



जल शक्ति मंत्रालय
Ministry of Jal Shakti



केंद्रीय जल आयोग Central Water Commission

Water Resources at a Glance 2022



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Reg.No : CWC / 2022 / 34



केंद्रीय जल आयोग Central Water Commission

मिशन वक्तव्य

अत्याधुनिक प्रौद्योगिकी और सक्षमता का उपयोग करके और सभी पणधारियों का समन्वय करके भारत के जल संसाधनों के एकीकृत और दीर्घकालिक विकास और प्रबंधन को बढ़ावा देना।

Mission Statement

To promote integrated and sustainable development and management of India's water resources by using state-of-the-art technology and competency and by coordinatng all stakeholders.

Brief Profile of Central Water Commission



Dr. B. R. Ambedkar,
Founding father of CWC



Dr. A.N Khosla,
Founding Chairman of CWC

Central Water Commission (erstwhile Central Waterways, Irrigation and Navigation Commission) was established in 1945 by the Government on the advice of Dr. B.R. Ambedkar, Member (Labour) in Viceroy's Executive Council . Since then CWC has evolved as a premier technical organization in the country in the field of Water Resources and is functioning as an attached office of the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti. The Commission is entrusted with the responsibilities of initiating, coordinating and furthering, in consultation with the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for the purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Hydro Power Development. It also undertakes the investigations, construction and execution of any such schemes, if required.

ORGANIZATION SET UP

CWC, with its headquarters at New Delhi, is headed by a Chairman, an Ex-officio Secretary to the Government of India. It has three technical wings, namely:

- Designs and Research Wing
- Water Planning and Projects Wing
- River Management Wing

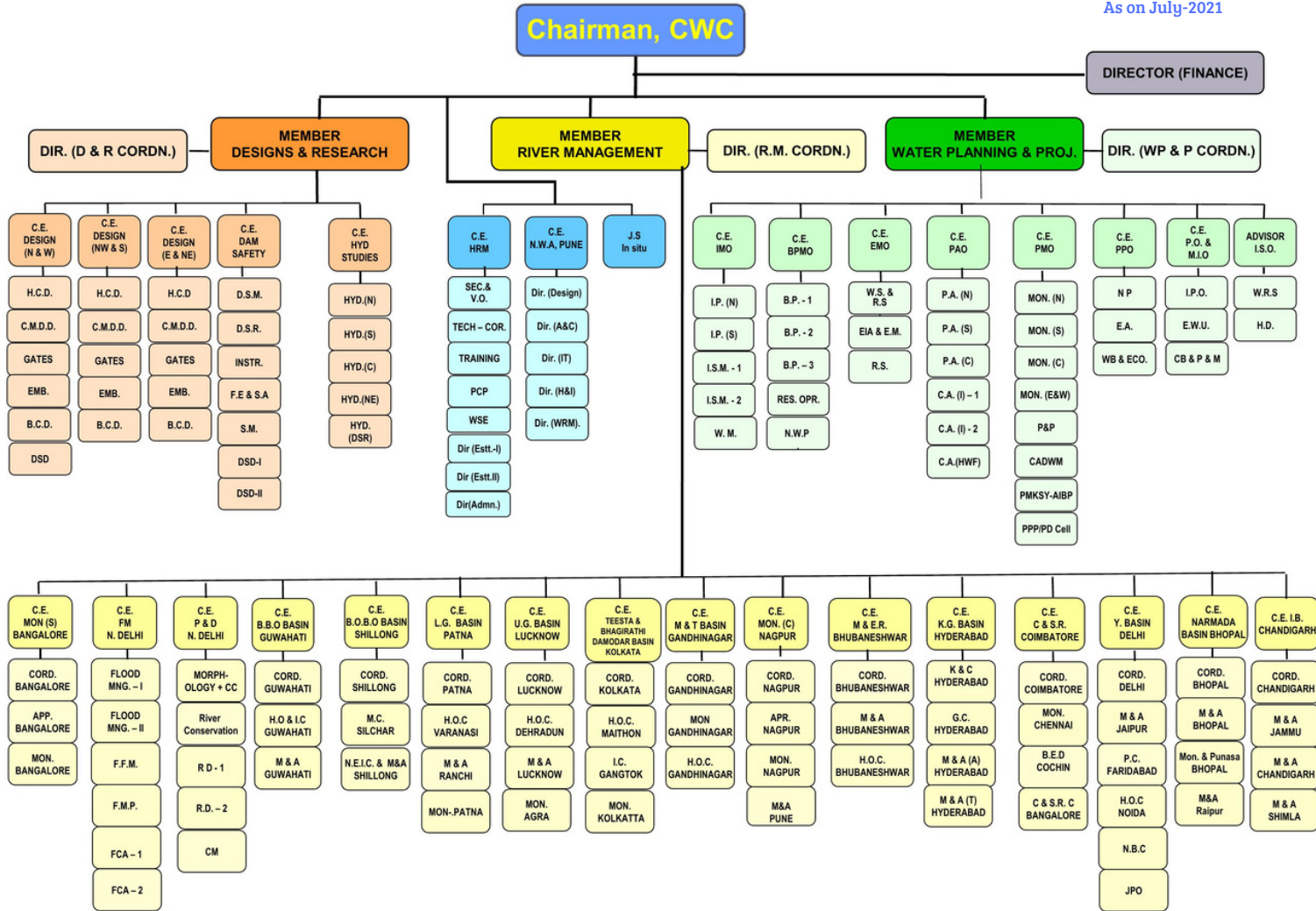
Each wing is headed by a Central Water Engineering Services- Group 'A' officer designated as Member, an Ex-officio Additional Secretary to the Government of India. Members are assisted by officers of the rank of Chief Engineer & below. For better coordination with the States and to ensure basin-wise water resources management, 14 Regional Offices headed by Chief Engineer are functioning at various locations in the country. CWC has a dedicated Human Resources Management Unit headed by a Chief Engineer. In addition, National Water Academy at Pune headed by a Chief Engineer conducts training courses for the in-service engineers of Central/State Governments and other stakeholders.

The CWC has contributed substantially to the country's commendable progress achieved in creation of irrigation potential, flood management measures and hydro-power generation. The CWC is also responsible for strengthening international cooperation on matters relating to trans-boundary rivers by way of assistance in water resource development projects, hydrological observation and flood forecasting and operation of bilateral treaties and agreements.



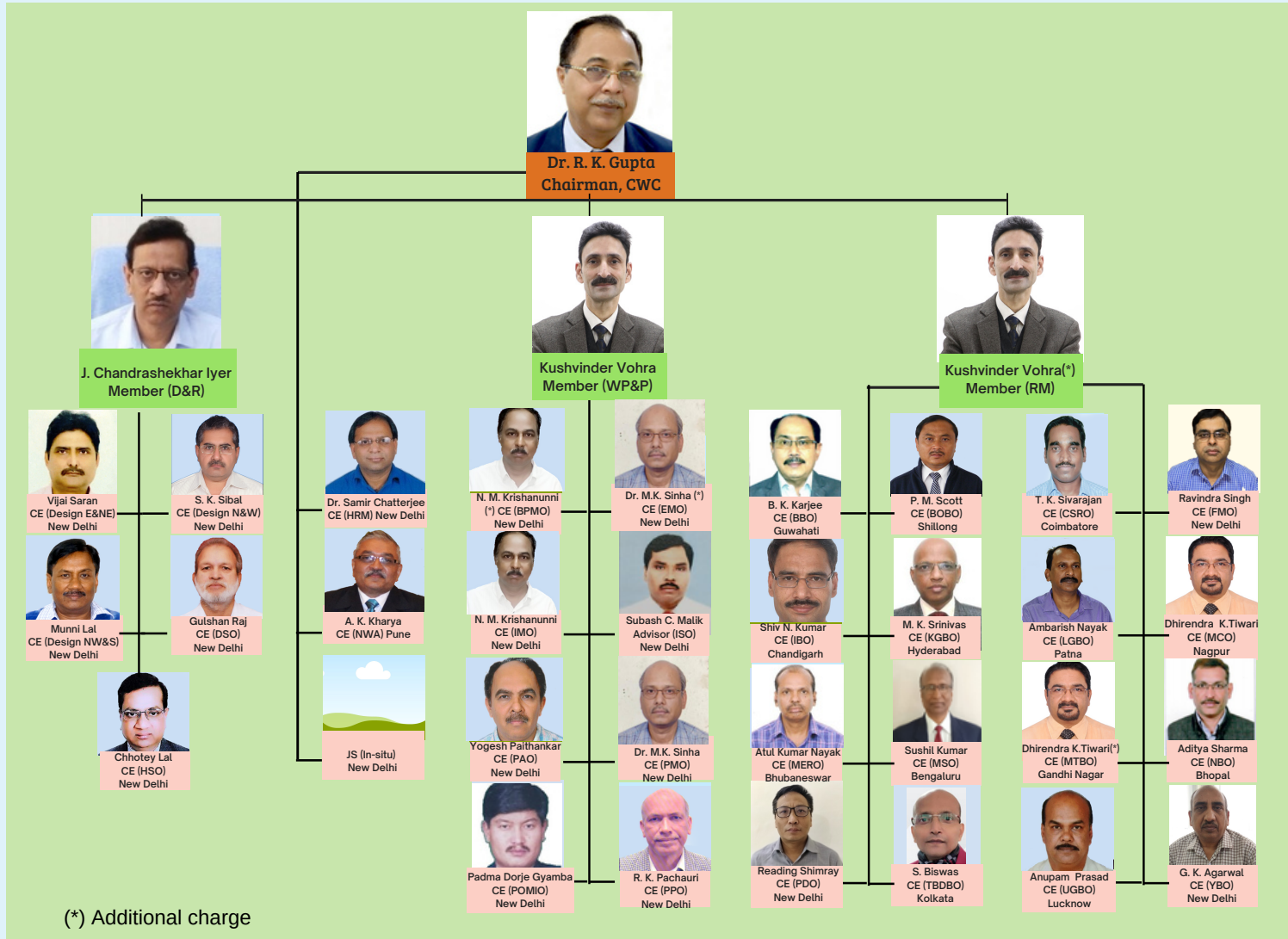
Organogram

As on July-2021



Source: WPC, CWC

Senior Officers of CWC



Unit conversion table

1 metre = 100 centimetre
 1 feet = 30.48 cm
 1 Acre = 4840 sq. yard
 1 Hectare = 10000 sq. m
 1 cubic metre = 1000 litre

Unit A to B	Unit B to A
1 metre = 3.28084 feet	1 feet = 0.3048 metre
1 Hectare = 2.47105 Acre	1 Acre = 0.40468 Hectare
1 cumec = 35.31466 cusec	1 cusec = 0.0283168 cumec
1 BCM = 35.31467 TMC	1 TMC = 0.028317 BCM
1 MLD = 0.011574 cumec	1 cumec = 86.4 MLD
1 MAF = 1.23348 BCM	1 BCM = 0.81071 MAF

Abbreviations

cusec- cubic foot per second
 cumec- cubic metre per second
 MLD- Millions of liter (mega litre) per day
 BCM- Billion cubic metres
 MCM- Million cubic meters
 TMC- Thousand million cubic feet
 MAF- Million acre feet

Salient Features of National Water Policy (2012)

- Planning, development and management of water resources need to be governed by common integrated perspective considering local, regional, State and national context, having an environmentally sound basis, keeping in view the human, social and economic needs.
- Principle of equity and social justice must inform use and allocation of water.
- Water needs to be managed as a common pool community resource held, by the state under public trust doctrine to achieve food security, support livelihood, and ensure equitable and sustainable development for all
- Water is essential for sustenance of eco-system, and therefore, minimum ecological needs should be given due consideration.
- Safe Water for drinking and sanitation should be considered as pre-emptive needs, followed by high priority allocation for other basic domestic needs (including needs of animals), achieving food security, supporting sustenance agriculture and minimum eco-system needs. Available water, after meeting the above needs, should be allocated in a manner to promote its conservation and efficient use.
- Given the limits on enhancing the availability of utilizable water resources and increased variability in supplies due to climate change, meeting the future needs will depend more on demand management, and hence, this needs to be given priority, especially through (a) evolving an agricultural system which economizes on water use and maximizes value from water, and (b) bringing in maximum efficiency in use of water and avoiding wastages.
- Water quality and quantity are interlinked and need to be managed in an integrated manner, consistent with broader environmental management approaches inter-alia including the use of economic incentives and penalties to reduce pollution and wastage.
- The impact of climate change on water resources availability must be factored into water management related decisions. Water using activities need to be regulated keeping in mind the local geo climatic and hydrological situation.
- There is a need to evolve a National Framework Law as an umbrella statement of general principles governing the exercise of legislative and/or executive (or devolved) powers by the Centre, the States and the local governing bodies. This should lead the way for essential legislation on water governance in every State of the Union and devolution of necessary authority to the lower tiers of government to deal with the local water situation.
- There is a need for comprehensive legislation for optimum development of inter-State rivers and river valleys to facilitate inter-State coordination ensuring scientific planning of land and water resources taking basin/sub-basin as unit with unified perspectives of water in all its forms (including precipitation, soil moisture, ground and surface water) and ensuring holistic and balanced development of both the catchment and the command areas. Such legislation needs, inter alia, to deal with and enable establishment of basin authorities, comprising party States, with appropriate powers to plan, manage and regulate utilization of water resource in the basins.
- The Centre, the States and the local bodies (governance institutions) must ensure access to a minimum quantity of potable water for essential health and hygiene to all its citizens, available within easy reach of the household.

- Ecological needs of the river should be determined, through scientific study, recognizing that the natural river flows are characterized by low or no flows, small floods (freshets), large floods, etc., and should accommodate developmental needs. A portion of river flows should be kept aside to meet ecological needs ensuring that the low and high flow releases are proportional to the natural flow regime, including base flow contribution in the low flow season through regulated ground water use.
- The availability of water resources and its use by various sectors in various basin and States in the country need to be assessed scientifically and reviewed at periodic intervals, say, every five years. The trends in water availability due to various factors including climate change must be assessed and accounted for during water resources planning.
- The anticipated increase in variability in availability of water because of climate change should be dealt with by increasing water storage in its various forms, namely, soil moisture, ponds, ground water, small and large reservoirs and their combination. States should be incentivized to increase water storage capacity, which inter-alia should include revival of traditional water harvesting structures and water bodies.
- There is a need to map the aquifers to know the quantum and quality of ground water resources (replenishable as well as non-replenishable) in the country. This process should be fully participatory involving local communities. This may be periodically updated.
- Declining ground water levels in over-exploited areas need to be arrested by introducing improved technologies of water use, incentivizing efficient water use and encouraging community based management of aquifers. In addition, where necessary, artificial recharging projects should be undertaken so that extraction is less than the recharge. This would allow the aquifers to provide base flows to the surface system, and maintain ecology.
- A system to evolve benchmarks for water uses for different purposes, i.e., water footprints, and water auditing should be developed to promote and incentivize efficient use of water. The 'project' and the 'basin' water use efficiencies need to be improved through continuous water balance and water accounting studies. An institutional arrangement for promotion, regulation and evolving mechanisms for efficient use of water at basin/sub-basin level will be established for this purpose at the national level.
- Recycle and reuse of water, including return flows, should be the general norm.
- Water saving in irrigation use is of paramount importance. Methods like aligning cropping pattern with natural resource endowments, micro irrigation (drip, sprinkler, etc.), automated irrigation operation, evaporation-transpiration reduction, etc., should be encouraged and incentivized. Recycling of canal seepage water through conjunctive ground water use may also be considered.
- Pricing of water should ensure its efficient use and reward conservation. Equitable access to water for all and its fair pricing, for drinking and other uses such as sanitation, agricultural and industrial, should be arrived at through independent statutory Water Regulatory Authority, set up by each State, after wide ranging consultation with all stakeholders.

- In order to meet equity, efficiency and economic principles, the water charges should preferably / as a rule be determined on volumetric basis. Such charges should be reviewed periodically.
- The principle of differential pricing may be retained for the pre-emptive uses of water for drinking and sanitation; and high priority allocation for ensuring food security and supporting livelihood for the poor. Available water, after meeting the above needs, should increasingly be subjected to allocation and pricing on economic principles so that water is not wasted in unnecessary uses and could be utilized more gainfully.
- Encroachments and diversion of water bodies (like rivers, lakes, tanks, ponds, etc.) and drainage channels (irrigated area as well as urban area drainage) must not be allowed, and wherever it has taken place, it should be restored to the extent feasible and maintained properly.
- Sources of water and water bodies should not be allowed to get polluted. System of third party periodic inspection should be evolved and stringent punitive actions be taken against the persons responsible for pollution.
- Considering the heavy economic loss due to delay in implementation of projects, all clearances, including environmental and investment clearances, be made time bound.
- All components of water resources projects should be planned and executed in a pari-passu manner so that intended benefits start accruing immediately and there is no gap between potential created and potential utilized.
- Local governing bodies like Panchayats, Municipalities, Corporations, etc., and Water Users Associations, wherever applicable, should be involved in planning of the projects. The unique needs and aspirations of the Scheduled caste and Scheduled Tribes, women and other weaker sections of the society should be given due consideration.
- All water resources projects, including hydro power projects, should be planned to the extent feasible as multi-purpose projects with provision of storage to derive maximum benefit from available topology and water resources.
- While every effort should be made to avert water related disasters like floods and droughts, through structural and non-structural measures, emphasis should be on preparedness for flood / drought with coping mechanisms as an option. Greater emphasis should be placed on rehabilitation of natural drainage system.
- Urban and rural domestic water supply should preferably be from surface water in conjunction with groundwater and rainwater. Where alternate supplies are available, a source with better reliability and quality needs to be assigned to domestic water supply. Exchange of sources between uses, giving preference to domestic water supply should be possible. Also, reuse of urban water effluents from kitchens and bathrooms, after primary treatment, in flush toilets should be encouraged, ensuring no human contact.
- In urban and industrial areas, rainwater harvesting and de-salinization, wherever techno-economically feasible, should be encouraged to increase availability of utilizable water. Implementation of rainwater harvesting should include scientific monitoring of parameters like hydrogeology, groundwater contamination, pollution and spring discharges.

- Urban water supply and sewage treatment schemes should be integrated and executed simultaneously. Water supply bills should include sewerage charges.
- A permanent Water Disputes Tribunal at the Centre should be established to resolve the disputes expeditiously in an equitable manner. Apart from using the “good offices” of the Union or the State Governments, as the case may be, the paths of arbitration and mediation may also to be tried in dispute resolution.
- Integrated Water Resources Management (IWRM) taking river basin / sub-basin as a unit should be the main principle for planning, development and management of water resources. The departments / organizations at Centre / State Governments levels should be restructured and made multi-disciplinary accordingly.
- All water related data, like rainfall, snowfall, geo-morphological, climatic, geological, surface water, ground water, water quality, ecological, water extraction and use, irrigated area, glaciers, etc., should be integrated with well defined procedures and formats to ensure online updation and transfer of data to facilitate development of database for informed decision making in the management of water.
- Continuing research and advancement in technology shall be promoted to address issues in the water sector in a scientific manner. Innovations in water resources sector should be encouraged, recognized and awarded.
- It needs to be recognized that the field practices in the water sector in advanced countries have been revolutionized by advances in information technology and analytical capabilities. A re-training and quality improvement programme for water planners and managers at all levels in India, both in private and public sectors, needs to be undertaken.
- An autonomous centre for research in water policy should also be established to evaluate impacts of policy decisions and to evolve policy directives for changing scenario of water resources.

Source – NWP Dte .CWC, New Delhi.

