-1999	Jharkhand, Mizoram, Manipur, Nagaland, Sikkim, Tripura
2000-4999	Meghalya, Ladakh, Gujarat, Chattisgarh, Telangana, Kerala, Himachal Pradesh, Uttarakhand
5000-9999	Karnataka, Tamil Nadu, Haryana
10000-14999	Andhra Pradesh, Assam, Arunachal Pradesh
15000-19999	Madhya Pradesh
20000-24999	Odisha, Bihar
25000 & above	Uttar Pradesh, Rajasthan, West Bengal, Jammu & Kashmir, Maharashtra

Source: D/o Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying

1.3 Rainfall

The annual precipitation including snowfall, which is the main source of water in the country, is estimated to be of the order of 4000 BCM. A summary of rainfall in the country has been given in Table T3. Accordingly, there is an undulating trend of rainfall. The Annual normal rainfall is 3813 BCM on the basis of 1971-2020. In 2020, the total volume of rainfall was 4241 BCM as against 4238 BCM recorded during the previous calendar year registering a negligible increase. The volume of rainfall is decreased to 4063 BCM in 2021, whereas in 2022 it is increased to 4132 BCM.

Table T3: Rainfall in India

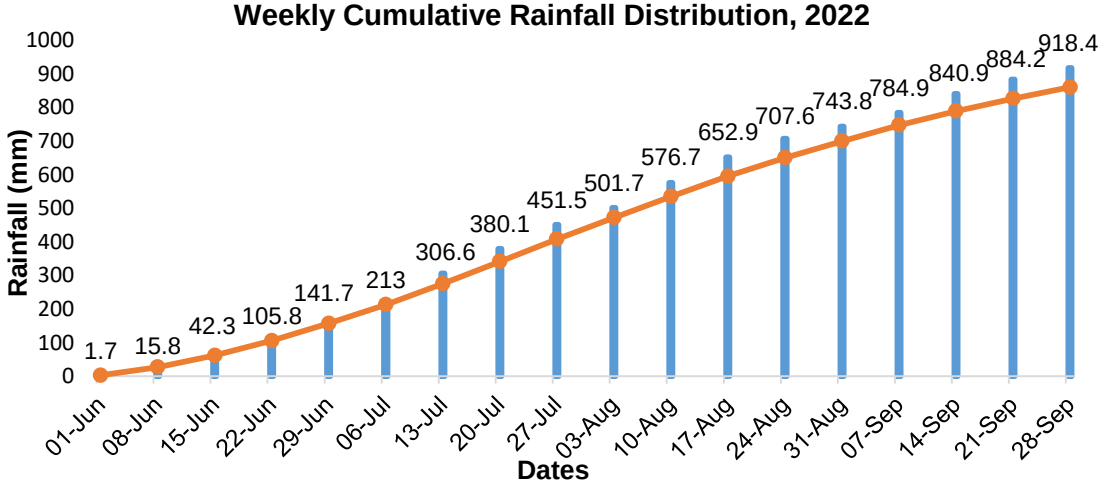
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022
1	2	3	4	5	6	7	8	9	10
Total Rainfall (mm)	1045	1085	1083	1127	1021	1289	1290	1236	1257
Total Volume of Rainfall (BCM)	3435	3567	3560	3705	3356	4238	4241	4063	4132

1.3.1 Southwest Monsoon Weekly Cumulative Rainfall Distribution, 2022

i. Observed weekly cumulative rainfall (in mm) and its long term (1971-2020) normal cumulative rainfall value for the country as a whole and for the four homogeneous regions during June to September, 2022 are shown in Figures 1 to 5. The temporal distribution of Southwest monsoon rainfall for the country and homogeneous regions (Figures 1 to 5) show that the rainfall was well distributed during the season

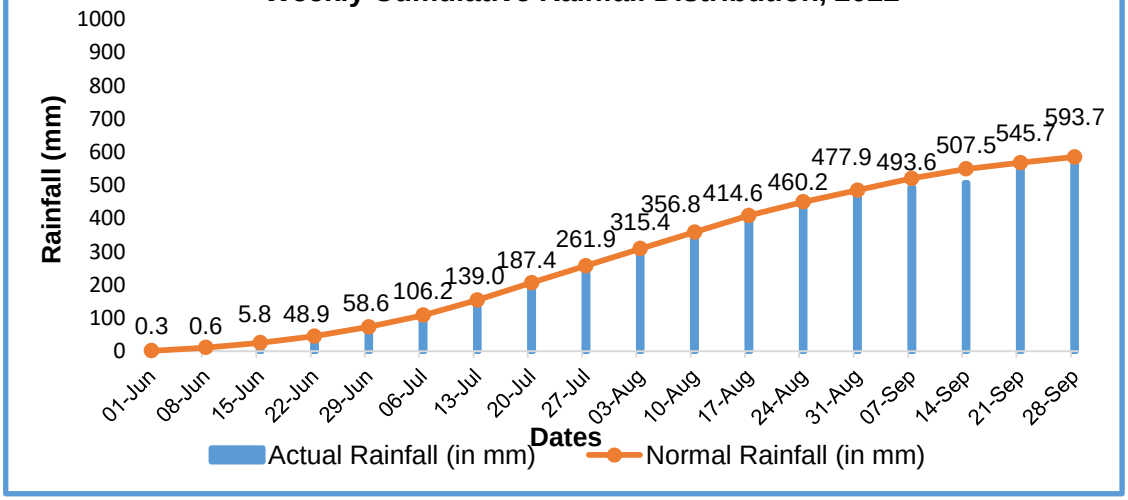
except the initial first half in the month of June. The weekly actual cumulative rainfall values in mm, of the respective region are labelled for its comparison with weekly normal cumulative rainfall in mm during the same period.

Figure-1: All India Rainfall-Southwest Monsoon Weekly Cumulative Rainfall Distribution, 2022



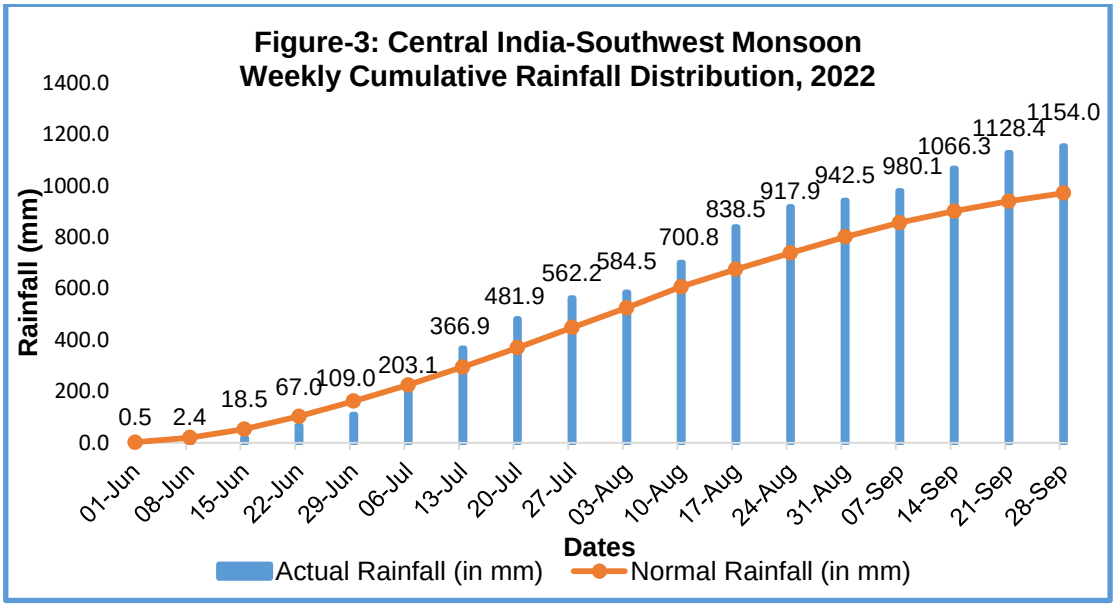
ii. Figure-1 shows the actual and normal cumulative rainfall on weekly basis in India during the Southwest monsoon season of 2022. The weekly cumulative figures of actual rainfall in India during the Southwest monsoon season of 2022 for country as a whole, was higher than the weekly cumulative figures of normal rainfall after the 1st week of July. The weekly cumulative figures of actual rainfall was recorded 1.7 mm during the 1st week of June, 2022 while it was recorded 918.4 mm during the 4th week of September, 2022. The highest weekly rainfall was recorded during the 2nd week of July, 2022 as 93.6 mm.

Figure-2: North West India-Southwest Monsoon Weekly Cumulative Rainfall Distribution, 2022

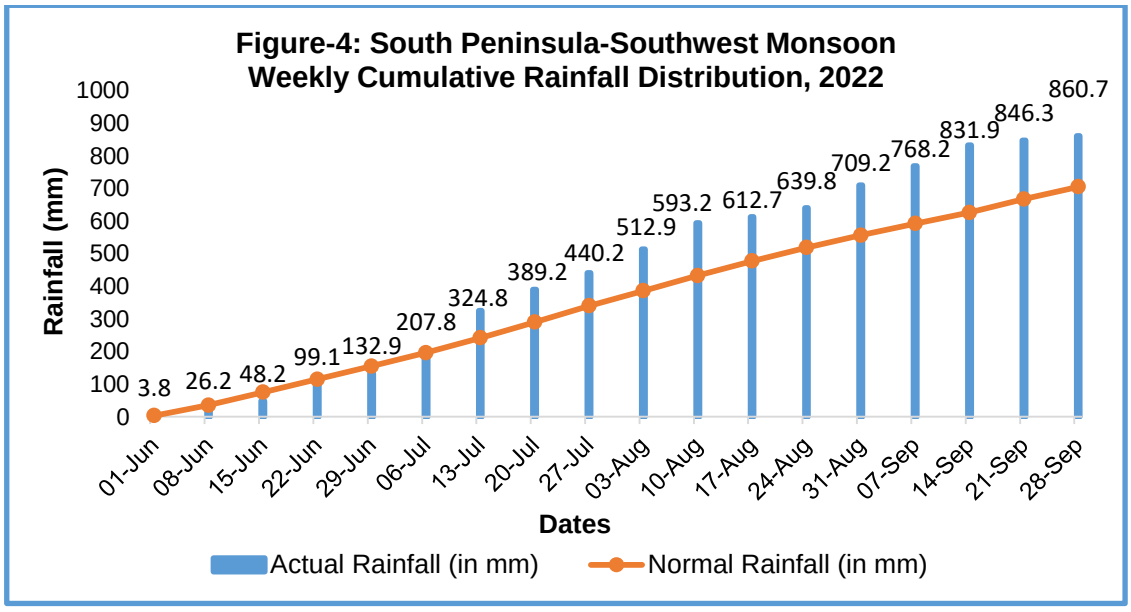


iii. Figure-2 shows the actual and normal cumulative rainfall on weekly basis in North West India during the Southwest monsoon season of 2022. The Northwest India region covers East Uttar Pradesh, West Uttar Pradesh, Uttarakhand; Haryana-Chandigarh & Delhi (HAR.CHD & Delhi), Punjab, Himachal Pradesh, Jammu & Kashmir, West Rajasthan and East Rajasthan. The weekly cumulative figures of actual rainfall in India during the Southwest monsoon season of 2022 for North West India was lower than the weekly cumulative figures of normal rainfall for most of the period except 4th week of June, 4th week of July; 1st, 3rd &

4th week of August and 4th week of September, 2022. The weekly cumulative figures of actual rainfall was recorded 0.3 mm during the 1st week of June, 2022 while it was recorded 593.7 mm during the 4th week of September, 2022. The highest weekly rainfall was recorded during the 4th week of July, 2022 as 74.5 mm.

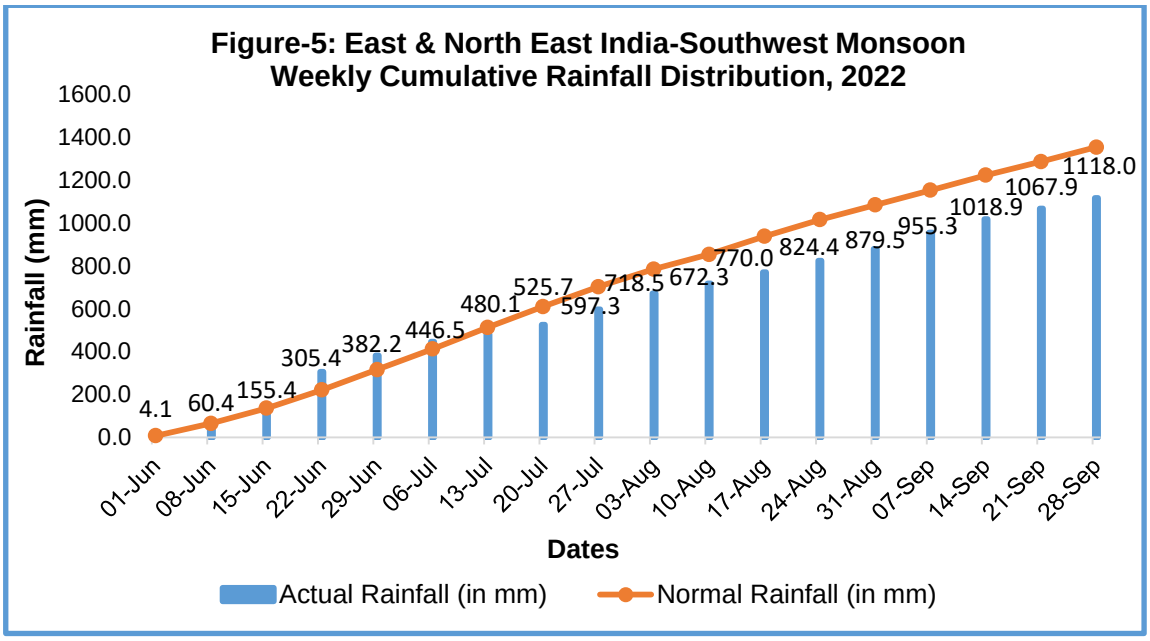


iv. Figure-3 shows the actual and normal cumulative rainfall on weekly basis in Central India during the Southwest monsoon season of 2022. The Central India region covers Odisha, West Madhya Pradesh, East Madhya Pradesh, Gujarat Region; Saurashtra & Kutch; Konkan & Goa; Madhya Maharashtra,Marathwada, Vidarbha and Chhattisgarh. The weekly cumulative figures of actual rainfall in India during the Southwest monsoon season of 2022 for Central India was higher than the weekly cumulative figures of normal rainfall after the 1st week of July. The weekly cumulative figures of actual rainfall was recorded 0.5 mm during the 1st week of June, 2022 while it was recorded 1154.0 mm during the 4th week of September, 2022. The highest weekly rainfall was recorded during the 2nd week of July, 2022 as 163.8 mm.



v. Figure-4 shows the actual and normal cumulative rainfall on weekly basis in South Peninsula during the Southwest monsoon season of 2022. The South

Peninsula region covers Andaman & Nicobar Islands; Coastal Andhra Pradesh & Yanam; Telangana, Rayalaseema; Tamil Nadu, Puducherry & Karaikal; Coastal Karnataka, North Interior Karnataka, South Interior Karnataka; Kerala & Mahe and Lakshadweep. The weekly cumulative figures of actual rainfall in India during the Southwest monsoon season of 2022 for South Peninsula was higher than the weekly cumulative figures of normal rainfall for most of the period except 2nd to 5th week of June, 2022. The weekly cumulative figures of actual rainfall was recorded 3.8 mm during the 1st week of June, 2022 while it was recorded 860.7 mm during the 4th week of September, 2022. The highest weekly rainfall was recorded during the 2nd week of July, 2022 as 117.0 mm.



vi. Figure-5 shows the actual and normal cumulative rainfall on weekly basis in East & North East India during the Southwest monsoon season of 2022. The East & Northeast India region covers Arunachal Pradesh; Assam & Meghalaya; Nagaland, Manipur, Mizoram & Tripura (NMMT); Sub-Himalayan West Bengal & Sikkim (SHWB & Sikkim); Gangetic West Bengal, Jharkhand and Bihar.The weekly cumulative figures of actual rainfall in India during the Southwest monsoon season of 2022 for East & North East India was lower than the weekly cumulative figures of normal rainfall for most of the period except 3rd to 5th week of June and 1st week of July, 2022. The weekly cumulative figures of actual rainfall was recorded 4.1 mm during the 1st week of June, 2022 while it was recorded 1118.0 mm during the 4th week of September, 2022. The highest weekly rainfall was recorded during the 4th week of June, 2022 as 150.0 mm.

1.4 Water Resources Potential

i. The water resources potential of the country which occurs as natural run-off in the rivers is 1999.20 BCM as per the estimates of Central Water Commission (CWC), taking both surface and ground water into account. The estimated utilizable surface water resources of the country as per the reassessment of water availability in India using space inputs-2019 are 690.10 BCM. The annual ground water recharge as per ground water resources assessment, 2022 is 437.60 BCM. In this manner, the total annual utilizable water resources are 1127.70 BCM.

Table T4: Water Resources Potential in River Basins of India

(BCM)

Sl. No.	River Basin	Catchment Area (Sq.km)	Average Water Resources Potential	Utilisable Surface Water Resources
1	2	3	4	5
1	Indus (up to Border)	3,17,708	45.53*	46.00
2	Ganga- Brahmaputra-Meghna			
	a) Ganga	8,38,803	509.52	250.00
	b) Brahmaputra	1,93,252	527.28	24.00
	c) Barak & others	86,335	86.67	-
3	Godavari	3,12,150	117.74	76.30
4	Krishna	2,59,439	89.04	58.00
5	Cauvery	85,167	27.67	19.00
6	Subarnarekha	26,804	15.05	6.80
7	Brahamani & Baitarni	53,902	35.65	18.30
8	Mahanadi	1,44,905	73.00	50.00
9	Pennar	54,905	11.02	6.90
10	Mahi	39,566	14.96	3.10
11	Sabarmati	31,901	12.96	1.90
12	Narmada	96,660	58.21	34.50
13	Tapi	65,805.80	26.24	14.50
14	West Flowing Rivers from Tapi to Tadri	58,360	118.35	11.90
15	West Flowing Rivers from Tadri to Kanyakumari	54,231	119.06	24.30
16	East Flowing Rivers between Mahanadi & Pennar	82,073	26.41	13.10
17	East Flowing Rivers between Pennar and Kanyakumari	1,01,657	26.74	16.50
18	West Flowing Rivers of Kutch and Saurashtra including Luni	1,92,112	26.93	15.00
19	Area of Inland drainage in Rajasthan	1,44,836	-----	N.A
20	Minor River Draining into Myanmar (Burma) & Bangladesh	31,382	31.17	N.A
Total		**32,71,953****	**1999.20**	**690.10**

Source: BPMO, Central Water Commission, M/o Jal Shakti

Note: '*':The average water resources potential of the Indus basin has been computed considering Ravi, Beas, Sutlej and Ghaggar rivers i.e. East flowing rivers only, as per the Indus Water Treaty, 1960. The utilisable surface water resources for Indus basin is reported as 46 BCM as per the report of the Standing Sub Committee, August, 2000 for the whole basin consisting East flowing and West flowing rivers, as mentioned in the Indus Water Treaty, 1960.

'**': Excluding area of Indus above border, Lakshadweep Island and Andaman and Nicobar group of islands.

ii. Table T4 presents river basin-wise catchment area, average water resources potential and utilisable surface water resources. Of the major rivers, the river basin Ganga-Brahmaputra-Meghna is the largest in respect of catchment area of more

than 11 Lakh Sq. km. The other river basins with a catchment area of more than 1.5 Lakh Sq. km are: Indus, Godavari, Krishna and West Flowing Rivers of Kutch and Saurashtra including Luni. The Table shows that the River Basin Ganga-Brahmaputra-Meghna has an average water resources potential of 1123.47 BCM out of total 1999.20 BCM in the country. So far, as utilisable surface water resources is concerned, the proportion of utilisable surface water resources to average water resources potential is very high in smaller basins except in West Flowing River basins from Tapi to Tadri and Tadri to Kanyakumari, Sabarmati and Mahi. The proportion of utilisable surface water resources to average water resources potential is found to be minimum in Brahmaputra sub-basin. The average water resources potential and utilisable surface water resources in river basins of India with average water resources potential more than 50 BCM, are given in Table T5.

iii. The Basin-wise distribution of Catchment Area has been presented in Figure-6.

Figure-6: Basin-wise Distribution of Catchment Area

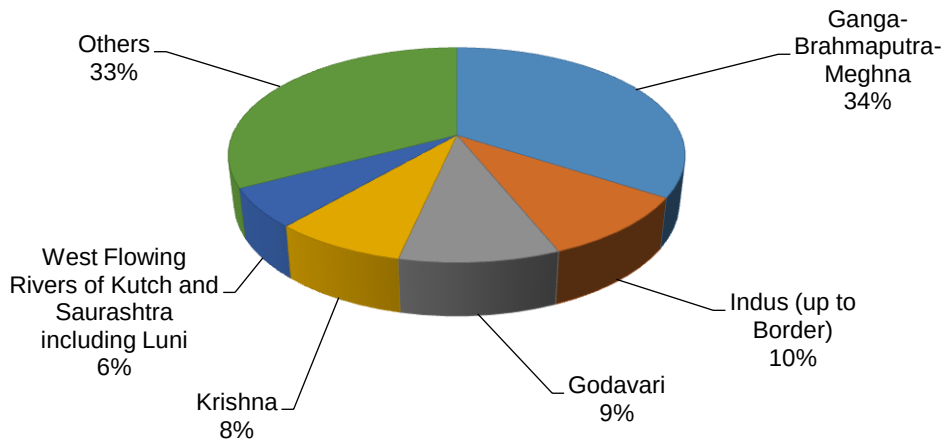


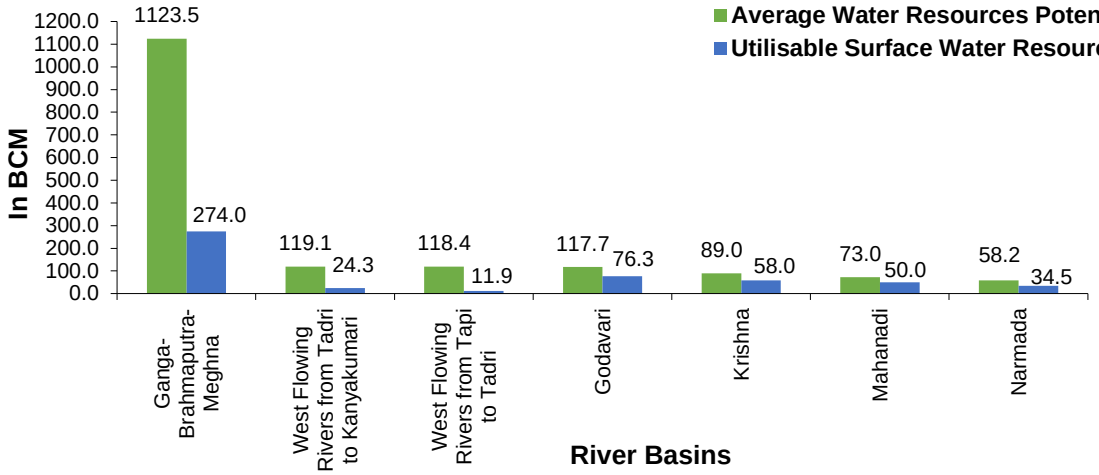
Table T5: Average Water Resources Potential and Utilisable Surface Water Resources in River Basins with Average Water Resources Potential more than 50 BCM

River Basin	Average Water Resources Potential (BCM)	Utilisable Surface Water Resources (BCM)
1	2	3
Ganga-Brahmaputra- Meghna	1123.47	274.00
West Flowing Rivers from Tadri to Kanyakumari	119.06	24.30
West Flowing Rivers from Tapi to Tadri	118.35	11.90
Godavari	117.74	76.30
Krishna	89.04	58.00
Mahanadi	73.00	50.00
Narmada	58.21	34.50

Source: B.P. Directorate, CWC, M/o Jal Shakti

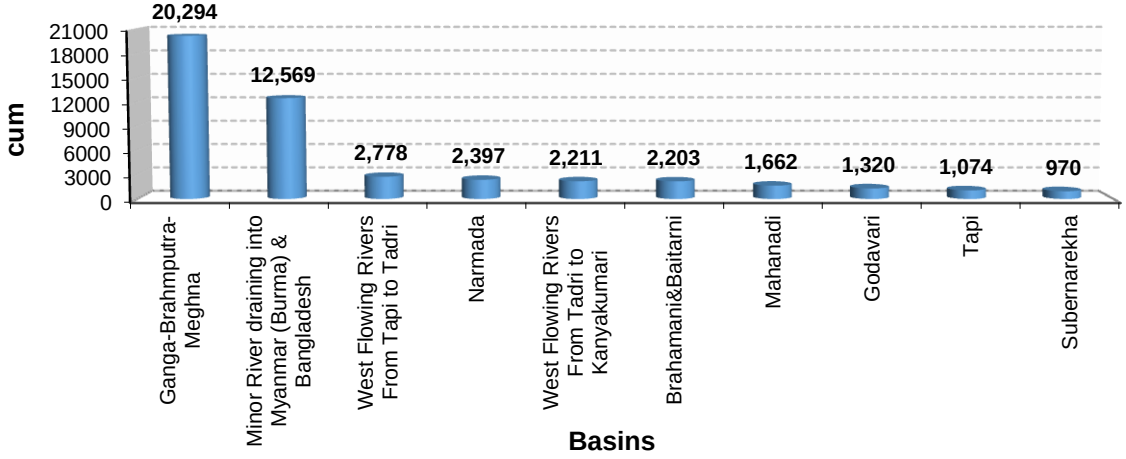
iv. It is observed that the River Basin of Ganga-Brahmaputra-Meghna is covering 34% of the total catchment area in the country and is the major contributor to total water resources potential of the country. Its share is 56% in total average water resources potential (1999.20 BCM) and also is the major contributor in the context of utilisable surface water resources (about 40% of 690.10 BCM). The average water resources potential and utilisable surface water resources in River Basins of India with Average Water Resources Potential more than 50 BCM, has been presented in Figure-7 below:

Figure-7: Average Water Resources Potential and Utilisable Surface Water Resources of River Basins in India



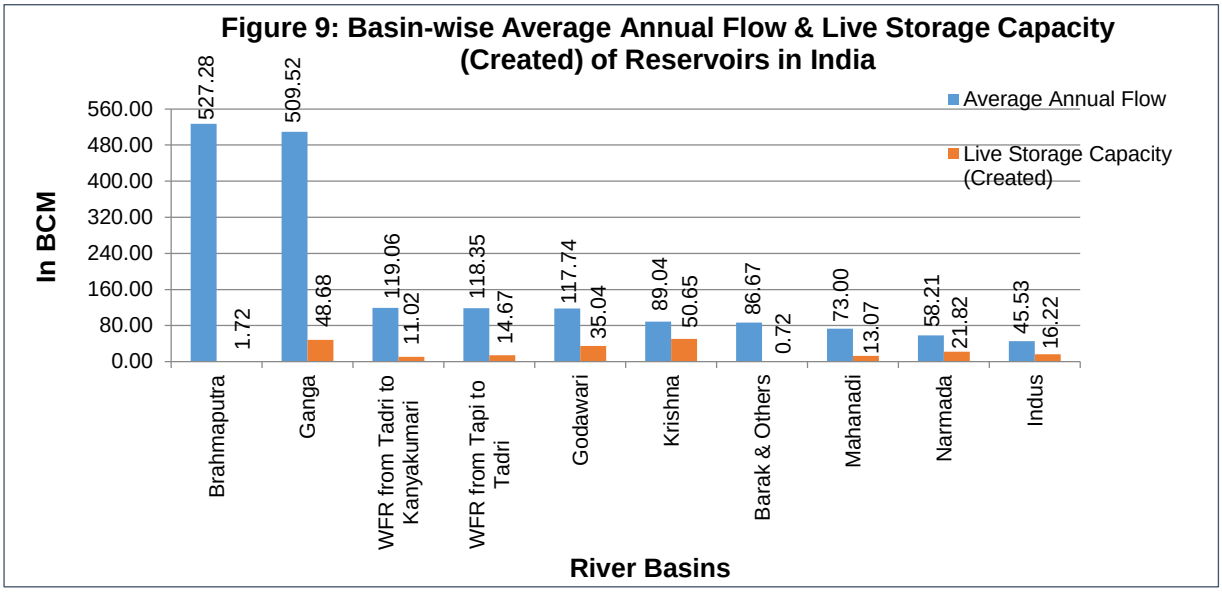
v. The per capita average water availability in the country will be 1219 cum in the year 2050 against 1434 cum during 2025. Per capita average water availability of less than 1700 cum is termed as a 'water-stressed condition' while if per capita average water availability falls below 1000 cum it is termed as a 'water scarcity condition'. As per estimated per capita average water availability during 2025, Mahanadi and Tapi basins fall under the 'water-stressed condition' whereas Subernarekha, Krishna, Mahi, Sabarmati, West Flowing Rivers of Kutch and Saurashtra including Luni, Pennar, East Flowing Rivers between Mahanadi and Pennar, Indus (up to border), Cauvery, East Flowing Rivers between Pennar and Kanyakumari are the basins, which fall under the 'water scarcity condition' (Appendix Table 1.1). The estimated per capita average water availability (cum) in different River Basins during 2025 is given in Figure-8 below:

Figure-8: Estimated Per Capita Average Water Availability (cum) in Different River Basins during 2025



1.5 Surface Storage

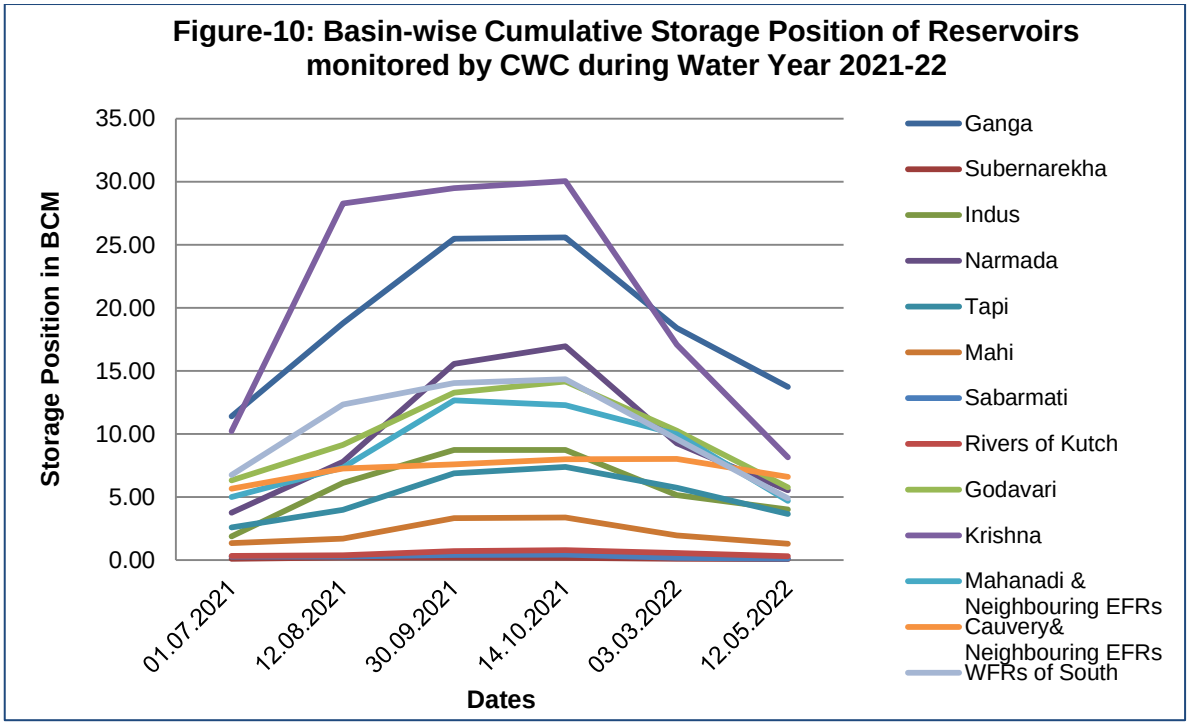
i. A total live storage capacity of about 257.81 BCM has been created in the country due to Major & Medium irrigation projects since their completion. The projects under construction will contribute to an additional 46.77 BCM. Thus, likely live storage (created) will be 304.58 BCM once the projects under construction are completed against the total water availability of 1999.20 BCM in the river basins of the country. Basin-wise average annual flow and live storage capacity (created) of Reservoirs in India, are represented in Figure-9 below:



ii. The maximum live storage capacity (created) lies in the Krishna Basin (50.65 BCM) followed by Ganga (48.68 BCM), Godavari (35.04 BCM) and Narmada (21.82 BCM). Krishna (56.89%) is the leading basin in terms of live storage capacities (created) as a percentage of average annual flow. The live storage capacities (created) as a percentage of average annual flow exceed 30% for Narmada (37.48%), Indus (35.63%), Tapi (34.82%), Mahi (33.54%) and Cauvery (32.83%) basins while for Ganga and Brahmaputra sub-basins the corresponding figures are 9.55% and 0.33% respectively (Appendix Table 1.2).

iii. Maharashtra, Madhya Pradesh, Karnataka, the State of erstwhile Andhra Pradesh, Odisha and Gujarat together account for 68.9% of total live storage capacity (potential) in the country (Appendix Table 1.3).

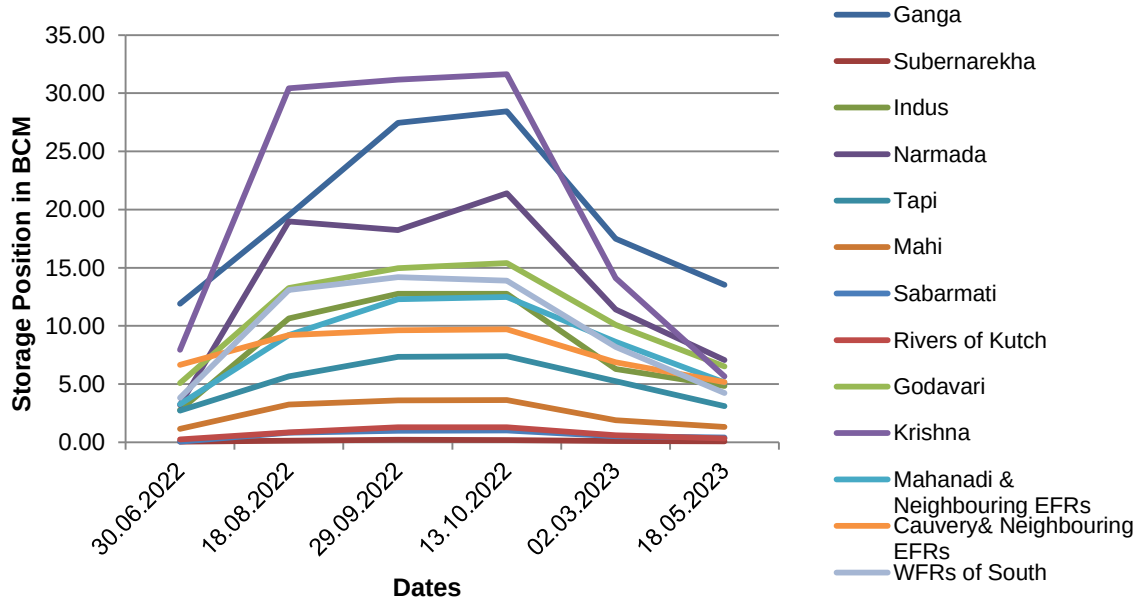
iv. The Basin-wise cumulative storage position in respect of the Reservoirs of India monitored by CWC as on the selected dates during the Water year 2021-22 and 2022-23 are given in Appendix Tables 1.4 (a) and 1.4 (b) respectively and are presented in Figures-10 and 11 respectively, as given below:



iv. The basin-wise cumulative storage position of the reservoirs of India monitored by CWC, reflects the highest cumulative storage position as on 14th October, 2021, for most of the river basins. The total cumulative storage across all basins was lowest as on 1st July, 2021 at 55.61 BCM. It then increased significantly, peaking at 142.23 BCM as on 14th October, 2021 after the monsoon season. The Krishna basin had its highest cumulative storage, reaching 30.06 BCM as on 14th October, 2021. The Ganga basin also had very high cumulative storage, peaking at 25.57 BCM as on the same date.

v. The Krishna, Ganga, Narmada, West Flowing Rivers of South basins, Godavari, Mahanadi & Neighbouring East Flowing River basins had cumulative storage exceeding 10 BCM at their peaks. The Rivers of Kutch, Sabarmati and Subernarekha basins had the lowest cumulative storage, not exceeding 1 BCM even at their peaks. The cumulative storage in most of the basins increased steadily from July to September/October as the monsoon progressed and then declined.

Figure-11: Basin-wise Cumulative Storage Position of Reservoirs monitored by CWC during Water Year 2022-23



vi. The basin-wise cumulative storage position of the reservoirs of India monitored by CWC, reflects the highest cumulative storage position as on 13th October, 2022 for most of the river basins. The total cumulative storage across all basins was lowest as on 30th June, 2022 at 48.95 BCM. It then increased significantly, peaking at 159.28 BCM as on 13th October, 2022 after the monsoon season. The Krishna basin had the highest cumulative storage, reaching 31.65 BCM as on 13th October, 2022. The Ganga and Narmada basins also had very high cumulative storage, peaking at 28.44 BCM and 21.41 BCM respectively, as on the same date.

vii. The Krishna, Ganga, Narmada, Godavari, West Flowing Rivers of South basins, Indus, Mahanadi & Neighbouring East Flowing River basins had cumulative storage exceeding 10 BCM at their peaks. The Subernarekha river basin had the lowest cumulative storage, not exceeding 1 BCM even at its peak. Overall, the data shows the seasonal nature of water storage, with levels rising during the monsoon and falling thereafter. The cumulative storage in most basins increased steadily from July to September/October as the monsoon progressed and then declined.

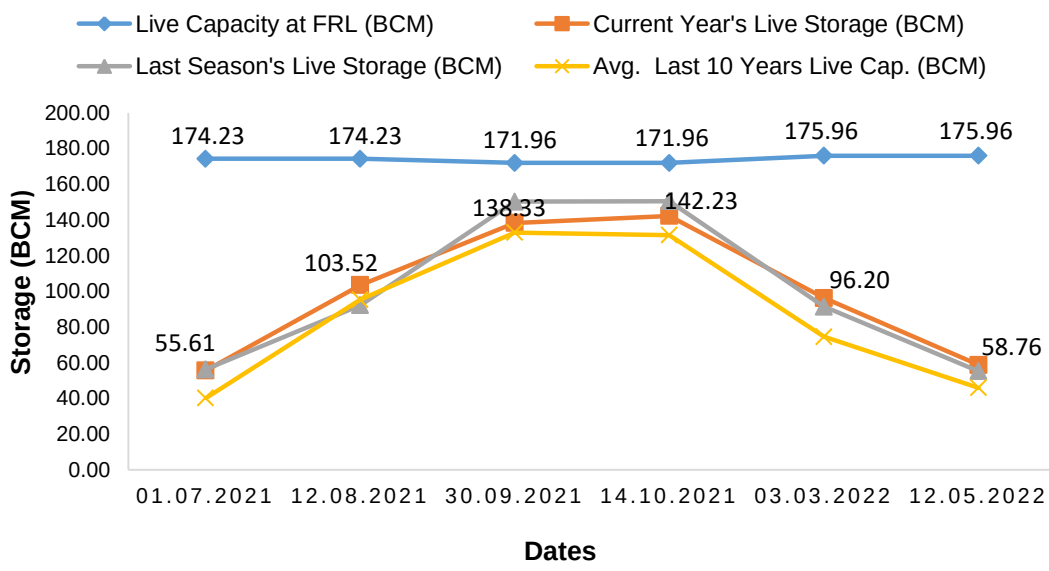
viii. Central Water Commission is monitoring live storage status of 146 reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday which can be accessed through the 'Reservoir level and storage bulletin' under 'water Info' at the website of CWC (https://cwc.gov.in/reservoir-level-storage-bulletin). Out of these reservoirs, 18 reservoirs are of hydro-electric projects having total live storage capacity of 34.960 BCM.

ix. The total live storage capacity of 146 reservoirs is 178.185 BCM which is about 69.11% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated 18.05.2023, live storage available in these reservoirs is 57.438 BCM, which is 32% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 57.674 BCM and the average of last 10 years live storage was 46.477 BCM. Thus, the live storage available in 146 reservoirs as per 18.05.2023 Bulletin is 99.6% of the live storage of corresponding period of last year and 124% of storage of average of last ten years.

x. Region/State/Reservoir-wise yearly storage position of the important reservoirs of India during the last week of March for the FY 2018-19 to 2022-23, is presented in Appendix Table 1.4(c). Also, Region/State-wise yearly storage position of the important reservoirs of India during the last week of March for the FY 2019-20 to 2022-23, is presented in Appendix Table 1.4 (d).

xi. The storage position of the important reservoirs in India monitored by CWC, as on the above mentioned dates during the Water year 2021-22 and 2022-23 are given in Appendix Tables 1.4 (e) and 1.4 (f) respectively and are presented in Figures-12 and 13 respectively, as given below:

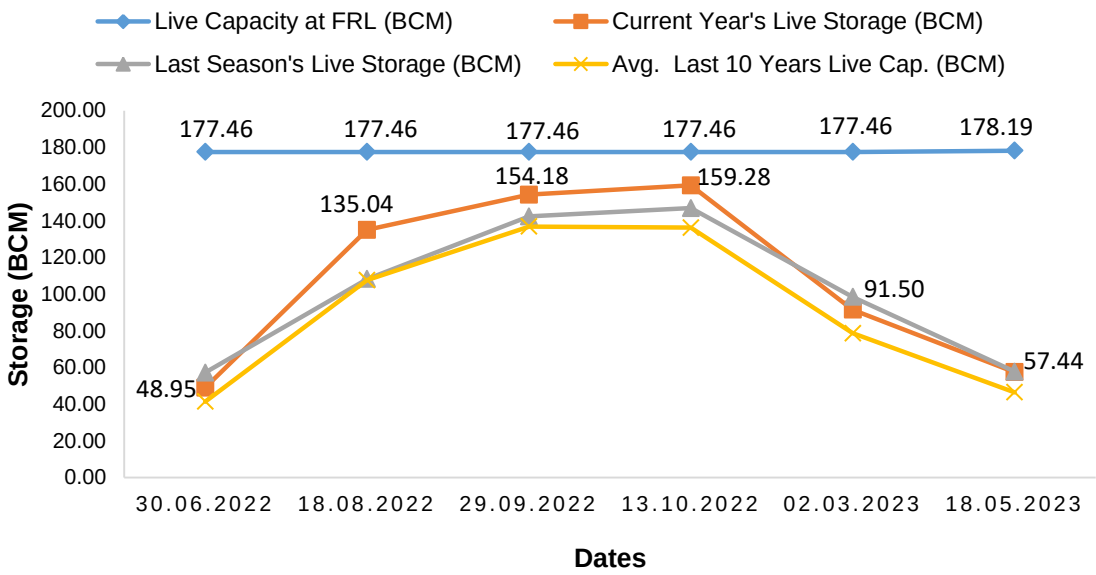
Figure-12: Storage Position of the Important Reservoirs of India monitored by CWC during Water Year 2021-22



xii. The total live storage capacity of the reservoirs was 174.23 BCM as of 1st July, 2021, decreasing to 171.96 BCM by 14th October, 2021 and then increased to 175.96 BCM by 3rd March, 2022 which remained constant by 12th May, 2022 (175.96 BCM). The cumulative storage levels were lowest at the start of the monsoon season as on 1st

July, 2021 at 55.61 BCM. They then increased significantly, peaking at 142.23 BCM as on 14th October, 2021. The cumulative storage levels declined to 58.76 BCM as on 12th May, 2022. Current year's storage levels were higher than the 10-year average for the same period. The data shows the seasonal nature of water storage in India, with levels rising during the monsoon season and falling after that.

Figure-13: Storage Position of the Important Reservoirs of India monitored by CWC during Water Year 2022-23



xiii. The total live storage capacity of the reservoirs was 177.46 BCM as of 30th June, 2022, which remained constant as 177.46 BCM by 2nd March, 2023 and then increased to 178.19 BCM by 18th May, 2023. The cumulative storage levels were lowest at the start of the monsoon season as on 30th June, 2022 at 48.95 BCM. They then increased significantly, peaking at 159.28 BCM as on 13th October, 2022. The cumulative storage levels declined to 57.44 BCM as on 18th May, 2023. Current year's storage levels were higher than the 10-year average for the same period. The data shows the seasonal nature of water storage in India, with levels rising during the monsoon season and falling after that.

1.6 Hydrological Network of CWC

CWC maintains 1728 Hydro-meteorological Observation sites across the country for collection of hydrological data on water level and discharge observations including silt measurements and snow-melt run-off for assessment of the water resources for planning and its optimal utilisation for comprehensive and sustainable development. Out of 1728 total Hydrological Observation sites, 81 are exclusively Meteorological sites. State-wise, Basin-wise, State/Basin-wise and Basin/State-wise details of Hydro-meteorological observations sites of CWC are given in the Appendix Tables 1.5 (a), 1.5 (b), 1.5 (c) and 1.5 (d) respectively.

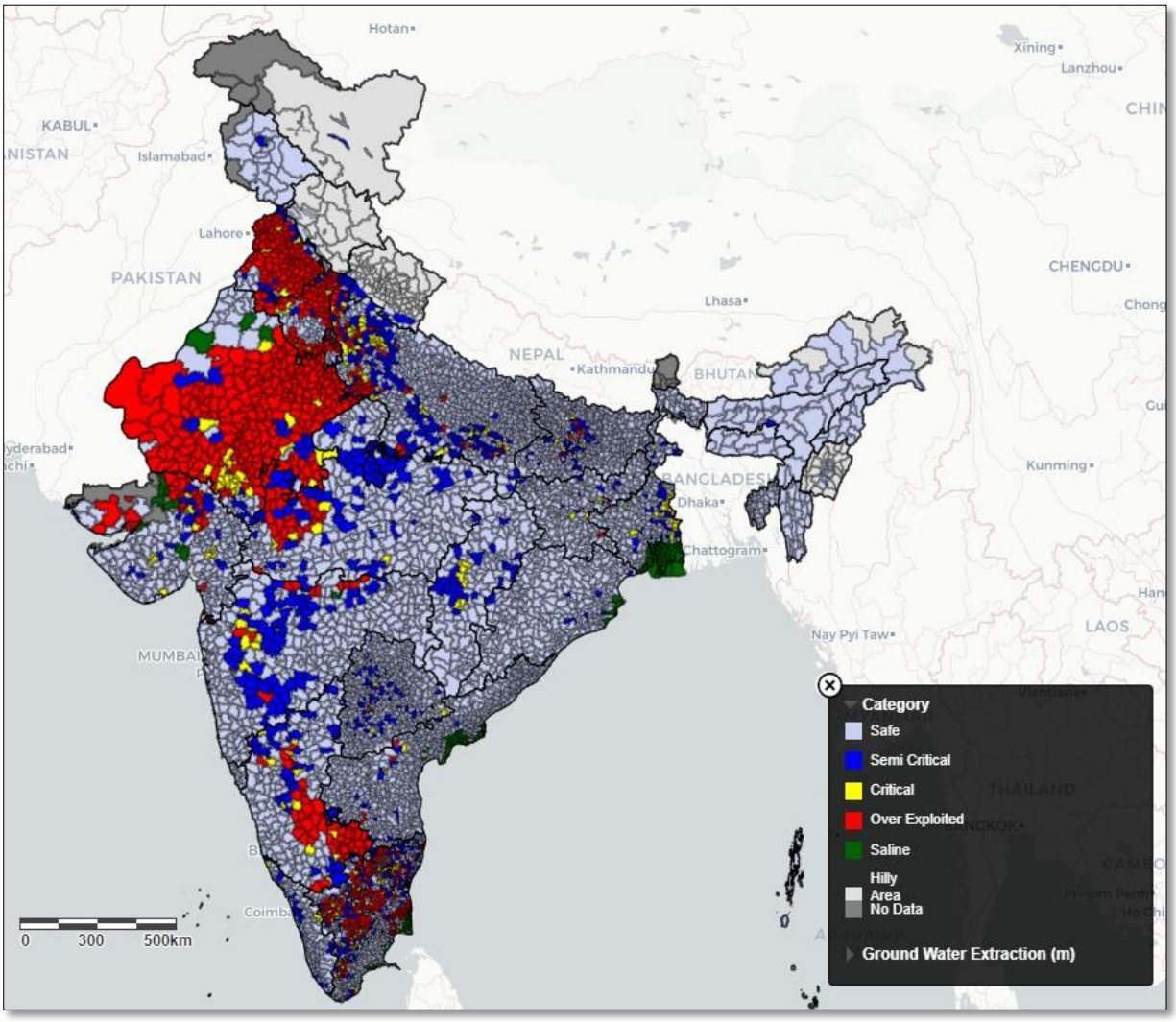
1.7 Dynamic Ground Water Resources

i. Ground water resources get replenished through rainfall and other sources like return flow from irrigation, canal seepage, recharge from water bodies, water conservation structures etc. Various components of ground water recharge and

discharge are required to be quantified for proper management of ground water resources.

ii. Assessment of Dynamic Ground Water Resources of each State/UT is being carried out jointly by Central Ground Water Board (CGWB) and State Nodal/Ground Water Department periodically as per the Ground Water Resource Estimation Committee-2015 (GEC-2015) methodology under the guidance of the respective State/UT Level Committees (SLCs) and overall supervision of Central Level Expert Group (CLEG). As part of the assessment, 'Annual Extractable Ground Water Resource' as well as 'Annual Ground Water Extraction' are assessed for each assessment unit (block/taluka/mandal/tehsils/firka etc.). The 'Stage of Ground Water Extraction' is then computed as the ratio of 'Annual Ground Water Extraction' with respect to 'Annual Extractable Ground Water Resource' and is usually expressed in percentage. Based on the stage of extraction, the assessment units are categorized as Safe (<= 70 %), Semi-Critical (>70 % and <=90 %), Critical (>90 % and <=100%) and Over-Exploited (>100 %). GW Resource Assessment -2022 (GWRA-2022, latest) has been carried out through a software/web-based application "India-ground water resource estimation system (in-gres)" developed by CGWB through IIT Hyderabad.

Map 1: Categorization of States as per Ground Water Resources Assessment (2022)



Source: Central Ground Water Board, D/o Water Resources, RD & GR, M/o Jal Shakti (https://cgwb.gov.in/sites/default/files/inline-files/2022-11-11-gwra_2022_1_compressed.pdf)

iii. As per the 2022 assessment of Dynamic Ground Water Resources, the Total Annual Ground Water Recharge for the entire country has been assessed as 437.60 BCM and Total natural discharges works out to be 36.85 BCM. Hence, Annual Extractable Ground Water Resources for the entire country is 398.08 BCM. The Total Annual Ground Water Extraction has been estimated as 239.16 BCM. About 87 % of total annual ground water extraction i.e. 208.49 BCM is for irrigation use. Only 30.69 BCM is for Domestic & Industrial use, which is about 13% of the total extraction. The overall stage of ground water extraction in the country is 60.08% (Appendix Table 1.6).

iv. Ground Water Assessment units are categorized as safe, semi-critical, critical and over exploited based on the stage of ground water extraction. Out of the total 7089 assessment units (Blocks/Talukas/Mandals/Districts/Firkas/Valleys), 1006 have been categorized as 'Over-exploited', 260 as 'Critical', 885 as 'Semi-critical', and 4780 units as 'Safe'. There are 158 assessment units, which are categorized 'saline' based on predominant ground water quality. Majority of the over-exploited assessment units are located in the north-western part of India (Map 1).

v. The stage of ground water extraction is very high in the States of Haryana, Punjab, Rajasthan, Dadra & Nagar Haveli and Daman & Diu where it is more than 100%, which implies that in these states the annual ground water consumption is more than annual extractable ground water resources. In the States of Delhi, Tamil Nadu, Uttar Pradesh, Karnataka and UTs of Chandigarh, Lakshadweep and Puducherry, the stage of ground water extraction is between 60-100%. In rest of the States, the stage of ground water extraction is below 60%.

vi. A summary of the classification of ground water assessment units based on stage of Ground Water Extraction for the year 2022 is presented below in Table T6. However, classification of area units based on % of ground water extraction for the year 2022 in different States of the country is given in Table T7. State-wise detailed table is given in Appendix Table 1.7.

Table T6: Dynamic Ground Water Resources and Categorisation of Assessment Units as per the Assessment done for the year 2022

Total Annual Ground Water Recharge	437.60 BCM
Annual Extractable Ground Water Resources	398.08 BCM
Annual Ground Water Extraction	239.16 BCM
Stage of Ground Water Extraction	60.08 %
Categorisation of Assessment units	
Total number of Ground Water Assessment Units	7089
Number of Assessments classified as '*Safe*'	4780 (67%)
Number of Assessments classified as '*Semi-critical'*	885(13%)
Number of Assessments classified as *'Critical'*	260 (4%)
Number of Assessments classified as *'Over-exploited'*	1006 (14%)
Number of Assessments classified as *'Saline'*	158 (2%)

Source: Central Ground Water Board, D/o Water Resources, RD & GR, M/o Jal Shakti (as per the latest availability of data)

Table T7: Classification of Area Units Based on % of Ground Water Extraction (2022)					
% of units	Safe	Semi-critical	Critical	Over-exploited	Salinity Affected
1	2	3	4	5	6
90 and above	Andhra Pradesh, Arunachal Pradesh, Assam, Goa, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Jammu and Kashmir, Andaman and Nicobar Islands, Odisha, Jharkhand	Chandigarh		Dadra & Nagar Haveli and Daman & Diu	
75 to 89	Bihar, Chhattisgarh, Gujarat, Kerala, Uttarakhand, Telangana, Maharashtra, Ladakh, Lakshadweep			Punjab	
40 to 74	Madhya Pradesh, West Bengal, Uttar Pradesh, Karnataka, Tamil Nadu, Puducherry			Delhi, Rajasthan, Haryana	
20 to 39	Haryana	Delhi, Uttar Pradesh, Uttarakhand, Tamil Nadu, Lakshadweep	Delhi, Puducherry	Karnataka, Tamil Nadu	Puducherry
5 to 19	Delhi, Punjab, Rajasthan	Bihar, Chhattisgarh, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Telangana, Rajasthan, West Bengal, Gujarat, Punjab, Jammu & Kashmir, Ladakh	Haryana, Karnataka, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal	Gujarat, Madhya Pradesh, Uttar Pradesh	Andhra Pradesh, Gujarat, West Bengal

Contd…

Table T7: Classification of Area Units Based on % of Ground Water Extraction (2022)					
% of units	Safe	Semi-critical	Critical	Over-exploited	Salinity Affected
1	2	3	4	5	6
1 to 4		Andhra Pradesh, Assam, Jharkhand, Odisha,	Punjab, Telangana, Madhya Pradesh, Maharashtra, Andhra Pradesh, Kerala, Gujarat, Bihar, Jharkhand, Chhattisgarh	Andhra Pradesh, Maharashtra, Bihar, Jharkhand, Telangana	Odisha, Rajasthan, Tamil Nadu, Maharashtra, Andaman & Nicobar Islands

Source: Central Ground Water Board, D/o Water Resources, RD & GR, M/o Jal Shakti (as per the latest availability of data)

1.8 Ground Water Exploration

i. Ground Water Exploration aided by drilling is an important activity of Central Ground Water Board (CGWB). It is aimed at delineation of aquifers in different hydro-geological setups and determination of their hydraulic parameters. The exploratory drilling operations have enabled demarcation of aquifers both in lateral and vertical extensions and evaluation of various aquifer parameters and assessment of their yield potential in various hydro-geological settings. These studies have helped in identifying areas worthy for future ground water development.

ii. For exploration of ground water, CGWB has drilled various types of bore holes in the country. The types of bore holes drilled are Exploratory Well (EW), Observation Well (OW), Piezometers (PZ), Slim Hole (SH) and Deposit Well (DW). CGWB has drilled a total of 44,925 boreholes of various types in different parts of the country till 31st March, 2022. The statement showing State-wise distribution of bore holes drilled till 31st March, 2022 in the country is presented in Table T8 as given below:

Table T8: Status of Cumulative Boreholes Drilled till 2021-22 in States & UTs												
Sl. No.	States/UTs	EW	OW	PZ	Total	EW	OW	PZ	SH	DW	Total	Total (I+II)
		(I) Through Outsourcing (Contractual)				(II) Through Departmental Rigs						
1	2	3	4	5	6	7	8	9	10	11	12	13
A. States												
1	Andhra Pradesh	456	122	0	578	924	425	307	9	4	1669	2247
2	Arunachal Pradesh	0	0	0	0	46	10	0	1	1	58	58
3	Assam	17	20	0	37	455	214	65	16	42	792	829

Contd…

Table T8: Status of Cumulative Boreholes Drilled till 2021-22 in States & UTs												
Sl. No.	States/UTs	EW	OW	PZ	Total	EW	OW	PZ	SH	DW	Total	Total (I+II)
		(I) Through Outsourcing (Contractual)				(II) Through Departmental Rigs						
1	2	3	4	5	6	7	8	9	10	11	12	13
4	Bihar	151	39	0	190	322	195	75	10	514	1116	1306
5	Chhattisgarh	414	15	105	534	886	285	161	0	28	1360	1894
6	Goa	13	1	0	14	58	18	14	0	31	121	135
7	Gujarat	392	116	0	508	1176	546	501	27	255	2505	3013
8	Haryana	75	55	80	210	410	273	239	23	170	1115	1325
9	Himachal Pradesh	0	0	0	0	272	49	10	1	0	332	332
10	Jammu & Kashmir	21	0	0	21	501	124	37	8	114	784	805
11	Jharkhand	275	28	0	303	496	249	49	4	71	869	1172
12	Karnataka	804	146	0	950	1631	738	369	7	5	2750	3700
13	Kerala	10	0	0	10	613	213	231	16	13	1086	1096
14	Madhya Pradesh	725	57	80	862	1433	747	176	8	149	2513	3375
15	Maharashtra	92	2	88	182	1792	571	167	2	166	2698	2880
16	Manipur	0	0	0	0	29	14	1	0	2	46	46
17	Meghalaya	0	0	0	0	120	40	2	2	8	172	172
18	Mizoram	0	0	0	0	3	3	0	0	0	6	6
19	Nagaland	0	0	0	0	15	6	1	0	3	25	25
20	Odisha	575	40	67	682	1751	441	151	21	191	2555	3237
21	Punjab	121	105	0	226	232	215	113	20	14	594	820
22	Rajasthan	809	195	0	1004	1488	558	573	93	591	3303	4307
23	Sikkim	0	0	0	0	31	9	0	0	0	40	40
24	Tamil Nadu	425	206	179	810	1427	451	331	13	93	2315	3125
25	Tripura	0	0	0	0	64	31	1	5	22	123	123
26	Telangana	373	78	0	451	796	534	534	5	27	1896	2347
27	Uttarakhand	28	12	0	40	75	7	3	1	129	215	255
28	Uttar Pradesh	694	274	0	968	1132	768	210	40	501	2651	3619
29	West Bengal	263	80	100	443	602	306	177	12	82	1179	1622
Total (A)		**6733**	**1591**	**699**	**9023**	**18780**	**8040**	**4498**	**344**	**3226**	**34888**	**43911**
B. Union Territories												
1	Andaman & Nicobar	0	0	0	0	46	13	0	1	0	60	60
2	Chandigarh	0	0	0	0	9	17	14	2	15	57	57

Contd…

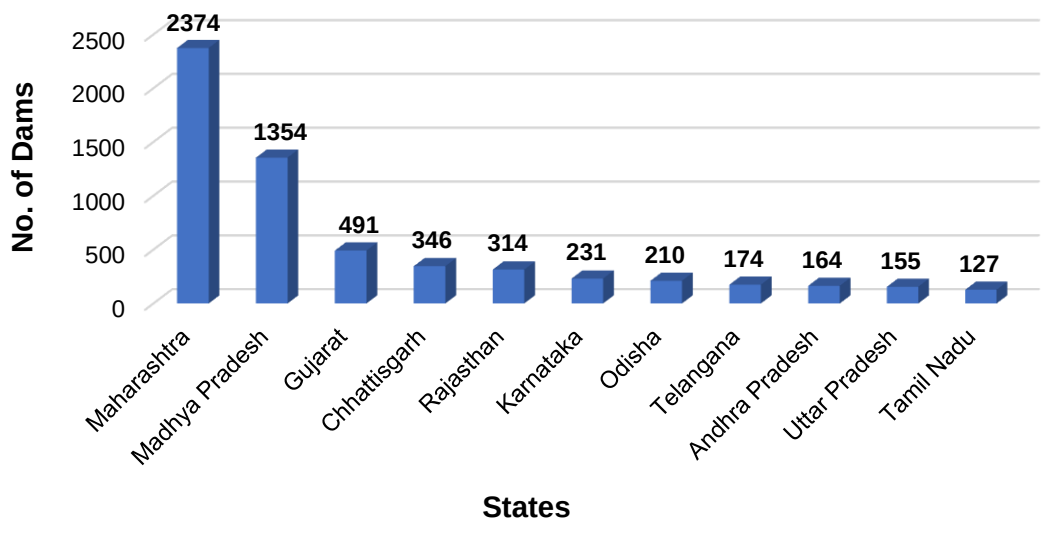
Table T8: Status of Cumulative Boreholes Drilled till 2021-22 in States & UTs												
Sl. No.	States/UTs	EW	OW	PZ	Total	EW	OW	PZ	SH	DW	Total	Total (I+II)
		(I) Through Outsourcing (Contractual)				(II) Through Departmental Rigs						
1	2	3	4	5	6	7	8	9	10	11	12	13
3	Dadra & Nagar Haveli	0	0	0	0	14	1	0	0	0	15	15
4	Delhi	0	0	0	0	149	64	192	13	380	798	798
5	Daman & Diu	0	0	0	0	0	0	7	0	0	7	7
6	Puducherry	0	0	0	0	30	20	8	5	14	77	77
Total (B)		**0**	**0**	**0**	**0**	**248**	**115**	**221**	**21**	**409**	**1014**	**1014**
Grand Total (A+B)		**6733**	**1591**	**699**	**9023**	**19028**	**8155**	**4719**	**365**	**3635**	**35902**	**44925**

Source: Central Ground Water Board, D/o Water Resources, RD & GR, M/o Jal Shakti (as per the latest availability of data)

1.9 Dams Scenario

i. Central Water Commission maintains the National Register of Large Dams (NRLD). The State-wise distribution of number of dams as per NRLD-2023 is presented in Appendix Table 1.8. It reveals that there are 6281 dams in the country out of which 6138 are completed. The maximum number of dams completed in the country is in Maharashtra (2333) followed by Madhya Pradesh (1354). The number of dams under construction is the highest in Maharashtra (41) followed by Andhra Pradesh and Jharkhand (24).

Figure-14: Distribution of Large Dams



ii. International Commission on Large Dams (ICOLD) Specification:

(i). A large dam is classified as one with a maximum height of more than 15 m from its deepest foundation to the crest.

(ii) A dam between 10 and 15 m in height from its deepest foundation is also included in the classification of a large dam provided it complies with one of the following conditions:

a) length of the crest of the dam is not less than 500 m or

b) the capacity of the reservoir formed by the dam is not less than one MCM or

c) the maximum flood discharge dealt with by the dam is not less than 2000 cubic metres per second or

d) the dam has specially difficult foundation problems, or

e) the dam is of unusual design

iii. The distribution of dams by time period is given in Table T9. It indicates that the maximum number of dams in India was completed during the decades 1981-90 (1189) and 1971-80 (1163).

Table T9: Break-up of Number of Completed Large Dams by Time Period as per NRLD-2023

Up to 1900	1901-1950	1951-1960	1961-1970	1971-1980	1981-1990	1991-2000	2001-2010	2011-2020	2021 & Beyond	Year of Construction not available	Total
70	271	230	459	1163	1189	718	892	681	61	547	6281

Source: Dam Safety Monitoring Directorate, CWC, M/o Jal Shakti

1.10 Land Use Statistics

i. In irrigation accounts the maximum utilisation of water, is pertinent to look at the irrigation statistics vis-à-vis availability of land in the country and its use especially in relation to water use. As per the Land use statistics available from the Ministry of Agriculture and Farmers Welfare at the national level, during 2021-22, about 22% area of the country is under forest cover and Net Sown Area is about 42.89% of the total geographic area. Barren and unculturable waste land amount to about 5.02% and about 8.39% is under non-agricultural uses like houses, industries etc.

ii. Over the period 2011-12 to 2021-22, the Forest Area moderately increased to 72,000 Th. Ha in 2021-22 while it was 71,618 Th. Ha in 2011-12. Total Cultivable Area moderately decreased to 154262 Th. Ha in 2021-22 while it was 155451 Th. Ha in 2011-12. The Gross Irrigated Area was increasing over the said period except for year 2015-16. The percentage of Gross Irrigated Area over Gross Cropped Area/Gross Area Sown has improved from 47% in 2011-12 to about 55% in 2021-22.

Table 10: Land Use and Irrigation Statistics-All India (Th. Ha)

Year	Geo-graphical Area	Forests	Net Area Sown (NSA)	Total Cultivable Land (TCA)	Gross Area Sown (GSA)	Gross Irrigated Area (GIA)	Net Irrigated Area (NIA)
1	2	3	4	5	6	7	8
2011-12	328726	71618	140792	155451	195546	91931	66009
2012-13	328726	71590	139746	155185	194455	92780	66589
2013-14	328726	71848	141238	155542	201300	96270	68419
2014-15	328726	72071	139445	154520	198285	97846	68582
2015-16	328726	72137	138974	154685	198122	97754	67772
2016-17	328726	72295	139000	154298	201158	99620	69270
2017-18	328726	72334	138770	153759	200876	101467	70164
2018-19	328726	72295	138439	153653	201179	104711	72244
2019-20	328747	71751	139901	153671	211359	112443	75469
2020-21	328747	71980	141544	154530	216107	118934	77729
2021-22	328747	72000	141007	154262	219158	120380	77916

Source: 'Land Use Statistics at a Glance 2011-12 to 2021-22', Economics Statistics & Evaluation Division, D/o Agriculture & Farmers Welfare, M/o Agriculture & Farmers Welfare (as per the latest availability of data)

1.11 Irrigated Area under Principal Crops

i. To have an idea about the quantum of water used for irrigation it is important to know the irrigated area under different crops as the requirement of water varies from crop to crop. The gross irrigated area for a few selected crops has been presented in the following Table T11. It shows that gross irrigated area during 2021-22 was about 120.38 Mha.

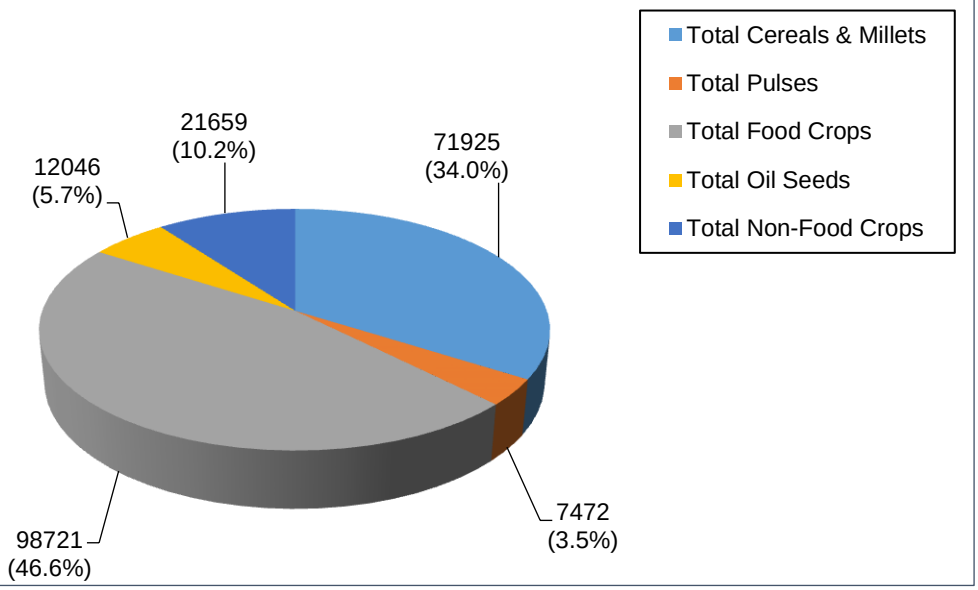
Table T11: Total Gross Irrigated Area for Crops - All India (Th. Ha)

Crop/Year	Rice	Wheat	Total Cereals & Millets	Total Pulses	Total Food Crops	Total Oilseeds	Cotton	Total Non-Food Crops	Total Gross Irrigated Area
1	2	3	4	5	6	7	8	9	10
2011-12	25579	27748	57802	3849	75970	7733	4252	15961	91931
2012-13	25006	28282	57796	4172	76010	8283	4171	16769	92780
2013-14	26519	29149	60394	4765	79446	8347	4010	16824	96270
2014-15	26614	30261	61457	4345	80539	7867	4484	17307	97846
2015-16	26204	29290	59978	4471	80158	8271	4132	17597	97754
2016-17	27067	30402	62040	5074	82357	8401	3972	17263	99620
2017-18	27721	29525	61864	6561	83855	8325	4537	17613	101467
2018-19	28599	30181	62997	6515	85855	8985	4853	18855	104711
2019-20	31265	34012	70445	6100	93286	9348	4977	19156	112443
2020-21	33634	33902	73105	7297	98276	10432	5024	20658	118934
2021-22	33718	33171	71925	7472	98721	12046	4605	21659	120380

Source: 'Land Use Statistics at a Glance 2011-12 to 2021-22', Economics Statistics & Evaluation Division, D/o Agriculture & Farmers Welfare, M/o Agriculture & FW (as per the latest availability of data)

ii. Among the cereals, it is observed that irrigated area under rice varied between 25579 to 33718 Th. Ha during the period 2011-12 to 2021-22. The irrigated area under wheat varies from 27748 to 33171 Th. Ha during the same period. The crop-wise irrigated area during 2021-22 is presented in the following Figure-15. It is observed that the maximum contribution is from Food crops (46.6%), followed by Cereals & Millets (34.0%).

Figure-15: Crop-wise Irrigated Area during 2021-22 (in Th. Ha)



1.12 Sources of Irrigation and Area Irrigated

i. The main sources of irrigation in the country are canals, tanks and wells including tube-wells. These data are available from two sources. Ministry of Agriculture collects and compiles data on irrigated area by source at various levels - District/State/Country.

ii. The erstwhile Planning Commission also collected data on Irrigation Potential Created (IPC) and Utilised (IPU) for major and medium irrigation projects. For Minor Irrigation schemes, D/o Water Resources, RD&GR, Ministry of Jal Shakti conducts a census on regular interval. These censuses provide IPC and IPU by source of irrigation. So far, six Censuses have been conducted with reference years 1986-87, 1993-94, 2000-01, 2006-07, 2013-14 & 2017-18 respectively. The All India and State wise reports of 6th MI Census with reference year 2017-18 were released in August, 2023 and is available on the website of the D/o Water Resources, RD & GR, M/o Jal Shakti.

iii. Analysing the data relating to net area irrigated by source for the year 2021-22, it is observed that the major source of irrigation is ground water. It was found that wells provided about 60.46% irrigation followed by canals with 24.67% at all India level during 2021-22.

Table T12: Source-wise Net Irrigated Area in India

(in Th. Ha)

Year	Canal	Tank	Wells	Other Sources	Total (All Sources)
1	2	3	4	5	6
2011-12	16120	2007	40455	7426	66009
2012-13	15789	1842	41224	7734	66589
2013-14	16395	1932	42358	7734	68419
2014-15	16274	1883	42600	7826	68582
2015-16	15497	1874	42886	7515	67772
2016-17	16817	1793	42932	7727	69270
2017-18	16914	1813	43948	7489	70164
2018-19	17611	1747	44947	7938	72244
2019-20	18543	2013	46496	8416	75469
2020-21	18600	2190	47327	9612	77729
2021-22	19218	2205	47105	9387	77916

Source: 'Land Use Statistics at a Glance 2011-12 to 2021-22', Economics Statistics & Evaluation Division, D/o Agriculture & Farmers Welfare, M/o Agriculture & FW (as per the latest availability of data)

1.13 INDIA – WRIS

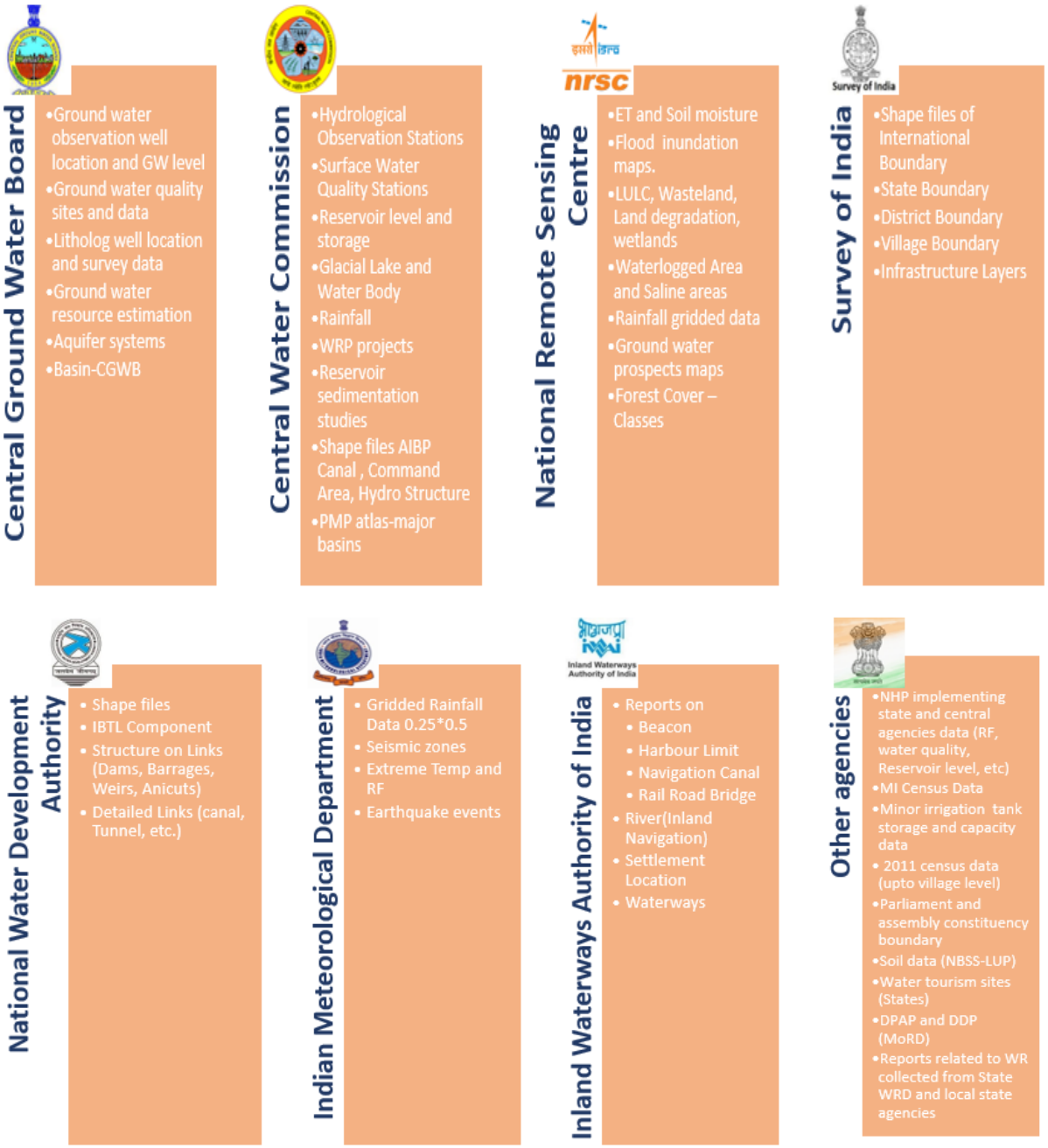
i. India-WRIS portal (https://indiawris.gov.in/wris/) launched on 10th December, 2009, provides a single window solution for all water resources data and information in a standardized national GIS framework. It allows users to Search, Access, Visualize, Understand and Analyze comprehensive and contextual water data for the assessment, monitoring, planning and development of water resources in the context of Integrated Water Resources Management (IWRM). The data collection, collation and presenting it into the portal are continuous activities. These data have been collected from various Central organisations like CWC, CGWB, IMD, NRSC, SOI, NWDA etc. and State WRD, Irrigation Department, Electricity Boards etc.

ii. India-WRIS is managed by the National Water Informatics Centre (NWIC), a subordinate office of Ministry of Jal Shakti which has been created upon Cabinet approval by the Ministry of Water Resources, River Development and Ganga Rejuvenation (now Jal Shakti) vide notification of 28th March, 2018 to be a repository of updated nation-wide water resources data and allied themes. NWIC's mandate also is to provide value added products and services to all stake holders for its management and sustainable development.

