



S. K. Haldar

Chairman

Message

The water sector is witnessing various reforms in governance, institutional arrangement, policy and programmes with more and more stakeholder participation involving the general public as well. CWC has been the premier organization of the country in the water sector and has contributed substantially to the country's commendable progress in water resources development and management for more than seven decades. It gives me a great sense of responsibility to head an Institution whose legacy is directly associated with Dr. B. R. Ambedkar and Dr. A. N. Khosla.

During the year 2020, several programmes have been launched by the government for the improvement of water sector and the activities already underway were also given momentum. Support for Irrigation Modernization Program (SIMP) is a new initiative taken up by the Government of India to improve delivery services of irrigation sector in the country. In this context, a webinar was organised by CWC to introduce SIMP to State/UTs. Shri U. P. Singh, Secretary, DoWR, RD&GR

was the chief guest and the webinar had very active participation from the various States/UTs. Shri U.P. Singh, Secretary, DoWR, RD&GR also chaired the 147th meeting of the Advisory Committee of DoWR, RD&GR for consideration of techno-economic viability of Irrigation, Multipurpose and Flood Control Projects on 24.12.2020. A total of 5 no. of projects were accepted by the Advisory Committee in the meeting.

The senior officers of CWC monitor the progress of activities/schemes through important Inter-Departmental Committees. Meetings of Damodar Valley Reservoirs Regulation Committee (DVRRC), Ghaggar Standing Committee, Technical Advisory Committee (TAC) for organizations such as Farakka Barrage Project and National Institute of Hydrology (NIH), Technical Evaluation Committee for North Koel Project etc. were held during the month.

CWC is also adopting modern technologies such as topographical survey work using Drone/UAV. This technology is being used for Survey & investigation work for Barinam HE Project in UT of J&K and various other projects under investigation. As compared to the conventional methods, this method is proving to be fast and economical and especially suited for hilly/rough terrains.

This is the first issue of Jalansh under my tenure as Chairman, CWC. I would request readers and stakeholders to convey their suggestions and

feedback for its continuous improvement. Also, other peer organizations working in the water sector may like to provide required material/information for incorporation in this monthly newsletter.

Shri R. K. Jain, my predecessor has superannuated on 31.12.2020 after more than 35 years of Govt. Service. The organization will fondly remember his services & contributions in the water sector. I, on behalf of CWC, wish him a healthy and prosperous retired life.

After the dreadful year of 2020 which was marred by COVID-19 pandemic, we are welcoming the year 2021 with a lot of hope and positivity. I wish everyone a happy, prosperous and healthy New Year 2021.

श्री क. हलदार



Hon'ble Minister of Jal Shakti, Shri Gajendra Singh Shekhawat inaugurated the Brahmaputra Amantran Abhiyan at the ITA Centre, Guwahati by auspicious lamp lighting.



CONTENTS

- National Webinar on SIMP
- Second meeting of the Managing Committee of MoJS Research Chair (Water Conflicts and Governance)
- Ghaggar Standing Committee meeting
- 147th meeting of the Advisory Committee of DoWR, RD&GR on Irrigation, Flood Control & Multipurpose Projects
- Visit to Water conservation works carried out by Banda District Administration, U.P.

- Topographical Survey of Barinam HEP, J&K
- 143rd DVRRC meeting
- 116th meeting of the Technical Advisory Committee of Farakka Barrage Project and 8th Meeting of Farakka Barrage Project Advisory Committee.
- Meeting on siltation due to construction of embankment
- Flood Situation in the Country
- DD News : आपदा का सामना
- Activities under DRIP

- Performance Evaluation Study of Giri Medium Irrigation Project
- Financial Progress of Schemes/Components as on 31.12.2020
- Water Sector News
- 29th TEC meeting - North Koel
- 11th Meeting of Technical Advisory Committee of Brahmaputra Board
- Third Meeting for Salinity Ingress Management Projects
- History-Sharavati Hydro Power Plant

National Webinar on Support For Irrigation Modernisation Programme (SIMP)

Support for Irrigation Modernization Program (SIMP) has been initiated by the Government of India in September 2020 with the support of Asian Development Bank (ADB). Its objective is to improve delivery services of irrigation sector in the country i.e., Water Use Efficiency (WUE), increase in productivity and income of the farmers by having a standard modernization approach under Major & Medium Irrigation (MMI) projects. Under SIMP, Asian Development Bank (ADB) will work with the Water Resources Department (WRD), DoWR, RD&GR and the Department of Economic Affairs (DEA) to establish a system to support the States in preparing their future irrigation modernization programs for MMI schemes.

In this context, irrigation modernization includes upgrading existing irrigation schemes and developing new schemes by applying modern irrigation practices and high-level technology infrastructure. SIMP's main activities will be supporting the states with preparing new irrigation investments by applying national and international best-practices for preparing feasibility studies, detailed project reports (DPRs), detailed designs

Second meeting of the Managing Committee of MoJS Research Chair (Water Conflicts and Governance)

Second meeting of the Management Committee of the MoJS Research Chair was held on 17.12.2020 under the Chairmanship of Shri R. K. Jain, Chairman, CWC. The Management Committee is the Advisory body for the co-ordination of the activities of the Chair and providing strategic inputs. The meeting was attended by Shri S. K. Haldar, Member(WP&P); Ms. Yamini Aiyer, President & CEO, CPR; Shri Ashwin Pandya, Secretary General, ICID; Shri Vijai Saran, CE(IMO), CWC; Shri T. D. Sharma, SJC(BM), MoJS; Shri Ravi Bhushan, Director(R&D), MoJS; Dr. Srinivas Chokkakula, MoJS Research Chair; Dr. Partha Mukhopadhyay, Senior Fellow, CPR and other CWC officials.

The discussions were held during the meeting about the Ghaggar Standing Committee meeting

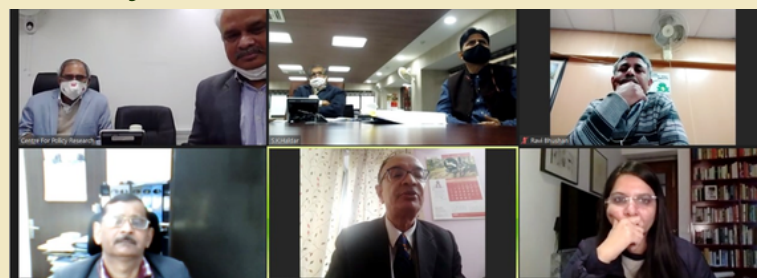
The 30th meeting of the Ghaggar Standing Committee was held on 18.12.2020 through video conferencing under the Chairmanship of Member (RM), CWC. In the meeting following decisions were made:

- Firm views from State Govts. should be given to CWPRS, Pune within a week.
- Verification of the preliminary model study viz. location of detention basins, alignment of embankments and other cross-drainage works etc. should be done by



and tender documents for the identified Projects.