World- Land and Water Resources at a Glance

General			
Geographical Area(2019)			
		13497 MHa	
Population (2018)			
		7631 Million	
Sources of Water			
A. Sources of Water (Approximate)			
Item	Volume (in Billion km ³)	In Percentage	
Salt Water in Oceans	1.365	97.5	
Fresh Water	0.035	2.5	
Total	1.4	100.0	
B. Sources of Fresh Water (Approximate)			
Item	Volume (in Million km ³)	% of Fresh Water	% of Total Water
Polar Ice and Glaciers	24.000	68.9	1.77
Ground Water **	10.780	30.8	0.79
Lakes & Rivers	0.105	0.3	0.01
Source: http://www.unep.org			
** Shallow and deep ground water basins up to 2000 meters, soil moisture, swamp water and permafrost.			
Land Resources*			
Land Area (2017)		13030 Mha	
Arable Lands (2017)		1383 Mha	
Forest (2017)		4064 MHa	

Source: WRS Dte, CWC/ *website of FAO - www.fao.org

India- Land and Water Resources at a Glance

A. General	
Total Geographical Area (TGA)	328.73Mha
Area as % of World Area	2.44%
Location	Latitude 8°4'N to 37°6'N Longitude 68°7'E to 97°25' E
Forest Cover (2017-18)	21.91% of TGA
Population (As Per Census Of India 2011)	1210.57 Million
Population(Estimated in 2018 as per FAO STAT)	1352.64 Million
Population as % of World Population(as in 2018)	17.73%
Annual Rainfall (2020)	1289.6 mm
B. Water Resources	
Average Annual Precipitation	3880 BCM
Average Annual Water Resources (as per Reassessment of Water Availability in India using Space Inputs-2019)	1999.2 BCM
Estimated Utilizable Surface Water Resources	690 BCM
Total Annual Ground Water Recharge(as per Ground Water Reassessment-2020)	436 BCM
Total Annual Utilizable Water Resources	1126 BCM
Per Capita Water Availability (2011 Census)	1545 m ³ /year
Large Dams	5745 Nos.
Completed Dams	5334 Nos.
Under Construction	411 Nos.
Storage Capacity	257.812 BCM
C. Land Resources	
Total Cultivable Land (2017-18)	153.99Mha
Gross Sown Area (2017-18)p	199.99Mha
Net Sown Area (2017-18)p	139.18 Mha
D. Hydropower (Capacity as on 30.11.2021)	
Identified Capacity as per re-assessment Study (above 25 MW)	145320 MW
Capacity Under Operation (above 25 MW)	40913.7 MW
Capacity Under Construction (above 25 MW)	11393.5 MW

Sources : WRS Dte, BP-1 Dte, CWC, RGI, IMD, Central Electricity Authority, Ministry of Agriculture & FW (<http://eands.dacnet.nic.in>)

River Basin Map of India



Water Resources Potential in River Basins in India

S. No	River Basin	Catchment area (sq.km)	Average Water Resources Potential (BCM)	Utilisable Surface Water Resources (BCM)
1	Indus (up to Border)	3,17,708	45.53	46
2	a) Ganga	8,38,803	509.52	250
	b) Brahmaputra,	1,93,252	527.28	24
	c)Barak & Others	86,335	86.67	-
3	Godavari	3,12,150	117.74	76.3
4	Krishna	2,59,439	89.04	58
5	Cauvery	85,167	27.67	19
6	Subemarekha*	26,804	15.05	6.8
7	Brahmani & Baitami	53,902	35.65	18.3
8	Mahanadi	1,44,905	73	50
9	Pennar	54,905	11.02	6.9
10	Mahi	39,566	14.96	3.1
11	Sabarnati	31,901	12.96	1.9
12	Narmada	96,659.79	58.21	34.5
13	Tapi	65,805.80	26.24	14.5
14	West Flowing Rivers From Tapi to Tadri	58,360	118.35	11.9
15	West Flowing Rivers From Tadri to Kanyakumari	54,231	119.06	24.3
16	East Flowing Rivers Between Mahanadi & Pennar	82,073	26.41	13.1
17	East Flowing Rivers Between Pennar And Kanyakumari	1,01,657	26.74	16.5
18	West Flowing Rivers Of Kutch and Saurashtra including Luni	1,92,112	26.93	15
19	Area of Inland drainage in Rajasthan	1,44,835.90	Negl.	N.A
20	Minor River Draining into Myanmar(Burma) & Bangladesh	31,382	31.17	N.A
TOTAL		32,71,953	1999.2	690.1

Reassessment of Water Availability in India using Space Inputs, June 2019

Source: BP-I Directorate, Central water Commission

State-wise Live Storage Capacity of Reservoirs

Sl. No.	State/UT	Total Live Storage Capacity (BCM)
1	Andaman & Nicobar	0.019
2	Arunachal Pradesh	0.000006
3	Andhra Pradesh (Erstwhile)	28.716
4	Assam	0.012
5	Bihar	2.613
6	Chattisgarh	6.736
7	Goa	0.290
8	Gujarat*	22.553
9	Himachal	13.792
10	J&K	0.029
11	Jharkhand	2.436
12	Karnataka	31.903
13	Kerala	9.768
14	Maharashtra	37.358
15	Madhya Pradesh	33.075
16	Manipur	0.532
17	Meghalaya	0.479
18	Nagaland	1.220
19	Orissa	24.032
20	Punjab	2.402
21	Rajasthan	9.708
22	Sikkim	0.007
23	Tamil Nadu	7.859
24	Tripura	0.312
25	Uttrakhand	5.670
26	Uttar Pradesh	14.263
27	West Bengal	2.027
28	Mizoram	0.000
	TOTAL	257.812

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

Basin-wise Live Storage Capacity of Reservoirs

Sl. No.	Basin Name	Live Storage of (in BCM)		
		Completed Projects	Under Construction Projects	Total
1	Indus	16.223	0.100	16.3232
2	Ganga	48.677	7.649	56.326
3	Brahmaputra	1.718	0.795	2.5131
4	Barak & others	0.719	9.172	9.891
5	Godavari	35.04	8.412	43.4515
6	Krishna	50.651	4.156	54.807
7	Cauvery	9.083	0.015	9.098
8	Subernrekha	0.309	2.150	2.459
9	Brahmani & Baitarni	5.55369	0.703	6.25669
10	Mahanadi	13.06564	1.461	14.52694
11	Pennar	2.938	2.141	5.079
12	Mahi	5.017	0.150	5.167
13	Sabarmati	1.577	0.109	1.686
14	Narmada	21.816	2.641	24.4567
15	Tapi	9.137	1.558	10.695
16	West flowing Rivers from Tapi to Tadri	14.668	2.430	17.098
17	West flowing Rivers from Tadri to Kanyakumari	11.023	1.416	12.439
18	East flowing Rivers between Mahanadi and Pennar	2.676	1.181	3.857
19	East flowing Rivers between Pennar and Kanyakumari	1.441	0.015	1.456
20	Rivers of Saurashtra and Kutchchh including Luni	6.336	0.511	6.847
21	Area of Inland Drainage of Rajasthan	0	0.000	0
22	Draining into Myanmar and Bangladesh	0.14358	0.000	0.14358
23	Area of North Ladakh not draining into Indus	0	0.000	0
	Total	257.812	46.765	304.577

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
Source: WM Dte., CWC

Abstract of Large Dams (State-wise)

Sl. No.	State	Total completed dams	Under Construction dams	Total dams
1	Andaman & Nicobar Islands*	2		2
2	Andhra Pradesh	149	17	166
3	Arunachal Pradesh	1	3	4
4	Assam	3	1	4
5	Bihar	24	2	26
6	Chhattisgarh	249	9	258
7	Goa	5		5
8	Gujarat	620	12	632
9	Himachal Pradesh	19	1	20
10	Haryana	1		1
11	Jammu & Kashmir	15	2	17
12	Jharkhand	55	24	79
13	Karnataka	230	2	232
14	Kerala	61		61
15	Madhya Pradesh	899	7	906
16	Maharashtra	2117	277	2394
17	Manipur	3	1	4
18	Meghalaya	8	2	10
19	Mizoram	1		1
20	Nagaland	1		1
21	Odisha	200	4	204
22	Punjab	14	2	16
23	Rajasthan	204	8	212
24	Sikkim	2		2
25	Tamil Nadu	118	0	118
26	Telangana	168	16	184
27	Tripura	1		1
28	Uttar Pradesh	117	13	130
29	Uttarakhand	17	8	25
30	West Bengal	30		30
	GRAND TOTAL	5334	411	5745

Source: DSM Dte., CWC/NRLD-2019 Published on 27.06.2019

International Commission on Large Dams (ICOLD) Specification

- A large dam is classified as one with a maximum height of more than 15 meters from its deepest foundation to the crest.
- A dam between 10 & 15 meters 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 crest of the dam is not less than 500 meters or
 - b) capacity of the reservoir formed by the dam is not less than one million cubic meter or
 - c) the maximum flood discharge dealt with by the dam is not less than 2000 cubic meters or
 - d) the dam has specially difficult foundation problems, or
 - e) the dam is of unusual design.

Details of Plan-wise position of irrigation Potential Created and Utilized (in MHa)

Plan		Potential Created					Potential Utilized				
		Major & Medium	Minor			Total	Major & Medium	Minor			Total
			S.W	G.W	Total			S.W	G.W	Total	
Upto 1951 (Pre-Plan)	Cumulative	9.7	6.4	6.5	12.9	22.6	9.7	6.4	6.5	12.9	22.6
I Plan (1951-1956)	During	2.5	0.03	1.13	1.16	3.66	1.28	0.03	1.13	1.16	2.44
	Cumulative	12.2	6.43	7.63	14.06	26.26	10.98	6.43	7.63	14.06	25.04
II Plan (1956-1961)	During	2.13	0.02	0.67	0.69	2.82	2.07	0.02	0.67	0.69	2.76
	Cumulative	14.33	6.45	8.3	14.75	29.08	13.05	6.45	8.3	14.75	27.8
III Plan (1961-1966)	During	2.24	0.03	2.22	2.25	4.49	2.12	3.03	2.22	2.25	4.37
	Cumulative	16.57	6.48	10.52	17	33.57	15.17	6.48	10.52	17	32.17
Annual Plans (1966-1969)	During	1.53	0.02	1.98	2	3.53	1.58	0.02	1.98	2	3.58
	Cumulative	18.1	6.5	12.5	19	37.1	16.75	6.5	12.5	19	35.75
IV Plan (1969-1974)	During	2.6	0.5	4	4.5	7.1	1.64	0.5	4	4.5	6.14
	Cumulative	20.7	7	16.5	23.5	44.2	18.39	7	16.5	23.5	41.89
V Plan (1974-1978)	During	4.02	0.5	3.3	3.8	7.82	2.7	0.5	3.3	3.8	6.5
	Cumulative	24.72	7.5	19.8	27.3	52.02	21.09	7.5	19.8	27.3	48.39
Annual Plans (1978-1980)	During	1.89	0.5	2.2	2.7	4.59	1.48	0.5	2.2	2.7	4.18
	Cumulative	26.61	8	22	30	56.61	22.57	8	22	30	52.57
VI Plan (1980-1985)	During	1.09	1.7	5.82	7.52	8.61	0.93	1.01	4.24	5.25	6.18
	Cumulative	27.7	9.7	27.82	37.52	65.22	23.5	9.01	26.24	35.25	58.75
VII Plan (1985-1990)	During	2.22	1.29	7.8	9.09	11.31	1.9	0.96	6.91	7.87	9.77
	Cumulative	29.92	10.9	35.62	46.52	76.44	25.4	9.97	33.15	43.12	68.52
Annual Plans (1990-1992)	During	0.82	0.47	3.27	3.74	4.56	0.85	0.32	3.1	3.42	4.27
	Cumulative	30.74	11.46	38.89	50.35	81.09	26.25	10.29	36.25	46.54	72.79
VIII Plan (1992-1997)	During	2.21	1.05	1.91	2.96	5.17	2.13	0.78	1.45	2.23	4.36
	Cumulative	32.95	12.51	40.8	53.31	86.26	28.38	11.07	37.7	48.77	77.15
IX Plan (1997-2002)	During	4.1	1.09	2.5	3.59	7.69	2.57	0.37	0.85	1.22	3.79
	Cumulative	37.05	13.6	43.3	56.9	93.95	30.95	11.44	38.55	49.99	80.94
X Plan (2002-2007)	During	4.59	N.A.	N.A.	3.2	7.79	2.73	N.A.	N.A.	1.49	4.22
	Cumulative	41.64	N.A.	N.A.	60.1	101.74	33.68	N.A.	N.A.	51.48	85.16
XI Plan (2007-2012)	During	6.34	NA	NA	5.45	11.79	1.33	N.A	N.A	1.43	2.76
	Cumulative	47.97	N.A	N.A	65.56	113.53	35.01	N.A	N.A	52.91	87.92

Note: IPC & IPU figures for the period from 2012-13 to 2019-20 are under revision / compilation.

S.W.: Surface Water, G.W.: Ground Water

Source: P&P Dte, CWC

Plan-wise Expenditure on Major & Medium Irrigation in India

Sl. No.	Plan Period	Major & Medium Irrigation (Rs.in crore)
1	First (1951-56)	376.2
2	Second (1956-61)	380
3	Third (1961-66)	576
4	Annual (1966-69)	429.8
5	Fourth (1969-74)	1242.3
6	Fifth (1974-78)	2516.2
7	Annual (1978-80)	2078.6
8	Sixth (1980-85)	7368.8
9	Seventh (1985-90)	11107.3
10	Annual (1990-92)	5459.2
11	Eight (1992-97)	21071.9
12	IX Plan (1997-02)	49289
13	X Plan(2002-07)	83647
14	XI Plan(2007-2012) outlay/Expenditure	
(a)	Actual Expenditure (2007-2008)	29390.6
(b)	Actual Expenditure (2008-2009)	32341.8
(c)	Revised approved outlay(2009-2010)	34882.3
(d)	Revised Approved Outlay(2010-2011)	34310.1
(e)	Actual Expenditure (2011-2012)	35664.5
15	XII Plan Outlay (Projection)	
(a)	Approved Outlay (2012-13)	49920.6
(b)	Actual Expenditure (2012-2013)	27403.8
(c)	Approved Outlay (2013-14)	55587.7

Note: Expenditure on MMI Projects for the period from 2014-15 to 2019-20 is under compilation.

Source: Erstwhile Planning Commission / P & P Dte./ WRIS, CWC

Irrigation Potential Created in Major , Medium & Minor Irrigation

(Th. Ha)

S. No.	State	UIP of MMI Projects	UIP of Minor Projects	Total UIP	Irrigation Potential Created up to XI Plan		
					MMI	Minor	Total
1	2	3	4	5	6	7	8
1	Andhra Pradesh	5000.00	6260.00	11260.00	4803.73	3340.550	8144.28
2	Telangana						
3	Arunachal Pradesh	0.00	168.00	168.00	1.20	132.248	133.448
4	Assam	970.00	1900.00	2870.00	455.96	1016.820	1472.783
5	Bihar	5223.50	5663.50	10887.00	3054.46	5924.780	8979.240
6	Chhattisgarh	1146.93	571.00	1717.93	1269.32	842.295	2111.610
7	Goa	62.00	54.00	116.00	55.55	25.927	81.478
8	Gujarat	3000.00	3103.00	6103.00	3679.09	2071.970	5751.060
9	Haryana	3000.00	1512.00	4512.00	2206.29	1637.670	3843.960
10	Himachal Pradesh	50.00	303.00	353.00	30.45	186.217	216.667
11	Jammu Kashmir	250.00	1108.00	1358.00	325.61	534.200	859.809
12	Jharkhand	1276.50	1183.50	2460.00	530.71	745.661	1276.366
13	Karnataka	2500.00	3474.00	5974.00	2965.83	1704.170	4670.000
14	Kerala	1000.00	1679.00	2679.00	715.69	763.650	1479.340
15	Madhya Pradesh	4853.07	11361.00	16214.07	2506.43	2534.340	5040.772
16	Maharashtra	4100.00	4852.00	8952.00	4128.71	3185.600	7314.310
17	Manipur	135.00	469.00	604.00	158.50	120.690	279.190
18	Meghalaya	20.00	148.00	168.00	-	77.770	77.770
19	Mizoram	0.00	70.00	70.00	-	51.740	51.740
20	Nagaland	10.00	75.00	85.00	-	124.510	124.510
21	Odisha	3600.00	5203.00	8803.00	2147.36	1887.430	4034.790
22	Punjab	3000.00	2967.00	5967.00	2684.39	3497.710	6182.100
23	Rajasthan	2750.00	2378.00	5128.00	3167.13	2487.760	5654.890
24	Sikkim	20.00	50.00	70.00	-	42.740	42.740
25	Tamil Nadu	1500.00	4032.00	5532.00	1578.27	2331.990	3910.260
26	Tripura	100.00	181.00	281.00	29.25	161.863	191.113
27	Uttar Pradesh	12154.00	17481.00	29635.00	9288.09	25320.130	34608.220
28	Uttarakhand	346.00	518.00	864.00	288.98	585.347	874.327
29	West Bengal	2300.00	4618.00	6918.00	1901.41	4159.680	6061.090
	Union Territories	98.00	46.00	144.00	0.00	61.935	61.935
	All India Total	58465.00	81428.00	139893.00	47972.41	65557.39	113529.798

Note: UIP & IPC figures for the period from 2012-13 to 2020-21 are under revision / compilation.

UIP: Ultimate Irrigation Potential; MI: Major & Medium Irrigation

Note: Sum/total may not match due to rounding off.

Source: Erstwhile Planning Commission / P&P Dte., CWC

STATUS OF LARGE HYDRO ELECTRIC POTENTIAL DEVELOPMENT (In terms of Installed Capacity above 25 MW)

As on 30.11.2021

Region/ State	Identified Capacity as per Reassessment Study(1978-87)	Capacity In Operation		Capacity Under Active Construction		Capacity on which Construction is held up		Capacity yet to be taken up under construction	
	Above 25 MW (MW)	(MW)	%	(MW)	(%)	(MW)	(%)	(MW)	%
NORTHERN									
Jammu & Kashmir	11567	3360.0	29.05	2511.5	21.71	48	0.41	5647.5	48.82
Ladakh	2046	89.0	4.35	0.0	0.00	0	0.00	1957.0	95.65
Himachal Pradesh	18470	10065.0	54.49	2146.0	11.62	44	0.24	6215.0	33.65
Punjab	971	1096.3	100	206.0	21.22	0	0.00	0.0	0.00
Harvana#	64	0.0	0	0.0	0.00	0	0.00	0.0	0.00
Rajasthan##	483	411.0	85.09	0.0	0.00	0	0.00	0.0	0.00
Uttarakhand	17998	3855.4	21.42	1144.0	6.36	247	1.37	12751.7	70.85
Uttar Pradesh*	664	501.6	75.54	0.0	0.00	0	0.00	162.4	24.46
Sub Total (NR)	52263	19378.3	37.08	6007.5	11.49	339.0	0.65	26538.3	50.78
WESTERN									
Madhya Pradesh	1970	2235.0	100	0.0	0.00	400	20.30	0.0	0.00
Chhattisgarh	2202	120.0	5.45	0.0	0.00	0	0.00	2082.0	94.55
Gujarat###	590	550.0	100	0.0	0.00	0	0.00	0.0	0.00
Maharashtra	3314	2647.0	79.87	0.0	0.00	0	0.00	667.0	20.13
Goa	55	0.0	0.00	0.0	0.00	0	0.00	55.0	100.00
Sub Total (WR)	8131	5552.0	68.28	0.0	0.00	400.0	4.92	2179.0	26.80
SOUTHERN									
Andhra Pradesh	3261	1610.0	49.37	960.0	29.44	0	0.00	691.0	21.19
Telangana	1099	800.0	72.79	0.0	0.00	0	0.00	299.0	27.21
Karnataka	6459	3689.2	57.12	0.0	0.00	0	0.00	2769.8	42.88
Kerala	3378	1856.5	54.96	100.0	2.96	0	0.00	1421.5	42.08
Tamil Nadu	1693	1778.2	100	0.0	0.00	0	0.00	0.0	0.00
Sub Total (SR)	15890	9733.9	61.26	1060.0	6.67	0.0	0.00	5096.1	32.07
EASTERN									
Jharkhand	582	210.0	36.08	0.0	0.00	0	0.00	372.0	63.92
Bihar####	40	0.0	0.00	0.0	0.00	0	0.00	0.0	0.00
Odisha	2981	2142.3	71.86	0.0	0.00	0	0.00	838.8	28.14
West Bengal	2829	441.2	15.60	120.0	4.24	0	0.00	2267.8	80.16
Sikkim	4248	2282.0	53.72	620.0	14.60	417	9.82	929.0	21.87
Sub Total (ER)	10680	5075.5	47.52	740.0	6.93	417.0	3.90	4447.6	41.64
NORTH EASTERN									
Meghalaya	2298	322.0	14.01	0.0	0.00	0	0.00	1976.0	85.99
Tripura	0	0.0	0.00	0.0	0.00	0	0.00	0.0	0.00
Manipur	1761	105.0	5.96	0.0	0.00	0	0.00	1656.0	94.04
Assam	650	350.0	53.85	120.0	18.46	0	0.00	180.0	27.69
Nagaland	1452	75.0	5.17	0.0	0.00	0	0.00	1377.0	94.83
Arunachal Pradesh	50064	1115.0	2.23	2000.0	3.99	0	0.00	46949.0	93.78
Mizoram	2131	60.0	2.82	0.0	0.00	0	0.00	2071.0	97.18
Sub Total (NER)	58356	2027.0	3.47	2120.0	3.63	0.0	0.00	54209.0	92.89
ALL INDIA	145320	41766.6	28.74	9927.5	6.83	1156.0	0.80	92469.9	63.63

Note:- 1. Does not include pumped storage Projects.

2. In some states the total of the capacity developed and balance capacity is different from the potential assessed . This is due to change in capacity of the Projects, addition/ deletion of the Projects and merger of two Projects into one etc.

* Eastern Yamuna Canal project (35 MW) has been developed in 2 stages each having Installed Capacity below 25 MW

Western Yamuna Canal project (64 MW) has been developed in 4 stages each having Installed Capacity below 25 MW

Two Projects namely Mahi Bajaj Sagar I & II were identified for I.C. of 97 MW has been developed with I.C of 140 MW. Gandhi Sagar (115 MW) Project was identified in Rajasthan but has been developed in Madhya Pradesh with same capacity.

Two Projects namely Ukai Dam and Sardar Sarovar were identified for an I.C. of 590 MW. However as per actual, the I.C. is 550 MW.

Identified project namely East Gandak Canal has been developed with installed capacity below 25 MW

3.In addition to above 8 PSS (4745.6 MW) are under operation, 2 PSS (1500 MW) are under active construction, 1 PSS (80 MW) on which construction is held up and 1 PSS (1000 MW) is Concurred by CEA , 1 PSS (1200 MW) is under examination in CEA, 17 PSS (16770 MW) are under S&I, 1 PSS of I.C. 660 MW is under Held up and 14 PSS (8855 MW) are under PFR/PIR/DPR list.