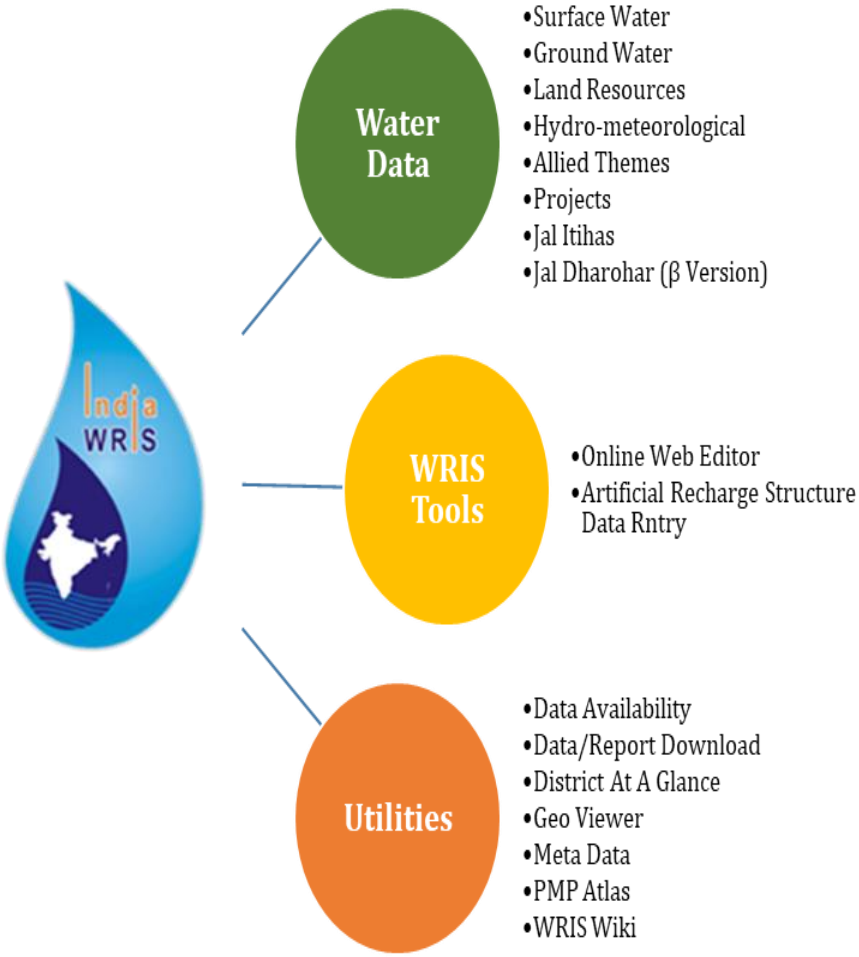
iii. India- WRIS has 37 major themes of information acts as a data dissemination platform for hosting static, dynamic, and semi-dynamic water resources under 150+ GIS layers for the entire country through various modules tailored to meet users' requirements. The main layers developed under India-WRIS are Basin, Sub Basin, Watershed, River, water-body, urban-rural population extents, Dams, Barrage/weir/anicut, canals and command boundaries, water heritage sites, etc. All unclassified data of CWC's HO stations and CGWB ground water data are available in the portal for free download. The information system has dedicated Sub-Info systems for various components of surface water, ground water, hydro-meteorological, Land resources, Allied Themes, Projects, Jal Dharohar, Jal Itihas

and others. Apart from the spatial layers, information is also available in textual and image format in India - WRIS Wiki which is a platform to link non-spatial information with spatial layers.

1.13.1 Data Availability in India-WRIS

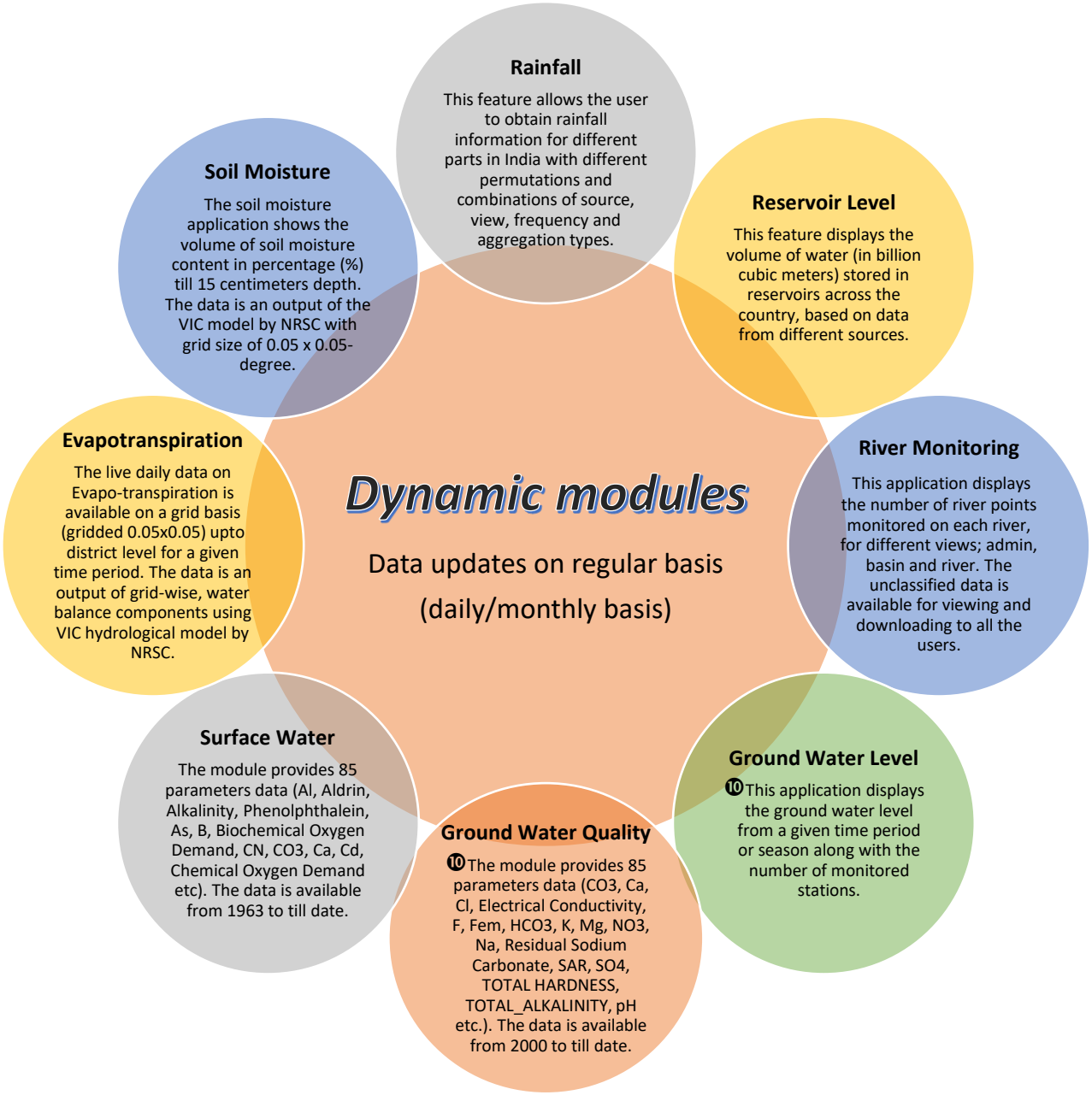


1.13.2 India-WRIS modules: 37 Modules & 07 Utilities



1.13.3 Classification of Modules

1.13.3.1 Dynamic Modules:



1.13.3.2 Semi Dynamic Modules:

In Semi-Dynamic modules, the information gets updated in a periodic manner or regular interval of time (1-5 years), based on the data type and it's availability.

Water Resources Projects:
The Water Resources Projects module provides information on irrigation, hydro-power and multi-purpose projects in India. User can view and get information of a large database related to Dam, Barrage / Weir / Anicut, Lift stations, Reservoir, Major & Medium Irrigation Projects, Extension Renovation and Modernization (ERM) projects, Hydro-Electric projects, along with vast associated attributes .

Artificial Recharge Structure-Viewer:
The ARS-Viewer module is a data dissemination platform built with a focus to ease the information access of large database pertaining to artificial recharge structures in a structured manner. The user can view/download the data through map or in the form of tables

Groundwater Resource Estimation:
The module provides ground water resources assessment results as per Ground water estimation committee 1997(GEC-97) carried out jointly by Central Ground Water Board and State Ground Water Departments for the years 2011, 2013, 2017, and 2020.

Snow-Glacial Lake:
Snow cover/glacier lakes module provides facility for visualization and analysis of satellite data derived information pertaining to snow cover extent, glacial lakes & water bodies of the Indian Himalayan regions of Indian River basins namely, Indus, Ganga and Brahmaputra. .

LULC:
This module contains outcome of the National level land use/land cover mapping taken up as a part of NNRMS-DOS programme with the objective of National level LULC mapping on 1:250 K scale using multi-temporal AWiFS datasets to provide on annual basis, sown area for different cropping seasons and integrated LULC map at the end of each year (starting from 2004-05).

Inter-Basin Transfer Links:
This module contains a geo-database which has been prepared from detailed map sheets of NWDA. This module provides visualization of all the proposed Inter basin water transfer links.

Minor irrigation Census:
The Minor irrigation Census module of India-WRIS comprises First MI (1986-87) to Fifth MI (2013-14) census to depict an overall view throughout the country. The First MI Census to the Fourth MI Census provides data at the state level, while the Fifth MI Census provides data at the village level.

Storm Surge Study (2011):
The module helps in getting a first-hand idea of the coastal vulnerability which will be a preliminary help of any coastal developmental activities.

Inland Navigation Waterways:
This module provides information of 6 navigation waterways of India namely, NW-1, NW-2, NW-3, NW-4, NW-5 & NW-16.

Wasteland Study:
This module provides the results of the spatial extent mapping of the distribution of Wasteland for the entire country under 12 sub-classes is available for 2 cycles (2008-09 & 2015-16)

Wetlands:
This module offers visualization and the statistics of wetlands based on the user based unit selection.It provides the spatial extent & comparison of wetland and its sub categories for pre-monsoon and post-monsoon for two cycles of assessment (1994 and 2005).

Land Degradation (2015-16):
The data is contains country level information of the areas under various forms of land degradation processes, it's type and severity mapped for the year 2015-16.

Jal-Itihas:
This module provides information about 75 selected Indian water heritage sites older than 100 years. This data has been made available by National Water Mission.

Jal Dharohar:
This module contains information of national database of 1st Water Body Census received from Minor Irrigation Statistics Wings of M/o Jal Shakti.

Forest/ Tree Cover:
The data contains information of the distribution of the nation's forest and tree cover collected from different agencies (Tree cover data of Forest Survey of India (FSI) & forest type data of NRSC.

Reservoir Sedimentation studies: This module offers the result of sediment study done using remote sensing method and hydrographic survey in different reservoirs spread across India.

1.13.3.3 Static Modules

Static modules contain information resulting from a particular project/study and hence its frequency of updation is not certain.

Exploration Details/Litholog: This module offers bore locations with litholog and static water level data. The information of major lithology of aquifer in different zones (encountered / tapped) are also provided.

Aquifer 2D (2013): This module offers the area statistics of the entire country classified into 14 Principal Aquifer Systems and 42 Major Aquifers and their spatial variation.

Surface Water Bodies: Surface Water Bodies module offers the visualization of mapped water bodies across nation. The landing page offers a nationwide summary of the number of waterbodies in mentioned area classes.

River Information: This module offers various hydrological boundaries by different agencies. Basin, subbasin and watershed boundary along with river.

Socio-Economic Census (2011): The module compiles information on the hierarchy of Administrative boundaries along with settlement information for urban and rural sets.

Flood Inundation (2008-10): This contains the flood inundated satellite derived images for three years viz., 2008, 2009 and 2010 generated under "Disaster Management Programme" of National Remote Sensing Centre.

Drought Affected Areas (2002): The Drought Module provides the information on two main themes i.e. Areas under Drought Prone Development and Desertification Development & Tribal Sub-Plan Areas in the Country.

Reported Extreme Temperature, Rainfall & Earthquake Events: The Extreme Events module provides information of all destructing events caused due to water in its various forms and seismic activity.

Groundwater Prospects Study (2011): Ground Water Prospects map provides information regarding potential areas in terms of ground water availability (both quantity and quality).

Agro-Climatic / Ecological Region: This module shows the division of various agro-climatic and agro-ecological regions.

Soil Type: This sub info system displays soil layer for entire country. It represents variation of soils in terms of texture, depth, slope, erosion and productivity.

Water Logging/Soil Salinity (2003-05): This module contains the statistics of area of waterlogging and soil salinity under major and medium commands in different State's India along with chart view.

1.13.3.4 WRIS Tools

i. **Online Web Editor**

This module has been designed to provide a platform for the state agencies to further update the water resources information of their state through a secured login final dissemination at India-WRIS platform.

ii. **Artificial Recharge Structure-Data Entry**

The ARS Data Entry module facilitates user agencies/ Nodal departments (Central/ State/ UT's/ Other) to populate the information pertaining to all the existing artificial recharge structures constructed under various schemes through authorized user login and the information collected is disseminated to public through India-WRIS web portal.

1.13.3.5 Utilities

i. **PMP Atlas**

The PMP module is based on the PMP Atlas of River Basin prepared by CWC. This module enables user to compute PMP for an area between 25 to 20,000 sq km, generate Storm Isoheytal Map &compute 1-Day, 2-Day & 3-Day Maximum Rainfall for an area of interest. The Atlas also covers very useful information such as patterns of key storms along with their synoptic situations, rainfall statistics at various stations and for various river basins, temporal distribution patterns of rainfall etc. that shall be very useful even for carrying the detailed storm analysis for a project.

ii. **Geo Viewer**

Geo-viewer enables geographic visualization that deals solely with displaying information that has a geospatial component to it. It is a common window to most of the spatial layers to be seen altogether so as to get a whole picture of the data collected.

iii. **District at a Glance**

District information system provides district-wise water resources information at a glance.

iv. **Data Availability**

This module provides the availability of time series data of surface and ground water for both telemetry and manual stations as per State/Agency/Basin selection.

v. **Data/Report Download**

This module offers download of time series data for one year at a time for different water themes i.e. Ground water Level, River Monitoring stations Level and flow, Reservoir, Rainfall and Water Quality.

vi. **Meta Data**

Metadata module offers information about the different GIS layers, its source, citation and other details.

vii. **WRIS Wiki**

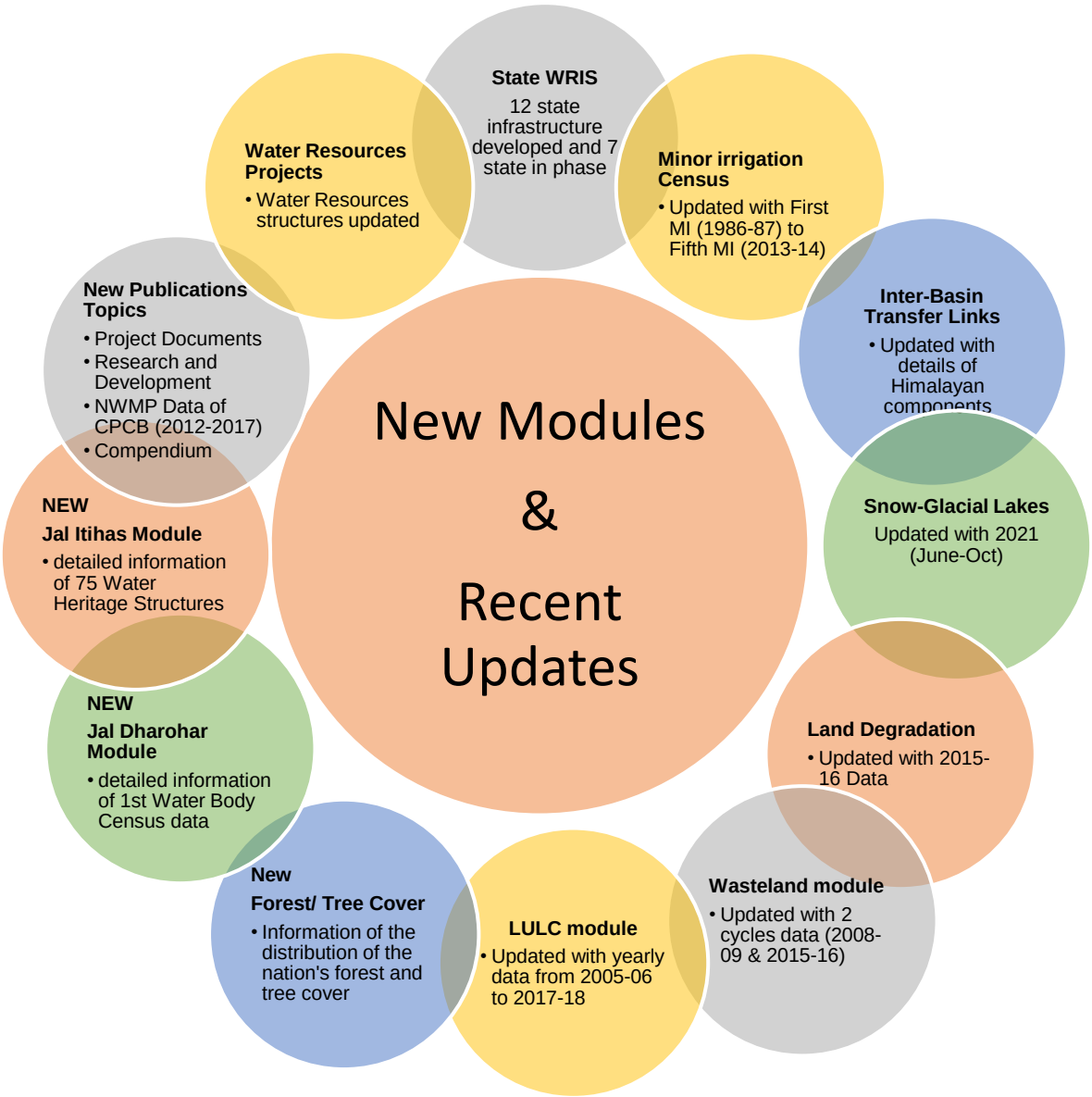
WRIS Wiki is a collaborative knowledge sharing web interface for exploring, sharing updated information regarding the various aspects of the water resources of the nation in textual format.

1.13.3.6 Publications

Various organizations working in the water and allied theme sector prepare and published their reports from time to time. These publications have been collected and placed under the publications section of India-WRIS along with the India-WRIS project documents and pre-generated maps for easy and handy access to the users.

i. Atlas
ii. Basin Reports
iii. Compendium
iv. Groundwater Year Books
v. Pre generated Maps
vi. Research and Development
vii. Project Documents
viii. Wasteland Distribution Atlas
ix. Water logging and Salinity Assessment Report
x. NWMP Data of CPCB (2012-2017)

1.13.4 Development of New Modules & Recent Updates in India-WRIS



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Appendix-1

Table 1.1: Per Capita Average Annual Availability of Water in India during 2025 & 2050

Sl. No.	River Basin	Average Water Resources Potential (BCM)$	Estimated Population (Million)#		Estimated per Capita Average Water Availability (cum)	
			2025	2050	2025	2050
1	2	3	4	5	6	7
1	Indus (up to Border)	45.53*	69.20	81.41	657.95	559.27
2	Ganga-Brahmaputra-Meghna					
	a) Ganga	509.52	593.04	697.69	859.17	730.30
	b) Brahmaputra	527.28	48.06	56.54	10971.29	9325.79
	c) Barak & others	86.67	10.24	12.05	8463.87	7192.53
3	Godavari	117.74	89.18	104.92	1320.25	1122.19
4	Krishna	89.04	100.41	118.13	886.76	753.75
5	Cauvery	27.67	48.39	56.93	571.81	486.04
6	Subernarekha	15.05	15.52	18.26	969.72	824.21
7	Brahamani & Baitarni	35.65	16.18	19.04	2203.34	1872.37
8	Mahanadi	73.00	43.93	51.68	1661.73	1412.54
9	Pennar	11.02	16.02	18.85	687.89	584.62
10	Mahi	14.96	17.34	20.40	862.75	733.33
11	Sabarmati	12.96	17.34	20.40	747.40	635.29
12	Narmada	58.21	24.28	28.56	2397.45	2038.17
13	Tapi	26.24	24.44	28.75	1073.65	912.70
14	West Flowing Rivers from Tapi to Tadri	118.35	42.61	50.13	2777.52	2360.86
15	West Flowing Rivers from Tadri to Kanyakumari	119.06	53.84	63.34	2211.37	1879.70
16	East Flowing Rivers between Mahanadi &Pennar	26.41	38.97	45.85	677.70	576.01
17	East Flowing Rivers between Pennar and Kanyakumari	26.74	74.32	87.43	359.80	305.84
18	West Flowing Rivers of Kutch and Saurashtra including Luni	26.93	36.50	42.94	737.81	627.15
19	Area of Inland drainage in Rajasthan	-	11.73	13.79	-	-
20	Minor River draining into Myanmar (Burma) & Bangladesh	31.17	2.48	2.91	12568.55	10711.34
Total		**1999.20**	**1394.02**	**1640.00**	**1434.13**	**1219.02**

Source: B.P. Directorate, CWC, M/o Jal Shakti

'$': Reassessment of Water Availability in India using Space Inputs, 2019, CWC;

'#': Report of the Standing Sub-Committee for assessment of availability and requirement of water for diverse uses in the country, August, 2000;

'*': The average water resources potential of the Indus basin has been computed considering Ravi, Beas, Sutlej and Ghaggar rivers only.

Table 1.2: Basin-wise Live Storage Capacity of Reservoirs

Sl. No	Basin Code	Basin Name	Average Annual Flow (BCM)	Live Storage Capacity Created as a % of Average Annual Flow =(Col6/Col4)*100	Total Live Storage Capacity (BCM)		
					Completed Projects	Under Construction Projects	Total
1	2	3	4	5	6	7	8
1	1	Indus	45.53*	35.63	16.22	0.10	16.32
2	2a	Ganga	509.52	9.55	48.68	7.65	56.33
3	2b	Brahmaputra	527.28	0.33	1.72	0.80	2.51
4	2c	Barak & others	86.67	0.83	0.72	9.17	9.89
5	3	Godawari	117.74	29.76	35.04	8.41	43.45
6	4	Krishna	89.04	56.89	50.65	4.16	54.81
7	5	Cauvery	27.67	32.83	9.08	0.02	9.10
8	6	Subernrekha	15.05	2.05	0.31	2.15	2.46
9	7	Brahmini & Baitrani	35.65	15.58	5.55	0.70	6.26
10	8	Mahanadi	73.00	17.90	13.07	1.46	14.53
11	9	Pennar	11.02	26.66	2.94	2.14	5.08
12	10	Mahi	14.96	33.54	5.02	0.15	5.17
13	11	Sabarmati	12.96	12.17	1.58	0.11	1.69
14	12	Narmada	58.21	37.48	21.82	2.64	24.46
15	13	Tapi	26.24	34.82	9.14	1.56	10.70
16	14	West Flowing Rivers (WFR) from Tapi to Tadri	118.35	12.39	14.67	2.43	17.10
17	15	West Flowing Rivers (WFR) from Tadri to Kanyakumari	119.06	9.26	11.02	1.42	12.44
18	16	East Flowing Rivers (EFR) between Mahanadi & Pennar	26.41	10.13	2.68	1.18	3.86
19	17	East Flowing Rivers (EFR) between Pennar & Kanyakumari	26.74	5.39	1.44	0.02	1.46
20	18	West Flowing Rivers (WFR) of Saurashtra and Kutch including Luni	26.93	23.53	6.34	0.51	6.85
21	19	Area of Inland drainage in Rajasthan	0.00	-	0.00	0.00	0.00
22	20	Minor Rivers draining into Myanmar and Bangladesh	31.17	0.46	0.14	0.00	0.14
23	20 a	Area of North Ladakh not draining into Indus	0.00	-	0.00	0.00	0.00
Total			**1999.20**	**12.90**	**257.81**	**46.77**	**304.58**

Source: WM Directorate, Central Water Commission, M/o Jal Shakti

Note: Reconciliation of Live Storage Capacities of Reservoirs is under process. The above figures are furnished/ made available to CWC as on 01.12.2017;

'*': The average water resources potential of the Indus basin has been computed considering Ravi, Beas, Sutlej and Ghaggar rivers only.

Table 1.3: State-wise Live Storage Capacity of Reservoirs

Sl. No.	States / UTs	Total Live Storage Capacity (BCM)
1	**2**	**3**
1	Andaman & Nicobar Islands	0.02
2	Arunachal Pradesh	0.00
3	Andhra Pradesh (Erstwhile)	28.72
4	Assam	0.01
5	Bihar	2.61
6	Chhattisgarh	6.74
7	Goa	0.29
8	Gujarat	22.55
9	Himachal Pradesh	13.79
10	Jammu & Kashmir	0.03
11	Jharkhand	2.44
12	Karnataka	31.90
13	Kerala	9.77
14	Maharashtra	37.36
15	Madhya Pradesh	33.08
16	Manipur	0.53
17	Meghalaya	0.48
18	Nagaland	1.22
19	Odisha	24.03
20	Punjab	2.40
21	Rajasthan	9.71
22	Sikkim	0.01
23	Tamil Nadu	7.86
24	Tripura	0.31
25	Uttrakhand	5.67
26	Uttar Pradesh	14.26
27	West Bengal	2.03
28	Mizoram	0.00
Total		**257.81**

Source: WM Directorate, Central Water Commission, D/o WR, RD&GR, M/o Jal Shakti
Note: Reconciliation of Live Storage Capacities of Reservoirs is under process.
The above figures are as furnished/made available to CWC as on 01.12.2017.

Table 1.4(a): Basin-wise Cumulative Storage Position in respect of the Reservoirs Monitored by CWC as on the selected dates during the Water year 2021-22

Sl. No.	Basin	Cumulative Storage Position in respect of the Reservoirs Monitored by CWC during the Water year 2021-22					
		As on 01.07.2021	As on 12.08.2021	As on 30.09.2021	As on 14.10.2021	As on 03.03.2022	As on 12.05.2022
1	Ganga	11.40	18.77	25.48	25.57	18.40	13.73
2	Subernarekha	0.09	0.20	0.19	0.17	0.10	0.08
3	Indus	1.88	6.12	8.73	8.72	5.15	4.00
4	Narmada	3.76	7.78	15.54	16.95	9.26	5.53
5	Tapi	2.58	3.98	6.87	7.39	5.73	3.66
6	Mahi	1.35	1.70	3.32	3.38	1.96	1.28
7	Sabarmati	0.28	0.28	0.42	0.43	0.16	0.10
8	Rivers of Kutch	0.33	0.38	0.72	0.78	0.55	0.30
9	Godavari	6.32	9.13	13.28	14.15	10.26	5.75
10	Krishna	10.22	28.27	29.49	30.06	17.07	8.13
11	Mahanadi & Neighbouring EFRs	4.99	7.34	12.67	12.29	9.97	4.70
12	Cauvery & Neighbouring EFRs	5.66	7.24	7.60	7.99	8.01	6.60
13	WFRs of South	6.75	12.33	14.03	14.35	9.58	4.89
Total		**55.61**	**103.52**	**138.33**	**142.23**	**96.20**	**58.76**

Source: WM Directorate, CWC, M/o Jal Shakti

Note: 'EFRs': East Flowing Rivers'; 'WFRs': West Flowing Rivers.

Table 1.4(b): Basin-wise Cumulative Storage Position in respect of the Reservoirs Monitored by CWC as on the selected dates during the Water year 2022-23

Sl. No.	Basin	Cumulative Storage Position in respect of the Reservoirs Monitored by CWC during the Water year 2022-23					
		As on 30.06.2022	As on 18.08.2022	As on 29.09.2022	As on 13.10.2022	As on 02.03.2023	As on 18.05.2023
1	Ganga	11.91	19.51	27.46	28.44	17.51	13.54
2	Subernarekha	0.07	0.13	0.21	0.19	0.10	0.07
3	Indus	2.78	10.65	12.76	12.76	6.31	4.85
4	Narmada	3.21	18.98	18.24	21.41	11.42	7.06
5	Tapi	2.72	5.67	7.35	7.39	5.24	3.11
6	Mahi	1.17	3.24	3.59	3.63	1.89	1.33
7	Sabarmati	0.06	0.82	1.00	1.02	0.53	0.40
8	Rivers of Kutch	0.25	0.86	1.30	1.29	0.59	0.33
9	Godavari	5.08	13.25	14.97	15.42	10.10	6.51
10	Krishna	7.96	30.42	31.18	31.65	14.10	5.68
11	Mahanadi & Neighbouring EFRs	3.26	9.20	12.31	12.49	8.65	5.15
12	Cauvery & Neighbouring EFRs	6.67	9.21	9.63	9.72	6.88	5.18
13	WFRs of South	3.83	13.09	14.19	13.90	8.19	4.24
Total		**48.95**	**135.04**	**154.18**	**159.28**	**91.50**	**57.44**

Source: WM Directorate, CWC, M/o Jal Shakti

Note: 'EFRs': East Flowing Rivers'; 'WFRs': West Flowing Rivers.

Table 1.4 (c): Region/State/Reservoir-wise Yearly Storage Position of Important Reservoirs of India during the last week of March for the FY 2018-19 to 2022-23

Sl. No.	Name of Reservoirs/ Region/ State-wise	2018-19 (as on 28.03.2019)			2019-20 (as on 26.03.2020)			2020-21 (as on 25.03.2021)			2021-22 (as on 24.03.2022)			2022-23 (as on 31.03.2023)		
		Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level(m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)
Northern Region																
Himachal Pradesh																
1	Gobind Sagar (Bhakra)	492.75	6.23	3.22	488.02	6.23	2.41	470.05	6.23	1.26	479.56	6.23	1.64	481.82	6.23	1.82
*2	Pong Dam (Beas)	408.19	6.16	2.69	413.96	6.16	3.64	396.41	6.16	1.09	402.77	6.16	1.73	405.41	6.16	2.12
*3	Kol Dam	-	-	-	641.57	0.09	0.08	636.79	0.09	0.01	640.99	0.09	0.07	640.74	0.09	0.07
Punjab																
4	Thein Dam	519.19	2.34	1.66	505.67	2.34	0.89	498.11	2.34	0.55	509.34	2.34	1.06	510.23	2.34	1.11
Rajasthan																
5	Mahi Bajaj Sagar	269.50	1.71	0.55	272.40	1.71	0.81	271.00	1.71	0.69	271.30	1.71	0.71	269.55	1.71	0.56
6	Jhakam	345.75	0.13	0.03	347.15	0.13	0.04	345.40	0.13	0.03	351.55	0.13	0.07	346.00	0.13	0.04
7	Rana Pratap Sagar	346.89	1.44	0.42	347.75	1.44	0.55	348.23	1.44	0.61	348.47	1.44	0.65	348.85	1.44	0.72
8	Bisalpur	-	-	-	314.07	1.08	0.82	311.33	1.08	0.43	310.98	1.08	0.39	313.84	1.08	0.77
9	Jawai Dam	-	-	-	-	-	-	-	-	-	295.35	0.19	0.02	305.41	0.19	0.06
10	Jaisamand	-	-	-	-	-	-	-	-	-	-	-	-	290.71	0.30	0.19
Eastern Region																
Jharkhand																
11	Tenughat	258.07	0.82	0.35	261.02	0.82	0.46	258.68	0.82	0.37	259.26	0.82	0.39	259.20	0.82	0.39
$12	Maithon	139.51	0.47	0.14	149.08	0.47	0.47	146.08	0.47	0.43	147.74	0.47	0.47	144.37	0.47	0.34
*$13	Panchet Hill	123.74	0.18	0.13	126.44	0.18	0.18	124.44	0.18	0.16	126.57	0.18	0.18	124.72	0.18	0.17
$14	Konar	419.95	0.18	0.08	424.76	0.18	0.16	422.51	0.18	0.12	422.97	0.18	0.13	422.36	0.18	0.12
$15	Tilaiya	364.17	0.14	0.01	365.68	0.14	0.05	364.95	0.14	0.03	365.06	0.14	0.03	364.91	0.14	0.03
*16	Getalsud	-	-	-	-	-	-	584.91	0.22	0.08	585.40	0.22	0.09	585.64	0.22	0.09

Contd…

Table 1.4 (c): Region/State/Reservoir-wise Yearly Storage Position of Important Reservoirs of India during the last week of March for the FY 2018-19 to 2022-23

Sl. No.	Name of Reservoirs/ Region/ State-wise	2018-19 (as on 28.03.2019)			2019-20 (as on 26.03.2020)			2020-21 (as on 25.03.2021)			2021-22 (as on 24.03.2022)			2022-23 (as on 31.03.2023)		
		Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level(m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)
Odisha																
17	Hirakud	188.11	5.38	2.60	190.20	5.38	3.69	187.30	5.38	2.22	189.21	5.38	3.14	187.68	5.38	2.39
*18	Balimela	453.91	2.68	1.42	454.00	2.68	1.44	449.76	2.68	0.92	449.58	2.68	0.90	445.53	2.68	0.51
19	Salanadi	73.52	0.56	0.30	74.45	0.56	0.32	69.90	0.56	0.22	75.80	0.56	0.36	72.08	0.56	0.26
20	Rengali	115.58	3.43	1.11	120.93	3.43	2.59	115.81	3.43	1.16	120.17	3.43	2.37	117.73	3.43	1.62
*21	Machkund (Jalaput)	832.58	0.89	0.48	833.40	0.89	0.53	832.91	0.89	0.50	825.64	0.89	0.17	831.92	0.89	0.45
22	Upper Kolab	851.56	0.94	0.39	853.43	0.94	0.53	848.34	0.94	0.20	848.54	0.94	0.21	851.52	0.94	0.39
23	Upper Indravati	634.66	1.46	0.72	636.39	1.46	0.88	634.38	1.46	0.70	630.88	1.46	0.41	634.67	1.46	0.72
24	Sapua	-	-	-	168.50	0.01	0.01	168.19	0.01	0.01	168.36	0.01	0.01	168.16	0.01	0.01
25	Hariharjhor	-	-	-	145.56	0.06	0.05	143.46	0.06	0.02	142.72	0.06	0.02	142.02	0.06	0.01
26	Mandira Dam	-	-	-	-	-	-	208.91	0.31	0.26	209.85	0.31	0.31	208.94	0.31	0.25
West Bengal																
27	Mayurakshi	110.69	0.48	0.09	116.25	0.48	0.26	113.78	0.48	0.17	115.37	0.48	0.22	112.56	0.48	0.14
28	Kangsabati	126.17	0.91	0.33	129.34	0.91	0.53	124.24	0.91	0.24	130.62	0.91	0.63	123.75	0.91	0.22
Tripura																
29	Gumti	88.95	0.31	0.12	87.30	0.31	0.07	91.10	0.31	0.20	88.90	0.31	0.12	89.60	0.31	0.14
Nagaland																
*30	Doyang Hep	-	-	-	307.90	0.54	0.18	312.85	0.54	0.24	308.95	0.54	0.19	307.90	0.54	0.18
Bihar																
31	Chandan Dam	-	-	-	-	-	-	-	-	-	147.40	0.14	0.08	137.04	0.14	0.03

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Table 1.4 (c): Region/State/Reservoir-wise Yearly Storage Position of Important Reservoirs of India during the last week of March for the FY 2018-19 to 2022-23

Sl. No.	Name of Reservoirs/ Region/ State-wise	2018-19 (as on 28.03.2019)			2019-20 (as on 26.03.2020)			2020-21 (as on 25.03.2021)			2021-22 (as on 24.03.2022)			2022-23 (as on 31.03.2023)		
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Western Region																
Gujarat																
32	Ukai	89.98	6.62	1.05	101.37	6.62	4.67	100.43	6.62	4.23	101.69	6.62	4.83	100.05	6.62	4.06
33	Sabarmati (Dharoi)	180.22	0.74	0.10	185.11	0.74	0.35	184.40	0.74	0.30	180.58	0.74	0.12	184.81	0.74	0.33
34	Kadana	121.39	1.47	0.63	122.91	1.47	0.75	123.12	1.47	0.76	122.12	1.47	0.68	120.93	1.47	0.59
35	Shetrunji	49.67	0.30	0.05	52.92	0.30	0.14	53.62	0.30	0.17	53.92	0.30	0.19	52.05	0.30	0.14
36	Bhadar	101.12	0.19	0.02	105.43	0.19	0.10	105.22	0.19	0.09	105.83	0.19	0.11	104.24	0.19	0.07
37	Damanga-nga	69.05	0.50	0.11	74.05	0.50	0.24	73.45	0.50	0.23	75.85	0.50	0.31	74.25	0.50	0.25
38	Dantiwada	167.79	0.40	0.03	165.64	0.40	0.01	168.93	0.40	0.04	168.60	0.40	0.03	174.87	0.40	0.13
39	Panam	123.70	0.70	0.33	124.60	0.70	0.38	122.25	0.70	0.27	120.85	0.70	0.21	119.90	0.70	0.18
40	Sardar Sarover	117.82	5.76	0.91	122.32	5.76	1.64	127.02	5.76	2.54	119.19	5.76	1.10	124.19	5.76	1.98
41	Karjan	105.79	0.52	0.28	106.52	0.52	0.30	108.78	0.52	0.34	110.70	0.52	0.39	108.90	0.52	0.34
42	Sukhi(Guj)	-	-	-	144.68	0.17	0.10	144.81	0.17	0.11	145.22	0.17	0.11	141.84	0.17	0.06
43	Watrak	-	-	-	134.22	0.15	0.09	132.22	0.15	0.05	128.36	0.15	0.01	133.20	0.15	0.07
44	Hathmati	-	-	-	178.19	0.15	0.06	177.94	0.15	0.06	173.25	0.15	0.01	178.34	0.15	0.07
45	Machchhu-I	-	-	-	131.23	0.07	0.03	129.91	0.07	0.02	130.71	0.07	0.02	128.73	0.07	0.01
46	Machchhu-II	-	-	-	56.43	0.09	0.07	55.56	0.09	0.06	56.11	0.09	0.06	54.52	0.09	0.04
47	Und-I	-	-	-	96.56	0.07	0.04	95.38	0.07	0.03	95.10	0.07	0.03	94.41	0.07	0.02
48	Brahmani (Guj)	-	-	-	62.77	0.07	0.03	62.21	0.07	0.03	58.88	0.07	0.01	61.20	0.07	0.02
Maharashtra																
49	Jayakwadi	455.43	2.17	0.00	462.02	2.17	1.50	461.83	2.17	1.43	461.99	2.17	1.48	461.57	2.17	1.35
	(Paithan)															
*50	Koyana	647.32	2.65	1.68	648.94	2.65	1.82	647.90	2.65	1.73	647.50	2.65	1.70	645.34	2.65	1.52

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51	Bhima (Ujjani)	489.98	1.52	0.00	494.39	1.52	0.78	494.69	1.52	0.86	495.32	1.52	1.04	493.18	1.52	0.47
52	Isapur	431.09	0.97	0.23	436.28	0.97	0.53	437.79	0.97	0.66	438.27	0.97	0.69	437.39	0.97	0.62
53	Mula	538.87	0.61	0.10	548.91	0.61	0.44	548.06	0.61	0.40	548.28	0.61	0.41	547.05	0.61	0.36
54	Yeldari	446.15	0.81	0.00	460.42	0.81	0.67	459.22	0.81	0.56	459.50	0.81	0.59	459.18	0.81	0.56
55	Girna	386.79	0.52	0.11	392.38	0.52	0.27	391.96	0.52	0.26	391.97	0.52	0.26	390.48	0.52	0.21
56	Khadakvasla	580.25	0.06	0.03	581.95	0.06	0.05	580.06	0.06	0.03	579.39	0.06	0.02	580.37	0.06	0.03
*57	Upper Vaitarna	598.03	0.33	0.17	598.15	0.33	0.17	599.75	0.33	0.21	598.90	0.33	0.19	599.98	0.33	0.22
58	Upper Tapi	210.34	0.26	0.08	212.51	0.26	0.17	211.69	0.26	0.13	212.56	0.26	0.17	212.39	0.26	0.17
59	Pench (Totladoh)	467.85	1.09	0.06	488.16	1.09	0.88	486.47	1.09	0.76	484.42	1.09	0.64	484.29	1.09	0.63
60	Upper Wardha	335.70	0.56	0.12	339.51	0.56	0.33	339.11	0.56	0.30	339.54	0.56	0.33	338.91	0.56	0.29
61	Bhatsa	119.13	0.94	0.43	126.00	0.94	0.56	123.90	0.94	0.52	125.00	0.94	0.54	121.90	0.94	0.48
62	Dhom	734.05	0.33	0.08	741.53	0.33	0.20	741.31	0.33	0.20	741.18	0.33	0.20	739.75	0.33	0.17
63	Dudhganga	630.96	0.66	0.26	633.06	0.66	0.39	634.62	0.66	0.34	636.43	0.66	0.39	628.79	0.66	0.22
64	Manikdoh	689.52	0.29	0.03	697.38	0.29	0.09	689.29	0.29	0.03	696.05	0.29	0.08	695.12	0.29	0.07
65	Bhandardara	718.64	0.30	0.05	741.90	0.30	0.25	739.62	0.30	0.21	740.20	0.30	0.22	742.02	0.30	0.25
66	Urmodi	-	-	-	693.41	0.27	0.23	692.59	0.27	0.22	692.41	0.27	0.22	689.46	0.27	0.18
67	Bhatghar	-	-	-	615.96	0.67	0.44	615.57	0.67	0.43	616.21	0.67	0.45	609.23	0.67	0.26
68	Nira Deoghar	-	-	-	658.10	0.33	0.21	654.40	0.33	0.17	656.05	0.33	0.19	654.90	0.33	0.18
*69	Thokarwadi	-	-	-	662.03	0.35	0.22	657.82	0.35	0.14	659.19	0.35	0.17	660.72	0.35	0.19
70	Kanher	-	-	-	682.37	0.27	0.14	680.95	0.27	0.12	683.25	0.27	0.15	680.16	0.27	0.11
*71	Mulshi	-	-	-	597.46	0.57	0.21	596.40	0.57	0.18	596.25	0.57	0.17	598.34	0.57	0.24
72	Surya	-	-	-	111.60	0.28	0.18	108.85	0.28	0.15	110.05	0.28	0.16	108.80	0.28	0.14
73	Tillari	-	-	-	104.50	0.45	0.32	101.94	0.45	0.28	105.28	0.45	0.33	98.28	0.45	0.24

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74	Dimbhe Dam	-	-	-	-	-	-	-	-	-	704.76	0.35	0.15	706.50	0.35	0.17
75	Veer Dam	-	-	-	-	-	-	-	-	-	576.47	0.27	0.17	576.47	0.27	0.17
76	Barvi Dam	-	-	-	-	-	-	-	-	-	66.44	0.34	0.19	65.11	0.34	0.17
77	Chaskaman	-	-	-	-	-	-	-	-	-	643.41	0.22	0.12	640.50	0.22	0.09
78	Pansheet (Tanaji Sagar)	-	-	-	-	-	-	-	-	-	-	-	-	623.56	0.30	0.14
79	Bhama Askhed	-	-	-	-	-	-	-	-	-	-	-	-	665.91	0.22	0.14
80	Darna Dam	-	-	-	-	-	-	-	-	-	-	-	-	568.90	0.20	0.13
Central Region																
Uttar Pradesh																
81	Matatila	303.34	0.71	0.18	301.14	0.71	0.06	303.73	0.71	0.21	304.50	0.71	0.26	304.70	0.71	0.28
*82	Rihand	256.61	5.65	1.03	258.68	5.65	1.74	259.29	5.65	1.97	257.83	5.65	1.44	256.82	5.65	1.10
83	Sharda Sagar	-	-	-	187.74	0.33	0.27	183.83	0.33	0.08	187.51	0.33	0.25	189.82	0.33	0.33
84	Sirsi	-	-	-	-	-	-	210.40	0.19	0.02	212.40	0.19	0.05	208.15	0.19	0.02
85	Maudaha	-	-	-	-	-	-	142.20	0.18	0.03	144.60	0.18	0.08	146.00	0.18	0.12
86	Jirgo	-	-	-	95.30	0.15	0.09	93.01	0.15	0.05	93.65	0.15	0.06	87.25	0.15	0.00
87	Rangawan	-	-	-	-	-	-	221.44	0.16	0.01	221.86	0.16	0.02	224.76	0.16	0.03
88	Meja	-	-	-	-	-	-	162.25	0.30	0.05	167.85	0.30	0.11	167.50	0.30	0.11
Uttarakhand																
89	Ramganga	345.71	2.20	0.96	351.94	2.20	1.28	342.40	2.20	0.81	356.97	2.20	1.58	347.99	2.20	1.07
90	Tehri	775.27	2.62	0.77	776.41	2.62	0.80	759.58	2.62	0.39	775.70	2.62	0.78	772.35	2.62	0.69
91	Nanak Sagar	-	-	-	-	-	-	-	-	-	209.76	0.18	0.02	210.31	0.18	0.03
Madhya Pradesh																
92	Gandhi Sagar	381.33	6.83	0.05	395.86	6.83	4.33	394.14	6.83	3.52	396.68	6.83	4.75	395.68	6.83	4.24

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93	Tawa	337.72	1.94	0.15	347.59	1.94	0.87	346.68	1.94	0.79	347.59	1.94	0.87	348.26	1.94	0.95
94	Bargi	415.85	3.18	1.51	419.15	3.18	2.21	418.25	3.18	2.01	417.90	3.18	1.93	417.80	3.18	1.91
95	Bansagar	337.93	5.17	3.54	338.58	5.17	3.80	335.43	5.17	2.64	336.67	5.17	3.08	337.60	5.17	3.42
96	Indira Sagar	254.74	9.75	4.20	256.55	9.75	5.42	254.71	9.75	4.17	252.77	9.75	3.16	253.95	9.75	3.83
97	Barna Dam	338.44	0.46	0.01	345.20	0.46	0.25	344.65	0.46	0.22	343.82	0.46	0.17	345.34	0.46	0.25
98	Omkareshwar	-	-	-	195.36	0.30	0.16	194.75	0.30	0.11	194.30	0.30	0.07	194.84	0.30	0.12
99	Sanjay Sarover	-	-	-	514.15	0.51	0.20	509.65	0.51	0.07	509.15	0.51	0.06	507.30	0.51	0.02
100	Rajghat Dam	-	-	-	-	-	-	-	-	-	366.55	1.95	1.13	364.90	1.95	0.86
101	Kolar Dam	-	-	-	453.21	0.27	0.13	451.95	0.27	0.11	450.70	0.27	0.10	453.13	0.27	0.13
102	Atal Sagar (Madikheda)	-	-	-	-	-	-	-	-	-	-	-	-	335.60	0.84	0.33
Chhattisgarh																
*103	Minimata Bango	352.53	3.05	1.78	356.60	3.05	2.38	354.30	3.05	2.03	353.26	3.05	1.88	354.07	3.05	2.00
104	Mahanadi	343.54	0.77	0.35	346.21	0.77	0.55	346.82	0.77	0.60	347.29	0.77	0.64	346.21	0.77	0.55
105	Dudhawa	-	-	-	421.66	0.28	0.15	421.75	0.28	0.15	416.47	0.28	0.05	423.66	0.28	0.23
106	Tandula	-	-	-	328.64	0.31	0.16	328.30	0.31	0.15	328.21	0.31	0.15	330.01	0.31	0.21
Southern Region																
Andhra Pradesh & Telangana																
*107	Srisailam	251.49	8.29	1.17	253.68	8.29	1.37	254.14	8.29	1.42	244.88	6.01	0.77	245.82	6.01	0.82
108	Nagarjuna Sagar	157.55	6.84	0.34	166.94	5.11	2.07	166.94	5.11	2.07	169.47	5.11	2.59	161.42	5.11	1.01
Andhra Pradesh																
109	Somasila	80.96	1.99	0.17	95.79	1.99	1.34	98.33	1.99	1.76	98.45	1.99	1.78	97.13	1.99	1.33
110	Yeleru	-	-	-	80.79	0.51	0.23	81.05	0.51	0.24	80.02	0.51	0.21	78.42	0.51	0.16
111	Kandaleru	-	-	-	-	-	-	81.06	1.79	1.29	79.69	1.79	1.13	78.86	1.79	1.05

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112	Donkarayi	-	-	-	-	-	-	-	-	-	-	-	-	304.56	0.38	0.14
Telangana																
113	Sriramsagar	322.78	2.30	0.36	327.57	2.30	1.11	327.20	2.30	1.03	327.66	2.30	1.12	326.01	2.30	0.80
114	Lower Manair	270.69	0.62	0.15	273.38	0.62	0.25	277.61	0.62	0.48	273.42	0.62	0.25	275.32	0.62	0.34
115	Nizam Sagar	-	-	-	420.18	0.48	0.03	425.67	0.48	0.23	426.20	0.48	0.27	424.72	0.48	0.17
116	Singur	-	-	-	511.27	0.82	0.01	521.68	0.82	0.56	522.47	0.82	0.65	521.63	0.82	0.55
117	Priyadarshini Jurala	-	-	-	-	-	-	-	-	-	316.93	0.17	0.08	315.05	0.17	0.01
Karnataka																
118	Krishnaraja Sagara	744.62	1.16	0.50	747.18	1.16	0.70	745.80	1.16	0.59	747.60	1.16	0.63	744.09	1.16	0.35
119	Tungabhadra	483.87	3.28	0.23	485.64	3.28	0.36	486.16	3.28	0.40	488.88	3.28	0.71	483.45	3.28	0.23
120	Ghataprabha (HIDKAL)	642.11	1.39	0.28	650.79	1.39	0.64	647.32	1.39	0.48	644.78	1.39	0.38	644.76	1.39	0.37
121	Bhadra	647.35	1.79	0.77	650.37	1.79	1.02	648.97	1.79	0.90	651.78	1.79	1.15	649.39	1.79	0.94
122	Linganamakki	542.74	4.29	1.58	545.93	4.29	2.14	547.01	4.29	2.36	544.27	4.29	1.83	541.39	4.29	1.38
@123	Narayanpur	487.19	0.86	0.22	491.10	0.86	0.60	489.88	0.86	0.46	490.87	0.86	0.57	489.18	0.86	0.39
124	Malaprabha (Renuka)	622.45	0.97	0.09	627.79	0.97	0.37	626.38	0.97	0.27	627.59	0.97	0.35	626.14	0.97	0.25
125	Kabini	691.34	0.44	0.20	692.81	0.44	0.27	690.56	0.44	0.16	691.96	0.44	0.23	688.75	0.44	0.10
126	Hemavathy	874.30	0.93	0.13	882.98	0.93	0.47	879.88	0.93	0.31	884.75	0.93	0.57	884.11	0.93	0.45
127	Harangi	855.88	0.22	0.04	863.09	0.22	0.09	860.43	0.22	0.07	868.30	0.22	0.14	860.33	0.22	0.06
128	Supa	542.94	4.12	1.98	546.00	4.12	2.23	547.01	4.12	2.32	538.93	4.12	1.68	541.98	4.12	1.91
129	Vani Vilas Sagar	632.22	0.80	0.02	643.00	0.80	0.26	644.18	0.80	0.31	649.88	0.80	0.62	651.45	0.80	0.74
*@130	Almatti	511.65	3.11	0.75	512.67	3.11	0.93	512.24	3.11	0.86	513.83	3.11	1.17	510.68	3.11	0.60
131	Gerusoppa	49.71	0.13	0.10	52.95	0.13	0.12	45.88	0.13	0.08	48.95	0.13	0.10	50.94	0.13	0.11

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Table 1.4 (c): Region/State/Reservoir-wise Yearly Storage Position of Important Reservoirs of India during the last week of March for the FY 2018-19 to 2022-23

Sl. No.	Name of Reservoirs/ Region/ State-wise	2018-19 (as on 28.03.2019)			2019-20 (as on 26.03.2020)			2020-21 (as on 25.03.2021)			2021-22 (as on 24.03.2022)			2022-23 (as on 31.03.2023)		
		Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level(m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	Current Reservoir Level (m)	Live Capacity at FRL (BCM)	Current Live Storage (BCM)
*132	Mani Dam	-	-	-	579.72	0.88	0.27	578.60	0.88	0.24	579.08	0.88	0.26	576.72	0.88	0.19
133	Tattihalla	-	-	-	449.61	0.25	0.00	449.75	0.25	0.00	449.79	0.25	0.00	449.70	0.25	0.00
Kerala																
134	Kallada (parappar)	108.04	0.51	0.32	107.30	0.51	0.31	103.24	0.51	0.24	105.19	0.51	0.27	100.56	0.51	0.20
135	Idamalayar	142.55	1.02	0.36	146.83	1.02	0.45	147.82	1.02	0.47	150.71	1.02	0.53	145.88	1.02	0.43
*136	Idukki	716.93	1.46	0.70	719.88	1.46	0.82	717.65	1.46	0.73	720.38	1.46	0.84	714.70	1.46	0.61
137	Kakki	964.36	0.45	0.22	964.03	0.45	0.22	972.54	0.45	0.31	966.16	0.45	0.24	964.92	0.45	0.23
138	Periyar	860.03	0.17	0.03	860.59	0.17	0.03	864.62	0.17	0.11	863.64	0.17	0.09	861.09	0.17	0.04
139	Malampuzha	102.34	0.22	0.03	104.20	0.22	0.05	104.32	0.22	0.05	106.47	0.22	0.07	106.42	0.22	0.07
Tamil Nadu																
140	Lower Bhawani	268.84	0.79	0.28	276.50	0.79	0.65	276.84	0.79	0.67	275.38	0.79	0.58	275.81	0.79	0.61
141	Mettur (Stanley)	223.83	2.65	0.79	235.74	2.65	1.96	234.79	2.65	1.85	236.21	2.65	2.02	235.58	2.65	1.94
142	Vaigai	270.92	0.17	0.04	271.92	0.17	0.05	277.19	0.17	0.13	278.68	0.17	0.16	274.09	0.17	0.07
#143	Parambikulam	546.22	0.38	0.18	548.49	0.38	0.23	548.61	0.38	0.23	553.13	0.38	0.32	540.31	0.38	0.08
#144	Aliyar	302.30	0.10	0.00	301.57	0.10	0.00	312.24	0.10	0.05	305.29	0.10	0.02	301.30	0.10	0.00
#145	Sholayar	963.88	0.14	0.00	962.74	0.14	0.00	954.64	0.14	0.00	960.93	0.14	0.01	958.46	0.14	0.01
146	Sathanur	-	-	-	-	-	-	-	-	-	215.77	0.21	0.10	219.78	0.21	0.16
Total			**161.99**	**50.31**		**171.09**	**88.12**		**174.23**	**76.37**		**175.96**	**83.52**		**178.19**	**76.06**

Source: WM Directorate, Central Water Commission, M/o Jal Shakti

Note-1: '-' denotes reservoir has not been monitored for that year.

Note-2: `FRL': Full Reservoirs Level

Note-3: '*': Hydro-Electric Projects; '$': Total CCA 342 Th. Ha of DVC system; '#': Total CCA 101 Th. Ha of Parambikulam, Aliyar & Sholayar;

'@': Total CCA 425 Th. Ha of Narayanpur and Alimatti;

Note-4: Sabarmati reservoir is supplemented with Narmada water through pipeline.

Table 1.4 (d): Region/State-wise Yearly Storage Position of Important Reservoirs of India during the last week of March for the FY 2019-20 to 2022-23

Sl. No.	Name of Reservoirs Region/ State-wise	2019-20 (as on 26.03.2020)			2020-21 (as on 25.03.2021)			2021-22 (as on 24.03.2022)			2022-23 (as on 31.03.2023)		
		No. of Reservoirs Monitored	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	No. of Reservoirs Monitored	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	No. of Reservoirs Monitored	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	No. of Reservoirs Monitored	Live Capacity at FRL (BCM)	Current Live Storage (BCM)
Northern Region													
1	Himachal Pradesh	3	12.48	6.13	3	12.48	2.36	3	12.48	3.45	3	12.48	4.01
2	Punjab	1	2.34	0.89	1	2.34	0.55	1	2.34	1.06	1	2.34	1.11
3	Rajasthan	4	4.36	2.21	4	4.36	1.76	5	4.55	1.84	6	4.84	2.32
Sub-Total		**8**	**19.17**	**9.23**	**8**	**19.17**	**4.66**	**9**	**19.37**	**6.34**	**10**	**19.66**	**7.44**
Eastern Region													
1	Jharkhand	5	1.79	1.32	6	2.01	1.18	6	2.01	1.29	6	2.01	1.13
2	Odisha	9	15.39	10.04	10	15.7	6.20	10	15.7	7.88	10	15.70	6.60
3	West Bengal	2	1.39	0.79	2	1.39	0.41	2	1.39	0.85	2	1.39	0.35
4	Tripura	1	0.31	0.07	1	0.31	0.20	1	0.31	0.12	1	0.31	0.14
5	Nagaland	1	0.54	0.18	1	0.54	0.24	1	0.54	0.19	1	0.54	0.18
6	Bihar	-	-	-	-	-	-	1	0.14	0.08	1	0.14	0.03
Sub-Total		**18**	**19.43**	**12.39**	**20**	**19.96**	**8.22**	**21**	**20.09**	**10.4**	**21**	**20.09**	**8.43**
Western Region													
1	Gujarat	17	17.96	8.99	17	17.96	9.31	17	17.96	8.23	17	17.96	8.36
2	Maharashtra	25	17.27	11.05	25	17.27	10.33	29	18.45	11.41	32	19.17	10.16
Sub-Total		**42**	**35.24**	**20.04**	**42**	**35.24**	**19.64**	**46**	**36.41**	**19.64**	**49**	**37.13**	**18.52**
Central Region													
1	Uttar Pradesh	4	6.83	2.16	8	7.66	2.41	8	7.66	2.26	8	7.66	1.98
2	Uttarakhand	2	4.81	2.08	2	4.81	1.2	3	4.99	2.38	3	4.99	1.79
3	Madhya Pradesh	9	28.4	17.36	9	28.4	13.63	10	30.34	15.31	11	31.18	16.05
4	Chhattisgarh	4	4.41	3.24	4	4.41	2.93	4	4.41	2.71	4	4.41	2.98
Sub-Total		**19**	**44.45**	**24.85**	**23**	**45.27**	**20.17**	**25**	**47.39**	**22.67**	**26**	**48.23**	**22.80**

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Table 1.4 (d): Region/State-wise Yearly Storage Position of Important Reservoirs of India during the last week of March for the FY 2019-20 to 2022-23

Sl. No.	Name of Reservoirs Region/ State-wise	2019-20 (as on 26.03.2020)			2020-21 (as on 25.03.2021)			2021-22 (as on 24.03.2022)			2022-23 (as on 31.03.2023)		
		No. of Reservoirs Monitored	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	No. of Reservoirs Monitored	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	No. of Reservoirs Monitored	Live Capacity at FRL (BCM)	Current Live Storage (BCM)	No. of Reservoirs Monitored	Live Capacity at FRL (BCM)	Current Live Storage (BCM)
Southern Region													
1	Andhra Pradesh & Telangana	2	13.40	3.44	2	13.40	3.49	2	11.12	3.37	2	11.12	1.83
2	Andhra Pradesh	2	2.50	1.57	3	4.29	3.28	3	4.29	3.12	4	4.67	2.68
3	Telangana	4	4.23	1.39	4	4.23	2.29	5	4.39	2.38	5	4.39	1.86
4	Karnataka	16	24.63	10.45	16	24.63	9.81	16	24.63	10.37	16	24.63	8.06
5	Kerala	6	3.83	1.87	6	3.83	1.89	6	3.83	2.04	6	3.83	1.57
6	Tamil Nadu	6	4.23	2.90	6	4.23	2.92	7	4.44	3.20	7	4.44	2.88
Sub-Total		**36**	**52.81**	**21.62**	**37**	**54.60**	**23.68**	**39**	**52.70**	**24.48**	**40**	**53.07**	**18.87**
All India		**123**	**171.09**	**88.12**	**130**	**174.23**	**76.37**	**140**	**175.96**	**83.52**	**146**	**178.19**	**76.06**

Source: Water Management Directorate, Central Water Commission, M/o Jal Shakti

Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
*1	Srisailam	AP/TG	8.288	1.136	0.904	0.677	8.288	5.973	3.378	3.238	6.013	5.677	5.919	4.720
*2	Nagarjuna Sagar	AP/TG	5.108	1.257	1.061	0.734	5.108	5.066	2.998	1.721	5.108	5.100	5.100	3.357
3	Somasila	AP	1.994	1.277	0.670	0.439	1.994	1.682	0.810	0.373	1.994	1.994	1.994	1.095
4	Yeleru	AP	0.508	0.150	0.168	0.118	0.508	0.118	0.223	0.121	0.508	0.285	0.459	0.252
5	Kandaleru	AP	1.792	0.984	0.443	0.320	1.792	0.950	0.442	0.269	1.792	1.481	1.207	0.423
6	Sriramsagar	TG	2.300	0.775	0.842	0.358	2.300	2.284	1.111	0.866	2.300	2.110	2.300	1.646
7	Lower Manair	TG	0.621	0.586	0.241	0.152	0.621	0.594	0.267	0.223	0.621	0.621	0.621	0.396
8	Nizam Sagar	TG	0.482	0.201	0.023	0.041	0.482	0.251	0.026	0.087	0.482	0.407	0.246	0.195
9	Singur	TG	0.822	0.460	0.000	0.181	0.822	0.561	0.038	0.249	0.822	0.738	0.664	0.452
10	Priyadarshini Jurala	TG	-	-	-	-	-	-	-	-	-	-	-	-
11	Chandan Dam	BR	-	-	-	-	-	-	-	-	-	-	-	-
12	Tenughat	JHA	0.821	0.381	0.344	0.306	0.821	0.416	0.350	0.362	0.821	0.385	0.411	0.389
13	Maithon	JHA	0.471	0.394	0.309	0.167	0.471	0.471	0.295	0.326	0.471	0.437	0.471	0.443
*14	Panchet Hill	JHA$	0.184	0.171	0.050	0.090	0.184	0.184	0.148	0.154	0.184	0.184	0.184	0.176
15	Konar	JHA$	0.176	0.061	0.050	0.054	0.176	0.127	0.126	0.111	0.176	0.176	0.174	0.156
16	Tilaiya	JHA$	0.142	0.074	0.040	0.028	0.142	0.142	0.087	0.080	0.142	0.142	0.142	0.124
*17	Getalsud	JHA	0.218	0.093	0.098	0.079	0.218	0.201	0.098	0.124	0.218	0.190	0.098	0.151

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
*18	Ukai	GUJ	6.615	2.354	2.866	1.474	6.615	3.715	4.304	4.077	6.615	6.226	6.615	5.490
19	Sabarmati (Dharoi)	GUJ	0.735	0.201	0.251	0.131	0.735	0.209	0.233	0.338	0.735	0.300	0.735	0.605
*20	Kadana	GUJ	1.472	0.558	0.537	0.626	1.472	0.477	0.331	0.764	1.472	1.166	1.189	1.199
21	Shetrunji	GUJ	0.300	0.190	0.078	0.060	0.300	0.209	0.218	0.137	0.300	0.300	0.300	0.207
22	Bhadar	GUJ	0.188	0.041	0.051	0.035	0.188	0.042	0.101	0.084	0.188	0.188	0.188	0.129
23	Damanganga	GUJ	0.502	0.124	0.105	0.087	0.502	0.244	0.305	0.267	0.502	0.438	0.478	0.461
24	Dantiwada	GUJ	0.399	0.030	0.000	0.014	0.399	0.028	0.002	0.104	0.399	0.054	0.257	0.210
25	Panam	GUJ	0.697	0.235	0.280	0.295	0.697	0.207	0.187	0.402	0.697	0.336	0.442	0.550
*26	Sardar Sarovar	GUJ	5.76	0.340	1.577	0.592	5.760	0.681	1.155	1.578	5.760	2.319	4.657	2.530
27	Karjan	GUJ	0.523	0.213	0.168	0.152	0.523	0.244	0.218	0.287	0.523	0.464	0.509	0.461
28	Sukhi	GUJ	0.167	0.058	0.062	0.022	0.167	0.092	0.108	0.075	0.167	0.163	0.163	0.132
29	Watrak	GUJ	0.154	0.029	0.050	0.032	0.154	0.025	0.051	0.072	0.154	0.053	0.117	0.121
30	Hathmati	GUJ	0.153	0.047	0.054	0.014	0.153	0.046	0.047	0.031	0.153	0.062	0.149	0.078
31	Machchhu-I	GuJ	0.071	0.010	0.015	0.009	0.071	0.013	0.030	0.030	0.071	0.043	0.069	0.041
32	Machchhu-II	GUJ	0.091	0.030	0.032	0.014	0.091	0.044	0.037	0.044	0.091	0.049	0.084	0.055
33	UND-I	GUJ	0.066	0.008	0.007	0.004	0.066	0.030	0.059	0.030	0.066	0.066	0.066	0.040
34	Brahmani	GUJ	0.071	0.019	0.021	0.004	0.071	0.017	0.020	0.026	0.071	0.017	0.056	0.033

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
*35	Gobind Sagar (Bhakra)	HP	6.229	0.780	1.876	2.052	6.229	2.720	3.569	4.169	6.229	4.210	4.495	5.334
*36	Pong Dam (BEAS)	HP	6.157	0.350	2.353	1.633	6.157	2.330	2.977	3.727	6.157	3.410	4.549	5.235
*37	Kol Dam	HP	0.089	0.031	0.026	0.047	0.089	0.055	0.029	0.036	0.089	0.071	0.079	0.069
38	Krishnaraja Sagara	KAR	1.163	0.386	0.457	0.308	1.163	1.129	1.135	0.864	1.163	0.854	1.163	0.917
*39	Tungabhadra	KAR	3.276	0.940	0.294	0.693	3.276	2.815	2.402	2.302	3.276	2.812	2.856	2.470
40	Ghataprabha	KAR	1.391	0.627	0.252	0.152	1.391	1.361	1.312	1.120	1.391	1.387	1.387	1.204
41	Bhadra	KAR	1.785	0.842	0.508	0.475	1.785	1.734	1.423	1.357	1.785	1.741	1.768	1.528
42	Linganamakki	KAR	4.294	1.798	0.631	0.804	4.294	3.659	2.314	2.833	4.294	4.005	3.863	3.543
43	Narayanpur	KAR@	0.863	0.432	0.387	0.286	0.863	0.659	0.680	0.648	0.863	0.736	0.726	0.699
44	Malaprabha (Renuka)	KAR	0.972	0.439	0.251	0.086	0.972	0.876	0.736	0.496	0.972	0.944	0.939	0.609
45	Kabini (Sancherla Tank)	KAR	0.444	0.307	0.112	0.182	0.444	0.407	0.434	0.325	0.444	0.379	0.441	0.320
46	Hemavathy	KAR	0.927	0.451	0.279	0.263	0.927	0.927	0.927	0.789	0.927	0.808	0.927	0.696
47	Harangi	KAR	0.220	0.109	0.102	0.100	0.220	0.195	0.204	0.204	0.220	0.215	0.220	0.189
48	Supa	KAR	4.120	1.676	0.963	1.058	4.120	3.041	2.081	2.463	4.120	3.279	3.420	3.091
49	Vanivilas Sagar	KAR	0.802	0.250	0.162	0.094	0.802	0.297	0.137	0.083	0.802	0.376	0.200	0.089
*50	Almatti	KAR@	3.105	2.215	1.584	0.647	3.105	3.005	2.842	2.726	3.105	3.105	3.105	2.900

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
*51	Gerusoppa	KAR	0.130	0.092	0.107	0.102	0.130	0.087	0.115	0.102	0.130	0.110	0.095	0.098
*52	Mani Dam	KAR	0.884	0.128	0.092	0.171	0.884	0.440	0.351	0.474	0.884	0.556	0.606	0.680
53	Tattihalla	KAR	0.249	0.057	0.004	0.012	0.249	0.158	0.119	0.060	0.249	0.012	0.211	0.092
54	Kallada (Parappar)	KRL	0.507	0.315	0.151	0.184	0.507	0.315	0.307	0.282	0.507	0.374	0.408	0.350
*55	Idamalayar	KRL	1.018	0.367	0.129	0.240	1.018	0.663	0.569	0.595	1.018	0.838	0.868	0.764
*56	Idukki	KRL	1.460	0.714	0.425	0.406	1.460	0.949	0.921	0.806	1.460	1.188	1.223	0.998
*57	Kakki	KRL	0.447	0.229	0.069	0.115	0.447	0.320	0.278	0.254	0.447	0.360	0.372	0.321
*58	Periyar	KRL	0.173	0.121	0.022	0.057	0.173	0.159	0.166	0.098	0.173	0.106	0.124	0.084
59	Malampuzha	KRL	0.224	0.055	0.031	0.063	0.224	0.108	0.134	0.142	0.224	0.172	0.197	0.175
*60	Gandhi Sagar	MP	6.827	3.112	3.974	2.158	6.827	4.417	4.115	3.314	6.827	6.189	6.369	5.856
61	Tawa	MP	1.944	0.434	0.341	0.397	1.944	1.466	0.760	1.431	1.944	1.944	1.944	1.861
*62	Bargi	MP	3.180	1.398	1.023	0.766	3.180	2.282	1.650	2.538	3.180	3.180	3.180	3.100
*63	Bansagar	MP	5.166	2.208	3.412	2.383	5.166	3.073	4.489	3.802	5.166	4.589	5.166	4.765
*64	Indira Sagar	MP	9.745	0.805	1.698	1.213	9.745	2.578	2.716	5.968	9.745	6.723	9.709	8.710
65	Barna Dam	MP	0.456	0.219	0.248	0.091	0.456	0.243	0.234	0.336	0.456	0.424	0.456	0.426
*66	Omkareshwar	MP	0.299	0.186	0.030	0.003	0.299	0.063	0.048	0.005	0.299	0.122	0.039	0.004
67	Sanjay Sarover	MP	0.508	0.103	0.210	0.053	0.508	0.205	0.329	0.252	0.508	0.397	0.382	0.369

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
68	Rajghat Dam	MP	-	-	-	-	-	-	-	-	-	-	-	-
69	Kolar Dam	MP	0.270	0.105	0.115	0.051	0.270	0.135	0.122	0.142	0.270	0.202	0.264	0.207
*70	Minimata Bango	CHH	3.046	1.855	2.454	1.716	3.046	2.543	2.610	2.184	3.046	2.800	2.444	2.473
71	Mahanadi	CHH	0.767	0.321	0.369	0.198	0.767	0.302	0.419	0.408	0.767	0.618	0.707	0.613
72	Dudhawa	CHH	0.284	0.054	0.156	0.067	0.284	0.073	0.225	0.142	0.284	0.145	0.280	0.218
73	Tandula	CHH	0.312	0.026	0.085	0.090	0.312	0.048	0.113	0.122	0.312	0.192	0.169	0.207
74	Jayakwadi (Paithon)	MAH	2.171	0.714	0.851	0.215	2.171	0.885	1.244	0.730	2.171	1.997	2.133	1.209
*75	Koyana	MAH	2.652	1.058	0.761	0.682	2.652	2.429	2.030	2.432	2.652	2.652	2.652	2.572
76	Bhima (Ujjani)	MAH	1.517	0.000	0.000	0.022	1.517	0.946	0.435	0.768	1.517	1.379	1.517	1.229
77	Isapur	MAH	0.965	0.471	0.384	0.217	0.965	0.662	0.523	0.436	0.965	0.962	0.964	0.599
78	Mula	MAH	0.609	0.127	0.084	0.033	0.609	0.372	0.286	0.382	0.609	0.606	0.603	0.513
79	Yeldari	MAH	0.809	0.457	0.496	0.114	0.809	0.601	0.782	0.222	0.809	0.792	0.809	0.328
80	Girna	MAH	0.524	0.175	0.188	0.060	0.524	0.211	0.260	0.155	0.524	0.460	0.524	0.272
81	Khadakvasla	MAH	0.056	0.025	0.035	0.020	0.056	0.047	0.055	0.051	0.056	0.045	0.055	0.046
*82	Upper Vaitarna	MAH	0.331	0.058	0.089	0.088	0.331	0.260	0.185	0.268	0.331	0.330	0.330	0.316
83	Upper Tapi	MAH	0.255	0.047	0.045	0.044	0.255	0.056	0.050	0.077	0.255	0.179	0.237	0.233
*84	Pench (Totaladoh)	MAH	1.091	0.607	0.775	0.245	1.091	0.659	0.936	0.534	1.091	0.971	1.005	0.826

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
85	Upper Wardha	MAH	0.564	0.257	0.298	0.192	0.564	0.339	0.506	0.393	0.564	0.558	0.564	0.534
86	Bhatsa	MAH	0.942	0.332	0.278	0.313	0.942	0.778	0.620	0.772	0.942	0.936	0.939	0.914
87	Dhom	MAH	0.331	0.121	0.109	0.068	0.331	0.267	0.201	0.240	0.331	0.319	0.324	0.304
88	Dudhganga	MAH	0.664	0.236	0.244	0.177	0.664	0.591	0.596	0.586	0.664	0.664	0.664	0.647
89	Manikdoh (Kukadi)	MAH	0.288	0.028	0.014	0.015	0.288	0.118	0.051	0.132	0.288	0.186	0.132	0.187
90	Bhandardara	MAH	0.304	0.138	0.071	0.054	0.304	0.267	0.210	0.270	0.304	0.304	0.304	0.296
91	Urmodi	MAH	0.273	0.166	0.143	0.132	0.273	0.221	0.235	0.247	0.273	0.261	0.272	0.261
92	Bhatghar	MAH	0.673	0.117	0.149	0.095	0.673	0.585	0.498	0.585	0.673	0.666	0.666	0.645
93	Nira Deoghar	MAH	0.332	0.071	0.035	0.029	0.332	0.332	0.209	0.257	0.332	0.332	0.332	0.320
*94	Thokarwadi	MAH	0.353	0.079	0.119	0.086	0.353	0.234	0.168	0.218	0.353	0.294	0.258	0.302
95	Kanher	MAH	0.272	0.110	0.054	0.091	0.272	0.226	0.208	0.212	0.272	0.269	0.270	0.263
*96	Mulshi	MAH	0.572	0.070	0.032	0.048	0.572	0.484	0.382	0.447	0.572	0.543	0.522	0.499
97	Surya	MAH	0.276	0.080	0.090	0.113	0.276	0.232	0.225	0.220	0.276	0.276	0.275	0.272
98	Tillari	MAH	0.447	0.353	0.264	0.216	0.447	0.358	0.373	0.363	0.447	0.436	0.430	0.430
99	Dimbhe Dam	MAH	-	-	-	-	-	-	-	-	-	-	-	-
100	Veer Dam	MAH	-	-	-	-	-	-	-	-	-	-	-	-
101	Barvi Dam	MAH	-	-	-	-	-	-	-	-	-		-	-

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
102	Chaskaman	MAH	-	-	-	-	-	-	-	-	-	-	-	-
*103	Doyang Hep	NAG	0.535	0.167	0.260	0.219	0.535	0.176	0.364	0.356	0.535	0.312	0.302	0.340
*104	Hirakud	ODI	5.378	1.243	1.203	0.725	5.378	1.752	1.528	2.128	5.378	4.823	4.806	4.977
*105	Balimela	ODI	2.676	0.547	0.500	0.690	2.676	0.628	0.553	0.756	2.676	1.092	1.894	1.743
106	Salanadi	ODI	0.558	0.228	0.374	0.204	0.558	0.159	0.298	0.236	0.558	0.399	0.328	0.326
*107	Rengali	ODI	3.432	1.064	0.472	0.448	3.432	2.249	1.713	1.343	3.432	3.424	3.108	3.016
*108	Machkund (Jalaput)	ODI	0.893	0.279	0.319	0.327	0.893	0.221	0.393	0.505	0.893	0.482	0.731	0.788
*109	Upper Kolab	ODI	0.935	0.115	0.217	0.166	0.935	0.102	0.167	0.270	0.935	0.385	0.379	0.647
*110	Upper Indravati	ODI	1.456	0.335	0.484	0.291	1.456	0.376	0.407	0.738	1.456	0.575	1.051	1.041
111	Sapua	ODI	0.006	0.006	0.006	0.004	0.006	0.002	0.006	0.004	0.006	0.006	0.006	0.005
112	Hariharjhor	ODI	0.059	0.000	0.041	0.017	0.059	0.015	0.053	0.041	0.059	0.052	0.055	0.054
113	Mandira Dam	ODI	0.309	0.192	0.211	0.206	0.309	0.195	0.192	0.188	0.309	0.210	0.222	0.223
*114	Thein Dam	PUN	2.344	0.719	1.263	1.226	2.344	1.013	1.037	1.423	2.344	1.037	1.386	1.724
*115	Mahi Bajaj Sagar	RAJ	1.711	0.531	0.599	0.505	1.711	0.975	0.692	1.271	1.711	1.711	1.711	1.709
116	Jhakam	RAJ	0.132	0.028	0.036	0.030	0.132	0.045	0.040	0.096	0.132	0.108	0.132	0.130
*117	Rana Pratap Sagar	RAJ	1.436	0.622	0.625	0.540	1.436	1.083	0.650	0.931	1.436	1.400	1.254	1.217
118	Bisalpur	RAJ	1.076	0.284	0.612	0.346	1.076	0.378	0.595	0.549	1.076	0.503	0.691	0.845

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
119	Jawai Dam	RAJ	-	-	-	-	-	-	-	-	-	-	-	-
120	Lower Bhawani	TN	0.792	0.676	0.456	0.254	0.792	0.792	0.792	0.459	0.792	0.792	0.792	0.445
*121	Mettur (Stanley)	TN	2.647	1.345	1.520	0.788	2.647	1.010	1.738	1.555	2.647	1.002	1.712	1.591
122	Vaigai	TN	0.172	0.127	0.017	0.026	0.172	0.150	0.034	0.043	0.172	0.070	0.115	0.059
123	Parambikulam	TN#	0.38	0.156	0.074	0.105	0.380	0.342	0.303	0.250	0.380	0.379	0.377	0.303
124	Aliyar	TN#	0.095	0.032	0.000	0.027	0.095	0.082	0.063	0.056	0.095	0.094	0.094	0.070
*125	Sholayar	TN#	0.143	0.059	0.021	0.063	0.143	0.131	0.134	0.113	0.143	0.143	0.143	0.124
126	Sathanur	TN	-	-	-	-	-	-	-	-	-	-	-	-
127	Gumti	TRP	0.312	0.166	0.156	0.136	0.312	0.166	0.240	0.187	0.312	0.254	0.283	0.235
128	Matatila	UP	0.707	0.077	0.105	0.186	0.707	0.528	0.193	0.451	0.707	0.641	0.641	0.643
*129	Rihand	UP	5.649	1.189	1.531	0.771	5.649	2.865	2.541	2.045	5.649	3.943	3.956	3.481
130	Sharda Sagar	UP	0.330	0.308	0.260	0.189	0.330	0.191	0.215	0.191	0.330	0.094	0.199	0.174
131	Sirsi	UP	0.190	0.051	0.137	0.033	0.190	0.147	0.130	0.075	0.190	0.165	0.127	0.133
132	Maudaha	UP	0.179	0.018	0.068	0.039	0.179	0.077	0.075	0.073	0.179	0.107	0.073	0.114
133	Jirgo	UP	0.147	0.060	0.101	0.044	0.147	0.086	0.115	0.060	0.147	0.106	0.105	0.093
134	Rangawan	UP	0.155	0.002	0.053	0.014	0.155	0.018	0.053	0.054	0.155	0.038	0.152	0.109
135	Meja	UP	0.299	0.147	0.002	0.063	0.299	0.246	0.002	0.138	0.299	0.282	0.003	0.177

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No.	Name of Reservoirs	States	As per Bulleting dated 01.07.2021				As per Bulleting dated 12.08.2021				As per Bulleting dated 30.09.2021			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
*136	Ramganga	UKH	2.196	0.794	1.116	0.655	2.196	1.262	1.368	1.031	2.196	1.856	1.696	1.552
*137	Tehri	UKH	2.615	0.330	0.211	0.260	2.615	1.746	1.448	1.663	2.615	2.613	2.512	2.389
138	Nanak Sagar	UKH	-	-	-	-	-	-	-	-	-	-	-	-
139	Mayurakshi	WB	0.480	0.230	0.227	0.144	0.480	0.284	0.389	0.266	0.480	0.300	0.367	0.299
140	Kangsabati	WB	0.914	0.558	0.521	0.331	0.914	0.685	0.595	0.516	0.914	0.768	0.590	0.588
Reservoirs			**174.233**	**55.606**	**56.185**	**40.166**	**174.233**	**103.517**	**92.179**	**95.307**	**171.958**	**138.327**	**150.189**	**132.962**
Percentage				**31.916**	**32.216**	**23.053**		**59.413**	**52.906**	**54.701**		**80.430**	**87.340**	**77.320**

Source: WM Directorate, Central Water Commission, M/o Jal Shakti

Note-1: `FRL': Full Reservoirs Level.