To introduce SIMP to the States/UTs, a workshop/webinar was organized by CWC on 08.12.2020. Shri U. P. Singh Secretary, DoWR, RD&GR was Chief Guest. Shri S. K. Haldar, Member(WP&P), CWC, other senior Officers of the Ministry & CWC, officials from Asian Development Bank (ADB) attended the webinar. States/UTs Principal Secretaries/ Special Secretary Water Resources Department (WRDs) participated in the webinar along with over 100 senior WRD officers from States/UTs. Outline, the structure and State's role under SIMP were discussed with the participating States and Union Territories (UTs).



issues as under:

- The Annual Report for advice and inputs to the Research Chair. It also included a memoir prepared by the Director (R&D) on MoJS Chair
- Strengthening coordination between CWC and CPR and closer engagement on the MoJS Research Chair research interests.
- Publications and dissemination of the research work.

the State Govts. within 2 weeks.

- Preliminary model study report should be shared with the Govt. of Rajasthan within 1 day.
- Alignment of proposed phase-II embankment should be given by the Govt. of Punjab to CWPRS, Pune.
- CWPRS, Pune should present model study report after incorporating views/suggestions by all the stakeholders and provide reach wise specific solutions by giving some options/cases in line to the earlier model study for Jhelum basin to address the flood problems of Ghaggar River in an integrated manner.

147th meeting of the Advisory Committee of DoWR, RD&GR on Irrigation, Flood Control & Multipurpose Projects

The 147th meeting of the Advisory Committee of DoWR, RD&GR for consideration of techno-economic viability of Irrigation, Multipurpose and Flood Control Projects was held on 24.12.2020 through video conferencing under the Chairmanship of Secretary, DoWR, RD&GR,

MoJS. The meeting was attended by the representatives from Govt. of Uttar Pradesh, Assam, Karnataka and Himachal Pradesh besides CWC, GFCC, CGWB, MoTA, MoEF&CC, CEA, NITI Ayog, and MoF. A total of 5 nos.

Projects were accepted by the Advisory Committee in the meeting, the details of which are as follows:

Sl. No.	Name of works/scheme	State/UT	Type of Project	Estimated Cost (Rs. Crore and Price Level)	Benefits
1.	Upper Bhadra Project	Karnataka	Irrigation (Major)	16125.48 (2018-19)	Area-225515 ha, Population-7426485
2.	ERM of Sukla Irrigation Project.	Assam	Irrigation (Major)	259.73 (Oct-2020)	Area-12150 ha, Population- 141427
3.	Amreng Irrigation Project	Assam	Irrigation (Medium)	540.4585 (2019-20)	Area-6800 ha, population- 10000
4.	Balance works of Bhojpur Shahpur bund from km 0.00 to 40.80 in Distt. Balrampur and Siddarthnagar	Uttar Pradesh	Flood Control	78.327 (2016)	Area-8587 ha, Population-33200
5.	Channelization of Markandey River in Tehsil Nahan, District Sirmour	Himachal Pradesh	Flood Control	105.66 (2019)	Area-462.18 ha, Population-17406

Visit to Water conservation works carried out by Banda District Administration, Uttar Pradesh

Ministry of Jal Shakti had directed to visit Banda District and furnish the report in respect of the water conservation works carried out under the guidance of Sh. Heera Lal the then District Magistrate, Banda as mentioned in his application for Prime Minister Award, 2020.

Accordingly, Shri G. L. Bansal, Director & Shri Mayank Suhirid, Deputy Director, M&A Directorate, CWC Agra made a visit to Banda and surrounding villages along with the officers from the district administration and minor irrigation & Jal Nigam, U.P. during 31st Dec, 2020

Topographical Survey of Barinium HEP, J&K

Chenab Division, CWC, Jammu is executing the Survey & Investigation works for the proposed Barinium HE Project in District Kishtwar of UT of J&K. Chenab Division has been carrying out the work of topographical Survey Work using Drone/UAV. As compared to the conventional methods being used, this method using Drone/UAV has proved to be fast and economical. The terrain of the project area is very tough having lofty peaks and deep gorges.

The area of the project is approximately 44 sq km and stretches from Gulabgarh (J&K) to Luj in Himachal Pradesh along the River Chenab. The project area includes the survey covering portion of dangerous cliffs making it the world's most dangerous road connecting Keylong in Himachal to Kishtwar in J&K. CWC has completed the work facing tough terrain and very harsh



to 1st Jan, 2021 and submitted their report to CWC(HQ).



climate with lowest temperature ranging between -10 to 0 degree centigrade.

143rd DVRRC meeting

The 143rd meeting of Damodar Valley Reservoirs Regulation Committee was held through Video Conferencing on 18.12.2020 under the Chairmanship of Shri R. K. Sinha, Member (RM), CWC and Chairman, DVRRC. The officers from Central Water Commission, Damodar Valley Corporation, Govt. of Jharkhand (GoJ) and Govt. of West Bengal (GoWB) participated in the meeting. The important deliberations and decisions taken during the meeting are as under:

(i) Representative of GoJ to make strategic plan for the fringe area survey and land acquisition of Tenughat reservoir for the storage in the reservoir above 852 ft and utilisation of its water storage between 817 ft to 839 ft which is not being utilised due to heavy siltation of intake well of Tenughat Vidyut Nigam Limited.

(ii) The plan of drawls for Konar Irrigation Scheme by GoJ and replenishment by corresponding supplies from Tenughat reservoir through Tenu-Bokaro Link canal to DVC system as per interstate agreement 1978 shall be provided within one month.

116th meeting of the Technical Advisory Committee of Farakka Barrage Project and 8th Meeting of Farakka Barrage Project Advisory Committee.

