



JALANSH



The Monthly Newsletter of Central Water Commission



Message

S. K. Halder
Chairman

Last year, Central Water Commission, DoWR, RD&GR, Ministry of Jal Shakti with the technical assistance from the Asian Development Bank (ADB) has initiated the "Support for Irrigation Modernization Programme" (SIMP). The SIMP proposes the application of National and International best practices for modernizing Major & Medium Irrigation (MMI) projects in India to improve irrigation water use efficiency and crop water productivity. States/UTs were requested to prioritize few projects which can be included in the first batch. States have shown great response to the programme and submitted various projects to CWC. These projects are being screened and shortlisted by CWC in consultation with the ADB and the States. Various detailed consultation meetings were held with the State Govt. officials for this purpose and they would continue further.

CWC has actively contributed towards the planning of various thematic pillars of the India-EU Water Partnership (IEWP) for implementation during the Phase-II of the programme. The thematic pillars of cooperation mostly pertain to important issues being faced in the water sector such as Environmental Flows, Irrigation Water Use Efficiency, River Basin Management etc.

CWC has planned to carry out sedimentation survey of around 191 reservoirs of National importance under the National Hydrology Project (NHP). Phase -I of the studies has already started in February 2021 in which 32 reservoirs from the states of Rajasthan, Tamil Nadu, Himachal Pradesh, Karnataka and Bihar are taken up. The cumulative live storage capacity of these reservoirs is more than 17 BCM. The progress of the work is being actively monitored.

NWA, Pune, our premier training institute, has planned a very important webinar series on International Cooperation in Water Sector in India from 07.06.2021 to 23.08.2021. The programme is free and would be highly valuable for professionals dealing with the subject matter. Interested participants can join the programme to enhance their knowledge and capacity in this important facet of water management.

April had been a very painful month for the Organization. At the start of the Month, we lost two of our beloved officers Shri Jitendra Panwar, Director & Shri L. Kodandaramaswamy, Deputy

Director in the line of their duty. They met with a fatal accident on 01.04.2021 while returning from a Monitoring visit to Projects in Karnataka. We condole the sad demise of our officers and convey our deepest heartfelt sympathies to the bereaved families for the irreparable loss.

An unprecedented surge has been seen in the COVID-19 cases during the month. CWC, as an Organization, has also been badly affected and several officers/staff of CWC have lost their lives in the ongoing pandemic. It has been a painful experience and an unfortunate situation in the Organization as well as in the Country. I pay homage to the departed souls and convey my deepest condolences to the bereaved families.

I urge everyone to follow the Govt. directives being issued from time to time and stick to COVID appropriate behaviour. All the Staff/Officers and their family members are encouraged to go for vaccination which has been extended to cover all people of more than 18 years of age.

गीतिका कान्हा

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Glacier Management in the country-Monitoring of Glaciers/Glacial Lakes including Glacial Lake Outbursts leading to flash floods in the Himalayan region

The meeting of the Parliamentary Standing Committee on Water Resources was held on 08.04.2021 in connection with the examination of the subject "Glacier Management in the Country - Monitoring of Glacier / Glacial Lakes including Glacier Lakes Outburst leading to flash flood in the Himalayan region". The representative of the various Ministries / Departments i.e. Ministry of Jal Shakti – Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Earth

Science, Ministry of Environment, Forest & Climate Change, Department of Science & Technology and Geological Survey of India were present during the sitting. The concerned Ministries / Departments were directed to submit a short note, not exceeding two pages, spelling out the solutions to the various problems discussed during the sitting. The requisite short notes have been submitted by all the concerned Ministries / Departments.

Meeting regarding knowledge products development by NRSC under NHP

A meeting was taken by Secretary, DoWR, RD&GR on 20.04.2021 regarding knowledge products development by NRSC under NHP. During the meeting, a presentation was made by NRSC on the two products namely; Glacial Lake Outburst Flood Risk Assessment in Catchment Area of Indian Himalayan River Basins and Spatial Flood Early Warning Systems - Godavari and Tapi Rivers.