Note-2: '*': Hydel power capacity having capacity more than 60 MW; '$': Total CCA 342 Th. Ha of DVC system; '#': Total CCA 101 Th. Ha of Parambikulam, Aliyar & Sholayar; '@': Total CCA 425 Th. Ha of Narayanpur and Alimatti;

Note-3: Sabarmati reservoir is supplemented with Narmada water through pipeline.

Note-4: 'AP': Andhra Pradesh; 'TG':Telangana; 'JHA': Jharkhand; 'GUJ': Gujarat; 'HP': Himachal Pradesh; 'KAR': Karnataka; 'KRL': Kerala; 'MP': Madhya Pradesh; 'CHH': Chhattisgarh; 'MAH': Maharashtra; 'NAG': Nagaland; 'ODI': Odisha; 'PUN': Punjab; 'RAJ': Rajasthan; 'TN': Tamil Nadu; 'TRP': Tripura; 'UP': Uttar Pradesh; 'UKH': Uttarakhand; 'WB': West Bengal.

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No	Name of Reservoirs	States	As per Bulleting dated 14.10.2021				As per Bulleting dated 03.03.2022				As per Bulleting dated 12.05.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
*1	Srisailam	AP/TG	6.013	5.973	5.919	4.585	6.013	0.763	2.547	1.590	6.013	0.911	0.830	0.660
*2	Nagarjuna Sagar	AP/TG	5.108	5.083	5.024	3.349	5.108	3.566	2.256	0.926	5.108	1.493	1.389	0.540
3	Somasila	AP	1.994	1.994	1.994	1.238	1.994	1.937	1.924	0.906	1.994	1.606	1.481	0.627
4	Yeleru	AP	0.508	0.385	0.494	0.286	0.508	0.273	0.316	0.198	0.508	0.126	0.169	0.092
5	Kandaleru	AP	1.792	1.464	1.404	0.494	1.792	1.211	1.382	0.513	1.792	1.045	1.186	0.403
6	Sriramsagar	TG	2.300	2.300	2.300	1.829	2.300	1.548	1.415	0.877	2.300	0.587	0.560	0.385
7	Lower Manair	TG	0.621	0.621	0.621	0.404	0.621	0.427	0.587	0.311	0.621	0.229	0.306	0.176
8	Nizam Sagar	TG	0.482	0.482	0.277	0.203	0.482	0.340	0.310	0.136	0.482	0.188	0.203	0.056
9	Singur	TG	0.822	0.805	0.799	0.471	0.822	0.689	0.620	0.302	0.822	0.575	0.470	0.241
10	Priyadarshini Jurala	TG	-	-	-	-	0.168	0.116	0.099	0.086	0.168	0.075	0.099	0.016
11	Chandan Dam	BR	-	-	-	-	0.136	0.086	0.063	0.037	0.136	0.072	0.063	0.036
12	Tenughat	JHA$	0.821	0.417	0.392	0.398	0.821	0.402	0.385	0.376	0.821	0.337	0.324	0.334
13	Maithon	JHA	0.471	0.471	0.471	0.432	0.471	0.471	0.471	0.364	0.471	0.206	0.212	0.183
*14	Panchet Hill	JHA	0.184	0.184	0.184	0.167	0.184	0.184	0.168	0.147	0.184	0.106	0.111	0.102
15	Konar	JHA$	0.176	0.176	0.176	0.163	0.176	0.144	0.132	0.120	0.176	0.083	0.099	0.078
16	Tilaiya	JHA$	0.142	0.142	0.142	0.132	0.142	0.033	0.035	0.048	0.142	0.020	0.020	0.029
*17	Getalsud	JHA	0.218	0.166	0.098	0.136	0.218	0.100	0.081	0.097	0.218	0.075	0.066	0.078

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No	Name of Reservoirs	States	As per Bulleting dated 14.10.2021				As per Bulleting dated 03.03.2022				As per Bulleting dated 12.05.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
*18	Ukai	GUJ	6.615	6.615	6.615	5.477	6.615	5.207	4.783	3.547	6.615	3.341	2.943	2.022
19	Sabarmati (Dharoi)	GUJ	0.735	0.311	0.735	0.623	0.735	0.131	0.365	0.273	0.735	0.082	0.246	0.170
*20	Kadana	GUJ	1.472	1.192	1.192	1.123	1.472	0.775	0.828	0.831	1.472	0.499	0.636	0.793
21	Shetrunji	GUJ	0.300	0.300	0.300	0.213	0.300	0.232	0.218	0.119	0.300	0.102	0.072	0.041
22	Bhadar	GUJ	0.188	0.188	0.188	0.128	0.188	0.122	0.104	0.056	0.188	0.083	0.070	0.038
23	Damanganga	GUJ	0.502	0.480	0.478	0.477	0.502	0.358	0.276	0.264	0.502	0.191	0.115	0.100
24	Dantiwada	GUJ	0.399	0.056	0.260	0.218	0.399	0.036	0.055	0.053	0.399	0.027	0.034	0.019
25	Panam	GUJ	0.697	0.361	0.448	0.549	0.697	0.237	0.296	0.388	0.697	0.161	0.243	0.326
*26	Sardar Sarovar	GUJ	5.760	3.305	4.611	2.439	5.760	1.325	3.384	1.101	5.760	1.225	1.852	1.001
27	Karjan	GUJ	0.523	0.513	0.513	0.472	0.523	0.413	0.373	0.314	0.523	0.318	0.258	0.206
28	Sukhi(Guj)	GUJ	0.167	0.165	0.163	0.133	0.167	0.133	0.113	0.072	0.167	0.070	0.064	0.029
29	Watrak	GUJ	0.154	0.057	0.117	0.120	0.154	0.018	0.061	0.066	0.154	0.005	0.034	0.040
30	Hathmati	GUJ	0.153	0.062	0.149	0.088	0.153	0.014	0.063	0.041	0.153	0.008	0.051	0.030
31	Machchhu-I	GuJ	0.071	0.069	0.068	0.041	0.071	0.026	0.025	0.020	0.071	0.017	0.014	0.013
32	Machchhu-II	GUJ	0.091	0.084	0.084	0.055	0.091	0.067	0.060	0.042	0.091	0.049	0.048	0.037
33	UND-I	GUJ	0.066	0.066	0.066	0.039	0.066	0.039	0.041	0.017	0.066	0.011	0.014	0.010
34	Brahmani	GUJ	0.071	0.019	0.055	0.033	0.071	0.008	0.031	0.020	0.071	0.003	0.020	0.017

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No	Name of Reservoirs	States	As per Bulleting dated 14.10.2021				As per Bulleting dated 03.03.2022				As per Bulleting dated 12.05.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
*35	Gobind Sagar (Bhakra)	HP	6.229	4.220	4.066	5.166	6.229	2.089	1.473	2.506	6.229	1.271	0.675	1.654
*36	Pong Dam (BEAS)	HP	6.157	3.320	4.275	5.033	6.157	2.086	1.419	2.057	6.157	1.722	0.925	1.774
*37	Kol Dam	HP	0.089	0.073	0.079	0.077	0.089	0.080	0.024	0.052	0.089	0.066	0.026	0.027
38	Krishnaraja Sagara	KAR	1.163	0.989	1.163	0.910	1.163	0.742	0.740	0.495	1.163	0.409	0.332	0.195
*39	Tungabhadra	KAR	3.276	2.856	2.856	2.433	3.276	1.157	0.775	0.486	3.276	0.311	0.151	0.202
40	Ghataprabha	KAR	1.391	1.387	1.387	1.193	1.391	0.602	0.726	0.376	1.391	0.226	0.243	0.128
41	Bhadra	KAR	1.785	1.785	1.758	1.489	1.785	1.316	1.116	0.925	1.785	0.708	0.505	0.368
42	Linganamakki	KAR	4.294	4.000	3.828	3.475	4.294	2.272	2.652	1.959	4.294	0.972	1.683	0.978
43	Narayanpur	KAR@	0.863	0.734	0.688	0.691	0.863	0.605	0.621	0.446	0.863	0.380	0.366	0.253
44	Malaprabha (Renuka)	KAR	0.972	0.972	0.957	0.626	0.972	0.445	0.349	0.159	0.972	0.233	0.215	0.092
45	Kabini (Sancherla Tank)	KAR	0.444	0.361	0.430	0.295	0.444	0.314	0.210	0.175	0.444	0.106	0.084	0.076
46	Hemavathy	KAR	0.927	0.752	0.927	0.648	0.927	0.622	0.332	0.171	0.927	0.544	0.279	0.133
47	Harangi	KAR	0.220	0.220	0.216	0.169	0.220	0.188	0.072	0.040	0.220	0.132	0.064	0.038
48	Supa	KAR	4.120	3.320	3.477	3.003	4.120	2.061	2.628	2.126	4.120	0.916	1.741	1.297
49	Vanivilas Sagar	KAR	0.802	0.430	0.220	0.099	0.802	0.633	0.346	0.125	0.802	0.570	0.235	0.090
*50	Almatti	KAR@	3.105	3.105	3.105	2.802	3.105	1.615	1.198	0.685	3.105	0.718	0.327	0.260

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1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
*51	Gerusoppa	KAR	0.130	0.099	0.106	0.101	0.130	0.098	0.096	0.106	0.130	0.099	0.109	0.109
*52	Mani Dam	KAR	0.884	0.547	0.602	0.671	0.884	0.338	0.352	0.365	0.884	0.092	0.121	0.160
53	Tattihalla	KAR	0.249	0.065	0.196	0.098	0.249	0.001	0.001	0.021	0.249	0.002	0.002	0.002
54	Kallada (Parappar)	KRL	0.507	0.421	0.419	0.350	0.507	0.341	0.292	0.315	0.507	0.149	0.163	0.170
*55	Idamalayar	KRL	1.018	0.875	0.873	0.766	1.018	0.625	0.552	0.513	1.018	0.324	0.306	0.237
*56	Idukki	KRL	1.460	1.242	1.259	0.990	1.460	1.012	0.881	0.715	1.460	0.540	0.479	0.403
*57	Kakki	KRL	0.447	0.386	0.371	0.318	0.447	0.295	0.343	0.271	0.447	0.145	0.197	0.121
*58	Periyar	KRL	0.173	0.110	0.102	0.075	0.173	0.108	0.109	0.038	0.173	0.118	0.109	0.037
59	Malampuzha	KRL	0.224	0.196	0.203	0.178	0.224	0.073	0.047	0.041	0.224	0.070	0.039	0.032
*60	Gandhi Sagar	MP	6.827	6.568	6.381	5.860	6.827	5.042	4.133	3.268	6.827	4.490	3.214	2.892
61	Tawa	MP	1.944	1.944	1.944	1.865	1.944	0.891	0.804	0.553	1.944	0.299	0.184	0.326
*62	Bargi	MP	3.180	3.180	3.180	3.053	3.180	2.198	2.170	1.871	3.180	1.369	1.610	1.127
*63	Bansagar	MP	5.166	4.553	5.108	4.763	5.166	3.369	3.067	3.450	5.166	2.680	2.134	2.796
*64	Indira Sagar	MP	9.745	7.194	9.715	8.566	9.745	3.959	4.595	4.162	9.745	1.986	2.722	2.324
65	Barna Dam	MP	0.456	0.389	0.444	0.365	0.456	0.215	0.245	0.132	0.456	0.159	0.193	0.111
*66	Omkareshwar	MP	0.299	0.054	0.159	0.016	0.299	0.023	0.131	0.025	0.299	0.016	0.031	0.027
67	Sanjay Sarover	MP	0.508	0.407	0.402	0.362	0.508	0.098	0.090	0.068	0.508	0.032	0.046	0.044

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No	Name of Reservoirs	States	As per Bulleting dated 14.10.2021				As per Bulleting dated 03.03.2022				As per Bulleting dated 12.05.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
68	Rajghat Dam	MP	-	-	-	-	1.945	1.403	0.377	0.493	1.945	0.970	0.165	0.218
69	Kolar Dam	MP	0.270	0.206	0.264	0.207	0.270	0.103	0.117	0.072	0.270	0.088	0.101	0.063
*70	Minimata Bango	CHH	3.046	2.608	2.480	2.375	3.046	2.020	2.163	2.074	3.046	1.480	1.660	1.770
71	Mahanadi	CHH	0.767	0.561	0.732	0.530	0.767	0.670	0.596	0.493	0.767	0.418	0.292	0.211
72	Dudhawa	CHH	0.284	0.113	0.279	0.193	0.284	0.055	0.157	0.095	0.284	0.045	0.087	0.069
73	Tandula	CHH	0.312	0.165	0.168	0.199	0.312	0.151	0.152	0.171	0.312	0.073	0.053	0.071
74	Jayakwadi (Paithon)	MAH	2.171	2.171	2.171	1.232	2.171	1.673	1.617	0.733	2.171	1.024	0.979	0.352
*75	Koyana	MAH	2.652	2.652	2.652	2.533	2.652	2.005	1.984	1.727	2.652	0.811	0.955	0.824
76	Bhima (Ujjani)	MAH	1.517	1.517	1.517	1.255	1.517	1.340	1.027	0.679	1.517	0.244	0.014	0.043
77	Isapur	MAH	0.965	0.964	0.964	0.619	0.965	0.783	0.720	0.434	0.965	0.544	0.490	0.249
78	Mula	MAH	0.609	0.609	0.609	0.522	0.609	0.468	0.462	0.275	0.609	0.215	0.265	0.115
79	Yeldari	MAH	0.809	0.809	0.809	0.347	0.809	0.661	0.636	0.280	0.809	0.453	0.517	0.168
80	Girna	MAH	0.524	0.524	0.524	0.296	0.524	0.322	0.267	0.166	0.524	0.203	0.205	0.102
81	Khadakvasla	MAH	0.056	0.043	0.044	0.041	0.056	0.043	0.028	0.035	0.056	0.021	0.013	0.031
*82	Upper Vaitarna	MAH	0.331	0.331	0.330	0.317	0.331	0.222	0.266	0.227	0.331	0.113	0.121	0.118
83	Upper Tapi	MAH	0.255	0.255	0.253	0.246	0.255	0.198	0.148	0.161	0.255	0.117	0.050	0.077
*84	Pench (Totaladoh)	MAH	1.091	1.003	1.014	0.784	1.091	0.670	0.795	0.422	1.091	0.577	0.698	0.388

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			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
85	Upper Wardha	MAH	0.564	0.564	0.564	0.534	0.564	0.367	0.334	0.251	0.564	0.282	0.264	0.193
86	Bhatsa	MAH	0.942	0.942	0.935	0.907	0.942	0.599	0.581	0.567	0.942	0.402	0.381	0.377
87	Dhom	MAH	0.331	0.317	0.328	0.304	0.331	0.229	0.241	0.178	0.331	0.123	0.102	0.090
88	Dudhganga	MAH	0.664	0.664	0.664	0.646	0.664	0.458	0.414	0.403	0.664	0.240	0.209	0.183
89	Manikdoh (Kukadi)	MAH	0.288	0.194	0.132	0.190	0.288	0.106	0.041	0.079	0.288	0.024	0.023	0.016
90	Bhandardara	MAH	0.304	0.304	0.304	0.292	0.304	0.261	0.258	0.193	0.304	0.131	0.168	0.075
91	Urmodi	MAH	0.273	0.269	0.273	0.263	0.273	0.240	0.238	0.208	0.273	0.171	0.160	0.164
92	Bhatghar	MAH	0.673	0.666	0.666	0.646	0.673	0.533	0.506	0.358	0.673	0.242	0.163	0.091
93	Nira Deoghar	MAH	0.332	0.332	0.332	0.321	0.332	0.224	0.218	0.167	0.332	0.105	0.074	0.054
*94	Thokarwadi	MAH	0.353	0.298	0.255	0.289	0.353	0.185	0.163	0.192	0.353	0.113	0.097	0.113
95	Kanher	MAH	0.272	0.272	0.272	0.261	0.272	0.167	0.150	0.137	0.272	0.092	0.076	0.074
*96	Mulshi	MAH	0.572	0.508	0.496	0.485	0.572	0.228	0.229	0.250	0.572	0.072	0.085	0.085
97	Surya	MAH	0.276	0.276	0.275	0.271	0.276	0.207	0.197	0.200	0.276	0.086	0.072	0.100
98	Tillari	MAH	0.447	0.444	0.440	0.432	0.447	0.352	0.304	0.290	0.447	0.274	0.229	0.205
99	Dimbhe Dam	MAH	-	-	-	-	0.354	0.188	0.239	0.171	0.354	0.049	0.128	0.054
100	Veer Dam	MAH	-	-	-	-	0.266	0.160	0.158	0.129	0.266	0.133	0.148	0.081
101	Barvi Dam	MAH	-	-	-	-	0.339	0.214	0.259	0.141	0.339	0.143	0.259	0.094

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1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
102	Chaskaman	MAH	-	-	-	-	0.215	0.149	0.163	0.102	0.215	0.068	0.163	0.044
*103	Doyang Hep	NAG	0.535	0.315	0.332	0.331	0.535	0.213	0.329	0.233	0.535	0.194	0.172	0.186
*104	Hirakud	ODI	5.378	4.823	4.823	4.798	5.378	3.665	2.760	3.122	5.378	1.385	1.157	1.561
*105	Balimela	ODI	2.676	1.206	1.940	1.627	2.676	1.048	1.213	1.466	2.676	0.350	0.572	0.516
106	Salanadi	ODI	0.558	0.444	0.323	0.306	0.558	0.359	0.215	0.221	0.558	0.324	0.179	0.207
*107	Rengali	ODI	3.432	3.281	3.352	3.207	3.432	2.713	1.396	2.082	3.432	0.695	0.654	0.693
*108	Machkund (Jalaput)	ODI	0.893	0.560	0.769	0.828	0.893	0.228	0.588	0.579	0.893	0.076	0.338	0.371
*109	Upper Kolab	ODI	0.935	0.411	0.411	0.579	0.935	0.273	0.256	0.480	0.935	0.059	0.074	0.166
*110	Upper Indravati	ODI	1.456	0.549	1.061	1.061	1.456	0.453	0.816	0.805	1.456	0.306	0.432	0.476
111	Sapua	ODI	0.006	0.006	0.006	0.005	0.006	0.006	0.006	0.004	0.006	0.006	0.006	0.004
112	Hariharjhor	ODI	0.059	0.048	0.055	0.052	0.059	0.020	0.03	0.025	0.059	0.000	0.000	0.014
113	Mandira Dam	ODI	0.309	0.236	0.204	0.237	0.309	0.309	0.279	0.290	0.309	0.276	0.197	0.244
*114	Thein Dam	PUN	2.344	1.111	1.294	1.671	2.344	0.892	0.450	0.840	2.344	0.939	0.719	1.042
*115	Mahi Bajaj Sagar	RAJ	1.711	1.711	1.711	1.710	1.711	0.873	0.857	0.872	1.711	0.557	0.550	0.564
116	Jhakam	RAJ	0.132	0.120	0.132	0.130	0.132	0.073	0.041	0.041	0.132	0.063	0.030	0.033
*117	Rana Pratap Sagar	RAJ	1.436	1.397	1.281	1.192	1.436	0.844	0.431	0.451	1.436	0.561	0.661	0.512
118	Bisalpur	RAJ	1.076	0.541	0.672	0.840	1.076	0.423	0.462	0.539	1.076	0.307	0.344	0.462

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1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
119	Jawai Dam	RAJ	-	-	-	-	0.193	0.017	0.047	0.042	0.193	0.011	0.045	0.031
120	Lower Bhawani	TN	0.792	0.792	0.792	0.425	0.792	0.665	0.711	0.296	0.792	0.459	0.582	0.18
*121	Mettur (Stanley)	TN	2.647	1.340	1.833	1.474	2.647	2.081	1.941	0.912	2.647	2.109	1.758	0.741
122	Vaigai	TN	0.172	0.081	0.082	0.061	0.172	0.152	0.124	0.042	0.172	0.148	0.117	0.031
123	Parambikulam	TN#	0.380	0.376	0.379	0.299	0.380	0.329	0.266	0.157	0.380	0.214	0.124	0.076
124	Aliyar	TN#	0.095	0.094	0.094	0.068	0.095	0.032	0.053	0.025	0.095	0.033	0.046	0.028
*125	Sholayar	TN#	0.143	0.143	0.143	0.119	0.143	0.040	0.000	0.006	0.143	0.010	0.000	0.004
126	Sathanur	TN	-	-	-	-	0.207	0.101	0.157	0.088	0.207	0.043	0.055	0.040
127	Gumti	TRP	0.312	0.251	0.289	0.222	0.312	0.166	0.228	0.108	0.312	0.114	0.164	0.084
128	Matatila	UP	0.707	0.641	0.589	0.606	0.707	0.226	0.186	0.221	0.707	0.182	0.193	0.222
*129	Rihand	UP	5.649	3.780	4.074	3.475	5.649	0.778	2.263	2.022	5.649	1.085	1.365	1.188
130	Sharda Sagar	UP	0.330	0.100	0.252	0.184	0.330	0.307	0.149	0.155	0.330	0.206	0.168	0.171
131	Sirsi	UP	0.190	0.155	0.115	0.127	0.190	0.062	0.023	0.048	0.190	0.029	0.012	0.040
132	Maudaha	UP	0.179	0.111	0.073	0.116	0.179	0.085	0.032	0.062	0.179	0.063	0.022	0.055
133	Jirgo	UP	0.147	0.097	0.094	0.092	0.147	0.061	0.053	0.059	0.147	0.049	0.044	0.055
134	Rangawan	UP	0.155	0.038	0.152	0.109	0.155	0.018	0.007	0.026	0.155	0.010	0.002	0.014
135	Meja	UP	0.299	0.252	0.003	0.159	0.299	0.129	0.047	0.085	0.299	0.076	0.045	0.079

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Table 1.4 (e): Storage Position of the Important Reservoirs of India during the Water Year 2021-22

Sl. No	Name of Reservoirs	States	As per Bulleting dated 14.10.2021				As per Bulleting dated 03.03.2022				As per Bulleting dated 12.05.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
*136	Ramganga	UKH	2.196	1.916	1.718	1.586	2.196	1.822	0.963	1.064	2.196	1.122	0.761	0.805
*137	Tehri	UKH	2.615	2.578	2.535	2.411	2.615	1.078	0.739	0.965	2.615	0.203	0.012	0.223
138	Nanak Sagar	UKH	-	-	-	-	0.176	0.061	0.056	0.048	0.176	0.002	0.001	0.016
139	Mayurakshi	WB	0.480	0.215	0.339	0.281	0.480	0.257	0.207	0.191	0.480	0.137	0.092	0.108
140	Kangsabati	WB	0.914	0.668	0.588	0.548	0.914	0.739	0.316	0.381	0.914	0.430	0.234	0.275
Reservoirs			**171.958**	**142.228**	**150.489**	**131.494**	**175.957**	**96.196**	**91.358**	**74.561**	**175.957**	**58.759**	**55.205**	**45.890**
Percentage				**82.710**	**87.510**	**76.460**		**54.6702**	**51.921**	**42.375**		**33.394**	**31.374**	**26.080**

Source: WM Directorate, Central Water Commission, M/o Jal Shakti

Note-1: `FRL': Full Reservoirs Level.

Note-2: '*': Hydel power capacity having capacity more than 60 MW; '$': Total CCA 342 Th. Ha of DVC system; '#': Total CCA 101 Th. Ha of Parambikulam, Aliyar & Sholayar; '@': Total CCA 425 Th. Ha of Narayanpur and Alimatti;

Note-3: Sabarmati reservoir is supplemented with Narmada water through pipeline.

Note-4: 'AP': Andhra Pradesh; 'TG':Telangana; 'JHA': Jharkhand; 'GUJ': Gujarat; 'HP': Himachal Pradesh; 'KAR': Karnataka; 'KRL': Kerala; 'MP': Madhya Pradesh; 'CHH': Chhattisgarh; 'MAH': Maharashtra; 'NAG': Nagaland; 'ODI': Odisha; 'PUN': Punjab; 'RAJ': Rajasthan; 'TN': Tamil Nadu; 'TRP': Tripura; 'UP': Uttar Pradesh; 'UKH': Uttarakhand; 'WB': West Bengal.

Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
*1	Srisailam	AP/TG	6.013	1.148	1.136	0.665	6.013	5.892	5.121	3.518	6.013	5.469	5.520	4.680
*2	Nagarjuna Sagar	AP/TG	5.108	1.150	1.268	0.448	5.108	4.678	5.066	2.212	5.108	5.083	5.100	3.324
3	Somasila	AP	1.994	1.611	1.280	0.456	1.994	1.982	1.775	0.457	1.994	1.917	1.994	1.143
4	Yeleru	AP	0.508	0.097	0.151	0.077	0.508	0.189	0.114	0.126	0.508	0.286	0.285	0.241
5	Kandaleru	AP	1.792	0.813	1.024	0.332	1.792	0.774	1.012	0.292	1.792	1.325	1.481	0.464
6	Donkarayi	AP	0.376	0.276	0.323	0.239	0.376	0.243	0.368	0.331	0.376	0.282	0.365	0.358
7	Sriramsagar	TG	2.300	0.654	0.764	0.396	2.300	2.300	2.269	0.996	2.300	2.300	2.218	1.635
8	Lower Manair	TG	0.621	0.265	0.586	0.194	0.621	0.575	0.567	0.292	0.621	0.621	0.621	0.395
9	Nizam Sagar	TG	0.482	0.157	0.201	0.047	0.482	0.463	0.252	0.091	0.482	0.482	0.409	0.188
10	Singur	TG	0.822	0.515	0.461	0.220	0.822	0.791	0.567	0.280	0.822	0.817	0.755	0.445
11	Priyadarshini Jurala	TG	0.168	0.111	0.098	0.034	0.168	0.122	0.098	0.120	0.168	0.148	0.098	0.150
12	Chandan Dam	BR	0.136	0.070	0.063	0.060	0.136	0.014	0.136	0.091	0.136	0.072	0.099	0.071
13	Tenughat	JHA$	0.821	0.278	0.383	0.294	0.821	0.392	0.387	0.366	0.821	0.454	0.384	0.395
14	Maithon	JHA	0.471	0.107	0.398	0.174	0.471	0.148	0.471	0.352	0.471	0.471	0.430	0.438
*15	Panchet Hill	JHA	0.184	0.082	0.184	0.091	0.184	0.095	0.184	0.167	0.184	0.184	0.184	0.176
16	Konar	JHA$	0.176	0.031	0.062	0.052	0.176	0.034	0.128	0.113	0.176	0.166	0.176	0.155
17	Tilaiya	JHA$	0.142	0.016	0.075	0.033	0.142	0.015	0.142	0.093	0.142	0.057	0.142	0.124

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
18	Getalsud	JHAR	0.218	0.066	0.093	0.073	0.218	0.127	0.187	0.145	0.218	0.209	0.191	0.153
*19	Ukai	GUJ	6.615	2.502	2.359	1.378	6.615	5.129	3.672	4.169	6.615	6.615	6.028	5.466
20	Sabarmati (Dharoi)	GUJ	0.735	0.056	0.202	0.144	0.735	0.652	0.206	0.345	0.735	0.724	0.298	0.542
*21	Kadana	GUJ	1.472	0.342	0.560	0.655	1.472	1.088	0.431	0.749	1.472	1.192	1.168	1.172
22	Shetrunji	GUJ	0.300	0.126	0.190	0.077	0.300	0.261	0.209	0.146	0.300	0.300	0.300	0.208
23	Bhadar	GUJ	0.188	0.045	0.042	0.036	0.188	0.130	0.041	0.078	0.188	0.188	0.188	0.143
24	Damanganga	GUJ	0.502	0.112	0.123	0.091	0.502	0.247	0.278	0.287	0.502	0.470	0.424	0.454
25	Dantiwada	GUJ	0.399	0.028	0.030	0.016	0.399	0.229	0.027	0.111	0.399	0.379	0.053	0.182
26	Panam	GUJ	0.697	0.160	0.235	0.295	0.697	0.212	0.200	0.424	0.697	0.261	0.332	0.523
*27	Sardar Sarovar	GUJ	5.760	0.457	0.395	0.511	5.760	4.707	0.614	1.561	5.760	2.223	2.223	2.627
28	Karjan	GUJ	0.523	0.213	0.213	0.155	0.523	0.357	0.247	0.319	0.523	0.505	0.513	0.459
29	Sukhi	GUJ	0.167	0.060	0.054	0.025	0.167	0.105	0.093	0.086	0.167	0.126	0.163	0.127
30	Watrak	GUJ	0.154	0.000	0.029	0.037	0.154	0.048	0.025	0.073	0.154	0.129	0.051	0.113
31	Hathmati	GUJ	0.153	0.004	0.047	0.015	0.153	0.121	0.046	0.034	0.153	0.149	0.061	0.068
32	Machchhu-I	GuJ	0.071	0.012	0.010	0.010	0.071	0.030	0.012	0.025	0.071	0.068	0.043	0.039
33	Machchhu-II	GUJ	0.091	0.021	0.032	0.014	0.091	0.044	0.042	0.042	0.091	0.084	0.049	0.053
34	UND-I	GUJ	0.066	0.004	0.008	0.004	0.066	0.048	0.028	0.030	0.066	0.066	0.066	0.040
35	Brahmani	GUJ	0.071	0.001	0.019	0.006	0.071	0.013	0.016	0.023	0.071	0.020	0.017	0.029

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
*36	Gobind Sagar (Bhakra)	HP	6.229	1.225	0.764	1.848	6.229	4.485	2.940	4.304	6.229	5.276	4.210	5.129
*37	Pong Dam (BEAS)	HP	6.157	0.765	0.512	1.343	6.157	4.143	2.370	3.946	6.157	5.423	3.410	4.959
*38	Kol Dam	HP	0.089	0.019	0.021	0.032	0.089	0.021	0.030	0.050	0.089	0.064	0.069	0.068
39	Krishnaraja Sagara	KAR	1.163	0.588	0.386	0.304	1.163	1.111	1.101	0.888	1.163	1.122	0.860	0.894
*40	Tungabhadra	KAR	3.276	1.280	0.926	0.740	3.276	2.996	2.856	2.440	3.276	2.996	2.825	2.469
41	Ghataprabha	KAR	1.391	0.181	0.619	0.167	1.391	1.357	1.387	1.152	1.391	1.387	1.387	1.216
42	Bhadra	KAR	1.785	0.780	0.838	0.461	1.785	1.707	1.748	1.477	1.785	1.746	1.746	1.525
43	Linganamakki	KAR	4.294	0.603	1.806	0.860	4.294	3.735	3.699	3.092	4.294	3.995	4.000	3.636
44	Narayanpur	KAR@	0.863	0.587	0.425	0.293	0.863	0.671	0.705	0.634	0.863	0.724	0.734	0.705
45	Malaprabha (Renuka)	KAR	0.972	0.234	0.437	0.117	0.972	0.883	0.899	0.579	0.972	0.972	0.949	0.609
46	Kabini (Sancherla Tank)	KAR	0.444	0.145	0.307	0.190	0.444	0.435	0.430	0.338	0.444	0.420	0.385	0.337
47	Hemavathy	KAR	0.927	0.666	0.451	0.282	0.927	0.923	0.864	0.789	0.927	0.921	0.811	0.695
48	Harangi	KAR	0.220	0.173	0.109	0.094	0.220	0.194	0.220	0.207	0.220	0.196	0.215	0.190
49	Supa	KAR	4.120	0.544	1.687	1.125	4.120	2.435	3.055	2.687	4.120	2.973	3.281	3.144
50	Vanivilas Sagar	KAR	0.802	0.584	0.250	0.088	0.802	0.757	0.307	0.083	0.802	0.802	0.375	0.081
*51	Almatti	KAR@	3.105	1.018	2.178	0.708	3.105	2.928	3.105	2.844	3.105	3.105	3.105	2.911
*52	Gerusoppa	KAR	0.130	0.094	0.095	0.099	0.130	0.094	0.099	0.099	0.130	0.089	0.117	0.102

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
*53	Mani Dam	KAR	0.884	0.061	0.129	0.171	0.884	0.564	0.461	0.526	0.884	0.659	0.556	0.647
54	Tattihalla	KAR	0.249	0.009	0.057	0.014	0.249	0.201	0.129	0.074	0.249	0.183	0.013	0.074
55	Kallada (Parappar)	KRL	0.507	0.140	0.315	0.197	0.507	0.309	0.315	0.289	0.507	0.312	0.373	0.329
*56	Idamalayar	KRL	1.018	0.319	0.367	0.252	1.018	0.854	0.673	0.628	1.018	0.881	0.835	0.749
*57	Idukki	KRL	1.460	0.539	0.714	0.423	1.460	1.171	0.962	0.843	1.460	1.165	1.183	0.985
*58	Kakki	KRL	0.447	0.115	0.229	0.123	0.447	0.357	0.320	0.271	0.447	0.353	0.359	0.318
*59	Periyar	KRL	0.173	0.107	0.121	0.060	0.173	0.165	0.143	0.103	0.173	0.129	0.107	0.085
60	Malampuzha	KRL	0.224	0.062	0.055	0.053	0.224	0.177	0.113	0.136	0.224	0.209	0.172	0.170
*61	Gandhi Sagar	MP	6.827	3.793	3.112	2.440	6.827	5.544	4.457	4.294	6.827	6.452	6.189	6.127
62	Tawa	MP	1.944	0.175	0.431	0.379	1.944	1.727	1.504	1.528	1.944	1.944	1.944	1.861
*63	Bargi	MP	3.180	1.003	1.388	0.805	3.180	2.912	2.254	2.649	3.180	3.180	3.180	3.100
*64	Bansagar	MP	5.166	2.317	2.208	2.479	5.166	2.436	3.244	4.233	5.166	5.166	4.589	4.747
*65	Indira Sagar	MP	9.745	1.083	0.849	1.267	9.745	8.497	2.677	5.863	9.745	9.274	6.723	8.602
66	Barna Dam	MP	0.456	0.144	0.219	0.081	0.456	0.370	0.249	0.328	0.456	0.454	0.424	0.404
*67	Omkareshwar	MP	0.299	0.000	0.194	0.027	0.299	0.084	0.094	0.015	0.299	0.263	0.145	0.018
68	Sanjay Sarover	MP	0.508	0.035	0.103	0.062	0.508	0.317	0.227	0.259	0.508	0.375	0.397	0.368
69	Rajghat Dam	MP	1.945	0.843	0.188	0.263	1.945	1.748	1.563	1.510	1.945	1.945	1.945	1.931
70	Kolar Dam	MP	0.270	0.076	0.105	0.061	0.270	0.222	0.140	0.153	0.270	0.266	0.202	0.208

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
71	Atal Sagar (Madikheda)	MP	0.835	0.358	0.098	0.191	0.835	0.727	0.742	0.622	0.835	0.824	0.824	0.738
*72	Minimata Bango	CHH	3.046	1.450	1.854	1.762	3.046	1.885	2.561	2.294	3.046	2.441	2.810	2.450
73	Mahanadi	CHH	0.767	0.364	0.321	0.218	0.767	0.755	0.297	0.460	0.767	0.711	0.618	0.622
74	Dudhawa	CHH	0.284	0.045	0.054	0.053	0.284	0.273	0.093	0.148	0.284	0.280	0.145	0.209
75	Tandula	CHH	0.312	0.071	0.026	0.071	0.312	0.312	0.049	0.128	0.312	0.283	0.192	0.218
76	Jayakwadi (Paithon)	MAH	2.171	0.737	0.717	0.255	2.171	2.077	0.882	0.839	2.171	2.170	1.997	1.270
*77	Koyana	MAH	2.652	0.239	1.056	0.733	2.652	2.604	2.477	2.450	2.652	2.652	2.652	2.574
78	Bhima (Ujjani)	MAH	1.517	0.000	0.000	0.000	1.517	1.517	0.946	0.782	1.517	1.517	1.374	1.186
79	Isapur	MAH	0.965	0.481	0.470	0.238	0.965	0.927	0.679	0.421	0.965	0.956	0.965	0.629
80	Mula	MAH	0.609	0.108	0.124	0.037	0.609	0.586	0.383	0.416	0.609	0.608	0.606	0.513
81	Yeldari	MAH	0.809	0.435	0.457	0.103	0.809	0.708	0.610	0.239	0.809	0.809	0.809	0.342
82	Girna	MAH	0.524	0.175	0.175	0.077	0.524	0.484	0.216	0.181	0.524	0.524	0.390	0.301
83	Khadakvasla	MAH	0.056	0.011	0.026	0.020	0.056	0.056	0.039	0.046	0.056	0.056	0.048	0.046
*84	Upper Vaitarna	MAH	0.331	0.081	0.058	0.081	0.331	0.317	0.267	0.272	0.331	0.330	0.330	0.315
85	Upper Tapi	MAH	0.255	0.047	0.047	0.038	0.255	0.057	0.056	0.088	0.255	0.214	0.199	0.221
*86	Pench (Totaladoh)	MAH	1.091	0.527	0.609	0.295	1.091	0.958	0.640	0.590	1.091	1.017	0.964	0.844
87	Upper Wardha	MAH	0.564	0.257	0.257	0.193	0.564	0.510	0.343	0.409	0.564	0.551	0.557	0.533

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
88	Bhatsa	MAH	0.942	0.299	0.332	0.320	0.942	0.907	0.814	0.806	0.942	0.936	0.939	0.912
89	Dhom	MAH	0.331	0.066	0.120	0.068	0.331	0.305	0.280	0.266	0.331	0.330	0.321	0.304
90	Dudhganga	MAH	0.664	0.131	0.237	0.169	0.664	0.607	0.614	0.604	0.664	0.658	0.664	0.645
91	Manikdoh (Kukadi)	MAH	0.288	0.022	0.021	0.016	0.288	0.195	0.123	0.151	0.288	0.260	0.184	0.184
92	Bhandardara	MAH	0.304	0.061	0.138	0.059	0.304	0.304	0.262	0.282	0.304	0.304	0.304	0.296
93	Urmodi	MAH	0.273	0.109	0.168	0.142	0.273	0.257	0.226	0.251	0.273	0.273	0.260	0.261
94	Bhatghar	MAH	0.673	0.038	0.117	0.092	0.673	0.666	0.599	0.618	0.673	0.666	0.666	0.643
95	Nira Deoghar	MAH	0.332	0.010	0.071	0.031	0.332	0.325	0.332	0.309	0.332	0.332	0.332	0.318
*96	Thokarwadi	MAH	0.353	0.066	0.079	0.082	0.353	0.273	0.238	0.234	0.353	0.341	0.294	0.295
97	Kanher	MAH	0.272	0.052	0.110	0.074	0.272	0.245	0.234	0.242	0.272	0.271	0.269	0.262
*98	Mulshi	MAH	0.572	0.000	0.073	0.059	0.572	0.570	0.488	0.479	0.572	0.557	0.543	0.505
99	Surya	MAH	0.276	0.063	0.080	0.101	0.276	0.257	0.242	0.232	0.276	0.275	0.276	0.272
100	Tillari	MAH	0.447	0.243	0.354	0.213	0.447	0.365	0.359	0.392	0.447	0.418	0.436	0.431
101	Dimbhe Dam	MAH	0.354	0.017	0.098	0.037	0.354	0.338	0.098	0.284	0.354	0.354	0.098	0.309
102	Veer Dam	MAH	0.266	0.107	0.109	0.045	0.266	0.261	0.254	0.231	0.266	0.266	0.254	0.238
103	Barvi Dam	MAH	0.339	0.106	0.137	0.068	0.339	0.338	0.137	0.199	0.339	0.328	0.336	0.239

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
104	Chaskaman	MAH	0.215	0.016	0.163	0.034	0.215	0.214	0.163	0.194	0.215	0.214	0.163	0.201
105	Panshet (Tanajisagar)	MAH	-	-	-	-	-	-	-	-	-	-	-	-
106	Bhama Askhed	MAH	-	-	-	-	-	-	-	-	-	-	-	-
107	Darna Dam	MAH	-	-	-	-	-	-	-	-	-	-	-	-
*108	Doyang Hep	NAG	0.535	0.216	0.167	0.211	0.535	0.240	0.189	0.335	0.535	0.312	0.312	0.338
*109	Hirakud	ODI	5.378	0.682	1.215	0.763	5.378	3.778	1.828	2.473	5.378	4.818	4.818	4.887
*110	Balimela	ODI	2.676	0.088	0.548	0.607	2.676	0.706	0.622	1.152	2.676	1.000	1.092	1.817
111	Salanadi	ODI	0.558	0.329	0.228	0.224	0.558	0.450	0.157	0.252	0.558	0.415	0.388	0.330
*112	Rengali	ODI	3.432	0.104	1.064	0.430	3.432	1.557	2.419	2.085	3.432	3.130	3.424	3.016
*113	Machkund (Jalaput)	ODI	0.893	0.017	0.279	0.247	0.893	0.236	0.204	0.470	0.893	0.537	0.482	0.728
*114	Upper Kolab	ODI	0.935	0.055	0.115	0.163	0.935	0.334	0.131	0.364	0.935	0.616	0.357	0.607
*115	Upper Indravati	ODI	1.456	0.314	0.335	0.305	1.456	1.031	0.429	0.863	1.456	1.243	0.575	1.052
116	Sapua	ODI	0.006	0.006	0.006	0.004	0.006	0.006	0.001	0.003	0.006	0.006	0.006	0.005
117	Hariharjhor	ODI	0.059	0.011	0.000	0.017	0.059	0.055	0.013	0.046	0.059	0.052	0.052	0.053
118	Mandira Dam	ODI	0.309	0.200	0.195	0.207	0.309	0.131	0.195	0.191	0.309	0.170	0.210	0.213
*119	Thein Dam	PUN	2.344	0.768	0.768	1.222	2.344	1.999	0.988	1.526	2.344	1.999	1.037	1.630
*120	Mahi Bajaj Sagar	RAJ	1.711	0.520	0.531	0.554	1.711	1.650	1.013	1.392	1.711	1.711	1.711	1.708

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
121	Jhakam	RAJ	0.132	0.057	0.028	0.033	0.132	0.132	0.046	0.102	0.132	0.132	0.106	0.128
*122	Rana Pratap Sagar	RAJ	1.436	0.904	0.630	0.570	1.436	1.298	1.158	1.098	1.436	1.436	1.397	1.265
123	Bisalpur	RAJ	1.076	0.237	0.286	0.384	1.076	0.558	0.376	0.669	1.076	1.076	0.496	0.767
124	Jawai Dam	RAJ	0.193	0.009	0.045	0.025	0.193	0.100	0.002	0.060	0.193	0.191	0.002	0.102
125	Jaisamand	RAJ	0.296	0.088	0.155	0.086	0.296	0.159	0.152	0.121	0.296	0.296	0.186	0.203
126	Lower Bhawani	TN	0.792	0.484	0.676	0.279	0.792	0.792	0.792	0.492	0.792	0.792	0.792	0.448
*127	Mettur (Stanley)	TN	2.647	2.016	1.345	0.743	2.647	2.647	0.880	1.656	2.647	2.591	1.012	1.434
128	Vaigai	TN	0.172	0.068	0.127	0.034	0.172	0.160	0.151	0.062	0.172	0.162	0.072	0.055
129	Parambikulam	TN#	0.380	0.215	0.156	0.089	0.380	0.366	0.351	0.260	0.380	0.250	0.378	0.295
130	Aliyar	TN#	0.095	0.038	0.032	0.024	0.095	0.091	0.085	0.060	0.095	0.092	0.093	0.069
*131	Sholayar	TN#	0.143	0.077	0.073	0.062	0.143	0.143	0.143	0.112	0.143	0.143	0.143	0.122
132	Sathanur	TN	0.207	0.104	0.043	0.042	0.207	0.195	0.043	0.041	0.207	0.181	0.055	0.052
133	Gumti	TRP	0.312	0.144	0.164	0.147	0.312	0.224	0.178	0.201	0.312	0.273	0.254	0.249
134	Matatila	UP	0.707	0.174	0.077	0.138	0.707	0.576	0.576	0.460	0.707	0.641	0.641	0.637
*135	Rihand	UP	5.649	0.687	1.199	0.802	5.649	1.458	3.007	2.545	5.649	2.324	3.931	3.429
136	Sharda Sagar	UP	0.330	0.198	0.308	0.216	0.330	0.095	0.165	0.190	0.330	0.142	0.094	0.159
137	Sirsi	UP	0.190	0.030	0.037	0.024	0.190	0.024	0.150	0.107	0.190	0.056	0.165	0.129
138	Maudaha	UP	0.179	0.049	0.018	0.039	0.179	0.082	0.079	0.081	0.179	0.176	0.104	0.110

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 30.06.2022				As per Bulleting dated 18.08.2022				As per Bulleting dated 29.09.2022			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
139	Jirgo	UP	0.147	0.038	0.060	0.049	0.147	0.030	0.089	0.073	0.147	0.037	0.107	0.093
140	Rangawan	UP	0.155	0.000	0.002	0.008	0.155	0.026	0.019	0.051	0.155	0.093	0.038	0.097
141	Meja	UP	0.299	0.072	0.146	0.078	0.299	0.045	0.255	0.179	0.299	0.191	0.284	0.177
*142	Ramganga	UKH	2.196	0.638	0.792	0.660	2.196	1.036	1.348	1.212	2.196	1.403	1.856	1.549
*143	Tehri	UKH	2.615	0.056	0.056	0.213	2.615	2.052	1.890	1.783	2.615	2.589	2.613	2.432
144	Nanak Sagar	UKH	0.176	0.000	0.000	0.004	0.176	0.054	0.004	0.058	0.176	0.115	0.004	0.096
145	Mayurakshi	WB	0.480	0.141	0.227	0.150	0.480	0.104	0.298	0.270	0.480	0.198	0.295	0.285
146	Kangsabati	WB	0.914	0.428	0.557	0.337	0.914	0.459	0.714	0.541	0.914	0.603	0.726	0.594
Reservoirs			**177.460**	**48.951**	**57.139**	**41.427**	**177.460**	**135.040**	**108.250**	**107.650**	**177.460**	**154.180**	**142.370**	**136.860**
Percentage				**27.584**	**32.198**	**23.344**		**76.097**	**61.001**	**60.660**		**86.880**	**80.225**	**77.119**

Source: WM Directorate, Central Water Commission, M/o Jal Shakti

Note-1: `FRL': Full Reservoirs Level.

Note-2: '*': Hydel power capacity having capacity more than 60 MW; '$': Total CCA 342 Th. Ha of DVC system; '#': Total CCA 101 Th. Ha of Parambikulam, Aliyar & Sholayar; '@': Total CCA 425 Th. Ha of Narayanpur and Alimatti;

Note-3: Sabarmati reservoir is supplemented with Narmada water through pipeline.

Note-4: 'AP': Andhra Pradesh; 'TG':Telangana; 'JHA': Jharkhand; 'GUJ': Gujarat; 'HP': Himachal Pradesh; 'KAR': Karnataka; 'KRL': Kerala; 'MP': Madhya Pradesh; 'CHH': Chhattisgarh; 'MAH': Maharashtra; 'NAG': Nagaland; 'ODI': Odisha; 'PUN': Punjab; 'RAJ': Rajasthan; 'TN': Tamil Nadu; 'TRP': Tripura; 'UP': Uttar Pradesh; 'UKH': Uttarakhand; 'WB': West Bengal.

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 13.10.2022				As per Bulleting dated 02.03.2023				As per Bulleting dated 18.05.2023			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
*1	Srisailam	AP/TG	6.013	6.001	5.960	4.630	6.013	1.121	0.762	1.469	6.013	0.866	0.918	0.621
*2	Nagarjuna Sagar	AP/TG	5.108	5.083	5.074	3.306	5.108	2.038	3.615	1.157	5.108	0.571	1.470	0.540
3	Somasila	AP	1.994	1.929	1.994	1.268	1.994	1.508	1.937	0.969	1.994	1.087	1.656	0.672
4	Yeleru	AP	0.508	0.408	0.383	0.280	0.508	0.224	0.279	0.196	0.508	0.106	0.125	0.133
5	Kandaleru	AP	1.792	1.377	1.464	0.533	1.792	1.125	1.211	0.450	1.792	0.806	1.028	0.420
6	Donkarayi	AP	0.376	0.257	0.356	0.353	0.376	0.203	0.299	0.253	0.376	0.078	0.298	0.236
7	Sriramsagar	TG	2.300	2.300	2.300	1.663	2.300	1.252	1.572	0.957	2.300	0.611	0.582	0.413
8	Lower Manair	TG	0.621	0.621	0.621	0.372	0.621	0.370	0.440	0.318	0.621	0.228	0.277	0.187
9	Nizam Sagar	TG	0.482	0.482	0.482	0.206	0.482	0.259	0.344	0.149	0.482	0.145	0.186	0.066
10	Singur	TG	0.822	0.817	0.812	0.437	0.822	0.605	0.690	0.332	0.822	0.477	0.567	0.239
11	Priyadarshini Jurala	TG	0.168	0.142	0.098	0.146	0.168	0.045	0.116	0.081	0.168	0.086	0.078	0.024
12	Chandan Dam	BR	0.136	0.083	0.136	0.072	0.136	0.023	0.086	0.037	0.136	0.017	0.070	0.041
13	Tenughat	JHA$	0.821	0.463	0.414	0.396	0.821	0.404	0.403	0.392	0.821	0.344	0.332	0.346
14	Maithon	JHA	0.471	0.471	0.471	0.431	0.471	0.408	0.471	0.375	0.471	0.210	0.151	0.177
*15	Panchet Hill	JHA	0.184	0.184	0.184	0.167	0.184	0.183	0.184	0.148	0.184	0.089	0.089	0.093
16	Konar	JHA$	0.176	0.176	0.176	0.162	0.176	0.130	0.145	0.120	0.176	0.084	0.076	0.073
17	Tilaiya	JHA$	0.142	0.086	0.142	0.129	0.142	0.029	0.033	0.047	0.142	0.019	0.020	0.026

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			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
*18	Getalsud	JHAR	0.218	0.191	0.169	0.155	0.218	0.103	0.100	0.101	0.218	0.071	0.075	0.080
*19	Ukai	GUJ	6.615	6.615	6.615	5.536	6.615	4.760	5.207	3.866	6.615	2.806	3.259	2.040
20	Sabarmati (Dharoi)	GUJ	0.735	0.735	0.311	0.580	0.735	0.394	0.132	0.253	0.735	0.292	0.079	0.154
*21	Kadana	GUJ	1.472	1.186	1.192	1.146	1.472	0.731	0.779	0.829	1.472	0.424	0.480	0.707
22	Shetrunji	GUJ	0.300	0.300	0.300	0.215	0.300	0.195	0.232	0.118	0.300	0.071	0.094	0.047
23	Bhadar	GUJ	0.188	0.188	0.188	0.125	0.188	0.078	0.123	0.062	0.188	0.048	0.080	0.038
24	Damanganga	GUJ	0.502	0.478	0.480	0.475	0.502	0.326	0.358	0.273	0.502	0.132	0.178	0.102
25	Dantiwada	GUJ	0.399	0.379	0.055	0.184	0.399	0.153	0.036	0.045	0.399	0.085	0.027	0.020
26	Panam	GUJ	0.697	0.301	0.361	0.516	0.697	0.187	0.239	0.362	0.697	0.170	0.159	0.271
*27	Sardar Sarovar	GUJ	5.760	5.744	3.305	2.631	5.760	3.121	1.325	1.165	5.760	0.781	1.162	1.060
28	Karjan	GUJ	0.523	0.515	0.513	0.472	0.523	0.378	0.413	0.330	0.523	0.269	0.307	0.209
29	Sukhi(Guj)	GUJ	0.167	0.137	0.165	0.132	0.167	0.075	0.133	0.099	0.167	0.027	0.064	0.044
30	Watrak	GUJ	0.154	0.132	0.057	0.113	0.154	0.070	0.018	0.053	0.154	0.049	0.004	0.033
31	Hathmati	GUJ	0.153	0.149	0.062	0.081	0.153	0.069	0.014	0.043	0.153	0.058	0.007	0.026
32	Machchhu-I	GuJ	0.071	0.066	0.069	0.041	0.071	0.018	0.027	0.022	0.071	0.013	0.016	0.013
33	Machchhu-II	GUJ	0.091	0.075	0.084	0.055	0.091	0.037	0.067	0.046	0.091	0.037	0.047	0.038
34	UND-I	GUJ	0.066	0.066	0.066	0.039	0.066	0.034	0.039	0.013	0.066	0.015	0.008	0.007

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Sl. No	Name of Reservoirs	States	As per Bulleting dated 13.10.2022				As per Bulleting dated 02.03.2023				As per Bulleting dated 18.05.2023			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
35	Brahmani (GUJ)	GUJ	0.071	0.019	0.019	0.029	0.071	0.017	0.008	0.016	0.071	0.015	0.002	0.012
*36	Gobind Sagar (Bhakra)	HP	6.229	5.461	4.220	5.267	6.229	2.321	2.089	2.442	6.229	1.313	1.319	1.573
*37	Pong Dam (BEAS)	HP	6.157	5.143	3.320	4.752	6.157	2.667	2.086	1.839	6.157	2.231	1.699	1.578
*38	Kol Dam	HP	0.089	0.076	0.073	0.076	0.089	0.060	0.080	0.056	0.089	0.069	0.035	0.031
39	Krishnaraja Sagara	KAR	1.163	1.143	0.989	0.903	1.163	0.557	0.751	0.516	1.163	0.148	0.418	0.204
*40	Tungabhadra	KAR	3.276	2.981	2.856	2.451	3.276	0.792	1.186	0.561	3.276	0.109	0.365	0.235
41	Ghataprabha	KAR	1.391	1.387	1.387	1.212	1.391	0.615	0.614	0.420	1.391	0.166	0.174	0.117
42	Bhadra	KAR	1.785	1.785	1.785	1.492	1.785	1.210	1.323	0.950	1.785	0.526	0.689	0.327
43	Linganamakki	KAR	4.294	3.868	4.000	3.521	4.294	1.859	2.290	2.021	4.294	0.674	0.905	0.875
44	Narayanpur	KAR@	0.863	0.679	0.738	0.683	0.863	0.653	0.607	0.471	0.863	0.250	0.428	0.263
45	Malaprabha (Renuka)	KAR	0.972	0.972	0.972	0.639	0.972	0.313	0.452	0.198	0.972	0.171	0.228	0.101
46	Kabini (Sancherla Tank)	KAR	0.444	0.410	0.361	0.316	0.444	0.190	0.316	0.203	0.444	0.025	0.105	0.088
47	Hemavathy	KAR	0.927	0.912	0.752	0.645	0.927	0.488	0.627	0.229	0.927	0.371	0.547	0.183
48	Harangi	KAR	0.220	0.167	0.220	0.175	0.220	0.071	0.195	0.056	0.220	0.054	0.136	0.049
49	Supa	KAR	4.120	2.956	3.320	3.093	4.120	2.109	2.077	2.198	4.120	1.368	0.872	1.280
50	Vanivilas Sagar	KAR	0.802	0.802	0.426	0.112	0.802	0.765	0.635	0.163	0.802	0.697	0.571	0.128

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 13.10.2022				As per Bulleting dated 02.03.2023				As per Bulleting dated 18.05.2023			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
*51	Almatti	KAR@	3.105	3.105	3.105	2.845	3.105	1.034	1.646	0.834	3.105	0.324	0.645	0.314
*52	Gerusoppa	KAR	0.130	0.091	0.099	0.100	0.130	0.109	0.103	0.106	0.130	0.092	0.115	0.111
*53	Mani Dam	KAR	0.884	0.646	0.547	0.643	0.884	0.252	0.341	0.369	0.884	0.088	0.084	0.145
54	Tattihalla	KAR	0.249	0.175	0.065	0.085	0.249	0.001	0.001	0.021	0.249	0.000	0.002	0.000
55	Kallada (Parappar)	KRL	0.507	0.316	0.421	0.347	0.507	0.251	0.345	0.320	0.507	0.135	0.143	0.165
*56	Idamalayar	KRL	1.018	0.824	0.875	0.751	1.018	0.502	0.629	0.516	1.018	0.281	0.307	0.225
*57	Idukki	KRL	1.460	1.147	1.242	0.996	1.460	0.712	1.018	0.752	1.460	0.377	0.545	0.410
*58	Kakki	KRL	0.447	0.347	0.386	0.321	0.447	0.265	0.297	0.271	0.447	0.115	0.139	0.113
*59	Periyar	KRL	0.173	0.104	0.110	0.082	0.173	0.060	0.109	0.046	0.173	0.050	0.121	0.048
60	Malampuzha	KRL	0.224	0.213	0.195	0.172	0.224	0.062	0.075	0.044	0.224	0.034	0.070	0.034
*61	Gandhi Sagar	MP	6.827	6.592	6.568	6.177	6.827	4.581	5.042	4.111	6.827	3.692	4.468	3.015
62	Tawa	MP	1.944	1.944	1.944	1.865	1.944	0.971	0.891	0.583	1.944	0.447	0.202	0.288
*63	Bargi	MP	3.180	3.180	3.180	3.051	3.180	2.184	2.198	1.933	3.180	1.590	1.286	1.131
*64	Bansagar	MP	5.166	5.166	4.553	4.685	5.166	3.853	3.369	3.475	5.166	3.112	2.629	2.791
*65	Indira Sagar	MP	9.745	9.020	7.194	8.574	9.745	4.122	3.977	4.276	9.745	3.499	1.916	2.159
66	Barna Dam	MP	0.456	0.455	0.389	0.375	0.456	0.282	0.215	0.154	0.456	0.231	0.167	0.110
*67	Omkareshwar	MP	0.299	0.151	0.045	0.018	0.299	0.150	0.019	0.026	0.299	0.100	0.005	0.028

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 13.10.2022				As per Bulleting dated 02.03.2023				As per Bulleting dated 18.05.2023			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
68	Sanjay Sarover	MP	0.508	0.402	0.407	0.360	0.508	0.048	0.098	0.068	0.508	0.019	0.029	0.040
69	Rajghat Dam	MP	1.945	1.945	1.945	1.934	1.945	0.993	1.403	0.626	1.945	0.836	0.925	0.287
70	Kolar Dam	MP	0.270	0.266	0.206	0.209	0.270	0.133	0.103	0.067	0.270	0.115	0.087	0.053
71	Atal Sagar (Madikheda)	MP	0.835	0.821	0.824	0.717	0.835	0.411	0.294	0.271	0.835	0.316	0.101	0.176
*72	Minimata Bango	CHH	3.046	2.417	2.625	2.360	3.046	2.198	2.027	2.062	3.046	1.766	1.472	1.727
73	Mahanadi	CHH	0.767	0.668	0.561	0.526	0.767	0.653	0.670	0.494	0.767	0.419	0.406	0.222
74	Dudhawa	CHH	0.284	0.275	0.113	0.179	0.284	0.237	0.055	0.084	0.284	0.191	0.087	0.069
75	Tandula	CHH	0.312	0.268	0.165	0.188	0.312	0.242	0.151	0.170	0.312	0.158	0.073	0.060
76	Jayakwadi (Paithon)	MAH	2.171	2.171	2.171	1.312	2.171	1.566	1.682	0.853	2.171	0.948	0.947	0.428
*77	Koyana	MAH	2.652	2.652	2.652	2.563	2.652	1.806	2.013	1.705	2.652	0.657	0.696	0.673
78	Bhima (Ujjani)	MAH	1.517	1.517	1.517	1.226	1.517	1.033	1.349	0.653	1.517	0.000	0.150	0.031
79	Isapur	MAH	0.965	0.964	0.964	0.625	0.965	0.699	0.785	0.437	0.965	0.512	0.522	0.252
80	Mula	MAH	0.609	0.609	0.609	0.522	0.609	0.464	0.469	0.292	0.609	0.269	0.186	0.107
81	Yeldari	MAH	0.809	0.809	0.809	0.361	0.809	0.639	0.666	0.299	0.809	0.470	0.450	0.187
82	Girna	MAH	0.524	0.524	0.524	0.327	0.524	0.290	0.326	0.171	0.524	0.172	0.201	0.099
83	Khadakvasla	MAH	0.056	0.056	0.043	0.041	0.056	0.028	0.044	0.035	0.056	0.034	0.020	0.025
*84	Upper Vaitarna	MAH	0.331	0.331	0.331	0.317	0.331	0.271	0.224	0.220	0.331	0.125	0.100	0.105

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Sl. No	Name of Reservoirs	States	As per Bulleting dated 13.10.2022				As per Bulleting dated 02.03.2023				As per Bulleting dated 18.05.2023			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
85	Upper Tapi	MAH	0.255	0.254	0.254	0.244	0.255	0.190	0.199	0.165	0.255	0.134	0.117	0.073
*86	Pench (Totaladoh)	MAH	1.091	1.017	1.005	0.793	1.091	0.658	0.672	0.447	1.091	0.610	0.578	0.344
87	Upper Wardha	MAH	0.564	0.564	0.564	0.535	0.564	0.332	0.370	0.267	0.564	0.260	0.276	0.200
88	Bhatsa	MAH	0.942	0.936	0.942	0.910	0.942	0.565	0.600	0.561	0.942	0.346	0.385	0.353
89	Dhom	MAH	0.331	0.331	0.317	0.304	0.331	0.218	0.229	0.179	0.331	0.115	0.114	0.088
90	Dudhganga	MAH	0.664	0.635	0.664	0.647	0.664	0.289	0.460	0.387	0.664	0.071	0.215	0.159
91	Manikdoh (Kukadi)	MAH	0.288	0.263	0.194	0.190	0.288	0.153	0.106	0.083	0.288	0.029	0.024	0.017
92	Bhandardara	MAH	0.304	0.304	0.304	0.293	0.304	0.292	0.264	0.188	0.304	0.162	0.116	0.073
93	Urmodi	MAH	0.273	0.272	0.269	0.264	0.273	0.197	0.240	0.210	0.273	0.114	0.163	0.146
94	Bhatghar	MAH	0.673	0.666	0.666	0.644	0.673	0.382	0.533	0.344	0.673	0.100	0.192	0.086
95	Nira Deoghar	MAH	0.332	0.332	0.332	0.318	0.332	0.238	0.224	0.166	0.332	0.103	0.093	0.052
*96	Thokarwadi	MAH	0.353	0.340	0.299	0.283	0.353	0.221	0.186	0.168	0.353	0.143	0.113	0.108
97	Kanher	MAH	0.272	0.272	0.272	0.263	0.272	0.153	0.167	0.142	0.272	0.082	0.083	0.075
*98	Mulshi	MAH	0.572	0.538	0.511	0.484	0.572	0.282	0.232	0.219	0.572	0.114	0.054	0.067
99	Surya	MAH	0.276	0.271	0.276	0.273	0.276	0.184	0.182	0.191	0.276	0.075	0.078	0.102
100	Tillari	MAH	0.447	0.417	0.444	0.434	0.447	0.291	0.352	0.285	0.447	0.157	0.267	0.197

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Sl. No	Name of Reservoirs	States	As per Bulleting dated 13.10.2022				As per Bulleting dated 02.03.2023				As per Bulleting dated 18.05.2023			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
101	Dimbhe Dam	MAH	0.354	0.354	0.098	0.311	0.354	0.228	0.188	0.175	0.354	0.071	0.041	0.048
102	Veer Dam	MAH	0.266	0.266	0.254	0.241	0.266	0.170	0.160	0.135	0.266	0.105	0.142	0.081
103	Barvi Dam	MAH	0.339	0.326	0.330	0.236	0.339	0.196	0.214	0.140	0.339	0.120	0.136	0.098
104	Chaskaman	MAH	0.215	0.214	0.163	0.201	0.215	0.116	0.149	0.102	0.215	0.032	0.057	0.041
105	Panshet (Tanajisagar)	MAH	-	-	-	-	-	-	-	-	0.302	0.060	0.090	0.093
106	Bhama Askhed	MAH	-	-	-	-	-	-	-	-	0.217	0.082	0.083	0.075
107	Darna Dam	MAH	-	-	-	-	-	-	-	-	0.202	0.113	0.082	0.055
*108	Doyang Hep	NAG	0.535	0.322	0.315	0.331	0.535	0.211	0.213	0.232	0.535	0.167	0.181	0.183
*109	Hirakud	ODI	5.378	4.802	4.823	4.749	5.378	2.943	3.674	3.243	5.378	1.268	1.177	1.421
*110	Balimela	ODI	2.676	1.159	1.195	1.504	2.676	0.679	1.048	1.497	2.676	0.428	0.325	0.748
111	Salanadi	ODI	0.558	0.439	0.444	0.309	0.558	0.267	0.359	0.237	0.558	0.251	0.323	0.217
*112	Rengali	ODI	3.432	3.359	3.259	3.276	3.432	1.847	2.713	2.778	3.432	0.915	0.506	0.969
*113	Machkund (Jalaput)	ODI	0.893	0.631	0.551	0.707	0.893	0.504	0.228	0.412	0.893	0.297	0.078	0.265
*114	Upper Kolab	ODI	0.935	0.703	0.403	0.603	0.935	0.487	0.273	0.484	0.935	0.252	0.052	0.213
*115	Upper Indravati	ODI	1.456	1.198	0.537	1.061	1.456	0.815	0.453	0.824	1.456	0.523	0.304	0.411
116	Sapua	ODI	0.006	0.006	0.006	0.004	0.006	0.006	0.006	0.004	0.006	0.006	0.006	0.004

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			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
117	Hariharjhor	ODI	0.059	0.053	0.048	0.050	0.059	0.018	0.021	0.030	0.059	0.000	0.000	0.010
118	Mandira Dam	ODI	0.309	0.199	0.240	0.228	0.309	0.235	0.309	0.290	0.309	0.178	0.263	0.235
*119	Thein Dam	PUN	2.344	2.078	1.111	1.559	2.344	1.263	0.892	0.877	2.344	1.233	0.964	1.141
*120	Mahi Bajaj Sagar	RAJ	1.711	1.711	1.711	1.710	1.711	0.731	0.882	0.882	1.711	0.528	0.554	0.552
121	Jhakam	RAJ	0.132	0.132	0.120	0.129	0.132	0.042	0.073	0.045	0.132	0.034	0.058	0.035
*122	Rana Pratap Sagar	RAJ	1.436	1.436	1.399	1.231	1.436	0.700	0.852	0.478	1.436	1.049	0.541	0.496
123	Bisalpur	RAJ	1.076	1.076	0.541	0.796	1.076	0.832	0.424	0.535	1.076	0.657	0.294	0.418
124	Jawai Dam	RAJ	0.193	0.193	0.031	0.110	0.193	0.060	0.017	0.039	0.193	0.044	0.010	0.028
125	Jaisamand	RAJ	0.296	0.296	0.201	0.209	0.296	0.199	0.226	0.146	0.296	0.172	0.159	0.107
126	Lower Bhawani	TN	0.792	0.792	0.792	0.460	0.792	0.691	0.667	0.338	0.792	0.495	0.466	0.219
*127	Mettur (Stanley)	TN	2.647	2.647	1.340	1.482	2.647	1.969	2.084	1.001	2.647	1.981	2.199	0.838
128	Vaigai	TN	0.172	0.147	0.081	0.064	0.172	0.075	0.153	0.050	0.172	0.068	0.145	0.043
129	Parambikulam	TN#	0.380	0.213	0.376	0.300	0.380	0.137	0.330	0.167	0.380	0.053	0.211	0.075
130	Aliyar	TN#	0.095	0.093	0.094	0.069	0.095	0.025	0.032	0.020	0.095	0.014	0.039	0.025
*131	Sholayar	TN#	0.143	0.143	0.143	0.118	0.143	0.008	0.042	0.007	0.143	0.003	0.011	0.004
132	Sathanur	TN	0.207	0.191	0.074	0.067	0.207	0.205	0.101	0.083	0.207	0.141	0.038	0.038
133	Gumti	TRP	0.312	0.277	0.254	0.242	0.312	0.172	0.166	0.111	0.312	0.104	0.118	0.091

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Table 1.4 (f): Storage Position of the Important Reservoirs of India during the Water Year 2022-23

Sl. No	Name of Reservoirs	States	As per Bulleting dated 13.10.2022				As per Bulleting dated 02.03.2023				As per Bulleting dated 18.05.2023			
			Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)	Live Capacity at FRL (BCM)	Current Year's Live Storage (BCM)	Last Season's Live Storage (BCM)	Avg. Last 10 Years Live Cap. (BCM)
1	2	3	16	17	18	19	20	21	22	23	24	25	26	27
134	Matatila	UP	0.707	0.641	0.641	0.609	0.707	0.288	0.226	0.203	0.707	0.143	0.139	0.216
*135	Rihand	UP	5.649	2.698	3.792	3.411	5.649	1.292	1.789	1.917	5.649	0.962	1.054	1.115
136	Sharda Sagar	UP	0.330	0.194	0.100	0.165	0.330	0.209	0.310	0.186	0.330	0.259	0.172	0.150
137	Sirsi	UP	0.190	0.061	0.155	0.122	0.190	0.000	0.062	0.048	0.190	0.014	0.029	0.030
138	Maudaha	UP	0.179	0.176	0.111	0.117	0.179	0.128	0.085	0.065	0.179	0.101	0.061	0.052
139	Jirgo	UP	0.147	0.034	0.098	0.084	0.147	0.004	0.061	0.054	0.147	0.002	0.048	0.048
140	Rangawan	UP	0.155	0.121	0.038	0.092	0.155	0.033	0.018	0.022	0.155	0.004	0.001	0.008
141	Meja	UP	0.299	1.179	0.254	0.180	0.299	0.083	0.130	0.099	0.299	0.066	0.075	0.074
*142	Ramganga	UKH	2.196	1.615	1.916	1.584	2.196	1.070	1.833	1.177	2.196	0.840	1.052	0.876
*143	Tehri	UKH	2.615	2.615	2.578	2.423	2.615	1.082	1.078	0.998	2.615	0.110	0.197	0.191
144	Nanak Sagar	UKH	0.176	0.120	0.142	0.112	0.176	0.031	0.061	0.050	0.176	0.000	0.000	0.011
145	Mayurakshi	WB	0.480	0.221	0.223	0.273	0.480	0.141	0.257	0.204	0.480	0.122	0.137	0.112
146	Kangsabati	WB	0.914	0.664	0.678	0.549	0.914	0.216	0.739	0.434	0.914	0.221	0.430	0.309
Reservoirs			**177.460**	**159.280**	**146.850**	**136.220**	**177.460**	**91.498**	**98.413**	**78.634**	**178.190**	**57.436**	**57.674**	**46.477**
Percentage				**90.315**	**82.751**	**76.761**		**51.559**	**55.455**	**44.310**		**32.234**	**32.367**	**26.084**

Source: WM Directorate, Central Water Commission, M/o Jal Shakti

Note-1: `FRL': Full Reservoirs Level.

Note-2: '*': Hydel power capacity having capacity more than 60 MW; '$': Total CCA 342 Th. Ha of DVC system; '#': Total CCA 101 Th. Ha of Parambikulam, Aliyar & Sholayar; '@': Total CCA 425 Th. Ha of Narayanpur and Alimatti; Note-3: Sabarmati reservoir is supplemented with Narmada water through pipeline;

Note-4: 'AP': Andhra Pradesh; 'TG':Telangana; 'JHA': Jharkhand; 'GUJ': Gujarat; 'HP': Himachal Pradesh; 'KAR': Karnataka; 'KRL': Kerala; 'MP': Madhya Pradesh; 'CHH': Chhattisgarh; 'MAH': Maharashtra; 'NAG': Nagaland; 'ODI': Odisha; 'PUN': Punjab; 'RAJ': Rajasthan; 'TN': Tamil Nadu; 'TRP': Tripura; 'UP': Uttar Pradesh; 'UKH': Uttarakhand; 'WB': West Bengal.

Table 1.5 (a): State-wise Distribution of Hydro-Meteorological Sites of CWC

(as on January, 2023)

Sl. No	Name of States/UTs	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met	WQSS	Grand Total
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	8	17	4	-	14	1	-	2	46
2	Arunachal Pradesh	7	3	9	-	9	10	18	-	56
3	Assam	7	9	21	-	26	53	5	-	121
4	Bihar	61	27	6	2	22	1	-	-	119
5	Chhattisgarh	11	9	2	1	18	-	3	12	56
6	Dadar & Nagar Haveli	3	1	-	-	-	-	-	-	4
7	Delhi	-	-	1	-	2	-	-	3	6
8	Goa	-	2	-	-	-	-	-	-	2
9	Gujarat	20	16	4	-	9	-	1	2	52
10	Haryana	3	3	3	-	1	-	-	-	10
11	Himachal Pradesh	5	11	-	4	6	-	5	-	31
12	Jammu & Kashmir	10	5	3	4	6	-	1	-	29
13	Jharkhand	10	20	4	-	6	1	2	6	49
14	Karnataka	4	18	17	-	23	2	-	-	64
15	Kerala	-	14	2	-	24	-	-	-	40
16	Ladakh	8	2	-	-	-	-	-	-	10
17	Madhya Pradesh	55	44	20	-	24	4	4	12	163
18	Maharashtra	31	32	17	1	25	4	11	6	127
19	Manipur	-	1	-	-	-	1	-	-	2
20	Meghalaya	4	5	5	1	3	1	-	-	19
21	Mizoram	1	16		5	5	-	2	-	29
22	Odisha	49	7	2	-	22	1	4	25	110
23	Puducherry	-	-	3	-	-	-	-	-	3
24	Punjab	-	-	-	4	-	-	-	-	4
25	Rajasthan	15	6	8	-	8	-	1	2	40
26	Sikkim	-	-	-	-	11	6	2	5	24
27	Tamil Nadu	-	20	21	-	21	-	-	-	62
28	Telangana	10	11	4	-	8	1	1	-	35
29	Tripura	1	5	-	3	3	2	-	-	14
30	Uttar Pradesh	70	41	14	1	47	4	-	28	205
31	Uttarakhand	26	27	5	6	9		18	15	106
32	West Bengal	18	22	7	2	21	10	3	7	90
Grand Total		**437**	**394**	**182**	**34**	**373**	**102**	**81**	**125**	**1728**

Source: RDC-II Directorate, CWC, M/o Jal Shakti

Note: 'G': Gauge; 'GQ': Gauge and Water Quality; 'GD': Gauge and Discharge; 'GDS': Gauge, Discharge & Sediment; 'GDQ': Gauge, Discharge & Water Quality; 'GDSQ': Gauge, Discharge, Sediment and Water Quality; 'Exl. Met': Exclusive Met; 'WQSS': Water Quality Sampling Station.

Table 1.5 (b): Basin-wise Distribution of Hydro-Meteorological Sites of CWC

(as on January, 2023)

Sl. No	Basin Name	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met	WQSS	Grand Total
1	2	3	4	5	6	7	8	9	10	11
1.	Barak and other Basins	6	24	6	6	18	7	2	-	69
2.	Brahmani & Baitarni Basin	12	-	-	-	11	1	1	15	40
3.	Brahmaputra Basin	12	7	34	-	44	76	25	9	207
4.	Cauvery Basin	-	13	17	-	24	-	0	-	54
5.	East Flowing Rivers between Pennar and Cauvery	-	17	8	-	4	-	0	-	29
6.	East Flowing Rivers between Krishna and Pennar	-	1	-	-	1	-	0	-	2
7.	East Flowing Rivers between Mahanadi and Godavari	13	1	-	-	4	-	0	5	23
8.	East Flowing Rivers between South of Cauvery	-	2	2	-	4	-	0	-	8
9.	Ganga Basin	226	151	48	12	115	6	25	54	637
10.	Godavari Basin	46	42	19	-	26	4	9	6	152
11.	Indus Basin	21	15	3	12	8	-	4	-	63
12.	Krishna Basin	7	14	14	-	27	3	0	-	65
13.	Mahanadi Basin	30	2	1	-	22	-	6	15	76
14.	Mahi Basin	8	4	2	-	3	-	2		19
15.	Narmada Basin	15	33	8	-	11	4	2	11	84
16.	Pennar Basin	-	4	4	-	4	-	0	-	12
17.	Rivers draining into Bangladesh Basin	1	4	-	-	1	-	0	-	6
18.	Rivers draining into Myanmar Basin	1	4	-	3	2	-	0	-	10
19.	Sabarmati Basin	7	4	1	-	1	-	0	1	14
20.	Subarnarekha Basin	6	2	1	-	6	-	0	8	23
21.	Tapi Basin	16	18	1	1	3	-	2	-	41
22.	West Flowing Rivers of Kutch & Saurashtra including Luni Basin	3	10	2	-	3	-	0	-	18
23.	West Flowing Rivers from South of Tapi	7	22	11	-	31	1	3	1	76
Grand Total		**437**	**394**	**182**	**34**	**373**	**102**	**81**	**125**	**1728**

Source: RDC-II Directorate, CWC, M/o Jal Shakti

Note: 'G': Gauge; 'GQ': Gauge and Water Quality; 'GD': Gauge and Discharge;
'GDS': Gauge, Discharge & Sediment; 'GDQ': Gauge, Discharge & Water Quality;
'GDSQ': Gauge, Discharge, Sediment and Water Quality; 'Exl. Met': Exclusive Meteorological;
'WQSS': Water Quality Sampling Station.