STATUS OF LARGE HYDRO ELECTRIC POTENTIAL DEVELOPMENT - BASINWISE (In terms of Installed Capacity above 25 MW)

As on 30.11.2021

BASIN	Identified capacity as per Reassessment study	Capacity In Operation		Capacity Under Active Construction		Capacity on which Construction is held Up		Capacity yet to be taken up under Construction	
	Above 25 MW (MW)	(MW)	(%)	(MW)	(%)	(MW)	(%)	(MW)	(%)
INDUS	33028	14439.3	43.72	4863.5	14.73	48.0	0.15	13677.2	41.41
GANGA	20252	5567.2	27.49	1144.0	5.65	291.0	1.44	13249.9	65.42
CENTRAL INDIAN RIVERS	3868	3147.5	81.37	0.0	0.00	400.0	10.34	320.5	8.29
WEST FLOWING RIVERS	8997	5676.7	63.10	100.0	1.11	0.0	0.00	3220.3	35.79
EAST FLOWING RIVERS	13775	8249.0	59.88	960.0	6.97	0.0	0.00	4566.1	33.15
BRAHMAPUTRA	65400	4687.0	7.17	2860.0	4.37	417.0	0.64	57436.0	87.82
ALL INDIA	145320	41766.6	28.74	9927.5	6.83	1156.0	0.80	92469.9	63.63

Note:- 1. Does not include pumped storage Projects

2. In some states the total of the capacity developed and balance capacity is different from the potential assessed . This is due to change in capacity of the Projects, addition/ deletion of the Projects and merger of two Projects into one etc.

3. In addition to above 8 PSS (4745.6 MW) are under operation, 2 PSS (1500 MW) are under active construction, 1 PSS (80 MW) on which construction is held up and 1 PSS (1000 MW) is Concurred by CEA , 1 PSS (1200 MW) is under examination in CEA, 17 PSS (16770 MW) are under S&I, 1 PSS of I.C. 660 MW is under Held up and 14 PSS (8855 MW) are under PFR/PIR/DPR list.

List of Projects Considered and Accepted by Advisory Committee of DoWR, RD&GR during 1st November 2020 - 31st October 2021

Sl. No.	Meeting Number	Date of Meeting	Project Name	Name of the State	Category	Nature of the Proposal	Estimated Cost in Crore	Benefits in Ha
1	147	24.12.2020	Upper Bhadra Project	Karnataka	Major	DPR	Rs. 16,125.48 Crore (PL 2018-19)	Benefitted area- 2,25,515 Ha Benefitted population- 74,26,485
2	147	24.12.2020	ERM of Sukla Irrigation Project.	Assam	Major	ERM	Rs. 259.73 Crore (PL October, 2020)	Benefitted area- 12150 Ha Benefitted population- 141427
3	147	24.12.2020	Amreng Irrigation Project	Assam	Medium	DPR	Rs. 540.4585 Crore (PL 2019-2020)	Benefitted area- 6800 Ha
4	147	24.12.2020	Balance works of Bhojpur Shahpur bund from km 0.00 to 40.80 in Distt. Balrampur and Siddarhnagar	Uttar Pradesh	Flood	DPR	Rs. 78.327 Crore (PL 2016)	Benefitted area- 8587 Ha Benefitted population- 33200
5	147	24.12.2020	Channelization of Markandey River in Tehsil Nahan, District Sirmour	Himachal Pradesh	Flood	DPR	Rs. 105.66 Crore (PL 2019)	Benefitted area- 462.18 Ha Benefitted population- 17406

Source: PA (N) Dte., CWC

State wise details of H.O/Meteorological and Water Quality Sites

*As on January 2021										
Sl. No	Name of States/UTs	Type of Site								
		G	GD	GDQ	GDS	GDSQ	GQ	Exclusive Met sites	WQSS	Total
1	Andhra Pradesh	10	16	4	0	14	1	8	2	55
2	Arunachal Pradesh	7	2	8	0	9	10	18	0	54
3	Assam	7	9	23	1	26	53	5	0	124
4	Bihar	60	28	5	2	22	2	0	0	119
5	Chattisgarh	11	9	2	1	18	0	14	8	63
6	D.&NH	3	1	0	0	0	0	0	0	4
7	Delhi	0	0	1	0	2	0	0	0	3
8	Goa	0	2	0	0	0	0	0	0	2
9	Gujarat	20	16	4	0	9	0	6	1	56
10	Haryana	3	3	3	0	1	0	0	0	10
11	Himachal Pradesh	6	11	0	4	6	0	23	0	50
12	Jammu & Kashmir	15	7	3	7	6	0	17	0	55
13	Jharkhand	10	19	4	0	6	1	19	6	65
14	Karnataka	7	18	15	0	25	2	4	0	71
15	Kerala	0	14	2	0	24	0	0	0	40
16	Ladakh	4	0	0	0	0	0	0	0	4
17	Madhya Pradesh	57	46	16	0	27	1	10	1	158
18	Maharashtra	34	33	15	1	28	3	14	0	128
19	Manipur	0	1	0	0	0	1	0	0	2
20	Meghalaya	4	5	5	1	3	1	2	0	21
21	Mizoram	1	15	0	6	5	0	0	0	27
22	Nagaland	1	0	0	0	0	0	0	0	1
23	Odisha	49	7	2	0	22	1	5	29	115
24	Pondicherry		0	3	0	0	0	0	0	3
25	Punjab	0	1	0	0	0	0	0	0	1
26	Rajasthan	17	6	8	0	8	0	4	2	45
27	Sikkim	0	0	10	0	1	6	8	13	38
28	Tamil Nadu	0	20	21	0	21	0	1	0	63
29	Telangana	12	12	4	0	8	1	12	0	49
30	Tripura	1	5	0	5	3	2	0	0	16
31	Uttar Pradesh	71	44	13	1	46	4	4	27	210
32	Uttarakhand	23	31	4	6	9	0	7	16	96
33	West Bengal	18	22	8	2	21	10	6	7	94
	Grand Total	451	403	183	37	370	99	187	112	1842

Details of Hydrological Observation, Snow Gauge, Meteorological sites & Water Quality Sampling stations under CWC (Basin wise)

*As on January 2021										
Sl. No	Basin	G	GD	GDQ	GDS	GDSQ	GQ	Excl. Met sites	WQSS	Total
1	Brahmani-Baitarni Total	12				11	1	1	15	40
2	Cauvery Total		13	17		24				54
3	East Flowing rivers between Mahanadi and Pennar Total	13	2			5			5	25
4	East Flowing rivers between Pennar and Kanyakumari Total		19	10		8		1		38
5	Ganga/Brahmaputra/Meghna/Barak Total	241	186	97	22	166	90	89	68	959
6	Godavari Basin Total	48	43	13		32	4	17		157
7	Indus Basin Total	23	16	3	11	8		33		94
8	Krishna Total	14	14	12		29	3	18		90
9	Mahanadi Total	30	2	1		22		6	15	76
10	Mahi Total	10	4	2		3		1		20
11	Minor rivers draining into Myanmar and Bangladesh Total	2	9		3	3				17
12	Narmada Total	18	35	6		11	1	2		73
13	Pennar Total		4	4		4				12
14	Sabarmati Total	7	4	1		1		5	1	19
15	Subarnarekha Total	6	2	1		6			8	23
16	Tapi Total	17	18	1	1	3		7		47
17	West Flowing rivers from Tadri to Kanyakumari Total		16	9		26				51
18	West flowing rivers from Tapi to Tadri Total	7	6	4		5		3		25
19	West flowing rivers of Kutchh and Saurashtra including Luni Total	3	10	2		3		4		22
	Grand Total	451	403	183	37	370	99	187	112	1842

Source: RDC-II Dte., CWC

Basin-wise Flood Forecasting Stations

Sr. No	Major Interstate River Systems	FF stations as on 01.10.2021		
		Level	Inflow	Total
1	Indus and its tributaries	3	0	3
2	Ganga & its tributaries	96	39	135
3	Brahmaputra & its tributaries	39	5	44
4	Barak System	6	0	6
5	Subarnarekha (i/c Burhabalang)	4	3	7
6	Brahmani & Baitarni	3	2	5
7	East Flowing (Mahanadi to Pennar)	4	4	8
8	Narmada	4	6	10
9	Tapi	1	2	3
10	Mahi	1	4	5
11	Sabarmati	1	1	2
12	Mahanadi	3	3	6
13	Godavari	18	24	42
14	Krishna	5	19	24
15	West Flowing Rivers (Kutch & Saurashtra)	1	1	2
16	West Flowing Rivers (Tapi to Tadri)	2	1	3
17	Cauvery and its tributaries	3	9	12
18	Pennar	1	1	2
19	East Flowing Rivers (Pennar to Kanyakumari)	1	6	7
20	West Flowing River (Tadri to Kanyakumari)	3	2	5
	Total	199	132	331

State-wise Flood Forecasting Stations

Sl. No	Name of State/UT	Number of flood forecasting Stations		
		Level	Inflow	Total
1	Andhra Pradesh	10	10	20
2	Arunachal Pradesh	3	0	3
3	Assam	30	0	30
4	Bihar	40	3	43
5	Chhattisgarh	1	2	3
6	Gujarat	6	7	13
7	Haryana	1	1	2
8	Himachal Pradesh	1	0	1
9	Jammu & Kashmir	3	0	3
10	Jharkhand	2	15	17
11	Karnataka	1	14	15
12	Kerala	3	2	5
13	Madhya Pradesh	2	10	12
14	Maharashtra	8	15	23
15	Odisha	12	7	19
16	Rajasthan	4	11	15
17	Sikkim	3	5	8
18	Tamil Nadu	4	11	15
19	Telangana	5	8	13
20	Tripura	2	0	2
21	Uttar Pradesh	39	5	44
22	Uttarakhand	4	2	6
23	West Bengal	12	4	16
24	Daman & Diu	1	0	1
25	NCT of Delhi	2	0	2
	Total	199	132	331

Source: FFM Dte., CWC

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

Water Resources Projects are planned, funded, executed and maintained by the State Governments themselves as per their own resources and priority. In order to supplement their efforts, Government of India provides technical and financial assistance to State Governments to encourage sustainable development and efficient management of water resources through various schemes and programmes.

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. PMKSY has various components viz. Accelerated Irrigation Benefits Programme (AIBP), PMKSY –Har Khet Ko Pani (HKKP) including Command Area Development and Water Management (CADWM), Surface-Minor Irrigation (SMI) and Repair, Renovation and Restoration (RRR) of Water Bodies [Implemented by DoWR, RD & GR, MoJS], PMKSY-Per Drop More Crop (PDMC) [Implemented by Department of Agriculture, Cooperation and Farmers Welfare] and PMKSY- Watershed Development Component(WDC) [Implemented by Department of Land Resources]. The PMKSY-PDMC focuses on water use efficiency at farm level through precision/micro irrigation. Surface Minor Irrigation (SMI) schemes with irrigation potential less than 2000 ha were included under Accelerated Irrigation Benefit Programme (AIBP) for providing Central Assistance (CA) since 1999-2000 for Special Category States. Subsequently the Scheme extended to area covering DPAP, Tribal, DDP, Flood prone, Left Wing extremist and Koraput, Bolangir and Kalahandi (KBK) region of Odisha. The scheme of SMI is now a part of PMKSY (HKKP). New SMI schemes approved by State Technical Advisory Committee (TAC) and State Level Sanctioning Committee (SLSC) are eligible for Central Assistance (CA) under PMKSY (HKKP) scheme as per the prescribed criteria.

For the efficient distribution of available water and to avoid the problems of Land Acquisition, use of pressurized pipe system wherever feasible is encouraged. DoWR, RD & GR and Central Water Commission (CWC) has prepared Guidelines for Planning and Design of Piped Irrigation Network and the same was circulated to States for reference during July, 2017.

(I) PMKSY-AIBP

The Accelerated Irrigation Benefits Programme (AIBP) was launched by Union Government in 1996-1997, to provide Central Assistance in the form of Loan to State Governments to complete those ongoing irrigation projects which were costing, Rs 1000 Crore or above and were in advance stage of completion. Subsequently the AIBP Guidelines were changed from time to time so as to include all categories of projects i.e. Major, Medium and Surface Minor Irrigation (SMI) Projects to bring a regional balance. From 2005-06 onwards, Central Assistance is provided in form of grant. 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 55601.11 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 8913 Th. Ha. has been created upto March 2016.

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

Government of India has launched the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) during 2015-16 with the motto of providing 'Har Khet Ko Pani' ensuring access to some means of protective irrigation to all agricultural farms in the country, to produce 'per drop more crop', thus bringing much desired rural prosperity. The programmes as being implemented by the Govt. of India, viz. AIBP, Repair, Renovation and Restoration (RRR) of Water bodies and Command Area Development and Water Management (CADWM) have been subsumed in PMKSY. Under PMKSY-AIBP, 99 Projects have been prioritized amongst the 149 ongoing projects under AIBP. Out of these Priority Projects, 46 projects have been reported as completed as on October 2021. Total Irrigation Potential targeted under 99 Priority Project is 76.03 Lakh Ha. During 2015-16, 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21; a Central Assistance of Rs 2327.82 Cr, Rs 3307.88 Cr., Rs 3593.601 Cr., Rs. 2849.07, Rs 1738.76 Cr. and Rs 1510.04 Cr. respectively has been released under PMKSY -AIBP. An Irrigation Potential of 5.147 Lakh Ha, 7.024 Lakh Ha, 6.104 Lakh Ha, 3.172 Lakh Ha and 1.30 Lakh Ha have been created during 2016- 17, 2017-18, 2018-19, 2019-20 and 2020-21 respectively with a cumulative Irrigation Potential of 64.14 Lakh Ha till March 2021. Under PMKSY- AIBP, a dedicated funding mechanism i.e. Long Term Irrigation Fund (LTIF) a special window has been created in NABARD which could be utilized by the Central and State Governments to bridge the requirement of funds for completion of the 99 priority projects including CAD works for central assistance as well as state share component.

(II) Command Area Development and Water Management (CADWM)

Command Area Development (CAD) works through CADWM Programme of Government of India are in implementation since 1974-75. The program has been brought under Pradhan Mantri Krishi Sinchai 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, and improve agriculture production on a sustainable basis through Participatory Irrigation Management (PIM). In order to promote water use efficiency in Irrigation, the CADWM program has also been targeting at least 10% of the Culturable Command Area (CCA) of the included projects for development of Micro-Irrigation infrastructure for facilitating use of Sprinkler/Drip Irrigation systems (30% as proposed in the Incentivisation Scheme for Bridging Irrigation Gap (ISBIG)). The CADWM program 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. During FY 2016-17, CADWM works were ongoing in 152 projects targeting a CCA of about 70 Lakh Ha. After the introduction of PMKSY, the CADWM works got restricted to only 99 Prioritized AIBP Projects from 2016-17 onwards.

Further, CADWM works of all other projects (including remaining AIBP MMI Projects) are proposed to be funded through new scheme of Incentivization - ISBIG, for bridging the Irrigation gap between IPC and IPU, the works under which shall also include system correction / renovation and modernization requirement of completed projects in addition to pressurized pipe system and use of Sprinklers and Drip for their functioning at optimum level. The main objective of ISBIG is to bridge the gap between Irrigation Potential Created (IPC) and Irrigation Potential Utilized (IPU) in India's completed Water Resources Projects. In addition, the Scheme aims for providing assured supply of water to every farm field by bringing improvements in water-use efficiency; and it also seeks to strengthen the Participatory Irrigation Management by transfer of control and management of irrigation system to the Water Users' Associations.

State-wise details of MMI Projects under AIBP

S. No.	Name of States	No. of MMI Projects benefiting under AIBP	No. of MMI Projects completed under AIBP	No. of ongoing Projects under AIBP	Cumulative CLA/Grant released as on 31.03.2021 (Rs in Crore)	Ultimate Irrigation Potential created till 31.03.2021 (Th.Ha)
1	2	3	4	5	6	7
1	Andhra Pradesh	16	8	7	2087.76	330.83
2	Assam	11	8	3	512.61	123.85
3	Bihar	10	5	4	872.143	480.35
4	Chhattisgarh	11	10	1	559.53	208.79
5	Goa	2	1	1	273.17	20.70
6	Gujarat	15	14	1	12964.65	1910.99
7	Haryana	3	2	0	90.54	115.222
8	Himachal Pradesh	4	1	3	378.89	37.506
9	UT of Jammu & Kashmir	18	12	6	564.64	64.06
10	Jharkhand	10	3	6	2004.32	139.72
11	Karnataka	19	8	11	7157.50	846.47
12	Kerala	5	1	4	201.11	52.12
13	Madhya Pradesh	22	18	4	6012.56	976.96
14	Maharashtra	64	46	18	12227.81	939.48
15	Manipur	3	1	2	1595.83	44.18
16	Meghalaya	1	0	0	4.00	0.00
17	Odisha	18	12	6	5898.60	314.95
18	Punjab	7	5	2	724.45	214.28
19	Rajasthan	10	9	1	2632.60	1161.10
20	Tamil Nadu	1	1	0	20.00	0.00
21	Telangana	17	9	8	4325.87	653.69
22	Tripura	3	0	3	126.29	0.00
23	UT of Laddakh	1	0	1	34.63	1.5
24	Uttar Pradesh	18	12	6	5987.50	2446.68
25	Uttarakhand	2	1	0	609.75	0.00
26	West Bengal	7	3	4	385.00	0.00
	Total	297	190	102	68217.80	11083.43

*5 projects have been deferred

**including 44 projects under 99 priority projects category (PMKSY-AIBP); reported completed by state governments.

State-wise details of on going 99 Priority Projects under PMKSY-AIBP

S. No	Name of States	No. of Projects	CLA/Grant released under PMKSY (Rs in Crore) (2016-17 to 2020-21)						Ultimate Irrigation Potential created under PMKSY 31.03.2021 (Th.Ha)
			2016-17	2017-18	2018-19	2019-20	2020-21	Total	
1	ANDHRA PRADESH	8	7.40	15.24	0.00	0.00	0.00	22.70	24.325
2	ASSAM	3	0.00	0.00	0.00	0.00	0.00	0.00	29.442
3	BIHAR	2	0.00	46.32	37.82	11.98	14.12	110.24	12.98
4	CHHATISGARH	3	13.29	17.26	0.00	4.09	6.45	41.08	16.76
5	GOA	1	0.00	0.00	0.00	0.00	0.00	0.00	0.229
6	GUJARAT	1	961.88	1410.49	1047.29	485.35	177.96	4083.00	569.91
7	JHARKHAND	1	145.75	305.10	305.88	0.00	0.00	756.73	79.80
8	KARNATAKA	5	135.47	459.52	197.00	163.42	231.22	1186.60	115.76
9	KERALA	2	0.00	0.00	0.00	0.00	0.00	0.00	2.054
10	MADHYA PRADESH	14 (i/c phases of ISP & OSP total 21 Nos.)	300.13	181.27	81.01	26.45	19.96	608.82	175.15
11	MAHARASHTRA	26	379.88	363.04	527.54	291.69	301.85	1864.00	271.57
12	MANIPUR	2	127.00	25.42	21.93	30.50	23.51	228.35	25.541
13	ODISHA	8	457.74	464.71	119.39	90.65	76.387	1208.90	55.148
14	PUNJAB	2	52.42	0.00	0.00	0.00	0.00	52.42	13.06
15	RAJASTHAN	2	45.89	216.87	95.15	7.04	93.61	458.56	7.24
16	TELENGANA	11	545.43	13.24	1.99	214.05	162.82	937.54	138.05
17	UTTAR PRADESH	4	135.64	65.61	397.16	407.68	391.84	1397.90	743.87
18	UT OF JAMMU & KASHMIR	3	0.00	8.216	16.92	5.07	9.5	39.71	22.56
19	UT OF LADAKH	1	0.00	1.36	0.00	0.81	0.81	2.98	0
	Total	99	3307.09	3593.67	2849.10	1738.80	1510.00	12999.00	2274.90

Source: Mon(C) Dte., CWC

Flood Management Programme (FMP)

“Flood Management Programme (FMP)” a State Sector scheme amounting to Rs. 8,000 crore under Central Plan proposed by MoWR, RD&GR was approved by Government of India during XI Plan (Nov.2007). The continuation of flood management programme has been approved by the Government of India during XII Plan with an outlay of Rs 10,000 crore. A Central Assistance of Rs 4873.07 Cr was released during XI (Rs 3566.00 Cr) and XII (Rs 1307.07 Cr) Plan.

Under “Flood Management Programme”, critical flood control, river management and anti-sea erosion works in the entire country would be covered. These works would include the works related to river management, flood control, anti-erosion, drainage development, flood proofing, flood prone area development programme in critical regions, restoration of flood control/management works damaged due to force majeure like conditions, anti-sea erosion and catchment area treatment.

A total 522 schemes costing Rs 13238.37 Cr were approved during XI (420 projects costing Rs 7857.08 Cr) Plan and XII (102 projects costing Rs 5381.29 Cr) Plan.