Glacial Lake Outburst Flood Risk Assessment in Catchment Area of Indian Himalayan River Basins

During the presentation, NRSC informed that they have prepared the inventories of Glacial Lakes of size more than 0.5 ha of Indus basin and same was launched by Secretary, DoWR, RD&GR. It was informed that the preparation of Inventories for Ganga Basin and Brahmaputra Basin is under Process. Apart from this, the other objective of the study is:

- Ranking & Selection of critical glacial lakes
- Assessment of GLOF risk for prioritized critical lakes; and
- GLOF visualization system

30th TEC meeting of North Koel Project

The 30th meeting of the Technical Evaluation Committee (TEC) for completing the balance works of the North Koel Project (NKP) was held on 12.04.2021 under the Chairmanship of Shri Kushvinder Vohra, Member (WP&P), CWC and Chairman (TEC), NKP at CWC, HQ through Video Conferencing (VC). The officers from DoWR, RD&GR, CWC HQ & field units, CSMRS, State Governments of Bihar & Jharkhand and WAPCOS participated in the meeting through VC.

The North Koel project is situated on the North Koel river which is a tributary of the Sone river. On completion, it would provide benefits to Bihar & Jharkhand. During the meeting, the progress of the project was critically reviewed and various action points were identified. The representatives of Govt. of Bihar were requested to convey their views at the earliest regarding the issue of the complete lining of Right Main Canal (RMC) in Bihar portion for initiating the process of the cabinet

Spatial Flood Early Warning Systems - Godavari and Tapi Rivers

The objective of the study is:

- To develop medium-range flood early warning models for Godavari and Tapi Rivers using space-based inputs
- To develop spatial flood inundation simulation models using high resolution Digital Elevation Models
- To develop a web-enabled real-time spatial flood early warning system
- To develop workflow mechanism for issuing flood advisory to the concerned authorities during the flood event.
- Scientific assessment of flood prone area in both the basins under different flood return periods

Till now, NRSC has captured the high resolution DEM of 0.5 m of the critical reaches prone to flood and for the rest of the area, Carto DEM has been acquired. The model for both the basins has been developed, calibrated and validated based on historical data. During this monsoon, it will be tested on a real-time basis.



approval and further tendering activities for RMC portion in Bihar State. There were discussions on other important agenda items such as status of land acquisition, the progress of various components of the balance works of the project by M/s WAPCOS, issue of the thickness of LDPE sheet in canal lining in the RMC, design & drawings of distributary system, recommendation of proposals of CA releases etc.



CNS profile making work in progress for Right Main Canal(RMC) - North Koel Project



Review of Support for Irrigation Modernisation Programme (SIMP) and consultation meetings with States

Shri Kushvinder Vohra, Member (WP&P), CWC convened a meeting through VC on 15.04.2021 to review the Support for Irrigation Modernisation Programme (SIMP). The meeting was attended by Shri P. Dorje Gyamba, Chief Engineer(POMIO), CWC and other officers of POMIO, CWC. During the meeting, various activities to be carried out were firmed up along with the timeline for the same. Member (WP&P) also desired to convene a meeting with ADB officials shortly in this regard.

Central Water Commission, DoWR, RD&GR, Ministry of Jal Shakti with the technical assistance from the Asian Development Bank (ADB) has initiated "Support for Irrigation Modernization Programme" (SIMP). The SIMP proposes the application of National and International best practices for modernizing Major & Medium Irrigation (MMI) projects in India to improve irrigation water use efficiency and crop water productivity. It is proposed to be taken up in 4 phases. The SIMP Phase-1 is ongoing and shall continue up to June 2021. POMIO, CWC is functioning as Central Irrigation Modernisation Office (CIMO) with the support of the Consultants responsible for the overall implementation and management of the programme. As the first batch of projects under SIMP, 3-4 MMI projects from the Country which are suffering with the issue of low water use efficiency or reduced project performance are envisaged to be identified for preparation of the Irrigation Modernization Plan (IMP). Phase- 4 would see the final implementation of the Irrigation Modernization Project. It is intended that the above process will be repeated continuously until most of the irrigation projects in the Country are modernized.