Table 1.5 (c) : State/Basin-wise Details of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	State	Basin	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met	WQSS	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh	East Flowing rivers between Pennar to Cauvery		3			2				5
		East Flowing rivers between Krishna and Pennar		1			1				2
		East Flowing rivers between Mahanadi and Godavari	4	1			1			2	8
		Godavari Basin	3	5			1	1			10
		Krishna	1	3	1		5				10
		Pennar		4	3		4				11
Andhra Pradesh Total			**8**	**17**	**4**		**14**	**1**		**2**	**46**
2	Arunachal Pradesh	Ganga/Brahmaputra/Meghna/Barak	7	3	9		9	10	18		56
Arunachal Pradesh Total			**7**	**3**	**9**		**9**	**10**	**18**		**56**
3	Assam	Ganga/Brahmaputra/Meghna/Barak	7	9	21		26	53	5		121
Assam Total			**7**	**9**	**21**		**26**	**53**	**5**		**121**
4	Bihar	Ganga/Brahmaputra/Meghna/Barak	61	27	6	2	22	1			119
Bihar Total			**61**	**27**	**6**	**2**	**22**	**1**			**119**
5	Chhattisgarh	Ganga/Brahmaputra/Meghna/Barak				1					1
		Godavari Basin	1	8	1		3				13
		Mahanadi	10	1	1		15			12	42
Chhattisgarh Total			**11**	**9**	**2**	**1**	**18**		**3**	**12**	**56**
6	Dadar & Nagar Haveli & Daman & Diu	West Flowing rivers from Tapi to Tadri	3	1							4
Dadar & Nagar Haveli & Daman & D Total			3	1							4
7	Delhi	Ganga/Brahmaputra/Meghna/Barak			1		2			3	6
Delhi Total					**1**		**2**			**3**	**6**
8	Goa	West Flowing rivers from Tapi to Tadri		2							2
Goa Total				**2**							**2**
9	Gujarat	Mahi	3	1	1		1		1		7

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Table 1.5 (c) : State/Basin-wise Details of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	State	Basin	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met	WQSS	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12
		Narmada	2	1			2				5
		Sabarmati	6	4	1		1			1	13
		Tapi	5	2	1						8
		West Flowing rivers from Tapi to Tadri	2	1			2			1	6
		West Flowing rivers of Kutch and Saurashtra including Luni	2	7	1		3				13
Gujarat Total			**20**	**16**	**4**		**9**		**1**	**2**	**52**
10	Haryana	Ganga/Brahmaputra/Meghna/Barak	3	3	3		1				10
Haryana Total			**3**	**3**	**3**		**1**				**10**
11	Himachal Pradesh	Ganga/Brahmaputra/Meghna/Barak	2	3			4		2		11
		Indus Basin	3	8		4	2		3		20
Himachal Pradesh Total			**5**	**11**		**4**	**6**		**5**		**31**
12	Jammu & Kashmir	Indus Basin	10	4	3	5	6		1		29
Jammu & Kashmir Total			**10**	**4**	**3**	**5**	**6**		**1**		**29**
13	Jharkhand	Brahmani-Baitarni					1				1
		Ganga/Brahmaputra/Meghna/Barak	8	20	3		2	1	2	2	38
		Subarnarekha	2		1		3			4	10
Jharkhand Total			**10**	**20**	**4**		**6**	**1**	**2**	**6**	**49**
14	Karnataka	Cauvery		10	5		9				24
		Godavari Basin		1			1				2
		Krishna	4	6	6		11	2			29
		Pennar			1						1
		West Flowing rivers from Tadri to Kanyakumari		1	5		2				8
Karnataka Total			**4**	**18**	**17**		**23**	**2**			**64**
15	Kerala	Cauvery		1			1				2
		West Flowing rivers from Tadri to Kanyakumari		13	2		23				38

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Table 1.5 (c) : State/Basin-wise Details of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	State	Basin	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met	WQSS	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12
Kerala Total				**14**	**2**		**24**				**40**
16	Ladakh	Indus Basin	8	2							10
Ladakh Total			**8**	2							**10**
17	Madhya Pradesh	Ganga/Brahmaputra/Meghna/Barak	29	9	8		9			1	56
		Godavari Basin	11	1	4		4		2		22
		Mahi	1				1				2
		Narmada	13	32	8		9	4	2	11	79
		Tapi	1	2			1				4
Madhya Pradesh Total			**55**	**44**	**20**		**24**	**4**	**4**	**12**	**163**
18	Maharashtra	Godavari Basin	19	13	10		13	2	6	6	69
		Krishna		3	5		7	1			16
		Tapi	10	14		1	2		2		29
		West Flowing rivers from South to Tapi	2	2	2		3	1	3		13
Maharashtra Total			**31**	**32**	**17**	**1**	**25**	**4**	**11**	**6**	**127**
19	Manipur	Ganga/Brahmaputra/Meghna/Barak		1				1			2
Manipur Total				**1**				**1**			**2**
20	Meghalaya	Ganga/Brahmaputra/Meghna/Barak	4	5	5	1	3	1			19
Meghalaya Total			**4**	**5**	**5**	**1**	**3**	**1**			**19**
21	Mizoram	Ganga/Brahmaputra/Meghna/Barak		9		2	2		2		15
		Minor rivers draining into Myanmar and Bangladesh	1	7		3	3				14
Mizoram Total			**1**	**16**		**5**	**5**		**2**		**29**
22	Odisha	Brahmani-Baitarni	12				10	1	1	15	39
		East Flowing rivers between Mahanadi and Godavari	9				3			3	15
		Godavari Basin	4	5	2						11
		Mahanadi	20	1			7		3	3	34

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Table 1.5 (c) : State/Basin-wise Details of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	State	Basin	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met	WQSS	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12
		Subarnarekha	4	1			2			4	11
Odisha Total			**49**	**7**	**2**		**22**	**1**	**4**	**25**	**110**
23	Puducherry	Cauvery			2						2
		East Flowing rivers between Pennar and Kanyakumari			1						1
Puducherry Total					**3**						**3**
24	Punjab	Indus Basin				4					4
Punjab Total						**4**					**4**
25	Rajasthan	Ganga/Brahmaputra/Meghna/Barak	9		6		7			2	24
		Mahi	4	3	1		1		1		10
		Sabarmati	1								1
		West Flowing rivers of Kutch and Saurashtra including Luni	1	3	1						5
Rajasthan Total			**15**	**6**	**8**		**8**		**1**	**2**	**40**
26	Sikkim	Ganga/Brahmaputra/Meghna/Barak					11	6	2	5	24
Sikkim Total							**11**	**6**	**2**	**5**	**24**
27	Tamil Nadu	Cauvery		2	10		14				26
		East Flowing rivers between Pennar and Kanyakumari		14	7		2				23
		East Flowing rivers South of Cauvery		2	2		4				8
		West Flowing rivers from Tadri to Kanyakumari		2	2		1				5
Tamil Nadu Total				**20**	**21**		**21**				**62**
28	Telangana	Godavari Basin	8	9	2		4	1	1		25
		Krishna	2	2	2		4				10
Telangana Total			**10**	**11**	**4**		**8**	**1**	**1**		35
29	Tripura	Ganga/Brahmaputra/Meghna/Barak		4		3	3	2			12
		Minor rivers draining into Myanmar and	1	1							2

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Table 1.5 (c) : State/Basin-wise Details of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	State	Basin	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met	WQSS	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12
		Bangladesh									
Tripura Total			**1**	**5**		**3**	**3**	**2**			**14**
30	Uttar Pradesh	Ganga/Brahmaputra/Meghna/Barak	70	41	14	1	47	4		28	205
Uttar Pradesh Total			**70**	**41**	**14**	**1**	**47**	**4**		**28**	**205**
31	Uttarakhand	Ganga/Brahmaputra/Meghna/Barak	26	27	5	6	9		18	15	106
Uttarakhand Total			**26**	**27**	**5**	**6**	**9**		**18**	**15**	**106**
32	West Bengal	Brahmaputra Basin			4		8	10		4	26
		Ganga Basin	18	21	3	2	12		3	3	62
		Subarnarekha Basin		1			1				2
West Bengal Total			**18**	**22**	**7**	**2**	**21**	**10**	**3**	**7**	**90**
Grand Total			**437**	**394**	**182**	**34**	**373**	**102**	**81**	**125**	**1728**

Source: RDC-II Directorate, CWC, M/o Jal Shakti

Note: 'G': Gauge Site; 'GQ':Gauge and Water Quality Site; 'GD': Gauge and Discharge Site; 'GDS': Gauge, Discharge & Sediment Site; 'GDQ': Gauge, Discharge & Water Quality Site; 'GDSQ': Gauge, Discharge, Sediment and Water Quality Site; 'Exl. Met': Exclusive Meteorological Sites

Table 1.5 (d) : Basin/State-wise Distribution of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	Basin	State	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met.	WQSS	Grand Total
1	Barak and Others Basin	Assam	3	6	2		11	4			
		Manipur		1				1			
		Meghalaya	3	4	4	1	2				
		Mizoram		9		2	2		2		
		Tripura		4		3	3	2			
Barak and Others Basin Total			**6**	**24**	**6**	**6**	**18**	**7**	**2**		**69**
2	Brahmani and Baitarni Basin	Jharkhand					1				
		Odisha	12				10	1	1	15	
Brahmani & Baitarni Basin Total			**12**				**11**	**1**	**1**	**15**	**40**
3	Brahmaputra Basin	Arunachal Pradesh	7	3	9		9	10	18		
		Assam	4	3	19		15	49	5		
		Meghalaya	1	1	1		1	1			
		Sikkim					11	6	2	5	
		West Bengal			4		8	10		4	
Brahmaputra Basin Total			**12**	**7**	**33**		**44**	**76**	**25**	**9**	**206**
4	Cauvery Basin	Karnataka		10	5		9				
		Kerala		1			1				
		Puducherry			2						
		Tamil Nadu		2	10		14				
Cauvery Basin Total				**13**	**17**		**24**				**54**
5	EFR bertween Pennar and Cauvery	Andhra Pradesh		3			2				
		Puducherry			1						
		Tamil Nadu		14	7		2				
EFR bertween Pennar & Cauvery Total				**17**	**8**		**4**				**29**
6	EFR between Krishna & Pennar	Andhra Pradesh		1			1				
EFR between Krishna & Pennar Total				**1**			**1**				**2**
7	EFR between Mahanadi & Godavari	Andhra Pradesh	4	1			1			2	
		Odisha	9				3			3	

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Table 1.5 (d) : Basin/State-wise Distribution of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	Basin	State	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met.	WQSS	Grand Total
EFR between Mahanadi and Godavari Total			**13**	**1**			**4**			**5**	**23**
8	EFR South of Cauvery	Tamil Nadu		2	2		4				
EFR South of Cauvery Total				**2**	**2**		**4**				**8**
9	Ganga Basin	Bihar	61	27	6	2	22	1			
		Chhattisgarh				1					
		Delhi			1		2			3	
		Haryana	3	3	3		1				
		Himachal Pradesh	2	3			4		2		
		Jharkhand	8	20	3		2	1	2	2	
		Madhya Pradesh	29	9	8		9			1	
		Rajasthan	9		6		7			2	
		Uttar Pradesh	70	41	14	1	47	4		28	
		Uttarakhand	26	27	5	6	9		18	15	
		West Bengal	18	21	3	2	12		3	3	
Ganga Basin Total			**226**	**151**	**49**	**12**	**115**	**6**	**25**	**54**	**638**
10	Godavari Basin	Andhra Pradesh	3	5			1	1			
		Chhattisgarh	1	8	1		3				
		Karnataka		1			1				
		Madhya Pradesh	11	1	4		4		2		
		Maharashtra	19	13	10		13	2	6	6	
		Odisha	4	5	2						
		Telangana	8	9	2		4	1	1		
Godavari Basin Total			**46**	**42**	**19**		**26**	**4**	**9**	**6**	**152**
11	Indus (Up to border) Basin	Himachal Pradesh	3	8		4	2		3		
		Jammu and Kashmir	10	5	3	4	6		1		
		Ladakh	8	2							

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Table 1.5 (d) : Basin/State-wise Distribution of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	Basin	State	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met.	WQSS	Grand Total
		Punjab				4					
Indus (Up to border) Basin Total			**21**	**15**	**3**	**12**	**8**		**4**		**63**
12	Krishna Basin	Andhra Pradesh	1	3	1		5				
		Karnataka	4	6	6		11	2			
		Maharashtra		3	5		7	1			
		Telangana	2	2	2		4				
Krishna Basin Total			**7**	**14**	**14**		**27**	**3**			**65**
13	Mahanadi Basin	Chhattisgarh	10	1	1		15		3	12	
		Odisha	20	1			7		3	3	
Mahanadi Basin Total			**30**	**2**	**1**		**22**		**6**	**15**	**76**
14	Mahi Basin	Gujarat	3	1	1		1		1		
		Madhya Pradesh	1				1				
		Rajasthan	4	3	1		1		1		
Mahi Basin Total			**8**	**4**	**2**		**3**		**2**		**19**
15	Narmada Basin	Gujarat	2	1			2				
		Madhya Pradesh	13	32	8		9	4	2	11	
Narmada Basin Total			**15**	**33**	**8**		**11**	**4**	**2**	**11**	**84**
16	Pennar Basin	Andhra Pradesh		4	3		4				
		Karnataka			1						
Pennar Basin Total				**4**	**4**		**4**				**12**
17	River draining into Bangladesh Basin	Mizoram		3			1				
		Tripura	1	1							
River draining into Bangladesh Basin Total			**1**	**4**			**1**				**6**
18	River draining into Myanmar Basin	Mizoram	1	4		3	2				
River draining into Myanmar Basin Total			**1**	**4**		**3**	**2**				**10**
19	Sabarmati Basin	Gujarat	6	4	1		1			1	
		Rajasthan	1								
Sabarmati Basin Total			**7**	**4**	**1**		**1**			**1**	**14**

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Table 1.5 (d) : Basin/State-wise Distribution of Hydro-Meteorological Observations Sites of CWC

(as on 1st January, 2023)

Sl. No.	Basin	State	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met.	WQSS	Grand Total
20	Subernarekha Basin	Jharkhand	2		1		3			4	
		Odisha	4	1			2			4	
		West Bengal		1			1				
Subernarekha Basin Total			**6**	**2**	**1**		**6**			**8**	**23**
21	Tapi Basin	Gujarat	5	2	1						
		Madhya Pradesh	1	2			1				
		Maharashtra	10	14		1	2		2		
Tapi Basin Total			**16**	**18**	**1**	**1**	**3**		**2**		**41**
22	WFR of Kutch and Saurashtra including Luni Basin	Gujarat	2	7	1		3				
		Rajasthan	1	3	1						
WFR of Kutch and Saurashtra including Luni Basin Total			**3**	**10**	**2**		**3**				**18**
23	**WFR South of Tapi**	Dadar & Nagar Haveli and Daman & Diu	3	1							
		Goa		2							
		Gujarat	2	1			2			1	
		Karnataka		1	5		2				
		Kerala		13	2		23				
		Maharashtra	2	2	2		3	1	3		
		Tamil Nadu		2	2		1				
WFR South of Tapi Total			**7**	**22**	**11**		**31**	**1**	**3**	**1**	**76**
Grand Total			**437**	**394**	**182**	**34**	**373**	**102**	**81**	**125**	**1728**

Source: RDC-II Directorate, CWC, M/o Jal Shakti

Note : 'G': Gauge Site; 'GQ': Gauge and Water Quality Site; 'GD': Gauge and Discharge Site; 'GDS': Gauge, Discharge & Sediment Site; `GDQ': Gauge, Discharge & Water Quality Site; 'GDSQ': Gauge, Discharge, Sediment and Water Quality Site; 'Exl. Met': Exclusive Met Sites

'WQSS': Water Quality Sampling Station.

Table 1.6: State-wise Ground Water Resources in India, 2022

(in BCM)

Sl. No.	States/ Union Territories	Ground Water Recharge					Total Natural Discharges	Annual Extractable Ground Water Resource	Current Annual Ground Water Extraction				Annual GW Allocation for Domestic use as on 2025	Net Ground Water Availability for Future use	Stage of Ground Water Extraction (%)
		Monsoon Season		Non-monsoon Season		Total Annual Ground Water Recharge			Irrigation	Industrial	Domestic	Total			
		Recharge from Rainfall	Recharge from other Sources	Recharge from Rainfall	Recharge from other Sources										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Andhra Pradesh	9.14	9.41	0.91	7.77	27.23	1.36	25.86	6.46	0.16	0.83	7.45	1.09	18.54	28.81
2	Arunachal Pradesh	1.96	0.94	1.06	0.56	4.52	0.41	4.07	0.02	0.01	0.01	0.03	0.01	4.03	0.79
3	Assam	17.92	1.15	6.52	0.94	26.53	2.56	21.4	2.06	0.01	0.58	2.65	0.62	18.71	12.38
4	Bihar	19.94	7.07	1.14	5	33.15	3.1	30.04	10.01	0.35	3.14	13.5	3.41	16.76	44.94
5	Chhattisgarh	8.08	1.8	0.15	2.01	12.04	1.04	11.01	4.62	0.11	0.73	5.46	0.83	5.56	49.58
6	Delhi	0.1388	0.0895	0.0094	0.1728	0.4105	0.0411	0.3695	0.0904	0.0007	0.2716	0.3627	0.2878	0.0288	98.1612
7	Goa	0.35	0.02	0	0.04	0.41	0.08	0.33	0.026	0.004	0.048	0.078	0.05	0.25	23.63
8	Gujarat	19	2.63	0	4.83	26.46	1.88	24.58	12.1	0.16	0.82	13.09	1.04	12.18	53.23
9	Haryana	3.15	2.79	0.70	2.83	9.48	0.87	8.61	10.30	0.60	0.65	11.54	0.66	1.04	134.14
10	Himachal Pradesh	0.6	0.14	0.14	0.15	1.03	0.09	0.94	0.18	0.05	0.12	0.35	0.12	0.59	37.56
11	Jharkhand	4.92	0.45	0.48	0.36	6.21	0.51	5.69	0.93	0.21	0.65	1.78	0.65	3.92	31.35
12	Karnataka	8.83	4.29	1.19	3.43	17.74	1.70	16.04	10.01	0.13	1.09	11.22	1.17	6.34	69.93
13	Kerala	4.25	0.15	0.47	0.87	5.74	0.54	5.19	1.17	0.01	1.55	2.73	2.2	2.18	52.56
14	Madhya Pradesh	26.87	1.56	0.11	6.69	35.23	2.66	32.58	17.39	0.17	1.69	19.25	1.88	14.21	59.1
15	Maharashtra	20.72	2.43	0.54	8.6	32.29	1.84	30.45	15.29	0.003	1.35	16.65	1.35	14.38	54.68
16	Manipur	0.4	0	0.11	0.01	0.52	0.05	0.47	0.02	0.0002	0.02	0.04	0.02	0.43	7.95
17	Meghalaya	1.29	0.01	0.42	0	1.72	0.17	1.51	0.003	0.0007	0.05	0.05	0.06	1.45	3.55
18	Mizoram	0.19	0	0.03	0	0.22	0.02	0.2	0.000	0.00	0.01	0.01	0.01	0.19	3.96
19	Nagaland	0.36	0.33	0.08	0.02	0.79	0.08	0.71	0.002	0.000020	0.02	0.02	0.02	0.69	2.89
20	Odisha	10.44	2.82	1.81	2.72	17.79	1.44	16.34	5.83	0.16	1.24	7.23	1.37	9.03	44.25
21	Punjab	4.67	9.09	0.72	4.46	18.94	1.87	17.07	26.69	0.16	1.17	28.02	1.19	1.57	165.99
22	Rajasthan	8.71	0.62	0.20	2.61	12.13	1.17	10.96	14.18	0.14	2.23	16.56	2.28	0.87	151.07
23	Sikkim	0.1712	0.0039	0.0956	0.0005	0.2712	0.0271	0.2441	0.0089	0.0022	0.0036	0.0147	0.0038	0.2291	6.04
24	Tamil Nadu	7.42	9.76	1.33	2.59	21.11	2.04	19.09	13.68	0.18	0.57	14.43	1.36	6.42	75.59

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Table 1.6: State-wise Ground Water Resources in India, 2022

(in BCM)

Sl. No.	States/ Union Territories	Ground Water Recharge					Total Natural Discharges	Annual Extractable Ground Water Resource	Current Annual Ground Water Extraction				Annual GW Allocation for Domestic use as on 2025	Net Ground Water Availability for Future use	Stage of Ground Water Extraction (%)
		Monsoon Season		Non-monsoon Season		Total Annual Ground Water Recharge			Irrigation	Industrial	Domestic	Total			
		Recharge from Rainfall	Recharge from other Sources	Recharge from Rainfall	Recharge from other Sources										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
25	Telangana	7.19	6.66	0.98	6.44	21.27	2.02	19.25	7.257	0.154	0.596	8	3.82	11.23	41.6
26	Tripura	0.81	0.06	0.22	0.22	1.31	0.25	1.06	0.02	0.0007	0.08	0.10	0.09	0.96	9.70
27	Uttar Pradesh	35.44	13.96	0.82	21.23	71.45	6.13	65.3	40.72	0.41	5.01	46.14	5.48	19.99	70.66
28	Uttarakhand	1.28	0.31	0.1	0.32	2.01	0.16	1.86	0.63	0.12	0.15	0.89	0.15	0.96	48.04
29	West Bengal	15.46	1.65	3.04	3.46	23.61	2.19	21.42	8.38	0.14	1.54	10.07	1.76	11.29	47.01
30	Andaman and Nicobar	0.2979	0.0002	0.3203	0.0001	0.6185	0.0618	0.5566	0.0001	0.001	0.0065	0.0075	0.0069	0.5486	1.35
31	Chandigarh	0.01	0.01	0.00	0.03	0.05	0.01	0.05	0.01	0.002	0.03	0.04	0.03	0.01	80.99
32	Dadra & Nagar Haveli	0.06	0.01	0.003	0.02	0.09	0.01	0.08	0.01	0.09	0.01	0.11	0.02	0.01	133.2
	Daman & Diu	0.037	0.001	0.000	0.001	0.038	0.002	0.036	0.003	0.055	0.000	0.057	0.016	0.000	157.927
33	Jammu & Kashmir	1.16	1.94	1.15	0.64	4.90	0.46	4.44	0.31	0.05	0.71	1.07	0.73	3.35	24.18
34	Ladakh	0.01	0.05	0.02	0	0.08	0.01	0.07	0.00037	0.000200	0.03	0.03	0.03	0.04	41.36
35	Lakshadweep	0.01	0	0	0	0.01	0.01	0.01	0	0.00	0	0	0	0	61.6
36	Puducherry	0.06	0.09	0.01	0.04	0.21	0.02	0.19	0.08	0.01	0.05	0.13	0.05	0.05	69.17
Grand Total		**241.35**	**82.30**	**24.88**	**89.07**	**437.60**	**36.85**	**398.08**	**208.49**	**3.64**	**27.05**	**239.16**	**33.86**	**188.03**	**60.08**

Source: Central Ground Water Board, D/o Water Resources, RD & GR, M/o Jal Shakti

Table 1.7: State/UT-wise Categorization of Assessment Units in India, 2022

Sl. No.	States/UTs	Total No. of Assessed Units	Safe		Semi-Critical		Critical		Over-Exploited		Saline	
			Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
1	2	3	4	5	6	7	8	9	10	11	12	13
States												
1	Andhra Pradesh	667	598	89.7	19	2.8	5	0.7	6	0.9	39	5.85
2	Arunachal Pradesh	11	11	100.00								
3	Assam	28	27	96.43	1	3.57						
4	Bihar	535	469	87.66	46	8.60	12	2.24	8	1.50		
5	Chhattisgarh	146	116	79.45	24	16.44	6	4.11				
6	Delhi	34	4	11.76	8	23.53	7	20.59	15	44.12		
7	Goa	12	12	100.00								
8	Gujarat	252	189	75.00	20	7.94	7	2.78	23	9.13	13	5.16
9	Haryana	143	36	25.17	9	6.29	10	6.99	88	61.54		
10	Himachal Pradesh	10	10	100.00								
11	Jharkhand	263	241	91.63	11	4.18	6	2.28	5	1.90		
12	Karnataka	234	139	59.40	35	14.96	11	4.70	49	20.94		
13	Kerala	152	122	80.26	27	17.76	3	1.97				
14	Madhya Pradesh	317	226	71.29	60	18.93	5	1.58	26	8.20		
15	Maharashtra	353	272	77.05	62	17.56	7	1.98	11	3.12	1	0.28
16	Manipur	9	9	100.00								
17	Meghalaya	12	12	100.00								
18	Mizoram	26	26	100.00								
19	Nagaland	11	11	100.00								
20	Odisha	314	300	95.54	8	2.55					6	1.91
21	Punjab	153	17	11.11	15	9.80	4	2.61	117	76.47		
22	Rajasthan	302	38	12.58	20	6.62	22	7.28	219	72.52	3	0.99
23	Sikkim	6	6	100.00								
24	Tamil Nadu	1166	463	39.71	231	19.81	78	6.69	360	30.87	34	2.92
25	Telangana	594	494	83.00	80	13.60	7	1.20	13	2.20		
26	Tripura	59	59	100.00								
27	Uttar Pradesh	836	557	66.63	169	20.22	47	5.62	63	7.54		
28	Uttarakhand	18	14	77.78	4	22.22						
29	West Bengal	345	232	67.25	31	8.99	22	6.38			60	17.39

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Table 1.7: State/UT-wise Categorization of Assessment Units in India, 2022

Sl. No.	States/UTs	Total No. of Assessed Units	Safe		Semi-Critical		Critical		Over-Exploited		Saline	
			Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
1	2	3	4	5	6	7	8	9	10	11	12	13
UTs												
30	Andaman and Nicobar	36	35	97.22							1	2.78
31	Chandigarh	1			1	100.00						
32	Dadra & Nagar Haveli	1							1	100.00		
33	Daman & Diu	2							2	100.00		
34	Jammu and Kashmir	20	19	95.00	1	5.00						
35	Ladakh	8	7	87.50	1	12.50						
36	Lakshadweep	9	7	77.78	2	22.22						
37	Puducherry	4	2	50.00			1	25.00			1	25.00
Grand Total		**7089**	**4780**	**67.43**	**885**	**12.48**	**260**	**3.67**	**1006**	**14.19**	**158**	**2.23**

Source: Central Ground Water Board, M/o Jal Shakti

Note 1:

'Blocks': Bihar, Chhattisgarh, Haryana, Jharkhand, Kerala, Madhya Pradesh, Manipur, Mizoram, Odisha, Punjab, Rajasthan, Tripura, Uttar Pradesh, Uttarakhand, West Bengal;

'Taluks': Goa, Gujarat, Karnataka, Maharashtra;

'**Mandals'**: Andhra Pradesh, Telangana;

'District': Arunachal Pradesh, Assam, Meghalaya, Nagaland, Sikkim, Dadra & Nagar Haveli, Daman & Diu, Jammu & Kashmir;

'**Valley'**: Himachal Pradesh, Ladakh;

'Islands': Andaman & Nicobar and Lakshadweep;

'**Firka'**: Tamil Nadu;

'**Region'**: Puducherry;

'UT': Chandigarh;

'**Tehsil**': Delhi

Note 2:

Based on the stage of extraction, the assessment units are categorized as Safe (<= 70%); Semi-Critical (>70 % and <=90 %); Critical (>90% and <=100%) and Over-Exploited (>100 %).

Table 1.8: State-wise & Decade-wise Abstract of Large Dams as per NRLD-2023

Sl. No.	States/UTs	Year of Completion											Total
		Up to 1900	1901 to 1950	1951 to 1960	1961 to 1970	1971 to 1980	1981 to 1990	1991 to 2000	2001 & Beyond	Year of Construction not available	Total Completed dams	Under Construction	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Andaman & Nicobar Islands*	-	-	-	-	1	-	-	1	-	2	-	2
2	Andhra Pradesh	1	6	9	11	23	15	9	21	69	140	24	164
3	Arunachal Pradesh	-	-	-	-	-	-	-	1	3	1	3	4
4	Assam	-	-	-	-	-	2	-	1	2	3	2	5
5	Bihar	1	-	1	10	5	4	1	5	1	27	1	28
6	Chandigarh*	-	-	-	-	-	-	-	-	-	-	-	-
7	Chhattisgarh	-	13	4	18	54	113	54	83	7	339	7	346
8	Dadra and Nagar Haveli*	-	-	-	-	-	-	-	-	-	-	-	-
9	Daman and Diu*	-	-	-	-	-	-	-	-	-	-	-	-
10	Goa	-	-	-	-	-	3	2	-	-	5	-	5
11	Gujarat	4	46	48	58	120	124	41	39	11	487	4	491
12	Haryana	-	-	-	-	-	-	-	1	-	1	-	1
13	Himachal Pradesh	-	-	-	1	3	1	1	17	6	23	6	29
14	Jammu & Kashmir*	-	-	-	-	2	2	1	5	5	13	2	15
15	Jharkhand	-	-	9	5	11	22		5	27	55	24	79
16	Karnataka	6	28	11	39	47	57	15	15	13	231	-	231
17	Kerala	1	1	6	16	10	9	13	5	-	61	-	61
18	Ladakh*	-	-	-	-	-	-	-	2	-	2	-	2
19	Lakshadweep*	-	-	-	-	-	-	-	-	-	-	-	-
20	Madhya Pradesh	3	60	29	53	160	239	102	619	89	1354	-	1354
21	Maharashtra	18	30	23	140	561	399	360	649	194	2333	41	2374
22	Manipur	-	-	-	-	1	-	1	1	1	3	1	4
23	Meghalaya	-	-	-	2	2	-	1	3	1	8	1	9
24	Mizoram	-	-	-	-	-	-	-	1	-	1	-	1
25	Nagaland	-	-	-	-	-	-	1	-	-	1	-	1

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Table 1.8: State-wise & Decade-wise Abstract of Large Dams as per NRLD-2023

Sl. No.	States/UTs	Year of Completion											Total
		Up to 1900	1901 to 1950	1951 to 1960	1961 to 1970	1971 to 1980	1981 to 1990	1991 to 2000	2001 & Beyond	Year of Construction not available	Total Completed dams	Under Construction	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
26	Delhi*	-	-	-	-	-	-	-	-	-	-	-	-
27	Odisha	3	1	3	5	60	78	39	19	2	210	-	210
28	Puducherry*	-	-	-	-	-	-	-	-	-	-	-	-
29	Punjab	-	1	2	-	-	5	6	3	2	18	1	19
30	Rajasthan	18	12	40	31	35	36	31	32	79	310	4	314
31	Sikkim	-	-	-	-	-	-	1	1	-	2	-	2
32	Tamil Nadu	1	10	10	29	26	19	8	21	3	127	-	127
33	Telangana	9	36	6	11	13	18	12	49	20	161	13	174
34	Tripura	-	-	-	-	1	-	-	-	-	1	-	1
35	Uttar Pradesh	4	26	27	18	16	25	15	19	5	151	4	155
36	Uttarakhand	1	1	1	9	7	2	1	10	5	32	5	37
37	West Bengal	-		1	3	5	16	3	6	2	36	-	36
Grand Total		**70**	**271**	**230**	**459**	**1163**	**1189**	**718**	**1634**	**547**	**6138**	**143**	**6281**

Source: Dam Safety Monitoring Directorate, CWC, M/o Jal Shakti

Note: 'NRLD': National Register for Large Dams;

'*': Union Territory (UT)

Table 1.9: State-wise Number of Major, Medium and ERM Irrigation Projects

Sl. No	Name of the State/UTs	Major Project				Medium Project				ERM				Total			
		Completed in XI Plan	Completed up to XI Plan	Spilled over Projects in XII Plan	New Projects in XII Plan	Completed in XI Plan	Completed up to XI Plan	Spilled over Projects in XII Plan	New Projects in XII Plan	Completed in XI Plan	Completed up to XI Plan	Spilled over Projects in XII Plan*	New Projects in XII Plan	Completed in XI Plan	Completed up to XI Plan	Spilled over projects in XII Plan	New Projects in XII Plan
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Andhra Pradesh	13	35	30	1	14	135	10	NR	1	7	2	0	28	177	42	1
2	Arunachal Pradesh	NR	0	NR	NR	NR	0	NR	NR	NR	0	NR	NR	NR	0	NR	NR
3	Assam	0	4	2	0	1	10	1	0	0	1	0	0	1	15	3	]
4	Bihar	1	18	8	2	1	21	2	1	1	3	3	0	3	42	13	3
5	Chhattisgarh	3	11	2	3	1	29	4	1	0	2	1	0	4	42	7	4
6	Goa	0	1	1	0	0	1	0	0	0	0	0	0	0	2	1	0
7	Gujarat	0	19	1	0	6	121	4	0	0	12	13	0	6	152	18	0
8	Haryana	4	11	2	0	1	1	1	0	1	14	0	0	6	26	3	0
9	Himachal Pradesh	1	1	0	0	2	6	0	0	0	0	0	0	3	7	0	0
10	Jammu & Kashmir	0	2	0	0	0	18	0	0	0	6	0	0	0	26	0	0
11	Jharkhand	NR	1	6	0	6	44	4	0	0	1	4	0	6	46	14	0
12	Karnataka	5	13	11	0	13	52	11	2	3	3	0	0	21	68	22	2
13	Kerala	1	12	1	0	0	7	3	0	1	2	0	0	2	21	4	0
14	Madhya Pradesh	2	17	15	16	2	104	13	13	6	7	2	4	10	128	30	33
15	Maharashtra	2	28	49	4	10	209	71	12	1	5	4	0	13	242	124	16
16	Manipur	0	1	1	0	1	5	1	2	0	0	0	0	1	6	2	2
17	Meghalaya	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Mizoram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Table 1.9: State-wise Number of Major, Medium and ERM Irrigation Projects

Sl. No	Name of the State/UTs	Major Project				Medium Project				ERM				Total			
		Completed in XI Plan	Completed up to XI Plan	Spilled over Projects in XII Plan	New Projects in XII Plan	Completed in XI Plan	Completed up to XI Plan	Spilled over Projects in XII Plan	New Projects in XII Plan	Completed in XI Plan	Completed up to XI Plan	Spilled over Projects in XII Plan*	New Projects in XII Plan	Completed in XI Plan	Completed up to XI Plan	Spilled over projects in XII Plan	New Projects in XII Plan
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
19	Nagaland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Odisha	0	12	11	0	1	47	13	1	5	26	5	21	6	85	29	22
21	Punjab	0	8	1	0	0	2	0	0	0	11	2	2	0	21	3	2
22	Rajasthan	3	11	NR	0	2	102	0	0	0	7	0	0	5	120	0	0
23	Sikkim	NR	0	NR	NR	NR	0	NR	NR	NR	0	NR	NR	NR	0	NR	NR
24	Tamil Nadu	0	22	0	0	0	46	0	0	0	12	0	0	0	80	0	0
25	Tripura	NR	0	NR	NR	NR	0	NR	NR	NR	0	NR	NR	NR	0	NR	NR
26	Uttara-khand	0	5	0	0	0	0	0	0	0	1	0	0	0	6	0	0
27	Uttar Pradesh	0	57	6	1	0	40	0	0	0	20	3	0	0	117	9	1
28	West Bengal	0	6	2	0	1	18	0	0	0	0	0	0	1	24	2	0
Total		**35**	**295**	**149**	**27**	**62**	**1018**	**138**	**32**	**19**	**140**	**39**	**27**	**116**	**1453**	**326**	**86**

Source: Planning & Progress Directorate, CWC, M/o Jal Shakti
Note:
ERM: Extension, Renovation and Modernisation
Note- *: Figures are likely to be changed after receiving final data. NR: Data have not been reported by the States.

Table 1.10 (a): Percentage of Rural Households having provision of tap water supply as on 01.04.2023

(Population in Lakh)

Sl. No.	State/UT	Total Rural Households	Household Connections with PWS	Percentage Household Connections with PWS
1	2	3	4	5
1	Andaman & Nicobar Islands	0.62	0.62	100.00
2	Andhra Pradesh	95.54	66.41	69.51
3	Arunachal Pradesh	2.30	1.77	76.91
4	Assam	67.67	31.98	47.26
5	Bihar	166.30	159.08	95.66
6	Dadra & Nagar Haveli and Daman & Diu	0.85	0.85	100.00
7	Chhattisgarh	50.09	20.93	41.78
8	Goa	2.63	2.63	100.00
9	Gujarat	91.18	91.18	100.00
10	Haryana	30.41	30.41	100.00
11	Himachal Pradesh	17.09	16.80	98.29
12	Jammu & Kashmir	18.68	10.96	58.70
13	Jharkhand	61.20	20.36	33.27
14	Karnataka	101.17	67.43	66.65
15	Kerala	70.72	33.47	47.33
16	Ladakh	0.43	0.31	72.07
17	Lakshadweep	0.13	0.00	0.00
18	Madhya Pradesh	119.88	57.55	48.01
19	Maharashtra	146.73	109.85	74.87
20	Manipur	4.52	3.45	76.45
21	Meghalaya	6.52	3.08	47.21
22	Mizoram	1.33	1.11	83.10
23	Nagaland	3.70	2.43	65.65
24	Odisha	88.59	52.65	59.42
25	Puducherry	1.15	1.15	100.00
26	Punjab	34.26	34.26	100.00
27	Rajasthan	107.91	39.09	36.22
28	Sikkim	1.32	1.08	81.85
29	Tamil Nadu	125.53	79.49	63.32
30	Telangana	53.98	53.98	100.00
31	Tripura	7.42	4.58	61.78
32	Uttar Pradesh	265.64	95.11	35.81
33	Uttarakhand	14.94	11.48	76.84
34	West Bengal	183.70	58.75	31.98
Total		**1944.12**	**1164.27**	**59.89**

Source: D/o Drinking Water & Sanitation, M/o Jal Shakti

As per IMIS 08.05.2023, As per 40 LPCD

Note: Data is continuously updated by the State Departments, hence date wise information may vary.

Table 1.10 (b): Percentage of Rural Population getting Safe Drinking Water using Improved Drinking Water Sources as on 01-04-2023

(Population in Lakh)

Sl. No.	State/UT	Total Rural Population	Rural Population getting Safe Drinking Water using Improved Drinking Water Sources	Percentage % of Rural Population getting Safe Drinking Water using Improved Drinking Water Sources
1	2	3	4	5
1	Andaman & Nicobar Islands	2.52	2.52	100.00
2	Andhra Pradesh	380.59	380.59	100.00
3	Arunachal Pradesh	13.34	12.47	93.45
4	Assam	331.04	304.85	92.09
5	Bihar	950.65	947.54	99.67
6	Dadra & Nagar Haveli and Daman & Diu	4.20	4.20	100.00
7	Chhattisgarh	226.30	225.76	99.76
8	Goa	11.37	11.37	100.00
9	Gujarat	437.30	437.30	100.00
10	Haryana	177.83	177.83	100.00
11	Himachal Pradesh	75.60	75.60	100.00
12	Jammu & Kashmir	110.25	110.25	100.00
13	Jharkhand	316.00	315.98	99.99
14	Karnataka	445.17	445.17	100.00
15	Kerala	288.96	287.43	99.47
16	Ladakh	2.50	2.50	100.00
17	Lakshadweep	0.75	0.00	0.00
18	Madhya Pradesh	602.76	602.70	99.99
19	Maharashtra	686.34	685.02	99.81
20	Manipur	24.24	24.24	100.00
21	Meghalaya	35.03	35.03	100.00
22	Mizoram	6.66	6.66	100.00
23	Nagaland	18.81	18.81	100.00
24	Odisha	384.05	380.86	99.17
25	Puducherry	5.62	5.62	100.00
26	Punjab	182.32	172.05	94.37
27	Rajasthan	588.50	558.84	94.96
28	Sikkim	5.48	5.48	100.00
29	Tamil Nadu	492.90	492.90	100.00
30	Telangana	206.97	206.97	100.00
31	Tripura	32.57	30.04	92.25
32	Uttar Pradesh	1686.85	1681.20	99.67
33	Uttarakhand	71.99	71.54	99.39
34	West Bengal	803.82	801.67	99.73
Total		**9609.27**	**9521.00**	**99.08**

Source: D/o Drinking Water & Sanitation, M/o Jal Shakti

As per IMIS 10.05.2021, As per 40 LPCD

Note: Data is continuously updated by the State Departments, hence date-wise information may vary.

Table 1.11: Status of Large Hydro Electric Potential Development Region/State-wise (In terms of Installed Capacity -Above 25 MW)

(As on 31.03.2023)

Region/ State	Identified Capacity as per Reassessment Study (2017-23)	Capacity In Operation		Capacity Under Active Construction $		Capacity on which Construction is held up		Capacity yet to be taken up under construction	
	(MW)	(MW)	%	(MW)	(%)	(MW)	(%)	(MW)	%
1	2	3	4	5	6	7	8	9	10
Northern									
Jammu & Kashmir	12264.50	3360.00	27.40	3051.50	24.88	48.00	0.39	5805.00	47.33
Ladakh	707.00	89.00	12.59	0.00	0.00	0.00	0.00	618.00	87.41
Himachal Pradesh	18305.00	10263.00	56.07	2446.00	13.36	44.00	0.24	5552.00	30.33
Punjab	1300.73	1096.30	84.28	206.00	15.84	0.00	0.00	0.00	0.00
Haryana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rajasthan	411.00	411.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttarakhand	13481.35	3975.35	29.49	1324.00	9.82	247.00	1.83	7935.00	58.86
Uttar Pradesh	501.60	501.60	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total (NR)	**46971.18**	**19696.25**	**41.93**	**7028.00**	**14.96**	**339.00**	**0.72**	**19908.4**	**42.38**
Western									
Madhya Pradesh	2819.00	2235.00	79.28	0.00	0.00	400.00	14.19	184.00	6.53
Chhattisgarh	1311.00	120.00	9.15	0.00	0.00	0.00	0.00	1191.00	90.85
Gujarat	550.00	550.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	3144.00	2647.00	84.19	0.00	0.00	0.00	0.00	497.00	15.81
Goa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total (WR)	**7824.00**	**5552.00**	**70.96**	**0.00**	**0.00**	**400.0**	**5.11**	**1872.00**	**23.93**

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Table 1.11: Status of Large Hydro Electric Potential Development Region/State-wise (In terms of Installed Capacity -Above 25 MW)

(As on 31.03.2023)

Region/ State	Identified Capacity as per Reassessment Study (2017-23)	Capacity In Operation		Capacity Under Active Construction $		Capacity on which Construction is held up		Capacity yet to be taken up under construction	
	(MW)	(MW)	%	(MW)	(%)	(MW)	(%)	(MW)	%
1	2	3	4	5	6	7	8	9	10
Southern									
Andhra Pradesh	2596.00	1610.00	62.02	960.00	36.98	0.00	0.00	26.00	1.00
Telangana	1302.00	800.00	61.44	0.00	0.00	0.00	0.00	502.00	38.56
Karnataka	4414.40	3689.20	83.57	0.00	0.00	0.00	0.00	725.20	16.43
Kerala	2472.75	1864.15	75.39	140.00	5.66	0.00	0.00	468.60	18.95
Tamil Nadu	1785.20	1778.20	99.61	0.00	0.00	0.00	0.00	7.00	0.39
Sub Total (SR)	**12570.40**	**9741.55**	**77.50**	**1100.00**	**8.75**	**0.00**	**0.00**	**1728.80**	**13.75**
Eastern									
Jharkhand	300.00	210.00	70.00	0.00	0.00	0.00	0.00	90.00	30.00
Bihar	130.10	0.00	0.00	0.00	0.00	0.00	0.00	130.10	100.00
Odisha	2824.50	2154.55	76.28	0.00	0.00	0.00	0.00	670.00	23.72
West Bengal	809.20	441.20	54.52	120.00	14.83	0.00	0.00	248.00	30.65
Sikkim	6051.00	2282.00	37.71	620.00	10.25	417.00	6.89	2732.00	45.15
Sub Total (ER)	**10114.80**	**5087.75**	**50.30**	**740.00**	**7.32**	**417.00**	**4.12**	**3870.10**	**38.26**
North Eastern									
Meghalaya	2026.00	322.00	15.89	0.00	0.00	0.00	0.00	1704.00	84.11
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manipur	615.00	105.00	17.07	0.00	0.00	0.00	0.00	510.00	82.93

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Table 1.11: Status of Large Hydro Electric Potential Development Region/State-wise (In terms of Installed Capacity -Above 25 MW)

(As on 31.03.2023)

Region/ State	Identified Capacity as per Reassessment Study (2017-23)	Capacity In Operation		Capacity Under Active Construction $		Capacity on which Construction is held up		Capacity yet to be taken up under construction	
	(MW)	(MW)	%	(MW)	(%)	(MW)	(%)	(MW)	%
1	2	3	4	5	6	7	8	9	10
Assam	643.00	350.00	54.43	120.00	18.66	0.00	0.00	173.00	26.91
Nagaland	325.00	75.00	23.08	0.00	0.00	0.00	0.00	250.00	76.92
Arunachal Pradesh	50394.00	1115.00	2.21	4880.00	9.68	0.00	0.00	44399.00	88.10
Mizoram	1926.70	60.00	3.11	0.00	0.00	0.00	0.00	1866.70	96.89
Sub Total (NER)	**55929.70**	**2027.00**	**3.62**	**5000.00**	**8.94**	**0.00**	**0.00**	**48902.70**	**87.44**
All India	**133410.03**	**42104.55**	**31.56**	**13867.50**	**10.39**	**1156.00**	**0.87**	**76282.00**	**57.18**

Source: Hydro Electric Potential Reassessment Division (HEPR), Central Electricity Authority, M/o Power

Note 1: (i). Does not include pumped storage projects.
(ii). In addition to above 8 PSS (4745.6 MW) are under operation, 3 PSS (2700 MW) are under active construction, 1 PSS (80 MW) on which construction is held up, 1 PSS (1000 MW) is Concurred by CEA, 24 PSS (29260 MW) are under S&I, 1PSS (1350 MW) is Under Examination & 5 PSS (5320 MW) are under S&I held up.
(iii) '$': The above list includes 1 Multi-purpose Project (MPP) namely Lakhwar MPP (300 MW) in Uttarakhand.
Note 2: Multi-purpose projects (International Projects) are under examination (India and Nepal) namely, Pancheshwar MPP (2400 MW) whose DPR is being revised & Rupali Garh Regulating Dam (120 MW) which is Under S&I.
Note 3: DPR of Goriganga-IIIA H.E. project has been suspended due to tariff issues and examination shall be continued after issues are resolved with State Govt.

Table 1.12 : Status of Large Hydro Electric Potential Development Basin-wise (In terms of Installed Capacity -Above 25 MW)

(as on 31.03.2023)

Basin	Identified Capacity as per Reassessment Study (2017-23)	Capacity In Operation		Capacity under Active Construction $		Capacity on which Construction is held up		Capacity yet to be taken up under Construction	
	MW	(MW)	%	(MW)	%	(MW)	%	(MW)	%
1	2	3	4	5	6	7	8	9	10
Indus	32322.23	14637.30	45.29	6003.50	18.57	48.00	0.15	11633.40	35.99
Ganga	15591.25	5687.15	36.48	1024.00	6.57	291.00	1.87	8589.10	55.09
Central Indian Rivers	4498.50	3159.80	70.24	0.00	0.00	400.00	8.89	938.70	20.87
West Flowing Rivers	70001.95	5684.35	81.18	140.00	2.00	0.00	0.00	1177.60	16.82
East Flowing Rivers	11269.40	8248.95	73.20	960.00	8.52	0.00	0.00	2060.50	18.28
Brahmaputra	62726.70	4687.00	7.47	5740.00	9.15	417.00	0.66	51882.70	82.71
All India	**133410.03**	**42104.55**	**31.56**	**13867.50**	**10.39**	**1156.00**	**0.87**	**76282.00**	**57.18**

Source: Hydro Electric Potential Reassessment Division (HEPR), Central Electricity Authority, M/o Power

Note 1: (i). Does not include pumped storage projects.
(ii). In addition to above 8 PSS (4745.6 MW) are under operation, 3 PSS (2700 MW) are under active construction, 1 PSS (80 MW) on which construction is held up, 1 PSS (1000 MW) is Concurred by CEA, 24 PSS (29260 MW) are under S&I, 1PSS (1350 MW) is Under Examination & 5 PSS (5320 MW) are under S&I held up.
(iii). '$': The above list includes 1 Multipurpose Project (MPP) namely Lakhwar MPP (300 MW) in Uttarakhand.
Note 2: Multi-purpose projects (International Projects) are under examination (India and Nepal) namely, Pancheshwar MPP (2400 MW) whose DPR is being revised & Rupali Garh Regulating Dam (120 MW) which is Under S&I.
Note 3: DPR of Goriganga-IIIA H.E. project has been suspended due to tariff issues and examination shall be continued after issues are resolved with State Govt.

Table 1.13 : Hydro Electric Power Installed Capacity and Generation - All India (Utilities)

Sl. No.	Year	Installed Capacity (Utilities)			Generation (Utilities)			Load Factor
		Total (MW)	Hydro (MW)	Percentage Installed Capacity of Total	Total (GWh)	Hydro (GWh)	Percentage Generation of Total	
1	2	3	4	5	6	7	8	9
1	1947	1361.80	508.10	37.30	4073.30	2194.50	53.90	49
2	1950	1712.50	559.30	32.70	5106.70	2519.80	49.30	51
3	1955	2694.80	939.50	34.90	8592.50	3742.20	43.60	45
4	1960-61	4653.10	1916.70	41.20	16937.00	7836.60	46.30	47
5	1965-66	9027.00	4123.70	45.70	32990.10	15225.00	46.20	42
6	1973-74	16663.60	6965.30	41.80	66689.00	28971.80	43.40	47
7	1979-80	28447.80	11384.00	40.00	104627.30	45477.60	43.50	46
8	1985-86	46796.00	15471.60	33.10	170350.10	51020.80	30.00	38
9	1989-90	63627.30	18307.60	28.80	245437.90	62116.10	25.30	39
10	1990-91	66086.30	18753.40	28.40	264328.60	71641.30	27.10	44
11	1995-96	83293.50	20985.60	25.20	379877.10	72579.20	19.10	39
12	1996-97	85795.40	21658.10	25.20	395889.50	68900.80	17.40	36
13	1997-98	89102.30	21904.50	24.60	421747.30	74581.70	17.70	39
14	1998-99	93293.50	22479.10	24.10	448544.10	82922.60	18.50	42
15	1999-00	97884.50	23856.80	24.40	481055.20	80755.50	16.80	39
16	2000-01	101626.20	25152.90	24.80	501204.10	74361.90	14.80	34
17	2001-02	105046.00	26268.80	25.00	517439.40	73579.90	14.20	32
18	2002-03	107877.40	26766.80	24.80	532693.00	64013.70	12.00	27
19	2003-04	112683.50	29506.80	26.20	565101.70	75242.50	13.30	29
20	2004-05	118425.70	30942.20	26.10	594456.20	84610.40	14.20	31
21	2005-06	124287.20	32325.80	26.00	623819.50	101494.40	16.30	36
22	2006-07	132329.20	34653.80	26.20	670654.20	113501.60	16.90	37
23	2007-08	143061.00	35908.80	25.10	722625.50	120386.70	16.70	38
24	2008-09	147965.41	36877.76	24.90	741167.36	110098.50	14.90	34
25	2009-10	159398.50	36863.40	23.10	799850.60	104059.40	13.00	32
26	2010-11	173626.40	37567.40	21.60	844748.20	114415.50	13.50	35
27	2011-12	199877.00	38990.40	19.50	922451.10	130511.50	14.10	38
28	2012-13	223343.58	39491.40	17.68	964488.90	113720.29	11.79	33
29	2013-14	249415.98	40531.41	16.25	1026648.58	134847.53	13.13	38
30	2014-15	275895.30	41267.43	14.96	1105071.65	129243.69	11.57	36
31	2015-16	306329.84	42783.42	13.97	1167584.03	121376.65	10.40	32
32	2016-17	328146.50	44478.42	13.55	1235357.98	122377.56	9.91	31
33	2017-18	345631.44	45293.42	13.10	1303454.68	126122.70	9.68	32
34	2018-19	357870.56	45399.22	12.69	1371779.48	134893.62	9.83	34
35	2019-20	371334.08	45699.22	12.31	1383416.75	155769.12	11.26	39
36	2020-21	383520.82	46209.00	12.05	1373186.88	150299.52	10.95	37
37	2021-22	399496.61	46722.52	11.70	1484463.08	151627.33	10.21	37
38	2022-23	416058.88	46850.17	11.26	1617902.96	162098.77	10.02	39

Source: PDM Division, Central Electricity Authority

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Chapter-2

Financial Performance

Chapter-2
Financial Performance

This chapter deals with the financial aspects along with physical progress of water and related sectors and schemes in the country such as details on Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) and its major components;Accelerated Irrigation Benefits Programme (AIBP) and Har Khet Ko Pani (HKKP). It also gives the details on its sub-components-National Projects, Command Area Development & Water Management (CAD&WM) Programme, Surface Minor Irrigation (SMI) Scheme, Repair, Renovation & Restoration (RRR) of Water Bodies Scheme and PMKSY-HKKP and Ground Water Scheme. It also provides the data/information on Minor irrigation census and details on the Plan-wise Financial Expenditure on Minor Irrigation (Institutional). It also provides the details on the Central sector water resources projects and Namami Gange programme.

2.1 Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

i. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched during the year 2015-16, with an aim to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on-farm water use efficiency, introduce sustainable water conservation practices, etc.

ii. PMKSY is an umbrella scheme, consisting of two major components being implemented by the Ministry of Jal Shakti, namely; Accelerated Irrigation Benefits Programme (AIBP) and Har Khet Ko Pani (HKKP). HKKP, in turn, consists of four sub-components; Command Area Development & Water Management (CAD&WM), Surface Minor Irrigation (SMI), Repair, Renovation and Restoration (RRR) of Water Bodies, and Ground Water (GW) Development component.

iii. In addition, PMKSY also consists of two components being implemented by other Ministries. Per Drop More Crop (PDMC) component is being implemented by Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture & Farmers Welfare. Watershed Development component (WDC) of PMKSY is being implemented by Department of Land Resources, Ministry of Rural Development.

2.1.1 Accelerated Irrigation Benefits Programme (AIBP)

i. Irrigation is a state subject and irrigation projects are formulated, executed and funded by the State Governments themselves from their own resources. Central assistance is released in the form of block loans and grants not tied to any sector of development or project. A large number of major and medium irrigation projects in the country are languishing due to various reasons, the most important of them being inadequate provision of funds by the concerned State Governments. As a result, large amount of funds spent on these projects are locked up and the benefits envisaged at the time of formulation of project reports could not be achieved. This is a cause of concern to the nation and initiative is required at the national level to remedy the situation. Since the irrigation projects are capital intensive, and States with limited resources, at their disposal find

themselves unable to meet the desired fund demands of all the projects, the implementation of these projects get delayed.

ii. Keeping the above in view, Central Government, during 1996-97, launched an Accelerated Irrigation Benefits Programme (AIBP) to provide Central Loan Assistance (CLA) to major/medium irrigation projects in the country, with the objective to accelerate the implementation of those projects which were beyond resource capability of the States or were in advanced stage of completion. While selecting the projects, special emphasis was to be given to Pre-fifth and Fifth Plan projects. Priorities were also given to those projects which were benefiting Tribal and Drought Prone Areas.

iii. Since inception altogether, 297 major and medium irrigation projects have been included under AIBP, out of which 143 projects have been completed and five projects have been deferred, leaving 149 projects as ongoing as on 2015-16. A total sum of Rs. 52,918 Cr was provided to State Governments in the form of Central Assistance till March, 2016 for Major and Medium Irrigation Projects under AIBP and an Irrigation Potential of 8,913 Th. Ha has been created up to March, 2016.

2.1.2 PMKSY-AIBP

i. Under PMKSY-AIBP, 99 projects have been prioritized amongst the 149 ongoing projects under AIBP. Out of these priority projects, 53 irrigation/ERM projects have been reported as completed as on March, 2023. Total Irrigation Potential targeted under 99 Priority Project is 76.03 Lakh Ha out of which 41.45 Lakh Ha was created up to March, 2016. A cumulative Irrigation Potential of 66.59 Lakh Ha out of 76.03 Lakh Ha (87.6%) has been created till March, 2023. Further, in December, 2021, implementation of PMKSY for the period of 2021-22 to 2025-26 has been approved by the Government of India with an outlay of Rs. 93,068.0 Cr including Rs. 37,454 Cr Central Assistance (CA) to States.

ii. Under the continuing scheme of PMKSY-AIBP, it is planned to provide financial assistance for completion of 60 ongoing Major/Medium Irrigation projects under PMKSY-AIBP, 85 ongoing CAD&WM projects and financial assistance to new Major/Medium irrigation projects including ERM projects. Since 2021-22, 06 newly MMI/ERM projects, one each from Rajasthan, Himachal Pradesh, Maharashtra, Assam, Manipur and Tamil Nadu have been included in PMKSY-AIBP. During 2016-17 to 2022-23, Rs.14239.23 Cr Central Assistance was released including the new projects included under the extended PMKSY-AIBP scheme. The Financial Status of Irrigation Projects under AIBP-PMKSY is presented in Appendix Table 2.1.The Expenditure Status of 99 Priority Projects under PMKSY-AIBP is presented in Appendix Table 2.2 (a) and the Financial Status of 99 Priority Projects under PMKSY-AIBP (including newly included project) is presented in Appendix Table 2.2 (b).

2.1.3 National Projects

i. Government of India approved a scheme of National Projects for implementation during XI Plan with a view to expedite completion of identified National projects for the benefit of the people. Such Projects are provided financial assistance of 90% of the cost of irrigation & drinking water component (as per original

Guideline) of the project as Central Assistance (CA) by the Government of India in the form of Central grant for their completion in a time bound manner. The proposal for continuation of Scheme of National Project in XII Plan was approved by CCEA on 12.09.2013. As per the approval, CA was to be provided as 75% and 90% of the cost of balance works of Irrigation and Drinking Water Component for Projects of Non-Special Category State and Special Category States, respectively. However, under the scheme of PMKSY, to which AIBP including National Projects has also been made a component, the proportion of Central share from 2016-17 onwards has been reduced to 60% except in case of projects in eight North Eastern States and three Himalayan States which will continue to get 90% of the cost as Central grant.

ii. Guidelines on Pradhan Mantri Krishi Sinchayee Yojana – Accelerated Irrigation Benefits Programme (PMKSY-AIBP) and National Projects was issued by D/o Water Resources, RD & GR, M/o Jal Shakti vide OM dated 07.02.2022.

iii. The criteria for selection of National Projects are as under:

(i). International projects where usage of water in India is required by a treaty or where planning and early completion of the project is necessary for the interest of the country.

(ii). Inter-State projects which are dragging on due to non-resolution of Inter-State issues relating to sharing of costs, rehabilitation, aspects of power production etc., including river interlinking projects.

(iii). Intra State projects with additional potential of more than 2 Lakh Ha and with no dispute regarding sharing of water and where hydrology is established.

(iv). Extension, Renovation and Modernization (ERM) projects envisaging restoration of lost irrigation potential of 2 Lakh Ha or more would be eligible for inclusion as a National Project subject to:

a. The Command Area Development & Water Management (CAD&WM) works shall be ensured in the entire command area of the ERM project.
b. The CAD&WM works shall be taken up simultaneously with the ERM works so as to facilitate achievement of the benchmark efficiency for water use.
c. The management of command area system by Water Users' Association (WUAs) after the ERM works will be necessary.
d. Independent evaluation of the project will be carried out after project implementation and the project should achieve the benchmark water use efficiency in practice as prescribed by Central Water Commission.

iv. New Projects could be considered for inclusion under the scheme of National Projects on receipt of proposals in the prescribed format from the State Governments after investment clearance from the Competent Authority, clearance from Expenditure Finance Committee/ Project Investment Board on the recommendation there upon of the High Powered Steering Committee constituted for the purpose of overseeing the entire process of selection and implementation of National Projects and approval by the Union Cabinet.

v. The Government of India initially declared 14 projects as National Projects in February, 2008. Later, Cabinet Committee on Infrastructure approved inclusion of Saryu Nahar Pariyojana in the scheme of National Project on 3rd August, 2012.

Polavaram Irrigation Project was included under the scheme of National Projects vide Gazette notification dated 01.03.2014.

vi. Out of 16 projects included in the scheme of National Projects, eight projects, namely, Gosikhurd Project of Maharashtra, Shahpur Kandi of Punjab, Teesta Barrage Project of West Bengal, Saryu Nahar Pariyojana of Uttar Pradesh, Indirasagar Polavaram Irrigation Project of Andhra Pradesh, Ken-betwa inter-linking Project of Madhya Pradesh & Uttar Pradesh, Renukaji Dam Project of Himachal Pradesh and Lakhwar Multipurpose Project of Uttarakhand are under implementation.

vii. Gosikhurd and Shahpur Kandi projects have been provided grant amounting to Rs. 3784.04 Cr and Rs. 290.37 Cr, respectively, up to March, 2023. Teesta Barrage Project started receiving funds under the scheme of National Project during 2010-11 and grant amounting to Rs. 178.20 Cr has been provided for the project till March, 2012. Saryu Nahar Pariyojana started receiving funding under the scheme of National Project since 2012-13 and an amount of Rs. 2257.61 Cr has been released up to March, 2023. The Indirasagar Polavaram Irrigation Project started receiving funding under the scheme of National Project since 2014-15 and an amount of Rs. 14418.39 Cr has been released up to March, 2023. Saryu Nahar Pariyojana (Uttar Pradesh) and Gosikhurd Irrigation Project (Maharashtra) have been included under the 99 priority projects under PMKSY-AIBP. Saryu Nahar Pariyojana (Uttar Pradesh) was inaugurated by the Hon'ble Prime Minister Shri Narendra Modi on 11th December, 2021. CA for Ken-Betwa inter-linking project have been granted amounting of Rs. 5263.79 Cr up to March, 2023. Renukaji Dam project and Lakhwar Project has received amounting Rs. 1495.50 Cr and 38.58 Cr Central Assistance from Central Government.

viii. Ujh Multipurpose project (J&K) the project was accepted by the Advisory Committee of D/o WR, RD & GR, M/o Jal Shakti in its 148th Meeting held on 17.01.2022 at New Delhi. However, the project was not accepted by the Public Investment Board (PIB) in its meeting held on 12.10.2022.

ix. Three projects, viz Noa-Dihing Dam Project (Arunachal Pradesh), Kulsi Dam Project (Assam) and Bursar Project (J&K) are under appraisal in CWC/CEA.

x. Four projects, namely, Kishau MPP (HP and UK), Upper Siang Project (Arunachal Pradesh) and Gyspa Project (Himachal Pradesh) and 2nd Ravi Beas Link Project (Punjab) are at DPR/ PFR stage.

xi. Status of 16 National Projects is presented in Appendix Table 2.3.

2.1.3.1 High-Powered Steering Committee

i. The Union Cabinet in its meeting held on 7th Feb, 2008, constituted a 'High Powered Steering Committee for Implementation of the Proposals of National Projects' with the Secretary (M/o Jal Shakti, D/o WR, RD & GR) as Chairman and Chief Engineer (PPO), CWC as Member-Secretary. The terms of reference of the Committee are as under:
(i). To recommend implementation strategies for National Projects.

(ii). To monitor implementation of National Projects.
(iii) To examine the proposal for inclusion of new projects as National Projects and make appropriate recommendation to the Government.

ii. Fourteen meetings of High Powered Steering Committee constituted for implementation of National Projects have been held so far.

2.1.4 PMKSY- HKKP, Command Area Development & Water Management (CAD&WM)

i. During the post-independence era, a large number of irrigation projects were constructed for increasing agricultural production in the country. However, during early seventies analysis of irrigation potential created and utilised, revealed that there was a substantial gap between them. The Irrigation Commission made specific recommendations in its report in 1972 that systematic development of commands of irrigation projects should be taken up in order to fully utilise the irrigation potential created. Subsequently, a Committee of Ministers set up by the Ministry of Irrigation and Power, analysed the issue and suggested in 1973 that a broad based Area Development Authority should be set up for every major irrigation project to undertake the work of comprehensive area development. Based on this recommendation, the Government of India initiated a Centrally Sponsored Command Area Development Programme (CADP) in December, 1974 to improve irrigation potential utilisation and optimise agricultural production from irrigated land through integrated and coordinated approach of efficient water management.

ii. In tune with objectives of the programme, a number of components such as construction of field channels and field drains, enforcement of warabandi, land levelling and shaping, realignment of field boundaries/ consolidation of holdings, introduction of suitable cropping patterns, strengthening of extension services etc. were included in the programme. Subsequently, in view of emergent needs a few more components like farmers participation and reclamation of waterlogged areas were included in the programme with effect from 1st April, 1996 to make the programme more beneficial to the farmers.

iii. Review of the Programme implementation during the VIII and IX Five Year Plan periods, noticed a number of constraints such as unreliability of water supply at the outlet due to deficiencies in the irrigation system above the outlet, absence of link and intermediate drains to let out surplus water into main drains, non-inclusion of minor irrigation projects from non-hilly areas, low priority by the State Governments to extension and training activities, non-revision of cost norms for various activities. In view of these constraints, the programme has been restructured for the remaining period of X Plan (2004-07) and renamed as 'Command Area Development and Water Management Programme (CAD&WM Programme)' to make it more comprehensive and beneficial to farmers. As stated above, during XII Plan, the CAD&WM programme has been implemented pari-passu with Accelerated Irrigation Benefits Programme (AIBP).

iv. The programme has now been brought under the umbrella scheme of Pradhan Mantri Krishi Sinchayee Yojna (PMKSY) –'Har Khet Ko Pani' from 2015-16 onwards. The main objective of taking up CAD works is to enhance utilisation of irrigation potential created, bring overall efficiency in water utilisation and improve agriculture production on a sustainable basis through Participatory Irrigation Management (PIM). In order to promote water use efficiency in irrigation, the

CAD&WM programme has also been targeting development of micro-irrigation infrastructure for facilitating use of sprinkler/drip irrigation systems. The CAD&WM programme also mandates formation of Water Users' Associations (WUAs) under each project, and also gives them start-up support through one-time infrastructure grant and functional grant. However, CAD&WM sub-component of HKKP is being implemented pari-passu with AIBP.

v. Initially, 60 major and medium irrigation projects were taken up under the CAD Programme, covering a Culturable Command Area (CCA) of about 15.00 Mha. At the end of FY 2015-16, there were 158 ongoing projects spread across the 29 States of the country with CCA of 16.3 Mha.

vi. Completion of CAD works of 99 prioritised AIBP projects only, are being targeted from 2016-17 onwards under PMKSY-HKKP. The arrangement of funds for Central Share/ or Central Assistance (CA) has been made by taking loan from NABARD as per year-wise requirements. A dedicated Long Term Irrigation Fund (LTIF) in NABARD has been created. Accordingly, funding of Central Assistance and State share for above mentioned 99 projects along with CAD works is being made through NABARD.

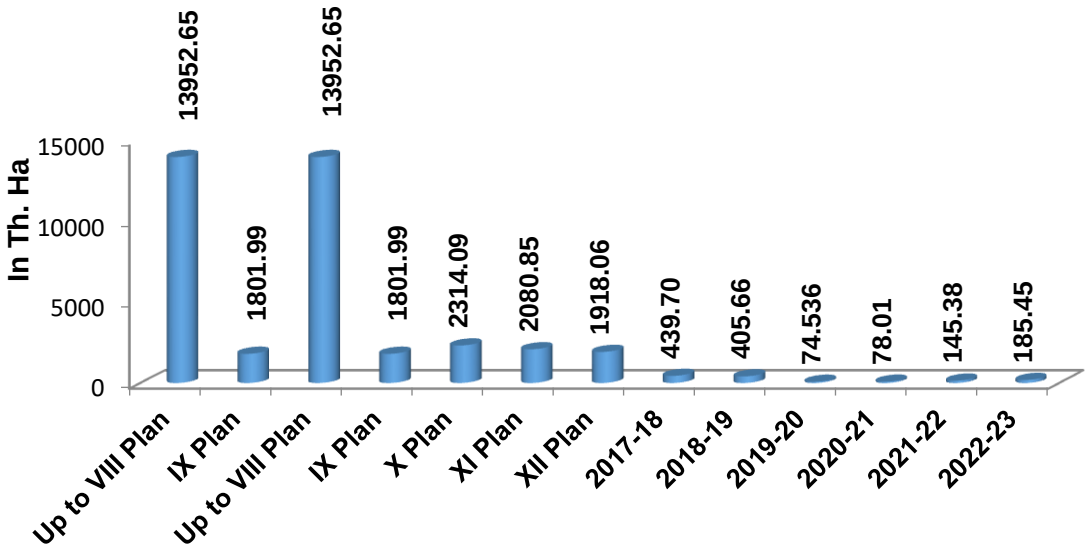
vii. Out of 99 prioritized CAD&WM projects, the State Governments have intimated that, CAD works are not required/deemed completed in 8 projects. Of the balance 91 projects, 1 Project of Rajasthan (Narmada Canal) included for Non- Structural intervention only for Central Assistance of Rs. 54.06 Cr; 87 projects in balance Culturable Command Area (CCA) of 45.08 Lakh Ha have been included under CAD&WM programme with Central Assistance (CA) of Rs. 8,235.69 Cr and targeted expenditure of Rs. 18,736.476 Cr; 3 projects namely Punpun (Bihar), Karipuzha (Kerala) & Madhya Ganga (Uttar Pradesh) are yet to be included. The CAD&WM Inclusion Status is presented in Appendix Table 2.4. The physical achievements of field channels under CAD programme (in Th. Ha) are given in Table T1 below:

Table T1: Physical Achievements of Field channels under CAD programme (in Th. Ha)

Sl. No.	Plan/Year	Achievements
1	**2**	**3**
1	Up to VIII Plan	13952.65
2	IX Plan	1801.99
3	X Plan	2314.09
4	XI Plan	2080.85
5	XII Plan	1918.06
6	2017-18	439.70
7	2018-19	405.66
8	2019-20	74.536
9	2020-21	78.01
10	2021-22	145.38
11	2022-23	185.45
Cumulative Achievement up to 31.03.2023		**23396.38**

Source: CAD Wing, D/o Water Resources, RD&GR, M/o Jal Shakti

Figure-1: Physical Achievements of Field Channels under CAD Programme



viii. The Physical Achievements of Field channels under CAD Programme as reported by the States/UTs as on 31-03-2023 is presented in Appendix Table 2.5. The State-wise Status of Expenditure Progress, Financial Progress and Physical Progress of the proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023 are presented in Appendix Tables 2.6 (a), 2.6 (b) and 2.6 (c) respectively.

2.1.5 PMKSY-HKKP, Surface Minor Irrigation (SMI)

i. The scheme 'Surface Minor Irrigation (SMI)' is a part of PMKSY-HKKP. The main objective of SMI schemes is to expand cultivable area under assured irrigation. The eligibility criteria, funding pattern and release of funds in this scheme are as per the guidelines of the D/o Water Resources, RD&GR of January, 2022.

ii. Since XII Plan, 7359 SMI schemes have been reportedly included under the programme (till 31.03.2023). Out of this, 4428 schemes have been reported to be completed. So far, Central Assistance amounting to Rs. 9009.16 Cr has been released for completion of these schemes till 31.3.2023. Out of this, an amount of Rs. 312.545 Cr was released during 2022-23. The details of SMI projects included for funding under the scheme SMI during 2022-23 are given below:

Table T2: Details of SMI Projects included for Funding during 2022-23

Sl. No.	State	No. of SMI Schemes	Estimated Cost (Rs. in Cr)
1	**2**	**3**	**4**
1	Nagaland	2	13.98
2	Assam	9*	302.07
3	Karnataka	138*	443.46
Total		**149**	**759.51**

Source: Economics Directorate, CWC, M/o Jal Shakti

Note: '*': 7359 SMI schemes included since XII Plan, excludes 09 Nos. of SMI schemes of Assam & 138 Nos. SMI schemes of Karnataka State.

iii. The Surface Minor Irrigation (SMI) component was included under Accelerated Irrigation Benefits Programme (AIBP) since 1999-2000 for special category States. Subsequently the scheme was extended to cover other special areas, namely; drought prone area programme (DPAP), tribal area (TA), desert development programme (DDP), flood prone, left wing extremism affected and Koraput, Bolangir and Kalahandi (KBK) region of Odisha.

2.1.6 PMKSY-HKKP, Repair, Renovation & Restoration (RRR) of Water Bodies Scheme

i. To revive, restore and rehabilitate the traditional water bodies, Ministry of Jal Shakti (erstwhile M/o Water Resources), Government of India launched a pilot scheme for "Repair, Renovation and Restoration (RRR) of Water Bodies directly linked to Agriculture" in January, 2005 for implementation during the remaining period of X^{th} Plan. The pilot scheme envisaged a Plan outlay of Rs. 300 Cr to be shared by Centre and State in the ratio of 3:1. The scheme was sanctioned in respect of 1,098 water bodies in 26 districts of 15 States, with a target to create 0.78 Lakh Ha of additional irrigation potential.

ii. Keeping in view the success of the pilot scheme for RRR of Water Bodies, the then Ministry of Water Resources, during XI plan, launched a State Sector Scheme for Repair, Renovation & Restoration (RRR) of Water Bodies with two components (i) one with external assistance with an outlay of Rs. 1,500 Cr and (ii) the other with domestic support with an outlay of Rs. 1,250 Cr Under the scheme of external assistance, 10,887 water bodies have been taken up while under scheme of RRR of water bodies with domestic support, 3341 water bodies taken up.

iii. The scheme of RRR of Water Bodies has become a part of Pradhan Mantri Krishi Sinchayee Yojana-Har Khet Ko Pani (HKKP) from 2015-16. Recently, Government of India has approved the scheme implementation during 2021-26 with enhanced scope. Now, in addition to water bodies directly linked to irrigation, other water bodies such as percolation tanks and the water bodies used for providing drinking water and for other community purposes which fulfil the eligibility criteria, are now proposed to be included under the scheme. During 2021-26, the scheme aims to create 0.9 Lakh Ha of irrigation potential in addition to improve availability of drinking water & conservation schemes for multifarious use. The scheme also aims to provide protection works to avoid encroachment, environmental benefits etc.

iv. Funding pattern under the scheme, for projects to be included as per the latest guidelines, is as below:

Table T3: Funding Pattern under RRR Scheme

Sl. No.	Category	Funding Pattern
1	2	3
1	All Union Territories (UTs)	100 % Central funding for UTs without legislature; 90 (Centre): 10 (State) for UTs with legislature.
2	Seven North-Eastern States including Sikkim & Hilly States (Himachal Pradesh, Uttarakhand)	90 (Central): 10 (State)
3	All others	Central) : 40 (State)

Source: Economics Directorate, CWC, M/o Jal Shakti

v. As per information available, during FY 2022-23, an amount of Rs. 58.544 Cr has been released for RRR of Water Bodies under PMKSY-HKKP. Also, 35.212 MCM storage has been restored and 198 Water Bodies have been physically completed. The detailed information on the fund released to States for the Water Bodies included during XII Plan & onwards under RRR of Water Bodies Scheme as on 31.03.2023 is presented in Appendix Table 2.7.

2.1.7 PMKSY-HKKP, Ground Water

i. PMKSY-HKKP, Ground Water scheme, launched by the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, envisages providing irrigation facility for small and marginal farmers in areas having sufficient potential for future development of ground water. The scheme is being implemented with an objective to support goal of Hon'ble Prime Minister of India, for doubling the farmers' incomes. Though the scheme was approved for 2015-20, keeping in view the various requirements to implement the scheme, guidelines were revised and scheme was effectively launched in July, 2019.

ii. Beneficiaries under this scheme are small and marginal farmers only identified by State Governments. Priority is to be given to SC/ST and Women farmers. The scheme expects to give a boost to assured irrigation in tribal and backward areas (with abundant replenishable ground water) of the country, which are deprived of benefits of irrigation projects. The scheme is applicable only in areas having stage of ground water extraction less than 60%, average rainfall more than 750 mm rainfall and having shallow ground water levels (less than 15 m below ground level).

iii. Better irrigation facilities are expected to result in improved socio-economic conditions of small and marginal farmers and may enhance food production by more than two-fold in target areas. Implementation of the scheme is also expected to generate employment for skilled/unskilled personnel including ground water professionals.

iv. Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti has sanctioned 13 projects under PMKSY-HKKP-GW scheme since 2019 in 10 States namely Assam, Arunachal Pradesh, Gujarat, Nagaland, Manipur, Mizoram, Tripura, Tamil Nadu, Uttar Pradesh and Uttarakhand. The total cost of these 13 ongoing projects is Rs. 978.00 Cr and Central Assistance is Rs.827.15 Cr out of which 764.89 Cr has already been released as on 31st March, 2023 by the Ministry of Jal Shakti. The cumulative financial progress status of PMKSY-HKKP-GW as on 31st March, 2023, is given in Table T4 below:

Table T4: Financial Progress status of PMKSY-HKKP-GW					
Sl. No.	**State**	**Projects**	**Project Cost (Rs.in Cr)**	**CA Released (As on 31st March, 2023)**	**CA Released in 2022-23**
1	**2**	**3**	**4**	**5**	**6**
1	Assam	Assam Phase-I	246.69	439.65	3.69
2		Assam Phase-II	292.96		0.00
3	Arunachal Pradesh	Arunachal Pradesh Phase-I	45.30	79.90	0.00
4		Arunachal Pradesh Phase-II	44.95		0.00
5	Gujarat	Gujarat	119.19	71.44	36.94
6	Nagaland	Nagaland	18.15	16.25	0.65
7	Manipur	Manipur	61.68	54.40	0.00
8	Mizoram	Mizoram	16.04	13.86	5.20
9	Tamil Nadu	Tamil Nadu	9.13	5.36	0.08
10	Tripura	Tripura Phase-I	13.31	43.63	0.26
11		Tripura Phase-II	48.34		7.74
12	Uttarakhand	Uttarakhand	15.89	13.72	0.00
13	Uttar Pradesh	Uttar Pradesh	46.37	26.69	10.00
Total			**978.00**	**764.89**	**64.55**

Source: CGWB, D/o Water Resources, RD&GR, M/o Jal Shakti

v. As on March, 2023; 29695 wells have been constructed, 77964 Ha command area have been created and 67285 number of small & marginal farmers have been taken the benefit of PMKSY-HKKP-GW scheme so far. The cumulative physical progress status of PMKSY-HKKP-GW, as on 31st March, 2023, is given in Table T5 below:

Table T5: Physical Progress status of PMKSY-HKKP-GW (as on 31st March, 2023)				
Sl. No.	**Projects**	**Wells to be Constructed Target/ Achievement (Nos.)**	**Project Command Target/ Achievement (Ha)**	**Beneficiaries Target/ Achievement (Nos.)**
1	**2**	**3**	**4**	**5**
1	Assam Phase-I	4779 / 4779	19116 / 19116	19643 / 19643
2	Assam Phase-II	4916/ 4916	19664/ 19532	17216/ 17200
3	Arunachal Pradesh Phase-I	473 / 473	1785/ 1785	3350/ 3350
4	Arunachal Pradesh Phase-II	519/ 519	1957/ 1957	3633/ 3633

Contd…

Table T5: Physical Progress status of PMKSY-HKKP-GW (as on 31st March, 2023)				
Sl. No.	**Projects**	**Wells to be Constructed Target/ Achievement (Nos.)**	**Project Command Target/ Achievement (Ha)**	**Beneficiaries Target/ Achievement (Nos.)**
1	**2**	**3**	**4**	**5**
5	Nagaland	262/ 262	667/ 667	264/ 264
6	Tripura Phase-I	231/ 231	339/ 339	851/ 851
7	Tripura Phase-II	890/ 885	2670/ 735	1639/ 1166
8	Manipur	550/ 550	2057/ 2057	1445/ 1445
9	Mizoram	209/ 133	553/ 333.40	411/ 296
10	Uttar Pradesh	14752/ 14752	36365/ 27944	15252/ 15252
11	Uttarakhand	206/ 206	1030/ 1030	1085/ 1085
12	Gujarat	1826/ 1826	1866/ 1866	1908/ 1908
13	Tamil Nadu	166/ 163	610/ 603	1233/ 1192
Total		**29779/ 29695**	**88679/ 77964**	**67930/ 67285**

Source: CGWB, D/o Water Resources, RD&GR, M/o Jal Shakti

vi. Ground water development for irrigation is planned in such a way that after implementation of the project, stage of ground water extraction should not exceed 70% at any time. The scheme includes measures to prevent over-exploitation and facilitate recharge to ground water. Suitable recharge measures are to be taken up under NRM (National Resource Management) component of MGNREGS or any other recharge scheme in the target area of the present scheme to provide sustainability to ground water. State/UT Government ensures that micro-irrigation practices are implemented in at least 30% of the proposed irrigated area in convergence with the relevant scheme(s) of Central/State/UT Governments.