The 116th meeting of the Technical Advisory Committee of Farakka Barrage Project (TAC-FBP) along with the 8th meeting of Farakka Barrage Project - Advisory Committee, (FBP-AC) was held during 18th - 19th December 2020 under the Chairmanship of Dr. R. K. Gupta, Member(D&R) / Chairman TAC-FBP.

TAC-FBP advises the Farakka Barrage Project Authorities on various technical matters related to Barrage and its appurtenant structures mainly gate replacement, anti-erosion and bank protection works etc. FBP-AC consisting of the public representatives including Member of Parliament, Malda Uttar, Member of Legislative Assembly of Baishnabnagar, Farakka and Pakur and stakeholders directly or indirectly benefitted by the project attended the site visit and discussed various works to be taken up by FBP in the meeting. During this year, prior to the TAC-FBP and FBP-AC meetings, the Hon'ble Minister of Jal Shakti along with the Secretary, DoWR, RD&GR, Commissioner(FM) and other delegates visited the Farakka Barrage Project.

Shri Samir Kumar Shukla, Director, Shri Nagaraj V., Deputy Director, and Shri Dheeraj Pandey, Assistant Director from BCD (E&NE) Dte., CWC and Shri Harkesh Kumar, Director, Shri Saket Krishna, Deputy Director, and Shri Ashish Singh, Assistant Director from Gates (E&NE) Dte., CWC accompanied and assisted the

(iii) GoJ shall send the comments on the data finalised for "Multi reservoirs simulation study of reservoirs in Damodar-Barakar Basin including the proposed Balpahari reservoir" in one month time for commencement of revised Balpahari multi-reservoir simulation.

(iv) Issues regarding removal of deposited silt in the upstream of Durgapur barrage pond may be resolved through video conferencing among the concerned officers of CWC, GoWB, DVC & CWPRS.

(v) The performance of flood moderation for Maithon and Panchet reservoirs and the good storage in these reservoirs during monsoon 2020 was appreciated by the committee members.

(vi) The allocations of water from Damodar valley area have been made to the firms: M/s Ma Amba Sponge Iron Ltd., M/s Mark Steels Limited, M/s BRGD Sponge & Iron Private Limited, M/s Aryavarta Khaniji Private Limited and M/s AICIron Industries Pvt. Ltd. for municipal and industrial purposes.



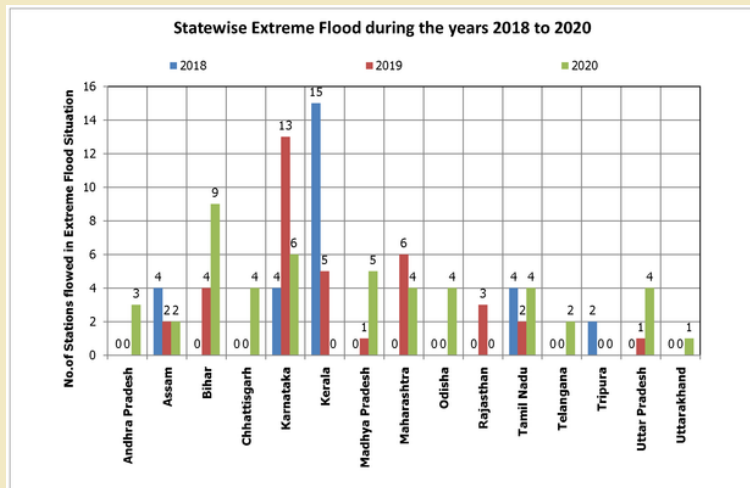
Technical Advisory Committee's meeting under the chairmanship of Member(D&R), CWC



Interaction with local representatives and public

senior officers during the field visit followed by meeting. Site visits to Barrage and appurtenant structures, erosion affected areas in upstream & downstream of barrage and feeder canal under the jurisdiction of FBP were made during 18th-19th December 2020 prior to the meeting.

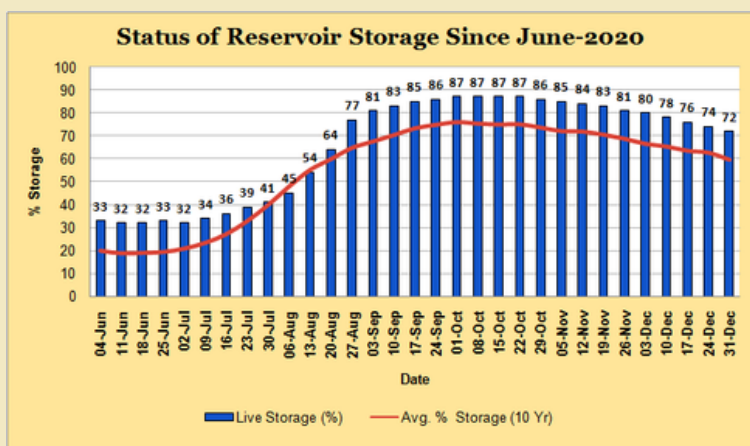
Data Corner



Reservoir Monitoring

CWC regularly monitors the live storage status of 128 reservoirs of the country on weekly basis and issues weekly bulletin every Thursday. Out of these 128 reservoirs, 44 reservoirs have hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of these 128 reservoirs is 172.132 BCM which is about 66.77% of the live storage capacity of 257.812 BCM created in the country.

As per reservoir storage bulletin dated 31.12.2020, live storage available in these reservoirs is 123.881 BCM which is 72% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 135.791 BCM and the average of last 10 years live storage was 102.51 BCM. Thus, the live storage available in 128 reservoirs as per the bulletin dated 31.12.2020 is 91% of the live storage of corresponding period of last year and 121% of storage of average of last ten years.



Meeting on siltation due to construction of embankment.