Under Phase-1 activities, a national webinar was convened on 08.12.2020 in the presence of the Secretary (WR, RD&GR) during which all the States/ UTs were introduced to SIMP and interactions were held regarding the programme, its scope, workflow, implementation arrangement, etc. Also, the States were requested to submit the proposals for consideration as



SIMP Review Meeting

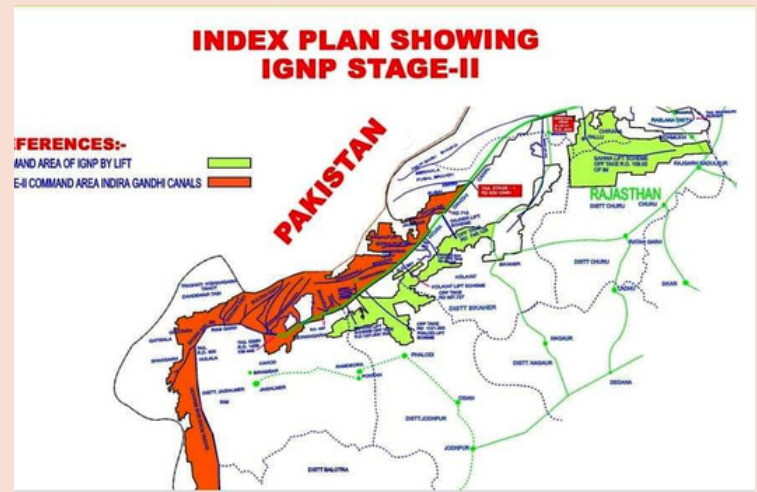
Batch-1 under SIMP.

Cosultation Meeting

As under Phase-1, Batch-1, only 3 to 4 schemes are to be taken up for preparation of modernization plan & DPR, SIMP team started consultations with the concerned State Governments through Video Conferencing for initial 12 projects. Consultation meetings with the State of Maharashtra, Rajasthan and Karnataka were held in April-2021 wherein following projects were discussed.

Date of Consultation	State	Projects Discussed	Details Presented By
28.04.2021	Maharashtra	Palkhed Project	Shri Sanjay Belsare, Chief Engineer, Nashik
		Purna Project	Shri Sabbinwar, Superintending Engineer, Nanded Irrigation Circle, Nanded
29.04.2021	Rajasthan	Indira Gandhi Nahar Project (IGNP) Stage-II	Shri Vinod Kumar Chowdhary, Chief Engineer (IGNP), Bikaner
		Chambal Project	Shri Ashim Markandey, Chief Engineer, Jaipur
30.04.2021	Karnataka	Vanivilasasagar Project	Shri Raghavan, Chief Engineer, UBP Zone, Chitradurga

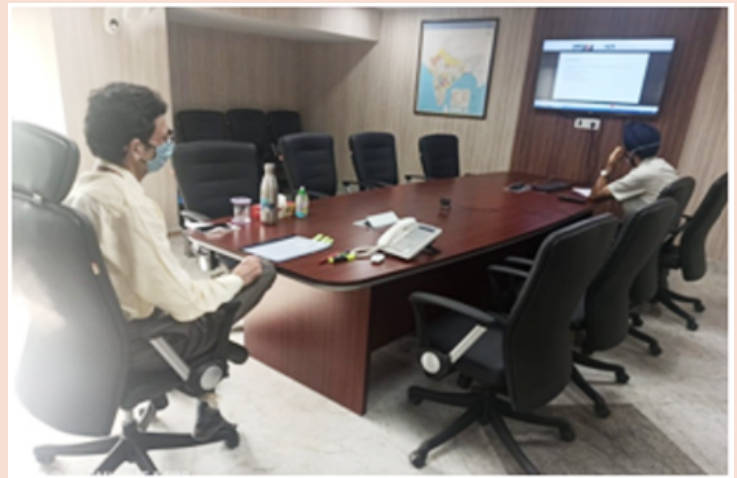
After the presentation, several clarifications were sought by the CWC and the team of Consultants. It was decided to list and circulate additional information required from the States.