2.2 Minor Irrigation Census

i. All ground water schemes and surface water schemes (both flow and lift) having Culturable Command Area (CCA) up to 2,000 Ha individually, are classified as Minor Irrigation schemes. A major share of irrigation is contributed by minor irrigation schemes across the country and the share of different type of minor irrigation schemes has also been changing over time. In order to study the composition of the minor irrigation sector and other related aspects, there was a need for a sound and reliable database on the minor irrigation sector, which could provide a strong foundation for planning and policy formulation. In order to meet this objective, Minor Irrigation Censuses are being conducted under the 'Rationalisation of Minor Irrigation Statistics (RMIS)' scheme till date.

ii. The Centrally Sponsored Plan Scheme RMIS was launched in 1987-88 with 100% Central assistance to the States/UTs. Currently, Irrigation Census (parent component of 'RMIS') is a standalone component under Umbrella Scheme- 'Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)' and other Schemes.

iii. So far, Six Censuses have been conducted with reference years 1986-87, 1993-94, 2000-01, 2006-07, 2013-14 & 2017-18 respectively. The All India and State wise reports of 6th MI Census with reference year 2017-18 were released in August, 2023 and is available on the website of the D/o Water Resources, RD&GR, M/o Jal Shakti. The Census throws light on important aspects like Irrigation Potential Created and Utilized through minor irrigation structures - both ground and surface water, water distribution practices employed by owners of these schemes and also sources used for energisation of these schemes.

iv. The Plan-wise expenditure on Minor Irrigation is presented in the following Table T6. It is seen that the expenditure on Minor irrigation during 2012-17 was Rs. 4712.32 Cr. It is observed that the expenditure of minor irrigation during 2017-18 was Rs. 1512.71 Cr and from the year 2017-18 it shows a decreasing trend till the year 2020-21 while in the year 2021-22 it was Rs. 1404.33 Cr which was more than double of the expenditure during 2020-21 of Rs. 680.03 Cr. Further, in the year 2022-23, it was Rs. 2467.38 Cr, shows an increasing trend again. In the year 2022-23, it was increased about 1063.05 Cr from the expenditure during the year 2021-22.

Table T6: Expenditure incurred on Minor Irrigation

(Rs. in Cr)

XII Plan	Year					
(2012-17)	(2017-18)	(2018-19)	(2019-20)	(2020-21)	(2021-22)	(2022-23)
1	2	3	4	5	6	7
4712.32	1512.71	1035.48	853.72	680.03	1404.33	2467.38

Source: NABARD

v. The Financial Expenditure on Minor Irrigation-Institutional is presented in Appendix Table 2.8. While analyzing the State-wise expenditure on Minor irrigation for the year 2022-23, it was found that the maximum expenditure was in Odisha followed by Telangana, Haryana, Tamil Nadu, Chhattisgarh, Bihar, Rajasthan, Himachal Pradesh, West Bengal, Uttar Pradesh and Uttarakhand. The expenditure in respect of these States was about 90% of the total expenditure during 2022-23. During 2022-23, the expenditure on minor irrigation was highly increased in Odisha, Telangana, Haryana, Tamil Nadu, Chhattisgarh, Himachal Pradesh and West Bengal in comparison to their expenditure in previous years while in Maharashtra, Karnataka and Uttar Pradesh the expenditure on minor irrigation was highly decreased in comparison to their expenditure in previous years. The State-wise details of expenditure incurred on Minor Irrigation are given in following table:

Table T7: Expenditure incurred on Minor Irrigation - Contribution of Selected States during 2022-23

(Rs. in Cr)

State	2022-23
1	2
Odisha	459.54
Telangana	341.06
Haryana	284.93

Contd…

Table T7: Expenditure incurred on Minor Irrigation - Contribution of Selected States during 2022-23 (Rs. in Cr)	
State	**2022-23**
1	**2**
Tamil Nadu	221.50
Chhattisgarh	207.61
Bihar	189.80
Rajasthan	170.88
Himachal Pradesh	103.80
West Bengal	95.76
Uttar Pradesh	95.73
Uttarakhand	52.41

Source: NABARD

2.3 Central Sector Water Resources Projects

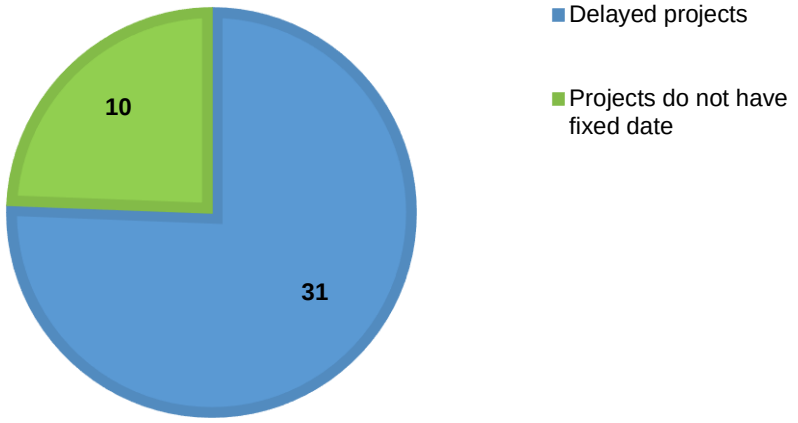
i. The Infrastructure & Project Monitoring Division (IPMD) under M/o Statistics & Programme Implementation is the Project Management arm and apex monitoring institution of the Government of India. It has studied the implementation status of central sector projects costing Rs. 150 Cr and more in 24 infrastructure sectors, during the month of March, 2023.

ii. The physical performances of all the infrastructure projects have been measured by IPMD in terms of milestones and percentage physical progress against the target dates and quantities; whereas, the financial performance has been measured on a yearly basis with respect to the link expenditure on each project. IPMD brings out reports like 'Monthly Flash Report on Central Sector Projects' (Rs. 150 Cr and above) in which the projects with time and cost overrun are flagged and forward the same to Prime Minister's Office, Cabinet Secretariat, Ministry of Finance, NITI Aayog and the concerned administrative Ministries.

iii. In this publication, total 44 Central Sector Projects each having value of Rs. 150 Cr and above in respect of water resources sector are presented with respect to time and cost overrun as on March, 2023. During the month of March, 2023, there were 1449 central sector ongoing projects across the different Ministries of Government of India; and each project having cost Rs. 150 Cr and above. Out of these, 51 projects (all the projects of Road Sector) are added and 20 projects (19 projects of Road Sector and 1 of Petroleum sector) are completed during the reference month. A total of 821 projects are found to be delayed with respect to their original schedules and 165 projects have reported additional delays vis-à-vis their date of completion reported in the previous month.

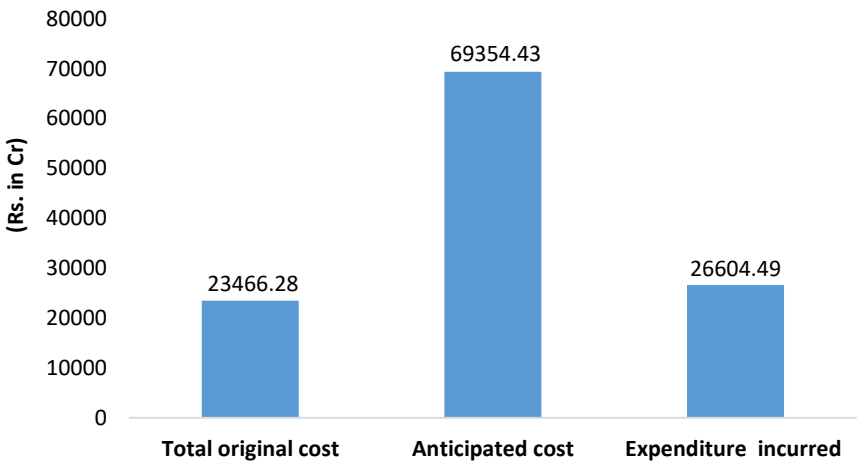
iv. Out of 1449 central sector projects costing Rs. 150 Cr (and above) as on March, 2023; 41 projects are water resources sector projects of Rs. 150 Cr (and above). Out of the ongoing 41 central sector water resources projects, 31 projects are delayed projects and 10 projects do not have fixed date of commissioning. The project status of these projects are given in Figure-2 below:

Figure-2: Status of 41 Ongoing Central Sector Water Resources Projects



v. The total original cost of implementation of the 41 ongoing water resources projects when sanctioned was of the order of Rs.23466.28 Cr but this was subsequently anticipated to Rs. 69354.43 Cr implying a cost overrun of 195.5%. The expenditure incurred on these 41 central sector water resources projects of Rs. 150 Cr (and above) as on March, 2023 is Rs. 26604.49 Cr, which is 38.4% of the anticipated cost of these projects. The details of the investment scenario of these projects are given in Figure-3 below:

Figure-3: Financial Status of 49 Ongoing Central Sector Water Resources Projects of Cost Rs. 150 Cr and above



vi. The details of 41 ongoing central sector water resources projects of Rs. 150 Cr and above as on March, 2023, are given in Table T8 below:

Table T8: Ongoing Central Sector Water Resources Projects Costing Rs. 150 Cr and above (as on March, 2023)

Sl. No.	Project	Date of Approval	Original / Revised Cost (in Rs. Cr)	Anticipated Cost (in Rs. Cr)	Cumulative Expenditure Cost (in Rs. Cr)	Original/ Revised Date of Commissioning (Month/Year)	Anticipated Date of Commissioning (Month/Year)	Cost Over run (in Rs. Cr)	Time Overrun (in months)
1	2	3	4	5	6	7	8	9	10
	Andhra Pradesh								
1	Polavaram Irrigation Project	02/2009	10,151.04 55,548.87	55,548.87	20775.8	03/2020 03/2024	04/2022	45,397.83	48
	Bihar								
2	Sewer Network Sps And Stp Begusarai	03/2018	230.06 -	230.06	180.57	07/2021 -	03/2021	0.00	20
3	I And D and Stp Works For Bhagalpur	10/2017	254.13 413.29	413.29	27.47	09/2020 11/2020	03/2024	159.16	42
4	I And D and Stp At Chappra	11/2018	236.15 -	236.15	95.77	12/2020 06/2021	03/2023	0	27
5	Sewer Networks Sps And StpHajipur	03/2018	305.19 -	305.19	250.54	10/2021	08/2023	0	24
6	Sewer Networks Sps And Stp Munger	03/2018	294.02 -	294.02	147.50	10/2021	12/2023	0	26
7	Sewerage System with Sewer Network Patna Beur	12/2014	225.77	398.90	344.48	03/2020	06/2022	173.13	0
8	Saidpur Sewer Network Patna	04/2015	268.63	431.21	472.13	01/2021	06/2022	162.58	0
9	Sewerage Scheme at Pahari Zone V Patna	05/2017	356.37 -	356.37	90.77	04/2021 -	02/2023	0.00	0
10	Sewerage Treatment Plant at Pahari Patna	05/2017	191.62 -	191.62	105.95	11/2020 03/2021	03/2021	0.00	21
11	Sewerage System with Sewer Network Patna Karmalichak	03/2017	277.42 -	277.42	328.54	05/2021 -	03/2023	0.00	22
12	Sewerage System and Stp For Kankarbag Zone Patna	08/2017	578.89 -	578.89	30.88	06/2022 -	03/2024	0.00	21
13	Sewerage System and Stp For Digha Zone Patna	08/2017	824.00 -	824.00	164.26	06/2022 -	03/2024	0.00	21
	Delhi								
14	Construction of 564 Mld 124 Mgd Waste Water Treatment Plant with Effluent Standards of BOD – 10MG/L	03/2017	665.78 -	665.78	468.41	12/2022 -	06/2023	0.00	6
15	Rehabilitation and Up-Gradation of Phase I STP 182 MLD R2	05/2016	211.79 -	211.79	152.00	12/2021 -	06/2023	0.00	18
16	Rehabilitation and Upgradation of Kondli Phase I STP 45 MLD Phase II STP 114 MLD and Phase III	05/2016	239.11 -	239.11	220.27	02/2022 -	06/2023	0.00	13
17	Construction of 318 Mld Wwtp with 10 Years O and M at Coronation Pillar Delhi	12/2018	515.07 -	515.07	388.08	01/2021 -	03/2022	0.00	0

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Table T8: Ongoing Central Sector Water Resources Projects Costing Rs. 150 Cr and above (as on March, 2023)

Sl. No.	Project	Date of Approval	Original / Revised Cost (in Rs. Cr)	Anticipated Cost (in Rs. Cr)	Cumulative Expenditure Cost (in Rs. Cr)	Original/ Revised Date of Commissioning (Month/Year)	Anticipated Date of Commissioning (Month/Year)	Cost Over run (in Rs. Cr)	Time Overrun (in months)
1	2	3	4	5	6	7	8	9	10
18	7 Nos Prioritized Stps 1 No. SPS And Peripheral Sewers in Command Area of Najafharh Drain Dhansa	05/2017	344.81 -	344.81	0.0	05/2020 -	-	0.00	0
	Maharashtra								
19	Protection of Majuli Island from Flood And Erosion Of River Brahmaputra *	03/2017	233.57 -	233.57	209.79	12/2019 03/2023	05/2023	0.00	41
	Uttar Pradesh								
20	Farrukhabad I And D and Stp Works Ham	10/2017	213.62 261.12	261.12	21.49	03/2022 02/2021	04/2024	47.50	25
21	Sewerage Works in Sewerage District I of Kanpur	10/2016	370.40 430.49	430.49	376.22	08/2020 03/2021	03/2021	60.09	7
22	Stp At Pankha Kanpur And Integration with Existing Stps	03/2018	967.23 -	967.23	220.73	09/2021 -	03/2023	0.00	18
23	Interception and Diversion Works with Stp At Bareilly Uttar Pradesh	03/2019	271.39 -	271.39	59.32	08/2021 -	03/2024	0.00	31
24	Mathura Sewerage Scheme	12/2017	460.45 -	460.45	295.23	12/2020 -	06/2022	0.00	0
25	Interception and Diversion Works and Stpat Muzaffarnagar Uttar Pradesh	01/2019	231.79 234.03	234.03	94.19	01/2020 -	06/20223	2.24	18
26	Interception and Diversion Works&Sew-ageTreatment Plant at Jaunpur Uttar Pradesh	01/2019	206.05 -	206.05	131.89	10/2021 -	03/2023	0.00	17
27	Sewerage Scheme Interception and Diversion with Stp Works At Meerut Uttar Pradesh	02/2019	681.78 690.71	690.71	0.00	06/2022 -	04/2024	8.93	0
28	Interception and Diversion Works with Stp At Lucknow Uttar Pradesh	03/2019	298.12 213.91	213.91	25.06	07/2021 05/2020	04/2024	-84.21	33
	Uttarakhand								
29	Interception and Diversion with Stp At Rishikesh	03/2017	158.00 -	158.00	95.54	11/2019 -	02/2021	0.00	0
	West Bengal								
30	Detailed Project Report for I And D Sewerage System and Stp For Asansol And Kulti Towns	01/2019	384.96 -	384.96	0.00	04/2022 -	12/2024	0.00	32

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Table T8: Ongoing Central Sector Water Resources Projects Costing Rs. 150 Cr and above (as on March, 2023)

Sl. No.	Project	Date of Approval	Original / Revised Cost (in Rs. Cr)	Anticipated Cost (in Rs. Cr)	Cumulative Expenditure Cost (in Rs. Cr)	Original/ Revised Date of Commissioning (Month/Year)	Anticipated Date of Commissioning (Month/Year)	Cost Over run (in Rs. Cr)	Time Overrun (in months)
1	2	3	4	5	6	7	8	9	10
31	Interception and Diversion Works with Stp For Drains Falling in River Damodar At Durgapurl	03/2019	287.53 -	287.53	0.00	04/2022 -	12/2024	0.00	32
32	I And D and Stp Works At Burdwan, KMDA, West Bengal	12/2018	234.31 -	234.31	0.00	04/2022 -	12/2024	0.00	32
33	Interception and Diversion with Stp At Maheshtala, KMDA, West Bengal	05/2018	198.43 224.69	224.69	19.03	02/2022 -	03/2024	26.26	25
34	Integration of Stps With Rehabilitation and O and M of Existing Assets	03/2018	165.16 -	165.16	0.00	06/2022 -	03/2024	0.00	21
35	Interception Diversion Treatment Works at Tollys Nullah Adi Ganga	08/2017	307.12 -	307.12	0.00	09/2022 -	12/2024	0.00	27
36	Interception and Diversion with Stp At Hughly-Chinsurah	05/2018	160.00 154.73	154.73	40.97	02/2022 09/2020	03/2024	-5.27	25
37	Interception Diversion and Treatment Works at Howrah	08/2017	185.22 -	185.22	44.85	12/2021 02/2021	03/2024	0.00	27
38	Sewerage System and Stp Works At Halishahr	02/2014	274.76 -	274.76	260.69	12/2019 -	06/2022	0.00	0
39	Sewerage System with Sewer Network at Barrackpore	12/2014	272.32 -	272.32	294.01	04/2020 -	06/2022	0.00	0
40	Interception Diversion and Treatment Works at Baranagar And Kamarahati	01/2018	172.10 -	172.10	42.25	12/2021 02/2021	09/2023	0.00	21
41	Interception and Diversion with Stp At Bally	10/2017	164.93 -	164.93	39.98	12/2021 -	03/2024	0.00	27
Total			**24,206.47 58,171.84**	**70,154.71**	**27,107.77**			**45,948.24**	

Source: 422nd Flash Report on Central Sector Projects (Rs. 150 Cr and above) for March, 2023, IPMD Division, M/o Statistics & Programme Implementation

2.3.1 Cost Overrun Projects

The total original cost of implementation of the aforesaid 41 ongoing water resources projects was Rs. 24,206.47 Cr and their anticipated completion cost was Rs. 70,154.71 Cr, which reflects an overall cost overrun of Rs. 45,948.24 Cr (189.8% of original cost). The expenditure incurred on these 41 projects till March, 2023 is Rs. 27,107.77 Cr, which is approximately 38.6% of the anticipated completion cost of these projects.

Table T9: Five Central Sector Water Resources Projects having Maximum Cost Overrun (in Rs. Cr)

(as on 1st April, 2023)

Sl. No.	Water Resources Projects	DOA	Original Cost (in Rs. Cr)	Anticipated Cost (in Rs. Cr)	COR (in Rs. Cr)	COR In %
1	2	3	4	5	6	7
1	Polavaram Irrigation Project	2/2009	10151.54	55548.87	45397.83	447.20%
2	Sewerage System with Sewer Network Patna Beur	12/2014	225.77	398.90	173.13	76.68%
3	Saidpur Sewer Network Patna	04/2015	268.63	431.21	162.58	60.52%
4	I and D and STP Works for Bhagalpur	10/2017	254.13	413.29	159.16	62.63%
5	Farrukhabad I and D and STP Works HAM	10/2017	213.62	261.12	47.50	22.24%

Source: 422nd Flash Report on Central Sector Projects (Rs. 150 Cr and above) for March, 2023, IPMD Division, M/o Statistics & Programme Implementation

Note: 'DOA': Date of Approval; 'COR': Cost Overrun

2.3.2 Time Overrun Projects

Out of the ongoing 41 central sector water resources projects, 10 projects do not have fixed date and 31 projects are delayed projects. However, details of 5 central sector water resources projects having Maximum Time Overrun (in Months) as on 1st April, 2023 are given below:

Table T10: Five Central Sector Water Resources Projects having Maximum Time Overrun (in Months)

(as on 1st April, 2023)

Sl. No.	Water Resources Projects	DOA	Original DOC	Anticipated DOC	TOR (in Months)
1	2	3	4	5	6
1	Polavaram Irrigation Project	02/2009	03/2020	03/2024	48
2	I and D and STP Works for Bhagalpur	10/2017	09/2020	03/2024	42
3	Protection of Majuli Island from Flood and Erosion of River Brahamputra	03/2017	12/2019	05/2023	41
4	Interception and Diversion Works with STP at Lucknow Uttar Pradesh	03/2019	07/2021	04/2024	33
5	I and D Sewerage System and STP for Asansol and kulti Towns	01/2019	04/2022	12/2024	32

Source: 422nd Flash Report on Central Sector Projects (Rs. 150 Cr and above) for March, 2023, IPMD Division, M/o Statistics & Programme Implementation

Note: 'DOA': Date of Approval; 'DOC': Date of Commissioning; 'TOR': Time Overrun

2.4 Namami Gange Programme

i. The Government of India launched an Integrated Ganga Conservation Mission/Programme under National Ganga River Basin Authority (NGRBA) called 'Namami Gange' designed as an umbrella programme, aiming at integrating previous & ongoing initiatives (including NGRBA projects) by enhancing efficiency, extracting synergies, and supplementing them with more comprehensive & better coordinated interventions. The programme was launched with the following objectives:

(i) To ensure effective abatement of pollution and rejuvenation of the river Ganga by adopting a river basin approach to promote inter-sectoral co-ordination for comprehensive planning and management.

(ii) To maintain required ecological flows in the river Ganga with the aim of ensuring water quality and environmentally sustainable development.

ii. Accordingly, the key Ministries comprising of
(a) Water Resources, River Development and Ganga Rejuvenation (b) Environment, Forest & Climate Change, (c) Urban Development, (d) Drinking Water Supply and Sanitation, (e) Rural Development, (f) Tourism, and (g) Shipping; worked together since June, 2014 to arrive at a comprehensive action plan.

iii. Cabinet approved the Namami Gange programme on 13th May, 2015 as a comprehensive approach to rejuvenate river Ganga and its tributaries under one umbrella. A total of Rs. 20,000 Cr were allocated for this project for the next five years. This includes funds allocated for ongoing projects to clean river Ganga and new initiatives. The first phase of the NMCG has ended in 2021 and the Cabinet approved Namami Gange II for Rs. 22,500 Cr for the period 2021-2026. The focus shall be on sewerage infrastructure creation in Ganga tributaries, scaling up of public private partnership efforts, circular water economy model and fecal sludge and septage management. The project summary under Namami Gange Programme for the year 2022-23 are given in the following Tables T11(a) and T11(b):

Table T11(a): Project Summary under Namami Gange Programme for the year 2022-23

Sl. No.	Type of Project	Name of State	Sanctioned				Completed		
			No. of Projects	Capacity (MLD)	Network (km)	Cost (Rs. in Cr)	No. of Projects	MLD Created/ Rehabilit-ated	Network (km)
1	Sewerage Projects	Uttarakhand	41	223.14	196.23	1581.59	36	164.50	174.91
		Uttar Pradesh	63	2185.19	1885.64	13142.90	34	922.76	1797.93
		Bihar	36	731.60	1790.09	6082.71	13	241.50	1259.58
		Jharkhand	5	262.50	151.36	1310.30	2	15.50	87.90
		West Bengal	27	885.22	975.38	4742.02	11	379.07	848.77
		Haryana	2	145.00	41.00	218.00	2	145.00	51.62
		Delhi	9	1268.00	37.32	1951.00	6	704.00	36.00
		Himachal Pradesh	1	1.72	-	12.00	1	1.72	-
		Rajasthan	1	36.00	146.00	258.00	0	36.00	122.55
		Madhya Pradesh	1	195.00	15.27	511.15	0	0.00	0.00
		Modular STP Decentralized	1	-	-	410.00	-	-	-
		Total (a)	**187**	**5933.37**	**5238.29**	**30220.00**	**105**	**2610.05**	**4379.26**

Source: Annual Report 2022-23 of National Mission for Clean Ganga (NMCG), M/o Jal Shakti

Table T11(b): Project Summary under Namami Gange Programme for the year 2022-23 other than Sewerage Projects

Sl. No.	Type of Project	Sanctioned				Completed		
		No. of Projects	Capacity (MLD)	Network (km)	Cost (in Rs. Cr.)	No. of Projects	MLD Created/ Rehabilit-ated	Network (km)
1	River front, Ghats and Crematoria	103	-	-	1675.58	77	-	-
2	Afforestation and Biodiversity conservation	47	-	-	714.21	33	-	-
3	Ghats Cleaning & River Surface Cleaning	6	-	-	93.37	4	-	-
4	Industrial Pollution Abatement	18	-	-	1467.23	2	-	-
5	Rural Sanitation	8	-	-	148.07	2	-	-
6	Other Projects	59	-	-	2194.80	21	-	-
Total (b)		**241**	**0.00**	**0.00**	**6293.26**	**139**	**0.00**	**0.00**
Grand Total (a+b)		**428**	**5933.37**	**5238.29**	**36512.93**	**244**	**2610.05**	**4379.26**

Source: Annual Report 2022-23 of National Mission for Clean Ganga (NMCG), M/o Jal Shakti

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Appendix-2

Table 2.1: Financial Status of Irrigation Projects under AIBP-PMKSY

Sl. No.	Name of States	Cumulative CLA/Grant Released up to 31.03.2016 under AIBP (Rs. in Cr)	CLA/Grant Released under PMKSY (Rs. in Cr)							CLA/Grant Released under PMKSY-AIBP (Rs. in Cr) (2016-2023)
			2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	1377.76	7.40	15.24	0.00	0.00	0.00	0.00	0.00	22.64
2	Assam	514.77	0.00	0.00	0.00	0.00	0.00	0.00	41.90	41.90
3	Bihar	761.90	0.00	46.32	37.82	11.98	14.12	0.00	0.00	110.24
4	Chhattisgarh	518.44	13.29	17.26	0.00	4.09	6.45	3.12	1.85	46.06
5	Goa	273.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Gujarat	8881.70	961.88	1410.49	1047.29	485.35	177.96	357.28	61.15	4501.40
7	Haryana	90.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Himachal Pradesh	378.89	0.00	0.00	0.00	0.00	0.00	2.25	0.00	2.25
9	Jharkhand	1247.59	145.75	305.10	305.88	0.00	0.00	0.00	0.00	756.73
10	Karnataka	5987.36	135.47	459.52	197.00	163.42	231.22	0.00	3.42	1190.05
11	Kerala	201.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Madhya Pradesh	5407.76	300.15	181.27	81.01	26.45	19.96	59.47	87.86	756.19
13	Maharashtra	10363.89	379.88	363.05	527.54	291.68	301.85	285.55	155.28	2304.79
14	Manipur	1367.48	126.99	25.42	21.93	30.50	23.51	11.75	24.88	264.98
15	Meghalaya	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Odisha	4689.74	457.74	464.71	119.38	90.65	76.39	0.00	0.00	1208.87
17	Punjab	672.03	52.42	0.00	0.00	0.00	0.00	0.00	0.00	52.42
18	Rajasthan	2174.07	45.89	216.87	95.15	7.04	93.61	41.43	0.00	499.99
19	Tamil Nadu	20.00	0.00	0.00	0.00	0.00	0.00	9.04	25.70	34.74
20	Telangana	4075.72	545.44	13.24	1.99	214.05	162.82	43.95	0.00	981.49
21	Tripura	126.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	UT of Jammu & Kashmir	480.78	0.00	8.22	16.92	5.07	9.50	0.00	0.00	39.71
23	UT of Ladakh	31.66	0.00	1.36	0.00	0.81	0.81	0.00	0.00	2.98
24	Uttar Pradesh	4589.63	135.63	65.60	397.16	407.68	391.84	0.00	23.91	1421.81
25	Uttarakhand	609.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	West Bengal	385.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		**55231.04**	**3307.93**	**3593.63**	**2849.08**	**1738.77**	**1510.04**	**813.84**	**426.03**	**14239.23**

Source: Monitoring (Central) Directorate, Central Water Commission, M/o Jal Shakti

Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Andhra Pradesh																
1	Gundlakamma	2005-06	Major	Gundlakamma	Prakasham	697.39	521.97	13.04	21.28	15.03	6.40	7.11	7.36	2.14	72.36	594.33
2	Tadipudi LIS	2006-07	Major	Godavari	W.Godavari	794.32	714.79	13.04	18.81	16.54	5.83	1.93	15.70	18.27	90.12	804.91
3	Thotapally	2005-06	Major	Nagavali	Srikakulam, Vijayanagram	1023.24	604.14	109.16	40.28	22.65	12.40	26.32	1.35	0.75	212.91	817.05
4	Tarakaram Teerta Sagaram	2005-06	Medium	Champavathi	Vizayanagaram	471.31	186.55	6.46	23.82	7.05	5.63	23.51	28.49	2.76	97.72	284.27
5	Musurumilli	2007-08	Medium	Godavari	E.Godavari	169.95	136.09	1.78	0.30	1.40	0.00	0.00	0.00	0.00	3.48	139.57
6	Pushkara LIS	2006-07	Major	Godavari	E.Godavari	491.26	431.47	5.96	1.14	0.00	0.00	0.00	0.00	0.00	7.10	438.57
7	Yerracalva	2000-01	Medium	Yerrakalva / Godavari	W.Godavari	66.13	38.59	0.48	0.84	0.45	0.00	0.00	0.00	0.00	1.77	40.36
8	Maddigedda	2000-01	Medium	Maddigedda / Godavari	E.Godavari	10.90	8.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.94
Total						**3724.50**	**2642.54**	**149.92**	**106.47**	**63.12**	**30.25**	**58.87**	**52.90**	**23.92**	**485.46**	**3128.00**
Assam																
1	Dhansiri	1996-97	Major	Dhansiri	Udalguri	425.13	305.39	3.73	0.00	0.00	0.00	0.00	95.85	0.00	99.58	404.97
2	Champamati	1996-97	Major	Champamati	Kokrajhar, Chirang and Bongaigaon	213.51	149.00	39.30	16.93	5.95	2.35	0.00	0.00	0.00	64.52	213.52
3	Borolia	1996-97	Medium	Borolia	Nalbari	256.16	84.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.39
4	ERM of Sukla Lift Irrigation	2021-22	Major		Baksa	258.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	91.82	91.82	91.82
Total						**1153.27**	**538.78**	**43.03**	**16.93**	**5.95**	**2.35**	**0.00**	**95.85**	**91.82**	**255.92**	**794.70**
Bihar																

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Durgawati	1996-97	Major	Durgawati	Rohtas, Bhabua	971.97	729.26	16.00	25.50	53.13	37.86	28.84	33.89	4.13	199.35	928.61
2	Punpun	2007-08	Major	Punpun	Patna, Arawal, Jahanabad	682.10	343.21	30.31	67.81	1.84	0.51	0.00	0.00	2.91	103.39	446.60
Total						**1654.07**	**1072.47**	**46.31**	**93.32**	**54.97**	**38.37**	**28.84**	**33.89**	**7.04**	**302.73**	**1375.20**
Chhattisgarh																
1	Maniyari Tank	2011-12	Major/ ERM	Maniyari/ Shivnath/ Mahanadi	Bilaspur	159.95	92.05	0.75	0.27	3.63	1.63	1.97	0.00	0.00	8.25	100.30
2	Kelo	2008-09	Major	Mahanadi / Kelo	Raigarh, Jangir, Champa	727.04	486.72	46.07	51.80	28.20	19.72	28.35	11.94	19.77	205.84	692.56
3	Kharung	2010-11	Major/ ERM	Kharung/ Hasdeo/ Mahanadi	Bilaspur	101.04	100.03	0.70	0.31	0.00	0.00	0.00	0.00	0.00	1.01	101.04
Total						**988.03**	**678.80**	**47.52**	**52.38**	**31.83**	**21.35**	**30.32**	**11.94**	**19.77**	**215.09**	**893.89**
Goa																
1	Tillari	2000-01	Major	West flowing/ Tillari	North Goa	1051.74	830.80	4.75	6.22	28.22	76.86	28.17	28.53	48.19	220.95	1051.75
Total						**1051.74**	**830.80**	**4.75**	**6.22**	**28.22**	**76.86**	**28.17**	**28.53**	**48.19**	**220.95**	**1051.75**
Gujarat																

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Sardar Sarovar	1996-97	Major	Naramada/ Sukhi	17 districts (Narmada, Vadodra, Bharuch, Chhota-Udepur, Panchmahel, Ahmedabad, Gandhinagar, Kheda, Anand, Mehsana, Surendra nagar, Morbi, Botad, Bhavnagar, Kachchh, Banskantha and Patan)	31522.33	21649.07	1987.11	2350.54	2299.93	1047.34	1005.39	765.14	335.00	9790.44	31439.51
Total						**31522.33**	**21649.07**	**1987.11**	**2350.54**	**2299.93**	**1047.34**	**1005.39**	**765.14**	**335.00**	**9790.44**	**31439.51**
Himachal Pradesh																
1	Nadaun Project	2021-22	Medium	Beas	Hamirpur	12.68	0.00	0.00	0.00	0.00	0.00	0.00	2.50	0.00	2.50	2.50
Total						**12.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.50**	**0.00**	**2.50**	**2.50**
Jammu & Kashmir																
1	Tral Lift	2000-01	Medium	Indus / Jhelam	Pulwama	149.37	91.42	4.10	20.30	1.71	16.53	7.79	6.36	0.00	56.79	148.21
2	Restoration & Mod. of Main Ravi Canal	2011-12	ERM	Ravi	Jammu, Sambha, Kathua	60.01	33.74	9.84	6.05	7.01	1.57	3.14	0.00	0.00	27.60	61.34

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)										
							Cumulative Expenditure as on 03/2016	Expenditure during								Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	Rajpora Lift	2000-01	Med.	Indus/ Jhelam	Pulwama	65.67	62.91	0.20	0.26	2.30	60.00	0.00	0.00	0.00	62.76	125.67
Total						**275.05**	**188.07**	**14.14**	**26.60**	**11.02**	**78.10**	**10.93**	**6.36**	**0.00**	**147.15**	**335.22**
Jharkhand																
1	Subernarekha Multipurpose	2011-12	Major	Subernarekha	West singhbhum & East singhbhum, Saraikela Kharsawan	9579.58	1915.67	712.40	585.17	437.13	415.15	90.31	248.96	340.52	2829.64	4745.31
Total						**9579.58**	**1915.67**	**712.40**	**585.17**	**437.13**	**415.15**	**90.31**	**248.96**	**340.52**	**2829.64**	**4745.31**
Karnataka																
1	Upper Tunga Irrigation Project	2014-15	Major	Tunga/Krishna	Shivmoga, Haveri, Devnagari	1606.07	441.26	253.73	113.96	168.09	127.09	147.24	52.22	174.84	1037.17	1478.43
2	Sri Rameswara Irrigation	2014-15	Major	Krishna	Belgam	173.65	87.11	24.68	17.34	0.00	0.00	0.00	0.00	0.00	42.02	129.13
3	Karanja	1997-98	Major	Manjeera / Godavari	Bidar	339.15	275.59	14.99	4.49	25.94	36.60	7.96	0.00	0.00	89.98	365.57
4	Bhima LIS	2009-10	Major/ ERM	Krishna	Gulbarga	619.17	412.23	52.67	67.10	20.63	29.37	30.10	34.07	8.14	242.08	654.31
5	NLBC System Project (New)	2014-15	Major	/Krishna	Gulbarga/ Yadgir/ Bijapur	2405.84	1370.76	314.46	110.27	91.43	151.32	228.79	142.86	0.00	1039.13	2409.89
Total						**5143.88**	**2586.95**	**660.53**	**313.16**	**306.09**	**344.38**	**414.09**	**229.15**	**182.98**	**2450.38**	**5037.33**
Kerala																
1	Karapuzha	2006-07	Medium	Kabani / Panamaram	Wayanand	64.75	8.79	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.32	9.11

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Muvattupuzha	2000-01	Major	Thodupuzha / Muvattupuzha	Idukki, Ernakulam & Kottayam	351.60	306.15	9.44	7.17	6.84	7.69	0.00	1.95	1.90	34.99	341.14
Total						**416.35**	**314.94**	**9.44**	**7.49**	**6.84**	**7.69**	**0.00**	**1.95**	**1.90**	**35.31**	**350.25**
Madhya Pradesh																
1	Sindh Project Phase II	1998-99	Major	Ganga	Shivpuri, Gwalior, Datia, Bhind	1924.83	1695.39	117.83	44.63	33.50	0.00	0.00	0.00	0.00	195.96	1891.35
2	Indira Sagar Project Canal Phase - I & II (km. 0 to km. 142)	1996-97	Major	Narmada	Khandwa, Khargaon	1608.00	1567.04	26.29	13.94	0.73	0.00	0.00	0.00	0.00	40.96	1608.00
3	Indira Sagar Project Canal Phase - III (km. 143 to km. 206)	2007-08	Major	Narmada	Badwani	890.38	724.71	63.10	47.07	12.89	7.38	1.60	22.07	0.00	154.11	878.82
4	Omkareshwar Project Canal Phase-IV (OSP lift)	2014-15	Major	Narmada	Khandwa, Khargone and Dhar	414.05	178.98	134.31	20.54	6.36	2.94	0.69	0.00	0.00	164.84	343.82
5	Bargi Diversion Project Phase - I	2001-02	Major	Narmada	Jabalpur, Satna, Rewa	432.25	407.11	3.88	10.16	6.83	1.16	0.34	0.00	0.00	22.37	429.48
6	Mahi Project	2000-01	Major	Mahi	Dhar, Jhabua	780.00	618.32	31.20	21.68	64.44	8.61	7.75	0.00	0.00	133.68	752.00
7	Barriyarpur LBC	2000-01	Major	Ganga / Kan	Chhatarpur	472.14	443.49	11.26	15.16	2.23	0.00	0.00	0.00	0.00	28.65	472.14

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
8	Bansagar Unit 2	2003-04	Major	Ganga / Sone	Rewa, Satna, Sidhi, Shahdol	1648.62	1463.62	40.48	36.47	10.75	0.00	0.00	0.00	0.00	87.70	1551.32
9	Mahan Project	2003-04	Major	Ganga / Mahan	Sidhi	434.01	377.20	18.36	5.24	10.21	5.09	0.00	0.00	0.00	38.89	416.09
10	Pench Project	2007-08	Major	Godavari / Pench	Seoni, Chindwara	1564.79	1229.58	118.41	54.89	119.40	17.83	4.18	8.81	3.44	326.96	1556.54
11	Sagad Project	2011-12	Medium	Sagar / Betwa / Yamuna	Vidisha	195.73	174.86	8.12	6.70	6.04	0.00	0.00	0.00	0.00	20.86	195.72
12	Singhpur Project	2011-12	Medium	urimil / Ken / Yamuna	Chhatarpur	180.09	175.13	4.65	0.31	0.00	0.01	0.00	0.00	0.00	4.97	180.10
13	Sanjay Sagar (Bah) Project	2011-12	Medium	Bah / Betwa /Yamuna	Vidisha	159.62	127.67	5.72	7.51	9.13	0.00	0.00	0.00	0.00	22.36	150.03
14	Mahuar Project	2013-14	Medium	Mahuar	Shivpuri	106.93	36.00	2.45	0.00	67.55	0.00	0.00	0.00	0.00	70.00	106.00
15	Indira Sagar Project Canal Phase - IV (km. 206 to km. 243)	2008-09	Major	Narmada	Barwani	558.62	301.24	81.27	68.68	48.15	8.74	0.00	0.30	0.00	207.14	508.38
16	Indira Sagar Project Canal Phase - V	2014-15	Major	Narmada	Khandwa, Khargaon Barwani	212.12	67.59	15.06	4.99	0.00	0.00	15.67	0.00	0.00	35.72	103.31
17	Omkareshwar Project Canal Phase-II (RBC km. 9.70 to km 65.50)	2007-08	Major	Narmada	Khandwa, Khargaon, Dhar	353.62	316.97	24.81	3.25	0.88	0.64	0.88	0.05	0.00	30.51	347.48

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
18	Omkareshwar Project Canal Phase-III (RBC km. 65.50 to km 142)	2007-08	Major	Narmada	Dhar	510.00	463.14	21.11	7.32	5.62	0.01	0.00	0.00	0.00	34.06	497.20
19	Bargi Diversion Project Phase - II (km. 63 to km 104)	2002-03	Major	Narmada	Jabalpur, Satna, Rewa	342.29	319.20	5.09	9.04	6.42	5.66	9.94	3.39	16.54	56.08	375.28
20	Bargi Diversion Project Phase - III (km. 104 to km 154)	2007-08	Major	Narmada	Jabalpur, Satna, Rewa	1399.70	503.70	23.03	102.46	119.77	57.91	74.86	346.12	1522.94	2247.08	2750.78
21	Bargi Diversion Project Phase - IV (km. 154 to km 197)	2008-09	Major	Narmada	Jabalpur, Satna, Rewa, Katni	893.35	485.98	10.76	5.05	0.01	3.04	1.76	4.08	575.45	600.15	1086.13
Total						**15081.14**	**11676.92**	**767.18**	**485.09**	**530.91**	**119.01**	**117.67**	**384.82**	**2118.37**	**4523.05**	**16199.97**
Maharashtra																
1	Waghur	1996-97	Major	Tapi / Waghur	Jalgaon	1758.50	721.31	97.23	90.90	223.89	118.26	44.58	31.45	82.26	688.57	1409.88
2	Bawanthadi (IS)	2004-05	Major	Godavari / Wainganga	Bhandara	697.93	608.67	77.67	11.59	0.00	11.90	1.02	0.00	0.00	102.17	710.84
3	Lower Dudhna	2005-06	Major	Godavari	Parbhani, Jalna	1714.05	1089.44	309.35	214.27	79.14	27.34	12.44	0.00	0.00	642.54	1731.98
4	Tillari (IS)	2005-06	Major	West Flowing	Sindhudurg	649.60	350.05	39.74	58.26	48.23	30.44	52.90	29.24	76.18	334.99	685.04

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
5	Lower Wardha	2006-07	Major	Godavari / Wardha	Wardha	2915.60	1319.50	358.34	322.90	301.05	200.65	90.33	88.10	89.31	1450.68	2770.18
6	Lower Panzara	2009-10	Medium	Tapi / Panzara	Dhule	294.66	211.61	36.67	34.75	7.33	0.00	19.18	0.00	0.00	97.93	309.54
7	Nandur Madhmeshwar Ph-II	2009-10	Major	Godavari / Darna	Aurangabad	686.97	286.51	272.91	117.84	9.72	0.00	0.00	0.00	0.00	400.47	686.98
8	Gosikhurd (NP)	2008-09	Major	Godavari / Wainganga	Nagpur, Bhandara Chandrapur	12770.09	4905.48	570.29	697.43	887.61	1186.75	696.77	1095.65	851.49	5985.99	10891.47
9	Upper Pen Ganga	2004-05	Major	Godavari	Yavatmal, Parbhani, Nanded	1511.83	788.90	55.30	103.20	103.01	64.53	75.50	54.45	101.47	557.45	1346.35
10	Bembla	2007-08	Major	Bembla / Godavari	Yavatmal	2483.54	1449.55	176.89	207.78	186.33	168.00	145.05	147.38	105.17	1136.604	2586.15
11	Tarali	2007-08	Major	Tarali / Krishna	Satara	943.26	446.92	45.48	68.98	88.34	118.36	59.18	47.18	16.98	444.50	891.42
12	Dhom Balaakwadi	2007-08	Major	Krishna	Pune / Satara	868.52	403.02	80.24	141.03	84.41	97.15	19.14	12.40	0.00	434.37	837.39
13	Arjuna	2007-08	Medium	Arjuna / Kodavali	Ratnagiri	611.55	365.38	38.74	33.99	41.51	108.44	86.49	85.47	17.41	412.05	777.43
14	Upper Kundalika	2008-09	Medium	Godavari/ Kundalika	Beed	263.72	166.66	17.69	43.59	34.47	5.15	1.16	0.00	0.00	102.06	268.72
15	Aruna	2009-10	Medium	Aruna	Sindhudurg	1472.14	378.16	140.53	166.17	290.37	323.54	48.86	38.92	91.11	1099.50	1477.66
16	Krishna Koyana Lift	2009-10	Major	Krishna	Solapur, Sangli	2774.90	683.86	80.00	111.56	350.67	278.91	302.51	170.00	92.46	1386.11	2069.97
17	Gadnadi	2009-10	Medium	Gad / Shastri	Ratnagiri	602.75	448.63	9.24	19.24	16.71	19.37	70.92	32.72	11.29	179.49	628.12
18	Dongargaon	2005-06	Medium	Godavari	Chandrapur	52.28	34.96	5.63	5.96	2.19	3.54	0.00	0.00	0.00	17.32	52.28
19	Sangola Branch Canal	2007-08	Major	Yelwaldi / Nira	Solapur,	742.24	254.56	13.59	34.69	86.17	111.58	69.46	95.02	50.15	460.66	715.22
20	Khadakpurna	2006-07	Major	Khadakpurna /Godavari	Buldhana	1052.01	878.99	71.95	50.94	50.13	50.95	41.05	0.00	0.00	265.02	1144.01

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(Rs. in Cr), (Potential in Th. Ha)

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								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
21	Warna	2005-06	Major	Krishna	Kolhapur, Sangli	1062.92	231.59	60.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00	291.59
22	Morna (Gureghar)	2007-08	Medium	Morna / Koyna	Satara	219.00	71.78	2.80	10.03	22.63	6.64	2.28	1.03	1.07	46.48	118.26
23	Lower Pedhi	2008-09	Major	Tapi/Purna/ Pedhi	Amravati, Akola	1480.70	565.70	182.17	82.11	99.94	20.28	26.45	16.73	91.18	518.86	1084.56
24	Wang project	2008-09	Medium	Krishna/ Wang	Satara	111.92	65.61	3.44	9.55	13.25	28.83	30.91	6.14	0.00	92.12	157.73
25	Naradave (Mahammad-wadi)	2009-10	Medium	Gad	Sindhudurg	781.85	180.67	5.08	61.10	3.91	69.62	17.86	114.96	129.10	401.62	582.29
26	Kudali	2009-10	Medium	Krishna / Kudali / Hatgeghar	Satara	382.29	72.47	6.54	5.77	22.68	75.29	17.93	21.39	10.58	160.18	232.65
27	Jihe Kathapur	2021-22	Major													
Total						**38904.82**	**16979.98**	**2757.50**	**2703.63**	**3053.70**	**3125.51**	**1931.96**	**2088.24**	**1817.21**	**17477.74**	**34457.71**
Manipur																
1	Thoubal	1997-98	Major	Thoubal	Imphal East, Senapati, Thoubal, Ukhrul	1822.24	1151.22	164.91	41.74	107.28	63.18	125.29	29.76	34.14	566.30	1717.52
2	Dolaithabi Barrage	2002-03	Medium	Irli	Imphal & Senapati	455.55	308.16	54.13	36.49	33.75	0.00	0.00	0.00	0.00	124.37	432.53
3	ERM of Loktak LIS Phase-I	2022-23			Bishnupur, Imphal west	57.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.58	28.58	28.58
Total						**2335.50**	**1459.38**	**219.04**	**78.23**	**141.03**	**63.18**	**125.29**	**29.76**	**62.71**	**719.25**	**2178.63**
Odisha																
1	Lower Indra (KBK)	1999-2000	Major	Indra / Mahanadi	Noapada	1595.35	1263.10	120.51	74.98	117.06	61.62	53.45	0.00	0.00	427.62	1690.72

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(Rs. in Cr), (Potential in Th. Ha)

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	Upper Indravati Extn (KBK)	2003-04	Major	Indravathi / Indravathi	Kalahandi	535.88	517.88	18.00	0.00	0.00	0.80	0.00	0.00	0.00	18.80	536.68
3	Rukura-Tribal	2009-10	Major	Bolani / Brahmani	Sundargarh	240.22	190.08	20.38	18.26	11.50	1.21	4.11	0.00	0.00	55.46	245.54
4	Subernarekha	1996-97	Major	Subernarekha / Subernarekha	Mayurbhanj, Balasore	4455.68	2768.10	375.90	475.84	438.92	204.65	264.94	353.71	407.22	2521.18	5289.28
5	Anandpur Barr. Phase-I / Integrated Anandpur Barr.	2003-04	Major/ ERM	Salandi / Baitarani	Keonjhar, Bhadrak	2864.36	774.12	157.01	148.22	169.76	244.50	173.74	48.57	252.88	1194.68	1968.80
6	RET irrigation	2003-04	Medium	Ret / Mahanadi	Kalahandi	707.64	241.58	127.06	296.94	42.06	22.42	12.35	0.00	0.00	500.83	742.41
7	Kanupur	2003-04	Major	Baitarni / Baitarni	Keonjhar	2301.28	1208.40	86.12	181.59	92.24	81.99	86.86	136.47	355.02	1020.28	2228.68
8	Telengiri	2003-04	Major	Telengiri / Indravathi	Koraput	932.96	449.06	193.90	236.85	53.16	168.25	34.34	0.00	0.00	686.50	1135.56
Total						**13633.37**	**7412.32**	**1098.87**	**1432.68**	**924.70**	**785.44**	**629.79**	**538.75**	**1015.12**	**6425.36**	**13837.68**
Punjab																
1	Kandi Canal Extension (Phase II)	2002-03	Major/ ERM	Indus	Hoshiarpur, Jalandhar & Kapurthala	580.13	406.83	88.93	0.00	0.00	0.00	13.81	25.17	0.00	127.91	534.74
2	Rehabilitation of Ist Patiala Feeder and Kotla Branch Project	2007-08	Major/ ERM	Indus	Patiala	177.81	130.30	24.85	0.00	0.00	0.00	2.87	38.27	0.00	65.99	196.29
Total						**757.94**	**537.13**	**113.78**	**0.00**	**0.00**	**0.00**	**16.68**	**63.44**	**0.00**	**193.90**	**731.03**

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Rajasthan																
1	Narmada Canal	1998-99	Major	Narmada	Jalore & Barmer	2551.03	1864.19	103.48	172.15	235.80	0.00	54.22	5.77	24.70	596.12	2460.31
2	Mod. of Gang Canal	2000-01	Major/ ERM	Indus	Sriganganagar	635.46	603.09	15.20	12.15	1.70	0.78	0.00	0.00	0.00	29.83	632.92
3	Parwan multipurpose project	2021-22	Major			3554.25	0.00	0.00	0.00	0.00	0.00	0.00	581.95	461.00	1042.95	1042.95
Total						**6740.74**	**2467.28**	**118.68**	**184.30**	**237.50**	**0.77**	**54.22**	**587.72**	**485.70**	**595.47**	**3062.75**
Tamil Nadu																
1	Kannadian channel	2021-22	Major	Tamirabarani, Karumeniyar and Nambiyar Rivers	Tirunelveli, Thoothukudi	96.13	0.00	0.00	0.00	0.00	0.00	0.00	68.66	25.44	94.10	94.10
Total						**96.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**68.66**	**25.44**	**94.10**	**94.10**
Telangana																
1	J. Chokha Rao LIS	2006-07	Major	Godavari	Warangal, Nalgonda, Krimnagar, Medak	12413.26	6867.33	789.13	548.17	1392.74	991.01	641.75	555.41	466.36	5384.57	12251.90
2	Sri Komaram Bheem Project	2006-07	Medium	Godavari	Adilabad	483.72	336.17	29.30	40.85	16.22	5.30	9.54	0.00	3.74	104.95	441.12
3	Gollavagu Project	2006-07	Medium	Godavari	Adilabad	93.28	82.95	2.73	2.65	1.13	0.00	0.00	0.00	0.00	6.51	89.46
4	Rallivagu Project	2006-07	Medium	Godavari	Adilabad	53.16	39.08	0.00	12.76	0.00	6.96	0.00	0.00	0.00	19.72	58.80
5	Mathadivagu Project	2006-07	Medium	Godavari	Adilabad	50.65	42.99	7.67	0.00	0.00	0.00	0.00	0.00	0.00	7.67	50.66

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6	Peddavagu Neelwai project	2006-07	Medium	Godavari	Adilabad	201.10	100.06	12.35	16.79	26.99	12.25	0.00	0.00	0.00	68.38	168.44
7	Palemvagu project	2005-06	Medium	Godavari	Khammam	229.45	195.36	4.00	0.00	0.26	0.20	0.25	0.00	0.00	4.71	200.07
8	Peddavagu Jagannathpur	2006-07	Medium	Godavari	Nellore	244.67	96.53	16.40	4.50	22.38	26.82	12.56	8.46	0.00	91.12	187.65
9	SRSP St.II	2005-06	ERM	Godavari	Warangal, Nalgonda, Khammam, Adilabad	949.87	665.59	139.31	46.32	35.76	10.44	24.24	10.94	2.03	269.02	934.61
10	Rajiv Bheema L.I. Scheme	2007-08	Major	Krishna / Krishna	Mahaboob nagar	1942.66	1374.76	130.62	104.40	137.42	0.00	17.22	34.11	0.00	423.77	1798.53
11	Indiramma Flood Flow Canal	2005-06	ERM	Godavari	Karimnagar, Warangal, Nalgonda	5036.71	3581.60	430.30	252.33	82.57	50.00	35.00	0.00	4.00	854.20	4435.80
Total						**21698.53**	**13382.42**	**1561.81**	**1028.77**	**1715.47**	**1102.98**	**740.55**	**608.92**	**476.13**	**7234.62**	**20617.04**
Uttar Pradesh																
1	Bansagar Canal	1997-98	Major	Ganga/Sone	Allahabad, Mirzapur	3242.52	2754.93	197.00	196.99	93.61	0.00	0.00	0.00	0.00	487.60	3242.53
2	Arjun sahayak	2009-10	Major	Dhasan/ Ganga	Mahoba, Hamirpur, Banda	2465.68	790.66	87.37	87.37	769.18	612.86	116.87	0.00	0.00	1673.65	2464.31
3	Madhya Ganga canal Phase-II	2008-09	Major	Ganga	Moradbad, Jyotibafule Nagar, Bijnore	4284.46	1006.49	0.00	7.93	575.93	1015.55	798.45	771.22	240.00	3409.08	4415.57

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Table 2.2 (a): Expenditure Status of 99 Priority Projects under PMKSY-AIBP(including newly included project)

(Rs. in Cr), (Potential in Th. Ha)

Sl. No.	Project Name	Year of Inclusion	Major/ Medium / ERM	River/River Basin/Sub Basin	District Benefited	Latest Estimated Cost (Works-AIBP) (in Cr. Rs.)	Expenditure Status (Rs. in Cr)									
							Cumulative Expenditure as on 03/2016	Expenditure during							Cumulative Expenditure under PMKSY-AIBP as on 03/2023 from 2016-17	Cumulative Expenditure under AIBP as on 03/2023 since 1996-97
								2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
4	Saryu Nahar (NP)	1996-97	Major	Ganga/Saryu	Baharaich, Basti, Gorakhpur, Gonda, Shravasti, Balrampur, Siddharth nagar, Sant Kabir nagar	5803.61	1965.09	201.26	571.23	962.00	1305.45	634.19	164.39	0.00	3838.52	5803.61
Total						**15796.27**	**6517.17**	**485.63**	**863.51**	**2400.72**	**2933.86**	**1549.51**	**935.61**	**240.00**	**9408.84**	**15926.01**
UT of Ladakh																
1	Prakachik Khows Canal Project	2007-08	Medium	Suru	Kargil	53.32	32.08	3.17	7.70	1.43	0.81	0.00	0.26	47.52	60.88	92.96
Total						**53.32**	**32.08**	**3.17**	**7.70**	**1.43**	**0.81**	**0.00**	**0.26**	**47.52**	**60.88**	**92.96**
Grand Total						**170235.38**	**92881.97**	**10786.67**	**10315.58**	**12239.54**	**10115.28**	**6821.66**	**6118.10**	**6828.20**	**63225.02**	**156351.54**

Source: Monitoring (Central), PMO, Central Water Commission, M/o Jal Shakti

Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
Andhra Pradesh												
1	Gundlakamma	99.35	19.87	0.00	11.79	0.00	0.00	0.00	0.00	0.00	111.14	8.08
2	Tadipudi LIS	48.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.22	0.00
3	Thotapally	99.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.73	0.00
4	Tarakaram Teerta Sagaram	33.01	25.04	0.00	3.44	0.00	0.00	0.00	0.00	0.00	36.45	21.60
5	Musurumilli	85.74	14.52	7.40	0.00	0.00	0.00	0.00	0.00	0.00	93.14	7.12
6	Pushkara LIS	47.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.08	0.00
7	Yerracalva	28.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.46	0.00
8	Maddigedda	3.79	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79	0.31
Total		**445.38**	**59.74**	**7.40**	**15.23**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**468.01**	**37.11**
Assam												
1	Dhansiri	226.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	226.60	0.00
2	Champamati	182.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	182.24	0.00
3	Borolia	29.80	9.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.80	9.97
4	ERM of Sukla Lift Irrigation	0.00	232.62	0.00	0.00	0.00	0.00	0.00	0.00	41.98	41.98	190.64
Total		**438.64**	**242.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**41.98**	**480.62**	**200.61**
Bihar												
1	Durgawati	103.84	90.07	0.00	46.32	0.00	11.98	14.12	0.00	0.00	176.26	17.65
2	Punpun	46.88	106.02	0.00	0.00	37.82	0.00	0.00	0.00	0.00	84.70	68.99
Total		**150.72**	**196.09**	**0.00**	**46.32**	**37.82**	**11.98**	**14.12**	**0.00**	**0.00**	**260.96**	**86.64**

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Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
Chhattisgarh												
1	Maniyari Tank	43.25	19.69	0.00	3.62	0.00	0.00	0.00	0.00	0.00	46.87	16.07
2	Kelo	40.63	51.50	13.29	13.63	0.00	4.09	6.45	3.12	1.85	83.06	9.07
3	Kharung	10.48	0.00	0.00	0.00	0.00	0.00	0.00			10.48	0.00
Total		**94.36**	**71.19**	**13.29**	**17.25**	**0.00**	**4.09**	**6.45**	**3.12**	**1.85**	**140.41**	**25.14**
Goa												
1	Tillari	255.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	255.42	0.00
Total		**255.42**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**255.42**	**0.00**
Gujarat												
1	Sardar Sarovar	8792.22	4797.51	961.88	1410.49	1047.29	485.35	177.96	357.28	61.15	13293.61	296.12
Total		**8792.22**	**4797.51**	**961.88**	**1410.49**	**1047.29**	**485.35**	**177.96**	**357.28**	**61.15**	**13293.61**	**296.12**
Himachal Pradesh												
1	Nadaun project	0.00	11.41	0.00	0.00	0.00	0.00	0.00	0.00	2.25	2.25	9.16
Total		**0.00**	**11.41**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.25**	**2.25**	**9.16**
Jammu & Kashmir												
1	Tral Lift	108.81	28.49	0.00	0.00	10.69	5.07	6.36	0.00	0.00	130.93	6.37
2	Restoration & Mod. of Main Ravi Canal	36.28	15.29	0.00	8.22	3.93	0.00	3.14	0.00	0.00	51.57	0.0038
3	Rajpora Lift	60.38	2.48	0.00	0.00	2.30	0.00	0.00	0.00	0.00	62.68	0.18
Total		**205.47**	**46.26**	**0.00**	**8.22**	**16.92**	**5.07**	**9.50**	**0.00**	**0.00**	**245.18**	**6.55**

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Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
Jharkhand												
1	Subernarekha Multipurpose	1132.88	1373.68	145.75	305.10	305.88	0.00	0.00	0.00	0.00	1889.61	616.95
Total		**1132.88**	**1373.68**	**145.75**	**305.10**	**305.88**	**0.00**	**0.00**	**0.00**	**0.00**	**1889.61**	**616.95**
Karnataka												
1	Upper Tunga Irrigation Project	226.24	217.76	108.88	75.16	0.00	0.00	0.00	0.00	0.00	410.28	33.72
2	Sri Rameswara Irrigation	63.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
3	Karanja	189.03	35.15	4.147	15.50	0.00	7.75	7.75	0.00	0.00	224.18	0.003
4	Bhima LIS	297.87	44.89	22.44	0.00	0.00	0.00	15.60	0.00	3.42	339.33	3.43
5	NLBC System Project (New)	70.00	940.5	0.00	368.86	197.00	155.67	207.87	0.00	0.00	999.40	11.10
Total		**846.15**	**1238.3**	**135.46**	**459.52**	**197.00**	**163.42**	**231.22**	**0.00**	**3.42**	**2036.20**	**48.25**
Kerala												
1	Karapuzha	2.72	14.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.72	14.05
2	Muvattupuzha	154.97	8.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	154.97	8.73
Total		**157.69**	**22.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**157.69**	**22.78**
Madhya Pradesh												
1	Sindh Project Phase II	605.047	39.46	35.52	0.00	0.00	0.00	0.00	0.00	0.00	640.56	3.90
2	Indira Sagar Project Canal Phase - I & II (km. 0 to km. 142)	249.909	40.96	16.35	7.33	0.00	0.00	0.00	0.00	0.00	273.59	17.30

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Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
3	Indira Sagar Project Canal Phase - III (km. 143 to km. 206)	232.545	146.53	39.65	51.29	14.97	0.00	0.00	0.00	4.42	342.87	36.20
4	Omkareshwar Project Canal Phase-IV (OSP lift)	111.93	98.15	61.27	4.496	1.74	2.07	0.00	0.00	0.00	181.51	28.57
5	Bargi Diversion Project Phase - I	140.645	9.51	5.656	0.00	1.92	0.96	0.00	0.00	0.00	149.18	0.97
6	Mahi Project	340.621	7.24	4.71	0.00	0.00	0.00	1.26	0.00	0.00	346.59	1.27
7	Barriyarpur LBC	110.0186	18.28	6.62	0.00	0.00	0.00	0.00	0.00	0.00	116.64	11.66
8	Bansagar Unit 2	395.19	91.47	0.00	68.02	0.00	0.00	0.00	0.00	0.00	463.21	23.45
9	Mahan Project	139.131	11.88	2.38	1.80	0.00	3.85	0.00	0.00	0.00	147.16	3.85
10	Pench Project	16.378	25.99	0.00	4.99	0.00	0.00	10.49	0.00	5.25	37.11	5.30
11	Sagad Project	26.5995	6.83	2.50	0.00	0.00	0.00	0.00	0.00	0.00	29.10	4.33
12	Singhpur Project	30.543	4.96	1.94	0.00	0.00	0.00	0.00	0.00	0.00	32.48	3.00
13	Sanjay sagar (Bah) Project	26.438	3.32	2.99	0.00	0.00	0.00	0.00	0.00	0.00	29.43	0.33
14	Mahuar Project	17.00	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.00	5.55
15	Indira Sagar Project Canal Phase - IV (km. 206 to km. 243)	89.477	115.70	29.22	24.55	31.70	0.00	0.00	0.00	0.00	174.95	30.20
16	Indira Sagar Project Canal Phase - V (Khargone Lift)	47.19	39.28	9.51	0.00	0.00	0.00	0.00	0.00	0.00	56.70	29.77
17	Omkareshwar Project Canal Phase-II (RBC km. 9.70 to km 65.50)	123.92	36.65	10.99	5.92	0.00	0.00	0.00	0.00	0.00	140.83	19.70
18	Omkareshwar Project Canal Phase-III (RBC km. 65.50 to km 142)	144.88	46.86	14.05	12.88	2.5	2.5	0.00	0.00	0.00	176.80	14.90

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Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
18	Omkareshwar Project Canal Phase-III (RBC km. 65.50 to km 142)	144.88	46.86	14.05	12.88	2.50	2.50	0.00	0.00	0.00	176.80	14.90
19	Bargi Diversion Project Phase - II (km. 63 to km 104)	114.47	12.94	11.65	0.00	0.00	0.59	0.00	0.00	0.00	126.71	0.70
20	Bargi Diversion Project Phase - III (km. 104 to km 154)	71.07	240.74	33.85	0.00	28.18	16.48	8.21	59.47	59.91	277.17	34.60
21	Bargi Diversion Project Phase - IV (km. 154 to km 197)	22.73	145.87	11.28	0.00	0.00	0.00	0.00	0.00	18.29	52.29	116.30
Total		**3055.73**	**1148.17**	**300.13**	**181.27**	**81.01**	**26.45**	**19.96**	**59.47**	**87.86**	**3811.88**	**392.00**
Maharashtra												
1	Waghur	555.58	246.15	81.704	0.00	113.32	0.00	0.00	0.00	0.00	750.60	51.13
2	Bawanthadi (IS)	129.63	27.23	16.84	9.992	0.00	0.00	0.00	0.00	0.00	156.46	0.40
3	Lower Dudhna	261.31	56.26	39.62	5.2686	4.48	3.43	0.00	0.00	0.00	314.11	3.46
4	Tillari (IS)	86.65	17.91	11.94	0.00	0.00	0.00	0.00	0.00	0.00	98.59	5.97
5	Lower Wardha	252.06	230.20	102.47	0.00	38.94	30.83	30.83	0.00	0.00	455.13	27.13
6	Lower Panzara	114.87	18.77	8.73	9.89	0.00	0.00	0.00	0.00	0.00	133.49	0.15
7	Nandur Madhmeshwar Ph-II	175.28	17.24	16.04	0.25	0.95	0.00	0.00	0.00	0.00	192.51	0.00
8	Gosikhurd (NP)	2987.94	1146.11	0.00	166.59	195.81	50.34	135.24	146.55	101.57	3784.04	350.01
9	Upper Pen Ganga	328.12	241.966	12.256	26.19	55.30	50.13	0.00	12.27	16.43	500.70	69.39
10	Bembla	721.04	307.1683	24.18	54.48	42.90	40.96	56.87	65.83	0.00	1006.26	21.94
11	Tarali	253.43	80.54	24.38	0.00	6.43	10.58	16.35	10.027	0.00	321.19	12.80
12	Dhom Balaakwadi	152.58	57.66	5.778	13.46	7.94	9.05	10.33	4.51	0.00	203.64	6.60

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Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
13	Arjuna	79.50	17.69	1.01	4.70	3.40	0.0	8.6	0.00	0.00	97.2	0.00
14	Upper Kundalika	101.12	15.09	1.013	7.04	1.56	1.31	0.00	0.00	0.00	112.04	4.18
15	Aruna	70.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.54	0.00
16	Krishna Koyana Lift	479.47	337.776	23.09	29.27	22.46	77.13	36.48	29.76	0.00	697.67	119.58
17	Gadnadi	37.8	4.143	0.10	0.63	0.81	0.00	0.00	1.95	0.00	41.29	0.65
18	Dongargaon	16.90	5.88	1.17	2.55	2.16	0.00	0.00	0.00	0.00	22.78	0.00
19	Sangola Branch Canal	139.06	33.72	1.31	2.45	5.10	5.23	4.14	8.17	4.73	170.20	2.58
20	Khadakpurna	574.93	40.17	2.14	12.00	26.02	0.00	0.00	0.00	0.00	615.0846	0.01
21	Warna	63.40	118.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.40	118.22
22	Morna (Gureghar)	9.82	8.228	0.32	0.00	0.00	0.00	0.00	0.00	0.00	10.14	7.91
23	Lower Pedhi	219.42	38.018	4.18	6.31	0.00	7.31	0.00	0.00	0.00	237.21	20.22
24	Wang project	14.53	7.63	0.32	0.00	0.00	3.64	0.00	0.00	0.00	18.49	3.67
25	Naradave (Mahammadwadi)	37.68	25.775	1.27	10.80	0.00	0	0.00	0.00	0.00	49.75	13.71
26	Kudali	12.22	10.4265	0.004	1.13	0.00	1.74	3.03	0.00	0.00	18.12	4.53
27	Jije Kathapur	0.00	247.34						6.48	32.54	39.02	208.3
Total		**7874.88**	**3357.35**	**379.88**	**363.02**	**527.54**	**291.68**	**301.85**	**285.55**	**155.28**	**10179.64**	**1052.58**
Manipur												
1	Thoubal	903.37	216.60	105.524	11.62	21.93	30.5	23.51	11.754	0.00	1108.21	**11.76**
2	Dolaithabi Barrage	270.12	35.27	21.47	13.80	0.00	0.00	0.00	0.00	0.00	305.39	**0.00**
3	ERM of Loktak LIS (Ph-I)	0.00	51.94	0.00	0.00	0.00	0.00	0.00	0.00	24.88	24.88	**27.1**
Total		**1173.49**	**303.81**	**126.99**	**25.42**	**21.93**	**30.50**	**23.51**	**11.75**	**24.88**	**1438.48**	**38.82**

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Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
Odisha												
1	Lower Indra(KBK)	987.109	104.88	89.75	0.00	0.00	7.55	0.00	0.00	0.00	1091.96	0.03
2	Upper Indravati Extn (KBK)	538.102	18.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	556.10	0.00
3	Rukura-Tribal	63.657	26.35	7.26	16.63	1.23	0.00	0.00	0.00	0.00	88.78	1.23
4	Subernarekha	1435.171	642.33	200.66	240.79	45.27	77.80	38.90	0.00	0.00	2038.59	38.91
5	Anandpur Barr. Ph.-I / Integrated Anandpur Barr.	97.922	61.32	16.39	0.00	0.00	5.3	6.317	0.00	0.00	125.93	33.31
6	RET irrigation	94.318	110.78	34.401	47.12	14.6	0.00	0.00	0.00	0.00	190.44	14.66
7	Kanupur	612.751	270.28	32.96	28.51	48.82	0.00	23.62	0.00	0.00	746.66	136.37
8	Telengiri	145.328	208.91	58.32	131.66	9.46	0.00	0.00	0.00	0.00	344.76	9.47
Total		**3974.357**	**1442.35**	**457.74**	**464.708**	**119.38**	**90.65**	**76.387**	**0.00**	**0.00**	**5183.219**	**233.49**
Punjab												
1	Kandi Canal Extension (Ph.II)	93.48	45.7615	45.756	0.00	0.00	0.00	0.00	0.00	0.00	139.23	0.00
2	Rehabilitation of Ist Patiala Feeder and Kotla Branch Project	29.61	6.66	6.66	0.00	0.00	0.00	0.00	0.00	0.00	36.27	0.00
Total		**123.09**	**52.42**	**52.42**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**175.50**	**0.01**
Rajasthan												
1	Narmada Canal	1084.048	427.82	40.79	199.99	93.43	0.00	93.61	0.00	0.00	1511.86	0.00
2	Mod. of Gang Canal	217.738	32.37	5.10	16.88	1.72	7.04	0.00	0.00	0.00	248.48	1.63
3	Parwan Multipurpose project	0.00	733.86	0.00	0.00	0.00	0.00	0.00	0.00	41.43	41.43	691.88
Total		**1301.79**	**1194.05**	**45.89**	**216.87**	**95.15**	**7.04**	**93.61**	**0.00**	**41.43**	**1801.77**	**693.51**

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Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
Tamil Nadu												
1	Kannadian channel	0.00	44.22	0.00	0.00	0.00	0.00	0.00	9.04	25.70	34.74	9.48
Total		**0.00**	**44.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**9.04**	**25.70**	**34.74**	**9.48**
Telangana												
1	J. Chokha Rao LIS	1317.089	966.639	470.602	0.00	0.00	205	145.48	43.95	0.00	2182.12	101.60
2	Sri Komaram Bheem project	145.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	145.54	0.00
3	Gollavagu Project	60.47	6.304	0.00	0.00	0.00	0.00	4.78	0.00	0.00	65.25	1.50
4	Rallivagu project	6.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.71	0.00
5	Mathadivagu Project	37.02	5.346	2.67	0.00	2.673	0.00	0.00	0.00	0.00	42.36	0.00
6	Peddavagu @ Neelwai project	18.40	0.00	0.67	0.00	-0.674	0.00	0.00	0.00	0.00	18.40	0.00
7	Palemvagu project	9.5355	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.54	0.00
8	Peddavagu @ Jagannathpur	106.025	8.49	0.00	0.00	0.00	0.00	2.29	0.00	0.00	108.32	6.20
9	SRSP St.II	139.47	48.36	17.01	13.24	0.00	9.04	0.00	0.00	0.00	178.76	9.10
10	Rajiv Bheema L.I. Scheme	1165.67	94.66	54.48	0.00	0.00	0.00	10.27	0.00	0.00	1230.42	29.90
11	Indiramma Flood Flow Canal	382.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	382.40	0.00
Total		**3388.33**	**1129.80**	**545.43**	**13.24**	**2.00**	**214.04**	**162.82**	**43.95**	**0.00**	**4369.81**	**148.31**
Uttar Pradesh												
1	Bansagar Canal	867.37	143.51	64.637	63.36	15.51	0.00	0.00	0.00	0.00	1010.88	0.00
2	Arjun sahayak	556.72	132.41	9.00	2.24	57.84	31.66	15.83	0.00	0.00	673.29	15.80
3	Madhya Ganga canal PH-II	191.95	92.00	0.00	0.00	18.81	17.8	17.8	0.00	9.40	255.76	28.20

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Table 2.2 (b): Financial Status of 99 Priority Projects under PMKSY-AIBP(including newly included Project)

(Rs. in Cr), (Potential in Th. Ha.)

Sl. No.	Project Name	CA Status (in Cr Rs.)										
		Cumulative CA/CLA Released as on 03/2016	Maximum CA Eligibility as on 01.04.2016 /2021*	CA Released during 2016-17	CA Released during 2017-18	CA Released during 2018-19	CA Released during 2019-20	CA Released during 2020-21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released as on 03/2023	Balance CA as on 01.04.2023
1	2	3	4	5	6	7	8	9	10	11	12	13
4	Saryu Nahar (NP)	1159.59	1228.58	62.00	0.00	305	358.22	358.21	0.00	14.512	2257.53	130.60
	Total	**2775.63**	**1596.50**	**135.63**	**65.60**	**397.16**	**407.68**	**391.84**	**0.00**	**23.91**	**4197.45**	**174.68**
UT of Ladakh												
1	Prakachik Khows Canal Project	31.65	3.41	0.00	1.356	0.00	0.81	0.81	0.00	0.00	34.63	0.436
Total		**31.65**	**3.41**	**0.00**	**1.356**	**0.00**	**0.81**	**0.81**	**0.00**	**0.00**	**34.63**	**0.436**
Grand Total		**36217.88**	**18332.09**	**3307.90**	**3593.60**	**2849.08**	**1738.76**	**1510.03**	**770.16**	**469.71**	**50457.35**	**4092.75**

Source: Monitoring (Central), PMO, Central Water Commission, M/o Jal Shakti

Note: '2021*': For newly included projects

Table 2.3: List of Water Resources Projects declared as National Projects

Sl. No.	Name of the Project	State (River/Basin)	Benefits: 1) Irrigation Potential (Ha) 2) Power (MW) 3) Storage (MCM)	Latest Estimated Cost (Rs. in Cr)	Central Assistance Released so far (Rs. in Cr)	Date of Completion/ Remarks
1	2	3	4	5	6	7
National Projects under Implementation/Execution						
1	Gosikhurd Irrigation Project	Maharashtra (Wainganga/ Godavari)	1) 2.50 lakh 2) 26.5 MW 3)1147.14 MCM (Gross)	18494.57 (PL 2012-13)	3881.2825	December, 2024
2	Saryu Nahar Pariyojana	Uttar Pradesh (Diversion Scheme among Rivers Ghaghara, Saryu, Rapti & Bansagar/ Ganga)	1) 14.04 (NP Component:4.73) 2) – 3) Barrage	9802.67 (PL 2016)	2257.612	The project was inaugurated by Hon'ble PM on 11.12.2021
3	Polavaram Irrigation Project	Andhra Pradesh (Godavari)	1) 4.36 Lakh 2) 960 MW 3) 5511 MCM (Gross)	47725.74 (P.L. 2017-18)	15146.270	March,2026
4	Shahpurkandi Dam Project	Punjab (Ravi)	1) 0.37 Lakh 2) 206 MW 3) 120.71 MCM (Gross)	3394.49 (PL-Oct, 2022)	390.8058	June, 2024
5	Teesta Barrage Project	West Bengal (Teesta)	1) 9.23 Lakh (NP component: 5.27 Lakh) 2) 1000 MW 3) Barrage	2988.61	178.20	Project is at standstill since 2014-15 due to land acquisition issues.
6	Renukaji Dam Project	Himachal Pradesh (Giri/Yamuna)	1) Drinking water 2) 40 MW 3) 498 MCM Drinking (Live)	6946.99 (PL Oct, 2018)	1909.9569	30th April, 2029
7	Lakhwar Multipurpose Project	Uttarakhand (Yamuna)	1) 0.3378 Lakh 2) 300 MW 3) 587.84 MCM (Gross)/39.415 MCM (Drinking)/39.415 MCM (Industrial)	5747.17 (PL July, 2018)	204.14	Oct, 2028
8	Ken-Betwa Link Project	Madhya Pradesh & Uttar Pradesh (Ken & Betwa/ Yamuna Basin)	1) 9.08 Lakh (CCA) 2) 130 MW 3) 3495 MCM (Live)	Rs 44605 Cr (PL 2020-21)	6659.01	March, 2030
9	Ujh Multipurpose Project	Jammu & Kashmir (Ujh/Ravi)	1) 0.91 Lakh 2) 89.5 MW 3) 925 MCM (Gross)/ 20 MCM (Drinking)/ 20 MCM (Industrial)	11907.77 (PL Dec, 2019)	----	Accepted by Advisory Committee of D/o WR, RD & GR on 148th meeting on 17.01.2022. The project was not accepted by the Public Investment Board (PIB), meeting held on 12th October, 2022.