A Technical Group under the Chairmanship of Member(RM), CWC was constituted in connection with the efficacy of embankments as a viable flood control structure and cause of flooding on 02.11.2020. The 1st

Training

Training Organized by NWA, CWC, Pune

Sl. No.	Topic	Duration	Participants
1.	Webinar 8 :Interstate River Water Disputes in India – Challenges Krishna Water Dispute -I– a case study https://youtu.be/hkfvHE2Tw5w	01.12.2020	110 Central & State officers
2.	Distance Learning Program on Water Resources Sector of India for School Teachers - Batch D	01st-03rd December 2020	158 School teachers
3.	Distance Learning Program on Water Resources Sector of India for School Teachers - Batch E	02nd-04th December 2020	137 School teachers
4.	Webinar 9 :Interstate River Water Disputes in India – Challenges Krishna Water Dispute -II– a case study https://youtu.be/gttmrmjIHm0	07.12.2020	95 Central & State officers
5.	Distance Learning Program on Water Resources Sector of India for School Teachers - Batch G	08th-10th December 2020	145 School teachers
6.	Distance Learning Program on Water Resources Sector of India for School Teachers - Batch H	09th-11th December 2020	107 School teachers
7.	Distance Learning Program on Water Resources Sector of India for School Teachers – Batch I	14th-16th December 2020	117 School teachers
8.	Webinar 10 :Interstate River Water Disputes in India – Challenges Narmada Water Dispute - a case Study https://youtu.be/sFty5OvkPCI	14.12.2020	80 Central & State officers
9.	Purpose Oriented Training Through Distance Learning on GIS Based Mapping of Flood Assets	14th-18th December 2020	40 CWC officers
10.	Distance Learning Program on Water Resources Sector of India for School Teachers - Batch J	15th-17th December 2020	120 School teachers
11.	Webinar 11 :Interstate River Water Disputes in India – Challenges Ravi & Beas Water Dispute - a case study https://youtu.be/cTuogJEMhIA	21.12.2020	80 Central & State officers
12.	Training-cum Webinar on Reassessment of Water Availability In India using Space Inputs	22nd-24th December 2020	132 Participants from State/ Central Govt. Private Sector

technical meeting was held on 01.12.2020. Subsequently the minutes of the meeting were circulated to all the participants seeking inputs. Based on the inputs received from all the participants, 2nd meeting will be held on 08.01.2021.

Flood Situation in the Country

Regular Flood Forecasting Activity commenced on 01.05.2020 in various basins. During the period from 1st May to 31st December 2020, 11721 flood forecasts (8243 Level and 3478 Inflow) were issued, out of which 11198 (8132 Level and 3065 Inflow) forecasts were within limit of accuracy with a percentage accuracy of 95.53%. 1131 nos. of Orange Bulletin (for Severe Flood Situation) and 797 number of Red Bulletin for Extreme Flood Situation were issued in the month of December from Central Flood Control Room.

Summary of Flood Situation during 01.05.2020 to 31.12.2020

Extreme Flood Situation

Seven FF station observed Extreme Flood Situation.

Sl. No.	State	District	River	Station
1.	Assam	Sivasagar	Dikhow	Sivasagar
2.	Bihar	Gopalganj	Gandak	Dumariaghat
3.		Muzzafarpur	Gandak	Rewaghat
4.		Samastipur	Burhi Gandak	Rosera
5.	Odisha	Balasore	Subarnarekha	Mathani Road Bridge
6.	Andhra Pradesh	East Godavari	Godavari	Chinturu
7.	Karnataka	Gulbarga	Bhima	Deongaon Bridge

41 Flood Monitoring Stations observed Extreme Flood Situation.

Severe Flood Situation for FF Stations

88 FF Stations observed Severe Flood Situation in the States of Arunachal Pradesh, Assam, Bihar, Odisha, Uttar Pradesh, West Bengal, Jharkhand, Madhya Pradesh, Maharashtra, Rajasthan, Uttarakhand, Andhra Pradesh, Telangana, Kerala, Chhattisgarh and Gujarat.

DD News : आपदा का सामना

With the advancement in weather forecasting technology, the support of meteorological data and more accurate weather forecasts are helping millions of citizens across the world in tackling the disasters. In countries like India, it was a challenge to bring weather warnings and forecasts to the villages. The good work was done and now the alert system has been developed up to the state, district and tehsil level.

A panel discussion was telecasted on Doordarshan on 13.12.2020 about Weather Forecasting Technology having following participants.

Sl. No.	Name and Designation	Department/Agency
1.	Lt. Gen. Syed Ata Hasnain, PVSM, UYSM, AVSM, SM, VSM (Retd.), Member	National Disaster Management Authority (NDMA)
2.	Shri Sharad Chandra, Director, CWC	Central Water Commission (CWC)
3.	Shri Lakshman Singh Rathor, Ex Director General	India Meteorological Department

Above Normal Flood Situation

34 FF Stations in Assam, Bihar, Uttar Pradesh, Gujarat, Rajasthan, Andhra Pradesh, Jharkhand, Odisha, Telangana, Uttarakhand, Karnataka and West Bengal observed Above Normal Flood Situation.

Reservoirs having Inflow above threshold limit

88 reservoirs received inflows above their threshold limit in West Bengal, Chhattisgarh, Andhra Pradesh, Bihar, Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Tamil Nadu, Telangana, Rajasthan, Uttar Pradesh and Uttarakhand.



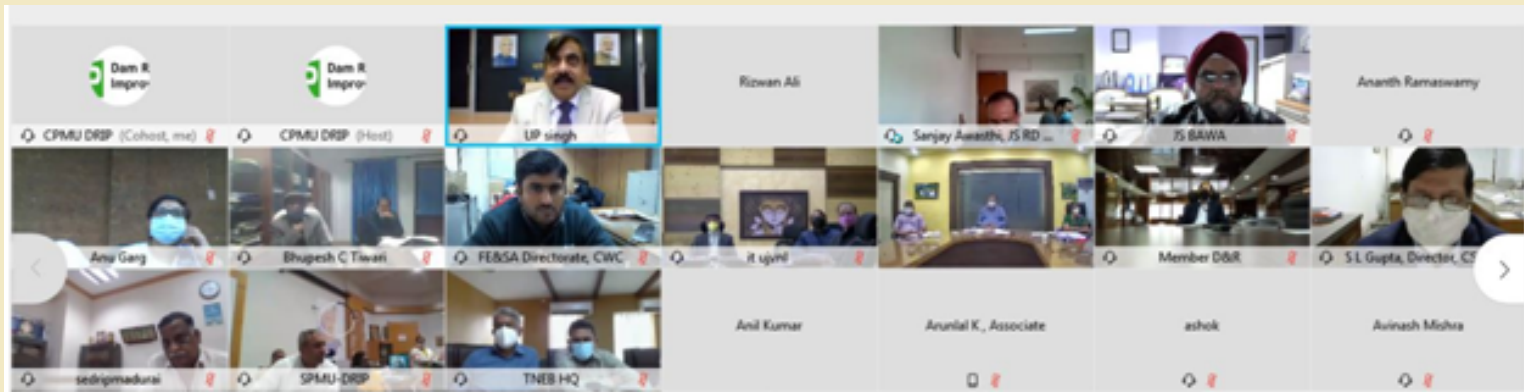
The efforts of Government of India towards developing a new weather forecast and warning mechanism were highlighted during the panel discussion. The new mechanism will have the following characteristics.