Review of Saraswati River Rejuvenation and its Heritage Development Project

Shri Kushvinder Vohra, Member (WP&P), CWC convened a meeting through VC on 15.04.2021 to review the status of clearance/design consultancy of Saraswati River Rejuvenation and its Heritage Development Project.

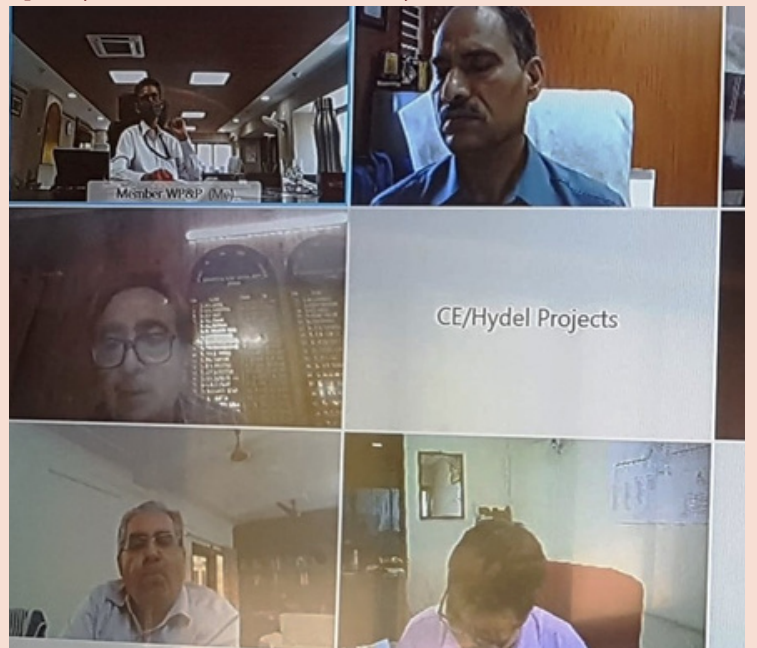
The meeting was attended by officers of the various wings of CWC as well as UYRB. The status of various clearances, information/data required from the State Govt. and the timeline for completion of the appraisal/design consultancy etc. were discussed. Member (WP&P), CWC emphasized preparing a timeline for completion of works. It was also decided to review the overall progress with the project authorities shortly.



Sixth meeting of the Expert Committee constituted for monitoring of the implementation of the Shahpur Kandi Dam project (National Project)

The 6th Meeting of Monitoring Committee for implementation of Shahpurkandi Dam Project (SKDP) was held on 19.04.2021 under the Chairmanship of Shri Kushvinder Vohra, Member (WP&P) CWC, through video conferencing, wherein the issues regarding the progress of physical work on the Main Dam, Hydel Channel Head Regulator, Ravi Canal Head Regulator, Hydel Channel, Hydro Mechanical Work on the Main Dam & Hydel Channel Head Regulator, Power Houses etc. were discussed. In addition to the above, the status of Link Channel (J&K Side), Land Acquisition, Financial Progress, Realignment of Lakhanpur Basohli Road including bridge, other Statutory Clearances from MoEF&CC, were also discussed in detail and the respective actions in these regard were accorded to the Project Authorities.

The Project Authority raised the issue of lowering the crest level of regulator on Punjab and J&K side during 12th High Power Steering Committee (HPSC) meeting held on 24.11.2020. The matter was examined during the 5th Monitoring Meeting and subsequent meetings held on 29.01.2021 & 08.02.2021, respectively. During the 6th Monitoring meet held on 19.04.2021, Project Authority,



Punjab informed that their internal design level meeting was held on 15.04.2021 to resolve the issue of level of head regulator and it was decided that the crest level will be kept at 398.4 m as per the agreement dated 08.09.2018 and accordingly recommended the same to Govt. of Punjab to convey to Govt. of J&K side.