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Table 2.3: List of Water Resources Projects declared as National Projects

Sl. No.	Name of the Project	State (River/Basin)	Benefits: 1) Irrigation Potential (Ha) 2) Power (MW) 3) Storage (MCM)	Latest Estimated Cost (Rs. in Cr)	Central Assistance Released so far (Rs. in Cr)	Date of Completion/ Remarks
National Projects under Appraisal :						
10	Kulsi Dam Project	Assam (Kulsi - Tributary of Brahmaputra)	1) 0.395 Lakh (GIA) 2) 55 MW 3) 525.64 MCM (Gross)	Unit-I= 1073.05 Unit-II= 290.12 E&M Cost = 91.78 (PL June 2017)	----	----
11	Noa Dihing Dam Project	Arunachal Pradesh (Noa-Dihing)	1) 0.036 Lakh (CCA) 2) 72 MW 3) 322.00 MCM (Gross)	1291.93 (PL May, 2017)	----	-----
12	Bursar HE Project	Jammu & Kashmir (Marusudar/ Chenab/Indus)	1) 1.74 Lakh (Indirect) 2) 800 MW 3) 616.74 MCM (Gross)	16839.90 (PL Oct 2016)	----	----
13	Kishau Multipurpose Project	Himachal Pradesh & Uttarakhand (Tons/Yamuna)	1) 0.97 Lakh Ha 2) 660 MW 3) 1824 MCM (Gross)/ 617 MCM (Drinking)	7193.23 (PL 2010)	----	Revised DPR under preparation
14	Gyspa HE Project	Himachal Pradesh (Bhaga /Chenab/ Indus)	1) 0.50 Lakh Ha 2) 300 MW 3) 912.78 MCM (Live)	----	----	----
15	2nd Ravi Beas Link Project	Punjab (Ravi Beas Link)	Harness water flowing 0.58 MAF across border (about 719.30 MCM in non-monsoon period)	----	----	----
16	Upper Siang Project	Arunachal Pradesh (Siang)	1) Indirect 2) 9750 MW 3) 9.2 BCM (Live) 4) Flood moderation	----	----	----

Source: National Projects Directorate, Central Water Commission, M/o Jal Shakti (as per the latest availability of data)

Note:

1. In view of the SLP (C) No-19409 of 2015 (Arising out of impugned final order dated 20.11.2014 in CWP No-4739/2014 passed by Hon'ble High Court of H.P), Government of India had released as a special case one-time assistance of Rs. 446.96 Cr vide its order dated 03.10.2016 for payment of compensation to the outsees whose land has been acquired for the project.

2. Further, amount of Rs. 10.61 Cr has been released further to Himachal Pradesh vide letter dated 11.08.2021 of D/o WR, RD & GR to transfer it to Himachal Pradesh Power Corporation Limited (HPPCL) for depositing the same with the Hon'ble High Court Shimla towards land acquisition of Renukaji Dam as a grant under PMKSY-HKKP in the matter of Regular First Appeal RFA 161/2019 in compliance to Hon'ble High Court Order dated 30.07.2021.

3. Subsequently, on Account Payment of Grant Component of Central Assistance under AIBP Capital Asset (PMKSY) for the State Annual Plan 2021-22 for Rs. 1037.925 Cr were issued vide D/o WR, RD& GR Letter dated 03.03.2022.

Table 2.4: CAD&WM Inclusion Status

Sl. No.	State	No. of Priority Projects	Projects Included directly by M/oJal Shakti	Projects not Requiring CAD &WM	Projects Requiring Inclusion as on 01.4.2016	Status of Examination of DPRs in Field Units				Status of Examination of DPRs in HQ				Projects Included in M/o Jal Shakti after CWC HQ Recommendations	Project name of those not Included by M/oJal Shakti but Recommended by CWC	DPR yet to be Submitted or Resubmitted by State	Project name of those not Received or to be Resubmitted
						Received in Field Units	Under examination	Returned to States	Recommended to HQ	Received in HQ	Under examination	Returned to Field Units	Recommended to M/o Jal Shakti				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Andhra Pradesh	8	0	1	7	7	0	0	7	7	0	0	7	7		0	
2	Assam	3	2	0	1	1	0	0	1	1	0	0	1	1		0	
3	Bihar	2	1	0	1	0	0	0	0	0	0	0	0	0		1	Punpun
4	Chhattisgarh	3	0	0	3	3	0	0	3	3	0	0	3	3		0	
5	Goa	1	1	0	0	0	0	0	0	0	0	0	0	0		0	
6	Gujarat	1	1	0	0	0	0	0	0	0	0	0	0	0		0	
7	Jammu & Kashmir	4	0	1	3	3	0	0	3	3	0	0	3	3		0	
8	Jharkhand	1	0	0	1	1	0	0	1	1	0	0	1	1		0	
9	Karnataka	5	3	0	2	2	0	0	2	2	0	0	2	2		0	
10	Kerala	2	1	0	1	0	0	0	0	0	0	0	0	0		1	Karapuzha
11	Madhya Pradesh	21	17	0	4	4	0	0	4	4	0	0	4	2	Bargi Diversion Phase-III & IV	0	
12	Maharashtra	26	9	4	13	13	0	0	13	13	0	0	13	13		0	
13	Manipur	2	2	0	0	0	0	0	0	0	0	0	0	0		0	
14	Odisha	8	4	0	4	4	0	0	4	4	0	0	4	4		0	
15	Punjab	2	0	2	0	0	0	0	0	0	0	0	0	0		0	
16	Rajasthan	2	1	1	0	0	0	0	0	0	0	0	0	0		0	
17	Telangana	11	0	0	11	11	0	0	11	11	0	0	11	11		0	
18	Uttar Pradesh	4	0	1	3	3	0	1	2	2	0	0	2	2		1	Madhya Ganga canal Ph-II
Total		**106**	**42**	**10**	**54**	**52**	**0**	**1**	**51**	**51**	**0**	**0**	**51**	**49**	**2**	**3**	

Source: P&P Directorate, CWC, M/o Jal Shakti

Note: The data is updated as on 18th Dec., 2023.

Table 2.5: Physical Achievements of Field channels under CAD Programme as reported by the States/UTs as on 31-03-2023

(Th. Ha)

Sl. No.	Name of the State/UT	Progress up to VIII Plan	Achievements															Cumulative Achievement (up to 31.03.2023)
			IX Plan	X Plan	XI Plan	2012-13	2013-14	2014-15	2015-16	2016-17	XII Plan	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Andhra Pradesh	664.61	15.63	57.84	39.42	0.81	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.93	0.00	779.24
2	Arunachal Pradesh	0.00	1.02	7.93	11.45	0.56	1.78	0.00	0.00	0.00	2.34	0.00	0.00	0.00	0.00	0.00	0.00	22.75
3	Assam	54.13	1.95	0.55	4.89	0.90	0.00	0.41	0.00	0.00	1.31	0.00	11.92	7.97	3.51	2.00	0.00	88.23
4	Bihar	1282.42	14.84	46.76	126.43	12.15	5.23	2.28	0.00	2.25	21.90	5.49	4.00	2.47	3.04	1.02	0.84	1509.21
5	Chhattisgarh	0.00	1.47	49.87	154.27	29.33	36.62	15.24	2.88	0.00	84.06	0.00	0.00	0.00	0.00	2.07	1.13	292.87
6	Goa	10.34	0.04	0.00	3.01	0.60	0.00	0.00	0.00	0.01	0.61	0.01	0.75	0.08	0.20	0.00	5.65	20.69
7	Gujarat	851.96	37.91	217.70	42.88	0.00	0.00	0.00	258.82	385.28	644.10	290.00	260.17	1.59	1.57	59.57	23.84	2431.28
8	Haryana	312.67	116.71	167.92	255.61	37.56	63.21	49.30	58.75	0.00	208.82	0.00	0.00	0.00	0.00	0.00	0.00	1061.73
9	Himachal Pradesh	10.66	4.99	6.59	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.85
10	Jammu & Kashmir and Ladakh (UT)	55.45	22.45	20.36	57.43	23.61	21.71	3.46	5.04	0.00	53.81	0.00	0.97	0.53	0.19	0.03	0.00	211.23
11	Jharkhand	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Karnataka	1043.01	73.21	369.29	114.76	19.73	36.64	2.10	0.00	11.08	69.54	10.95	8.92	3.79	0.10	3.44	2.80	1699.81
13	Kerala	153.66	20.46	8.17	1.39	0.32	0.73	0.81	0.00	0.00	1.86	0.00	0.00	0.30	0.30	0.00	0.90	186.34
14	Madhya Pradesh	995.84	35.39	41.95	61.95	67.12	0.00		15.81	74.94	157.86	85.06	46.94	17.40	24.10	12.60	15.60	1494.69
15	Maharashtra	1113.14	110.78	24.21	88.90	3.99	6.73	1.25	0.76	7.63	20.36	16.56	40.81	19.65	24.23	16.17	47.52	1522.31
16	Manipur	36.79	13.84	13.26	23.36	0.50	0.80	0.61	0.00	0.00	1.92	0.00	5.03	0.00	3.64	0.00	0.00	97.84

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Table 2.5: Physical Achievements of Field channels under CAD Programme as reported by the States/UTs as on 31-03-2023

(Th. Ha)

Sl. No.	Name of the State/UT	Progress up to VIII Plan	Achievements															Cumulative Achievement (up to 31.03.2023)
			IX Plan	X Plan	XI Plan	2012-13	2013-14	2014-15	2015-16	2016-17	XII Plan	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
17	Meghalaya	1.00	0.13	1.05	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55
18	Mizoram	0.00	0.12	0.74	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91
19	Nagaland	0.00	1.96	1.78	0.07	0.45	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	4.26
20	Odisha	346.48	49.95	41.02	103.85	36.88	23.33	32.00	72.66	10.47	175.34	24.40	19.08	9.61	8.03	4.25	4.39	784.00
21	Punjab	0.00	222.71	128.81	251.44	18.78	22.86	15.57	82.05	0.00	139.25	0.00	0.00	0.00	0.00	20.53	6.23	768.97
22	Rajasthan	925.50	251.73	249.90	131.25	7.44	16.12	10.75	46.22	6.86	87.40	7.22	7.08	0.46	9.11	22.77	16.13	1708.55
23	Sikkim	0.00	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
24	Tamil Nadu	629.56	221.26	190.91	110.03	18.26	16.87	0.41	5.14	0.00	40.69	0.00	0.00	0.00	0.00	0.00	0.00	1192.45
25	Telangana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.68	0.00	0.00	0.00	10.68
26	Tripura	0.32	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
27	Uttar Pradesh	5374.97	561.05	639.29	399.54	75.71	53.22	44.43	23.41	0.00	196.78	0.00	0.00	0.00	0.00	0.00	18.90	7190.53
28	Uttarakhand	0.00	0.00	4.88	7.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.92
29	West Bengal	90.14	22.33	23.13	90.85	6.35	2.51	0.00	0.00	0.00	8.86	0.00	0.00	0.00	0.00	0.00	0.00	235.31
Total		**13952.65**	**1801.99**	**2314.09**	**2080.85**	**361.04**	**308.36**	**178.62**	**571.54**	**498.51**	**1918.07**	**439.70**	**405.66**	**74.54**	**78.01**	**145.38**	**143.91**	**23351.79**

Source: CAD Wing, D/o Water Resources, RD&GR, M/o Jal Shakti
Note: 'CAD': Command Area Development
Remarks: Total may not tally due to rounding off.

Table 2.6 (a) : State-wise Status (Expenditure Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Complet-ion	As per DPR/ MoU			Expenditure Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	Exp. 2016-17	Exp. 2017-18	Exp. 2018-19	Exp. 2019-20	Exp. 2020-21	Exp. 2021-22	Exp. 2022-23	Total	% Exp. Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Andhra Pradesh	1	Gundalakamma	Praksam	2017-18	2025-26	32.40	46.95	93.90	0.00	0.00	0.00	0.00	0.42	0.70	0.60	1.72	1.83
	2	Tadipudi LIS	West Godavari	2017-18	2025-26	54.35	100.58	201.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	Thotapally	Srikakulam	2017-18	2025-26	29.14	58.51	117.03	0.00	0.00	0.00	0.00	0.00	1.39	0.05	1.44	1.23
	4	Tarakaram Teertasagaram	Vijayanagaram	2017-18	2025-26	4.35	10.15	25.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	Musurumilli	East Godavari	2017-18	2025-26	5.92	12.01	24.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	Pushkara LIS	East Godavari	2017-18	2025-26	46.55	99.65	199.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	7	Yerracalva	West Godavari	2018-19	2025-26	5.92	11.88	26.54	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.50	1.88
	8	Maddigedda	……..			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	Total					**178.62**	**339.72**	**687.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.92**	**2.10**	**0.65**	**3.66**	**0.53**
Assam	9	Dhansiri	Udalguri	2014-15	2025-26	31.12	66.27	151.99	0.00	2.33	6.10	5.89	3.75	6.55	-	24.62	16.20
	10	Champamati	Kokrajhar, Chirang (BTC), Bongaigaon	2015-16	2022-23	6.59	13.85	27.23	0.00	6.43	7.10	0.00	8.00	0.00	-	21.53	79.07
	11	Borolia	Baksa, Kamrup	2018-19	2025-26	8.92	16.52	36.24	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**46.62**	**96.64**	**215.46**	**0.00**	**8.76**	**13.20**	**5.89**	**11.75**	**6.55**	**0.00**	**46.15**	**21.42**
Bihar	12	Durgawati	Kuaimue, Rohtas	2015-16	2023-24	30.51	50.66	142.40	7.85	18.06	17.55	10.38	12.69	4.04	4.82	75.39	52.94
	13	Punpun	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**30.51**	**50.66**	**142.40**	**7.85**	**18.06**	**17.55**	**10.38**	**12.69**	**4.04**	**4.82**	**75.39**	**52.94**
Chhattisgarh	14	Maniyari Tank	Mungeli	2017-18	2025-26	11.52	22.63	45.37	0.00	0.00	0.00	0.00	0.00	0.85	6.10	6.95	42.91
	15	Kelo	Rajgarh, Janjgir Champa	2017-18	2025-26	22.81	40.51	81.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.30
	16	Kharung	Bilaspur	2017-18	2025-26	8.30	16.43	33.18	0.00	0.00	0.00	0.00	0.00	8.17	1.46	9.63	29.86
	Total					**42.63**	**79.57**	**159.76**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**9.02**	**7.56**	**16.58**	**20.57**

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Table 2.6 (a) : State-wise Status (Expenditure Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Complet-ion	As per DPR/ MoU			Expenditure Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	Exp. 2016-17	Exp. 2017-18	Exp. 2018-19	Exp. 2019-20	Exp. 2020-21	Exp. 2021-22	Exp. 2022-23	Total	% Exp. Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Goa	17	Tillari	Talukas, Bicholim, Bardez	2007-08	2023-24	8.67	18.77	137.92	4.72	7.16	9.09	10.96	4.31	0.00	9.59	45.83	33.23
	Total					**8.67**	**18.77**	**137.92**	**4.72**	**7.16**	**9.09**	**10.96**	**4.31**	**0.00**	**9.59**	**45.83**	**33.23**
Gujarat	18	Sardar Sarovar Project	Vadodara, Bharuch, Narmada, Panchmahal,Chhotaudepur, Gandinagar,Ahmedabad, Mahesana, Patan,Banaskantha, Botad,Surendranagar,Morbi, Rajkot, Bhavnagar, Kutch(16)	2004-05	2023-24	1363.86	2510.88	5021.76	1435.90	1224.73	861.68	60.69	25.29	10.96	83.54	3702.79	73.73
	Total					**1363.86**	**2510.88**	**5021.76**	**1435.90**	**1224.73**	**861.68**	**60.69**	**25.29**	**10.96**	**83.54**	**3702.79**	**73.73**
Jammu & Kashmir	19	Tral Lift	Pulwama	2017-18	2021-22	1.41	3.01	6.16	0.00	0.00	1.59	0.00	1.45	0.00	-	3.04	49.35
	20	Prakachik Khows Canal (Kargil)	Kargil	2017-18	2021-22	0.46	0.71	1.87	0.00	0.00	0.22	0.00	0.49	0.00	0.93	1.63	87.54
	21	Restoration & Mod. of Main Ravi Canal	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	22	Rajpora Lift	Pulwama.	2017-18	2021-22	0.59	1.52	3.61	0.00	0.00	1.54	0.00	1.22	0.00	-	2.76	76.40
	Total					**2.46**	**5.24**	**11.64**	**0.00**	**0.00**	**3.35**	**0.00**	**3.16**	**0.00**	**0.93**	**7.43**	**63.86**
Jharkhand	23	Subernarekha	East Singhbum, Saraikela, Kharsawan	2018-19	2025-26	66.65	133.32	747.53	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**66.65**	**133.32**	**747.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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Table 2.6 (a) : State-wise Status (Expenditure Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Complet-ion	As per DPR/ MoU			Expenditure Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	Exp. 2016-17	Exp. 2017-18	Exp. 2018-19	Exp. 2019-20	Exp. 2020-21	Exp. 2021-22	Exp. 2022-23	Total	% Exp. Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Karnataka	24	Upper Tunga Irrigation Project	Haveri, Simoga, Davengere	2015-16	2022-23	24.91	44.11	87.50	5.94	13.71	14.21	5.48	11.60	4.77	4.68	60.39	69.02
	25	Sri Rameswar Irrigation	Belgaum	2016-17	2021-22	11.42	22.71	56.31	22.14	8.15	11.26	3.70	0.00	0.00	-	45.25	80.36
	26	Bhima LIS	Kalaburagi	2016-17	2021-22	12.90	23.63	52.83	10.87	17.90	11.07	0.51	3.08	0.89	-	44.32	83.89
	27	Karanja	Bidar	2017-18	2022-23	5.59	11.23	42.60	0.00	0.00	3.75	8.09	2.70	2.17	-	16.71	39.23
	28	NLBC	Bijapur, Gulbarga	2018-19	2025-26	28.67	62.17	750.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**83.48**	**163.85**	**989.24**	**38.95**	**39.76**	**40.29**	**17.78**	**17.38**	**7.83**	**4.68**	**166.67**	**16.85**
Kerala	29	Muvattupuzha	Idukki, Ernakulam, Kottayam	2015-16	2025-26	18.48	48.72	107.30	1.54	0.00	0.00	0.00	0.00	2.13	1.10	4.77	4.45
	30	Karapuzha	……..			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**18.48**	**48.72**	**107.30**	**1.54**	**0.00**	**0.00**	**0.00**	**0.00**	**2.13**	**1.10**	**4.77**	**4.45**
Madhya Pradesh	31	Sindh Project Phase II	Shivpuri,Gwalior, Datia & Bhind	2014-15	2023-24	90.56	180.76	361.53	70.89	73.31	26.97	10.43	4.45	1.61	-	187.66	51.91
	32	Indira Sagar Project Canal Phase -I & II (km.0 to km. 142)	Khandwa, Khargone, Barwani	2015-16	2025-26	88.00	196.72	410.58	5.44	10.54	4.57	0.00	0.00	3.19	44.85	68.59	16.70
		Indira Sagar Project Canal Phase -III				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	33	Mahi Project	Dhar	2015-16	2023-24	28.13	64.28	128.34	2.66	15.80	11.39	7.57	2.14	1.05	-	40.60	31.63
	34	Barriyarpur LBC	Chhatarpur	2011-12	2023-24	19.00	25.96	51.85	12.68	8.48	1.53	4.25	0.12	8.10	-	35.16	67.81

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Table 2.6 (a) : State-wise Status (Expenditure Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Complet-ion	As per DPR/ MoU			Expenditure Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	Exp. 2016-17	Exp. 2017-18	Exp. 2018-19	Exp. 2019-20	Exp. 2020-21	Exp. 2021-22	Exp. 2022-23	Total	% Exp. Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Madhya Pradesh	35	Bansagar Unit 2	Rewa, Satna, Sidhi and Shahdol	2014-15	2025-26	97.04	224.30	448.60	49.02	38.00	27.96	14.56	3.47	0.10	-	133.11	29.67
	36	Mahan Project	Sidhi	2014-15	2023-24	14.31	27.26	54.52	5.59	12.60	0.11	3.40	0.00	0.16	-	21.86	40.10
	37	Pench Project	Chhindwara, Seoni	2014-15	2023-24	27.87	51.22	102.44	14.61	13.00	9.07	11.39	1.48	1.83	0.60	51.98	50.74
	38	Sagad Project	Vidisha	2014-15	2021-22	9.48	17.68	35.37	3.36	6.75	11.77	0.78	0.36	9.59	-	32.61	92.20
	39	Singhpur Project	Chhatarpur	2014-15	2021-22	5.84	10.36	21.39	4.73	8.10	0.00	0.00	0.00	0.00	-	12.83	59.98
	40	Sanjay sagar (Bah) Project	Vidisha	2014-15	2022-23	9.67	18.09	36.19	2.61	3.40	11.20	0.00	1.00	1.50	-	19.70	54.43
	41	Mahuar Project	Shivpuri	2014-15	2021-22	9.16	16.79	33.59	16.06	6.14	1.06	1.04	1.04	0.00	-	25.34	75.44
	42	Indira Sagar Project Canal Phase – IV (km. 206 to km. 243)	Khandwa, Khargone, Barwani			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
		Indira Sagar Project Canal Phase –V				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	43	Omkareshwar Project Canal Phase-III (RBC km. 65.50 to km 142)	Khandwa, Khargone,Dhar	2015-16	2025-26	143.37	323.57	648.09	7.56	15.64	14.89	0.00	25.20	0.84	95.24	159.37	24.59
		Omkareshwar Project Canal Phase-II				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
		Omkareshwar Project Canal Phase-IV				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00

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Table 2.6 (a) : State-wise Status (Expenditure Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Complet-ion	As per DPR/ MoU			Expenditure Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	Exp. 2016-17	Exp. 2017-18	Exp. 2018-19	Exp. 2019-20	Exp. 2020-21	Exp. 2021-22	Exp. 2022-23	Total	% Exp. Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Madhya Pradesh	44	Bargi Diversion Project Phase-I (km. 16 to km 63)	Jabalpur	2017-18	2025-26	21.19	41.18	82.52	0.00	0.00	0.00	0.00	0.85	0.00	4.05	4.90	5.94
		Bargi Diversion Project Phase-II (km. 63 to km 104)	Jabalpur, Katani	2017-18	2025-26	31.90	60.87	121.99	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.82
		Bargi Diversion Project Phase-III				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
		Bargi Diversion Project Phase-IV				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**595.52**	**1259.04**	**2536.99**	**195.20**	**211.76**	**120.51**	**53.41**	**40.11**	**27.97**	**145.74**	**794.71**	**31.32**
Maharashtra	45	Waghur	Jalgaon	2016-17	2021-22	17.97	39.13	77.95	0.00	0.67	30.95	19.14	2.71	0.31	1.75	55.53	71.24
	46	Bawanthadi (IS)	Bhandara	2016-17	2022-23	2.50	7.41	15.63	0.00	0.30	2.42	1.04	0.74	0.33	0.10	4.93	31.54
	47	Lower Dudhna	Parbhani, Jalana	2016-17	2025-26	30.04	72.26	145.49	0.00	0.00	17.39	12.37	12.40	12.53	8.71	63.40	43.58
	48	Tillari	Sinsdhudurg	2016-17	2023-24	6.68	16.09	32.43	0.00	0.84	0.91	0.10	2.42	2.72	1.75	8.74	26.95
	49	Lower Wardha	Wardha	2016-17	2025-26	61.20	98.85	198.63	11.86	10.22	24.49	2.83	15.24	11.00	24.76	100.40	50.55
	50	Lower Panzara	Dhule	2016-17	2022-23	6.79	13.05	25.69	0.00	0.98	5.52	0.00	5.12	1.72	0.44	13.78	53.64
	51	Nandur Madhmeshwar Ph-II	Sindhudurg	2009-10	2025-26	23.12	49.33	98.50	0.00	1.58	0.04	0.54	1.94	0.02	3.67	7.79	7.91
	52	Gosikhurd (NP)	Nagpur, Bhandara, Chandrapur	2017-18	2025-26	176.11	354.10	743.73	0.00	0.00	0.00	0.00	4.60	7.58	95.86	108.04	14.53
	53	Upper Pen Ganga	Nanded, Hingoli, Yavatmal	2010-11	2025-26	17.29	34.83	69.62	0.00	6.32	5.76	9.26	0.00	1.81	5.44	28.59	41.07
	54	Bembla	Yavatmal	2017-18	2025-26	29.78	64.49	164.44	0.00	9.38	14.87	7.69	12.33	11.59	8.78	64.64	39.31
	55	Tarali	Satara	2017-18	2025-26	13.09	25.26	53.64	0.00	0.00	0.00	3.72	8.47	11.12	5.52	28.83	53.75
	56	Dhom Balkwadi	Pune and Satara	2010-11	2022-23	4.05	8.18	21.77	0.66	1.51	3.04	1.78	0.28	0.16	0.00	7.42	34.11
	57	Arjuna	Ratnagiri	2017-18	2023-24	5.70	11.19	44.68	0.00	0.00	0.00	0.00	8.99	15.74	4.03	28.76	64.37

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Table 2.6 (a) : State-wise Status (Expenditure Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Complet-ion	As per DPR/ MoU			Expenditure Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	Exp. 2016-17	Exp. 2017-18	Exp. 2018-19	Exp. 2019-20	Exp. 2020-21	Exp. 2021-22	Exp. 2022-23	Total	% Exp. Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	58	Upper Kundalika	Beed	2017-18	2022-23	2.80	5.60	14.63	0.00	0.00	6.76	1.92	0.00	0.06	0.79	9.53	65.14
Maharashtra	59	Aruna	Sindhudurg	2017-18	2025-26	5.31	9.60	20.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	60	Krishna Koyana Lift	Sangli.	2017-18	2025-26	52.82	67.38	132.69	0.00	0.00	2.03	2.31	7.35	1.13	0.60	13.42	10.11
	61	Gadnadi	Ratnagiri	2017-18	2022-23	3.11	6.10	19.13	0.00	0.00	0.00	0.00	0.03	0.85	0.00	0.88	4.60
	62	Dongargaon	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	63	Sangola Branch Canal	Solapur	2017-18	2023-24	6.88	13.83	32.45	0.00	0.58	0.56	0.06	0.00	0.00	0.19	1.39	4.28
	64	Khadakpurna	Buldhana	2017-18	2025-26	15.72	31.46	79.42	0.00	0.44	2.58	5.50	1.77	2.16	1.18	13.63	17.16
	65	Warna	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	66	Morna (Gureghar)	Satara	2017-18	2023-24	4.23	8.16	16.80	0.00	0.00	0.30	0.00	3.05	0.00	0.00	3.35	19.95
	67	Lower Pedhi	Amravati, Akola	2017-18	2025-26	10.19	20.50	43.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	68	Wang project	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	69	Naradave (Mahammadwadi)	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	70	Kudali	Satara	2017-18	2025-26	5.33	10.70	26.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**500.71**	**967.51**	**2078.20**	**12.52**	**32.82**	**117.62**	**68.26**	**87.44**	**80.83**	**163.57**	**563.05**	**27.09**
Manipur	71	Thoubal	Imphal, Senapati, Thoubal,Ukrul	2014-15	2023-24	16.54	45.37	90.24	0.00	14.29	0.00	0.00	11.81	0.00	1.60	27.70	30.70
	72	Dolaithabi Barrage	Imphal, Senapati,	2014-15	2023-24	5.50	15.05	30.41	0.00	5.05	0.00	0.00	4.01	0.00	0.49	9.55	31.39
	Total					**22.04**	**60.42**	**120.65**	**0.00**	**19.34**	**0.00**	**0.00**	**15.82**	**0.00**	**2.09**	**37.25**	**30.87**
Odisha	73	Lower Indra (KBK)	Noapada	2015-16	2023-24	29.90	51.67	103.98	0.00	0.00	39.18	21.75	11.39	5.35	28.38	106.05	102.91
	74	Upper Indravati (KBK)	Kalahandi	2015-16	2020-21	23.83	44.03	140.27	43.43	65.84	13.14	2.65	0.00	0.00	15.40	140.46	100.14
	75	Rukura-Tribal	Kalahandi	2016-17	2020-21	5.75	10.21	31.63	4.82	13.45	5.12	0.49	0.00	1.40	-	25.28	79.92
	76	Subernarekha	Sundargarh	2016-17	2025-26	68.88	126.03	389.58	7.45	11.95	12.98	3.36	2.25	3.71	19.30	61.01	23.92

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Table 2.6 (a) : State-wise Status (Expenditure Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Complet-ion	As per DPR/ MoU			Expenditure Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	Exp. 2016-17	Exp. 2017-18	Exp. 2018-19	Exp. 2019-20	Exp. 2020-21	Exp. 2021-22	Exp. 2022-23	Total	% Exp. Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	77	Anandpur Barr. Ph.-I /Integrated Anandpur Barr.	Keonjhar, Bhadrak	2016-17	2025-26	60.00	101.57	334.37	0.00	2.08	2.09	1.70	2.56	0.26	33.28	41.97	12.55
Odisha	78	RET irrigation	Kalahandi	2016-17	2020-21	8.50	16.55	46.87	0.00	8.13	28.64	2.69	0.00	1.79	766.37	807.62	1751.78
	79	Kanupur	Kaeonjhar	2016-17	2025-26	29.58	53.44	164.85	0.00	1.07	1.28	1.70	0.00	0.00	0.78	4.83	7.56
	80	Telengiri	Koraput	2016-17	2023-24	9.95	16.72	54.51	0.00	0.90	6.94	28.40	7.26	1.46	15.43	60.39	110.79
	Total					**236.40**	**420.40**	**1266.06**	**55.70**	**103.42**	**109.37**	**62.74**	**23.46**	**13.97**	**878.94**	**1247.61**	**106.23**
Punjab	81	Kandi Canal Extension (Ph.II)	…….			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	82	Rehabilitation of 1st Patiala Feeder and Kotla Branch Project	Bhathinda, Mansa, Sangrur and Barnala	2019-20	2025-26	142.66	228.87	475.48	0.00	0.00	0.00	0.00	0.00	50.38	19.32	69.70	14.66
	Total					**142.66**	**228.87**	**475.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**50.38**	**19.32**	**69.70**	**14.66**
Rajasthan	83	Narmada Canal	Jalore & Barmer	2017-18	2025-26	246.00	54.06	97.48	0.00	0.00	0.00	7.17	0.00	0.00	49.05	56.22	62353
	84	Mod. of Gang Canal	Sriganganagar	2015-16	2025-26	117.98	170.76	341.53	10.44	12.99	14.85	15.00	21.90	84.46	96.96	256.68	83.48
	Total					**363.98**	**224.82**	**439.01**	**10.44**	**12.99**	**14.85**	**22.17**	**21.90**	**84.46**	**146.01**	**312.82**	**78.83**
Telangana	85	J. Chokha Rao LIS	Warangal, Nalgonda, Karimnagar, Medak	2016-17	2025-26	248.69	380.35	759.94	0.00	0.00	0.00	5.22	0.00	0.00	0.00	5.22	0.69
	86	Sri Komaram Bheem Project	Komaram, Bheem Ashifabad	2017-18	2025-26	9.92	19.10	39.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	87	Gollavagu Project	Mancherial	2016-17	2025-26	3.85	7.19	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	88	Rallivagu Project	Mancherial	2016-17	2025-26	0.92	1.47	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	89	Mathadivagu Project	Adilabad	2016-17	2025-26	3.44	6.32	12.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	90	Peddavagu Neelwai Project	Mancherial	2016-17	2025-26	5.26	6.67	25.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Table 2.6 (a) : State-wise Status (Expenditure Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Complet-ion	As per DPR/ MoU			Expenditure Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	Exp. 2016-17	Exp. 2017-18	Exp. 2018-19	Exp. 2019-20	Exp. 2020-21	Exp. 2021-22	Exp. 2022-23	Total	% Exp. Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	91	Palemvagu Project	Khammam	2016-17	2025-26	2.01	2.60	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	92	Peddavagu Jagannathpur	Khammam, Bheem Ashifabad	2016-17	2025-26	6.07	12.20	52.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Telangana	93	SRSP St.II	Warangal,Mahbub-abad, Khammam, Suryapet,Jangaon	2016-17	2025-26	73.14	103.24	204.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	94	Rajiv Bheema L.I. Scheme	Mahaboobnagar, Wanaparthy	2016-17	2025-26	82.15	114.81	245.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	95	Indiramma Flood Flow Canal	Warangal	2016-17	2025-26	93.59	48.26	97.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**529.03**	**702.21**	**1467.40**	**0.00**	**0.00**	**0.00**	**5.22**	**0.00**	**0.00**	**0.00**	**5.22**	**0.36**
Uttar Pradesh	96	Arjunsahayak	Mahoba, Hamirpur	2017-18	2025-26	44.38	77.87	188.97	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	97	SaryuNahar (NP)	Baharaich, Basti, Gonda, Shravasti, Balrampur,Sidharth Nagar, Sant Kabir Nagar	2017-18	2025-26	480.00	837.06	1672.70	0.00	0.00	0.00	0.00	0.47	0.00	5.78	6.25	0.89
	98	Bansagar				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	99	Madhya Ganga				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**524.38**	**914.93**	**1861.67**	**0.00**	**0.00**	**0.00**	**0.00**	**0.47**	**0.00**	**5.78**	**6.25**	**0.00**
Grand Total						**4756.66**	**8225.76**	**18466.31**	**1762.82**	**1678.81**	**1307.50**	**317.50**	**264.70**	**300.23**	**1474.32**	**7105.88**	**39.39**

Source: CAD&WM Wing, D/o Water Resources, RD & GR, M/o Jal Shakti

Note: 'CCA': Culturable Command Area; 'CA': Central Assistance

Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Andhra Pradesh	1	Gundalakamma	Praksam	2017-18	2025-26	32.40	46.95	93.90	0.00	0.00	3.64	0.00	0.00	0.00	0.00	3.64	7.75
	2	Tadipudi LIS	West Godavari	2017-18	2025-26	54.35	100.58	201.16	0.00	0.00	16.40	0.00	0.00	0.00	0.00	16.40	16.31
	3	Thotapally	Srikakulam	2017-18	2025-26	29.14	58.51	117.03	0.00	0.00	6.37	0.00	0.00	0.00	0.00	6.37	10.89
	4	Tarakaram Teertasagaram	Vijayanagaram	2017-18	2025-26	4.35	10.15	25.92	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.61	6.01
	5	Musurumilli	East Godavari	2017-18	2025-26	5.92	12.01	24.01	0.00	0.00	4.49	0.00	0.00	0.00	0.00	4.49	37.39
	6	Pushkara LIS	East Godavari	2017-18	2025-26	46.55	99.65	199.30	0.00	0.00	35.85	0.00	0.00	0.00	0.00	35.85	35.98
	7	Yerracalva	West Godavari	2018-19	2025-26	5.92	11.88	26.54	0.00	0.00	1.82	0.00	0.00	0.00	0.00	1.82	0.00
	8	Maddigedda	……..			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**178.62**	**339.72**	**687.86**	**0.00**	**0.00**	**69.18**	**0.00**	**0.00**	**0.00**	**0.00**	**69.18**	**20.36**
Assam	9	Dhansiri	Udalguri	2014-15	2025-26	31.12	66.27	151.99	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	10	Champamati	Kokrajhar, Chirang (BTC), Bongaigaon	2015-16	2022-23	6.59	13.85	27.23	0.00	0.00	3.55	0.00	4.00	0.00	0.00	7.55	54.51
	11	Borolia	Baksa, Kamrup	2018-19	2025-26	8.92	16.52	36.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**46.62**	**96.64**	**215.46**	**0.00**	**0.00**	**3.55**	**0.00**	**4.00**	**0.00**	**0.00**	**7.55**	**7.81**
Bihar	12	Durgawati	Kuaimue, Rohtas	2015-16	2023-24	30.51	50.66	142.40	12.64	8.76	14.42	0.00	0.00	0.00	0.00	35.82	70.71
	13	Punpun	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**30.51**	**50.66**	**142.40**	**12.64**	**8.76**	**14.42**	**0.00**	**0.00**	**0.00**	**0.00**	**35.82**	**70.71**
Chhatti-sgarh	14	Maniyari Tank	Mungeli	2017-18	2025-26	11.52	22.63	45.37	0.00	0.00	4.98	0.00	0.00	0.00	0.00	4.98	22.01
	15	Kelo	Rajgarh, Janjgir Champa	2017-18	2025-26	22.81	40.51	81.21	0.00	11.78	0.00	0.00	0.00	0.00	0.00	11.78	29.08
	16	Kharung	Bilaspur	2017-18	2025-26	8.30	16.43	33.18	0.00	0.00	4.95	0.00	0.00	0.00	0.00	4.95	30.13
	Total					**42.63**	**79.57**	**159.76**	**0.00**	**11.78**	**9.93**	**0.00**	**0.00**	**0.00**	**0.00**	**21.71**	**27.28**

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Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Goa	17	Tillari	Talukas, Bicholim, Bardez	2007-08	2023-24	8.67	18.77	137.92	0.00	0.00	0.00	0.00	3.84	0.00	0.00	3.84	20.46
	Total					**8.67**	**18.77**	**137.92**	**0.00**	**0.00**	**0.00**	**0.00**	**3.84**	**0.00**	**0.00**	**3.84**	**20.46**
Gujarat	18	Sardar Sarovar Project	Vadodara, Bharuch, Narmada, Panchmahal, Chhotaudepur, Gandinagar, Ahmedabad, Mahesana, Patan, Banaskantha, Botad, Surendranagar, Morbi, Rajkot, Bhavnagar, Kutch (16)	2004-05	2023-24	**1363.86**	**2510.88**	**5021.76**	681.64	690.48	347.04	0.00	0.00	0.00	0.00	1719.16	68.47
	Total					**1363.86**	**2510.88**	**5021.76**	**681.64**	**690.48**	**347.04**	**0.00**	**0.00**	**0.00**	**0.00**	**1719.16**	**68.47**
Jammu & Kashmir	19	Tral Lift	Pulwama	2017-18	2021-22	1.41	3.01	6.16	0.00	0.00	0.64	0.00	1.35	0.00	0.00	1.99	66.10
	20	Prakachik Khows Canal (Kargil)	Kargil	2017-18	2021-22	0.46	0.71	1.87	0.00	0.00	0.21	0.00		0.00	0.00	0.21	29.61
	21	Restoration & Mod. of Main Ravi Canal	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	22	Rajpora Lift	Pulwama.	2017-18	2021-22	0.59	1.52	3.61	0.00	0.00	0.85	0.00	0.52	0.00	0.00	**1.37**	**90.06**
		Total				**2.46**	**5.24**	**11.64**	**0.00**	**0.00**	**1.70**	**0.00**	**1.87**	**0.00**	**0.00**	**3.57**	**68.12**
Jharkhand	23	Subernarekha	East Singhbum, Saraikela,	2018-19	2025-26	66.65	133.32	747.53	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**	0.00

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Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			Kharsawan														
	Total					**66.65**	**133.32**	**747.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Karnataka	24	Upper Tunga Irrigation Project	Haveri, Simoga, Davengere	2015-16	2022-23	24.91	44.11	87.50	21.04	0.00	0.00	0.00	7.56	0.00	2.97	31.57	71.58
	25	Sri Rameswar Irrigation	Belgaum	2016-17	2021-22	11.42	22.71	56.31	10.38	2.50	3.87	0.00	1.09	0.00	0.00	17.84	78.56
	26	Bhima LIS	Kalaburagi	2016-17	2021-22	12.90	23.63	52.83	0.00	12.74	5.09	1.94	0.00	0.00	0.00	19.77	83.66
	27	Karanja	Bidar	2017-18	2022-23	5.59	11.23	42.60	0.00	0.00	4.53	1.85	2.69	0.00	0.00	9.07	80.77
	28	NLBC	Bijapur, Gulbarga	2018-19	2025-26	28.67	62.17	750.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**83.48**	**163.85**	**989.24**	**31.42**	**15.24**	**13.49**	**3.79**	**11.34**	**0.00**	**2.97**	**78.25**	**47.76**
Kerala	29	Muvattupuzha	Idukki, Ernakulam, Kottayam	2015-16	2025-26	18.48	48.72	107.30	0.00	0.00	0.00	0.00	2.69	0.00	0.00	2.69	5.52
	30	Karapuzha	……..			0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	Total					**18.48**	**48.72**	**107.30**	**0.00**	**0.00**	**0.00**	**0.00**	**2.69**	**0.00**	**0.00**	**2.69**	**5.52**
Madhya Pradesh	31	Sindh Project Phase II	Shivpuri, Gwalior, Datia & Bhind	2014-15	2023-24	90.56	180.76	361.53	17.19	43.31	14.29	0.00	18.24	0.00	0.00	93.03	51.47
	32	Indira Sagar Project Canal Phase - I & II (km 0 to km 142)	Khandwa, Khargone, Barwani	2015-16	2025-26	88.00	196.72	410.58	6.64	0.00	0.00	0.00		3.75	3.13	13.52	12.12
		Indira Sagar Project Canal Phase -III				0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	33	Mahi Project	Dhar	2015-16	2023-24	28.13	64.28	128.34	2.34	8.72	6.05	0.00	3.98	0.00	0.00	21.09	32.80
	34	Barriyarpur	Chhatarpur	2011-12	2023-24	19.00	25.96	51.85	7.14	3.97	4.99	0.00		0.00	0.00	16.10	62.00

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Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		LBC															
	35	Bansagar Unit 2	Rewa, Satna, Sidhi & Shahdol	2014-15	2025-26	97.04	224.30	448.60	22.35	15.97	18.24	0.00	11.87	1.64	0.00	70.07	31.24
	36	Mahan Project	Sidhi	2014-15	2023-24	14.31	27.26	54.52	2.14	6.38	3.09	0.00		0.00	0.00	11.61	42.59
	37	Pench Project	Chhindwara, Seoni	2014-15	2023-24	27.87	51.22	102.44	5.35	8.60	5.90	0.00	4.25	0.30	0.44	24.85	48.51
	38	Sagad Project	Vidisha	2014-15	2021-22	9.48	17.68	35.37	0.00	4.34	2.15	0.00	3.11	0.00	0.00	9.60	54.28
	39	Singhpur Project	Chhatarpur	2014-15	2021-22	5.84	10.36	21.39	2.06	2.20	0.66	0.00		0.00	0.00	4.92	47.53
	40	Sanjay sagar (Bah) Project	Vidisha	2014-15	2022-23	9.67	18.09	36.19	0.00	4.02	0.00	0.00	0.56	0.00	0.00	4.58	25.33
	41	Mahuar Project	Shivpuri	2014-15	2021-22	9.16	16.79	33.59	2.92	5.28	0.60	0.00	0.87	0.00	0.00	9.67	57.62
	42	Indira Sagar Project Canal Phase – IV (km. 206 to km. 243)	Khandwa, Khargone, Barwani			0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
		Indira Sagar Project Canal Phase –V				0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Madhya Pradesh	43	Omkareshwar Project Canal Phase-III (RBC km. 65.50 to km 142)	Khandwa, Khargone, Dhar	2015-16	2025-26	143.37	323.57	648.09	9.61	0.00	0.00	0.00	0.44	10.07	2.00	22.12	7.61
		Omkareshwar Project Canal Phase-II				0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
		Omkareshwar Project				0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

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Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		Canal Phase-IV															
	44	Bargi Diversion Project Phase -I (km. 16 to km 63)	Jabalpur	2017-18	2025-26	21.19	41.18	82.52	0.00	0.00	5.98	0.00		0.00	0.00	5.98	14.52
		Bargi Diversion Project Phase - II (km. 63 to km 104)	Jabalpur, Katani	2017-18	2025-26	31.90	60.87	121.99	0.00	0.00	8.96	0.00		0.00	0.00	8.96	14.72
		Bargi Diversion Project Phase - III				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bargi Diversion Project Phase - IV				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**595.52**	**1259.04**	**2536.99**	**77.75**	**102.79**	**70.91**	**0.00**	**43.32**	**15.76**	**5.57**	**316.09**	**26.12**
Maha-rashtra	45	Waghur	Jalgaon	2016-17	2021-22	17.97	39.13	77.95	0.00	1.57	0.00	0.00	9.07	6.38	0.00	17.02	**43.49**
	46	Bawanthadi (IS)	Bhandara	2016-17	2022-23	2.50	7.41	15.63	0.00	0.52	0.00	0.00	0.00	0.00	1.98	2.50	**33.80**
	47	Lower Dudhna	Parbhani, Jalana	2016-17	2025-26	30.04	72.26	145.49	0.00	8.10	0.00	0.00	6.20	5.54	8.72	28.56	**39.52**
	48	Tillari	Sinsdhudurg	2016-17	2023-24	6.68	16.09	32.43	0.00	1.81	0.00	0.00	0.00	0.00	0.00	1.81	**26.94**
	49	Lower Wardha	Wardha	2016-17	2025-26	61.20	98.85	198.63	15.17	0.00	5.46	0.00	9.55	5.84	0.00	36.02	**48.82**
	50	Lower Panzara	Dhule	2016-17	2022-23	6.79	13.05	25.69	0.00	2.15	3.97	0.00	2.52	0.00	0.00	8.64	**66.21**
	51	Nandur	Sindhudurg	2009-10	2025-26	23.12	49.33	98.50	0.00	0.00	0.00	0.00	0.00	0.63	5.57	6.20	**12.56**

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Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		Madhmeshwar Ph-II															
	52	Gosikhurd (NP)	Nagpur, Bhandara, Chandrapur	2017-18	2025-26	176.11	354.10	743.73	0.00	0.00	9.38	0.00	0.00	2.54	39.45	51.37	**23.94**
	53	Upper Pen Ganga	Nanded, Hingoli, Yavatmal	2010-11	2025-26	17.29	34.83	69.62	0.00	3.00	0.00	0.00	2.10	1.74	0.00	6.84	**24.44**
	54	Bembla	Yavatmal	2017-18	2025-26	29.78	64.49	164.44	0.00	5.99	3.51	0.00	6.13	2.62	0.00	18.25	47.63
	55	Tarali	Satara	2017-18	2025-26	13.09	25.26	53.64	0.00	1.31	0.00	0.00	2.94	1.90	3.45	9.60	38.01
	56	Dhom Balkwadi	Pune and Satara	2010-11	2022-23	4.05	8.18	21.77	0.00	0.00	1.82	0.00		0.00	0.00	1.82	22.25
	57	Arjuna	Ratnagiri	2017-18	2023-24	5.70	11.19	44.68	0.00	0.81	0.00	0.00	0.40	0.39	1.58	3.18	37.91
	58	Upper Kundalika	Beed	2017-18	2022-23	2.80	5.60	14.63	0.00	0.52	0.00	0.00	0.57	1.05	0.00	2.14	38.15
	59	Aruna	Sindhudurg	2017-18	2025-26	5.31	9.60	20.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	60	Krishna Koyana Lift	Sangli.	2017-18	2025-26	52.82	67.38	132.69	0.00	3.82	0.00	0.00	4.36	0.00	0.00	8.18	21.55
	61	Gadnadi	Ratnagiri	2017-18	2022-23	3.11	6.10	19.13	0.00	0.03	0.00	0.00	0.00	0.27	0.00	0.30	6.91
	62	Dongargaon	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	63	Sangola Branch Canal	Solapur	2017-18	2023-24	6.88	13.83	32.45	0.00	0.55	1.37	0.00	0.00	0.00	0.00	1.92	13.88
	64	Khadakpurna	Buldhana	2017-18	2025-26	15.72	31.46	79.42	0.00	2.65	0.00	0.00	2.39	0.00	0.00	5.04	16.02
	65	Warna	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	66	Morna (Gureghar)	Satara	2017-18	2023-24	4.23	8.16	16.80	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.28	3.43
	67	Lower Pedhi	Amravati, Akola	2017-18	2025-26	10.19	20.50	43.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	68	Wang Project	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	69	Naradave (Mahammad-	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		wadi)															
	70	Kudali	Satara	2017-18	2025-26	5.33	10.70	26.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**500.71**	**967.51**	**2078.20**	**15.17**	**32.83**	**25.79**	**0.00**	**46.23**	**28.88**	**60.75**	**209.65**	**28.89**
Manipur	71	Thoubal	Imphal, Senapati, Thoubal,Ukrul	2014-15	2023-24	16.54	45.37	90.24	0.00	0.00	0.00	0.00	0.00	1.60	0.00	1.60	16.49
	72	Dolaithabi Barrage	Imphal, Senapati,	2014-15	2023-24	5.50	15.05	30.41	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.49	15.56
	Total					**22.04**	**60.42**	**120.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.09**	**0.00**	**2.09**	**16.26**
Odisha	73	Lower Indra (KBK)	Noapada	2015-16	2023-24	29.90	51.67	103.98	24.37	0.00	0.00	0.00	12.99	0.00	0.00	37.36	72.31
	74	Upper Indravati (KBK)	Kalahandi	2015-16	2020-21	23.83	44.03	140.27	8.50	30.83	0.00	0.00	0.00	0.00	0.00	39.32	89.31
	75	Rukura-Tribal	Kalahandi	2016-17	2020-21	5.75	10.21	31.63	2.41	0.80	0.00	0.00	3.11	0.00	0.00	6.32	61.93
	76	Subernarekha	Sundargarh	2016-17	2025-26	68.88	126.03	389.58	0.00	16.28	0.00	0.00	0.00	0.00	0.00	16.28	12.92
	77	Anandpur Barr. Ph.-I /Integrated Anandpur Barr.	Keonjhar, Bhadrak	2016-17	2025-26	60.00	101.57	334.37	0.00	1.82	0.00	0.00	1.17	0.00	0.00	2.99	2.94
	78	RET irrigation	Kalahandi	2016-17	2020-21	8.50	16.55	46.87	0.00	4.11	0.00	0.00	9.11	0.00	0.00	13.22	79.84
	79	Kanupur	Kaeonjhar	2016-17	2025-26	29.58	53.44	164.85	0.00	1.89	3.65	0.00		0.00	0.00	5.54	10.37
	80	Telengiri	Koraput	2016-17	2023-24	9.95	16.72	54.51	0.00	2.84	0.00	0.00	8.09	0.00	0.00	10.93	65.36
	Total					**236.40**	**420.40**	**1266.06**	**35.28**	**58.57**	**3.65**	**0.00**	**34.47**	**0.00**	**0.00**	**131.96**	**31.39**
Punjab	81	Kandi Canal Extension (Ph.II)	…….			0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	82	Rehabilitation	Bhathinda,	2019-20	2025-26	142.66	228.87	475.48	0.00	0.00	0.00	0.00	18.08	0.00	9.00	27.08	0.00

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Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		of 1st Patiala Feeder and Kotla Branch Project	Mansa, Sangrur and Barnala														
		Total				**142.66**	**228.87**	**475.48**	**0.00**	**0.00**	**0.00**	**0.00**	**18.08**	**0.00**	**9.00**	**27.08**	**0.00**
Rajasthan	83	Narmada Canal	Jalore & Barmer	2017-18	2025-26	246.00	54.06	97.48	0.00	0.00	0.00	0.00	7.02	13.90	8.42	**29.34**	**54.27**
	84	Mod. of Gang Canal	Sriganganagar	2015-16	2025-26	117.98	170.76	341.53	0.00	2.48	7.43	10.22	24.24	47.36	12.36	**104.09**	**73.91**
	Total					**363.98**	**224.82**	**439.01**	**0.00**	**2.48**	**7.43**	**10.22**	**31.26**	**61.26**	**20.78**	**133.43**	**69.91**
Telangana	85	J. Chokha Rao LIS	Warangal, Nalgonda, Karimnagar, Medak	2016-17	2025-26	248.69	380.35	759.94	0.00	10.22	0.00	0.00		0.00	0.00	10.22	2.69
	86	Sri Komaram Bheem Project	Komaram, Bheem Ashifabad	2017-18	2025-26	9.92	19.10	39.66	0.00	0.00	5.89	0.00		0.00	0.00	5.89	30.84
	87	Gollavagu Project	Mancherial	2016-17	2025-26	3.85	7.19	20.40	0.00	0.00	1.03	0.00		0.00	0.00	1.03	14.33
	88	Rallivagu Project	Mancherial	2016-17	2025-26	0.92	1.47	5.57	0.00	0.00	0.28	0.00		0.00	0.00	0.28	19.05
	89	Mathadivagu Project	Adilabad	2016-17	2025-26	3.44	6.32	12.38	0.00	0.00	1.80	0.00		0.00	0.00	1.80	28.48
	90	Peddavagu Neelwai Project	Mancherial	2016-17	2025-26	5.26	6.67	25.12	0.00	0.00	1.99	0.00	0.00	0.00	0.00	1.99	29.84
	91	Palemvagu Project	Khammam	2016-17	2025-26	2.01	2.60	5.20	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.51	19.62
	92	Peddavagu Jagannathpur	Khammam, Bheem Ashifabad	2016-17	2025-26	6.07	12.20	52.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	93	SRSP St.II	Warangal, Mahbubabad, Khammam,	2016-17	2025-26	73.14	103.24	204.08	0.00	0.00	11.56	0.00	0.00	0.00	0.00	11.56	11.20

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Table 2.6 (b): State- wise Status (Financial Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Financial Progress								
						CCA (Th. Ha)	Target CA (Rs. Cr)	Total Cost (Rs. Cr)	CA Released 2016-17	CA Released 2017-18	CA Released 2018-19	CA Released 2019-20	CA Released 2020-21	CA Released 2021-22	CA Released 2022-23	Total	% Financial Progress
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			Suryapet, Jangaon														
	94	Rajiv Bheema L.I. Scheme	Mahaboobnagar, Wanaparthy	2016-17	2025-26	82.15	114.81	245.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	95	Indiramma Flood Flow Canal	Warangal	2016-17	2025-26	93.59	48.26	97.23	0.00	0.00	3.06	0.00	0.00	0.00	0.00	3.06	6.34
	Total					**529.03**	**702.21**	**1467.40**	**0.00**	**10.22**	**26.12**	**0.00**	**0.00**	**0.00**	**0.00**	**36.34**	**5.18**
Uttar Pradesh	96	Arjunsahayak	Mahoba, Hamirpur	2017-18	2025-26	44.38	77.87	188.97	0.00	0.00	0.00	0.00	6.00	0.00	0.00	6.00	7.71
	97	Saryu Nahar (NP)	Baharaich, Basti, Gonda, Shravasti, Balrampur, Sidharth Nagar, Sant Kabir Nagar	2017-18	2025-26	480.00	837.06	1672.70	0.00	0.00	0.00	150.00	0.00	0.00	0.00	150.00	17.92
	98	Bansagar				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	99	Madhya Ganga				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total						**524.38**	**914.93**	**1861.67**	**0.00**	**0.00**	**0.00**	**150.00**	**6.00**	**0.00**	**0.00**	**156.00**	**17.05**
Grand Total						**4756.66**	**8225.56**	**18466.31**	**853.90**	**933.13**	**593.21**	**164.01**	**203.10**	**107.98**	**99.07**	**2954.41**	**38.04**

Source: CAD&WM Wing, D/o Water Resources, RD&GR, M/o Jal Shakti

Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Andhra Pradesh	1	Gundalakamma	Praksam	2017-18	2025-26	32.40	46.95	93.90	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.93	2.87
	2	Tadipudi LIS	West Godavari	2017-18	2025-26	54.35	100.58	201.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	Thotapally	Srikakulam	2017-18	2025-26	29.14	58.51	117.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	Tarakaram Teertasagaram	Vijayanaga-ram	2017-18	2025-26	4.35	10.15	25.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	Musurumilli	East Godavari	2017-18	2025-26	5.92	12.01	24.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	Pushkara LIS	East Godavari	2017-18	2025-26	46.55	99.65	199.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	7	Yerracalva	West Godavari	2018-19	2025-26	5.92	11.88	26.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8	Maddigedda	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**178.62**	**339.72**	**687.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.93**	**0.00**	**0.93**	**0.52**
Assam	9	Dhansiri	Udalguri	2014-15	2025-26	31.12	66.27	151.99	0.00	0.00	9.90	6.91	0.00	2.00		18.81	60.45
	10	Champamati	Kokrajhar, Chirang (BTC), Bongaiga-on	2015-16	2022-23	6.59	13.85	27.23	0.00	0.00	2.02	1.06	3.51	0.00	-	6.59	100.04
	11	Borolia	Baksa, Kamrup	2018-19	2025-26	8.92	16.52	36.24	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**46.62**	**96.64**	**215.46**	**0.00**	**0.00**	**11.92**	**7.97**	**3.51**	**2.00**	**0.00**	**25.40**	**54.48**
Bihar	12	Durgawati	Kuaimue, Rohtas	2015-16	2023-24	30.51	50.66	142.40	2.25	5.49	4.00	2.47	3.04	1.02	0.84	19.11	62.65
	13	Punpun	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**30.51**	**50.66**	**142.40**	**2.25**	**5.49**	**4.00**	**2.47**	**3.04**	**1.02**	**0.84**	**19.11**	**62.65**

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Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Chhattisgarh	14	Maniyari Tank	Mungeli	2017-18	2025-26	11.52	22.63	45.37	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	0.50	3.80	4.29	57.22
	15	Kelo	Rajgarh, Janjgir Champa	2017-18	2025-26	22.81	40.51	81.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.16
	16	Kharung	Bilaspur	2017-18	2025-26	8.30	16.43	33.18	0.00	0.00	0.00	0.00	0.00	2.62	0.23	2.85	47.13
	Total					**42.63**	**79.57**	**159.76**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.12**	**4.03**	**7.14**	**27.40**
Goa	17	Tillari	Talukas, Bicholim, Bardez	2007-08	2023-24	8.67	18.77	137.92	**0.01**	**0.01**	**0.75**	**0.08**	**0.20**	0.00	5.65	6.70	77.27
	Total					**8.67**	**18.77**	**137.92**	**0.01**	**0.01**	**0.75**	**0.08**	**0.20**	**0.00**	**5.65**	**6.70**	**77.27**
Gujarat	18	Sardar Sarovar Project	Vadodara, Bharuch, Narmada, Panch-mahal, Chhotaud-epur, Gandi-nagar, Ahmeda-bad, Mahesana, Patan,- Banaskan-tha,Botad, Surendra-nagar, Morbi, Rajkot, Bhavnagar Kutch	2004-05	2023-24	1363.86	2510.88	5021.76	385.28	290.00	260.17	1.59	1.57	59.57	23.84	1022.02	74.94
	Total					**1363.86**	**2510.88**	**5021.76**	**385.28**	**290.00**	**260.17**	**1.59**	**1.57**	**59.57**	**23.84**	**1022.02**	**74.94**
Jammu	19	Tral Lift	Pulwama	2017-18	2021-22	1.41	3.01	6.16	0.00	0.00	0.44	0.27	0.19	0.03	-	0.93	65.82

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Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
& Kashmir	20	Prakachik Khows Canal (Kargil)	Kargil	2017-18	2021-22	0.46	0.71	1.87	0.00	0.00	0.23	0.00	0.00	0.00	-	0.23	49.78
	21	Restoration & Mod. of Main Ravi Canal	……			0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	-	0.00	0.00
	22	Rajpora Lift	Pulwama	2017-18	2021-22	0.59	1.52	3.61	0.00	0.00	0.30	0.26	0.00	0.00	-	0.56	96.24
		Total				**2.46**	**5.24**	**11.64**	**0.00**	**0.00**	**0.97**	**0.53**	**0.19**	**0.03**	**0.00**	**1.72**	**70.04**
Jharkhand	23	Subernarekha	East Singhbum, Saraikela, Kharsawan	2018-19	2025-26	66.65	133.32	747.53	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**66.65**	**133.32**	**747.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.0**
Karnataka	24	Upper Tunga Irrigation Project	Haveri, Simoga, Davengere	2015-16	2022-23	24.91	44.11	87.50	2.83	4.29	2.15	1.69	0.05	3.44	0.75	15.20	61.02
	25	Sri Rameswar Irrigation	Belgaum	2016-17	2021-22	11.42	22.71	56.31	4.85	1.29	2.72	0.00	0.00	0.00	2.05	10.91	95.59
	26	Bhima LIS	Kalaburagi	2016-17	2021-22	12.90	23.63	52.83	3.40	5.37	2.75	0.05	0.05	0.00	-	11.62	90.09
	27	Karanja	Bidar	2017-18	2022-23	5.59	11.23	42.60	0.00	0.00	1.30	2.05	0.00	0.00	-	3.35	59.95
	28	NLBC	Bijapur, Gulbarga	2018-19	2025-26	28.67	62.17	750.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**83.48**	**163.85**	**989.24**	**11.08**	**10.95**	**8.92**	**3.79**	**0.10**	**3.44**	**2.80**	**41.08**	**49.21**
Kerala	29	Muvattupuzha	Idukki, Ernakulam, Kottayam	2015-16	2025-26	18.48	48.72	107.30	0.00	0.00	0.00	0.30	0.30	0.00	0.90	1.50	8.10
	30	Karapuzha	…….			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
	Total					**18.48**	**48.72**	**107.30**	**0.00**	**0.00**	**0.00**	**0.30**	**0.30**	**0.00**	**0.90**	**1.50**	**8.10**

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Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Madhya Pradesh	31	Sindh Project Phase II	Shivpuri, Gwalior, Datia & Bhind	2014-15	2023-24	90.56	180.76	361.53	28.30	29.27	9.18	1.30	1.53	0.00	-	69.58	76.83
	32	Indira Sagar Project Canal Phase - I & II (km. 0 to km. 142)	Khandwa, Khargone, Barwani	2015-16	2025-26	88.00	196.72	410.58	0.31	2.48	1.59	0.00	2.31	7.19	5.37	19.25	21.87
		Indira Sagar Project Canal Phase -III				0.00	0.00	0.00	0.00		0.00		0.00	0.00		0.00	0.00
	33	Mahi Project	Dhar	2015-16	2023-24	28.13	64.28	128.34	1.06	6.31	4.70	2.83	0.42	0.00		15.32	54.47
	34	Barriyarpur LBC	Chhatar-pur	2011-12	2023-24	19.00	25.96	51.85	4.99	3.39	0.60	1.60	0.06	0.00		10.64	55.99
	35	Bansagar Unit 2	Rewa, Satna, Sidhi and Shahdol	2014-15	2025-26	97.04	224.30	448.60	19.36	15.17	10.96	5.63	1.32	4.81		57.25	59.00
	36	Mahan Project	Sidhi	2014-15	2023-24	14.31	27.26	54.52	2.23	5.03	0.00	1.36	0.00	0.00		8.62	60.24
	37	Pench Project	Chhindwara Seoni	2014-15	2023-24	27.87	51.22	102.44	5.83	5.19	3.19	4.45	0.31	0.28	1.94	21.19	76.04
	38	Sagad Project	Vidisha	2014-15	2021-22	9.48	17.68	35.37	1.16	2.70	4.60	0.23	0.00	0.00		8.69	91.72
	39	Singhpur Project	Chhatarpur	2014-15	2021-22	5.84	10.36	21.39	1.89	3.23	0.00	0.00	0.00	0.32		5.44	93.15
	40	Sanjay sagar (Bah) Project	Vidisha	2014-15	2022-23	9.67	18.09	36.19	1.04	1.36	4.47	0.00	0.39	0.00		7.26	75.05
	41	Mahuar Project	Shivpuri	2014-15	2021-22	9.16	16.79	33.59	5.96	2.45	0.00	0.00	0.00	0.00		8.41	91.86

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Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	42	Indira Sagar Project Canal Phase –IV (km 206 to km 243)	Khandwa, Khargon, Barwani			0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00		6.69	0.00
		Indira Sagar Project Canal Phase –V				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	43	Omkareshwar Project Canal Phase-III (RBC km 65.50 to km 142)	Khandwa, Khargone, Dhar	2015-16	2025-26	143.37	323.57	648.09	2.80	8.48	7.64	0.00	11.07	0.00	8.09	38.08	26.56
		Omkareshwar Project Canal Phase-II				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
		Omkareshwar Project Canal Phase-IV				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	44	Bargi Diversion Project Phase–I (km 16 to km 63)	Jabalpur	2017-18	2025-26	21.19	41.18	82.52	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.24
		Bargi Diversion Project Phase – II (km 63 to km 104)	Jabalpur, Katani	2017-18	2025-26	31.90	60.87	121.99	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.15	0.47
		Bargi Diversion Project Phase - III				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
		Bargi Diversion Project Phase - IV				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	Total					**595.52**	**1259.04**	**2536.99**	**74.94**	**85.06**	**46.94**	**17.40**	**24.10**	**12.60**	**15.60**	**276.63**	**46.45**
Maharashtra	45	Waghur	Jalgaon	2016-17	2021-22	17.97	39.13	77.95	0.00	0.42	5.83	3.60	1.12	2.00	0.37	13.34	74.25

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Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	46	Bawanthadi (IS)	Bhandara	2016-17	2022-23	2.50	7.41	15.63	0.00	0.80	0.90	0.11	0.00	0.00	0.00	1.81	72.40
	47	Lower Dudhna	Parbhani, Jalana	2016-17	2025-26	30.04	72.26	145.49	0.00	0.00	6.13	2.14	6.00	6.23	3.07	23.57	78.46
	48	Tillari	Sinsdhu-durg	2016-17	2023-24	6.68	16.09	32.43	0.00	0.00	0.00	0.12	0.50	0.27	0.12	1.01	15.19
	49	Lower Wardha	Wardha	2016-17	2025-26	61.20	98.85	198.63	7.63	9.16	6.60	2.15	3.45	2.42	6.80	38.21	62.43
	50	Lower Panzara	Dhule	2016-17	2022-23	6.79	13.05	25.69	0.00	0.00	2.91	2.30	1.05	0.10	0.00	6.36	93.74
	51	NandurMadhmeshwar Ph-II	Sindhu-durg	2009-10	2025-26	23.12	49.33	98.50	0.00	0.79	0.40	0.00	0.77	0.00	2.10	4.06	17.56
	52	Gosikhurd (NP)	Nagpur, Bhandara, Chandra-pur	2017-18	2025-26	176.11	354.10	743.73	0.00	0.00	0.00	0.00	0.00	1.62	26.36	27.98	15.89
	53	Upper Pen Ganga	Nanded, Hingoli, Yavatmal	2010-11	2025-26	17.29	34.83	69.62	0.00	1.09	5.83	0.63	0.00	0.00	1.94	9.50	54.92
	54	Bembla	Yavatmal	2017-18	2025-26	29.78	64.49	164.44	0.00	2.31	3.82	1.39	3.62	0.87	2.72	14.73	49.48
	55	Tarali	Satara	2017-18	2025-26	13.09	25.26	53.64	0.00	0.00	0.00	2.55	3.03	1.15	0.54	7.27	55.52
	56	Dhom Balkwadi	Pune and Satara	2010-11	2022-23	4.05	8.18	21.77	0.00	1.20	1.46	1.03	0.12	0.12	0.00	3.94	97.11
	57	Arjuna	Ratnagiri	2017-18	2023-24	5.70	11.19	44.68	0.00	0.00	0.00	0.00	1.03	1.23	1.58	3.84	67.32
	58	Upper Kundalika	Beed	2017-18	2022-23	2.80	5.60	14.63	0.00	0.00	2.30	0.50	0.00	0.00	0.00	2.80	100.00
	59	Aruna	Sindhu-durg	2017-18	2025-26	5.31	9.60	20.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	60	Krishna Koyana Lift	Sangli.	2017-18	2025-26	52.82	67.38	132.69	0.00	0.00	1.63	1.39	2.78	0.00	1.21	7.00	13.24
	61	Gadnadi	Ratnagiri	2017-18	2022-23	3.11	6.10	19.13	0.00	0.00	0.00	0.00	0.04	0.28	0.70	1.02	32.82
	62	Dongargaon	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Contd…

Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	63	Sangola Branch Canal	Solapur	2017-18	2023-24	6.88	13.83	32.45	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.15	2.18
	64	Khadakpurna	Buldhana	2017-18	2025-26	15.72	31.46	79.42	0.00	1.99	1.23	2.63	0.84	0.00	0.00	6.69	42.56
	65	Warna	……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	66	Morna (Gureghar)	Satara	2017-18	2023-24	4.23	8.16	16.80	0.00	0.00	1.52	0.00	0.00	0.00	0.00	1.52	35.94
	67	Lower Pedhi	Amravati, Akola	2017-18	2025-26	10.19	20.50	43.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	68	Wang project	…… ……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	69	Naradave (Mahamma-dwadi)	…… ……			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	70	Kudali	Satara	2017-18	2025-26	5.33	10.70	26.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**500.71**	**967.51**	**2078.20**	**7.63**	**17.76**	**40.70**	**20.54**	**24.35**	**16.29**	**47.52**	**174.79**	**34.91**
Manipur	71	Thoubal	Imphal, Senapati, Thoubal, Ukrul	2014-15	2023-24	16.54	45.37	90.24	0.00	0.00	3.72	0.00	2.59	0.00	4.92	11.23	67.91
	72	Dolaithabi Barrage	Imphal, Senapati,	2014-15	2023-24	5.50	15.05	30.41	0.00	0.00	1.31	0.00	1.05	0.00	1.56	3.92	71.31
	Total					**22.04**	**60.42**	**120.65**	**0.00**	**0.00**	**5.03**	**0.00**	**3.64**	**0.00**	**6.48**	**15.15**	**68.76**
Odisha	73	Lower Indra(KBK)	Noapada	2015-16	2023-24	29.90	51.67	103.98	0.00	0.00	10.02	4.00	3.38	0.50	12.00	29.90	100.00
	74	Upper Indravati(KBK)	Kalahandi	2015-16	2020-21	23.83	44.03	140.27	7.99	14.45	0.00	0.00	1.39	0.00	0.00	23.83	99.98
	75	Rukura-Tribal	Kalahandi	2016-17	2020-21	5.75	10.21	31.63	1.38	2.88	1.32	0.07	0.00	0.00	0.00	5.65	98.21
	76	Subernarekha	Sundargarh	2016-17	2025-26	68.88	126.03	389.58	1.10	1.66	0.50	0.00	1.37	0.84	4.02	9.49	18.87

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Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	77	Anandpur Barr. Ph.-I /Integrated Anandpur Barr.	Keonjhar, Bhadrak	2016-17	2025-26	60.00	101.57	334.37	0.00	1.45	0.30	0.40	0.00	0.85	0.00	3.00	5.00
	78	RET irrigation	Kalahandi	2016-17	2020-21	8.50	16.55	46.87	0.00	3.96	6.08	0.00	0.00	0.00	-	10.04	118.15
	79	Kanupur	Kaeonjhar	2016-17	2025-26	29.58	53.44	164.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.92
	80	Telengiri	Koraput	2016-17	2023-24	9.95	16.72	54.51	0.00	0.00	0.86	5.14	1.89	2.06		9.95	99.98
	Total					**236.40**	**420.40**	**1266.06**	**10.47**	**24.40**	**19.08**	**9.61**	**8.03**	**4.25**	**16.02**	**91.86**	**41.08**
Punjab	81	Kandi Canal Extension (Ph.II)	……..			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	82	Rehabilitation of 1st Patiala Feeder and Kotla Branch Project	Bhathinda, Mansa, Sangrur and Barnala	2019-20	2025-26	142.66	228.87	475.48	0.00	0.00	0.00	0.00	0.00	20.53	6.23	26.76	18.76
	Total					**142.66**	**228.87**	**475.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**20.53**	**6.23**	**26.76**	**18.76**
Rajasthan	83	Narmada Canal	Jalore & Barmer	2017-18	2025-26	246.00	54.06	97.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
	84	Mod. of Gang Canal	Sriganga-nagar	2015-16	2025-26	117.98	170.76	341.53	6.86	7.22	7.08	0.46	9.11	22.77	36.66	90.16	87.31
	Total					**363.98**	**224.82**	**439.01**	**6.86**	**7.22**	**7.08**	**0.46**	**9.11**	**22.77**	**36.66**	**90.16**	**95.89**
Telangana	85	J. Chokha Rao LIS	Warangal, Nalgonda, Karim-nagar, Medak	2016-17	2025-26	248.69	380.35	759.94	0.00	0.00	0.00	10.68	0.00	0.00	0.00	10.68	4.29
	86	SriKomaram Bheem Project	Komaram, Bheem Ashifabad	2017-18	2025-26	9.92	19.10	39.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	87	Gollavagu Project	Mancherial	2016-17	2025-26	3.85	7.19	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	88	Rallivagu Project	Mancherial	2016-17	2025-26	0.92	1.47	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	89	Mathadivagu Project	Adilabad	2016-17	2025-26	3.44	6.32	12.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	90	Peddavagu Neelwai Project	Mancherial	2016-17	2025-26	5.26	6.67	25.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	91	Palemvagu Project	Khammam	2016-17	2025-26	2.01	2.60	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	92	Peddavagu Jagannathpur	Khamma, Bheem Ashifabad	2016-17	2025-26	6.07	12.20	52.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	93	SRSP St.II	Warangal, Mahbuba-bad, Khammam Suryapet, Jangaon	2016-17	2025-26	73.14	103.24	204.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	94	Rajiv Bheema L.I. Scheme	Mahaboob nagar, Wanapar-thy	2016-17	2025-26	82.15	114.81	245.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	95	Indiramma Flood Flow Canal	Warangal	2016-17	2025-26	93.59	48.26	97.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total					**529.03**	**702.21**	**1467.40**	**0.00**	**0.00**	**0.00**	**10.68**	**0.00**	**0.00**	**0.00**	**10.68**	**2.02**
Uttar Pradesh	96	Arjunsahayak	Mahoba, Hamirpur	2017-18	2025-26	44.38	77.87	188.97	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

Contd…

Table 2.6 (c): State-wise Status (Physical Progress) of Proposal on CAD&WM Component for 99 Prioritized Projects as on 31.03.2023

(Rs. in Cr) (Area Th. Ha)

State	Sl. No.	Project Name	Districts Benefitted	Year of Inclusion	Target date of Completion	As per DPR/ MoU			Physical Progress							Total	% Physical Progress
						CCA (Th. Ha)	Target CA (Rs.Cr)	Total Cost (Rs. Cr)	Physical 2016-17	Physical 2017-18	Physical 2018-19	Physical 2019-20	Physical 2020-21	Physical 2021-22	Physical 2022-23		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	97	SaryuNahar (NP)	Baharaich, Basti, Gonda, Shravasti, Balrampur, Sidharth Nagar, Sant Kabir Nagar	2017-18	2025-26	480.00	837.06	1672.70	0.00	0.00	0.00	0.00	0.00	0.00	18.90	18.90	4.52
	98	Bansagar				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	99	Madhya Ganga				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	Total					**524.38**	**914.93**	**1861.67**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**18.90**	**18.90**	**4.14**
	Grand Total					**4756.66**	**8225.56**	**18466.31**	**498.51**	**440.90**	**405.66**	**75.43**	**78.13**	**146.55**	**185.45**	**1830.53**	**44.19**

Source: CAD Wing, D/o Water Resources, RD & GR, M/o Jal Shakti

Table 2.7: Fund Released to States for the Water Bodies included during XII Plan & onwards under RRR of Water Bodies Scheme as on 31.03.2023

(Rs. in Cr)

Sl. No.	Name of States	No. of Water Bodies Included	Estimated Cost	Committed Central Share (CA)	Potential Planned (Ha)	Targeted Storage Revival (MCM)	Cumulative CA Released during XII Plan Till 03/21	CA Released during 2021-22	CA Released during 2022-23	Cumulative CA Released during XII Plan & onwards till 03/2023	Cumulative Expenditure till 03/2023	No. of Completed Water Bodies till 03/2023	Potential Restored (Ha)	Storage Revived (MCM)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Andhra Pradesh	235	137.49	82.48	12992	40.98	2.70	0.00	0.00	2.70	0.00	0	0.00	0.00
2	Bihar	93	161.91	89.46	26090	333.79	18.08	8.62	7.285	33.985	43.575	73	21797	172.339
3	Gujarat	61	102.91	61.74	11360	0.00	8.81	0.00	3.162	11.972	19.848	21	3697	0.00
4	Madhya Pradesh	125	183.24	93.01	33300	438.35	37.70	0.00	0.00	37.70	149.66	124	33000	438.38
5	Manipur	4	65.44	58.90	1200	6.28	34.63	0.00	0.00	34.63	38.31	0.00	0.00	0.00
6	Meghalaya	9	11.43	10.29	1100	0.47	5.18	0.00	0.00	5.18	8.99	8	876	0.44
7	Odisha	1437	988.52	570.15	89730	164.89	145.18	0.00	11.10	156.28	334.606	828	48417	22.204
8	Rajasthan	105	309.85	159.95	20420	14.35	62.18	0.00	9.30	71.48	154.583	68	11950	11.52
9	Tamil Nadu	552	365.22	218.97	12208	12.174	34.25	17.43	27.697	79.377	146.446	245	6233	5.837
10	Telangana	575	459.18	272.02	29010	56.22	104.56	0.00	0.00	104.56	268.67	488	25984	54.37
11	Uttar Pradesh	20	49.501	32.645	3447	8.40	16.41	0.00	0.00	16.41	44.41	8	2354	4.29
Total		**3216**	**2834.692**	**1649.615**	**240887**	**1076.004**	**469.69**	**26.05**	**58.544**	**554.274**	**1209.05**	**1863**	**154307**	**791.382**

Source: Economic Directorate, CWC, M/o Jal Shakti

Note: 'CA': Central Assistance

Table 2.8: Plan-wise Financial Expenditure on Minor Irrigation (Institutional)

(Rs. in Cr)

Sl. No	States/UTs	During XII Plan	Year					
		(2012-17)	(2017-18)	(2018-19)	(2019-20)	(2020-21)	(2021-22)	(2022-23)
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	164.18	34.94	37.02	35.90	27.01	49.83	2.29
2	Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	2.36
3	Assam	1.14	0.00	0.00	0.00	0.00	0.00	36.79
4	Bihar	168.44	80.84	0.09	1.22	87.14	162.78	189.80
5	Chhattisgarh	47.96	7.59	2.59	0.69	0.57	6.97	207.61
6	Goa	0.09	0.00	0.00	0.00	0.00	0.00	5.49
7	Gujarat	628.24	90.69	91.59	51.60	19.29	36.07	7.95
8	Haryana	273.38	71.43	19.71	0.01	14.28	47.42	284.93
9	Himachal Pradesh	10.04	0.00	10.81	7.50	8.65	2.20	103.80
10	Jammu & Kashmir	0.02	0.00	0.00	0.00	0.00	0.00	2.40
11	Jharkhand	4.95	0.00	0.02	0.01	0.00	0.03	0.00
12	Karnataka	463.46	339.03	256.34	242.57	145.43	199.42	46.25
13	Kerala	408.12	74.18	45.23	141.83	92.00	45.14	34.66
14	Madhya Pradesh	139.37	6.08	18.54	0.06	10.70	0.55	0.00
15	Maharashtra	1089.26	486.33	302.27	242.78	165.44	459.33	6.53
16	Manipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	3.95
18	Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.51
19	Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	Odisha	25.79	0.01	0.03	0.04	0.00	0.00	459.54
21	Punjab	254.34	22.45	21.78	9.79	0.05	6.19	43.53
22	Rajasthan	274.79	74.54	9.67	10.71	12.75	182.07	170.88
23	Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	Tamil Nadu	484.54	188.58	180.03	54.35	92.87	7.74	221.50
25	Telangana	0.00	21.66	11.49	53.10	2.92	13.17	341.06
26	Tripura	0.00	0.00	0.00	0.00	0.00	0.00	48.07
27	Uttarakhand	0.03	0.00	0.01	0.00	0.00	1.60	52.41
28	Uttar Pradesh	266.30	14.32	28.08	1.03	0.26	183.58	95.73
29	West Bengal	6.80	0.04	0.03	0.00	0.00	0.10	95.76
Union Territories								
30	A & N Islands	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	Dadra & Nagar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	Delhi	0.00	0.00	0.07	0.22	0.00	0.14	0.00
35	Puducherry	1.08	0.00	0.08	0.31	0.67	0.00	3.58
36	Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total		**4712.32**	**1512.71**	**1035.48**	**853.72**	**680.03**	**1404.33**	**2467.38**

Source: NABARD

Note: Totals may not tally due to rounding off.