RIVER MANAGEMENT ACTIVITIES & WORKS RELATED TO BORDER AREAS (RMBA):

River Management Activities & Works related to Border Areas (RMBA) started as a Central Sector Scheme with an outlay of Rs 820 Cr in XI plan for taking up non-structural measures such as Hydrological Observation and Flood Forecasting works on common border rivers, payment to neighbouring countries (China) for supplying HO data on common rivers, investigation of WR projects in neighbouring countries, activities of GFCC and Pancheswar Development Authority (PDA) was funded through this scheme. In addition to above activities, 100% Central Assistance was also provided for taking up structural measures such as Anti Erosion/Flood Management schemes on rivers on international borders and Union Territories. The scheme with an outlay of Rs 740 Cr was also continued during XII Plan. A Central Assistance (as grant in aid) of Rs 563.61 Cr was released during XI & XII Plan (XI plan-Rs 340.41 Cr and XII Plan-Rs 223.2 Cr).

FLOOD MANAGEMENT & BORDER AREAS PROGRAMME (FMBAP):

A comprehensive scheme titled “Flood Management and Border Areas Programme (FMBAP)” with an outlay of Rs 3342.00 Cr (FMP-Rs 2642 Cr & RMBA-Rs 700 Cr) for period 2017-2020 with merged components from the existing Flood Management Programme (FMP) and River Management Activities & Works related to Border Areas (RMBA) schemes during XII Five Year Plan has been approved by the Union Cabinet on 07-Mar-2019 and aimed at completion of the on-going projects already approved under FMP. The scheme was extended till March, 2021.

FMP COMPONENT OF FMBAP

A total 522 schemes were approved during XI & XII Plan. Out of these schemes, 415 schemes have been completed; 64 schemes foreclosed, dropped and shifted (47-foreclosed; 16-dropped & 1 shifted to RMBA component) and 43 schemes are ongoing. A Central assistance of Rs 37.79 Cr was released during year 2020-21 and a total Central Assistance amounting to Rs 6447.83 Cr. has been released till 31st March, 2021.

RMBA COMPONENT OF FMBAP

Following activities are being taken up under RMBA component of FMBAP.

Sl. No.	Activity
1	Hydrological observations and flood forecasting on common border rivers with neighbouring countries
2	Investigation of WR projects in neighbouring countries
3	Pre-construction activities for WR projects on common border rivers
4	Grant in aid to states for bank protection /anti erosion works on common border rivers and Union Territories for flood management /anti sea erosion measurers
5	Activities of Ganga Flood Control Commission (GFCC)

A Central assistance of Rs 42.49 Cr was released (as grant in Aid) under RMBA component of FMBAP during year 2020-21 and a total Central Assistance amounting to Rs 1091.43 Cr has been released till 31st March, 2021.

Physical achievement of Flood Management Works

S. No	Name of States/UTs	Area Benefited (Mha)	Length of embankments (km)	Length of drainage channel (Km)	Village raised/protected (Nos)	Town/Vill. protection works (Nos)	Raised Platforms (Nos)
States							
1	Andhra Pradesh	1.31	2230	13569	23	72	0
2	Arunachal Pradesh	0.1	65.23	16.92	17	30	0
3	Assam	2.11	4473.82	874.97	1100	911	0
4	Bihar	3.692	3759.91	365	0	204	58
5	Chattisgarh	0	0	0	0	0	0
6	Delhi	0.078	83	453	0	0	0
7	Goa	0.003	23.19	32.77	0	2	0
8	Gujarat	0.483	104.12	271	30	805	0
9	Haryana	2	1144	4385	98	448	7
10	Himachal Pradesh	0.018	159.16	11	82	0	0
11	Jammu & Kashmir	0.217	560.681	324	1301	22	0
12	Jharkhand	0.001	14	0	5	2	0
13	Karnataka	0.005	73.515	10	0	0	0
14	Kerala	0.346	205.744	82.19	6	4	0
15	Madhya Pradesh	0.004	26	0	0	37	0
16	Maharashtra	0.001	44.5	110	0	0	0
17	Manipur	0.132	577	166	512	38	0
18	Meghalaya	0.015	112	0	10	8	0
19	Mizoram	0	0	0	0	38	0
20	Nagaland	0.632	10.519	0	0	8	0
21	Orissa	0.63	7137.75	650	14	29	0
22	Punjab	3.19	1370	6622	0	3	0
23	Rajasthan	0.082	145	197	0	25	0
24	Sikkim	0.041	101.81	64.86	0	18	0
25	Tamil Nadu	0.122	87	19	4	46	0
26	Tripura	0.033	141.74	95.23	0	11	0
27	Uttar Pradesh	1.703	3813.97	3995	4511	65	0
28	Uttaranchal	0.002	9	0	0	6	0
29	West Bengal	3.584	10539	7392.76	0	74	0
Union Territories							
30	A & N Islands	0	0	0	0	0	0
31	Chandigarh	0	0	0	0	0	0
32	Dadra & Nagar Haveli	0	0	0	0	0	0
33	Daman & Diu	0	0	0	0	0	0
34	Lakshadweep	0	0	0	0	0	0
35	Pondicherry	0.004	61	20	0	0	0
	Total	20.538	37072.659	39726.7	7713	2906	65

■ Tentative; as the table has been compiled from available information in office and website of various State Govts.

State-Wise Works Approved, Works Completed and Funds Released under FMP since start of XI Plan (Rs in Cr) and up to 31.03.2021

Sl. No.	State	XI Plan			XII Plan			Total (XI + XII Plan)						2017-18	2018-19	2019-20	2020-21	2021-22	Total funds released
		Nos.	Estimated Cost	Funds released (XI Plan)	Nos.	Estimated Cost	Funds released (XII Plan)	Nos.	Estimated Cost	Works completed	Works shifted/foreclosed	Works ongoing	Funds released (XI + XII Plan)	Funds released	Funds released	Funds released	Funds released		
1	Arunachal Pradesh	21	224.69	81.69	0	0.00	87.91	21	224.69	21	0	0	169.60	21.18					190.78
2	Assam	100	996.14	748.86	41	1386.97	64.89	141	2383.11	105	30	6	813.75	245.49	142.118	85.03			1286.39
3	Bihar	43	1370.42	723.18	4	447.63	184.64	47	1818.05	42	1	4	907.82		16.583				924.41
4	Chhattisgarh	3	31.13	15.57	0	0.00	3.75	3	31.13	3	0	0	19.32						19.32
5	Goa	2	22.73	9.98	0	0.00	2.00	2	22.73	2	0	0	11.98						11.98
6	Gujarat	2	19.79	2.00	0	0.00	0.00	2	19.79	2	0	0	2.00						2.00
7	Haryana	1	173.75	46.91	0	0.00	0.00	1	173.75	1	0	0	46.91						46.91
8	Himachal Pradesh	3	225.32	165.98	4	1139.62	221.87	7	1364.94	6	1	0	387.85	87.50	162.6	176.41	11.87		826.23
9	Jammu & Kashmir	28	408.22	252.57	15	562.47	169.95	43	970.69	19	3	21	422.52	110.40	52.1984	92.81	10.14		688.0
10	Jharkhand	3	39.30	18.44	0	0.00	4.27	3	39.30	3		0	22.71						22.71
11	Karnataka	3	59.46	23.80	0	0.00	0.00	3	59.46	2	1	0	23.80						23.80
12	Kerala	4	279.74	63.68	0	0.00	55.22	4	279.74	2	2	0	118.90	19.05					137.95
13	Manipur	22	109.34	66.34	0	0.00	24.36	22	109.34	22		0	90.70						90.70
14	Meghalaya	0	0.00	3.81	0	0.00	0.00	0	0.00	0	0	0	3.81						3.81
15	Mizoram	2	9.13	14.48	0	0.00	1.93	2	9.13	1	1	0	16.41	0.47					16.88
16	Nagaland	11	49.35	28.96	6	74.52	54.17	17	123.87	14		3	83.12		10.841				93.96
17	Odisha	67	169.00	101.12	1	62.32	0.00	68	231.32	66	2	0	101.12				15.785		116.905
18	Puducherry*	1	139.67	7.50	0	0.00	0.00	1	139.67	0	1	0	7.50						7.50
19	Punjab	5	153.40	40.43	0	0.00	0.00	5	153.40	4	1	0	40.43						40.43
20	Sikkim	28	104.92	83.69	17	261.40	8.15	45	366.32	28	17	0	91.84						91.84
21	Tamilnadu	5	635.54	59.82	0	0.00	0.00	5	635.54	5		0	59.82						59.82
22	Tripura	11	26.57	23.62	0	0.00	0.00	11	26.57	11		0	23.62						23.62
23	Uttar Pradesh	26	667.57	290.69	3	291.70	111.22	29	959.27	24	2	3	401.91	13.55	15.575	39.15			470.18
24	Uttarakhand	12	119.82	49.63	10	715.72	153.98	22	835.54	16	2	4	203.61		4.634	35.58			243.82
25	West Bengal	17	1822.08	643.26	1	438.94	158.75	18	2261.02	16		2	802.01	65.03	23.652	117.12			1007.81
	Total	420	7857.08	3566.00	102	5381.28	1307.07	522	13238.36	415	64	43	4873.07	562.67	428.20	546.09	37.795		6447.83

*The scheme has been shifted to be funded under RMBA component.

National Projects

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 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, Central Assistance 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.

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. Implementation of these projects is monitored by the High Powered Steering Committee constituted by Union Cabinet with Secretary, M/o JS, D/o WR, RD & GR as Chairman of the Committee.

The criteria for selection of National Projects are as under:

1. International projects where usage of water in India is required by a treaty or where planning and early completion of the project is necessary in the interest of the country.
2. 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.
3. Intra State projects with additional potential of more than 2,00,000 hectare (ha) and with no dispute regarding sharing of water and where hydrology is established.
4. Extension, Renovation and Modernization (ERM) projects envisaging restoration of lost irrigation potential of 2,00,000 ha or more would be eligible for inclusion as a National Project subject to certain conditions.

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 for the purpose of overseeing the entire process of selection and implementation of national projects and approval by the Union Cabinet.

An ERM Project of a State Government may be included in the scheme of National Projects only on completion of one ERM Project already being funded in the state under the category of National Projects.

List of Water Resources Projects Declared as National Projects

Sl. No	Name of the Project	State (River/Basin)	1) Irrigation Potential (ha.) 2) Power (MW) 3) Storage (MCM)	Plan wise Central Assistance Released under Scheme of National Projects (Rs Cr.)
1	2	3	4	5
1	Indira Sagar Polavaram Project	Andhra Pradesh (Godavari)	1) 4.36 lakh 2) 960 MW 3) 5511MCM (Gross)	12th Plan = 3364.70 2017-18 = 2000.00 2018-19 = 1400.00 2019-20 = 1850.00 2020-21 = 2234.288 2021-22 = 751.868 Total = 11600.23
2	Gosikhurd Irrigation Project	Maharashtra (Wainganga/ Godavari)	1) 2.50 lakh 2) 26.5 MW 3) 1147.14 MCM (Gross)	11th Plan = 2582.94 12th Plan = 405.00 2017-18 = 166.5925 2018-19 = 195.83 2019-20 = 50.34 2020-21 = 135.244 Total = 3535.946
3	Shahpurkandi Dam Project	Punjab (Ravi)	1) 0.37 lakh 2) 206 MW 3) 120.88 MCM (Gross)	11th Plan = 26.04 12th Plan = Nil 2017-18 = Nil 2018-19 = 3.705 2019-20 = 56.295 2020-21 = 147.466 Total = 233.506
4	Saryu Nahar Pariyojna	Uttar Pradesh (Diversion Scheme among Rivers Ghaghara, Saryu, Rapti & Bansagar/ Ganga)	1) 14.04(NP Component:4.73) 2) - 3) Barrage	11th Plan = Nil 12th Plan = 1221.58 2017-18 = Nil 2018-19 = 305.00 2019-20 = 358.22 2020-21 = 358.30 Total = 2243.10
5	Teesta Barrage Project	West Bengal (Teesta)	1) 9.23 lakh (NP component :5.27 lakh) 2) 1000 MW 3) Barrage	11th Plan = 178.20 12th Plan = Nil Total = 178.20
6	Ujh Multipurpose project	J&K (Ujh / Ravi)	1) 0.77 lakh 2) 196 MW 3) 925 MCM (Gross) / 18.92 MCM (Drinking)/20 MCM (Industrial)	Nil

List of Water Resources Projects Declared as National Projects

Sl. No	Name of the Project	State (River/Basin)	1) Irrigation Potential (ha.) 2) Power (MW) 3) Storage (MCM)	Plan wise Central Assistance Released under Scheme of National Projects (Rs Cr.)
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)	Nil
8	Noa-Dihing Dam Project	Arunachal Pradesh (Noa-Dihing)	1) 0.0361 lakh 2) 72 MW 3) 322.00 MCM (Gross)	Nil
9	Kulsi Dam Project	Assam (Kulsi) Tributary of Brahmaputra	1) 0.395 lakh (GIA) 2) 55 MW 3) 525.64 MCM (Gross)	Nil
10	Renuka Dam Project	HP (Giri/Yamuna)	1) Drinking water 2) 40 MW 3) 498.33 MCM (Live)	One-time special assistance of Rs 446.96 Cr was released in Oct-16.
11	Kishau Multipurpose Project	HP/ Uttarakhand	1) 0.97 lakh 2) 660 MW 3) 1824 MCM (Gross)	Nil
12	Bursar HE Project	J&K (Marusudar/ Chenab / Indus)	1) 1.74 lakh (Indirect) 2) 800 MW 3) 616.74 MCM (Gross)	Nil
13	Ken Betwa Link Project	Madhya Pradesh & Uttar Pradesh (Ken & Betwa/ Yamuna basin)	1) 9.04 lakh 2) 130 MW 3) 3495 MCM (Live)	Nil
14	2 nd Ravi Vyas Link Project	Punjab (Ravi Beas Link)	Harness water flowing 0.58 MAF across border (about 719.30 MCM in non-monsoon period)	Nil
15	Upper Siang Project	Arunachal Pradesh (Siang)	1) Indirect 2) 9750 MW 3) 9200 MCM (Live) 4) Flood moderation	Nil
16	Gyspa HE Project	HP (Bhaga / Chenab / Indus)	1) 0.50 lakh ha 2) 300 MW 3) 912.78 MCM (Live)	Nil

Source: National Projects Directorate, Central Water Commission

MCM- Million Cubic Meter

MW- Mega Watt

External Assistance for Development of Water Resources

External assistance flows to the country in various forms; as multilateral or bilateral aid, loan, grants and commodity aid from various foreign countries and other donor agencies such as World Bank, Japan International Cooperation Agency (JICA), Asian Development Bank (ADB) etc. for the implementation of irrigation projects.

The Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti and its organizations assist the State Governments in tying up the external assistance from different funding agencies to fill up the resources gaps, both in terms of funds and technological update for rapid development of country's water resources.

The important activities of Central Water Commission in Externally Aided Irrigation projects are:-

1. Examining Concept Notes of proposed Externally Aided Projects (EAPs) for in-principle consent for preparation of DPR.
2. Appraisal of DPR of proposed EAPs and preparation of TAC Note for putting the same before the Advisory Committee of MoWR, RD&GR on Irrigation, Flood Control and Multipurpose Projects.
3. To maintain a list of Arbitrators for the dealing with the disputes arising out of the works contracts between States and the contractors and suggest Chairman's nominee from the list of empanelled arbitrators.

Source: External Assistance Directorate, Central Water Commission

Repair, Renovation & Restoration (RRR) of Water Bodies

In India, tanks/ponds and lakes have traditionally played an important role in conserving water for meeting various needs of the communities. Through the ages, Indian agriculture has been sustained by natural and man-made water bodies such as lakes, tanks, ponds and similar structures. A water body is a structure where rain water is accumulated or water is stored by diversion from a stream, nala or river. As per 5th Minor Irrigation Census 2013-14, there are 5.16 lakh tanks and storages in the country as minor irrigation sources. Many of these water bodies have gone into disuse because of the development of ground water irrigation systems, inadequate maintenance, encroachments, etc.

The scheme of RRR of water bodies has multiple objectives such as reclamation of the lost irrigation potential, improvement of catchment area of the tanks, increase in storage capacity of water bodies and development of tourism and cultural activities.

A pilot scheme for “RRR of Water Bodies directly linked to Agriculture” was launched in January 2005 for implementation during the remaining period of X Plan with an outlay of Rs. 300 Cr. The scheme was sanctioned in respect of 1098 water bodies in 26 districts of 15 States. Out of these, 1085 water bodies were completed and 13 water bodies were dropped. An irrigation potential of 0.78 lakh ha was restored.

Keeping in view the success of the pilot scheme for RRR of water bodies and need to upscale the gains from water bodies, the Ministry of Jal Shakti (erstwhile Ministry of Water Resources, RD&GR) launched a State Sector Scheme for Repair, Renovation & Restoration (RRR) of water bodies with two components (i) one with external assistance and (ii) another with domestic support for implementation during XI Plan. Under the scheme, 3114 water bodies were completed with domestic support and 8054 water bodies were completed with external assistance. To increase the participation of all the States it was felt to frame a new scheme for RRR of Water Bodies during the XII plan as a State Sector Scheme with domestic budgetary support.

Government of India is committed to accord high priority to water conservation and its management. To this effect, Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched in 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. PMKSY- Har Khet Ko Pani (HKKP) is one of the component of PMKSY. The scheme of RRR of water bodies has become a part of PMKSY (HKKP).

Funding pattern under PMKSY:

S. No.	Category	Funding Pattern
1.	Seven North-Eastern states including Sikkim &, three Hilly states (Himachal Pradesh, Jammu and Kashmir and Uttarakhand)	90 (Central) : 10 (State)
2.	Project benefitting special areas i.e. undivided Koraput, Bolangir and Kalahandi (KBK) districts of Odisha, Bundelkhand region of UP and MP, Marathwada & Vidharbha region of Maharashtra, Naxal affected areas, DPAP areas, Tribal areas, Flood prone area, Desert Development Programme (DDP) area of General Category States / UTs.	60 (Central) : 40 (State)
3.	General Category States/UTs excluding the special areas.	25 (Central) : 75 (State)

There are 2218 water bodies (ongoing at start of XII plan/included thereafter) with an estimated cost of Rs. 1909.67 Cr. Under the program at present as reported by states so far (till March, 2021), restoration works of 1591 water bodies have been completed. Total CA released so far (till March, 2021) is Rs. 469.68 Cr.

Source: Economics Directorate, Central Water Commission

National Water Mission and Climate Change Issue

The “National Water Mission” was formulated by erstwhile Ministry of Water Resources (now Ministry of Jal Shakti) with main objective of “conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management”. The Mission, duly approved by the Government, has set five goals to achieve the above objective, which are:

1. Comprehensive water data base in public domain and assessment of the impact of climate change on water resource.
2. Promotion of citizen and state actions for water conservation, augmentation and preservation.
3. Focused attention on vulnerable areas including over-exploited areas
4. Increasing water use efficiency by 20%
5. Promotion of basin level integrated water resources management.

Earlier, a Climate Change cell was created in CWC in August, 2007 to deal with all the studies, works and reports on the subject regarding impact of climate change on water resources being referred to CWC. Inputs and assistance were provided to NWM secretariat in examining the research proposals related to climate change received in NWM Secretariat.

Six Chairs in Academic institutes viz IIT Kanpur, IIT Kharagpur, IIT Guwahati, IIT Roorkee, NIT Patna and NIT Srinagar were established by the MoWR with the objective of carrying out studies and research on “Impact of climate change on Water Resources”. Presently, all the works related to Climate change is dealt by NWM independently.

Monitoring of Glacial lakes/Water bodies in the Himalayan Region of Indian river basin has been carried out on monthly basis from June to October. The main objective of the study is to monitor the changes in the spatial extent of the glacial lakes and water bodies greater than 50ha area with the area of base year 2009 using satellite data received from NRSC, Hyderabad. Monthly Monitoring Reports have been sent to Central/State Govt agencies and other stakeholders.

Morphological Studies

Morphology (of river) is a field of science which deals with the change of river plan form and cross sections due to sedimentation and erosion. In this field, dynamics of flow and sediment transport are the principal elements. The morphological study of the river is utilized in assessing the characteristics evolving rational and scientific approach in planning, design, and construction of river training works. CWC, in collaboration with various IIT's and NIT's undertook morphological studies of 18 rivers of the country, out of which studies of 16 rivers have been completed so far. Apart from this, cross section survey of specific reaches of various rivers are also undertaken every year by CWC .

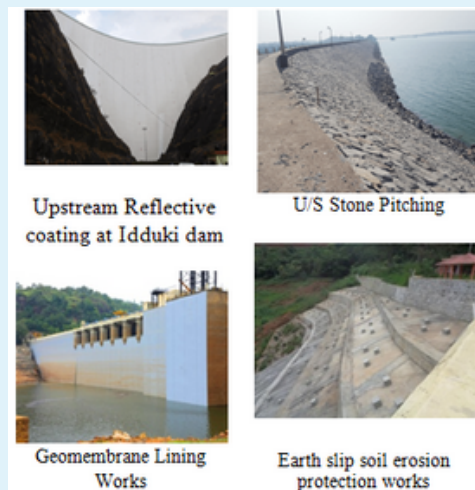
Source: Morphology & CC Directorate, Central Water Commission

Dam Rehabilitation and Improvement Project

In April 2012, Ministry of Jal Shakti initiated World Bank assisted Dam Rehabilitation and Improvement Project (DRIP) with an objective to improve safety and operational performance of selected dams, along with institutional strengthening with system wide management approach. The Scheme has provision to rehabilitate 223 dams, located in 7 States Jharkhand, Karnataka, Kerala, Madhya Pradesh, Odisha, Tamil Nadu and Uttarakhand with budget outlay of Rs 3466 Cr. Phase 1 of the project has been completed on March 31, 2021 with nearly all intended objectives. The completion cost of the Scheme is Rs 2567 Cr. Detailed information in respect of DRIP can be accessed through official Website of DRIP (www.damsafety.in).