1. Unified Common alerting Protocol
2. Data based public warnings and information sharing
3. The new system will integrate warning agencies
4. These warnings can be amended at the state level
5. Extremely important in disasters like tsunami
6. Alert agencies can directly trigger alerts without waiting



Activities under DRIP

10th meeting of National Level Steering Committee (NLSC) for DRIP



National Level Steering Committee for DRIP is headed by Secretary, DoWR, RD&GR and having representation from CWC, IMD, NITI Ayog and other implementing agencies of the Project. NLSC is mandated to give policy directions in the formulation and implementation of the Project and review its progress. 10th meeting of NLSC for DRIP was held under the Chairmanship of Secretary, DoWR, RD&GR on 21.12.2020. It was attended by all the members of NLSC as well as the special invitees. The

Committee was apprised of progress and issues hampering the Projects. A Documentary on DRIP, was shown to all the members. The Chairman of the Committee desired that all partner agencies must achieve the proposed financial target by March 2021 and close the ongoing rehabilitation activities. The progress of DRIP partner agencies in DRIP Phase II was also reviewed and the Chairman of Committee directed to expedite the tendering process to meet the DEA's Readiness Criteria.

Review Meeting with Additional Chief Secretary, Madhya Pradesh WRD regarding DRIP Phase II

A meeting was held with the officials of Madhya Pradesh WRD on 09.12.2020 at Bhopal to review the preparedness of MP WRD and expedite the pending tenders for civil works to fulfil the Readiness Criteria of

DEA. Meeting was attended by MPWRD delegation led by Shri S. N. Mishra, Addl. Chief Secretary, MPWRD and CPMU CWC officials led by Shri Gulshan Raj, Chief Engineer, DSO and Project Director DRIP Phase II.

Participation of Ministry of Jal Shakti and CWC officials in Australia- India Water Dialogue

Australia-India Water Dialogue was organised by Australian Trade Consulate General. The theme of Dialogue was "Dam Safety and Operations Management". Shri Subodh Yadav, Joint Secretary (Admin) gave the opening remarks in the Inaugural Session. Shri Gulshan Raj, Project Director, DRIP Phase II and Phase III and Shri Pramod Narayan, Project Director, DRIP participated in the Panel Discussion. The event was attended by all DRIP Partner Agencies.



Stakeholder Consultation Meeting with Karnataka WRD

Stakeholder Consultation Meeting to disseminate the published Emergency Action Plans in respect of Almatti dam and Narayanpur dam as a part of



implementation requirement was held on 11.12.2020. All stakeholders including Central and State Agencies as well as public representatives attended this meeting. The State officials of Telangana for one affected district (Narayanpet District) as well as officials of four affected

Districts of Karnataka (Vijayapura, Bagalkote, Yadgir, and Raichur District) participated in the meeting. This is a part of risk mitigation strategy to communicate the associated risks to all the stakeholders.

Review Committee Meeting to Review the Draft "Manual for Assessing Hydraulic Safety of Existing Dams"

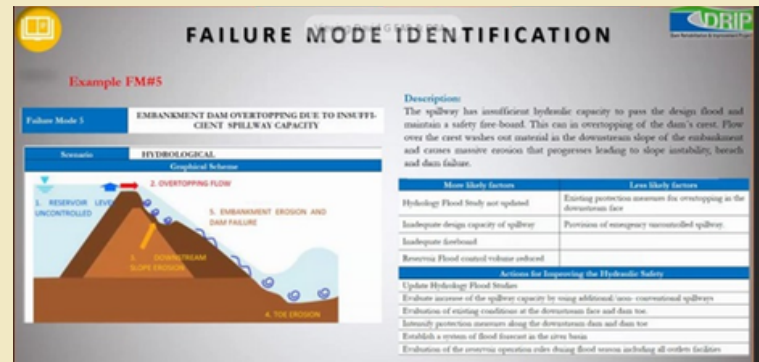
A meeting of the Review Committee was held to review the draft "Manual for Assessing Hydraulic Safety of Existing Dams". Committee appreciated the draft document and agreed to finalise it by the end of January 2021 keeping in view the scheduled closure of Project in March 2021. This manual is part of 14 Guidelines planned for publication in the ongoing DRIP.

Meeting with Asian Infrastructure Investment Bank(AIIB)regarding DRIP Phase II

A Review Meeting was held on 29.12.2020 regarding co-financing of DRIP Phase II for a loan amount of US \$ 250M with AIIB. Deliberations were made on the important terms and conditions of the loan. The preparedness of the States to join the Scheme was also reviewed. The meeting was attended by the officials of Ministry, CWC, the World Bank and AIIB.

IMCT

Various Inter-Ministerial Central Teams (IMCT) have been constituted by the Ministry of Home Affairs (MHA) for an on-the-spot assessment of the situation in the wake of the floods/landslides damages in irrigation, drinking water, embankment and flood control structures due to monsoon season-2020, North-Eastern Monsoon and cyclone "NIVAR". CWC Officers



were nominated to represent DoWR, RD&GR, Ministry of Jal Shakti in these IMCTs.

IMCT had meetings with District Officials and visited the affected districts for assessing the damages. The details of their visit during the month of December-2020 are summarized as under.