Table: 2.9: State/UT-wise Water Rates for Flow and Lift Irrigation

(Rs./Ha)

State/UT	Flow Irrigation Rates Range		Lift Irrigation Rates Range		Date since applicable
	Max	Min	Max	Min	
1	2	3	4	5	6
Andhra Pradesh /Telangana	864.50	148.20	NA		01-07-1996
Arunachal Pradesh	No Water Rates				
Assam	751.00	150.00	751.00	150.00	30-03-2000
Bihar	370.50	74.10	NA		27-11-2011
Chhattisgarh	741.29	172.97	741.29	172.97	15-06-1999
Delhi	148.20	34.03	148.20	33.35	2009
Goa	360.00	72.00	720.00	144.00	06-04-2016
Gujarat	590.59	314.19	196.86	104.73	16-06-2021
Haryana	296.52	37.06	148.26	18.53	30-11-2018
Himachal Pradesh	66.47	66.47	132.91	132.91	31-03-2019
Jharkhand	370.50	74.10	370.50	74.10	26-11-2001
Karnataka	988.39	37.06	2965.16	74.13	18-09-2018
Kerala	99.00	37.00	148.50	93.00	18-09-1974
Madhya Pradesh	960.00	50.00	960.00	50.00	31-12-2005
Maharashtra	13.50	3.38	10.97	0.47	11-01-2018
Manipur	602.00	184.00	602.00	184.00	24-08-2013
Meghalaya	No Water Rates				
Mizoram	No Water Rates				
Nagaland	No Water Rates				
Orissa	930.00	60.00	NA		05-04-2002
Punjab	123.50	123.50	123.50	123.50	12-11-2014
Rajasthan	286.52	49.40	573.04	24.70	24-05-1999
Sikkim	250.00	10.00	NA		2002
Tamil Nadu	61.78	2.77	NA		06-11-1987
Tripura	312.50	312.50	312.50	312.50	01-10-2003
Uttarakhand	No Water Rates				
Uttar Pradesh	6148.20	192.92	3075.08	97.44	03-09-2014
West Bengal	123.50	37.06	2015.52	251.94	01-07-2003
A & N Islands	No Water Rates				
Chandigarh *	NA				
Dadra & Nagar Haveli	830.00	110.00	275.00	75.00	29-01-1996
Daman & Diu	286.00	286.00	286.00	286.00	2007
Jammu/ Kashmir/ Ladakh	523.84	212.50	2614.28	1045.22	01-04-2018
Lakshadweep	No Water Rates				
Puducherry	NA				

Source: Department of Irrigation, Water Resource Department and State Government offices.

*In rural areas of Chandigarh, the water rates for irrigation purpose is Rs 23/- per hour with effect from 01.01.2010.

'NA' : Not Available

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Chapter-3

Environmental Performance

Chapter-3
Environmental Performance

This chapter presents information regarding the environmental aspects of water resources development activities, data on the degraded land and its distribution according to various types, details on flood damages and analysis of total damage. The flood damage data has been provided since 1953 to 2022. It also gives a description of the performance of the flood forecasting network with data related to flood forecasting performance since 2000 to 2022.

3.1 Land Degradation

The analysis given in 'Desertification and Land Degradation Atlas of India' by Indian Space Research Organisation (ISRO), sponsored by the Ministry of Environment, Forest and Climate Change, reveals that 97.85 Mha area of the country is undergoing the process of land degradation i.e., 29.77% of the Total Geographic Area (TGA) of the country during 2018-19 is undergoing the process of land degradation while during 2011-13 the area undergoing process of land degradation was 96.40 Mha (29.32% of the TGA). A Cumulative increase of 1.45 Mha area (0.44% of the TGA) undergoing DLD is observed from 2011-13 to 2018-19. The changes in Desertification/Land Degradation status is presented in Table T1 below:

Table T1: Changes in Desertification/Land Degradation Status

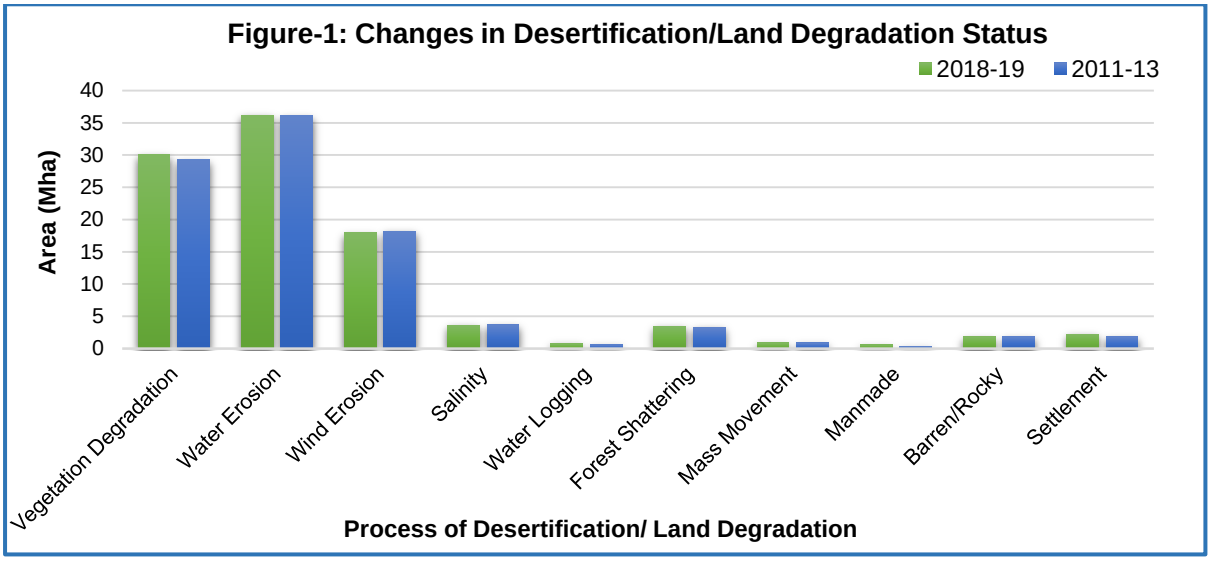
Process of Desertification/ Land Degradation	2018-19		2011-13	
	Area (Mha)	Area (%)	Area (Mha)	Area (%)
1	2	3	4	5
Vegetation Degradation	30.07	9.15	29.30	8.91
Water Erosion	36.20	11.01	36.10	10.98
Wind Erosion	17.94	5.46	18.23	5.55
Salinity	3.64	1.11	3.67	1.12
Water Logging	0.81	0.25	0.65	0.20
Forest Shattering	3.47	1.05	3.34	1.02
Mass Movement	0.94	0.29	0.93	0.28
Manmade	0.64	0.19	0.41	0.12
Barren/Rocky	1.87	0.57	1.89	0.57
Settlement	2.27	0.69	1.88	0.57
Total Area under Desertification	97.85	29.77	96.40	29.32
Total Geographical Area (Mha)	**328.72**			

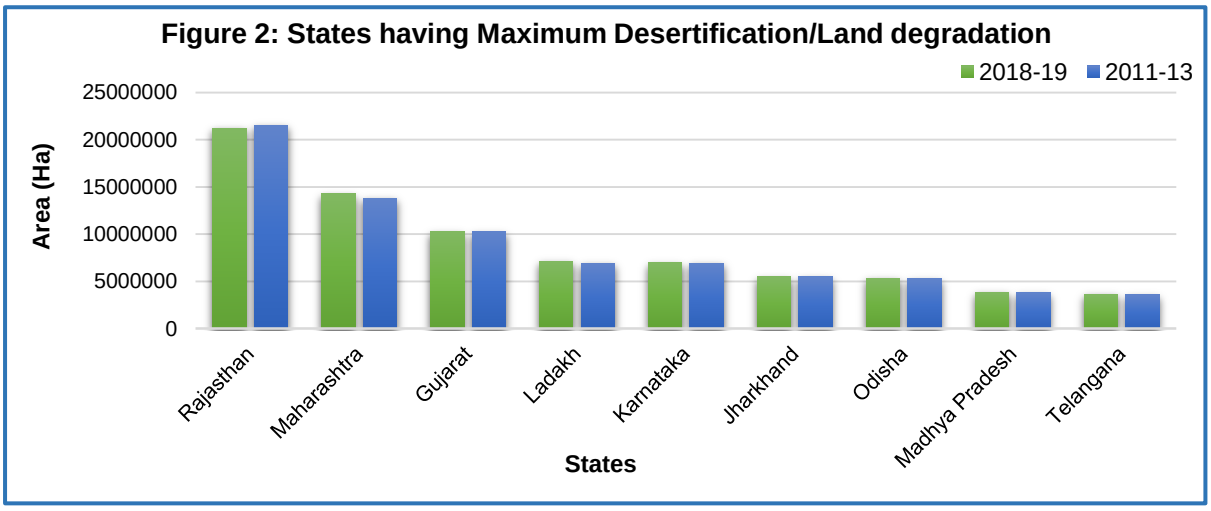
Source: ISRO, Desertification and Land Degradation Atlas of India https://vedas.sac.gov.in/static/atlas/dsm/DLD_Atlas_SAC_2021.pdf (as per the latest availability of data)

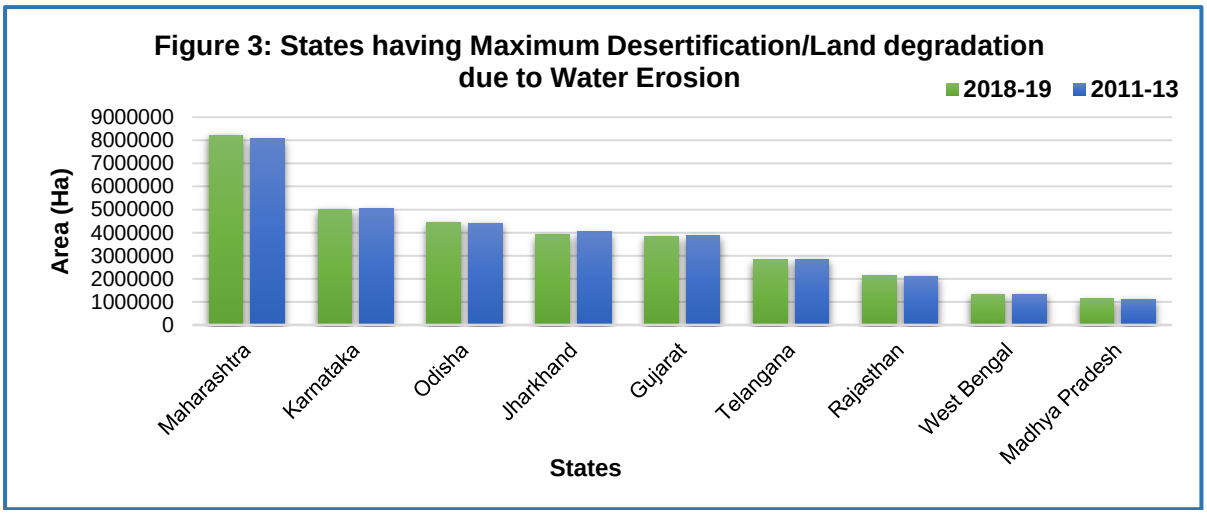
The analysis shows that around 23.79% (2018-19) and 23.63% (2011-13) of the area undergoing desertification/land degradation with respect to TGA of the country is contributed by Rajasthan, Maharashtra, Gujarat, Karnataka, Ladakh UT, Jharkhand, Odisha, Madhya

Pradesh and Telangana (in descending order). All other remaining States are contributing less than 1% (individually) w.r.t country TGA (Table T2).

The analysis with respect to TGA of the individual States show that Jharkhand, Rajasthan, Delhi, Gujarat and Goa are showing more than 50% area under desertification/land degradation; whereas, States with less than 10% area under desertification/land degradation are Kerala, Assam, Mizoram, Haryana, Bihar, Uttar Pradesh, Punjab and Arunachal Pradesh (Table T2).







The most significant process of desertification/ land degradation in the country is Water Erosion (11.01% in 2018-19 and 10.98% in 2011-13). The second most significant process is Vegetation Degradation (9.15% in 2018-19 and 8.91% in 2011-13), which is followed by Wind Erosion (5.46 % in 2018-19 and 5.55 % in 2011-13) (Table T1). At State level, Water Erosion is the most significant process of desertification/ land degradation in Maharashtra, Karnataka, Odisha, Jharkhand, Gujarat, Telangana, Rajasthan, West Bengal and Madhya Pradesh (Table T2).

Table T2: State-wise Status of Desertification/Land Degradation

Sl. No.	State	Geo-graphical Area of States (Ha)	Area under Desertification due to Water Erosion (Ha)		Total Area under Desertification (Ha)		Total Area under Desertification (%)	
			2018-19	2011-13	2018-19	2011-13	2018-19	2011-13
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	16020500	801280	789433	2378042	2298758	14.84	14.35
2	Arunachal Pradesh	8374300	-	-	200683	153933	2.4	1.84
3	Assam	7843800	31827	31424	834530	716596	10.64	9.14
4	Bihar	9416300	327004	321175	746586	694809	7.93	7.38
5	Chhattisgarh	13519200	854393	783645	2306531	2211153	17.06	16.36
6	Delhi	148300	-	-	91543	89868	61.73	60.6
7	Goa	370200	30328	33889	194877	192973	52.64	52.13
8	Gujarat	19624400	3833330	3859497	10248057	10261641	52.22	52.29
9	Haryana	4421200	13568	13568	364154	338964	8.24	7.67
10	Himachal Pradesh	5567300	268824	268261	2400300	2394240	43.11	43.01
11	Jammu & Kashmir	5413900	151031	136918	1129503	1064721	20.86	19.67
12	Jharkhand	7971600	3915868	4036785	5482260	5498726	68.77	68.98
13	Karnataka	19179100	5012171	5043041	6959847	6951000	36.29	36.24
14	Kerala	3885200	-	-	422299	379587	10.87	9.77
15	Ladakh	16809700	9243	9243	7111968	6911573	42.31	41.12
16	Madhya Pradesh	30825200	1129718	1125418	3859735	3804315	12.52	12.34
17	Maharashtra	30771300	8217047	8060753	14306029	13825935	46.49	44.93
18	Manipur	2232700	8070	8070	612566	601959	27.44	26.96
19	Meghalaya	2242900	71772	53149	557576	494880	24.86	22.06
20	Mizoram	2108100	8119	8119	275827	187453	13.08	8.89
21	Nagaland	1657900	-	-	828943	786678	50	47.45
22	Odisha	15570700	4439799	4409413	5359014	5304114	34.42	34.06
23	Punjab	5036200	15344	14116	167989	144653	3.34	2.87
24	Rajasthan	34223900	2124456	2116314	21237665	21526512	62.06	62.9
25	Sikkim	709600	-	-	84610	78749	11.92	11.1
26	Tamil Nadu	13006000	6411	6411	1599981	1543898	12.3	11.87
27	Telangana	11484000	2826129	2854285	3638508	3598856	31.68	31.34
28	Tripura	1048600	185575	186900	447378	437128	42.66	41.69
29	Uttar Pradesh	24092800	584188	586961	1549608	1528997	6.43	6.35
30	Uttarakhand	5348300	11943	11943	673894	648253	12.6	12.12
31	West Bengal	8875200	1323275	1329539	1784345	1733931	20.1	19.54
Total		327798400	36200713	36098270	97854848	96404853	29.77	29.32

Source: ISRO, Desertification and Land Degradation Atlas of India
https://vedas.sac.gov.in/static/atlas/dsm/DLD_Atlas_SAC_2021.pdf (as per the latest availability of data)

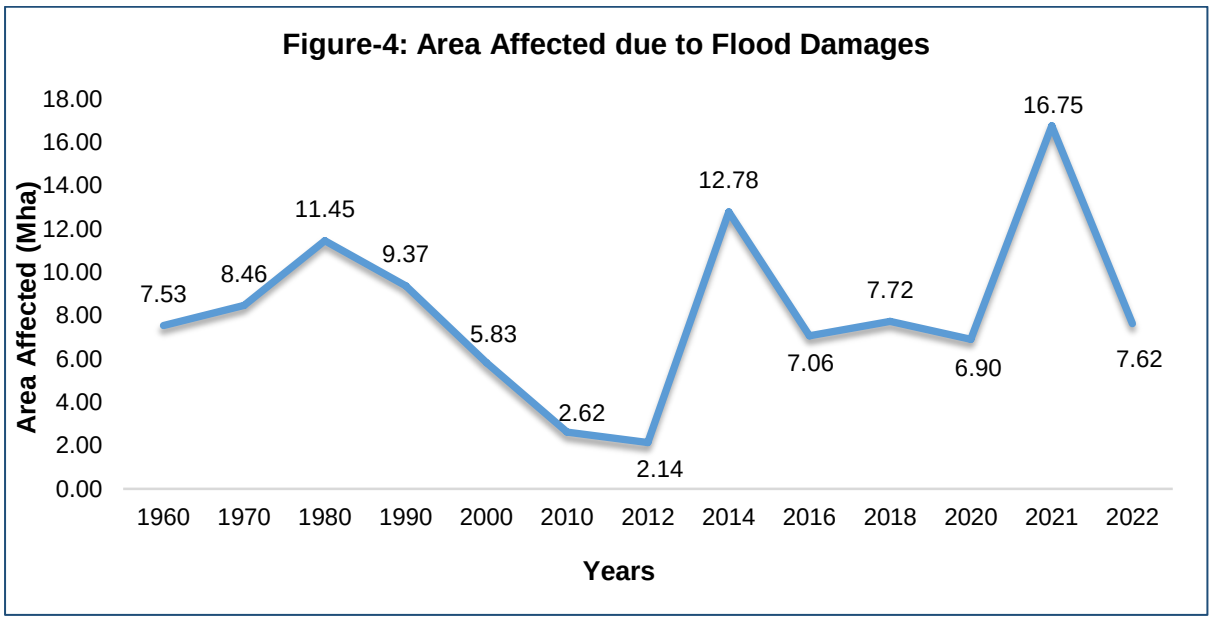
3.2 Flood

Floods are one of the most devastating natural calamities, which have been causing extensive damage to life and property besides perpetrating tremendous suffering. Since flood is a natural phenomenon, it is usually difficult to predict a definite trend especially with regard to the time and place of its occurrence. As such, the effort usually is to take appropriate advance flood protection measures. The area affected by floods was 2.29 Mha in 1953 and 7.62 Mha in 2022 which was 17.52 Mha, at peak during 1978. The damage to crops was in the wide range varying from Rs. 5.87 Cr in 1965 to Rs. 29229.71 Cr in 2021 which was at peak while during 2022 the floods caused damages to crops worth Rs. 18224.22 Cr. In addition, there was a great loss of human lives and livestock often affecting the poor strata of the population. Taking into consideration the other factors such as serious disruption and massive health rehabilitation measures needed, the loss could indeed be tremendous. The total damage caused by floods is calculated to the tune of Rs. 27392.17 Cr during 2022 which was Rs. 58.433.40 Cr at peak during 2021 (Appendix Table 3.1). State-wise details of flood damages during 2022 are given in Appendix Table 3.2.

Table T3: Flood Damages in India

Year	Area Affected (Mha)	Population Affected (Millions)	Damage to Crops (Rs. Cr)	Damage to Houses (Rs. Cr)	Damage to Public Utilities (Rs. Cr)	Cattle Lost Nos.	Human Life Lost (No.)	Total Damages to crops, houses and public utilities (Rs. Cr)
1	2	3	4	5	6	7	8	9
2022	7.62	25.81	18224.22	3212.63	5955.33	574503	1673	27392.17
Maximum	17.52	70.46	29229.71	10809.80	38937.84	618251	11305	58433.40
Year when maximum loss/damage occurred	1978	1978	2021	2009	2013	1979	1977	2021

Source: FFM Directorate, CWC, M/o Jal Shakti



Flood forecasting is one of the most important non-structural methods of flood control in which there has been significant contribution by CWC. Network performance for the flood season 2022 (10845 accurate forecasts out of 11558 issued) has been successful. 93.83% of forecasts were correct within +/-15 cm or +/-20% cumec of deviation from actual. Basin-wise and flood forecasting site-wise flood forecasting information in India during flood season, 2022 are given in Appendix Table 3.3. Over the years, the percentage of forecasts accuracy has been maintained at an average of 95.66% (Appendix Table 3.4). Moreover, site-wise forecast performance of flood forecasting sites of Central Water Commission in Flood Season, 2022 are given in Appendix Table 3.5.

Table T4: Flood Forecasting Performance

Year	Total No. of Forecasts Issued	Within +/-15 cm or +/-20% cumec of deviation from actual	Percentage of Accuracy
1	2	3	4
2000	6443	6251	97.02
2001	5463	5342	97.79
2002	4241	4151	97.88
2003	6600	6375	96.59
2004	4889	4696	96.05
2005	5618	5423	96.53
2006	6663	6377	95.71
2007	8223	7990	97.17
2008	6691	6554	97.95
2009	4010	3927	97.93
2010	7519	7378	98.12
2011	5991	5904	98.55
2012	5031	4939	98.17
2013	7060	6760	95.75
2014	4772	4667	97.80
2015	4072	3991	98.01
2016	6239	5948	95.34
2017	6297	5901	93.71
2018	6851	6495	94.80
2019	9754	8451	86.64
2020	11721	11198	95.54
2021	10617	9976	93.96
2022	11558	10845	93.83

Source: Flood Forecasting Management Directorate, CWC, M/o Jal Shakti

3.3 Water Requirement

The requirement of fresh water both for irrigation and other uses is growing continuously. The requirement of water for various sectors has been assessed by the National Commission on Integrated Water Resources Development (NCIWRD) in the year 2000. This requirement is based on the assumption that irrigation efficiency will increase to 60% from the current level of 35-40%. The following Table T5 indicates the projected water demand in India for different sectors:

Table T5: Projected Water Demand in India (By Different Use)						
Sector	Water Demand in km^3 (or BCM)					
	Standing Sub-Committee of D/o WR, RD & GR, M/o Jal Shakti		NCIWRD			
			2025		2050	
	2025	2050	Low	High	Low	High
1	2	3	4	5	6	7
Irrigation	910	1072	561	611	628	807
Drinking Water	73	102	55	62	90	111
Industry	23	63	67	67	81	81
Energy	15	130	31	33	63	70
Other	72	80	70	70	111	111
Total	**1093**	**1447**	**784**	**843**	**973**	**1180**

Source: Basin Planning Directorate, CWC, M/o Jal Shakti

Note: This is as per the report of the Standing Sub-Committee on 'Assessment of Availability & Requirement of Water for Diverse uses in the Country-2000'.

Figure-5: Estimated Sector-wise High Demand in India during 2050 (As per NCIWRD)

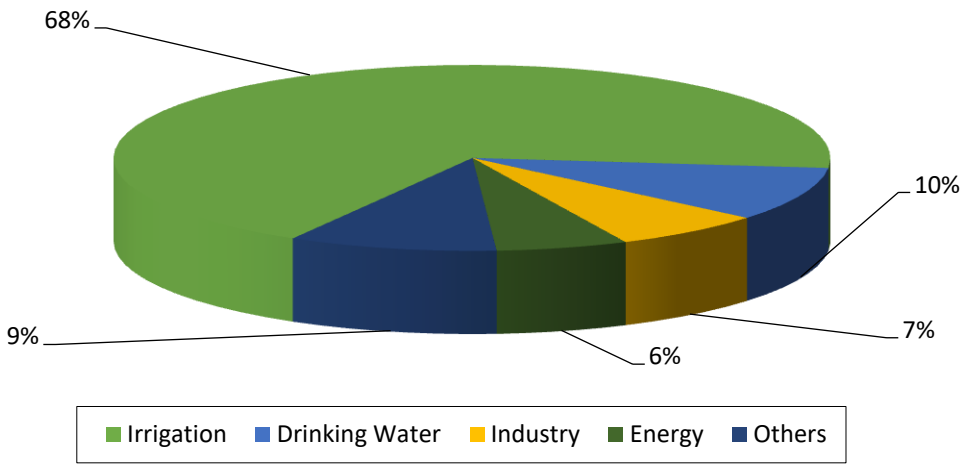
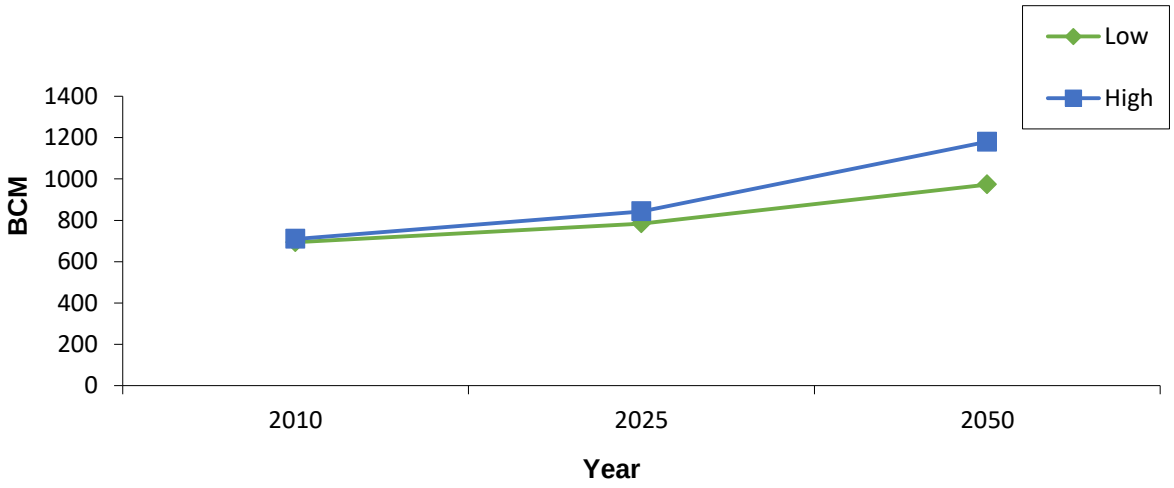


Figure-6: Projected Water Demand in India (As per NCIWRD)



The Standing Committee of M/o Jal Shakti also assesses it periodically. The total water demand for all the uses is likely to be 1,180 BCM by 2050 as per NCIWRD. Though major share of this would be consumed for irrigation purposes, this in no way undermines importance of providing portable drinking water. Infact, it may be presumed that drinking water provision would have to be given an added thrust since the lack of such facility is likely to entail serious social, economic and health impact.

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Appendix-3

Table 3.1 Flood Damage during 1953 to 2022

Sl. No.	Year	Area Affected in Mha	Population Affected in Million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities in Rs. Cr	Total Damages to Crops, Houses & Public Utilities in Rs. Cr (Col.6+ Col.8+ Col.11)
				Area in Mha	Value in Rs. Cr	Nos.	Value in Rs. Cr				
1	2	3	4	5	6	7	8	9	10	11	12
1	1953	2.29	24.28	0.93	42.08	264924	7.42	47034	37	2.90	52.40
2	1954	7.49	12.92	2.61	40.52	199984	6.56	22552	289	11.16	58.24
3	1955	9.44	25.27	5.31	80.77	1666789	25.41	72010	865	3.98	110.16
4	1956	9.24	14.57	1.11	44.44	725776	9.13	16109	462	2.15	55.72
5	1957	4.86	6.76	0.45	14.20	318149	4.97	7431	612	4.28	23.45
6	1958	6.26	10.98	1.40	38.28	382251	3.90	18439	389	1.80	43.97
7	1959	5.77	14.52	1.54	57.34	648821	9.41	72691	619	20.02	86.77
8	1960	7.53	8.35	2.28	42.55	609884	14.32	13908	510	6.32	63.19
9	1961	6.56	9.26	1.98	24.03	533515	0.89	15916	1374	6.44	31.36
10	1962	6.11	15.46	3.39	83.19	513785	10.66	37633	348	1.05	94.89
11	1963	3.49	10.93	2.05	30.16	420554	3.71	4572	432	2.74	36.61
12	1964	4.90	13.78	2.49	56.87	255558	4.59	4956	690	5.16	66.62
13	1965	1.46	3.64	0.31	5.87	112957	0.20	7287	79	1.06	7.13
14	1966	4.74	14.09	2.16	80.15	221030	2.55	9262	182	6.46	89.16
15	1967	7.12	20.46	3.27	133.31	563234	14.26	5827	353	7.13	154.70
16	1968	7.15	21.17	2.62	144.61	682704	41.11	130305	3497	25.38	211.09
17	1969	6.10	33.22	2.91	281.89	1268660	54.43	270326	1408	68.11	404.42
18	1970	8.46	32.33	4.91	162.79	1434030	48.60	19198	1070	76.45	287.84
19	1971	13.25	59.74	6.24	423.13	2428031	80.25	12866	994	129.11	632.48
20	1972	4.09	26.59	2.45	98.56	897307	12.46	58231	544	46.76	157.78
21	1973	11.79	64.05	5.69	428.03	869780	52.48	261016	1349	88.92	569.42

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Table 3.1 Flood Damage during 1953 to 2022

Sl. No.	Year	Area Affected in Mha	Population Affected in Million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities in Rs. Cr	Total Damages to Crops, Houses & Public Utilities in Rs. Cr (Col.6+ Col.8+ Col.11)
				Area in Mha	Value in Rs. Cr	Nos.	Value in Rs. Cr				
1	2	3	4	5	6	7	8	9	10	11	12
22	1974	6.69	29.44	3.32	411.64	746709	72.43	16846	393	84.93	569.00
23	1975	6.16	31.36	3.77	271.49	803705	33.81	17343	686	166.06	471.36
24	1976	11.91	50.52	5.92	595.15	1745142	92.20	80062	1366	201.46	888.81
25	1977	11.46	49.57	6.84	720.59	1661625	152.28	556317	11305	328.99	1201.85
26	1978	17.52	70.46	10.00	911.09	3507542	167.58	239174	3396	376.07	1454.73
27	1979	3.99	19.52	6.85	169.98	1328712	210.61	618251	3637	233.63	614.21
28	1980	11.45	54.13	5.58	366.39	2533142	170.85	59173	1913	303.28	840.53
29	1981	6.01	32.44	3.28	524.57	912505	159.61	82238	1376	512.32	1196.50
30	1982	8.87	56.00	5.16	589.40	2397365	383.88	246700	1573	671.61	1644.88
31	1983	9.01	60.90	4.93	1285.83	2393460	332.23	143093	2375	873.42	2491.47
32	1984	10.70	54.55	5.18	906.07	1763567	181.30	141308	1661	818.16	1905.53
33	1985	8.37	59.58	4.65	1425.37	2449578	583.86	53008	1804	2050.05	4059.27
34	1986	8.55	55.52	4.87	1231.57	2049277	534.41	60450	1200	1982.53	3748.52
35	1987	8.88	48.34	4.94	1154.64	2919380	464.49	128638	1835	950.59	2569.72
36	1988	16.29	59.54	10.14	2510.95	2276533	741.57	150996	4252	1377.82	4630.34
37	1989	8.05	34.15	2.63	956.74	782340	149.82	82376	1738	1298.77	2405.33
38	1990	9.37	40.33	3.22	702.58	1388917	264.95	134154	1842	457.05	1424.58
39	1991	6.43	33.95	2.75	587.17	1134445	181.62	41090	1187	730.97	1499.76
40	1992	2.72	19.32	1.80	1035.68	687566	308.93	78669	1533	2012.41	3357.02
41	1993	6.66	30.48	3.25	1317.03	1918360	529.69	211193	2860	1445.27	3291.99
42	1994	4.88	27.62	4.00	895.59	914682	166.16	52315	2079	741.42	1803.17

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Table 3.1 Flood Damage during 1953 to 2022

Sl. No.	Year	Area Affected in Mha	Population Affected in Million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities in Rs. Cr	Total Damages to Crops, Houses & Public Utilities in Rs. Cr (Col.6+ Col.8+ Col.11)
				Area in Mha	Value in Rs. Cr	Nos.	Value in Rs. Cr				
1	2	3	4	5	6	7	8	9	10	11	12
43	1995	5.32	36.00	3.25	1722.94	2001933	1309.09	62438	1814	681.71	3713.74
44	1996	8.11	44.37	3.86	1131.44	726839	177.89	73208	1803	865.14	2174.47
45	1997	5.10	31.58	2.47	726.82	571900	163.90	28414	1446	2018.31	2909.03
46	1998	10.92	47.48	7.53	2603.53	1925186	1110.52	107098	2883	5159.84	8873.90
47	1999	7.76	28.01	1.73	1854.67	1608474	1299.37	91289	739	462.21	3616.25
48	2000	5.83	45.09	3.61	4253.59	2628880	681.89	123252	2606	3938.76	8874.24
49	2001	6.24	26.53	4.00	696.49	716210	817.65	32703	1444	5606.54	7120.68
50	2002	7.21	26.38	2.25	921.89	772577	610.61	21543	1002	1074.23	2606.73
51	2003	6.12	43.20	4.27	7307.23	775379	756.48	15161	2166	3262.15	11325.87
52	2004	5.31	43.73	2.89	778.69	1664388	879.60	134106	1813	1656.09	3314.38
53	2005	12.56	22.93	12.30	2370.92	715749	380.53	119674	1455	4688.22	7439.67
54	2006	1.10	25.22	1.82	2850.67	1497428	3636.85	266945	1431	13303.93	19791.44
55	2007	7.14	41.40	8.79	3121.53	3280233	2113.11	89337	3389	8049.04	13283.68
56	2008	3.43	29.91	3.19	3401.56	1566809	1141.89	101780	2876	5046.48	9589.94
57	2009	3.84	29.54	3.59	4232.61	1235628	10809.80	63383	1513	17509.35	32551.76
58	2010	2.62	18.30	4.99	5887.38	293830	875.95	39706	1582	12757.25	19520.59
59	2011	1.90	15.97	2.72	1393.85	1152518	410.48	35982	1761	6053.57	7857.89
60	2012	2.14	14.69	1.95	1534.11	174526	240.57	31558	933	9169.97	10944.65
61	2013	7.55	25.93	7.48	6378.08	699525	2032.83	163958	2180	38937.84	47348.75
62	2014	12.78	26.51	8.01	7255.15	311325	581.98	60196	1968	7710.95	15548.08
63	2015	4.48	33.20	3.37	17043.95	3959191	8046.97	45597	1420	32200.18	57291.10

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Table 3.1 Flood Damage during 1953 to 2022

Sl. No.	Year	Area Affected in Mha	Population Affected in Million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities in Rs. Cr	Total Damages to Crops, Houses & Public Utilities in Rs. Cr (Col.6+ Col.8+ Col.11)
				Area in Mha	Value in Rs. Cr	Nos.	Value in Rs. Cr				
1	2	3	4	5	6	7	8	9	10	11	12
64	2016	7.06	26.55	6.66	4052.72	278240	114.68	22367	1420	1507.93	5675.33
65	2017	6.07	47.34	4.97	8951.98	1252914	9384.02	26673	2063	12329.85	30665.85
66	2018	7.72	37.40	2.51	3708.19	913414	2508.66	60279	1839	12132.92	18349.76
67	2019	11.60	46.35	10.69	10902.35	656595	462.79	25852	2754	4498.39	15863.53
68	2020	6.90	26.79	6.55	5626.02	239539	272.10	46911	1474	5458.01	11356.13
69	2021	16.75	38.56	7.40	29229.71	461205	3960.08	64880	1371	25243.61	58433.40
70	2022	7.62	25.81	6.71	18224.22	376649	3212.63	574503	1673	5955.33	27392.17
Total		**513.25**	**2264.86**	**298.75**	**179044.57**	**83789359**	**64282.45**	**6829756**	**116932**	**265411.95**	**508738.95**
Average		**7.33**	**32.36**	**4.27**	**2557.78**	**1196991**	**918.32**	**97568**	**1670**	**3791.60**	**7267.70**
MAX		**17.52**	**70.46**	**12.30**	**29229.71**	**3959191**	**10809.80**	**618251**	**11305**	**38937.84**	**58433.40**
(YEAR)		**1978**	**1978**	**2005**	**2021**	**2015**	**2009**	**1979**	**1977**	**2013**	**2021**

Source: FM-II Directorate, Central Water Commission, M/o Jal Shakti

Table 3.2: Flood Damage during 2022

Sl. No.	Name of State	Area Affected in Mha	Population Affected in Million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities in Rs. Cr	Total Damages to Crops, Houses & Public Utilities in Rs. Cr (Col.6+Col.8+Col.11)
				Area in Mha	Value in Rs. Cr	Nos.	Value in Rs. Cr				
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh		0.37	0.01	11.15	6566	38.82	291	7	29.46	79.43
2	Arunachal Pradesh		0.09	0.00		1156	4.42	48	27		4.42
3	Assam		8.85	0.25	154.59	192956	151.14	57923	205	2092.17	2397.9
4	Bihar	0.05	0.45	0.06	52.58	1744	2.56	4	0	0.00	55.14
5	Chhattisgarh			0.00		1445		533	95		0.00
6	Goa	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
7	Gujarat					6762	1457	190	33		1457.00
8	Haryana	0.06									
9	Himachal Pradesh			0.01	0.00	2787	30.29	940	3	0.00	30.29
10	Jammu & Kashmir			0.00	0.00	122	19.06	145	32		19.06
11	Jharkhand	0.00	1.11	0.00	0.06	0.00	0.00	1	4	0.00	0.06
12	Karnataka		0.01	1.03		49362		1676	152		
13	Kerala		0.15	0.11		2216		161	109		
14	Madhya Pradesh					6646		997	310		
15	Maharashtra	1.60	1.51	2.87	5684.84	50961	1488.88	1908	196	3352.41	10526.13
16	Manipur								65		
17	Meghalaya		0.01	0.00		5587		570	54		
18	Mizoram			0.00		300			0	0.00	0.00
19	Nagaland			0.00		716		30	8		
20	Odisha		2.47	0.13	104.10	14257	6.49	49	13	480.97	591.56

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Table 3.2: Flood Damage during 2022

Sl. No.	Name of State	Area Affected in Mha	Population Affected in Million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human Lives Lost Nos.	Damage to Public Utilities in Rs. Cr	Total Damages to Crops, Houses & Public Utilities in Rs. Cr (Col.6+Col.8+Col.11)
				Area in Mha	Value in Rs. Cr	Nos.	Value in Rs. Cr				
1	2	3	4	5	6	7	8	9	10	11	12
21	Punjab			0.08		1887		203	22		
22	Rajasthan	5.51	7.44	1.66	11750.40			506476	154		11750.40
23	Sikkim			0.00		3935		13	8		
24	Tamil Nadu			0.15		431		508	16		
25	Tripura					183			1		
26	Uttar Pradesh	0.38	3.30	0.35	454.98	6761	10.86	68	50		465.84
27	Uttarakhand	0.00		0.00		1967		194	43		
28	West Bengal	0.02	0.06	0.00	0.26	3028	3.11	1	25	0.32	3.68
29	A & N Islands	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
30	Chandigarh	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
31	D & N Haveli	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	Nil	Nil
32	Daman & Diu										
33	Delhi	0.00	0.00	0.00	0.06	Nil	Nil	Nil	Nil	Nil	0.06
34	Lakshadweep					14861		1574	40		
35	Puducherry			0.00	11.20	13					11.20
Total		**7.62**	**25.81**	**6.71**	**18224.22**	**376649**	**32.12.63**	**574503**	**1673**	**5955.33**	**27392.17**

Source: FM-II Directorate, CWC, M/o Jal Shakti

Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	**Indus Basin**											
1	Jhelum	Sangam	Jammu & Kashmir	1589.96	1590.88	1595.00	06-09-14	1591.94	22/06/2022 20	2	1	50.00
2	Jhelum	Rammunshibagh	Jammu & Kashmir	1584.87	1585.48	1588.99	08-09-14	1586.18	23/06/2022 03	4	1	25.00
3	Jhelum	Safapora	Jammu & Kashmir	1579.36	1579.66	1582.10	09-09-14	1580.32	23/06/2022 18	8	5	62.50
2 a.	**Ganga Basin**											
4	Alaknanda	Srinagar	Uttarakhand	535.00	536.00	537.90	17-06-13	535.34	05/08/2022 11	4	2	50.00
5	Mandakini	Ganganagar	Uttarakhand	803.00	804.00	801.92	26-06-15	801.2	12/07/2022 05	0	0	-
6	Ganga	Rishikesh	Uttarakhand	339.50	340.50	341.72	05-09-95	339.5	20/08/2022 21	0	0	-
7	Ganga	Haridwar	Uttarakhand	293.00	294.00	296.30	19-09-10	294.68	20/08/2022 06	4	1	25.00
8	Ganga	Garhmuktheswar	Uttar Pradesh	198.33	199.33	199.90	23-09-10	198.65	09/08/2022 16	24	24	100.00
9	Ganga	Kachla Bridge	Uttar Pradesh	161.00	162.00	162.79	23-10-21	162.73	24/08/2022 01	112	108	96.43
10	Ganga	Fathegarh	Uttar Pradesh	136.60	137.60	138.14	26-09-10	137.44	26/08/2022 03	59	59	100.00
11	Ramganga	Moradabad	Uttar Pradesh	189.60	190.60	192.88	21-09-10	190.31	13/10/2022 21	6	6	100.00
12	Ramganga	Bareilly	Uttar Pradesh	162.07	163.07	162.88	06-08-78	160.97	13/10/2022 07	0	0	-
13	Ganga	Dabri	Uttar Pradesh	136.30	137.30	139.70	28-09-83	137.66	16/10/2022 05	14	13	92.86
14	Ganga	Kannauj	Uttar Pradesh	124.97	125.97	126.78	27-09-10	125.48	16/10/2022 06	7	7	100.00

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
15	Ganga	Ankinghat	Uttar Pradesh	123.00	124.00	124.49	28-09-10	123.49	16/10/2022 22	12	12	100.00
16	Ganga	Kanpur	Uttar Pradesh	112.00	113.00	114.08	29-09-10	112.47	17/10/2022 09	7	7	100.00
17	Ganga	Dalmau	Uttar Pradesh	98.36	99.36	99.84	03-08-73	98.43	18/10/2022 09	3	3	100.00
18	Ganga	Phphamau	Uttar Pradesh	83.73	84.73	87.98	08-09-78	85.93	29/08/2022 06	8	6	75.00
19	Yamuna	Paonta Sahib	Himachal Pradesh	383.50	384.50	384.60	05-09-95	383	26/09/2022 04	1	0	0.00
20	Yamuna	Karnal Bridge	Haryana	248.80	249.50	250.07	17-06-13	248.3	27/09/2022 04	1	0	0.00
21	Yamuna	Mawi	Uttar Pradesh	231.00	231.50	232.75	18-06-13	231.16	27/09/2022 11	3	2	66.67
22	Sahibi	Dhansa	NCT Delhi	211.44	212.44	213.58	06-08-77	211.05	09/10/2022 08	0	0	-
23	Yamuna	Delhi Rly Bridge	NCT Delhi	204.50	205.33	207.49	06-09-78	206.59	28/09/2022 06	43	29	67.44
24	Yamuna	Mathura	Uttar Pradesh	165.20	166.00	169.73	08-09-78	165.46	30/09/2022 17	8	5	62.50
25	Yamuna	Agra	Uttar Pradesh	151.40	152.40	154.76	09-09-78	150.3	1/10/2022 03	0	0	-
26	Yamuna	Etawa	Uttar Pradesh	120.92	121.92	126.13	11-09-78	122.1	27/08/2022 08	8	4	50.00
27	Chambal	Manderial	Rajasthan	164.00	165.00	169.96	23-08-96	170.05	25/08/2022 06	3	1	33.33
28	Chambal	Dholpur	Rajasthan	129.79	130.79	145.54	23-08-96	146.57	25/08/2022 19	30	14	46.67
29	Chambal	Kota City	Rajasthan	239.00	242.00	248.68	16-09-19	245.8	23/08/2022 16	15	4	26.67
30	Yamuna	Auraiya	Uttar	112.00	113.00	118.51	06-08-21	117.98	27/08/2022	15	11	73.33

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
			Pradesh						10			
31	Yamuna	Kalpi	Uttar Pradesh	107.00	108.00	112.98	25-08-96	112.93	27/08/2022 14	17	11	64.71
32	Yamuna	Hamirpur	Uttar Pradesh	102.63	103.63	108.59	12-09-83	107.51	27/08/2022 05	15	13	86.67
33	Betwa	Mohana	Uttar Pradesh	121.66	122.66	133.35	11-09-83	122.03	23/08/2022 18	4	2	50.00
34	Betwa	Sahjina	Uttar Pradesh	103.54	104.54	108.67	12-09-83	106.92	26/08/2022 22	12	10	83.33
35	Ken	Banda	Uttar Pradesh	103.00	104.00	113.29	07-07-05	105.67	24/08/2022 04	9	7	77.78
36	Yamuna	Chilaghat	Uttar Pradesh	99.00	100.00	105.16	06-09-78	102.83	27/08/2022 19	17	13	76.47
37	Yamuna	Naini	Uttar Pradesh	83.74	84.74	87.99	08-09-78	85.9	29/08/2022 17	16	14	87.50
38	Ganga	Allahabad Chhatnag	Uttar Pradesh	83.73	84.73	88.03	08-09-78	85.1	29/08/2022 15	6	4	66.67
39	Ganga	Mirzapur	Uttar Pradesh	76.72	77.72	80.34	09-09-78	78.11	30/08/2022 02	6	6	100.00
40	Ganga	Varanasi	Uttar Pradesh	70.26	71.26	73.90	09-09-78	72.14	29/08/2022 21	7	6	85.71
41	Gomati	Lucknow	Uttar Pradesh	108.50	109.50	110.85	10-09-71	106.16	30/10/2022 17	0	0	-
42	SAI	Raibareli	Uttar Pradesh	100.00	101.00	104.81	17-09-82	99.31	20/09/2022 03	0	0	-
43	Gomati	Jaunpur	Uttar Pradesh	73.07	74.07	77.74	22-09-71	71.13	14/10/2022 14	0	0	-
44	Ganga	Ghazipur	Uttar Pradesh	62.10	63.10	65.22	09-09-78	64.39	31/08/2022 01	13	12	92.31
45	Ganga	Buxar	Bihar	59.32	60.32	62.09	01-05-05	60.69	01/09/2022 00	12	11	91.67

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
46	Ganga	Ballia	Uttar Pradesh	56.62	57.62	60.39	25-08-16	59.76	31/08/2022 04	35	26	74.29
47	Ghaghra	Elgin Bridge	Uttar Pradesh	105.07	106.07	107.62	18-08-14	107.36	12/10/2022 04	101	101	100.00
48	Ghaghra	Ayodhya	Uttar Pradesh	91.73	92.73	94.01	11-10-09	93.98	13/10/2022 04	97	95	97.94
49	Rapti	Kakardhari	Uttar Pradesh	130.00	131.00	132.37	15-08-14	131.29	08/10/2022 18	10	10	100.00
50	Rapti	Balrampur	Uttar Pradesh	103.62	104.62	105.54	15-08-17	106.07	10/10/2022 07	43	42	97.67
51	Rapti	Bansi	Uttar Pradesh	83.90	84.90	85.95	03-09-21	86.27	16/10/2022 04	25	25	100.00
52	Rapti	Gorakpur_ Birdghat	Uttar Pradesh	73.98	74.98	77.54	23-08-98	76.11	17/10/2022 07	27	27	100.00
53	Ghaghra	Turtipar	Uttar Pradesh	63.01	64.01	66.00	28-08-98	65.68	15/10/2022 05	81	80	98.77
54	Ghaghra	Darauli	Bihar	59.82	60.82	61.74	29-08-98	61.82	15/10/2022 17	75	75	100.00
55	Ghaghra	Gangpur Siswan	Bihar	56.04	57.04	58.01	18-09-83	57.96	16/10/2022 05	30	30	100.00
56	Ghaghra	Chhapra	Bihar	52.68	53.68	54.59	03-09-82	52.2	01/09/2022 05	0	0	-
57	Sone	Inderpuri	Bihar	107.20	108.20	108.85	23-08-75	103.27	24/08/2022 00	0	0	-
58	Sone	Koelwar	Bihar	54.52	55.52	58.88	20-07-71	52.65	02/09/2022 05	0	0	-
59	Sone	Maner	Bihar	51.00	52.00	53.79	10-09-76	52.57	01/09/2022 00	23	23	100.00
60	Ganga	Patna Dighaghat	Bihar	49.45	50.45	52.52	23-08-75	50.77	01/09/2022 07	22	22	100.00
61	Gandak	Khadda	Uttar	95.00	96.00	97.50	23-07-02	96.32	07/10/2022	198	196	98.99

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
			Pradesh						14			
62	Gandak	Chatia	Bihar	68.15	69.15	70.04	26-07-02	68.13	09/10/2022 17	0	0	-
63	Gandak	Dumariaghat	Bihar	61.22	62.22	64.36	24-07-20	63.52	09/10/2022 09	131	127	96.95
64	Gandak	Rewaghat	Bihar	53.41	54.41	55.46	24-07-20	54.92	10/10/2022 05	29	29	100.00
65	Gandak	Hazipur	Bihar	49.32	50.32	50.93	01-05-05	49.61	01/09/2022 00	5	5	100.00
66	Ganga	Patna Gandhighat	Bihar	47.60	48.60	50.52	20-08-16	49.6	01/09/2022 07	54	53	98.15
67	PunPun	Sripalpur	Bihar	49.60	50.60	53.91	18-09-76	49.64	27/08/2022 06	2	2	100.00
68	Ganga	Hathidah	Bihar	40.76	41.76	43.52	16-08-21	42.7	02/09/2022 02	56	55	98.21
69	Ganga	Munger	Bihar	38.33	39.33	40.99	19-09-76	39.1	04/09/2022 01	16	15	93.75
70	Burhi Gandak	Lalbeghiaghat	Bihar	62.20	63.20	67.09	30-07-75	61.42	04/08/2022 04	0	0	-
71	Burhi Gandak	Ahirwalia	Bihar	58.62	59.62	61.17	02-06-14	57.03	05/08/2022 07	0	0	-
72	Burhi Gandak	Muzaffarpur	Bihar	51.53	52.53	54.29	15-08-87	50.59	07/08/2022 03	0	0	-
73	BurhiGandak	Samastipur	Bihar	45.02	46.02	49.38	15-08-87	43.97	08/08/2022 05	0	0	-
74	BurhiGandak	Rosera	Bihar	41.63	42.63	46.56	02-08-20	41.47	08/08/2022 08	0	0	-
75	BurhiGandak	Khagaria	Bihar	35.58	36.58	39.22	29-05-05	37.76	04/09/2022 01	58	57	98.28

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
76	Ganga	Bhagalpur	Bihar	32.68	33.68	34.86	18-08-21	33.94	02/09/2022 23	33	32	96.97
77	Ganga	Kahalgaon	Bihar	30.09	31.09	32.87	17-09-03	32.05	04/09/2022 01	61	61	100.00
78	Kosi	Basua	Bihar	46.75	47.75	49.24	13-08-17	49.24	02/08/2022 19	290	287	98.97
79	Bagmati	Dheng Bridge	Bihar	70.00	71.00	73.00	13-08-17	71.4	29/06/2022 23	36	30	83.33
80	Bagmati	Runisaidpur	Bihar	54.00	55.00	58.15	14-08-17	56.52	03/08/2022 12	62	55	88.71
81	Bagmati	Benibad	Bihar	47.68	48.68	50.01	12-07-04	49.81	03/08/2022 15	114	113	99.12
82	Adhwara Group	Kamtaul	Bihar	49.00	50.00	52.99	12-08-87	49.92	02/07/2022 08	12	12	100.00
83	Adhwara Group	Ekmighat	Bihar	45.94	46.94	49.52	12-07-04	45.62	10/09/2022 04	0	0	-
84	Bagmati	Hayaghat	Bihar	44.72	45.72	48.96	14-08-87	44.22	06/08/2022 16	0	0	-
85	KamlaBalan	Jainagar	Bihar	66.75	67.75	71.35	21-09-16	68.9	29/06/2022 22	428	424	99.07
86	KamlaBalan	Jhanjharpur	Bihar	49.00	50.00	53.11	14-07-19	51.7	30/06/2022 05	348	347	99.71
87	Adhwara	Sonebarsha	Bihar	80.85	81.85	83.20	03-07-99	81.38	29/06/2022 18	1	1	100.00
88	Kosi	Baltara	Bihar	32.85	33.85	36.40	15-08-87	34.99	05/08/2022 05	121	116	95.87
89	Kosi	Kursela	Bihar	29.00	30.00	32.10	07-09-82	31.16	04/09/2022 21	77	75	97.40
90	Ganga	Sahibgunj	Jharkhand	26.25	27.25	30.91	20/08/1998	28.23	19/10/2022 08	71	71	100.00
91	Mahananda	Taibpur	Bihar	65.00	66.00	67.22	28-07-16	67.26	29/06/2022	55	54	98.18

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
									06			
92	Mahananda	Dhengraghat	Bihar	34.65	35.65	38.20	14-08-17	36.73	30/06/2022 14	55	55	100.00
93	Mahananda	Jhawa	Bihar	30.40	31.40	34.07	14-08-17	32.44	01/07/2022 06	79	76	96.20
94	Parwan	Araria	Bihar	46.00	47.00	49.40	14-08-17	48.26	01/07/2022 14	144	142	98.61
95	Ganga	Farakka	West Bengal	21.25	22.25	25.14	07-09-98	23.23	05/09/2022 09	113	111	98.23
96	Mayurakshi	Narayanpur	West Bengal	26.99	27.99	29.69	27-09-95	24.14	16/09/2022 21	0	0	-
97	Ajoy	Gheropara	West Bengal	38.42	39.42	43.94	27-09-78	35.9	30/09/2022 04	0	0	-
98	Mundeshwari	Harinkhola	West Bengal	11.80	12.80	14.60	28-07-17	11.16	07/10/2022 09	0	0	-
99	Kangsabati	Mohanpur	West Bengal	24.73	25.73	29.87	02-09-78	21.92	21/08/2022 15	0	0	-
2 b	**Brahmaputra Basin**											
100	Siang	Yingkiang	Arunachal Pradesh	303.00	304.00			269.94	18/06/2022 08	0	0	-
101	siang	Passighat	Arunachal Pradesh	152.96	153.96	157.54	11-06-00	152.9	28/06/2022 11	0	0	-
102	Lohit	Dholla Bazaar	Assam	127.27	128.27	130.07	22-09-12	126.53	18/06/2022 06	0	0	-
103	Brahmaputra	Dibrugrah	Assam	104.70	105.70	106.48	03-09-98	105.56	28/06/2022 19	103	103	100.00
104	Noa-Dehing	Namsai	Arunachal Pradesh	144.80	145.80	146.60	07-10-79	144.56	18/06/2022 11	0	0	-
105	Burhidihing	Naharkatia	Assam	119.40	120.40	122.69	17-06-73	118.96	16/05/2022 20	0	0	-

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
106	Burhidihing	Khwong	Assam	101.11	102.11	104.16	02-09-15	103.35	01/07/2022 12	44	44	100.00
107	Desang	Nanglamoraghat	Assam	93.46	94.46	96.49	06-09-98	95.36	04/07/2022 18	78	78	100.00
108	Dikhow	Shivsagar	Assam	91.40	92.40	94.24	22-06-20	92.39	04/07/2022 15	13	13	100.00
109	Brahmaputra	Neamatighat	Assam	84.54	85.54	87.37	11-07-91	86.6	18/06/2022 23	124	123	99.19
110	Subansiri	Choldhowaghat	Assam	99.43	100.43	101.31	27-07-72	96.33	17/06/2022 12	0	0	-
111	Ranganadi	N H Crossing Ranganadi	Assam	93.81	94.81	95.92	02-07-79	94.58	17/06/2022 16	20	19	95.00
112	Subansiri	Badatighat	Assam	81.53	82.53	86.21	28-07-72	82.57	19/06/2022 07	38	38	100.00
113	Dhansiri (S)	Golaghat	Assam	88.50	89.50	92.45	11-10-86	88.34	18/05/2022 00	0	0	-
114	Dhansiri (S)	Numaligarh	Assam	77.42	78.42	80.16	02-08-18	78.22	24/07/2022 19	74	74	100.00
115	Jiabharali	Jiabharali_NTX	Assam	77.00	78.00	78.50	26-07-07	78.1	17/06/2022 07	271	271	100.00
116	Brahmaputra	Tezpur	Assam	64.23	65.23	66.59	27-08-88	65.89	01/07/2022 07	70	70	100.00
117	Kopilli	Kampur	Assam	59.50	60.50	61.79	20-07-04	62.2	18/06/2022 14	56	55	98.21
118	Kopilli	Dharmatul	Assam	55.00	56.00	58.09	21-07-04	58	22/06/2022 03	85	85	100.00
119	Brahmaputra	Guwahati	Assam	48.68	49.68	51.46	21-07-04	49.95	20/06/2022 10	19	19	100.00
120	Puthimari	Puthimari _NHX	Assam	51.31	52.31	55.08	31-08-08	54.49	17/06/2022 12	31	28	90.32
121	Pagladiya	Pagladia_NTX	Assam	51.75	52.75	55.45	08-07-04	53.88	17/06/2022	35	34	97.14

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
									08			
122	Manas	Mathanguri	Assam	98.10	99.10	100.28	13-10-73	96.2	18/06/2022 07	0	0	-
123	Beki	Beki NHX	Assam	44.10	45.10	46.20	04-08-00	45.7	18/06/2022 12	191	191	100.00
124	Manas	Manas NHX	Assam	47.81	48.42	50.08	15-09-84	49.32	16/06/2022 20	41	41	100.00
125	Brahmaputra	Goalpara	Assam	35.27	36.27	37.43	31-07-54	36.64	20/06/2022 22	39	39	100.00
126	Gaurang	Kokrajhar	Assam	41.85	42.85	43.60	20-08-15	43.07	16/06/2022 13	31	30	96.77
127	Brahmaputra	Dhubri	Assam	27.62	28.62	30.37	18-07-19	29.6	21/06/2022 01	111	111	100.00
128	Sankosh	Golakganj	Assam	28.94	29.94	30.95	08-09-07	30	18/06/2022 17	78	78	100.00
129	Raidak-I	Tufanganj	West Bengal	34.22	35.30	36.50	12-08-17	35.27	17/06/2022 18	18	15	83.33
130	Jaldhaka	NH-31	West Bengal	80.00	80.90	81.33	28-08-72	80.3	01/09/2022 13	26	23	88.46
131	Torsa	Hasimara	West Bengal	116.30	116.90	118.50	13-07-96	117.1	18/06/2022 02	2	1	50.00
132	Torsa	Ghughumari	West Bengal	39.80	40.41	41.46	03-08-00	40.56	18/06/2022 11	29	27	93.10
133	Jaldhaka	Mathabhanga	West Bengal	47.70	48.20	49.85	07-09-07	47.98	29/06/2022 05	4	2	50.00
134	Tista	Domohani	West Bengal	85.65	85.95	89.30	14-10-68	86.18	01/08/2022 07	92	82	89.13
135	Tista	Mekhliganj	West Bengal	65.45	65.95	66.62	20-10-21	65.64	02/08/2022 02	4	4	100.00
136	Teesta	Malli Bazaar	Sikkim	223.00	224.00	225.25		217.25	12/10/2022 07	0	0	-

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
137	Teesta	Joretahang(Rothak)	Sikkim	350.60	351.60	353.20		348.95	01/09/2022 14	0	0	-
138	Teesta	Singtam	Sikkim	377.07	377.57	379.17		375.09	23/08/2022 20	0	0	-
2 c	**Barak & Others**											
139	Barak	APGhat	Assam	18.83	19.83	21.84	01-08-89	21.59	21/06/2022 14	68	67	98.53
140	Katakhal	Matizuri	Assam	19.27	20.27	22.73	10-09-07	22.49	21/06/2022 08	44	43	97.73
141	Kushiyara	Karimganj	Assam	13.94	14.94	16.57	10-06-10	16.52	22/06/2022 20	85	85	100.00
142	Barak	Badarpurghat	Assam	15.85	16.85	18.48	11-09-07	18.44	23/06/2022 08	82	81	98.78
143	Manu	Kailashar	Tripura	24.34	25.34	25.95	13-06-18	23.49	24/08/2022 11	0	0	-
144	Gumti	Sonamura	Tripura	11.50	12.50	14.42	23-07-93	12.01	20/06/2022	4	4	100.00
3.	**Godavari Basin**											
145	Godavari	Nasik	Maharashtra	558.10	559.60	563.51	04-08-19	558.91	12/07/2022 01	3	2	66.67
146	Godavari	Kopergaon	Maharashtra	490.90	493.68	499.17	22-05-05	493.2	12/07/2022 20	33	25	75.76
147	Godavari	Gangakhed	Maharashtra	374.00	375.00	377.57	30-04-05	370.98	19/09/2022 17	0	0	-
148	Godavari	Nanded	Maharashtra	353.00	354.00	357.10	06-08-06	349.84	13/07/2022 18	0	0	-
149	Wainganga	Bhandara	Maharashtra	245.50	245.70	250.90	16-09-05	248.38	16/08/2022 22	0	0	-
150	Wainganga	Pauni	Maharashtra	226.73	227.73	237.12	07-09-94	229.35	17/08/2022 05	0	0	-

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
151	Wardha	Balharsha	Maharashtra	171.50	174.00	176.45	14-08-86	173.67	20/07/2022 22	24	21	87.50
152	Wardha	Sirpur Town	Telangana	159.95	160.95	161.34	18-08-18	162.57	15/07/2022 04	32	26	81.25
153	Godavari	Kaleswaram	Telangana	103.50	104.75	107.05	15-08-86	108.19	15/07/2022 00	10	8	80.00
154	Indravati	Jagdalpur	Chhatisgarh	539.50	540.80	544.68	09-07-73	542.9	16/08/2022 11	18	17	94.44
155	Godavari	Eturunagaram	Telangana	73.32	75.82	77.66	24-08-90	77.11	15/07/2022 06	45	39	86.67
156	Godavari	Dummagudam	Telangana	53.00	55.00	60.25	15-08-86	59.62	15/07/2022 18	47	42	89.36
157	Godavari	Bhadrachalam	Telangana	45.72	48.77	55.66	16-08-86	54.34	16/07/2022 01	59	54	91.53
158	Sabari	Chinturu	Andhra Pradesh	41.50	43.00	44.91	18-08-20	49.4	16/07/2022 18	34	29	85.29
159	Godavari	Kunavaram	Andhra Pradesh	37.74	39.24	51.30	16-08-86	48.87	16/07/2022 16	68	68	100.00
160	Godavari	Rajamundry	Andhra Pradesh	17.68	19.51	20.48	16-08-86	19.38	17/07/2022 07	11	11	100.00
161	Godavari	Dowalaiswaram	Andhra Pradesh	14.25	16.08	18.36	16-08-86	17.29	17/07/2022 02	57	57	100.00
162	Godavari	Atreyapuram	Andhra Pradesh	13.50	15.00	14.16	18-08-20	14.12	17/07/2022 03	5	5	100.00
4. Krishna Basin												
163	Krishna	Arjunwad	Maharashtra	539.20	540.70	544.35	09-08-19	536.74	13/08/2022 06	0	0	-
164	Bhima	Deongaon	Karnataka	402.00	404.50	409.00	18-10-20	403.43	21/10/2022 00	9	5	55.56
165	Tungabhadra	Mantralayam	Andhra Pradesh	310.00	312.00	318.77	02-10-09	312.45	09/09/2022 03	89	72	80.90

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
166	Tungabhadra	Kurnool	Andhra Pradesh	273.00	274.00	281.23	02-10-09	273.5	08/09/2022 20	14	9	64.29
167	Krishna	Avanigadda	Andhra Pradesh	9.00	11.00	11.87	05-10-09	7.6	18/10/2022	0	0	-
5.	**Cauvery Basin**											
168	Cauvery	Musiri	Tamil Nadu	82.12	83.12	86.98	25-11-05	84.3	05/08/2022 18	108	101	93.52
169	Cauvery	Kodumudi	Tamil Nadu	125.50	126.50	128.14	17-08-18	127.83	05/08/2022 07	65	58	89.23
170	Bhavani	Savandapur	Tamil Nadu	184.50	185.50	187.75	17-08-18	184.88	06/08/2022 11	1	1	100.00
6.	**Subarnarekha**											
171	Subernarekna	Jamshedpur	Jharkhand	122.50	123.50	129.82	12-10-73	125.36	21/08/2022 06	4	2	50.00
172	Subernarekna	Rajghat	Odisha	9.45	10.36	12.69	19-06-08	11.9	22/08/2022 04	3	3	100.00
173	Jalaka	Mathani Road Bridge	Odisha	5.50	5.50	7.31	22-09-21	6.97	21/08/2022 00	87	83	95.40
174	Burhabalang	NH_5 _Road Bridge	Odisha	7.21	8.13	9.50	12-10-73	7.58	20/08/2022 20	4	4	100.00
7.	**Brahmani and Baitarani**											
175	Baitarni	Anandpur	Odisha	37.44	38.36	41.35	23-09-11	39.12	21/08/2022 03	7	4	57.14
176	Baitarni	Akhuapada	Odisha	17.83	17.83	21.95	16-08-60	19.02	21/08/2022 15	11	9	81.82
177	Brahmani	Jenapur	Odisha	22.00	23.00	24.78	20-08-75	21.23	25/08/2022 18	0	0	-
8.	**Mahanadi Basin**											

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
178	Mahanadi	Naraj	Odisha	25.41	26.41	27.61	31-08-82	27.49	17/08/2022 08	17	16	94.12
179	Mahanadi	Alipingal Devi	Odisha	10.85	11.76	13.11	11-09-11	12.06	17/08/2022 06	9	8	88.89
180	Mahanadi	Nimapara	Odisha	9.85	10.76	11.60	31-08-82	10.58	17/08/2022 13	8	8	100.00
9. Pennar Basin												
181	Pennar	Nellore	Andhra Pradesh	15.91	17.28	19.57	20-11-21	12.4	15/10/2022 22	0	0	-
10. Mahi Basin												
182	Mahi	Wanakbori	Gujarat	71.93	74.98	76.10	12-08-06	71.17	24/08/2022 01	0	0	-
11. Sabarmati Basin												
183	Sabarmati	Ahmedabad Shubhash Bridge	Gujarat	44.09	45.34	47.45	19-08-06	42.8	24/08/2022 20	0	0	-
12. Narmada Basin												
184	Naramada	Mandla	Madhya Pradesh	437.20	437.80	439.40	15-07-74	438.5	22/08/2022 01	19	19	100.00
185	Naramada	Hoshangabad	Madhya Pradesh	292.80	293.80	301.33	27-08-72	294.85	22/08/2022 21	23	23	100.00
186	Naramada	Garudeswar	Gujarat	30.48	31.09	41.65	06-09-70	25.7	24/08/2022 21	0	0	-
187	Naramada	Bharuch	Gujarat	6.71	7.31	12.65	07-09-70	8.52	25/08/2022 06	23	23	100.00

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
13. Tapi Basin												
188	Tapi	Surat	Gujarat	8.50	9.50	12.50	09-08-06	6.6	20/07/2022 10	0	0	-
14. West Flowing Rivers from Tapi to Tadri												
189	Damanganga	Vapi Town	Gujarat	18.20	19.20	23.76	03-08-04	17.55	12/07/2022 04	0	0	-
190	Damanganga	Daman	Daman & Diu	2.60	3.40	4.00	03-08-04	2.5	16/09/2022 00	0	0	-
15. East Flowing Rivers between Mahanadi and Pennar												
191	Rushikuluya	Purushottampur	Odisha	15.83	16.83	19.65	04-11-90	15.79	06/10/2022 02	0	0	-
192	Vamsadhara	Gunupur	Odisha	83.00	84.00	88.75	17-09-80	83.97	14/08/2022 19	10	7	70.00
193	Vamsadhara	Kashinagar	Odisha	54.10	54.60	58.93	18-09-80	55.84	14/08/2022 22	33	29	87.88
194	Nagavali	Srikakulam	Andhra Pradesh	10.17	10.80	14.53	12-05-90	10.77	15/08/2022 13	19	15	78.95
16 East flowing Rivers between Pennar and Kanyakumari												
195	Vaigai	Madurai	Tamil Nadu	131.50	132.50	134.76	17-11-97	131.7	18/10/2022 14	4	3	75.00
17. West Flowing Rivers of Kutch and Saurashtra including Luni												
196	Banas	Abu Road	Rajasthan	258.00	259.00	265.40	31-08-73	258.3	17/08/2022 18	0	0	-
18. West Flowing River Tadri to Kanyakumari												
197	Periyar	Neeleswaram	Kerala	9.00	10.00	12.40	15-08-18	7.32	02/08/2022 06	0	0	-
198	Bharathapuzha	Kumbidi	Kerala	8.20	9.20	11.27	17-08-18	7.9	17/07/2022 05	0	0	-

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Table 3.3: Basin-wise -River-wise- Flood Forecasting Information in India during Flood Season, 2022

Sl. No.	Name of the River	Name of Flood Forecasting site	Name of State	Warning Level (m)	Danger Level (m)	Highest Flood Level		Maximum Level -2022		No. of Forecasts Issued	No. of Forecasts within Limits	Percentage of Accuracy
						Level (m)	Date/ Month/ Year	Level (m)	Date and Time (DD/MM/YY)			
1	2	3	4	5	6	7	8	9	10	11	12	13
199	Pamba	Malakkara	Kerala	6.00	7.00	9.58	16-08-18	6.46	04/08/2022 20	3	1	33.33
								Total Level Forecasts		***6779***	***6476***	**95.53**
								Total Inflow Forecasts		**4779**	**4369**	**91.42**
								Total Forecasts		**11558**	**10845**	**93.83**

Source: FFM Directorate, Central Water Commission, M/o Jal Shakti

Table 3.4: Flood Forecasting Performance from 2000 to 2022

Sl. No.	Year	No. of Level Forecasts Issued			No. of Inflow Forecasts Issued			Total No. of Forecasts Issued		
		Total	Within +/-15 cm of Deviation from Actual	Accuracy (%)	Total	Within +/-20% cumec of Deviation from Actual	Accuracy (%)	Total	Within +/-15 cm or +/-20% cumec of Deviation from Actual	Accuracy (%)
1	2	3	4	5	6	7	8	9	10	11
1	2000	5622	5504	97.90	821	747	90.99	6443	6251	97.02
2	2001	4606	4533	98.42	857	809	94.40	5463	5342	97.79
3	2002	3618	3549	98.09	623	602	96.63	4241	4151	97.88
4	2003	5989	5789	96.66	611	586	95.91	6600	6375	96.59
5	2004	4184	4042	96.61	705	654	92.77	4889	4696	96.05
6	2005	4323	4162	96.28	1295	1261	97.37	5618	5423	96.53
7	2006	5070	4827	95.21	1593	1550	97.30	6663	6377	95.71
8	2007	6516	6339	97.28	1707	1651	96.72	8223	7990	97.17
9	2008	5670	5551	97.90	1021	1003	98.24	6691	6554	97.95
10	2009	3343	3298	98.65	667	629	94.30	4010	3927	97.93
11	2010	6491	6390	98.44	1028	988	96.11	7519	7378	98.12
12	2011	4848	4795	98.91	1143	1109	97.03	5991	5904	98.55
13	2012	4200	4136	98.47	831	803	96.63	5031	4939	98.17
14	2013	5741	5471	95.30	1319	1289	97.73	7060	6760	95.75
15	2014	3884	3804	97.94	888	863	97.18	4772	4667	97.80
16	2015	3500	3429	97.97	572	562	98.25	4072	3991	98.01
17	2016	4969	4891	98.43	1270	1057	83.23	6239	5948	95.34
18	2017	5085	4975	97.84	1212	926	76.40	6297	5901	93.71
19	2018	4969	4871	98.03	1882	1624	86.29	6851	6495	94.80
20	2019	6004	5773	96.15	3750	2678	71.41	9754	8451	86.64
21	2020	8243	8133	98.67	3478	3065	88.13	11721	11198	95.54
22	2021	6670	6456	96.79	3947	3520	89.18	10617	9976	93.96
23	2022	6779	6476	95.53	4779	4369	91.42	11558	10845	93.83
Average		**5231**	**5095**	**97.40**	**1565**	**1406**	**89.84**	**6797**	**6502**	**95.66**

Source: FFM Directorate, Central Water Commission, M/o Jal Shakti

Table 3.5: Site-wise 'Forecast Performance' of Flood Forecasting sites of CWC in Flood Season, 2022

Sl. No.	Details	No. of Sites	% age
1	**2**	**3**	**4**
1	Sites with performance accuracy between 0.0% to 25%	8	3.40%
2	Sites with performance accuracy between 25.1% to 50%	16	6.81%
3	Sites with performance accuracy between 50.1% to 75%	27	11.49%
4	Sites with performance accuracy between 75.1% to 99.99%	106	45.11%
5	Sites with 100% performance accuracy	78	33.19%
6	Total sites where forecasts were issued	235	100%

Source: FFM Directorate, Central Water Commission, M/o Jal Shakti

Table 3.6: Extreme Flood Events in India under CWC FF&W Network - 2022 Flood Season

Sl. No.	River	Station	State	Danger Level (m)	Existing Highest Flood Level (HFL)		New HFL		Duration	
					Level (m)	Date of Occurrence	Level	Date and Time of Occurrence	From	To
1	2	3	4	5	6	7	8	9	10	11
1	Kopili	Kampur	Assam	60.50	61.79	20-07-04	62.20	18/06/2022 1400	15/05/2022 1600 16/06/2022 1600	21/05/2022 2000 22/06/2022 1600
2	Mahananda	Taibpur	Bihar	66.00	67.22	28-07-16	67.26	29/09/2022 0600	29/06/2022 0400	29/06/2022 0800
3	Kosi	Basua	Bihar	47.75	49.24	13-08-17	49.24	02/08/2022 1900	02/08/2022 1900	02/08/2022 2200
4	Ghagra	Darauli	Bihar	60.82	61.74	29-08-98	61.82	15/10/2022 1700	14/10/2022 0600	16/10/2022 2200
5	Godavari	Kaleswaram	Telangana	104.75	107.05	15-08-86	108.19	15/07/2022 0000	14/07/2022 0600	15/07/2022 1200
6	Wardha	Sirpur(T)	Telangana	160.95	161.34	18-08-18	162.57	15/07/2022 0400	14/07/2022 0300	17/07/2022 0200
7	Sabri	Chinturu	Andhra Pradesh	43.00	44.91	18-08-20	49.4	16/07/2022 1800	15/07/2022 0100	19/07/2022 1000
8	Chambal	Manderial	Rajasthan	165.00	169.96	23-08-96	170.05	25/08/2022 0600	25/08/2022 0400	25/08/2022 1100
9	Chambal	Dholpur	Rajasthan	130.79	145.54	23-08-96	146.57	25/08/2022 1900	25/08/2022 0600	26/08/2022 0700
10	Rapti	Balrampur	Uttar Pradesh	104.62	105.54	15-08-17	106.07	10/10/2022 0700	08/10/2022 1100	13/10/2022 1900
11	Rapti	Bansi	Uttar Pradesh	84.90	85.95	03-09-21	86.27	16/10/2022 0400	14/10/2022 1600	19/10/2022 0900