Scheme Outcome

- Physical rehabilitation of 198 dam projects to address various safety concerns of dams, safety of downstream people, property, environment and ecology of river
- The Dam Break Analysis of all 198 dam projects prepared. The Emergency Action Plans (EAP) of 197 Dams (172 Projects) are published and 102 DRIP dams (77 Dam Project) have held Stakeholder Consultation Meetings for dissemination of published EAPs
- Operation and Maintenance Manuals of 196 dam projects have been prepared out of which 190 are published
- 2 nos. of Inspection Manuals for Dam Field Engineers in post-seismic event for dams located in Uttarakhand and Jharkhand published



Technical Publications prepared under DRIP

- 16 nos. of new Guidelines and Manuals published on various aspects of dam safety.
- Capacity building of 8 Academic Institutions and 2 Central Agencies in addition to 10 Project Agencies
- 191 nos. of training programs conducted, wherein about 5500 officials trained
- Dam Health and Rehabilitation Monitoring Application (DHARMA), a web-based asset management tool developed to support the effective collection and management of dam data. The licenses for this tool have been provided to 18 States and 3 Central Agencies. This tool has 1109 nos. of official users with stored data of 1550 nos. of large dams.
- Seismic Hazard Assessment Mapping of whole Country



International and National Trainings under DRIP



ICOLD 2021 Symposium on Sustainable Development of Dams and River Basin

Impacts

- The Scheme has been able to develop two most important technical documents (EAP, O&M manual) for all DRIP dams which will ensure safety and operational performance of selected dams; will mitigate the associated risks with dam failure through stakeholders sensitization about consequences, contribute in making more disaster resilience society.
- Capacity building of all partners will ensure availability of trained manpower to ensure safe dam operations.
- DRIP has given platform to all concerned States to take up need based de-siltation activities of reservoirs.
- DRIP will enable India to act as knowledge hub and strength in dam safety management especially for African and South East Asian Countries.
- First time in Country, academic institutions have been taken on board for long term capacity building to meet the future challenges of dam safety management.
- IISc Bangalore and IIT Roorkee have started Post Graduate Degree Programmes in Dam Engineering for Academic Session 2021. IIT Madras is also likely to start similar program from next year onwards.
- DRIP has prepared dam owners of India to achieve the technical activities like safety inspections, investigations, rehabilitations, instrumentation, and risk assessment etc. and institutional set up envisaged under Dam Safety Bill which has been passed by Lok Sabha and currently under consideration in Rajya Sabha.

New Drip Phase II and Phase III

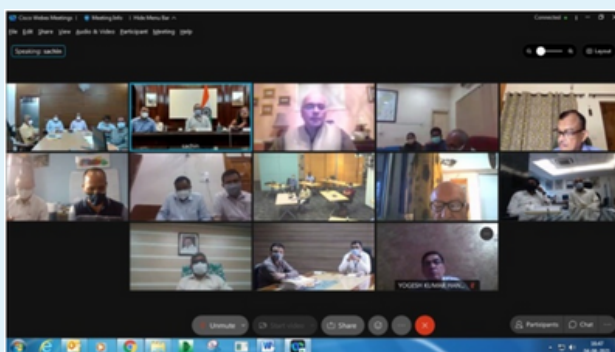
Based on the success of ongoing DRIP, the Ministry of Jal Shakti initiated activities for DRIP Phase II and Phase III, by inviting proposals in year 2017 for inclusion of more number of States and dams facing serious health and dam safety challenges. It is a State Sector Scheme with financial outlay of Rs 10211 Cr (US\$ 1.5 Billion), with duration of 10 years, to be implemented in two Phases i.e. Phase-II and Phase-III, each of six years duration with an overlap of two years. Detailed information in respect of DRIP Phase II & Phase III can be accessed through official Website of DRIP (www.damsafety.in).

The Scheme has four components; (i) Rehabilitation of dams and associated appurtenances to improve the safety and operational performance of selected existing dams and associated appurtenances in a sustainable manner, and (ii) Dam safety Institutional Strengthening to strengthen the dam safety institutional setup in participating States as well as on a Central level, (iii) Incidental Revenue Generation for sustainable operation and maintenance of dams, and (iv) Project Management.

EFC for DRIP Phase-II and Phase-III was approved on 26th May 2020 and the Union Cabinet approved the Scheme on 29th October 2020. Loan Signing ceremony with World Bank for loan amounting US \$ 250 Million was held on August 04, 2021. Loan Agreement was signed by DEA and World Bank and Project Agreement was signed by 10 partner States (Gujarat, Manipur, Meghalaya, Chhattisgarh, Madhya Pradesh, Rajasthan, Odisha, Kerala, Maharashtra and Tamil Nadu) with World Bank. The Scheme has been declared effective on October 12, 2021. Loan negotiation for the second tranche of USD 250 Million with AIIB is likely to be held in January, 2021.

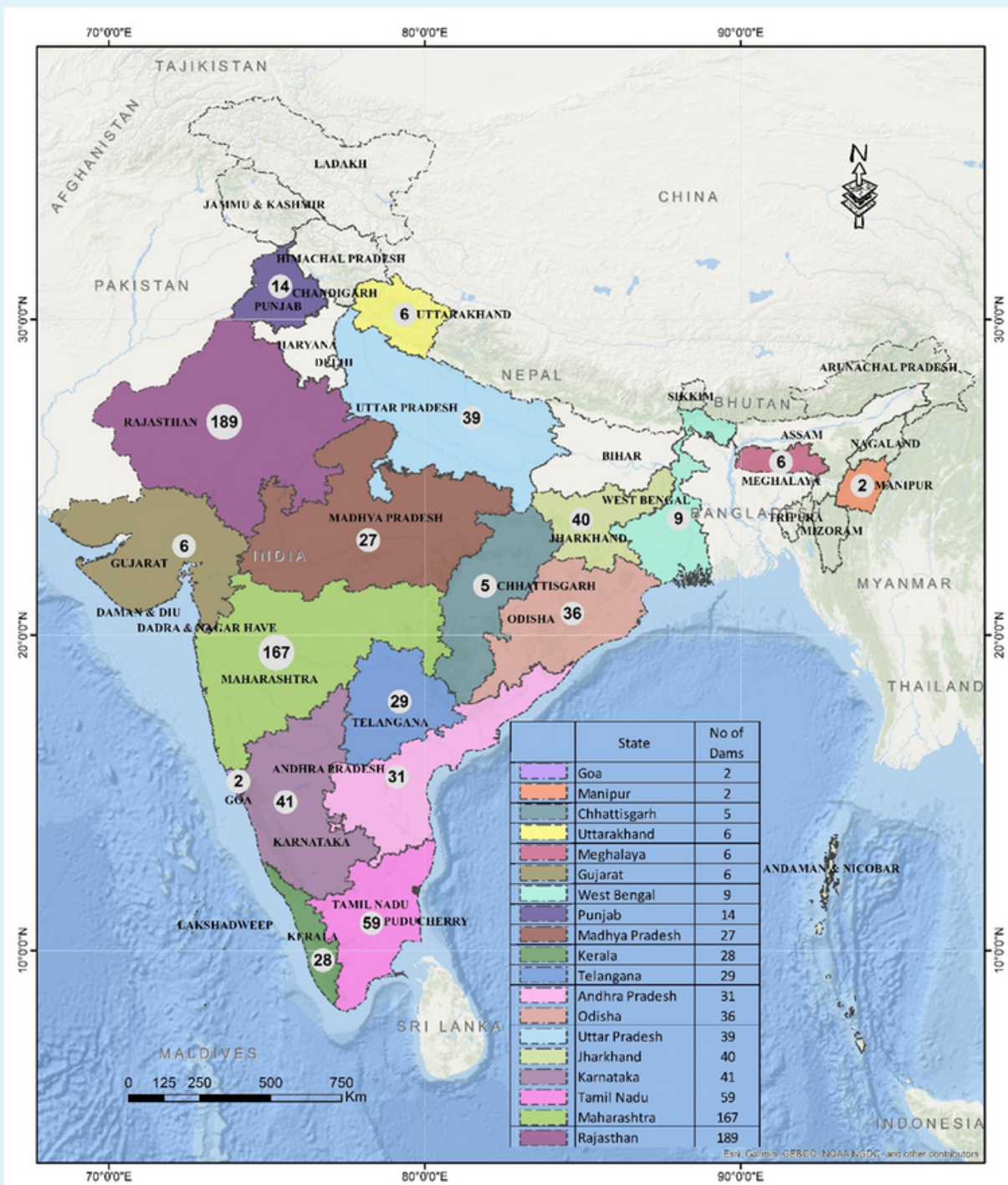


CCEA Approves DRIP Phase II & Phase III, October 29, 2020



Loan Signing ceremony with World Bank for loan amounting US \$ 250 Million was held on August 04, 2021.

DRIP Phase II & Phase III coverage across India



Source: DSR Directorate, Central Water Commission

Dynamic Ground Water Resources Assessment of India - 2020

STATE-WISE GROUND WATER RESOURCES OF INDIA, 2020															
S. 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	8.93	8.54	0.85	5.83	24.15	1.21	22.94	6.60	0.15	0.88	7.63	1.31	15.91	33.26
2	Arunachal Pradesh	2.01	0.07	1.11	0.002	3.19	0.27	2.92	0.003	0.0002	0.01	0.01	0.01	2.90	0.36
3	Assam	17.92	0.96	7.64	0.53	27.05	5.09	21.97	1.97	0.01	0.60	2.58	0.66	19.33	11.73
4	Bihar	21.02	3.32	1.29	2.42	28.05	2.60	25.46	10.33	0.65	2.04	13.02	2.29	12.23	51.14
5	Chhattisgarh	8.33	1.38	1.11	1.84	12.65	1.11	11.55	4.53	0.10	0.71	5.35	0.84	6.25	46.34
6	Delhi	0.05	0.13	0.004	0.13	0.32	0.03	0.29	0.07	0.04	0.18	0.29	0.19	0.02	101.40
7	Goa	0.34	0.02	0.003	0.04	0.40	0.08	0.32	0.02	0.004	0.05	0.08	0.05	0.24	23.48
8	Gujarat	19.59	2.89	0.00	4.32	26.81	1.90	24.91	12.65	0.03	0.62	13.30	0.78	12.52	53.39
9	Haryana	3.24	2.81	0.58	2.90	9.53	0.90	8.63	10.47	0.53	0.62	11.61	0.57	0.97	134.56
10	Himachal Pradesh	0.66	0.13	0.13	0.14	1.07	0.10	0.97	0.20	0.05	0.10	0.36	0.10	0.62	36.83
11	Jharkhand	4.91	0.43	0.47	0.35	6.15	0.51	5.64	0.93	0.20	0.51	1.64	0.52	4.02	29.13
12	Karnataka	7.47	4.68	2.23	3.77	18.16	1.76	16.40	9.60	0.00	1.03	10.63	1.16	7.08	64.85
13	Kerala	4.20	0.13	0.46	0.86	5.65	0.53	5.12	1.16	0.01	1.47	2.65	2.25	2.13	51.68
14	Madhya Pradesh	27.75	1.60	0.12	6.69	36.16	2.78	33.38	17.33	0.03	1.61	18.97	1.84	15.25	56.82
15	Maharashtra	20.66	2.38	0.53	8.45	32.01	1.76	30.25	15.29	0.003	1.34	16.63	1.34	14.20	54.99
16	Manipur	0.40	0.001	0.11	0.002	0.51	0.05	0.46	0.003	0.0002	0.02	0.02	0.02	0.44	5.12
17	Meghalaya	1.66	0.01	0.36	0.01	2.04	0.22	1.82	0.03	0.0003	0.05	0.08	0.06	1.73	4.22
18	Mizoram	0.19	0.00	0.03	0.00	0.22	0.02	0.20	0.00	0.00	0.01	0.01	0.01	0.19	3.81
19	Nagaland	1.08	0.76	0.27	0.06	2.17	0.22	1.95	0.002	0.00003	0.02	0.02	0.02	1.93	1.04
20	Odisha	10.26	2.71	1.51	2.60	17.08	1.37	15.71	5.50	0.15	1.21	6.86	1.46	8.74	43.65
21	Punjab	5.01	10.42	0.95	6.41	22.80	2.20	20.59	32.80	0.00	1.05	33.85	1.08	1.61	164.42
22	Rajasthan	8.80	0.58	0.29	2.57	12.24	1.17	11.07	14.37	0.13	2.14	16.63	2.17	0.99	150.22
23	Sikkim	0.96	0.00	0.00	0.00	0.96	0.10	0.86	0.00	0.002	0.01	0.01	0.01	0.85	0.86
24	Tamil Nadu	6.83	9.04	1.26	2.45	19.59	1.90	17.69	13.52	0.17	0.99	14.67	1.52	5.65	82.93
25	Telangana	7.50	3.29	1.10	4.75	16.63	1.60	15.03	7.13	0.14	0.73	8.01	0.74	7.14	53.32
26	Tripura	0.85	0.06	0.34	0.22	1.47	0.22	1.24	0.02	0.0002	0.08	0.10	0.09	1.14	7.94
27	Uttar Pradesh	37.75	13.16	1.30	19.99	72.20	5.32	66.88	41.29	0.00	4.74	46.03	5.38	21.53	68.83
28	Uttarakhand	1.29	0.31	0.10	0.32	2.02	0.17	1.85	0.63	0.09	0.15	0.87	0.16	0.98	46.80
29	West Bengal*	18.71	1.51	5.26	3.85	29.33	2.77	26.56	10.84	0.27	0.73	11.84	1.53	14.19	44.60
30	Andaman and Nicobar	0.32	0.0002	0.00	0.0001	0.32	0.03	0.28	0.0001	0.001	0.01	0.01	0.01	0.28	2.60
31	Chandigarh	0.01	0.02	0.005	0.03	0.06	0.01	0.06	0.01	0.002	0.03	0.05	0.03	0.01	80.60
32	Dadra & Nagar Haveli	0.04	0.01	0.003	0.02	0.07	0.005	0.07	0.01	0.01	0.02	0.03	0.02	0.03	45.99
	Daman & Diu	0.03	0.0005	0.00	0.001	0.03	0.001	0.03	0.003	0.03	0.00	0.03	0.02	0.0002	113.38
33	Jammu and Kashmir	0.80	2.04	0.95	0.88	4.68	0.46	4.22	3.20	0.13	0.56	0.89	0.57	3.32	21.03
34	Ladakh	0.01	0.05	0.02	0.04	0.12	0.01	0.11	0.001	0.0002	0.02	0.02	0.02	0.09	17.90
35	Lakshadweep	0.011	0.00	0.002	0.00	0.01	0.01	0.005	0.00	0.00	0.003	0.003	0.005	0.002	58.47
36	Puducherry	0.06	0.10	0.01	0.05	0.22	0.02	0.20	0.10	0.01	0.05	0.15	0.05	0.05	74.27
	Grand Total	249.65	73.54	30.41	82.54	436.15	38.51	397.62	217.61	2.94	24.37	244.92	28.90	184.56	61.60

State-wise Sewage Generation and Treatment Capacity of Urban Centers-India

States / UTs	Sewage Generation (in MLD)	Installed Capacity (in MLD)	Proposed Capacity (in MLD)	Total Treatment Capacity (in MLD) including planned / proposed	Operational Treatment Capacity (in MLD)
Andaman & Nicobar Islands	23	0	0	0	0
Andhra Pradesh	2882	833	20	853	443
Arunachal Pradesh	62	0	0	0	0
Assam	809	0	0	0	0
Bihar	2276	10	621	631	0
Chandigarh	188	293	0	293	271
Chhattisgarh	1203	73	0	73	73
Dadra & Nagar Haveli	67	24	0	24	24
Goa	176	66	38	104	44
Gujarat	5013	3378	0	3378	3358
Haryana	1816	1880	0	1880	1880
Himachal Pradesh	116	136	19	155	99
Jammu & Kashmir	665	218	4	222	93
Jharkhand	1510	22	617	639	22
Karnataka	4458	2712	0	2712	1922
Kerala	4256	120	0	120	114
Lakshadweep	13	0	0	0	0
Madhya Pradesh	3646	1839	85	1924	684
Maharashtra	9107	6890	2929	9819	6366
Manipur	168	0	0	0	0
Meghalaya	112	0	0	0	0
Mizoram	103	10	0	10	0
Nagaland	135	0	0	0	0
NCT of Delhi	3330	2896	0	2896	2715
Orissa	1282	378	0	378	55
Pondicherry	161	56	3	59	56
Punjab	1889	1781	0	1781	1601
Rajasthan	3185	1086	109	1195	783
Sikkim	52	20	10	30	18
Tamil Nadu	6421	1492	0	1492	1492
Telangana	2660	901	0	901	842
Tripura	237	8	0	8	8
Uttar Pradesh	8263	3374	0	3374	3224
Uttarakhand	627	448	67	515	345
West Bengal	5457	897	305	1202	337
Total	72368	31841	4827	36668	26869

Note: i) Sewage Generation is estimated based on Water supply @ 185lpcd and rate of sewage generation as 80 %.
ii) Sewage generation for NCT of Delhi is estimated based on their 80 % of water supply of 925 MGD

Source: CPCB (National Inventory of Sewage Treatment Plants March, 2021)

Status of Tribunals

The Central Government has, so far, set up nine Tribunals to settle inter-State water disputes among the States under Inter-State River Water Disputes (ISRWD) Act, 1956

S.No.	Name of the Tribunal	States Concerned	Date of Constitution	Present Status
1	Godavari Water Disputes Tribunal	Maharashtra, erstwhile Andhra Pradesh, Karnataka, erstwhile Madhya Pradesh & Odisha	10 th April, 1969	Decision given in July 1980.
2	Krishna Water Disputes Tribunal - I	Maharashtra, erstwhile Andhra Pradesh and Karnataka	10 th April, 1969	Decision given in May 1976.
3	Narmada Water Disputes Tribunal	Rajasthan, Madhya Pradesh, Gujarat and Maharashtra	6 th October, 1969	Award given in December, 1979. Narmada Control Authority (NCA) was constituted to give effect to the decision.
4	Ravi & Beas Water Tribunal	Punjab, Haryana and Rajasthan	2 nd April, 1986	Report & Decision under Section 5(2) of ISRWD Act, 1956 given in April, 1987. Clarification/explanation sought from the Tribunal under Section 5(3) of the said Act by the party States. The matter is sub-judice.
5	Cauvery Water Disputes Tribunal	Kerala, Karnataka, Tamil Nadu and Union Territory of Puducherry	2 nd June, 1990	Report and decision under Section 5(2) of ISRWD Act given on 05.02.2007. In accordance to Supreme Court Order dated 04.02.2013, the final decision dated 05.02.2007 of the Tribunal was published in the official Gazette on 19.02.2013. Subsequently, Hon'ble Supreme Court vide its judgment dated 16.02.2018, slightly modified the Tribunal Award dated 05.02.2007. The Tribunal has been dissolved on 16.07.2018.
6	Krishna Water Disputes Tribunal - II	Karnataka, Andhra Pradesh, Telangana and Maharashtra	2 nd April, 2004 (effective date of constitution is 01.02.2006)	Report and decision under Section 5(2) of ISRWD Act given on 30.12.2010. Further report under Section 5(3) of the Act given by the Tribunal on 29.11.2013 which could not be published in the Official Gazette on account of stay by Hon'ble Supreme Court vide Order dated 16.09.2011. According to Section 89 of AP Reorganization Act, 2014, term of the KWDT-II has been extended with certain Terms of Reference. The Tribunal is currently hearing the matters and yet to submit its Final Award. The matter is sub-judice.
7	Vansadhara Water Disputes Tribunal	Andhra Pradesh and Odisha	24 th February, 2010 (effective date of constitution is 17.09.2012)	Report and decision under Section 5(2) of ISRWD Act, 1956 given on 13.09.2017. The Tribunal has submitted the Further Report under Section 5(3) of the Act on 21.06.2021. The Award of the Tribunal dated 21.06.2021 is yet to be Notified. Government of Odisha has filed an SLP in Hon'ble Supreme Court seeking not to publish the Award.
8	Mahadayi Water Disputes Tribunal	Goa, Karnataka and Maharashtra	16 th November, 2010 (effective date of constitution is 21.08.2013)	Report & Decision under Section 5(2) of ISRWD Act, 1956 submitted on 14.08.2018. Basin States have filed separate SLPs in Hon'ble Supreme Court. State of Karnataka has filed an Interlocutory Application (I.A.) before Supreme Court for a direction to the Union of India to publish the Award dated 14.08.2018. Supreme Court vide its Order dated 20.02.2020, allowed the said I.A. subject to the result of the pending proceedings. Accordingly, the Tribunal Award dated 14.08.2018 has been published in Official Gazette on 27.02.2020. The Tribunal is yet to submit its Further Report under Section 5(3) of the Act. The matter is sub-judice.
9	Mahanadi Water Disputes Tribunal	Chhattisgarh, Odisha, Jharkhand, Maharashtra and Madhya Pradesh	12 th March, 2018	Matter is sub-judice before the Tribunal under section 5(2) of ISRWD Act.