Meeting to discuss the progress in respect of preparation of DPR of 2nd Ravi Beas Link

A meeting to discuss the issues related to the preparation of PFR/DPR of 2nd Ravi Beas link project was held under the chairmanship of Shri Kushvinder Vohra, Member (WP&P), CWC on 23.04.2021.

After detailed deliberations, the following decisions emerged in the meeting:

- All possibilities of various proposals regarding transfer of water from Ravi River to Beas River may be examined and a proposal envisaging optimal utilization of Ravi water may be finalized in PFR by IBO, CWC and WRD, Govt. of Punjab in a consultative mode.
- This exercise should be completed within two months and first draft of PFR may be completed in one month.

- The PFR should incorporate the details of the proposal through which optimal water may be utilized. Technical feasibility as well as economic feasibility along-with approximate cost of the project may be derived in the Pre- Feasibility Report (PFR).

CE (IBO), CWC was requested to share fortnightly progress report with CE (PPO), CWC and the same is to be monitored by CE (PPO), CWC.

2nd Ravi Vyas Link Project in Punjab has been declared as a National Project which envisages to harness about 0.58 MAF water flowing across the border during the non-monsoon period.

Online meeting of the India-EU Water Partnership (IEWP) nodal officers

(A) Thematic area/pillar-Environmental Flows

The first meeting to jointly outline the Flexible IEWP Action Plan of thematic area/pillar E-Flows under IEWP Phase-2 took place on 08.04.2021. Representatives from NMCG, CWC, CGWB, NWA and GIZ India (IEWP and Support to Ganga Rejuvenation-SGR projects) participated in this meeting. The 2nd meeting took place on 16.04.2021 wherein the Flexible IEWP Action Plan was finalized.

Following decisions were taken:

- For the Mahanadi Pilot basin, it is important to collect the ecological (habitat flow requirements) data in the monsoon season as previous data collection was done in the lean season. CIFRI team will take up the field visit to collect the monsoon season data (around the months of July-August 2021).
- For Bharathapuzha Pilot, surrogate ecological data that is currently available with WII and CIFRI teams, along with the expert judgement of these experts will be used for completing the study. This ecological data will be provided to the joint team by mid-May 2021.
- NMCG intended to include sub-basins like the Hindon, Ramganga, East Kali and Gomti sub-basins for E-Flows assessment. However, considering the capacities available in the IEWP Phase-2 and based on the previous experience, it will be realistic to select only one sub-basin under IEWP.
- A planning meeting to jointly decide on the activities under the SGR project under the Indo-German Development Cooperation is being scheduled together



with NMCG. In this meeting, it is planned to select a sub-basin for undertaking E-Flow assessment and also River Basin Management (RBM) work.

- In the meeting, joint discussion and agreement on deliverables, milestones and related timelines as part of the flexible IEWP Action Plan took place which included the following items:
 - Completed E-Flows Assessment in a selected Ganga sub-basin;
 - Finalization of E-Flows Assessment in one or two pilots from IEWP Phase 1 (Bharathapuzha & Mahanadi Delta);
 - Improved E-Flows Assessment method in India to update E-flows Guidance;
 - Completed hands-on E-flows assessment training and capacity building.
- A Joint Technical E-Flows Working Committee will be constituted comprising of the representatives of CWC, NMCG, WII, CIFRI, NWA and GIZ India along with the State representatives of the selected sub-basin.

(B) Thematic area/pillar-Irrigation Water Use Efficiency

A meeting was convened between EU/GIZ representatives and the nodal officers of Irrigation Water Use Efficiency Thematic Pillar on 15.04.2021 to discuss the data requirement for assessment of water use efficiency for the three pilot projects namely: Mahuar, Lower Panjara, and Golavagu. Broad decisions taken in the meeting are as under:

- A Technical Working Committee will be set up to formulate and implement the flexible IEWP Action Plan of the work area on Irrigation Water Use Efficiency. The Committee will involve the officials from the Ministry of Jal Shakti (including CWC head office and the regional offices), relevant State Water Resources/Irrigation Departments and the IEWP GIZ Project Management Unit.
- The IEWP Project Management Unit will provide information to the participants of the meeting about

the activities of the first IEWP Phase. The report developed under the first phase of the IEWP on the irrigation performance assessment in three pilot commands will be circulated. Along with this, a note on the challenges faced in the Phase-I on account of the data gaps will be provided.