Sl. No.	State	Duration of Visit	Officer representing MoJS	Visited Districts	Purpose
1	Tamilnadu	05th-08th December	Shri J. Harsha, Director, CWC, Chennai	Chennai South, Chengalpattu, Cuddalore, Villupuram, Chennai North, Thiruvallur, Kancheepuram, Vellore, Ranipet and Thirupattur	Damages/losses caused during the Cyclone "NIVAR"
2	Andhra Pradesh	17th-19th December	Shri P. Devender Rao, Director, CWC, Hyderabad	Krishna, Guntur, Prakasham, SPR Nellore, YSR and Chittoor	-do-
3	Himachal Pradesh	30th Dec 2020 -01st Jan 2021	Shri Piyush Ranjan, Director, CWC, Shimla	Shimla, Solan, Una, Hamirpur and Bilaspur	Flood/landslides/cloudburst during Monsoon Season-2020



Performance Evaluation Study of Giri Medium Irrigation Project

The Giri Medium Irrigation Project was commissioned during the year 1982 with an ultimate irrigation potential of 5263 hectares combined under Left Bank Canal (LBC) and under Right Bank Canal (RBC). The CCA for the project is 3891 hectares. The project was completed in the year 1982 at a cost of Rs. 8.23 crore. It is located in Tehsil Paonta Sahib, District Sirmour of Himachal Pradesh and lies in outer Himalayan Ranges, called as Shivaliks. Post-project Performance Evaluation Study (PES) of Giri Medium Irrigation Project Himachal Pradesh has been completed by Agro-Economic Research Centre, Himachal Pradesh University, Shimla.

The followings are the findings of the PES:

- The Cross-Drainage (CD) structures on both the canals were found to be partially damaged at few places. Diversion pond and carrying capacities of the canals were found to be lower than the designed value due to siltation.
- Project water use efficiency (PWUE) was computed as per CWC guidelines and came out to be 49.52%. Water

depth below ground level varied between 9.5 meters (August) to 20.4 meters (June) in the command. The Irrigation Potential Utilized (IPU) of the right bank canal during this period ranged between 72.8-91.0 percent with an average of 79.4 % and for left bank canal, it ranged between 22.2-30.4% with an average of 26.9%. The operational holding size has decreased from 1.48 ha before the initiation of the project to 0.74 ha. The cropping pattern witnessed a significant change after the introduction of irrigation. Crop productivity has increased due to better irrigation facilities.

- The total farm income was found to be Rs. 68774 per household. Additionally, the non-farm income was found to be Rs. 148598 per household. Farm employment was observed to be 626 man-days per year per household. On the other hand extent of non-farm employment was 413 days per year per household. The family size declined from 8.98 before the project to 5.69 currently, but the literacy rate significantly increased from 38 to 78 percent. The benefit-cost (BC) ratio projected at the time of formulation of the project was 2.92. However, benefit-cost (BC) ratio has been worked out to be 2.08.

Financial Progress of Schemes/Components as on 31.12.2020

Sl. No.	Scheme/Component Name	RE 2020-21	Expenditure	Expenditure (in %)
1.	Development of Water Resources information System (DWRIS)	130.00	88.345	67.96%
2.	Investigation of Water Resources Development Schemes (IWRD)	9.00	6.332	70.35%
3.	Flood Management & Border Areas Programme (FMBAP)	10.576	7.327	69.28%
4.	Infrastructure Development (ID) Schemes	5.75	5.025	87.35%
5.	National Hydrology Project	8.886	4.827	54.32%
6.	Dam Rehabilitation and Improvement Project	30.00	21.64	72.13%

Water Sector News

- ✦ Plastic pollution from fishing nets threatening Ganges wildlife, study finds (Millennium Post, 01.12.2020)
- ✦ To counter China, India plans to dam Brahmaputra in Arunachal (Times of India, 02.12.2020)
- ✦ Brahmaputra Bridge will link Bhutan with Vietnam (The Hans, 04.12.2020)
- ✦ For potable water in every home, Centre sends teams to Bengal, AP (The Tribune, 07.12.2020)
- ✦ Central team surveys damage by cyclone, rains in Puducherry (Statesman, 08.12.2020)
- ✦ Nearly half of droughts in India may have been influenced by North Atlantic air currents : Study (Millennium Post, 12.12.2020)
- ✦ Polavaram project may release water for 2020 Kharif season (Indian Express, 15.12.2020)
- ✦ The Ministry of Jal Shakti holds a review meeting of the National Hydrology Project (The Pioneer, 17.12.2020)
- ✦ Srisailem unit to run at full power in June (Deccan Chronicle, 18.12.2020)
- ✦ Rs. 3,400 cr drinking water project to finally see light of the day (The Tribune, 21.12.2020)
- ✦ Centre plans to measure depth of Himalayan glaciers to assess water availability (Millennium Post, 21.12.2020)
- ✦ To prevent flooding in Chennai, IIT-M studies water flow in the Adyar river (Business Line, 22.12.2020)
- ✦ Jal Shakti Abhiyan-II begins (Times of India, 23.12.2020)
- ✦ Brahmaputra Aamantran Abhiyan flagged off (Assam Tribune, 24.12.2020)
- ✦ Jal Jeevan adds 1 lakh water connections daily (The Hindu, 27.12.2020)
- ✦ Experts lay stress on conservation of water (Assam Tribune, 31.12.2020)

29th TEC meeting – North Koel

The 29th meeting of the Technical Evaluation Committee (TEC) for completing the balance works of North Koel Project (NKP) was held on 04.12.2020 at CWC, New Delhi through Video Conferencing (VC) under the Chairmanship of Member(WP&P), CWC and Chairman(TEC), NKP. The officers from DoWR, RD&GR, CWC HQ & field units, CSMRS, State Governments of Bihar & Jharkhand and WAPCOS attended the meeting through VC.

During the meeting, WAPCOS informed that the work has already been awarded for the construction of camp/Picket for security personnel. The representatives of Govt. of Bihar were requested to convey their views at the earliest regarding the issue of complete lining of RMC in Bihar portion so that the works of RMC in Bihar portion can also be taken up along with the approval for

Gallery



the increased cost as per the 7th RCE without any further delay. There were discussions on other important agenda items such as status of land acquisition, progress of various components of the balance works of the project by the WAPCOS, issue of thickness of LDPE sheet in canal lining in the Right Main Canal (RMC), design and drawings of Kandi Distributary System of Left Main Canal of the Project etc.



The then Chairman, CWC along with CWC officers visited Hathnikund Barrage, Proposed Adi Badri Dam and Barrage Sites on 28.12.2020.



Shri Yoki Vijay, Director(Mon.)/Superintending Engineer(C), CWC, Gandhinagar, Shri Amitabh Meena, DD(Mon), Gandhinagar attended meeting chaired by Commissioner (SPR), DoWR, RD&GR held on 18.12.2020 to review the progress of prioritized irrigation projects under PMKSY-AIBP.