Source: IMO, CWC

Interlinking of Rivers

Under National Perspective Plan (NPP) prepared in year 1980 for inter-basin water transfer, National Water Development Agency (NWDA) has identified 30 links (16 under Peninsular Component and 14 under Himalayan Component) for preparation of Feasibility Reports (FRs) under Inter-linking of Rivers Project. The present status of these links is given at Annexure-I and II.

Four links have been identified as priority links for preparation of Detailed Project Reports (DPRs) under the Peninsular Rivers Component viz; Ken-Betwa link project (KBLP), Damanganga-Pinjal link project, Par-Tapi-Narmada link project and Godavari-Cauvery link project for implementation on priority. Based on the concurrence of the concerned States, DPRs of KBLP, Damanganga-Pinjal link project, Par-Tapi-Narmada link project and Godavari -Cauvery link project {consisting of three links (Inchampalli) – Krishna (Nagarjunasagar), Krishna (Nagarjunasagar) – Pennar (Somasila), Pennar (Somasila)-Cauvery (Grand Anicut) link projects} have been completed and sent to concerned States. The DPR of Cauvery-Vaigai-Gundar link project was also completed and sent to the party States.

The Ken- Betwa link is the first link under NPP that is ready for implementation. Most of the statutory clearances for its implementation have been obtained except the stage-II forest clearance for Daudhan dam and TAC/investment clearances for phase-II projects of the KBLP. A tripartite agreement has been signed amongst states of MP and UP and Central Govt, for the implementation of Ken-Betwa Link project in March, 2021 in the august presence of Hon'ble Prime Minister of India. The appraisal for funding the project on 90 (C): 10(S) and setting up an SPV for the implementation of the project has been completed by Public Investment Board (PIB), Ministry of Finance. The project was appraised by the PIB in its meeting held on 1st October, 2021 and broadly agreed with funding pattern proposed (90 (C): 10(S)) for the project with some riders. Based on the PIB recommendations, a Cabinet Note for central funding and for setting up of a Special Purpose Vehicle (SPV) was submitted to the Cabinet for approval and the same was approved by Cabinet on 8.12.2021.

Constitution of Special Committee for Interlinking of Rivers (2014)

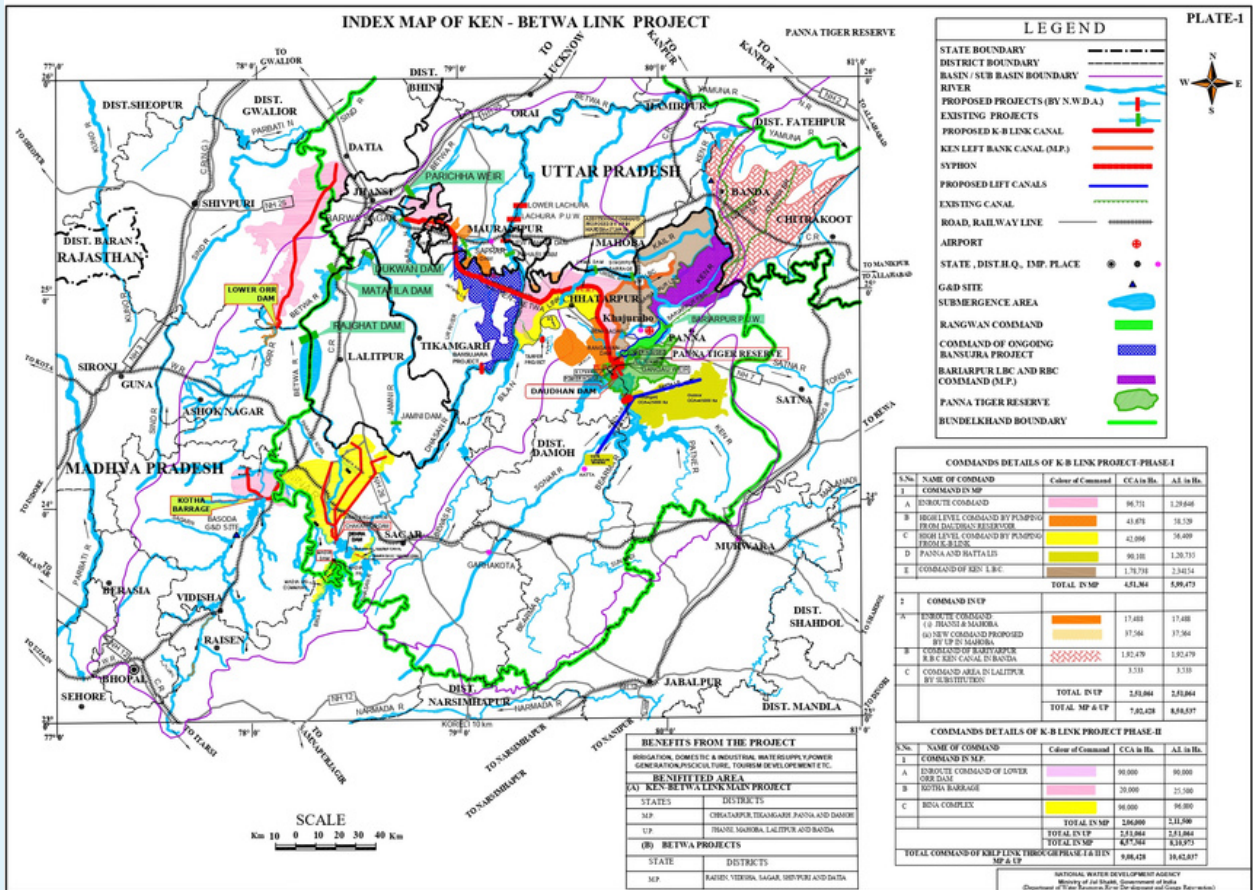
As directed by the Hon'ble Supreme Court vide its judgment dated 27.02.2012 in the Writ Petition (Civil) No. 512 of 2002 on 'Networking of Rivers' alongwith Writ Petition No. 668 of 2002, a Committee called as "Special Committee for Interlinking of Rivers" vide Gazette Notification dated 23rd September, 2014 has been constituted, under the chairmanship of Hon'ble Minister of Water Resources (now Jal Shakti) for the implementation of Interlinking of Rivers Programme. Nineteen meetings of the Special Committee for ILR have been held so far and the last meeting was held on 12.11.2021.

Constitution of Task Force for Interlinking of Rivers (2015)

The Union Cabinet while approving the constitution of Special Committee for ILR in its meeting held on 24th July, 2014 directed that a committee comprising of experts be constituted to look into the issues relating to inter linking of rivers. In compliance to the direction of Union Cabinet, MoWR, RD & GR vide O.M. dated 13th April, 2015 has constituted a Task Force for Interlinking of Rivers (TF-ILR) under the Chairmanship of Chief Advisor, MoWR, RD&GR (now Ministry of Jal Shakti) to assist the Special Committee for ILR and MoWR, RD & GR regarding the implementation of ILR Programme. Fifteen meetings of the Task Force have been held so far and the last meeting was held on 22.10.2021.

Intra-State links

Under the intra-State link projects, NWDA received 49 link proposals from 10 States out of which feasibility reports of 37 link projects were completed and sent to concerned States. The PFRs of two links are in progress. The remaining links are either withdrawn by States or not under intra-state link category. Based on the request of concerned States, the DPRs of four links viz; Kosi-Mechi, BurhiGandak-Noon-Baya-Ganga links of Bihar, Wainganga-Nalganga link of Maharashtra and Ponnaiyar (Nedungal)-Palar intra-State link of Tamil Nadu were completed and sent to them. Further the Draft DPRs of Damanganga (Ekdare)-Godavari link and Damanganga-Vaitarna-Godavari link projects have also been completed.



Ken-Betwa Link Project

States Benefitted from Inter-Basin Water Transfer Link Schemes (As per FR/PFR/DPR)

Peninsular Component

Sl. No	Name	Status	States benefited	Annual Irrigation (Lakh ha)	Domestic & (Mm ³)	Hydro power (MW)
1	a) Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link	FR completed	AP& Odisha	4.43	700	450
	b) Alternate Mahanadi (Barmul) - Rushikulya – Godavari (Dowlaiswaram) link	FR completed and DPR in progress	AP& Odisha	6.25 (0.91 + 3.52 + 1.82**)	700 (MGL) + 125**	210 (MGL) + 240**
2	Godavari (Polavaram) - Krishna (Vijayawada) link	FR completed	AP	2.1	162	--
3	a.) Godavari (Inchampalli) - Krishna (Nagarjunasagar) link	FR completed	Telangana	2.87	237	975+ 70= 1045
	b.) Alternate Godavari (Inchampalli) - Krishna (Nagarjunasagar) link *	DPR completed	Telangana	3.67	140	60
4	Godavari (Inchampalli) - Krishna (Pulichintala) link	FR completed and DPR in progress	Telangana & AP	6.13 (1.09 + 5.04)	413	27
5	a.) Krishna (Nagarjunasagar) - Pennar (Somasila) link	FR completed	AP	5.81	124	90
	b.) Alternate Krishna (Nagarjunasagar) - Pennar (Somasila) link *	DPR completed	AP	2.94	218	90
6	Krishna (Srisailem) – Pennar link	FR completed and DPR in progress	--	--	--	17
7	Krishna (Almatti) – Pennar link	FR completed and DPR in progress	AP & Karnataka	2.58 (1.9+0.68)	56	13.5
8	a.) Pennar (Somasila) - Cauvery (Grand Anicut) link	FR completed	AP, Tamil Nadu & Puducherry	4.91 (0.49+4.36+0.06)	1105	--
	b.) Alternate Pennar (Somasila) - Cauvery (Grand Anicut) link *	DPR completed	AP, Tamil Nadu & Puducherry	2.83 (0.51+ 2.32)	1098 (62+ 1036)	
9	Cauvery (Kattalai) - Vaigai - Gundar link	DPR completed	Tamil Nadu	4.48	218	--
10	a) Parbati –Kalisindh - Chambal link	FR completed	MP & Rajasthan	#Alt. I = 2.30 Alt. II = 2.20	- 13.2	--
	b) Parbati – Kuno – Sindh link. \$	PFR completed	MP & Rajasthan			
11	Damanganga - Pinjal link (As per DPR)	DPR completed	Maharashtra (only water supply to Mumbai)	--	895	5
12	Par-Tapi-Narmada link (As per DPR)	DPR completed	Gujarat	2.32	76	21
13	Ken-Betwa link	DPR completed	Uttar Pradesh & Madhya Pradesh	10.62 (2.51+8.11)	194	103 (Hydro) & 27MW (Solar)
14	Pamba - Achankovil - Vaippar	FR completed	Tamil Nadu	0.91	--	508
15	Bedti - Varda link	PFR completed and Draft DPR completed	Karnataka	0.60	----	----
16	Netravati – Hemavati link	PFR completed	Karnataka	0.34	--	--

**Benefit from Six Projects of Govt. of Odisha

Alt I- Linking with Gandhisagar Dam, Alt. II- Linking with Rana Pratapsagar Dam

*Due to pending consensus on Manibhadra and Inchampalli dams, Alternate study to divert unutilized waters of Godavari river carried out and DPR of Godavari (Inchampalli/ Janampet) – Krishna (Nagarjunasagar) - Pennar (Somasila) – Cauvery (Grand Anicut) link projects completed. Godavari-Cauvery (Grand Anicut) link project has been prepared comprising of Godavari (Inchampalli / Janampet) - Krishna (Nagarjunasagar), Krishna (Nagarjunasagar)- Pennar (Somasila) and Pennar(Somasila)-Cauvery(Grand Anicut) link projects

This link is planned to provide benefits of 9.45 lakh ha of annual irrigation and 1456 MCM of domestic and industrial water supply.

\$ Integration of Eastern Rajasthan Canal Project of Rajasthan and Parbati – Kalisindh-Chambal link

Himalayan Component

Sl. No.	Name of the Link	States concerned	Country/ States benefited	Annual Irrigation (Lakh ha)	M&I (Mm ³)	Hydro power (MW)	Status
1.	Kosi-Mechi link	Bihar & W.B	Bihar & Nepal	4.74 (2.99+1.75)	24	3180	PFR completed
2.	Kosi-Ghaghra link	Bihar & U.P	Bihar, U.P & Nepal	10.58 (8.17+0.67+1.74)	48	--	PFR completed
3.	Gandak-Ganga link	Bihar & U.P	U.P & Nepal	34.58 (28.80+5.78)	700	4375 (Dam PH) & 180 (Canal PH)	FR completed (Indian portion)
4.	Ghaghra-Yamuna link	Bihar & U.P	U.P & Nepal	26.65 (25.30+1.35)	1391	10884	FR completed (Indian portion)
5.	Sarda-Yamuna link	Bihar, U.P, Haryana, Rajasthan & Uttarakhand	U.P & Uttarakhand	2.95 (2.65+0.30)	3054	3600	FR completed (Indian portion)
6.	Yamuna-Rajasthan link	UP, Gujarat, Haryana & Rajasthan	Haryana & Rajasthan	2.51 (0.11+2.40)	30	--	FR completed
7.	Rajasthan-Sabarmati link	UP, Gujarat, Haryana & Rajasthan	Rajasthan & Gujarat	11.53 (11.21+0.32)	102	--	FR completed
8.	Chunar-Sone Barrage link	Bihar & U.P	Bihar & U.P	0.67 (0.30+0.37)	--	--	FR completed
9.	Sone Dam - Southern Tributaries of Ganga link	Bihar & Jharkhand	Bihar & Jharkhand	3.07 (2.99+0.08)	360	95(90 Dam PH) & 5 (Canal PH)	PFR completed
10.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Assam, W.B & Bihar	Assam, W.B & Bihar	3.41 (2.05+1.00+0.36)	--	--	FR completed and DPR in progress
11.	Jogighopa-Tista-Farakka link (Alternative to M-S-T-G)	-do-	Assam, W.B & Bihar	3.559 (0.975+1.564+1.02)	265	360	PFR completed
12.	Farakka-Sunderbans link	W.B	W.B	1.50	184	--	FR completed
13.	Ganga(Farakka) - Damodar-Subernarekha link	W.B., Odisha & Jharkhand	W.B., Odisha & Jharkhand	12.30 (11.18+0.39+0.73)	432	--	FR completed and DPR in progress
14.	Subernarekha-Mahanadi link	W.B. & Odisha	W.B. & Odisha	1.63 (0.18+1.45)	198	9	FR completed
15.	Irrigation benefits to Southern States through integration of Himalayan Component with Peninsular Component		Southern States	30.0			

Note: Annual irrigation includes existing commands taken over by some links especially in U.P. and A.P.

Source: NWDA

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REMOTE SENSING	Rishi Srivastava	29583429	9818656668	rsdte@nic.in	4th F(N)	3429
RESERVOIR OPERATION	D. P. Mathuria	29583383	9911725111	rodte@nic.in	5th F(S)	3383
RIVER BOARD	D. K. Jha	29583419	9431636308	cbdte@nic.in	6th F(S)	3419
RIVER CONSER. Dte.	R. P. S. Verma*	29583296	9968681205	rcddte-cwc@nic.in	9th F(S)	3296
RM COORDN	Ajay Kumar	29583211	9560453946	rm dte@nic.in	2th F(S)	3211
SOFTWARE MGMT	S. D. Sharma	29583615-00	9911117728	smdte@nic.in	6th F(S)	3615
WATERMANAGEMENT	Smarth Lal Meena	29583204	9968145974	wmdte@nic.in	5th F(S)	3204
WATER RES. STAT.(Jt. Dir.)		29583294		isd@nic.in	9th F(N)	3294
WB & ECONOMICS	B. B. Saikia	29583289	9435137795	ecodte@gmail.com	5th F(S)	3289
WP&P COORDN	Bhupinder Singh	29583225	9810720231	wppcdte@nic.in	3rd F(S)	3225
WS & RS, INC-SW, R&R	Alok Paul Kalsi	29583284	7838735136	wrsdte@nic.in	8th-2G(N)	3284

HR M/Admin/Finance						
Designation	Name	Office	Mobile	E-Mail ID	Location	PABX
CE (HRM)	Dr. Samir Chatterjee	20861748	9968688755	cehrmgmt@nic.in	2nd F(S)	3301
PPS	Lalit M. Nayyar	26100695	8459177778		2nd F(S)	3322
SECRETARY	Praveen Kumar	26187232	9711393566	secy-cwc@nic.in	3rd F(S)	3345
PPS	Rahul Chenna	26187232	9818691611		3rd F(S)	3325
PPS	Uma Taneja	29583325			3rd F(S)	3325
DIRECTOR (PCP)	Anant Kumar Gupta	29583217	9868359857	pcpdte@nic.in	2nd F(S)	3217
DIRECTOR (TRG.)	Sanjay Kumar Gangwar	29583505	9650675666	trngdte@nic.in	7th F(S)	3525
DIRECTOR(TC)	S. K. Rajan	29583218	9213209215	tcodte@nic.in	2nd F(S)	3218
DIRECTOR(WSE)	Sameer Kumar Jha	29583271	9971506825	wsedte-cwc@gov.in	2nd F(S)	3217
DIRECTOR(ADMIN)	Inderjit Hadda	29583449	9588113190	diradm@nic.in	3rd F(S)	3449
DIRECTOR (FINANCE)	Pradeep Kumar Shukla	29583460	7701862344	dirfin-cwc@gov.in	WB-II	3460
PA to DIRECTOR (FINANCE)	Saurabh		8860512524			
U.S. (FINANCE & BUDGET)	Pinky Pandey	29583356	9911284452			
DIRECTOR(ESTT. I)	S. K. Nanda	29583331	9718184004	directt@nic.in	3rd F(S)	3331
DIRECTOR(ESTT. II)	Inderjit Hadda*	29583449	9588113190	directt2-cwc@nic.in	2nd F(S)	3269
DD(TRG)	Venkateswarlu. E	29583531	9985126280	trngdte@nic.in	NLB	3531
DD (E-Governance Cell)	Saikat Biswas	29583246	7432945372		304(S)	3246
DD(TC & Parliamnt Cell)	Arun Banga	29583660	9599221454	pq-cwc@nic.in	2nd F(S)	3660
DD(TC)	Mahesh Prasad	29583282	9474671125	tcodte@nic.in	2nd F(S)	3282
DD(WPC)	V. Rajesh	29583321	9496437435	wpcl@nic.in	2nd F(S)	3321
DD(WSE)	Shiv Sunder Singh	29583270	9718670876	wsedte-cwc@gov.in	2nd F(S)	3270
DD(WSE)	A. K. Madhok	29583520	9140659909	tdoc@nic.in	2nd F(S)	3520
DD(OL)	Rajinder Paul	29583720	9871598548	rajinder.paul31@nic.in	8th F(S)	3720
AD(OL)		29583720			8th F(S)	3720
Designation	Name	Office	Mobile	E-Mail ID	Location	PABX
S.O./CONSULTANT(E.I)	R. K. Sharma	29583310	9868020929	estt1@nic.in	3rd F(S)	3310
S.O.(E.II)	Chiranjib Mridha	29583311	9873830341	estt2@nic.in	3rd F(S)	3311
S.O.(E.III)	Seema Juneja	29583319	9968267212	estt3@nic.in	3rd F(S)	3319
S.O.(E.IV)	Om Prakash	29583332	9582348043	estt4@nic.in	3rd F(S)	3332
S.O.(E.V)	Vandana Kalara	29583327		estt5@nic.in	4th F(S)	3327
S.O (E-VI)	Vandana Kalara*	29583327	8447171330	estt6@nic.in	3rd F(S)	3510
S.O (E-VII)	Krishna Toppo	29583287	9968095945	estt7@nic.in	5th F(S)	3287
S.O.(E.VIII)	Vatsala Sharma	29583740	9650976869	estt8@nic.in	3rd F(S)	3740
S.O.(E.IX)	R. Mahalakshmi	29583314	9810059006	estt9@nic.in	3rd F(S)	3314
S.O (E-X)	Rita Anrigh	29583316	9873428960	estt10@nic.in	3rd F(S)	3316
S.O.(E. XI)	Asha Bhatt	29583328	9868453936	estt11@nic.in	4th F(S)	3328
S.O. (E-XII)	Kailash Chand Meena	29583320	9968226826	estt12@nic.in	8th F(N)	3320
S.O. (E-XIII)	S. C. Pant	29583341	9354075543	estt13@nic.in	4th F(S)	3341
S.O. (E-XIV)	Chander Prakash (SSO)	29583337	8595472451	madhurlata@nic.in	9th F(N)	3337