- The Committee will discuss the data requirements for the irrigation efficiency and performance assessment study with the EU expert.
- The selected pilot projects were very recent and long-term time-series data on reservoir releases as well as canal system monitoring, cropping pattern etc. was not available. To overcome this data gap, new (different) projects/pilots may be selected based on the data requirement and availability. Projects with SCADA based monitoring system will be explored for their data availability and suitability for this thematic area.

(C) Thematic area/pillar-River Basin Management

A meeting was convened between EU/GIZ representatives and the nodal officers of River Basin management Thematic Pillar on 13.04.2021 to outline and discuss the flexible IEWP Action Plan for the River Basin Management work area of the IEWP's Action Phase-2. Broad decisions taken in the meeting are as under:

- Representative from NMCG mentioned that they are keen to replicate the approaches and expertise from the Tapi RBM Plan to one sub-basin in Ganga Basin to develop an RBM Plan. NMCG has identified the Ramganga sub-basin, the East Kali sub-basin and the Gomti sub-basin for such possible knowledge transfers.
- National Water Academy, CWC, Pune will be involved in all work areas from the beginning to have a common understanding of the scope of all the work areas of the IEWP Phase 2. It will help to develop the capacity building plan in line with the scope and to develop the modules for knowledge dissemination.
- IEWP/GIZ will share the draft Action Plan with the BPMP, CWC and through the office of Chief Engineer, BPMP, it will be provided to all RBM nodal officers for feedback.



- In coordination with the IEWP Convenor, GIZ will contact all the nodal officers for bilateral meetings to have a discussion on the feedback and to update the draft IEWP Action Plan for RBM. Then the Action Plan should be discussed and agreed upon in a joint nodal officers meeting involving the office of Member(WP&P), CWC as well as the EU Delegation.
- The IEWP Action Plan will be provided to the Tapi River Basin Committee for coordinated efforts in the implementation of the IEWP Action Plan.

Training Programmes organized by NWA, Pune

Sr. No.	Name of the Program	Dates & Duration	No of participants	Category
a)	Flood Forecasting and Mike Modelling	19-30 April 2021 (2 Weeks)	97	Technical (PODL)
b)	Drainage and Watershed Delineation using GIS	19-30 April 2021 (2 Weeks)	37	Technical (PODL)
c)	Training-cum-Workshop on overview of Water Resources Sector for Media Professionals	26-30 April 2021	25	Mass Awareness

Reservoir Sedimentation Studies using Hydrographic Survey under National Hydrology Project (NHP) Phase-I

Reservoir sedimentation is an issue of vital concern and among the subjects of utmost importance in the water sector. CWC has planned to carry out sedimentation survey of around 191 reservoirs of national importance. For the studies, fund amounting to Rs. 30 crore has been approved under Project Implementation Plan (PIP) for National Hydrology Project (NHP). Phase –I of the studies has already been started in the month of February 2021 in which 32 reservoirs from the states of Rajasthan, Tamil

Nadu, Himachal Pradesh, Karnataka and Bihar are taken up. The meeting for Monthly Progress Review of Reservoir Sedimentation Studies using Hydrographic Survey of 32 reservoirs in India under National Hydrology Project (NHP) Phase-I was held on 13.04.2021 under the Chairmanship of Chief Engineer (EMO), CWC at CWC, HQ. The Monthly Progress Report for March 2021 presented by the TVIPL representative was reviewed by the Committee Members.