Joint visit by Designers from CWC(HQ) and GSI at Haora and Champaicherra Dam Projects Tripura on 22/12/20



Site Inspection (Sikandarpur, Samastipur and Rosera) by Member(RM), CWC during 4th - 5th Dec 2020

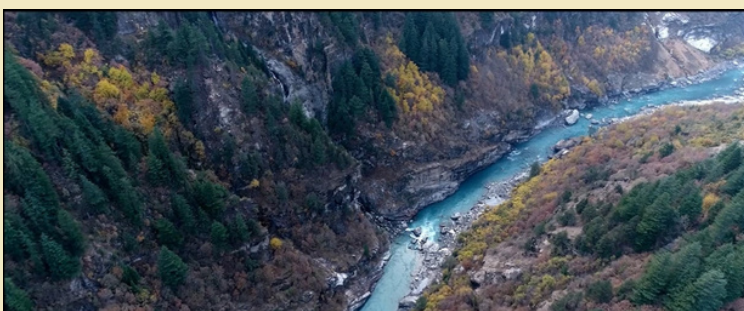


image from Topographical Survey work by Drone for Barinium Hydro Electric Project in remote areas of J&K by CWC. Project is proposed on Chenab River in Paddar Valley of District Kishtwar, J&K.



Inspection and Testing of New Supplied ADCP was done in presence of Chief Engineer, Mahanadi & Eastern Rivers Organization (M&ERO) at Site Rajghat

11th Meeting of Technical Advisory Committee of Brahmaputra Board

The 11th Meeting/Visit of Technical Advisory Committee of the Brahmaputra Board for the Scheme "Protection of Majuli Island from flood and erosion of river

Brahmaputra" was held under the Chairmanship of Member(RM), CWC during 29th-30th December 2020 in which suggestions were given regarding ongoing works for the protection of Majuli Island.

Retirement

Shri Rajendra Kumar Jain, Chairman, CWC and Shri Sai Sudarsanam, Director superannuated on 31.12.2020 after putting more than 35 years of service to the Govt. Officers/Staff of CWC bid farewell to them and

remembered their working experience with the retiring officers. Shri U. P. Singh, Secretary, Ministry of Jal Shakti and other retired senior officers graced the occasion.

Promotions

Shri S.K. Haldar, a regular Higher Administrative Grade (HAG) and Shri Kushvinder Vohra, a Senior Administrative Grade (SAG) officer of Central Water Engineering (Group 'A') Service were promoted to the post of Chairman, CWC and Higher Administrative Grade (HAG) respectively. Shri Kushvinder Vohra was posted as Member(WP&P), CWC.



**Shri S.K. Haldar,
Chairman, CWC**



**Shri Kushvinder Vohra,
Member(WP&P), CWC**

Third Meeting for Salinity Ingress Management Projects

The 3rd meeting of the Committee for Preparation of DPR & New scheme for Salinity Ingress Management Projects and setting up of National Centre for the Scientific Study of Salinity Ingress in Delta Regions was held through video conferencing on 09.12.2020 under the Chairmanship of Shri Reading Shimray, Chief Engineer (P&D), CWC. Members from CWC, NIH, CWPRS and CGWB participated in the meeting. "Guideline for Preparation of DPR for Salinity Ingress Management Projects in Coastal areas" was finalized during the meeting.

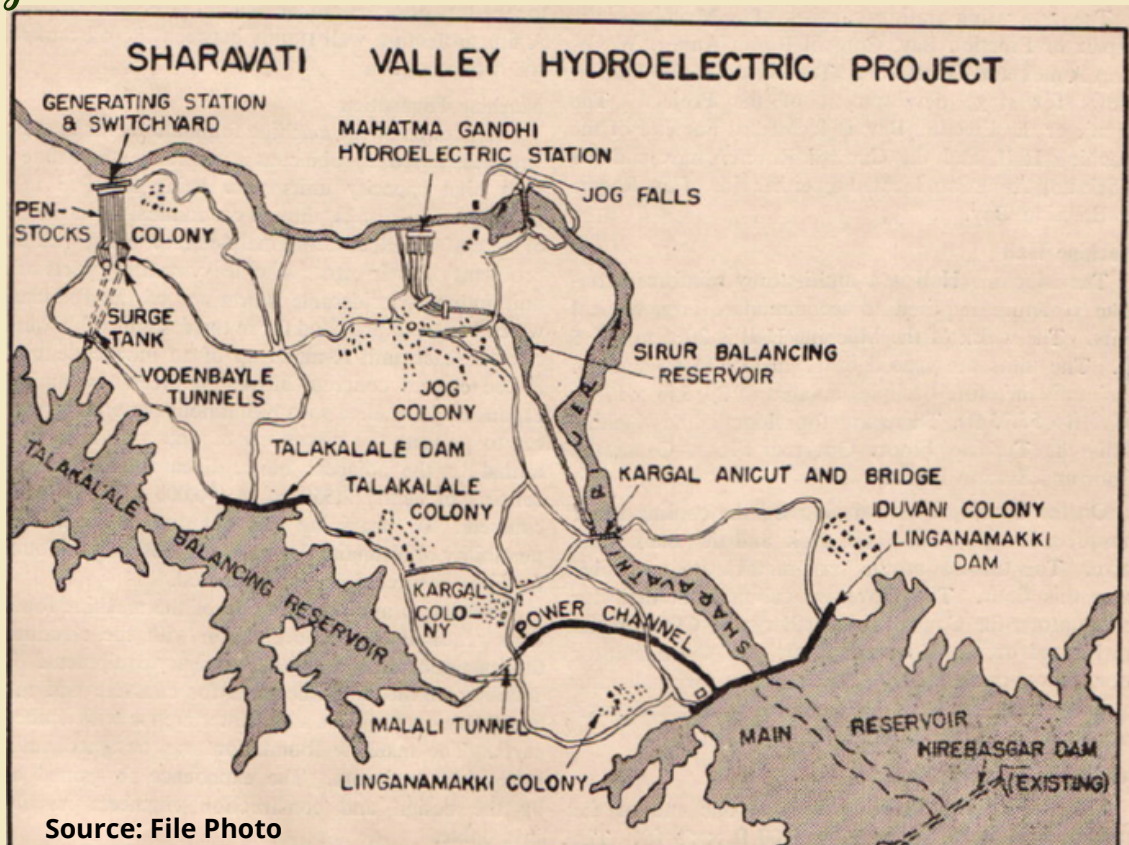


History- Sharavati Hydro Power Plant

Sharavati Hydro Power Plant in Karnataka is one of the biggest hydro power plants in the country having 1035 MW of Installed capacity under one roof.