Designation	Name	Office	Mobile	E-Mail ID	Location	PABX
S.O (APAR)	Rita Angrish*	29583316	9873428960	soapar-cwc@gov.in	4 th F(S)	3645
S.O. (CM&V)	Kanwaljit Kaur	29583330	9953078916		3 rd F(S)	3330
S.O. (O&M)	T. P. Singh	29583338	9810522569		3 rd F(S)	3338
S.O.(RTI)	Usha Kalra	29583345	9773879182	eofficecru-cwc@nic.in	4 th F(S)	3315
S.O.(R&I)	Nirja Solanki	29583305	9211204154	soact1@nic.in	2 nd F(S)	3305
S.O.(A/C-I)	Satish S. Koli	29583730	8076664557	soact2@nic.in	8 th F(N)	3263
S.O.(A/C-II)	Joginder Kumar	29583706	9582090604	soact3@nic.in	8 th F(N)	3706
S.O.(A/C-III)	Asha Dudeja	29583710		soactw@nic.in	8 th F(N)	3710
S.O.(A/C.WORKS)	Thawar Singh	29583265	9013364344	budget-cwc@gov.in	8 th F(N)	3265
S.O./Consultant(BUDGET)	M.S. Rawat	29583223		soom-cwc@nic.in	8 th F(S)	3223
S.O.(Pension Cell)	R. P. Singh	29583223	8448335744		3 rd F(S)	3537
US(APAR)	Anil Kumar Yadav	29583352	9810207991			
US(E-I)	R. K. Balamurugan	29583344	8527926654		3 rd F(S)	3344
US(E-II), O&M	R. K. Balamurugan	29583344	8527926654		3 rd F(S)	3344
US(E-III)	Sachin Dev Verma	29583356	9717090566	kb.hamza@nic.in	3 rd F(S)	3356
US(E-IV)	Ajay Malik	29583302	9818541901		3 rd F(S)	3302
US(E-V)	Ratnakar Yadav	29583304	9871138817	ratnakar.yadav77@nic.in	324(S)	3304
US(E-VI)	Ratnakar Yadav	29583304	9871138817	ratnakar.yadav77@nic.in	324(S)	3304
US(E-VII)	Pinki Pandey	29583356	9911284452	rajeshsharma-cwc@nic.in	3 rd F(S)	3317
US(E-VIII)	Anil Kumar Yadav	29583352	9810207991		3 rd F(S)	3302
US(E-IX)	Ratnakar Yadav	29583304	9871138817	kb.hamza@nic.in	3 rd F(S)	3356
US(E-X)	Anil Kumar Yadav	29583352	9810207991	rchacko-cwc@gov.in	3 rd F(S)	3534
US(E-XI)	P. N. Mohan	29583534	9810305826	rchacko-cwc@gov.in	3 rd F(S)	
US(E-XII)	Ajay Malik	29583302	9818541901	rchacko-cwc@gov.in	3 rd F(S)	3534
US(E-XIII)	Pinki Pandey	29583356	9911284452	rajeshsharma-cwc@nic.in	3 rd F(S)	3317
US(E-XIV)	Umesh Kumar Pali	29583302			3 rd F(S)	3637
U.S. RTI NODAL OFFICER	Pinki Pandey	29583356	9911284452		3 rd F(S)	3344
ACCOUNTS OFFICER	D. D. Garg	29583735			8 th F(S)	3735
BUDGET	S.M. Kohade	29583352	9868805067		3 rd F(S)	3352
U.S. RTI NODAL OFFICER	Rajesh Sharma	29583344	9013444289		3 rd F(S)	3344
ACCOUNTS OFFICER	D. D. Garg	29583735			8 th F(S)	3735
BUDGET	S.M. Kohade	29583352	9868805067		3 rd F(S)	3352
PAO UNIT						
Sr.AO	Rakesh Kala	26102185	9810565824		8 th FL(N)	3744
Sr.AO	D. K. Chahal	26711043	9899189634		8 th FL(N)	3744
Sr.AO	D. K. Saini	26711043	9818361591		8 th FL(N)	3886

Designation/Services	Name	Office	Mobile	E-Mail ID	Location	PABX
SERVICES (PCP)						
DD-PCP (HQ)	Anjani Kumar Mishra	29583232	8368554075	ddpcp-cwc@nic.in	R-214 2nd F(S)	3232
DD-PCP (M)	Nagendra Kumar Singh	29583219	9425776223	ddpcp-cwc@nic.in	R-213 2nd F(S)	3219
SDO (HQ)	Sumit Nigam	29583644	9873130890	sdohq@nic.in	R-215 2nd F(S)	3239
AD-II (Xerox, Telephone/Fax/ RO & Water Cooler)	Dinesh Kumar	29583239	9310662466	sdohq@nic.in	R-215 2nd F(S)	3239
AD-II (Store and MAS)	Sumit Nigam	29583644	9873130890		R-215 2nd F(S)	3644
AD-II Library Building	S. S. Nath	29583280	7982074626		Library Building	3280
AD-II (Stationary)	Dinesh Kumar	29583220	9310662466	store@nic.in	R-215 2nd F(S)	3220
AD-II (Vehicle, WB-I & WB-II)	Deepak Kajal	29583241	9724269478		R-215 2nd F(S)	3241
AD-II (News Paper/ COP)	Deepak Kajal*	29583241	9724269478		R-215 2nd F(S)	3701
PCP Help-Desk	-	26178202	-		2nd F(S)	7777
COMPUTER MAINTENANCE						
DD SMD	S. F. H. Abidi	29583603	9650957004	smdte@nic.in	6th F(S)	3603
DD SMD	Dheeraj Singhal	29583737	9582489984	smdte@nic.in	6th F(S)	3737
AD II SMD	Rabindar Kumar	29583607	8130709778	egovmance-cwc@gov.in	6th F(S)	3607
AD II SMD	Anurag Paul	29583355	7239023333	smdte@nic.in	6th F(S)	3355
E-OFFICE HELP DESK		29583366/77		egovhelpdesk-cwc@nic.in	6th F(S)	3366/3377
COMPUTER MAINTENANCE				comp624@nic.in		4444
LIBRARY						
DD (LIB.)	A. K. Madhok	29583397	9140659909		NLB	3397
LIBRARY INF OFFICER		29583398		cwclib-cwc@nic.in	NLB	3398
LIBRARY-REFERENCE	Rajbir Singh	29583398	9818693773		NLB	
MAP RECORD SEC	P. S. Verma	29583481	8447147494		NLB	3481
OTHER SERVICES						
AD (BIO-METRIC SYS)	H. C. Mishra	29583230			3rd floor(S)	3230

Field Offices of Central Water Commission

Brahmaputra Basin Organisation (BBO), Guwahati

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Bijoy Kumar Karjee	0361-2674268		9971099673		ceboghgy-cwc@gov.in	Guwahati
Superintending Engineer (C)	Sanjay Kumar Singh	0361-2674268	-	9650072606		secobbo-cwc@gov.in	Guwahati
Superintending Engineer	Ajay Kumar Sinha	0361-2674268	-	9560444535		se.hocghy-cwc@gov.in	Guwahati
Director, M&A	Sudhir Kumar	0361-2972124	-	9711999674		dirmaguwahati-cwc@nic.in	Guwahati
Deputy Director, M&A	Ankit Dudeja	0361-2972124	-	9717349877		dirmaguwahati-cwc@nic.in	Guwahati
Ex. Engineer, UBD	B. P. Sonowal	0373-2314398	-	8826788504		ubd-cwc-asm@nic.in	Dibrugarh
Ex. Engineer, MBD	Dipankar Das	0361-2972105	-	8724067472		ee.mbd.cwc-as@gov.in	Guwahati
Ex. Engineer, NEID-III	Akhil Akhouri	0360-2203510	-	8447522493		eeneid3-cwc@gov.in	Itanagar

Barak & Other Basins Organisation (BOBO), Shillong

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer, BOBO	Shri P. M. Scott	0364-2220568	2534919	9436165176	2220644	cebbo-cwc@nic.in	Shillong
Superintending Engineer (C), BOBO	Mohd. Faiz Syed	0364-2220489		8506006693	2220644	secoshillong-cwc@nic.in	Shillong
Superintending Engineer, NEIC cum M&A Dte	Mohd. Faiz Syed*	0364-2220706		8506006693		seneic-cwc@gov.in	Shillong
Superintending Engineer, MC	Mohd. Faiz Syed*	03842-269313		8506006693	266760	semcsilchar-cwc@nic.in	Silchar
Deputy Director, NEIC cum M&A Dte	Smt. Preeti Choudhary	0364-2220720		9935281141		seneic-cwc@gov.in	Shillong
Executive Engineer, NEID-I	Shri Rajat Kumar Sharma	03842-223937/ 223939		9911741448	223937	neid1sil@rediffmail.com	Silchar
Executive Engineer, NEID-II	Shri Awdhesh Kumar	0389-2352266	2352331	8882071006	2350822	neid2cwc@yahoo.com	Aizawl
Executive Engineer, MID	Shri Ashish Tripathi	0364-2521226		8808180969 / 9911096907	2521226	midcwc@gmail.com	Shillong
Executive Engineer, MD	Shri D.K. Rakshit	03842-242358		9435740685	240224	eemd_cwc2008@rediffmail.com	Silchar

Cauvery & Southern Rivers Organisation (CSRO), Coimbatore

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	T. K. Sivarajan	0422-2512242		8130922207	0422-2512243	cecsro-cwc@nic.in	Cauvery & Southern Rivers Organisation, CWC, Sangamam, Gandhi Maanagar, Peelamedu P.O. Coimbatore - 641004.
Superintending Engineer (Coordn)	Amit Ranjan	0422-2513227		9911198865	0422-2512243	secocoimbatore-cwc@nic.in	Cauvery & Southern Rivers Organisation, CWC, Sangamam, Gandhi Maanagar, Peelamedu Post. Coimbatore - 641004
Superintending Engineer	O.R.K. Reddy	080-29723060		9916563451	080-29723060	secsrcbangalore-cwc@nic.in	Cauvery & Southern Rivers Circle, CWC, JalaSoudha, 2 nd Floor, Jalahalli post, Bengaluru-560013
Director	N.V.Satish Seemakurti	0484-2310281		9911427505	NA	dirbecochin-cwc@nic.in	Beach Erosion Directorate, CWC, Jaladhara, D.No.27/1927-A, Kasturba Nagar, Kochukadavanthara, Kadavanthra post, Kochi- 682020.
Deputy Director	Vacant						
Director	R. Thangamani	044-29871040		9449070298	NA	dirmoncoimbatore-cwc@nic.in	Monitoring Directorate, CWC, Near New Telephone Exchange, Plot No. R-81, Velacherry (West), TNHB Colony, Chennai - 600042
Deputy Director	L Pannerselvam	044-29871040		8056231554	NA	dirmoncoimbatore-cwc@nic.in	Monitoring Directorate, CWC, Near New Telephone Exchange, Plot No. R-81, Velacherry (West), TNHB Colony, Chennai - 600042
Executive Engineer	M. S. Saravana Kumar	0484-2314229		9942736685	NA	ee.kochi-cwc@gov.in	Executive Engineer, South Western River Division, CWC, Jaladhara, D.No.27/1927-A, KasturbaNagar, KochuKadavanthara, Kadavanthra Post, Kochi- 682020
Executive Engineer	V. Vasanthakumar	044-29530653		8373977185	NA	ee.chn-cwc@gov.in	Hydrology Division, Neervalam, CWC, Near New Telephone Exchange, Plot No. R-81, Velacherry (West), TNHB Colony, Chennai-600042
Executive Engineer	S. Rajendran	0422-2512250		8800242327	NA	ee-srd-cwc@gov.in	Southern Rivers Division, CWC, Sangamam, 2 nd Floor, Gandhi Maanagar, Peelamedu Post, Coimbatore -641004

Indus Basin Organization (IBO), Chandigarh

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Shiv Nandan Kumar	0172-2746794		9868918952	0172-2741766	ceibo-cwc@nic.in	Chandigarh
Superintending Engineer (C)	Bhupesh Kumar	0172-2748334		9871073990	0172-2742465	secochandigarh-cwc@nic.in	Chandigarh
Director, M&A	Ashok Kumar Jeph	0172-2637569		9873030516	0172-2642327	dirachandigarh-cwc@nic.in	Chandigarh
Director, M&A	Piyush Ranjan	0177-2624036		7042083260	0177-2624224	dirmashimla-cwc@nic.in	Shimla
Director, M&A	Ravi ranjan	0191-2597667		9810884756	0191-2597669	dirmajammu-cwc@nic.in	Jammu
Deputy Director (M&A)	Rakesh Gupta	0191-2597669		9419208718	0194-2494030	dirmajammu-cwc@nic.in	Jammu
Deputy Director (M&A)	Maneesh Jaiswal	0191-2597669		9891699675	0194-2494030	maneeshjaiswal-cwc@nic.in	Jammu
Deputy Director (M&A)	Tanveer Ishaque Chisty	0191-2597688		7889470142	0191-2494030	ddsrinagar-cwc@nic.in	Srinagar
Deputy Director (M&A)	Samarth Agarwal	0172-2637569		9910706333	0172-2642327	dirachandigarh-cwc@nic.in	Chandigarh
Deputy Director (M&A)	Ramavtar Verma	0177-2624224		9818330157	0177-2624224	dirmashimla-cwc@nic.in	Shimla
Executive Engineer, (Chenab Division)	Rishi Kumar	0191-2597668		9596920469	0191-2597668	exenjammu@gmail.com	Jammu
Executive Engineer, SHD	Prakash Chand	0177-2623026		7018117528	0177-2625253	eeshdcwc@yahoo.com	Shimla

Krishna Godavari Basin Organization (KGBO), Hyderabad

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	D. Ranga Reddy	040-29808740	-	9900823440	040-29808742	cekgbo-cwc@nic.in	Hyderabad
Director, M&A (TS)	M. Ramesh Kumar	040-29708639	-	7382601531	040-29708644	dirmacwchyd@gmail.com	Hyderabad
Director, M&A (AP)	P.Devender Rao	040-29564309	-	9000473396	-	dir.hyd-cwc@gov.in	Hyderabad
Superintending Engineer (Krishna & Coord. Circle)	Srinivasu Bairy	040-29708645	-	9959428376	040-29708645	sekcohyderabad-cwc@nic.in	Hyderabad
Superintending Engineer (Godavari Circle)	M. Raghuram	040-29700116	-	8373987620	040-29700177	segchderabad-cwc@nic.in	Hyderabad
Dy. Director, M&A (TS)	K. Rekha Rani	040-29708644	-	8801900490	040-29708644	dirmacwchyd@gmail.com	Hyderabad
Dy. Director, M&A (AP)	D. Ganesh Kumar	040-29564309	-	8511089135	-	dir.hyd-cwc@gov.in	Hyderabad
Deputy Director, M&A (AP-PPA)	A. Praveen Kumar	040-29700903	-	8587078277	-	dir.hyd-cwc@gov.in	Hyderabad
Deputy Director (O/o. CE)	M. Ganga Bhavani	040-29808741	-	9246369523	040-29808742	cekgbo-cwc@nic.in	Hyderabad
Ex. Engineer, Upper Krishna Division	Abhishek Gaurav	020-24380073	-	9717657375	020-24381086	eeukd.pune-cwc@gov.in	Pune
Ex. Engineer, Lower Krishna Division	D. S. Prasad	040-29809650	-	9556661205	040-29809647	eelkdhyd.cwc@gov.in	Hyderabad
Ex. Engineer, Upper Godavari Division	N. Srinivasarao	040-29704541	-	9618694218	040-29704542	eeugdhyd.cwc@gov.in	Hyderabad
Ex. Engineer, Lower Godavari Division	K.V.K. Kuchel	040-29808749	-	8099443653	040-29808752	eelgdhyd.cwc@gov.in	Hyderabad

Lower Ganga Basin Organization (LGBO), Patna

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Ambarish Nayak	0612-2541087	-	9437105268	0612-2541865	celgbo-cwc@nic.in	Patna
Superintending Engineer (C)	Shashi Rakesh	0612-2541065	-	9711999234	0612-2541865	celgbo-cwc@nic.in	Patna
Superintending Engineer	Mukesh Kumar Singh	0542-2282309	-	9471193011	0542-2282309	sehocvaranasi-cwc@nic.in	Varanasi
Director, Monitoring	Sanjeev Kumar Suman	0612-2279256	-	7872933737	0612-2279256	dirmonpatna-cwc@nic.in	Patna
Director, M&A	Akhilesh Kumar Jha	0651-2252381	-	9431106479	0651-2252381	dirmaranchi-cwc@nic.in	Ranchi
Deputy Director, Monitoring	Anil Kumar Arya	0612-2279256	-	9431492487	0612-2279256	dirmonpatna-cwc@nic.in	Patna
Deputy Director, M&A	Manoj Kumar	0651-2252381	-	947037537	0651-2252381	dirmaranchi-cwc@nic.in	Ranchi
Executive Engineer, LGD-1	Mahesh Kumar Raman	0612-2671541	-	8210846371	0612-2671541	eelgd1-cwc@nic.in	Patna
Executive Engineer, LGD-2	Mukesh Kumar	0612-2558249	-	9015575817	0612-2558249	eelgd2-cwc@nic.in	Patna
Executive Engineer, MGD-3	Shashwat Rai	0542-2282339	-	8826838308	0542-2282339	eemgd3-cwc@nic.in	Varanasi

Mahanadi & Eastern Rivers Organization (MERO), Bhubaneswar

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Atul kumar Nayak	0674-2545536 2545573		9437483984	2545537	cemero-cwc@nic.in	Bhubaneswar
Superintending Engineer(C)	Amrish Pal Singh	0674-2545537		9990008961	2545537	secobhubaneshwar-cwc@nic.in	Bhubaneswar
Superintending Engineer(HOC)	Susant Kumar Samal	0674-2541804	0674-2913061	9937166235	2545708	sehocbbshwar-cwc@nic.in	Bhubaneswar
Director, M&A	Dilip Kumar Jena	0674-2544162		8895772192	2544132	dirmabbshwar-cwc@nic.in	Bhubaneswar
Deputy Director, M&A	R.R.Prasad	0674-2544132		6309357289	2544132	dirmabbshwar-cwc@nic.in	Bhubaneswar
Ex. Engineer, E.R.Division	A.Rajasekhar	0674-2540086		9703043901	2540316	eeerdwc.od@gov.in	Bhubaneswar
Ex. Engineer, Mahanadi Division	Upananda Rath	0663-2430238		7982373987	2431809	eemdburla-cwc@nic.in	Burla

Mahi and Tapi Basin Organization (MTBO), Gandhinagar

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	D. K. Tiwary*	079-23245427	-	8826173692	079-23246115	centbo-cwc@nic.in	1st floor, Narmada-Tapi Bhawan, Sector-10A, Gandhinagar, Gujarat - 382010
SE-Coordination	Yoki Vijay	079-23245426	079-48011746	9990093428	079-23246115	secogandhinagar-cwc@nic.in	3rd floor, Narmada-Tapi Bhawan, Sector-10A, Gandhinagar, Gujarat 382010
Director Mon (Add Charge)	Yoki Vijay	079-23244882	079-48011746	9990093428		dirmongnagar-cwc@nic.in	3rd floor, Narmada-Tapi Bhawan, Sector-10A, Gandhinagar, Gujarat 382010
SE-HOC	Y S Varshney	079-23245194	-	9825075127	079-23245194	sehocgandhinagar-cwc@nic.in	2nd floor, Narmada-Tapi Bhawan, Sector-10A, Gandhinagar, Gujarat 382010
EE-Mahi Division	Shreyas Gune	079-23239509	-	9958337125		eemdgnr-cwc@nic.in	3rd floor, Narmada-Tapi Bhawan, Sector-10A, Gandhinagar, Gujarat
EE-Tapi Division	Ashish Kumar	0261-2478569	-	9625388113	0261-2478569	ee.tapi-cwc@nic.in	Opposite- Khetrupal Health Centre, Sagrampura, Surat, Gujarat 395002
DD-Mon Dte	Naresh Porwal	079-23244882	-	8160495513		narespwl-cwc@nic.in	3rd floor, Narmada-Tapi Bhawan, Sector-10A, Gandhinagar, Gujarat 382010

Monitoring Central Organization (MCO), Nagpur

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Dhirendra Kumar Tiwary	0712-2510464		8826173692	0712-2510475	cemonc-cwc@nic.in	Nagpur
Director (Appraisal)	M. S. Sahare	0712-2511510		9868144595		diranagpur-cwc@nic.in	Nagpur
Director (Monitoring)	S. S. Bonal	0712-2510912		9718805243		dirmonnagpur-cwc@nic.in	Nagpur
Director (M & A)	D. S. Chaskar			9422309043		dirmapune-cwc@gov.in	Pune
Deputy Director (Appraisal)	Kailash K. Lakhe	0712-2511510		9405140152		kailskrsnj-cwc@nic.in	Nagpur
Deputy Director (Monitoring)	Karan Raghuvanshi	0712-2510912		9718081172		karanraghuvanshi-cwc@gov.in	Nagpur
Deputy Director (M & A)	Asheesh Singhal			9555986777		asheeshkr-cwc@nic.in	Pune
Executive Engineer (Wainganga Division)	Aditya S. S. Moola	0712-2519939		8826281265	0712-2510156	eewd.ngp-cwc@gov.in	Nagpur