Source: FFM Directorate, Central Water Commission, M/o Jal Shakti

Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Alaknanda	Srinagar	Uttarakhand	535.0	536.00	535.34	05/08/2022	13/07/2022 08	13/07/2022 09	1	-	-	-
								14/07/2022 08	14/07/2022 17	1	-	-	-
								28/07/2022 08	28/07/2022 11	1	-	-	-
								31/07/2022 00	31/07/2022 01	1	-	-	-
								05/08/2022 10	05/08/2022 16	1	-	-	-
2	Ganga	Rishikesh	Uttarakhand	339.50	340.50	339.5	20/08/2022	20/08/2022 21	20/08/2022 21	1	-	-	-
3	Ganga	Haridwar	Uttarakhand	293.00	294.00	294.68	20/08/2022	28/07/2022 19	28/07/2022 19	1	-	-	-
								31/07/2022 13	31/07/2022 13	1	-	-	-
								05/08/2022 18	05/08/2022 19	1	-	-	-
								07/08/2022 19	07/08/2022 19	1	-	-	-
								20/08/2022 05	21/08/2022 01	2	-	-	-
4	Mandakini	Ganganagar	Uttarakhand	803.00	804.00	801.2	12/07/2022	-	-	-	-	-	-
5	Ganga	Kannauj	Uttar Pradesh	124.97	125.97	125.48	16/10/2022	13/10/2022 06	19/10/2022 23	7	-	-	-
6	Ganga	Ankinghat	Uttar Pradesh	123.00	124.00	123.49	16/10/2022	30/09/2022 23	03/10/2022 03	4	-	-	-
								12/10/2022 18	20/10/2022 12	9	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
7	Ganga	Kanpur	Uttar Pradesh	112.00	114.00	112.47	17/10/2022	14/10/2022 09	20/10/2022 12	7	-	-	-
8	Ganga	Dalmau	Uttar Pradesh	98.36	99.36	98.43	18/10/2022	17/10/2022 10	19/10/2022 22	3	-	-	-
9	Ganga	Phphamau	Uttar Pradesh	83.73	84.73	85.93	29/08/2022	25/08/2022 10	01/09/2022 07	8	26/08/2022 11	31/08/2022 16	6
10	Ganga	Allahabad Chhatnag	Uttar Pradesh	83.73	84.73	85.1	29/08/2022	26/08/2022 03	31/08/2022 17	6	27/08/2022 19	30/08/2022 21	4
11	Ganga	Mirzapur	Uttar Pradesh	76.72	77.72	78.11	30/08/2022	26/08/2022 08	01/09/2022 06	7	28/08/2022 10	31/08/2022 09	4
12	Ganga	Varanasi	Uttar Pradesh	70.26	71.26	72.14	29/08/2022	25/08/2022 13	02/09/2022 00	9	27/08/2022 00	01/09/2022 06	6
13	Ganga	Ghazipur	Uttar Pradesh	62.10	63.10	64.39	31/08/2022	20/08/2022 02	03/09/2022 03	15	26/08/2022 05	02/09/2022 10	8
14	Ganga	Buxar	Bihar	59.32	60.32	60.69	01/09/2022	20/08/2022 23	23/08/2022 16	4	28/08/2022 04	30/08/2022 23	3
								25/08/2022 09	30/08/2022 23	6	01/09/2022 00	02/09/2022 04	2
								01/09/2022 00	03/09/2022 11	3	-	-	-
15	Ganga	Ballia	Uttar Pradesh	56.62	57.62	59.76	31/08/2022	18/08/2022 14	06/09/2022 06	20	19/08/2022 23	04/09/2022 05	16
								21/09/2022 22	02/10/2022 02	12	15/10/2022 07	18/10/2022 17	4
								13/10/2022 23	21/10/2022 23	9	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	Ganga	Patna Dighaghat	Bihar	49.45	50.45	50.77	01/09/2022	21/08/2022 01	30/08/2022 23	10	29/08/2022 11	30/08/2022 23	2
								01/09/2022 00	05/09/2022 08	5	01/09/2022 00	03/09/2022 20	3
								13/10/2022 10	20/10/2022 01	8	-	-	-
17	Ganga	Patna Gandhighat	Bihar	47.60	48.60	49.6	01/09/2022	02/08/2022 22	06/08/2022 22	5	22/08/2022 00	23/08/2022 17	2
								19/08/2022 16	09/09/2022 09	22	25/08/2022 02	30/08/2022 23	6
								20/09/2022 10	02/10/2022 12	13	01/09/2022 00	05/09/2022 00	5
								08/10/2022 05	23/10/2022 07	16	14/10/2022 21	19/10/2022 08	6
18	Ganga	Hathidah	Bihar	40.76	41.76	42.7	02/09/2022	04/08/2022 04	07/08/2022 16	4	22/08/2022 21	30/08/2022 23	9
								20/08/2022 05	10/09/2022 18	22	01/09/2022 00	06/09/2022 02	6
								20/09/2022 16	04/10/2022 02	15	11/10/2022 02	21/10/2022 10	11
								08/10/2022 02	25/10/2022 10	17	-	-	-
19	Ganga	Munger	Bihar	38.33	39.33	39.1	04/09/2022	27/08/2022 11	30/08/2022 23	4	-	-	-
								01/09/2022 00	06/09/2022 15	6	-	-	-
								16/10/2022 23	20/10/2022 13	5	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
20	Ganga	Bhagalpur	Bihar	32.68	33.68	33.94	02/09/2022	23/08/2022 10	30/08/2022 23	8	01/09/2022 00	06/09/2022 02	6
								01/09/2022 00	08/09/2022 22	8	-	-	-
								24/09/2022 09	28/09/2022 07	5	-	-	-
								11/10/2022 20	23/10/2022 10	13	-	-	-
21	Ganga	Colgong/ Kahalgaon	Bihar	30.09	31.09	32.05	04/09/2022	03/08/2022 21	11/08/2022 06	9	25/08/2022 15	30/08/2022 23	6
								21/08/2022 16	12/09/2022 16	23	01/09/2022 00	09/09/2022 13	9
								19/09/2022 13	05/10/2022 16	17	25/09/2022 19	27/09/2022 08	3
								08/10/2022 16	26/10/2022 15	19	12/10/2022 22	22/10/2022 16	11
22	Ganga	Sahibganj	Jharkhand	26.25	27.25	28.23	19/10/2022	03/08/2022 22	13/08/2022 05	11	27/08/2022 06	30/08/2022 23	4
								22/08/2022 08	14/09/2022 03	24	01/09/2022 00	09/09/2022 07	9
								19/09/2022 17	07/10/2022 20	19	25/09/2022 15	27/09/2022 06	3
								08/10/2022 22	27/10/2022 02	20	13/10/2022 15	23/10/2022 21	11
23	Ganga	Farakka	West Bengal	21.25	22.25	23.23	05/09/2022	03/08/2022 01	03/08/2022 15	1	27/08/2022 10	30/08/2022 23	4
								04/08/2022 11	12/08/2022 09	9	01/09/2022 00	10/09/2022 04	10
								22/08/2022 15	14/09/2022 14	24	14/10/2022 15	22/10/2022 20	9

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								22/09/2022 08	06/10/2022 12	15	-	-	-
								11/10/2022 06	26/10/2022 05	16	-	-	-
24	Ramganga	Moradabad	Uttar Pradesh	189.60	190.60	190.31	13/10/2022	10/10/2022 21	15/10/2022 19	6	-	-	-
25	Ramganga	Bareilly	Uttar Pradesh	162.07	163.07	160.97	13/10/2022	-	-	-	-	-	-
26	Yamuna	Mawi	Uttar Pradesh	231.00	231.50	231.16	27/09/2022	27/09/2022 05	27/09/2022 22	1	-	-	-
27	Yamuna	Delhi Rly Bridge	NCT Delhi	204.50	205.33	206.59	28/09/2022	01/08/2022 00	03/08/2022 22	3	07/08/2022 17	08/08/2022 05	2
								05/08/2022 23	10/08/2022 20	6	12/08/2022 16	14/08/2022 01	3
								12/08/2022 11	15/08/2022 23	4	26/09/2022 21	29/09/2022 11	4
								17/08/2022 00	18/08/2022 11	2	-	-	-
								22/08/2022 16	23/08/2022 04	2	-	-	-
								26/09/2022 01	03/10/2022 07	8	-	-	-
28	Yamuna	Mathura	Uttar Pradesh	165.20	166.00	165.46	30/09/2022	29/09/2022 13	01/10/2022 21	3	-	-	-
29	Yamuna	Agra	Uttar Pradesh	151.40	152.40	150.3	01/10/2022	-	-	-	-	-	-
30	Yamuna	Etawa	Uttar Pradesh	120.92	121.92	122.1	27/08/2022	25/08/2022 21	28/08/2022 09	4	26/08/2022 18	27/08/2022 15	2

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
31	Yamuna	Auraiya	Uttar Pradesh	112.00	113.00	117.98	27/08/2022	19/08/2022 05	19/08/2022 21	1	24/08/2022 10	29/08/2022 12	6
								24/08/2022 05	29/08/2022 17	6	-	-	-
32	Yamuna	Kalpi	Uttar Pradesh	107.00	108.00	112.93	27/08/2022	19/08/2022 08	20/08/2022 03	2	24/08/2022 12	30/08/2022 11	7
								24/08/2022 07	30/08/2022 16	7	-	-	-
33	Yamuna	Hamirpur	Uttar Pradesh	102.63	103.63	107.51	27/08/2022	19/08/2022 12	19/08/2022 22	1	24/08/2022 07	30/08/2022 01	7
								24/08/2022 02	30/08/2022 09	7	-	-	-
34	Yamuna	Chilaghat	Uttar Pradesh	99.00	100.00	102.83	27/08/2022	24/08/2022 04	30/08/2022 23	7	24/08/2022 10	30/08/2022 17	7
35	Yamuna	Naini	Uttar Pradesh	83.74	84.74	85.9	29/08/2022	25/08/2022 11	01/09/2022 03	8	26/08/2022 14	31/08/2022 12	6
36	Sahibi	Dhansa	NCT Delhi	211.44	212.44	211.05	09/10/2022	-	-	-	-	-	-
37	Betwa	Mohana	Uttar Pradesh	121.66	122.66	122.03	23/08/2022	23/08/2022 08	24/08/2022 05	2	-	-	-
38	Betwa	Sahjina	Uttar Pradesh	103.54	104.54	106.92	26/08/2022	24/08/2022 05	29/08/2022 22	6	24/08/2022 14	29/08/2022 13	6
39	Ken	Banda	Uttar Pradesh	103.00	104.00	105.67	24/08/2022	22/08/2022 21	25/08/2022 00	4	23/08/2022 01	24/08/2022 19	2
40	Gomati	Lucknow	Uttar Pradesh	108.50	109.50	106.16	30/10/2022	-	-	-	-	-	-
41	Gomati	Jaunpur	Uttar Pradesh	73.07	74.07	71.13	14/10/2022	-	-	-	-	-	-
42	SAI	Raibareli	Uttar Pradesh	100.00	101.00	99.31	20/09/2022	-	-	-	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
43	Ghaghra	Elginbridge	Uttar Pradesh	105.07	106.07	107.36	12/10/2022	01/07/2022 14	02/07/2022 15	2	01/08/2022 20	02/08/2022 09	2
								10/07/2022 14	04/10/2022 02	87	06/08/2022 00	09/08/2022 16	4
								06/10/2022 18	23/10/2022 05	18	30/08/2022 20	31/08/2022 14	2
								-	-	-	03/09/2022 11	05/09/2022 12	3
								-	-	-	17/09/2022 10	21/09/2022 09	5
								-	-	-	26/09/2022 13	28/09/2022 13	3
								-	-	-	08/10/2022 00	16/10/2022 08	9
44	Ghaghra	Ayodhya	Uttar Pradesh	91.73	92.73	93.98	13/10/2022	12/07/2022 08	12/07/2022 22	1	04/09/2022 16	05/09/2022 22	2
								17/07/2022 05	18/07/2022 17	2	18/09/2022 02	22/09/2022 05	5
								21/07/2022 20	29/08/2022 05	9	27/09/2022 18	28/09/2022 23	2
								30/08/2022 08	10/09/2022 17	12	08/10/2022 17	18/10/2022 01	11
								11/09/2022 11	04/10/2022 02	24	-	-	-
								06/10/2022 04	25/10/2022 15	20	-	-	-
45	Ghaghra	Turtipar	Uttar Pradesh	63.01	64.01	65.68	15/10/2022	23/07/2022 09	26/07/2022 14	4	03/08/2022 20	04/08/2022 16	4
								29/07/2022 15	17/08/2022 02	20	07/08/2022 20	11/08/2022 14	5

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								19/08/2022 13	20/08/2022 16	2	05/09/2022 15	07/09/2022 23	3
								25/08/2022 03	25/08/2022 13	1	18/09/2022 22	25/09/2022 10	8
								01/09/2022 02	11/09/2022 06	11	28/09/2022 01	01/10/2022 05	4
								15/09/2022 08	05/10/2022 09	21	09/10/2022 02	21/10/2022 17	13
								06/10/2022 00	31/10/2022 00	26	-	-	-
46	Ghaghra	Darauli	Bihar	59.82	60.82	61.82	15/10/2022	23/07/2022 19	26/07/2022 15	4	19/09/2022 15	24/09/2022 20	6
								31/07/2022 03	16/08/2022 19	17	29/09/2022 09	30/09/2022 15	2
								31/08/2022 00	31/08/2022 23	1	09/10/2022 13	20/10/2022 11	12
								01/09/2022 13	11/09/2022 06	11	-	-	-
								15/09/2022 13	06/10/2022 00	22	-	-	-
								07/10/2022 06	30/10/2022 02	24	-	-	-
47	Ghaghra	Gangpur Siswan	Bihar	56.04	57.04	57.96	16/10/2022	02/09/2022 07	05/09/2022 00	4	23/09/2022 01	24/09/2022 04	2
								06/09/2022 01	08/09/2022 12	3	12/10/2022 01	19/10/2022 12	8
								20/09/2022 01	23/09/2022 01	4	-	-	-
								24/09/2022 05	27/09/2022 05	4	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								28/09/2022 08	02/10/2022 00	5	-	-	-
								10/10/2022 01	12/10/2022 00	3	-	-	-
								19/10/2022 13	30/10/2022 02	12	-	-	-
48	Ghaghra	Chhapra	Bihar	52.68	53.68	52.2	01/09/2022	-	-	-	-	-	-
49	Rapti	Balrampur	Uttar Pradesh	103.62	104.62	106.07	10/10/2022	02/09/2022 10	03/09/2022 13	2	18/09/2022 22	20/09/2022 03	3
								17/09/2022 14	22/09/2022 09	6	06/10/2022 19	15/10/2022 20	10
								25/09/2022 07	26/09/2022 19	2	-	-	-
								06/10/2022 09	18/10/2022 02	13	-	-	-
50	Rapti	Bansi	Uttar Pradesh	83.90	84.90	86.27	16/10/2022	19/09/2022 04	23/09/2022 06	5	10/10/2022 17	22/10/2022 06	13
								26/09/2022 18	26/09/2022 22	1	-	-	-
								06/10/2022 23	24/10/2022 03	19	-	-	-
51	Rapti	Birdghat	Uttar Pradesh	73.98	74.98	76.11	17/10/2022	18/09/2022 23	25/09/2022 23	8	09/10/2022 06	24/10/2022 23	16
								07/10/2022 07	27/10/2022 18	21	-	-	-
52	Sone	Inderpuri	Bihar	107.20	108.20	103.27	24/08/2022	-	-	-	-	-	-
53	Sone	Koelwar	Bihar	54.52	55.52	52.65	02/09/2022	-	-	-	-	-	-
54	Sone	Maner	Bihar	51.00	52.00	52.57	01/09/2022	20/08/2022 10	30/08/2022 23	11	27/08/2022 01	30/08/2022 23	4

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								01/09/2022 00	05/09/2022 04	5	01/09/2022 00	03/09/2022 18	3
								13/10/2022 03	20/10/2022 04	8	-	-	-
55	PunPun	Sripalpur	Bihar	49.60	50.60	49.64	27/08/2022	27/08/2022 02	28/08/2022 12	2	-	-	-
56	Yamuna	Karnal Bridge	Haryana	248.80	249.50	248.3	27/09/2022	-	-	-	-	-	-
57	Yamuna	Paonta Sahib	Himachal Pradesh	383.50	384.50	383	26/09/2022	-	-	-	-	-	-
58	Gandak	Khadda	Uttar Pradesh	95.00	96.00	96.32	07/10/2022	19/06/2022 21	20/06/2022 11	2	07/10/2022 03	08/10/2022 10	2
								25/06/2022 13	01/07/2022 06	7	-	-	-
								09/07/2022 22	10/07/2022 18	2	-	-	-
								21/07/2022 05	16/08/2022 07	27	-	-	-
								19/08/2022 15	22/08/2022 07	4	-	-	-
								24/08/2022 12	25/08/2022 08	2	-	-	-
								27/08/2022 17	08/09/2022 23	13	-	-	-
								10/09/2022 00	14/09/2022 10	5	-	-	-
								15/09/2022 06	20/09/2022 00	6	-	-	-
								06/10/2022 05	13/10/2022 11	8	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
59	Ganga	Fathegarh	Uttar Pradesh	136.60	137.60	137.44	26/08/2022	17/07/2022 14	19/07/2022 00	3	-	-	-
								29/07/2022 12	29/07/2022 15	1	-	-	-
								01/08/2022 03	29/08/2022 16	29	-	-	-
								20/09/2022 16	04/10/2022 21	15	-	-	-
								09/10/2022 12	19/10/2022 19	11	-	-	-
60	Ganga	Dabri	Uttar Pradesh	136.30	137.30	137.66	16/10/2022	29/09/2022 09	01/10/2022 22	3	14/10/2022 06	18/10/2022 10	5
								11/10/2022 13	22/10/2022 07	12	-	-	-
61	Ganga	Garhmukthe-swar	Uttar Pradesh	198.33	199.33	198.65	09/08/2022	13/07/2022 15	13/07/2022 16	1	-	-	-
								29/07/2022 13	02/08/2022 14	5	-	-	-
								04/08/2022 10	04/08/2022 13	1	-	-	-
								05/08/2022 09	10/08/2022 20	6	-	-	-
								11/08/2022 14	11/08/2022 20	1	-	-	-
								12/08/2022 09	13/08/2022 16	2	-	-	-
								16/08/2022 13	17/08/2022 21	2	-	-	-
								20/08/2022 19	23/08/2022 06	4	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								19/09/2022 06	19/09/2022 10	1	-	-	-
								27/09/2022 09	27/09/2022 21	1	-	-	-
								12/10/2022 01	12/10/2022 06	1	-	-	-
62	Ganga	Kachla Bridge	Uttar Pradesh	161.00	162.00	162.73	24/08/2022	03/07/2022 19	04/07/2022 10	2	15/07/2022 13	17/07/2022 22	3
								10/07/2022 19	08/09/2022 18	61	27/07/2022 05	28/07/2022 17	2
								13/09/2022 15	06/11/2022 02	55	30/07/2022 17	20/08/2022 07	22
								-	-	-	21/08/2022 20	26/08/2022 14	6
								-	-	-	27/08/2022 00	27/08/2022 10	1
								-	-	-	31/08/2022 18	01/09/2022 06	2
								-	-	-	18/09/2022 18	21/09/2022 15	4
								-	-	-	22/09/2022 06	03/10/2022 01	12
								-	-	-	09/10/2022 04	16/10/2022 21	8
63	Gandak	Chatia	Bihar	68.15	69.15	68.13	09/10/2022	-	-	-	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
64	Gandak	Rewaghat	Bihar	53.41	54.41	54.92	10/10/2022	30/06/2022 23	02/07/2022 16	3	05/08/2022 11	06/08/2022 09	2
								02/08/2022 13	10/08/2022 08	9	31/08/2022 11	31/08/2022 23	1
								29/08/2022 22	01/09/2022 08	4	08/10/2022 17	11/10/2022 17	4
								02/09/2022 13	06/09/2022 20	5	-	-	-
								17/09/2022 01	20/09/2022 11	4	-	-	-
								07/10/2022 22	13/10/2022 08	7	-	-	-
65	Gandak	Hazipur	Bihar	49.32	50.32	49.61	01/09/2022	29/08/2022 19	30/08/2022 23	2	-	-	-
								01/09/2022 00	04/09/2022 08	4	-	-	-
66	Burhi Gandak	Lalbeghiaghat	Bihar	62.20	63.20	61.42	04/08/2022	-	-	-	-	-	-
67	Burhi Gandak	Muzaffarpur (Sikandarpur)	Bihar	51.53	52.53	50.59	07/08/2022	-	-	-	-	-	-
68	Burhi Gandak	Samastipur	Bihar	45.02	46.02	43.97	08/08/2022	-	-	-	-	-	-
69	Burhi Gandak	Rosera	Bihar	41.63	42.63	41.47	08/08/2022	-	-	-	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
70	Burhi Gandak	Khagaria	Bihar	35.58	36.58	37.76	04/09/2022	04/08/2022 20	11/08/2022 09	8	26/08/2022 10	07/09/2022 12	13
								21/08/2022 11	11/09/2022 02	22	10/09/2022 00	10/09/2022 23	1
								21/09/2022 19	03/10/2022 20	13	12/10/2022 20	21/10/2022 22	10
								09/10/2022 14	25/10/2022 04	17	-	-	-
71	Bagmati	Benibad	Bihar	47.68	48.68	49.81	03/08/2022	15/06/2022 18	07/07/2022 07	23	16/06/2022 09	17/06/2022 15	2
								08/07/2022 17	11/07/2022 21	4	18/06/2022 12	22/06/2022 11	5
								14/07/2022 14	15/07/2022 12	2	25/06/2022 12	25/06/2022 12	1
								19/07/2022 19	14/08/2022 12	27	29/06/2022 23	03/07/2022 09	5
								15/08/2022 12	17/08/2022 06	3	29/07/2022 08	29/07/2022 19	1
								20/08/2022 04	24/08/2022 15	5	01/08/2022 06	09/08/2022 18	9
								25/08/2022 13	26/08/2022 11	2	11/08/2022 11	12/08/202 2 05	2
								29/08/2022 10	18/10/2022 19	21	21/08/2022 10	22/08/2022 06	2
								-	-	-	29/08/2022 15	30/08/2022 12	2
								-	-	-	01/09/2022 14	09/09/2022 23	9
								-	-	-	11/09/2022 00	13/09/2022 20	3

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								-	-	-	15/09/2022 18	22/09/2022 05	8
								-	-	-	07/10/2022 17	08/10/2022 12	2
72	Bagmati	Hayaghat	Bihar	44.72	45.72	44.22	06/08/2022	-	-	-	-	-	-
73	Adhwara Group	Kamtaul	Bihar	49.00	50.00	49.92	02/07/2022	01/07/2022 21	06/07/2022 14	6	-	-	-
								03/09/2022 16	08/09/2022 20	6	-	-	-
74	Adhwara Group	Ekmighat	Bihar	45.94	46.94	45.62	10/09/2022	-	-	-	-	-	-
75	Kamla Balan	Jhanjharpur	Bihar	49.00	50.00	51.7	30/06/2022	31/05/2022 13	02/06/2022 02	3	18/06/2022 18	22/06/2022 07	5
								04/06/2022 18	06/06/2022 07	3	25/06/2022 12	25/06/2022 12	1
								09/06/2022 08	11/06/2022 09	3	29/06/2022 09	05/07/2022 12	7
								13/06/2022 11	13/07/2022 08	31	30/07/2022 19	05/08/2022 06	7
								23/07/2022 16	25/07/2022 06	3	06/08/2022 21	07/08/2022 00	2
								26/07/2022 07	14/08/2022 14	20	31/08/2022 12	09/09/2022 23	10
								16/08/2022 07	17/08/2022 00	2	10/09/2022 12	11/09/2022 04	2
								21/08/2022 16	22/08/2022 14	2	16/09/2022 16	16/09/2022 21	1

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								28/08/2022 16	26/10/2022 11	60	17/09/2022 14	17/09/2022 20	1
								-	-	-	26/09/2022 21	27/09/2022 10	2
								-	-	-	30/09/2022 18	30/09/2022 21	1
								-	-	-	12/10/2022 22	13/10/2022 03	2
76	Kosi	Basua	Bihar	46.75	47.75	49.24	02/08/2022	08/09/2022 09	31/10/2022 08	54	09/06/2022 17	06/07/2022 20	28
								-	-	-	07/07/2022 17	22/10/2022 21	108
77	Kosi	Baltara	Bihar	32.85	33.85	34.99	05/08/2022	18/06/2022 21	24/06/2022 14	7	01/07/2022 04	05/07/2022 00	5
								25/06/2022 12	25/06/2022 12	1	25/07/2022 22	26/07/2022 14	2
								27/06/2022 12	09/07/2022 20	13	28/07/2022 12	14/08/2022 19	18
								10/07/2022 05	17/07/2022 20	8	29/08/2022 21	21/09/2022 14	24
								20/07/2022 08	21/10/2022 06	94	27/09/2022 22	28/09/2022 15	2
								-	-	-	14/10/2022 01	15/10/2022 01	2
78	Kosi	Kursela	Bihar	29.00	30.00	31.16	04/09/2022	02/08/2022 14	15/08/2022 05	14	24/08/2022 16	10/09/2022 23	18
								22/08/2022 00	16/09/2022 03	26	24/09/2022 05	29/09/2022 09	6
								18/09/2022 13	27/10/2022 06	40	12/10/2022 05	23/10/2022 06	12

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
79	Mahananda	Dhengraghat	Bihar	34.65	35.65	36.73	30/06/2022	16/06/2022 07	08/07/2022 03	23	19/06/2022 21	20/06/2022 13	2
								28/07/2022 10	09/08/2022 05	13	21/06/2022 07	23/06/2022 19	3
								01/09/2022 13	09/09/2022 23	9	25/06/2022 12	25/06/2022 12	1
								25/09/2022 08	29/09/2022 19	5	28/06/2022 12	05/07/2022 07	8
								07/10/2022 14	09/10/2022 00	4	01/08/2022 21	05/08/2022 02	5
								11/10/2022 12	15/10/2022 13	5	02/09/2022 13	03/09/2022 13	2
								-	-	-	26/09/2022 12	27/09/2022 09	2
80	Mahananda	Jhawa	Bihar	30.40	31.40	32.44	01/07/2022	18/06/2022 07	24/06/2022 14	7	22/06/2022 22	23/06/2022 09	2
								25/06/2022 12	25/06/2022 12	1	25/06/2022 12	25/06/2022 12	1
								28/06/2022 07	06/07/2022 09	9	29/06/2022 18	03/07/2022 10	5
								08/07/2022 01	08/07/2022 12	1	04/07/2022 05	04/07/2022 07	1
								29/07/2022 07	09/08/2022 04	12	02/08/2022 22	03/08/2022 15	2
								02/09/2022 12	09/09/2022 16	8	-	-	-
								26/09/2022 07	29/09/2022 04	4	-	-	-
								12/10/2022 16	15/10/2022 07	4	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
81	Gandak	Dumariaghat	Bihar	61.22	62.22	63.52	09/10/2022	10/06/2022 10	13/06/2022 18	4	30/06/2022 09	02/07/2022 18	3
								16/06/2022 09	23/06/2022 07	8	30/07/2022 00	30/07/2022 09	1
								24/06/2022 04	25/06/2022 01	2	02/08/2022 06	12/08/2022 18	11
								26/06/2022 06	05/10/2022 03	102	29/08/2022 14	31/08/2022 09	3
								06/10/2022 05	24/10/2022 05	19	02/09/2022 01	06/09/2022 11	5
								-	-	-	10/09/2022 00	10/09/2022 09	1
								-	-	-	16/09/2022 16	20/09/2022 02	5
								-	-	-	07/10/2022 07	13/10/2022 13	7
82	Burhigandak	Ahirwalia	Bihar	58.62	59.62	57.03	05/08/2022	-	-	-	-	-	-
83	Mayurakshi	Narayanpur	West Bengal	26.86	27.86	24.14	16/09/2022	-	-	-	-	-	-
84	Ajoy	Gheropara	West Bengal	38.42	39.42	35.9	30/09/2022	-	-	-	-	-	-
85	Mundeshwari	Harinkhola	West Bengal	11.80	12.80	11.16	07/10/2022	-	-	-	-	-	-
86	Kangsabati	Mohanpur	West Bengal	24.73	25.73	21.92	21/08/2022	-	-	-	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
87	Bagmati	Dheng Bridge	Bihar	70.00	71.00	71.4	29/06/2022	15/06/2022 15	16/06/2022 08	2	29/06/2022 16	30/06/2022 07	2
								17/06/2022 21	17/06/2022 22	1	-	-	-
								18/06/2022 16	20/06/2022 10	3	-	-	-
								25/06/2022 16	25/06/2022 22	1	-	-	-
								28/06/2022 05	28/06/2022 09	1	-	-	-
								29/06/2022 05	01/07/2022 05	3	-	-	-
								21/07/2022 21	23/07/2022 04	3	-	-	-
								28/07/2022 06	28/07/2022 23	1	-	-	-
								30/07/2022 07	30/07/2022 09	1	-	-	-
								31/07/2022 08	05/08/2022 07	6	-	-	-
								06/08/2022 08	06/08/2022 20	1	-	-	-
								19/08/2022 10	19/08/2022 17	1	-	-	-
								20/08/2022 11	21/08/2022 04	2	-	-	-
								28/08/2022 13	29/08/2022 07	2	-	-	-
								31/08/2022 16	03/09/2022 08	4	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								04/09/2022 07	09/09/2022 23	6	-	-	-
								10/09/2022 16	10/09/2022 23	1	-	-	-
								15/09/2022 08	19/09/2022 06	5	-	-	-
								20/09/2022 07	21/09/2022 08	2	-	-	-
								26/09/2022 11	26/09/2022 17	1	-	-	-
								07/10/2022 09	07/10/2022 16	1	-	-	-
								08/10/2022 07	08/10/2022 13	1	-	-	-
88	Adhwara	Sonebarsha	Bihar	80.85	81.85	81.38	29/06/2022	29/06/2022 15	29/06/2022 22	1	-	-	-
89	Kamla Balan	Jainagar	Bihar	66.75	67.75	68.9	29/06/2022	01/05/2022 08	19/08/2022 07	111	04/06/2022 10	04/06/2022 14	1
								21/08/2022 08	22/08/2022 08	2	16/06/2022 17	17/06/2022 02	2
								28/08/2022 07	29/10/2022 21	63	18/06/2022 02	20/06/2022 22	3
								-	-	-	21/06/2022 07	21/06/2022 17	1
								-	-	-	24/06/2022 18	25/06/2022 12	2
								-	-	-	29/06/2022 07	01/07/2022 12	3
								-	-	-	02/07/2022 05	04/07/2022 04	3

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								-	-	-	30/07/2022 09	30/07/2022 16	2
								-	-	-	31/07/2022 07	03/08/2022 17	4
								-	-	-	06/08/2022 07	06/08/2022 19	1
								-	-	-	28/08/2022 09	28/08/2022 15	1
								-	-	-	31/08/2022 07	31/08/2022 13	1
								-	-	-	01/09/2022 05	03/09/2022 10	3
								-	-	-	04/09/2022 13	07/09/2022 20	4
								-	-	-	08/09/2022 06	10/09/2022 13	3
								-	-	-	16/09/2022 08	17/09/2022 13	2
								-	-	-	21/09/2022 11	21/09/2022 12	1
								-	-	-	26/09/2022 12	27/09/2022 05	2
								-	-	-	29/09/2022 18	30/09/2022 18	2
								-	-	-	12/10/2022 12	12/10/2022 23	1

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
90	Bagmati	Runisaidpur	Bihar	54.00	55.00	56.52	03/08/2022	15/06/2022 14	17/06/2022 19	3	19/06/2022 17	20/06/2022 13	2
								18/06/2022 07	23/06/2022 00	6	30/06/2022 08	01/07/2022 22	2
								26/06/2022 05	26/06/2022 20	1	01/08/2022 12	05/08/2022 20	5
								28/06/2022 10	04/07/2022 08	7	06/08/2022 22	06/08/2022 23	1
								22/07/2022 11	24/07/2022 19	3	07/08/2022 09	07/08/2022 15	1
								28/07/2022 15	13/08/2022 04	17	02/09/2022 16	03/09/2022 06	2
								15/08/2022 07	16/08/2022 07	2	04/09/2022 19	06/09/2022 09	3
								19/08/2022 20	22/08/2022 06	4	07/09/2022 09	09/09/2022 14	3
								29/08/2022 13	30/08/2022 05	2	17/09/2022 09	19/09/2022 05	3
								01/09/2022 07	09/09/2022 23	9	07/10/2022 15	07/10/2022 23	1
								11/09/2022 00	14/09/2022 07	4	-	-	-
								15/09/2022 05	22/09/2022 07	8	-	-	-
								24/09/2022 08	24/09/2022 10	1	-	-	-
								07/10/2022 06	09/10/2022 05	3	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
91	Parwan	Araria	Bihar	46.00	47.00	48.26	01/07/2022	15/06/2022 14	24/06/2022 05	10	25/06/2022 12	25/06/2022 12	1
								25/06/2022 12	25/06/2022 12	1	29/06/2022 02	05/07/2022 22	7
								27/06/2022 17	08/07/2022 00	12	29/07/2022 23	07/08/2022 07	10
								25/07/2022 12	12/08/2022 08	19	04/09/2022 19	09/09/2022 22	6
								01/09/2022 08	09/09/2022 23	9	-	-	-
								11/09/2022 00	16/09/2022 05	6	-	-	-
								17/09/2022 08	03/10/2022 11	17	-	-	-
								06/10/2022 09	18/10/2022 15	13	-	-	-
92	Mahananda	Taibpur	Bihar	65.00	66.00	67.26	29/06/2022	16/06/2022 12	23/06/2022 02	8	19/06/2022 16	19/06/2022 22	1
								24/06/2022 13	26/06/2022 00	3	20/06/2022 11	20/06/2022 21	1
								27/06/2022 09	03/07/2022 12	7	21/06/2022 10	22/06/2022 09	2
								27/07/2022 16	28/07/2022 14	2	28/06/2022 10	30/06/2022 08	3
								29/07/2022 10	30/07/2022 15	2	30/07/2022 02	30/07/2022 09	1
								31/07/2022 14	03/08/2022 15	4	01/09/2022 16	02/09/2022 11	2
								06/08/2022 15	07/08/2022 14	2	-	-	-

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Table 3.7: Above Normal and Severe Flood Events on main Ganga and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								01/09/2022 10	04/09/2022 13	4	-	-	-
								25/09/2022 09	26/09/2022 23	2	-	-	-
								11/10/2022 16	12/10/2022 09	2	-	-	-
93	Chambal	Kota City	Rajasthan	239.00	242.00	245.8	23/08/2022	24/07/2022 17	24/07/2022 18	1	22/08/2022 10	24/08/2022 17	3
								25/07/2022 17	25/07/2022 18	1	-	-	-
								16/08/2022 21	17/08/2022 22	2	-	-	-
								21/08/2022 21	25/08/2022 01	5	-	-	-
94	Rapti	Kakardhari	Uttar Pradesh	130.00	131.00	131.29	08/10/2022	17/09/2022 17	19/09/2022 06	3	08/10/2022 12	09/10/2022 07	2
								06/10/2022 07	10/10/2022 21	5	-	-	-
95	Chambal	Dholpur	Rajasthan	129.79	130.79	146.57	25/08/2022	14/06/2022 16	14/06/2022 16	1	14/06/2022 16	14/06/2022 16	1
								13/08/2022 11	15/08/2022 04	3	13/08/2022 15	14/08/2022 17	2
								17/08/2022 08	20/08/2022 01	4	17/08/2022 12	19/08/2022 20	3
								22/08/2022 22	28/08/2022 15	7	22/08/2022 23	28/08/2022 11	7
								09/10/2022 18	10/10/2022 15	2	-	-	-
96	Chambal	Manderial	Rajasthan	164.00	165.00	170.05	25/08/2022	23/08/2022 03	26/08/2022 08	4	23/08/2022 07	26/08/2022 05	4

Source: FFM Directorate, CWC, M/o Jal Shakti

Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Siang	Yingkiang	Arunachal Pradesh	303.00	304.00	269.94	18/06/2022	-	-	-	-	-	-
2	Siang	Passighat	Arunachal Pradesh	152.96	153.96	152.90	28/06/2022	-	-	-	-	-	-
3	Noa-Dehing	Namsai	Arunachal Pradesh	144.80	145.80	144.56	18/06/2022	-	-	-	-	-	-
								14/05/2022 19	16/05/2022 20	3	-	-	-
								17/05/2022 18	21/05/2022 09	5	-	-	-
								13/06/2022 06	14/06/2022 06	2	-	-	-
								15/06/2022 17	23/06/2022 00	9	-	-	-
4	Brahmaputra	Dibrugarh	Assam	104.70	105.70	105.56	28/06/2022	25/06/2022 02	04/07/2022 02	10	-	-	-
								20/07/2022 01	21/07/2022 11	2	-	-	-
								22/07/2022 14	24/07/2022 00	3	-	-	-
								09/08/2022 18	10/08/2022 00	1	-	-	-
								10/08/2022 18	10/08/2022 22	1	-	-	-
								20/08/2022 17	21/08/2022 00	2	-	-	-
								03/09/2022 22	11/09/2022 09	9	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								23/09/2022 12	29/09/2022 13	7	-	-	-
								09/10/2022 08	15/10/2022 16	7	-	-	-
								26/10/2022 08	26/10/2022 22	1	-	-	-
5	Brahmaputra	Neamati-ghat	Assam	84.54	85.54	86.60	18/06/2022	15/05/2022 09	25/05/2022 17	11	15/05/2022 20	17/05/2022 05	3
								28/05/2022 13	30/05/2022 17	3	18/05/2022 17	22/05/2022 03	5
								04/06/2022 07	10/07/2022 21	37	11/06/2022 06	12/06/2022 00	2
								12/07/2022 17	14/07/2022 05	3	13/06/2022 12	15/06/2022 07	3
								20/07/2022 11	25/07/2022 23	6	16/06/2022 06	22/06/2022 21	7
								28/07/2022 00	05/08/2022 12	9	28/06/2022 04	03/07/2022 21	6
								05/08/2022 15	07/08/2022 15	2	05/09/2022 05	10/09/2022 19	6
								10/08/2022 21	12/08/2022 01	3	25/09/2022 08	26/09/2022 01	2
								29/08/2022 22	15/09/2022 14	18	11/10/2022 03	15/10/2022 21	5
								16/09/2022 08	20/09/2022 16	5	27/10/2022 08	27/10/2022 23	1
								24/09/2022 02	03/10/2022 21	10	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								06/10/2022 13	18/10/2022 19	13	-	-	-
								26/10/2022 22	30/10/2022 00	5	-	-	-
								16/05/2022 18	24/05/2022 01	9	17/06/2022 15	23/06/2022 01	7
								11/06/2022 20	08/07/2022 21	29	29/06/2022 04	04/07/2022 07	6
								22/07/2022 13	23/07/2022 04	2	06/09/2022 09	08/09/2022 16	3
6	Brahmaputra	Tezpur	Assam	64.23	65.23	65.89	01/07/2022	24/07/2022 20	25/07/2022 12	2	12/10/2022 13	16/10/2022 02	5
								01/08/2022 16	04/08/2022 00	4	-	-	-
								05/09/2022 10	14/09/2022 02	10	-	-	-
								25/09/2022 09	02/10/2022 06	8	-	-	-
								08/10/2022 17	19/10/2022 04	12	-	-	-
								17/06/2022 12	24/06/2022 15	8	19/06/2022 16	21/06/2022 22	3
7	Brahmaputra	Guwahati	Assam	48.68	49.68	49.95	20/06/2022	30/06/2022 00	05/07/2022 01	6	-	-	-
								13/10/2022 14	17/10/2022 07	5	-	-	-
								20/05/2022 02	24/05/2022 03	5	18/06/2022 22	22/06/2022 20	5

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	Brahmaputra	Goalpara	Assam	35.27	36.27	36.64	20/06/2022	15/06/2022 00	07/07/2022 05	23	-	-	-
								08/09/2022 00	12/09/2022 04	5	-	-	-
								13/10/2022 07	18/10/2022 12	6	-	-	-
								18/05/2022 10	26/05/2022 03	9	15/06/2022 22	25/06/2022 22	11
								13/06/2022 00	09/07/2022 17	27	29/06/2022 22	05/07/2022 13	7
9	Brahmaputra	Dhubri	Assam	27.62	28.62	29.6	21/06/2022	02/08/2022 06	06/08/2022 21	5	-	-	-
								07/09/2022 18	15/09/2022 04	9	-	-	-
								12/10/2022 09	20/10/2022 05	9	-	-	-
10	Buridehing	Naharkatia	Assam	119.40	120.40	118.96	16/05/2022	-	-	-	-	-	-
11	Buridehing	Chenimari/ Khwong	Assam	101.11	102.11	103.35	01/7/2022	16/05/2022 10	21/05/2022 18	6	18/05/2022 02	18/05/2022 05	1
								14/06/2022 13	24/06/2022 19	11	29/06/2022 21	05/07/2022 03	7
								25/06/2022 07	27/06/2022 10	3	05/07/2022 13	06/07/2022 09	1
								28/06/2022 17	07/07/2022 11	10	-	-	-
								21/07/2022 02	24/07/2022 12	4	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								26/07/2022 15	31/07/2022 07	6	-	-	-
								29/08/2022 22	31/08/2022 11	3	-	-	-
								06/09/2022 11	09/09/2022 01	4	-	-	-
								17/06/2022 08	23/06/2022 12	7	19/06/2022 00	19/06/2022 21	1
12	Subansiri	Badatighat	Assam	81.53	82.53	82.57	19/06/2022	28/06/2022 13	03/07/2022 22	6	-	-	-
								06/09/2022 04	08/09/2022 05	3	-	-	-
								10/10/2022 18	15/10/2022 12	6	-	-	-
								01/07/2022 18	03/07/2022 18	3	-	-	-
13	Dikhow	Sivasagar	Assam	91.40	92.40	92.39	04/07/2022	04/07/2022 08	05/07/2022 11	2	-	-	-
								07/09/2022 01	07/09/2022 13	1	-	-	-
								16/05/2022 22	23/05/2022 22	8	17/05/2022 21	22/05/2022 15	6
								14/06/2022 21	17/06/2022 18	4	22/06/2022 07	23/06/2022 17	2
								20/06/2022 13	27/06/2022 11	7	30/06/2022 11	06/07/2022 10	7
14	Desang	Nanglam oraghat	Assam	93.46	94.46	95.36	04/07/2022	28/06/2022 21	07/07/2022 01	10	28/07/2022 06	31/07/2022 22	4
								27/07/2022 13	01/08/2022 22	6	07/09/2022 08	09/09/2022 04	3

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								03/09/2022 17	09/09/2022 21	6	-	-	-
								25/09/2022 16	27/09/2022 11	3	-	-	-
15	Dhansiri(S)	Golaghat	Assam	88.50	89.50	88.34	18/05/2022	-	-	-	-	-	-
								18/05/2022 03	22/05/2022 02	5	-	-	-
								18/06/2022 08	22/06/2022 23	5	-	-	-
								24/06/2022 12	25/06/2022 05	2	-	-	-
								26/06/2022 06	27/06/2022 04	2	-	-	-
								29/06/2022 09	03/07/2022 22	5	-	-	-
								04/07/2022 04	04/07/2022 19	1	-	-	-
16	Dhansiri (S)	Numaligarh	Assam	77.42	78.42	78.22	24/07/2022	05/07/2022 10	07/07/2022 19	3	-	-	-
								12/07/2022 13	13/07/2022 06	2	-	-	-
								24/07/2022 07	01/08/2022 04	9	-	-	-
								03/08/2022 11	05/08/2022 22	3	-	-	-
								06/08/2022 15	09/08/2022 16	4	-	-	-
								10/08/2022 14	11/08/2022 00	2	-	-	-
								14/09/2022 07	15/09/2022 15	2	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	Kopili	Kampur	Assam	59.50	60.50	62.2	18/06/2022	13/05/2022 18	27/05/2022 13	15	14/05/2022 03	24/05/2022 14	11
								08/06/2022 02	09/06/2022 07	2	15/06/2022 19	26/06/2022 06	12
								15/06/2022 05	29/06/2022 12	15	-	-	-
								26/10/2022 14	27/10/2022 05	2	-	-	-
								14/05/2022 13	01/06/2022 09	19	17/05/2022 21	29/05/2022 08	13
								16/06/2022 03	10/07/2022 13	25	17/06/2022 17	05/07/2022 22	19
								12/05/2022 15	12/05/2022 15	1	17/06/2022 05	17/06/2022 22	1
18	Kopili	Dharamtul	Assam	55.00	56.00	58.00	22/06/2022	14/05/2022 03	22/05/2022 18	9	18/06/2022 06	18/06/2022 09	1
								03/06/2022 21	06/06/2022 06	4	-	-	-
								08/06/2022 11	05/07/2022 00	28	-	-	-
								21/07/2022 07	21/07/2022 08	1	-	-	-
								22/07/2022 09	22/07/2022 23	1	-	-	-
								27/07/2022 06	28/07/2022 12	2	-	-	-
								29/07/2022 09	29/07/2022 16	1	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
19	Jiabharali	NT.Rd. X-ing	Assam	77.00	78.00	78.1	17/06/2022	30/07/2022 08	07/08/2022 12	9	-	-	-
								28/08/2022 16	11/09/2022 15	15	-	-	-
								13/09/2022 11	13/09/2022 16	1	-	-	-
								16/09/2022 09	18/09/2022 13	3	-	-	-
								22/09/2022 08	02/10/2022 04	11	-	-	-
								05/10/2022 05	16/10/2022 11	12	-	-	-
								25/10/2022 17	29/10/2022 13	5	-	-	-
20	Subansiri	Choldhowaghat	Assam	99.43	100.43	96.33	17/06/2022	-	-	-	-	-	-
								16/05/2022 20	17/05/2022 12	2	-	-	-
								10/06/2022 19	10/06/2022 21	1	-	-	-
								16/06/2022 08	19/06/2022 15	4	-	-	-
21	Ranganadi	N H Crossing Ranganadi	Assam	93.81	94.81	94.58	17/06/2022	20/06/2022 02	20/06/2022 14	1	-	-	-
								05/09/2022 05	05/09/2022 17	1	-	-	-
								25/10/2022 15	26/10/2022 20	2	-	-	-
22	Lohit	Dholla Bazaar	Assam	127.27	128.27	126.53	18/06/2022	-	-	-	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
23	Puthimari	Puthimari _NHX	Assam	51.31	52.31	54.49	17/06/2022	16/05/2022 10	18/05/2022 07	3	15/06/2022 12	21/06/2022 03	7
								12/06/2022 18	13/06/2022 07	2	-	-	-
								14/06/2022 16	23/06/2022 14	23	-	-	-
								01/08/2022 16	02/08/2022 12	2	-	-	-
								03/08/2022 06	04/08/2022 00	2	-	-	-
								15/05/2022 10	18/05/2022 14	4	15/06/2022 13	21/06/2022 03	7
								19/05/2022 05	19/05/2022 11	1	01/08/2022 14	02/08/2022 08	2
24	Pagladia	Pagladia_ NTX	Assam	51.75	52.75	53.88	17/06/2022	09/06/2022 16	10/06/2022 00	2	-	-	-
								12/06/2022 08	13/06/2022 15	2	-	-	-
								14/06/2022 12	22/06/2022 17	9	-	-	-
								01/08/2022 06	03/08/2022 17	3	-	-	-
								13/05/2022 20	24/05/2022 17	12	14/05/2022 15	23/05/2022 06	10
25	Barak	AP Ghat	Assam	18.83	19.83	21.59	21/06/2022	17/06/2022 10	10/07/2022 04	24	18/06/2022 11	01/07/2022 14	14
								-	-	-	03/07/2022 21	05/07/2022 22	3
								18/05/2022 11	22/05/2022 20	5	19/06/2022 00	24/06/2022 19	6

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
26	Katakhal	Matizuri	Assam	19.27	20.27	22.49	21/06/2022	18/06/2022 12	27/06/2022 17	10	08/07/2022 03	09/07/2022 01	2
								04/07/2022 02	05/07/2022 04	2	-	-	-
								07/07/2022 10	09/07/2022 20	3	-	-	-
								04/08/2022 08	05/08/2022 08	2	-	-	-
								06/08/2022 19	08/08/2022 05	3	-	-	-
27	Barak	Badarpurg-hat	Assam	15.85	16.85	18.44	23/06/2022	13/05/2022 21	26/05/2022 10	14	14/05/2022 14	24/05/2022 05	11
								17/06/2022 02	14/07/2022 03	28	18/06/2022 06	09/07/2022 19	21
28	Kushiyara	Karimganj	Assam	13.94	14.94	16.52	22/06/2022	13/05/2022 15	27/05/2022 05	15	14/05/2022 12	25/05/2022 05	12
								15/06/2022 22	14/07/2022 04	30	17/06/2022 12	09/07/2022 22	23
29	Manu	Kailashar	Tripura	24.34	25.34	23.49	24/08/2022	-	-	-	-	-	-
30	Gumti	Sonamura	Tripura	11.50	12.50	12.01	20/06/2022	20/06/2022 09	21/06/2022 19	2	-	-	-
31	Manas	Mathanguri	Assam	98.10	99.10	96.2	18/06/2022	-	-	-	-	-	-
								12/06/2022 15	13/06/2022 05	2	15/06/2022 08	20/06/2022 01	6
32	Manas	Manas NH-Crossing	Assam	47.81	48.42	49.32	16/06/2022	15/06/2022 00	21/06/2022 01	7	-	-	-
								28/06/2022 14	30/06/2022 03	3	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								01/08/2022 04	02/08/2022 11	2	-	-	-
								17/05/2022 01	17/05/2022 18	1	16/06/2022 22	20/06/2022 20	5
								08/06/2022 16	10/06/2022 17	3	27/06/2022 14	27/06/2022 22	1
								11/06/2022 16	13/06/2022 09	3	28/06/2022 07	29/06/2022 22	2
								14/06/2022 15	06/07/2022 17	23	30/06/2022 08	30/06/2022 17	1
								14/07/2022 14	14/07/2022 21	1	01/08/2022 06	02/08/2022 14	2
								21/07/2022 08	12/08/2022 03	23	03/08/2022 11	03/08/2022 20	1
								14/08/2022 12	16/08/2022 19	3	-	-	-
33	Beki	Beki Rd. Bridge	Assam	44.10	45.10	45.7	18/06/2022	19/08/2022 16	19/08/2022 23	1	-	-	-
								20/08/2022 15	20/08/2022 23	1	-	-	-
								22/08/2022 14	22/08/2022 19	1	-	-	-
								29/08/2022 13	29/08/2022 16	1	-	-	-
								31/08/2022 08	15/09/2022 23	16	-	-	-
								16/09/2022 11	16/09/2022 23	1	-	-	-
								17/09/2022 09	18/09/2022 19	2	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								23/09/2022 15	30/09/2022 10	8	-	-	-
								05/10/2022 06	07/10/2022 17	3	-	-	-
								08/10/2022 20	14/10/2022 23	7	-	-	-
								25/10/2022 18	26/10/2022 19	2	-	-	-
								12/06/2022 06	12/06/2022 22	1	16/06/2022 05	16/06/2022 20	1
								14/06/2022 18	21/06/2022 01	8	-	-	-
34	Gaurang	Kokrajhar	Assam	41.85	42.85	43.07	16/06/2022	28/06/2022 08	29/06/2022 16	2	-	-	-
								31/07/2022 10	03/08/2022 14	4	-	-	-
								29/08/2022 18	30/08/2022 02	2	-	-	-
								31/08/2022 11	01/09/2022 03	2	-	-	-
								05/09/2022 06	06/09/2022 17	2	-	-	-
								15/06/2022 22	23/06/2022 08	9	18/06/2022 13	18/06/2022 21	1
								28/06/2022 13	04/07/2022 03	7	-	-	-
								24/07/2022 04	29/07/2022 02	6	-	-	-
35	Sankosh	Golokganj	Assam	28.94	29.94	30.00	18/06/2022	31/07/2022 08	09/08/2022 23	10	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								30/08/2022 07	30/08/2022 12	1	-	-	-
								05/09/2022 06	08/09/2022 04	4	-	-	-
								10/09/2022 05	12/09/2022 17	3	-	-	-
								25/09/2022 18	26/09/2022 19	2	-	-	-
								11/10/2022 13	14/10/2022 05	4	-	-	-
								15/06/2022 15	15/06/2022 20	1	20/06/2022 03	20/06/2022 06	1
								16/06/2022 05	17/06/2022 15	2	21/06/2022 02	21/06/2022 05	1
								18/06/2022 07	18/06/2022 23	1	28/06/2022 23	29/06/2022 10	2
								19/06/2022 07	19/06/2022 22	1	01/08/2022 04	02/08/2022 04	2
								20/06/2022 01	20/06/2022 15	1	06/08/2022 11	06/08/2022 17	1
36	Teesta	Domohani	W.B.	85.65	85.95	86.18	01/08/2022	21/06/2022 00	21/06/2022 19	1	01/09/2022 06	01/09/2022 21	1
								24/06/2022 07	26/06/2022 22	3	12/10/2022 12	12/10/2022 18	1
								27/06/2022 13	27/06/2022 15	1	-	-	-
								28/06/2022 11	30/06/2022 14	3	-	-	-
								01/07/2022 11	02/07/2022 19	2	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								26/07/2022 00	26/07/2022 01	1	-	-	-
								27/07/2022 09	27/07/2022 23	1	-	-	-
								29/07/2022 04	29/07/2022 17	1	-	-	-
								31/07/2022 11	03/08/2022 22	4	-	-	-
								06/08/2022 07	06/08/2022 20	1	-	-	-
								07/08/2022 16	07/08/2022 18	1	-	-	-
								14/08/2022 12	14/08/2022 20	1	-	-	-
								15/08/2022 06	15/08/2022 16	1	-	-	-
								29/08/2022 09	29/08/2022 17	1	-	-	-
								31/08/2022 07	31/08/2022 12	1	-	-	-
								01/09/2022 05	02/09/2022 19	2	-	-	-
								03/09/2022 11	04/09/2022 16	2	-	-	-
								06/09/2022 08	06/09/2022 21	1	-	-	-
								17/09/2022 06	17/09/2022 19	1	-	-	-
								24/09/2022 11	27/09/2022 08	4	-	-	-
								29/09/2022	29/09/2022	1	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								05	09				
								10/10/2022 07	10/10/2022 16	1	-	-	-
								11/10/2022 17	13/10/2022 00	3	-	-	-
								20/06/2022 13	20/06/2022 16	1	-	-	-
37	Teesta	Mekhliganj	W.B.	65.45	65.95	65.64	02/08/2022	01/08/2022 20	02/08/2022 06	2	-	-	-
								01/09/2022 23	02/09/2022 04	2	-	-	-
								14/06/2022 13	14/06/2022 17	1	-	-	-
								15/06/2022 10	15/06/2022 13	1	-	-	-
								16/06/2022 08	16/06/2022 15	1	-	-	-
								18/06/2022 05	18/06/2022 08	1	-	-	-
38	Jaldhaka	N H 31	W.B.	80.00	80.90	80.3	01/09/2022	20/06/2022 07	20/06/2022 11	1	-	-	-
								21/06/2022 02	21/06/2022 12	1	-	-	-
								22/06/2022 08	22/06/2022 11	1	-	-	-
								28/06/2022 17	28/06/2022 23	1	-	-	-
								29/06/2022 20	30/06/2022 01	2	-	-	-
								01/07/2022 15	01/07/2022 16	1	-	-	-

Contd…

Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								29/07/2022 06	29/07/2022 09	1	-	-	-
								30/07/2022 08	30/07/2022 12	1	-	-	-
								01/08/2022 06	01/08/2022 13	1	-	-	-
								02/08/2022 11	02/08/2022 15	1	-	-	-
								29/08/2022 08	29/08/2022 11	1	-	-	-
								01/09/2022 09	01/09/2022 20	1	-	-	-
								24/09/2022 09	24/09/2022 14	1	-	-	-
								25/09/2022 10	25/09/2022 16	1	-	-	-
								12/10/2022 06	12/10/2022 12	1	-	-	-
								16/06/2022 15	16/06/2022 19	1	-	-	-
39	Jaldhaka	Mathabh-anga	W.B.	47.70	48.20	47.98	29/06/2022	21/06/2022 11	21/06/2022 15	1	-	-	-
								29/06/2022 01	29/06/2022 10	1	-	-	-
								15/06/2022 16	15/06/2022 18	1	18/06/2022 08	18/06/2022 14	1
40	Torsa	Ghughu-mari	W. B.	39.80	40.41	40.56	18/06/2022	16/06/2022 10	19/06/2022 18	4	-	-	-
								20/06/2022 11	20/06/2022 15	1	-	-	-

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Table 3.8: Above Normal and Severe Flood Events on main Brahmaputra and its tributaries- 2022 Flood Season

Sl. No.	River	Station	State	Warning level (in m)	Danger level (in m)	Peak Level in 2022		Flood Period above Warning Level			Flood Period above Danger Level		
						Level (in m)	Date	From	To	No. of Days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								21/06/2022 11	21/06/2022 22	1	-	-	-
								22/06/2022 08	22/06/2022 19	1	-	-	-
								24/06/2022 12	24/06/2022 22	1	-	-	-
								27/06/2022 16	27/06/2022 23	1	-	-	-
								28/06/2022 03	29/06/2022 14	2	-	-	-
								01/07/2022 08	02/07/2022 01	2	-	-	-
								01/08/2022 14	02/08/2022 01	2	-	-	-
								16/06/2022 07	21/06/2022 06	6	-	-	-
41	Radak-I	Tufanganj	W. B.	34.22	35.30	35.27	17/06/2022	28/06/2022 16	30/06/2022 08	3	-	-	-
								01/08/2022 23	03/08/2022 07	3	-	-	-
42	Teesta	Malli Bazaar	Sikkim	223.00	224.00	217.25	12/10/2022	-	-	-	-	-	-
43	Teesta	Joretahang (Rothak)	Sikkim	350.60	351.60	348.95	01/09/2022	-	-	-	-	-	-
44	Teesta	Singtam	Sikkim	377.70	377.57	375.09	23/08/2022	-	-	-	-	-	-
45	Torsa	Hasimara	West Bengal	116.30	116.90	117.1	18/06/2022	18/06/2022 00	18/06/2022 09	1	18/06/2022 01	18/06/2022 04	1

Source: FFM Directorate, CWC, M/o Jal Shakti

Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Jhelum	Rammunshibagh	Jammu & Kashmir	1584.87	1585.48	1586.18	23/06/2022	22/06/2022 15	24/06/2022 07	3	22/06/2022 18	23/06/2022 21	2
2	Jhelum	Sangam	Jammu & Kashmir	1589.96	1590.88	1591.94	22/06/2022	22/06/2022 08	23/06/2022 19	2	22/06/2022 11	23/06/2022 10	2
3	Jhelum	Safapora	Jammu & Kashmir	1579.36	1579.66	1580.32	23/06/2022	22/06/2022 19	25/06/2022 16	4	22/06/2022 22	25/06/2022 06	4
4	Subernarekna	Jamshedpur	Jharkhand	122.50	123.50	125.36	21/08/2022	20/08/2022 16	21/08/2022 16	2	20/08/2022 19	21/08/2022 14	2
5	Subernarekna	Rajghat	Odisha	9.45	10.36	11.9	22/08/2022	21/08/2022 12	23/08/2022 18	3	21/08/2022 15	23/08/2022 05	3
6	Burhabalang	NH_5 _Road Bridge	Odisha	7.21	8.13	7.58	20/08/2022	15/08/2022 08	16/08/2022 05	2	-	-	-
								20/08/2022 16	22/08/2022 02	3	-	-	-
7	Baitarni	Anandpur	Odisha	37.44	38.36	39.12	21/08/2022	14/08/2022 20	15/08/2022 17	2	20/08/2022 20	21/08/2022 11	2
								20/08/2022 18	21/08/2022 16	2	-	-	-
8	Baitarni	Akhuapada	Odisha	17.83	17.83	19.02	21/08/2022	13/08/2022 12	16/08/2022 21	4	13/08/2022 12	16/08/2022 21	4
								20/08/2022 22	22/08/2022 17	3	20/08/2022 22	22/08/2022 17	3
9	Brahmani	Jenapur	Odisha	22	23	21.23	25/08/2022	-	-	-	-	-	-
10	Rushikuluya	Purushottampur	Odisha	15.83	16.83	15.79	06/10/2022	-	-	-	-	-	-
								09/08/2022 15	09/08/2022 18	1	-	-	-
11	Vamsadhara	Gunupur	Odisha	83.00	84.00	83.97	14/08/2022	14/08/2022 15	16/08/2022 00	3	-	-	-
								20/08/2022 08	21/08/2022 04	2	-	-	-

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Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								17/07/2022 12	17/07/2022 19	1	17/07/2022 13	17/072022 16	1
								09/08/2022 15	11/08/2022 09	3	09/08/2022 19	10/08/2022 06	2
12	Vamsadhara	Kashinagar	Odisha	54.10	54.60	55.84	14/08/ 2022	14/08/2022 00	18/08/2022 07	5	14/08/2022 03	16/08/2022 06	3
								20/08/2022 07	21/08/2022 16	2	20/08/2022 11	21/08/2022 07	2
								20/09/2022 23	21/09/2022 14	2	21/09/2022 02	21/09/2022 06	1
								11/08/2022 15	17/08/2022 13	7	11/08/2022 15	17/08/2022 13	7
								19/08/2022 15	26/08/2022 08	8	19/08/2022 15	26/08/2022 08	8
								28/08/2022 04	29/08/2022 09	2	28/08/2022 04	29/08/2022 09	2
13	Jalaka	Mathani Road Bridge	Odisha	5.50	5.50	6.97	21/08/ 2022	11/09/2022 07	14/09/2022 22	4	11/09/2022 07	14/09/2022 22	4
								18/09/2022 08	18/09/2022 21	1	18/09/2022 08	18/09/2022 21	1
								20/09/2022 07	21/09/2022 09	2	20/09/2022 07	21/09/2022 09	2
								05/10/2022 02	07/10/2022 22	3	05/10/2022 02	07/10/2022 22	3
14	Mahanadi	Naraj	Odisha	25.41	26.41	27.49	17/08/ 2022	14/08/2022 08	22/08/2022 17	9	15/08/2022 06	20/08/2022 14	6
15	Mahanadi	Alipingal Devi	Odisha	10.85	11.76	12.06	17/08/ 2022	15/08/2022 21	20/08/2022 07	6	16/08/2022 18	17/08/2022 19	2
16	Mahanadi	Nimapara	Odisha	9.85	10.76	10.58	17/08/ 2022	16/08/2022 12	20/08/2022 09	5	-	-	-
17	Godavari	Atreyapuram	Andhra Pradesh	13.50	15.00	14.12	17/07/ 2022	16/07/2022 02	18/07/2022 11	3	-	-	-

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Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								11/07/2022 18	13/07/2022 15	3	-	-	-
								14/07/2022 06	16/07/2022 15	3	-	-	-
18	Godavari	Kopergaon	Maharashtra	490.90	493.68	493.2	12/07/ 2022	17/08/2022 06	18/08/2022 14	2	-	-	-
								01/09/2022 19	03/09/2022 00	3	-	-	-
								09/09/2022 11	09/09/2022 23	1	-	-	-
								16/09/2022 15	21/10/2022 13	6	-	-	-
19	Godavari	Gangakhed	Maharashtra	374.00	375.00	370.98	19/09/ 2022	-	-	-	-	-	-
20	Godavari	Nanded	Maharashtra	351.00	354.00	349.84	13/07/ 2022	-	-	-	-	-	-
								10/07/2022 14	11/07/2022 10	2	13/07/2022 04	16/07/2022 08	4
								12/07/2022 20	16/07/2022 22	5	-	-	-
21	Godavari	Kaleswaram	Telangana	103.50	104.75	108.19	15/07/ 2022	19/07/2022 23	20/07/2022 13	2	-	-	-
								10/08/2022 19	14/08/2022 08	5	-	-	-
								17/08/2022 10	18/08/2022 08	2	-	-	-
								12/09/2022 18	13/09/2022 19	2	-	-	-
								10/07/2022 17	12/07/2022 07	3	14/07/2022 03	16/07/2022 07	3
								12/07/2022 22	19/07/2022 09	7	-	-	

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Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
22	Godavari	Eturunagaram	Telangana	73.32	75.82	77.11	15/07/2022	20/07/2022 05	21/07/2022 06	2	-	-	
								09/08/2022 13	14/08/2022 18	6	-	-	
								15/08/2022 16	19/08/2022 10	5	-	-	
								12/09/2022 12	14/09/2022 17	3	-	-	
								11/07/2022 01	19/07/2022 16	9	11/07/2022 12	12/07/2022 03	2
								20/07/2022 13	21/07/2022 10	2	13/07/2022 16	17/07/2022 15	5
23	Godavari	Dummagudam	Telangana	53.00	55.00	59.62	15/07/2022	09/08/2022 19	15/08/2022 03	7	17/08/2022 03	17/08/2022 13	1
								16/08/2022 01	19/08/2022 13	4	-	-	-
								12/09/2022 17	15/09/2022 03	4			
								11/07/2022 01	22/07/2022 11	12	11/07/2022 17	12/07/2022 07	2
								23/07/2022 02	23/07/2022 21	1	13/07/2022 16	19/07/2022 11	7
24	Godavari	Bhadrachalam	Telangana	45.72	48.77	54.34	16/07/2022	25/07/2022 04	26/07/2022 07	2	16/08/2022 21	18/08/2022 11	3
								09/08/2022 17	20/08/2022 11	12	-	-	-
								12/09/2022 15	15/09/2022 17	4	-	-	-
								11/07/2022 05	11/07/2022 08	1	13/07/2022 19	17/07/2022 06	5
								13/07/2022 09	17/07/2022 10	5	19/07/2022 20	22/07/2022 01	4

Contd…

Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
25	Wardha	Sirpur Town	Telangana	159.95	160.95	162.57	15/07/2022	19/07/2022 11	22/07/2022 05	4	09/08/2022 19	13/08/2022 15	5
								28/07/2022 00	28/07/2022 00	1	13/09/2022 22	14/09/2022 18	2
								09/08/2022 05	13/08/2022 20	5	-	-	-
								12/09/2022 22	16/09/2022 08	5	-	-	-
								11/07/2022 10	24/07/2022 15	14	11/07/2022 17	22/07/2022 16	12
26	Godavari	Kunavaram	Andhra Pradesh	37.74	39.24	48.87	16/07/2022	25/07/2022 02	28/07/2022 02	4	10/08/2022 03	20/08/2022 22	11
								09/08/2022 15	21/08/2022 07	13	13/09/2022 06	16/09/2022 03	4
								12/09/2022 18	16/09/2022 22	5	-	-	-
27	Godavari	Rajamundry	Andhra Pradesh	17.68	19.51	19.38	17/07/2022	14/07/2022 22	20/07/2022 08	7	-	-	-
								12/07/2022 00	24/07/2022 17	13	15/07/2022 10	19/07/2022 13	5
28	Godavari	Dowalaiswaram	Andhra Pradesh	14.25	16.08	17.29	17/07/2022	26/07/2022 13	27/07/2022 03	2	-	-	-
								10/08/2022 09	21/08/2022 12	12	-	-	-
								13/09/2022 12	16/09/2022 18	4	-	-	-
29	Wainganga	Bhandara	Maharashtra	245.50	245.70	248.38	16/08/2022	10/08/2022 20	12/08/2022 04	3	10/08/2022 21	12/08/2022 02	3
								15/08/2022 08	18/08/2022 01	4	15/08/2022 09	18/08/2022 00	4
								13/07/2022 22	14/07/2022 12	2	14/07/2022 04	14/07/2022 05	1

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Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								18/07/2022 15	18/07/2022 21	1	10/08/2022 15	12/08/2022 07	3
30	Wainganga	Pauni	Maharashtra	226.73	227.73	229.35	17/08/ 2022	10/08/2022 14	12/08/2022 10	3	15/08/2022 10	18/08/2022 03	4
								15/08/2022 08	18/08/2022 07	4	-	-	-
								14/09/2022 12	14/09/2022 16	1	-	-	-
								13/07/2022 12	16/07/2022 12	4	-	-	-
31	Wardha	Balharsha	Maharashtra	171.50	174.00	173.67	20/07/ 2022	19/07/2022 11	21/07/2022 15	3	-	-	-
								09/08/2022 08	13/08/2022 09	5	-	-	-
								13/09/2022 21	14/09/2022 04	2	-	-	-
								12/07/2022 19	14/07/2022 09	3	13/07/2022 14	14/07/2022 00	2
32	Indravati	Jagdalpur	Chhatisgarh	539.50	540.80	542.9	16/08/ 2022	08/08/2022 04	11/08/2022 05	4	08/08/2022 12	10/08/2022 20	3
								14/08/2022 21	18/08/2022 02	5	15/08/2022 02	17/08/2022 19	3
33	Krishna	Arjunwad	Maharashtra	539.20	540.70	536.74	13/08/ 2022	-	-	-	-	-	-
								10/09/2022 21	11/09/2022 07	2	-	-	-
34	Bhima	Deongaon	Karnataka	402.00	404.50	403.43	21/10/ 2022	19/09/2022 01	20/09/2022 20	2	-	-	-
								20/10/2022 11	22/10/2022 01	3	-	-	-
								14/07/2022 14	22/07/2022 18	9	18/07/2022 09	19/07/2022 05	2

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Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								29/07/2022 15	30/07/2022 22	2	10/08/2022 13	11/08/2022 19	2
								31/07/2022 01	31/07/2022 15	1	12/08/2022 06	12/08/2022 14	1
								03/08/2022 01	06/08/2022 18	4	07/09/2022 18	09/09/2022 13	3
35	Tungabhadra	Mantralayam	Andhra Pradesh	310.00	312.00	312.45	09/09/ 2022	07/08/2022 19	17/08/2022 01	11	-	-	-
								27/08/2022 17	05/09/2022 17	10	-	-	-
								07/09/2022 02	10/09/2022 13	4	-	-	-
								01/10/2022 04	03/10/2022 21	3	-	-	-
								12/10/2022 11	16/10/2022 06	5	-	-	-
								17/10/2022 15	18/10/2022 14	2	-	-	-
36	Tungabhadra	Kurnool	Andhra Pradesh	273.00	274.00	273.5	08/09/ 2022	16/07/2022 16	16/07/2022 17	1	-	-	-
								18/07/2022 16	19/07/2022 12	2	-	-	-
								10/08/2022 19	12/08/2022 21	3	-	-	-
								07/09/2022 23	09/09/2022 23	3	-	-	-
								15/08/2022 08	16/08/2022 08	2	-	-	-
								21/08/2022 09	21/08/2022 19	1	-	-	-
37	Nagavali	Srikakulam	Andhra Pradesh	10.17	10.80	10.77	15/08/ 2022	09/09/2022 23	10/09/2022 07	2	-	-	-

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Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								11/09/2022 04	12/09/2022 17	2	-	-	-
								07/10/2022 10	08/10/2022 23	2	-	-	-
38	Pennar	Nellore	Andhra Pradesh	15.91	17.28	12.4	15/10/ 2022	-	-	-	-	-	
39	Sabarmati	Ahmedabad Shubhash Bridge	Gujarat	44.09	45.34	42.8	24/08/ 2022	-	-	-	-	-	-
40	Mahi	Wanakbori	Gujarat	71.93	74.98	71.17	24/08/ 2022	-	-	-	-	-	-
								13/08/2022 15	13/08/2022 20	1	21/08/2022 14	22/08/2022 10	2
41	Naramada	Mandla	Madhya Pradesh	437.20	437.80	438.5	22/08/ 2022	15/08/2022 11	16/08/2022 07	2	-	-	-
								21/08/2022 09	22/08/2022 14	2	-	-	-
42	Naramada	Hoshangabad	Madhya Pradesh	292.80	293.80	294.85	22/08/ 2022	15/08/2022 20	17/08/2022 05	3	16/08/2022 00	16/08/2022 22	1
								22/08/2022 15	24/08/2022 16	3	22/08/2022 17	24/08/2022 08	3
43	Naramada	Garudeswar	Gujarat	30.48	31.09	25.7	24/08/ 2022	-	-	-	-	-	-
44	Naramada	Bharuch	Gujarat	6.71	7.31	8.52	25/08/ 2022	17/08/2022 05	20/08/2022 00	4	17/08/2022 10	19/08/2022 21	3
								23/08/2022 17	26/08/2022 23	4	23/08/2022 22	26/08/2022 19	4
45	Tapi	Surat	Gujarat	8.50	9.50	6.6	20/07/ 2022	-	-	-	-	-	-
46	Damanganga	Vapi Town	Gujarat	18.20	19.20	17.55	12/07/ 2022	-	-	-	-	-	-
47	Damanganga	Daman	Dadra &	2.60	3.40	2.5	16/09/	-	-	-	-	-	-

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Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
			Nagar Haveli				2022	17/07/2022 09	24/07/2022 10	8	17/07/2022 17	20/07/2022 08	4
								02/08/2022 04	17/08/2022 09	16	03/08/2022 17	13/08/2022 11	11
48	Cauvery	Musiri	Tamil Nadu	82.12	83.12	84.3	05/08/ 2022	27/08/2022 08	13/09/2022 05	18	28/08/2022 04	02/09/2022 09	6
								14/09/2022 11	17/09/2022 09	4	07/09/2022 10	10/09/2022 01	4
								14/10/2022 12	26/10/2022 15	13	16/10/2022 12	19/10/2022 17	4
								14/11/2022 01	16/11/2022 06	3	21/10/2022 12	23/10/2022 12	3
								16/07/2022 19	20/07/2022 10	5	17/07/2022 11	19/07/2022 19	3
49	Cauvery	Kodumudi	Tamil Nadu	125.5	126.5	127.83	05/08/ 2022	21/07/2022 08	21/07/2022 22	1	03/08/2022 06	12/08/2022 20	10
								03/08/2022 00	16/08/2022 00	14	28/08/2022 13	01/09/2022 18	5
								27/08/2022 06	02/09/2022 00	7	07/09/2022 07	09/09/2022 06	3
								06/09/2022 05	09/09/2022 21	4	15/10/2022 23	19/10/2022 00	5
								15/10/2022 12	19/10/2022 06	5	21/10/2022 07	22/10/2022 17	2
								20/10/2022 05	24/10/2022 15	5	-	-	-
50	Bhavani	Savandapur	Tamil Nadu	184.50	185.50	184.88	06/08/ 2022	06/08/2022 08	06/08/2022 21	1	-	-	-
								12/07/2022 06	20/07/2022 23	9	14/07/2022 07	20/07/2022 07	7

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Table 3.9: Above Normal and Severe Flood Events on various river systems (excluding Ganga and Brahmaputra Basins)- 2022 Flood Season

Sl. No.	River	Station	State	Warning Level (in m)	Danger Level (in m)	Peak Level in 2022		Flood period Above Warning Level			Flood period above Danger Level		
						Level (in m)	Date	From	To	No. of days	From	To	No. of Days
1	2	3	4	5	6	7	8	9	10	11	12	13	14
51	Sabari	Chinturu	Andhra Pradesh	41.50	43.00	49.4	16/07/2022	11/08/2022 04	15/08/2022 05	5	-	-	-
								16/08/2022 18	19/08/2022 21	4	-	-	-
								14/09/2022 14	14/09/2022 21	1	-	-	-
52	Krishna	Avanigadda	Andhra Pradesh	9.00	11.00	7.6	18/10/2022	-	-	-	-	-	-
53	Periyar	Neeleswaram	Kerala	9.00	10.00	7.32	02/08/2022	-	-	-	-	-	-
54	Bharathapuzha	Kumbidi	Kerala	8.20	9.20	7.9	17/07/2022	-	-	-	-	-	-
55	Pamba	Malakkara	Kerala	6.00	7.00	6.46	04/08/2022	04/08/2022 11	05/08/2022 18	2	-	-	-
56	Godavari	Nasik	Maharashtra	558.10	559.60	558.91	12/07/2022	11/07/2022 16	12/07/2022 18	2	-	-	-
57	Banas	Abu Road	Rajasthan	258.00	259.00	258.3	17/08/2022	17/08/2022 17	18/08/2022 00	2	-	-	-
								23/08/2022 13	23/08/2022 15	1	-	-	-
								06/09/2022 17	06/09/2022 18	1	-	-	-
58	Vaigai	Madurai	Tamil Nadu	131.50	132.50	131.7	18/10/2022	18/10/2022 11	19/10/2022 08	2	-	-	-
								13/11/2022 14	13/11/2022 20	1	-	-	-

Source: FFM Directorate, Central Water Commission

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Appendix Glossary

GLOSSARY OF TERMS

Area sown more than once	This represents the area on which crops are cultivated more than once during the agricultural year. This is obtained by deducting Net Area Sown from Total Cropped Area.
Beel	A beel is a billabong or a lake-like wetland with static water (as opposed to moving water in rivers and canals.
Brackish water	Brackish water (less commonly brack water) is salt water and fresh water mixed together. It is saltier than fresh water, but not as salty as seawater. It may result from mixing of seawater with fresh water, as in estuaries, or it may occur in brackish fossil aquifers.
Canal	Canals are waterways channels, or artificial waterways, for water conveyance, or to service water transport vehicles. They may also help with irrigation. A canal is like navigation when it parallels a river and shares part of its waters and drainage basin, and leverages its resources by building dams and locks to increase and lengthen its stretches of slack water levels while staying in its valley. In contrast, a canal cuts across a drainage divide atop a ridge, generally requiring an external water source above the highest elevation.
Cropping Intensity	It is the ratio of gross (total) area sown to the net area sown expressed as a percentage.
Culturable Command Area (CCA)	It is the area which can be physically irrigated from a scheme and is fit for cultivation.
Dam	Any artificial barrier which impounds or diverts water. A dam is generally considered hydrologically significant if it is 1.25 feet (0.4 m) or more in height from the natural bed of the stream and has storage of at least 15 acre-feet or it has an impounding capacity of 50 acre-feet or more and is at least six feet (2 m) above the natural bed of the stream.
Glacier	A glacier is a persistent body of dense ice that is constantly moving under its own weight. A glacier forms where the accumulation of snow exceeds its ablation (melting and sublimation) over many years, often centuries. Glaciers slowly deform and flow under stresses induced by their weight, creating crevasses, seracs, and other distinguishing features.
Gross Sown Area	This is the sum total of the areas under all crops over the various seasons in an agriculture year (i.e. from the 1st July to 30th June next year).
Gross Irrigated Area	It is the total area irrigated under various crops in a year, counting the area irrigated under more than one crop during the same year as many times as the number of crops grown and irrigated.

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Appendix Glossary

GLOSSARY OF TERMS

Irrigation Potential Created (IPC)	The Irrigation potential created by a project at a given time during or after its construction is the aggregate gross area that can be irrigated annually by the quantity of water that could be made available by all the connected and completed works up to the end of the water courses or the last point in the water delivery system. It is the area that can be irrigated from a project in a design agriculture year that is from the 1st July to 30th June next year for the projected cropping pattern and accepted water allowance on its full development. Before an area is included under potential created, it has to be ensured that the water for the area to be reported upon is available and the conveyance system up to and including the irrigation outlet to serve an area up to 40 Ha in the area to be irrigated is completed.
Irrigation Potential Utilised	The Irrigation potential utilised is the total gross area actually irrigated by a project/scheme during the agricultural year under consideration.
Lake	A lake is an area filled with water, localized in a basin, surrounded by land, apart from any river or other outlet that serves to feed or drain the lake. Lakes lie on land and are not part of the ocean. Therefore, they are distinct from lagoons, and are also larger and deeper than ponds, though there are no official or scientific definitions.
Large Dam	A dam exceeding 15m in height above deepest river bed level and a dam between 10 and 15 m height provided volume of earthwork exceeds 0.75 MCM and storage exceeds 1 MCM or the maximum flood discharge exceeds 2000 cumec.
Live Capacity	It is the total amount of storage capacity available in a reservoir for all purposes, from the dead storage level to the normal water or normal pool level/surface level. It does not include surcharge, or dead storage, but does include inactive storage, active conservation storage and exclusive flood control storage.
Major Irrigation Scheme	A scheme having Culturable Command Area (CCA) more than 10,000 Ha is classified as major irrigation scheme.
Medium Irrigation Scheme	A scheme having CCA more than 2,000 Ha and up to 10,000 Ha individually is classified as medium irrigation scheme.
Minor Irrigation Scheme	A scheme having CCA up to 2,000 Ha individually is classified as minor irrigation scheme.

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Appendix Glossary

GLOSSARY OF TERMS

Net Sown Area	It is the total area sown with crops and orchards, counting areas sown more than once in the same agricultural year only once.
Net Irrigated Area	It is the total area which is irrigated counting area irrigated more than once on the same land in an agricultural year once only.
Oxbow Lake	An oxbow lake is a U-shaped lake that forms when a wide meander of a river is cut off, creating a free-standing body of water.
Reporting Area for Land Utilisation Statistics	The Reporting area stands for the area for which data on land use classification are available.
Power(KW)	Mechanical force developed by the motive power installation in craft. This power should be measured in effective kilowatts (power transmitted to the propeller).
River	River is a natural flowing water course, usually freshwater, flowing towards an ocean, sea, lake or another river.
River Basin	River Basin is the basic hydrological unit for water resources planning and management.
Surface Water	Water that flows in streams and rivers and in natural lakes, in wetlands, and in reservoirs constructed by humans.
Total Cultivable Area	This consists of net area sown, current fallows, fallow lands other than current fallows, culturable waste and land under miscellaneous tree crops.
Ultimate Irrigation Potential	The ultimate irrigation potential is the gross area that can be irrigated from a project in design year for the projected cropping pattern and assumed water allowance on its full development. The gross irrigated area will be the aggregate of the areas irrigated in the different crop seasons, the areas under two seasonal and perennial crops being counted only once in the year. The Ultimate Irrigation Potential of ground water may however, be taken as the total area that can be irrigated by utilizing the Annually Rechargeable Ground Water Resource Available for Irrigation considering the gross irrigation requirement of crops grown in an unit area.

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