History

Originating at a height of 730 m near Ambuthirtha in Shimoga district, the Sharavati river flows in a north-west direction. In its long 132-km journey, the river Sharavati is joined by several tributaries. After a stretch of 80 km along its course, the river drops down a steep mountain face of 293m – a visually delightful spectacle known as the Jog Falls. From this breath-taking drop, the river continues its journey



Source: File Photo

till it flows into the Arabian Sea near Honnavar.

Proposals for power development from Sharavati were made almost at the same time as for Sivasamudram known as India's first Hydro-electric project. The proposal was revived by Shri M. Visvesvaraya in the 1920's and investigations too were carried out. But it was not until 1948, the river Sharavati was harnessed for the first time at the Mahatma Gandhi Hydro-electric power station near the Jog Falls (Gerusoppa). It opened with an installed capacity of 48 MW and was later upgraded to 120 MW.

However, considering the power potential available, an integrated Sharavati Valley Project was planned in three stages. The integrated project included various components as follows:

- Linganamakki Dam/Reservoir (4.420 BCM)
- Talakalale Dam on tributary with same name creating a balancing reservoir (0.140 BCM)
- Water Conductor System
- Power House (10x89.1 MW)- 2 Units-Stage 1, 6 Units-Stage 2, 2 Units-Stage 3

Shri S.K. Patil, Union Minister of Irrigation and Power, inaugurated the construction of the Sharavati Hydroelectric Project in Mysore at Linganamakki, five miles from the Jog Falls, on 05.02.1958. Considering the importance of the Project, it was also included in the Second Five Year Plan. The project was also aided by loan from United States amounting to Rs. 48.7 crore (102 Million USD). The First unit of 89.1 MW was switched on by Hon'ble Prime Minister Shri Lal Bahadur Shastri on 24.01.1965.

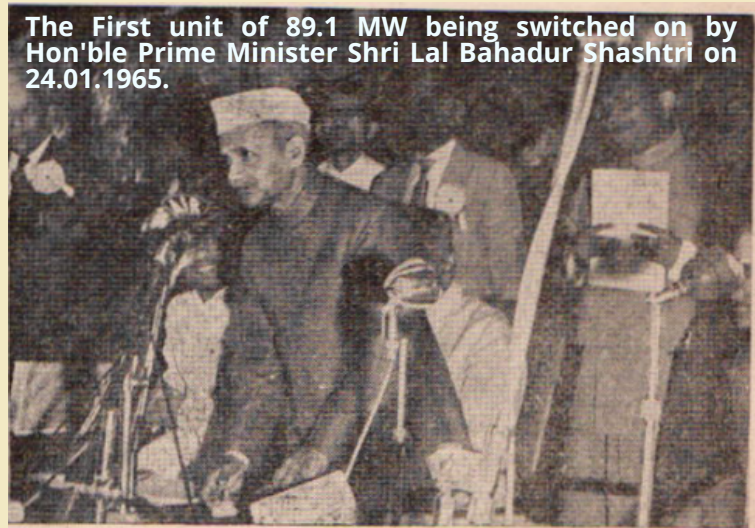
Role of CWPC

This project was executed by the State agencies. However, Central Water & Power Commission (CWPC) was involved in the hydrological examination of the scheme. Based on their observation, power potential of the scheme was revised to 891 MW. CWPC also rendered valuable assistance in the finalization of the designs for several components of works.

Further improvements, Current Status and future plan

Each generating unit has been renovated and upgraded from 89.1 MW to 103.5 MW. The Sharavathi Hydro Electric Project is today the backbone of Karnataka's

The First unit of 89.1 MW being switched on by Hon'ble Prime Minister Shri Lal Bahadur Shastri on 24.01.1965.



power generating arsenal. The unique feature of the Sharavathi Project is the establishment of 1035 MW resource under one roof, with an annual yield of around 5000 MU. The total number of turbines used in the power station is 10 and capacity per Turbine is 103.5 MW.

- Type of Turbine: Vertical Pelton
- Design Head: 443.18 m
- Design Discharge: 28.5 Cumecs

The first HEP on Sharavati namely Mahatma Gandhi HEP has current installed capacity of 139.20 MW. Further, Ambuthirtha Power Private Limited (APPL) has developed power project having installed capacity of 22 MW utilizing the water of tail race of above project. In addition to above, the Linganamakki Dam Powerhouse with 2 units has an installed capacity of 55 MW. To further tap the potential of the Sharavati river, Karnataka Power Corporation limited (KPCL) has installed four generating Units of 60 MW each, totalling to 240 MW at the Gerusoppa Dam Project. Today, the installed capacity is around 1500 MW which is quite remarkable considering the fact that river is hardly 132 km in length.

KPCL has also envisaged for 2000 MW Pumped Hydro Scheme utilizing the water by pumping from the lower Gerusoppa reservoir to the elevated Talakalale reservoir.

The Jog Falls is world famous on the tourist map of India. The dams, reservoir, channel and tunnels have further added to the attraction of Jog.



Central Water Commission

An attached office of Dept. of Water Resources,
River Development and Ganga Rejuvenation,
Ministry of Jal Shakti, Govt. of India

Editorial Board

- Dr. Samir Chatterjee, CE(HRM)- Editor-in-Chief
- Shri Amrendra Kumar Singh, CE(EMO)- Member
- Shri Yogesh Paithankar, CE(PMO)- Member
- Shri Deepak Kumar, Director(RMC)- Member
- Shri S. K. Rajan, Director(TC)- Member

Designed & Published by

Water Systems Engineering Directorate
Central Water Commission

- Shri Bhupinder Singh, Director(WP&P-C)- Member
- Shri K. V. Prasad, Director(WSE)- Member
- Shri A. K. Madhok, DD(WSE)- Member
- Shri R. K. Sharma, DD(D&R-Coordination)- Member
- Shri Shiv Sunder Singh, DD(WSE)- Member-Secretary

2nd Floor(South), Sewa Bhawan, R K Puram, New Delhi-110 066
E-mail: media-cwc@gov.in