Monitoring South Organisation (MSO), Bengaluru

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Sushil Kumar	080-29724080	-	9422646384	080-29724047	cemons-cwc@nic.in	Bengaluru
Superintending Engineer (HO&CC)	Guru Prasad.J	080-29724081	-	9871260794	080-29724047	secobangalore-cwc@nic.in	Bengaluru
Director (App.)	O. R. K Reddy	080-29724082	-	9916563451	080-29724047	dirabangalore-cwc@nic.in	Bengaluru
Director (Mon.)	J. Harsha	080-29724083	-	9902018682	080-29724047	dirmonbangalore-cwc@nic.in	Bengaluru
Deputy Director (Mon)	-	-	-	-	-	lkodanswamy-cwc@nic.in	Bengaluru
Deputy Director (App.)	-	-	-	-	-	mlprakash-cwc@nic.in	Bengaluru
Ex. Enginner, Cauvery Division	Shrihari Shekhar	080-29724010	-	9449339615	080-29724010	eedd.bng-cwc@gov.in	Bengaluru

Narmada Basin Organization (NBO), Bhopal

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Aditya Sharma	0755-2574513	-	9717200563	0755-2550253	cenbo-cwc@nic.in	Bhopal
Superintending Engineer (C.)	Manoj Tiwari	0755-2558264	-	9425608846	0755-2550253	secobhopal-cwc@nic.in	Bhopal
Director (Mon. & Punasa Design)	Anuj Kanwal	0755-2762059	-	9711564290	0755-2550253	dirmonbhopal-cwc@nic.in	Bhopal
Director (Mon. & App.), Bhopal	M. W. Paunikar	0755-2551834	-	9990137437	0755-2550253	dirmabhopal-cwc@nic.in	Bhopal
Director (Mon. & App.), Raipur	M. W. Paunikar*	0771-2433901	-	9990137437	0771-2433901	dirpdbhopal-cwc@nic.in	Raipur
Deputy Director (Mon. & Punasa Design)	Neelam Narolia	0755-2762059	-	9990808371	0755-2550253	dirmonbhopal-cwc@nic.in	Bhopal
Deputy Director (Mon. & Punasa Design)	Mahesh Gupta	0755-2762059	-	9460523193	0755-2550253	dirmonbhopal-cwc@nic.in	Bhopal
Deputy Director (Mon. & App.), Bhopal	Neeraj Kumar Sharma	0755-2551834	-	8527468184	0755-2550253	dirmabhopal-cwc@nic.in	Bhopal
Deputy Director (Mon. & App.), Raipur	Devi Shankar Goyal	0771-2433901	-	9718401007	0771-2433901	dirpdbhopal-cwc@nic.in	Raipur
Ex. Engineer, Narmada Division	Vijay Chaudhary	0755-2573630	-	9754500442	0755-2564909	eendb-cwc@nic.in	Bhopal

National Water Academy (NWA), Pune

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	A K Kharya	020-24380678		9818247513	020-24380110	cenwa.mah@nic.in	Pune
Director	S N Pande	020-24381212		9873163630	020-24380110	shailendrapandenwa@gmail.com sn.pande@nic.in	Pune
Director	Abhishek Sinha	020-24380476		9868170568	020-24380110	dirit-nwa@gov.in	Pune
Director (A&C)	Milind Panpatil	020-24380528	020-41203833	8767305098 9763031746	020-24380110	milindpanpatil-cwc@nic.in	Pune
Director	Harish Umbarje	020-24380528		9947243510	020-24380110	harishumbarje-cwc@nic.in	Pune
Deputy Director	Chaitanya KS			9910771794	020-24380110	chaitanyaks-cwc@gov.in	Pune
Deputy Director (A&C)	S P Singh	020-24380224		9718936741	020-24380224	satyendra-cwc@nic.in	Pune
Deputy Director	G Srinivasulu	020-24380476		9911340729	020-24380110	srinivas-cwc@gov.in	Pune

Teesta & Bhagirathi Damodar Basin Organization (TBDBO), Kolkata

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Subhrangshu Biswas	033-46044640	-	9818811841	033-40047023 23589181	cetbo-cwc@nic.in	Kolkata
Superintending Engineer (C)	Ashis Banerjee	033-46042962	46047198	9818309439	033-40047023 23589181	setbo-cwc@nic.in	Kolkata
Superintending Engineer (IC)	Kamal Kumar Jangid	03592-270613	-	9868872359	03592-231128	seicgangtok-cwc@nic.in	Gangtok
Superintending Engineer (HOC)	Amitabh Prabhakar	06540-274263		9973049058	06540-276525	sehocmithon-cwc@nic.in	Maithon
Director, M&A	Sidhartha Mitra	033-40047023		7507088332	033-40047023	dirmonkolkata@nic.in	Kolkata
Deputy Director, T&BDBO	Arkaprabha Majumder	033-46042962		8860761852		setbo-cwc@nic.in	Kolkata
Deputy Director, M&A	Sudipta Sarkar	033-40047023		9474844647	033-23589181	dirmonkolkata@nic.in	Kolkata
Deputy Director, HOC	Narendra Nath Shankar	06540-274263		9431069299		sehocmithon-cwc@nic.in	
Executive Engineer, SID	Shashank Bhushan	03592-271059		9968445805	03592-231887	eesid-cwc@gov.in	Gangtok
Executive Engineer, LBD	Shailesh Kumar	03561-230677		9818435917	03561-220770	eelbd-cwc@gov.in	Jalpaiguri
Executive Engineer, BID	Shashank Bhushan*	009755-252232		9968445805	009755-252485	eebid-cwc@gov.in	Bhutan
Executive Engineer, LGD-3	Rajesh Kumar	03482-251210		8210321358	03482-251210	eelgd3-cwc@nic.in	Berhampore
Executive Engineer, DD	Sudipto Mandal	0341-2254265		9810783036	0341-2253442	eedd-cwc@nic.in	Asansol

Upper Ganga Basin Organisation (UGBO), Lucknow

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Anupam Prasad	0522-2715832		9935954764	0522-2719834	ceugbo-cwc@nic.in	Lucknow
Superintending Engineer©	Ashish Kumar Pal	0522-2719360		9454724390	0522-2719834	secolucknow-cwc@nic.in	Lucknow
Director, M&A Dte, Lucknow	B. C. Vishwakarma	0522-2715471		9717832440	0522-2719834	dimalucknow-cwc@nic.in	Lucknow
Director, M&A Dte, Agra	N. K. Manglik	0562-2527196		9868207648	056-22527196	dirmaagra-cwc@nic.in	Agra
Superintending Engineer, HOC, DDN	Rajesh Kumar	0135-2761562		9650550015	0135-2760631	sehocdehradun-cwc@nic.in	Dehradun
Deputy Director, M&A Dte Lucknow	Deepti Verma	0522-2715471		8882995254	0522-2719834	deeptiverma-cwc@nic.in	Lucknow
Deputy Director, M&A Dte Agra	Mayank Suhirid	0562-2527196		8470087386	056-22527196	mayanksuhrid-cwc@nic.in	Agra
Executive Engineer, MGD-I	Ashish Awasthi	0522-2322181		9935057533	0522-2325028	eemgd1-cwc@nic.in	Lucknow
Executive Engineer, MGD-II	Vivek Kumar Verma	0522-2332524		9140706811	0522-2325526	eemgd2-cwc@nic.in	Lucknow
Executive Engineer, HGD	Vishal Garg	01334-235882		9968545206	0135-2742418	eehgd-cwc@nic.in	Haridwar

Yamuna Basin Organisation (YBO), New Delhi

Designation	Name	Telephone			Fax	E-mail	Location
		Office	Res.	Mobile			
Chief Engineer	Girish Kumar Agarwal	011-26526865		9868957498	011-26526857	ceybo-cwc@nic.in	New Delhi
Superintending Engineer (C)	Sunil Kumar	011-26868142		9810201965	011-26526857	secodelhi-cwc@nic.in	New Delhi
Superintending Engineer (HOC)	H. S. Sengar	0120-2581224		9899489256	0120-2584330	sehocnoida-cwc@nic.in	Vaishali
Superintending Engineer (PC)	Ram Jeet Verma	0129-2415092		7827227275	0129-2412956	seplanning-cwc@nic.in	Faridabad
Director (M&A)	H. S. Sengar *	0141-2230154		9899489256	0141-2230104	dirmajaipur-cwc@nic.in	Jaipur
Director (N&B)	Asit Chaturvedi	011-26964135	26250810	9868868979	011-26964135	dimbcodelhi-cwc@nic.in	New Delhi
Deputy Director (N&B)	Inderpal Singh	011-26964135		8860984882	011-26964135	nbccwc@yahoo.co.in	New Delhi
Deputy Director (M&A)	Hitesh Kumar Gupta	0141-2944007		9560299182	0141-2230104	dirmajaipur-cwc@nic.in	Jaipur
Ex. Engineer, LYD	Sachin Gupta	0562-2604424		9718523078	0562-2602268	eelyd-cwc@nic.in	Agra
Ex. Engineer, CD	Vivek Kumar Singh	0141-2790065		9621515438	0141-2791826	eechambal-cwc@nic.in	Jaipur
Ex. Engineer, UYD	H. P. Chaurasiya	011-26868120		9911106396	011-26565579	uydybo-cwc@nic.in	New Delhi
Ex. Engineer, P&I Division	Abhijeet Kashliwal	0129-2412576		8130901283	0129-2412576	pi-cwc@nic.in	Faridabad

Ministry of Jal Shakti, Dept. of WR, RD&GR

(As on Jan, 2022)

Name/Designation	Telephone		E-mail
	Office/ FAX	Residence/ Mobile	
Shri Gajendra Singh Shekhawat Minister for Jal Shakti	011-23714200, 011-23714663, 011-23711780, 011-23710804 (F)		minister-mowr@nic.in
Sh Chaudhari Uday Gaurishankar PS to Minister	-- do --		psmwr-mowr@nic.in
Shri Prahlad Singh Patel Minister of State for Jal Shakti	011-23718759, 011-23708419, 011-23354496(F)		mos-mowr@nic.in
Shri Bishweswar Tudu Minister of State for Jal Shakti	011-23718759, 011-23708419, 011-23354496(F)		mos-mowr@nic.in
Dr. S.K. Jena PS to MoS(WR)	011-23708419		psmos-mowr@nic.in
Shri. B.N.Navalavala Chief Advisor	011-23708418	9978406086	
Shri Sriram Vedire Advisor	011-23708418	9441002730	
Ms.Rinku Sr.P.A	011-23708418	9899184624	
Shri Pankaj Kumar Secretary	011-23715919, 011-23710305, 011-23731553 (F)		secy-mowr@nic.in
Ms. Debashree Mukherjee Additional Secretary	011-23714609	011-23073349	aswrs-mowr@nic.in
Shri G. Asok Kumar Director General (NMCG)	011-23072900 011-24364560 (F)		dg@nmcg.nic.in
Sh. Sanjay Awasthi Joint Secretary (RD&PP)	011-23725477 011-23710619 (F)		jsrd-dowr@nic.in
Sh. Subodh Yadav Joint Secretary (Admin)	011-23710343, 011-23725477 (F)		jsadmin-mowr@gov.in
Shri Manoj Sethi Joint Secretary & Financial Advisor	011-23710297 (T/F)	011-27467043	fawr-mowr@nic.in
Shri A.S. Goel Commissioner (SPR)	011-23710107, 011-23350051 (F)		commpr-mowr@nic.in
Sh. Atul Jain Commissioner (FM)	011-24362780 (T/F) 011-24368238	9968652152	commer-mowr@nic.in
Shri. T. S. Mehra Commissioner (B&B)	011-24694724 (T/F)	011-26261624	commgwhp-mowr@nic.in
Shri P.K. Saxena Commissioner (Indus)	011-24361540 (T/F)	9945364552	commindus-mowr@nic.in
Shri A.S. Goel* Commissioner (CAD)	011-23382256 (T/F)		commcadwm-mowr@nic.in

*additional charge

Ministry of Jal Shakti, Dept. of WR, RD&GR

(As on Jan, 2022)

Name/Designation	Telephone		E-mail
	Office/ FAX	Residence/ Mobile	
Shri S. R. Meena ADG (MI Stat.)	011-24699496	011-23073349	
Shri R. Sathish Economic Advisor	011-23388941 (T/F)		adviserce-mowr@nic.in
Shri Girraj Goyal Director (IEC/e-Gov/Coord./ID)	011-23766369	9971074337	dircoord-mowr@nic.in
Sh. Anup Kumar Srivastava Sr. Joint Commissioner SPR-1	011-23385186	9971594822	aksriv-cwc@nic.in
Sh. Amit Kumar Jha Sr. Joint Commissioner SPR-2	011-23710131		sjcpr-mowr@nic.in
Sh. Rahul Kumar Singh Sr. Joint Commissioner (MI)	011-23387834	23383490	sjc-mowr@nic.in
Sh. Rakesh Toteja Sr. Joint Commissioner (FM)	011-24360611	9811355107	sjcer1-mowr@nic.in
Sh. R. R. Sambharia Sr. Joint Commissioner (FM)	011-24362160		sjcer2-mowr@nic.in
Sh. Rajeew Singhal Sr. Joint Commissioner (FM)	011-24392095		sjcfm4-mowr@nic.in
Sh. Ajay Kumar Gupta Sr. Joint Commissioner (B&B)	011-24367590	9560032215	sjc3bb-mowr@gov.in
Sh. Vaseem Ashraf Sr. Joint Commissioner (B&B)	011-24367083		
Sh. Naveen Kumar Sr. Joint Commissioner (Indus)	011-24361467	9971434229	sjcindus2-mowr@nic.in
Sh. P K Mittal Sr. Joint Commissioner (CAD)	011-23383090		cadwmwm-mowr@nic.in
Sh. Manoj Kumar-II Sr. Joint Commissioner (Pen.R)	011-23388020		cadwmcentral-mowr@nic.in
Sh. T. D. Sharma Sr. Joint Commissioner (Pen.R)	011-23383518		cadwmsouth-mowr@gov.in
Sh. Kushagara Sharma Sr. Joint Commissioner (NHP-I)	011-24369543		sjc1nhp-mowr@nic.in
Sh. Rakesh Kashyap Sr. Joint Commissioner (NHP-II)	011-24363417		sjc2nhp-mowr@nic.in
Sh. Vivek Pal Sr. Joint Commissioner (PP)	011-23719503		pp-mowr@nic.in
Sh. Rakesh Kumar Sr. Joint Commissioner (BM)	011-24367109		sjcbm-mowr@nic.in
Sh. Manoj Kumar Sr. Joint Commissioner (BM)	011-24367109		sjcbm-mowr@nic.in

Offices under Department of WR,RD&GR

(As on 01.01.2022)

Designation	Name	Office	Residence	Fax
Bansagar Control Board, Rewa, MP – 486001 (STD Code 07662)				
SECRETARY	Mr. M.W. Paunikar	242433		242433
Betwa River Board, Nandanpura, Jhansi (U.P) (STD Code 0510)				
SECRETARY	Vipin Kumar Singh	2480183		2480183
Brahamaputra Board, Basistha, Guwahati (STD Code 0361)				
CHAIRMAN	Rajiv Yadav	2301309	9811376733	2301099
Central Ground Water Board, NH Iv, Faridabad 121 001 (STD Code 0129)				
CHAIRMAN	Dr. P. Nandakumaran	2477101	2477200	2477200
Central Soil Materials Research Station, Hauz Khas, New Delhi (STD Code 011)				
DIRECTOR	Dr. R. Chitra	26961894	26311705	26967985
Central Water & Power Research Station, Khadaskwasla, Pune (STD Code 020)				
ADDITIONAL DIRECTOR	Y. N. Srivastava	24103450		24103500
Farakka Barrage Project District Murshidabad (WB) (STD Code 03485)				
GENERAL MANAGER	R. Azhagesan	253644		253608
Ganga Flood Control Commission, Patna (STD Code 0612)				
CHAIRMAN	M.S.Dhillon	2217294		2217960
Narmada Control Authority, Indore (STD 0731)				
EXECUTIVE MEMBER	Aditya Sharma	2557276	9717200563	2559888
National Institute Of Hydrology, Roorkee (STD Code 01332)				
DIRECTOR	J. V. Tyagi	272106	275923	273976
National Project Construction Corporation Ltd. (STD Code 0124)				
CMD	R.K. Agrawal	2385219		
National Water Development Agency, New Delhi (STD Code 011)				
DG	Bhopal Singh	26715351	26165345	26513846
Tungabhadra Board, Hyderabad (STD Code 08394)				
CHAIRMAN	D.M. Raipure	259110	9900823440	
Upper Yamuna River Board, New Delhi (STD Code 011)				
MEMBER-SECY	R.D. Deshpande	26174147		26184025
Water & Power Consultancy Services (I) Ltd., New Delhi (STD Code 011)				
CMD	R.K. Agrawal	23313881	27865540	23314924
Godavari River Management Board, Hyderabad (STD Code 040)				
CHAIRMAN	J. Chandrashekhar Iyer	23313163		23313162
Krishna River Management Board, Hyderabad (STD Code 040)				
CHAIRMAN	M.P. Singh	23301659		
Pollavaram Project Authority, Hyderabad				
CHIEF EXECUTIVE OFFICER	J. Chandrashekhar Iyer			
National Water Informatics Centre, New Delhi (STD Code 011)				
Director	Sunil Kumar Garg	26173283		
Cauvery Water Management Authority, New Delhi (STD Code 011)				
CHAIRMAN	S.K. Haldar			
MEMBER (WR)	Naveen Kumar	29583247	9873399333	26173281
SECRETARY	Neeraj Kumar	29583444	9968689718	26173280

Other Organisations Related to Water Resources Sector

Designation	Name	Office	Residence	Fax
Bhakra Beas Management Board, Sector 19b, Chandigarh (STD Code 0172)				
CHAIRMAN	Sanjay Srivastava	501175		2549857
Narmada Valley Development Authority, Bhopal (STD Code 0755)				
CHAIRMAN	Iqbal Singh Bains	2677501		
National Hydroelectric Power Corporation Ltd., Faridabad (STD Code 0129)				
CMD	Abhay Kumar Singh	2275920		2278020
National Thermal Power Corporation Ltd., New Delhi (STD Code 011)				
CMD	Gurdeep Singh	24360100		24361018
Tehri Hydro Development Corporation India Ltd., Rishikesh (Uttaranchal) (STD Code 0135)				
CMD	R.K. Vishnoi	2431517		
Satluj jal Vidyut Nigam Ltd., Shimla (STD Code 0177)				
CMD	N. L. Sharma	2670064		2670893
Narmada Hydroelectric Development Corporation Ltd., Bhopal (STD Code 0755)				
CMD	M. D. Sinha	4030001		

Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi-110066

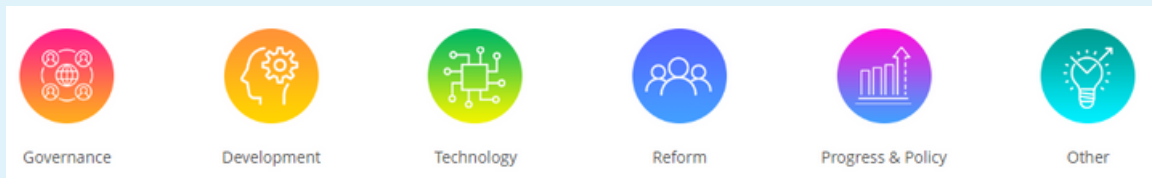
Designation	Name	Office	E-Mail ID	Location
CHAIRMAN	B. K. Arya	2673222 26732201	chair@nic.in	Room No 201(N)
MEMBER (PLANNING)	A. Balan	26732202	memberplanning@gov.in	Room No 200(N)
MEMBER (THERMAL)	Naresh Anand	26732901	member_thermal@nic.in	Room No 901(S)
MEMBER (HYDRO)	B. K. Arya (Addl. Charge)	26732701	member.he@cea.nic.in	Room No 701(N)
MEMBER (GO&D)	B. K. Arya	26732601	member.god@cea.nic.in	Room No 601(N)
MEMBER (POWER SYSTEM)	Gautam Roy	26732301	memberscea@nic.in	Room No 301(N)
MEMBER (E&C)	Gorityala Veera Mahendar	26732401		Room No 401(N)
SECRETARY	V.K. Mishra (Addl. Charge)	26732203	Mishra.vk65@gov.in	Room No 206(N)

Azadi Ka Amrit Mahotsav

Azadi Ka Amrit Mahotsav is an initiative of the Government of India to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements. This Mahotsav is dedicated to the people of India who have not only been instrumental in bringing India thus far in its evolutionary journey but also hold within them the power and potential to enable Prime Minister Modi's vision of activating India 2.0, fuelled by the spirit of Atmanirbhar Bharat. Azadi Ka Amrit Mahotsav is an embodiment of all that is progressive about India's socio-cultural, political and economic identity. The official journey of "Azadi Ka Amrit Mahotsav" commences on 12th March, 2021 which starts a 75 week countdown to our 75th anniversary of Independence.



How do you envision the India of tomorrow, the India which will merge the best of tradition with the most modern, global outlook in the following themes:



Hon'ble Prime Minister Shri Narendra Modi has often shared his vision of building a new, AatmaNirbhar Bharat by the year 2022. You may be aware that our great nation is now just few weeks away from the 75th Anniversary of Indian Independence (Azadi Ka अमृत महोत्सव). To commemorate the monumental occasion, all Department and Ministries will host a set of activities for a resurgent, Aatmanirbhar Bharat.