NHP-LIST OF RESERVOIRS FOR SEDIMENTATION SURVEY- Phase I

S. No.	State	Name of Dam	River	Gross Storage (MCM)	Reservoir Area (Sq Km)	Live Storage (MCM)
1	BR	Orhni	Orhni	51.56	9.95	44.59
2	BR	Anjan	Anjan	26.68	3.44	24.71
3	BR	Bilashi	Bilashi	32.57	5.83	28.87
4	HP	Kol	Satluj	576	13	90
5	KA	Linganamakki	Sharavathy	4435.35	320	4,294.00
6	KA	Supa	Kalinadi	4178	123	3,758.00
7	KA	Mani	Varahi	961.75	56	883.81
8	KA	Kadra Dam	Kali	388.92	37.75	209.06
9	KA	Thatihalla	Kali Nadi	264.03	27.3	249.26
10	KA	Gerusoppa Dam	Sharavathy	130.89	6	58.21
11	KA	Talakalale Dam	Sharavathy	129.61	9.32	14
12	KA	Savehakalu Dam	Savehaklu	124.97	9.4	66.97
13	RJ	RanapratapSagar	Chambal	2899	198	1,567.00
14	RJ	Bisalpur	Banas	1095.84	213	938.69
15	RJ	Jawai	Jawai	198.2	25.8	184.2
16	RJ	Som Kamla Amba	Som and Gomti	172.8	36.18	106.3
17	RJ	Jakham	Jakham	142.02	11.9	132.28
18	RJ	Parbati Dam	Chambal	120.28	24.08	108.6
19	RJ	Kota Barrage	Chambal	112.06	5.82	69.83
20	RJ	Rajsamand	Gomti Banas	107.2	16.5	98.71
21	TN	Mettur	Cauvery	2707.128	138.75	2,647.00
22	TN	Parambikulam	Parambikulam	504.66	20.72	380
23	TN	Vaigai	Vaigai	172.4	24.2	169.55
24	TN	Aliyar	Aliyar	109.43	6.48	106.12
25	TN	Bhawani Sagar	Bhawani	813.44	72.7	792
26	TN	Manimuthar	Manimuthar	156.07	9.4	156.07
27	TN	Sholayar (Main)	Chalakkudy	153.48	8.705	150.08
28	TN	Pechhiparai	Kodayar	150.16	15.15	123.19
29	TN	Amravathi	Amravathi	114.53	9.06	109.36
30	TN	Sathanur	Pennaiyar	207.18	18.1	19.852
31	TN	Poondi	Kosasthaliyar	91.437	33.63	91.147
32	TN	Thirumurti	Bharathapuzha	54.79	3.88	49.39
		Total		21483.605	1518.565	17827.419

Upcoming Event- Webinar Series on International Cooperation in Water Sector in India (07-June-23rd August, 2021)

Water, unlike most other natural resources, does not follow political boundaries. The natural flow of water, both on the Earth's surface and underground routinely cross administrative boundaries. That is why the world's freshwater resources are shared by many countries. There are 263 Transboundary Lake and river basins covering almost half the Earth's surface. 145 countries have territory in these basins, and 30 countries lie entirely within them. There are approximately 300 transboundary aquifers, helping to serve the 2 billion people who depend on groundwater. Overexploitation of lakes, rivers and aquifers can jeopardize the fragile ecosystem and have dire consequences for the reliability and sustainability of water supplies, which can cause international tensions and conflicts. India shares its boundaries with Pakistan, Afghanistan, China, Nepal, Bhutan, Myanmar and Bangladesh. Some of the major river systems of the world (e.g. Ganges, Indus, and the Brahmaputra) are in this sub-continent and all these river systems are trans-boundary. In the case of Indus & part of Ganges & part of Brahmaputra, India is upper riparian and it is lower riparian in part of Ganges & part of Brahmaputra. So, international cooperation is vital in the Indian context also for the development and management of these river basins. In the recent past, India has also established cooperation with various countries to mutually benefit from the shared knowledge, technology transfer and best practices in water development and management.


In the above background, The National Water Academy, CWC Pune is going to organise Webinar Series on "International Cooperation in Water Sector of India" from 07.06.2021 to 23.08.2021. There is no course fee for joining this program. All talks/lectures shall be held in online mode using NWA CISCO WebEx Meeting Platform. The Link for participation in the Webinar will be shared with all officials through email and will also be placed under the upcoming events link page of NWA Website (<https://nwa.mah.nic.in>) well before the commencement of the Webinar. A WhatsApp Group will also be created for the resolution of technical issues.

Presentation on Advanced Predictive Analytics for taking informed and timely decisions on Water and Flood Management System through VC.

A presentation on "Advanced Predictive Analytics for taking informed and timely decisions on Water and Flood Management System" was held on 15.04.2021 through video-conferencing. The presentation was made by SAS

NABL Accreditation for Raipur Lab

NABL Accreditation has been received for Raipur laboratory, MERO, CWC in accordance with ISO/IEC 17025: 2017 in the Month of April-2021. Now, CWC has 15 NABL accredited water quality labs out of total 23 labs across India.



National Accreditation Board for Testing and Calibration Laboratories
(A Constituent Board of Quality Council of India)

NABL / T-5918 06.04.2021

NIRMAL KUMAR BHUYAN
MAHANADI BASIN RIVERS WATER QUALITY LABORATORY
KENDRIYA JAL AYOOG, FIRST FLOOR, KOTA
COLONY, PO-R S UNIVERSITY
RAIPUR, CHHATTISGARH-492010
Mobile: 9937344601
E-mail: nkbhuyan-cwc@nic.in

Subject: Grant of accreditation

Dear Sir,

NABL is pleased to inform you the grant of accreditation in accordance with ISO/IEC 17025:2017 in the discipline of Chemical testing as per the scope recommended by the assessment team.

All the personnel proposed by the laboratory to report, review and authorize the results are accepted.

Your laboratory's accreditation is valid w.e.f 05.04.2021 to 04.04.2023. The accreditation certificate number is TC- 9397 which is currently in the process of preparation.

The accreditation is subjected to surveillance within a year as per NABL norms during the accreditation period. You are advised to adhere NABL 131 and use NABL symbol in line with NABL 133.

NABL is now allowing its accredited CABs (testing, calibration and medical laboratories) to use NABL Accredited CAB Combined ILAC MRA Ma on their test / calibration reports through a valid Agreement. For more details, please refer NABL document NABL 133 available on NABL website www.nabl-india.org under publication section.

Yours Sincerely,
Vivek Varthan
vivek@nabl.qcix.org

NABL House, Plot 45, Sector 44, Gurugram 122 003, Haryana, India
Tel No.: +91-124-4679700 (30 lines) * Fax: +91-124-4679799 * Website: www.nabl-india.org





International Cooperation in Water Sector of India



Weekly Webinar Series

07 June – 23 August 2021

Every Monday
11:00 AM – 12:30 PM

No Participant Fee

Last Date to Register
03 June 2021



Scan to Register



Fifth meeting of the Core Group of Scientific Committee of 7th India Water Week-2021

The fifth meeting of the Core Group of Scientific Committee of 7th India Water Week-2021 was held on 01.04.2021 at CWC, HQ. Chairman, CWC, Members of CWC, other officers from CWC, NWDA, ICID etc. participated in the meeting.

At the outset, Sh. Bhopal Singh, Director General, NWDA welcomed all the participants and apprised about the views/suggestions of the members of the

Organising Committee headed by Secretary, DoWR, RD&GR to improve the specificity of themes/topics for Seminars and Panel Discussions. The Organizing Committee had also suggested to make them more broad-based and to align them with International developments.

After detailed deliberation, the Core Group finalized the topics as detailed in the table below:

Sl. No.	Seminar	Panel Discussion
1	Sustainable Agriculture and Water Management – Key to Economic Development	Role of Water in Achieving Sustainable Development Goals.
2	Challenges for Sustainability of Ground Water Resources	Aligning with Nature While Ensuring Water Security – Challenges and Opportunities.
3	Impact of Climate Change and Adaptation Strategies	Strategies for Demand and Supply Side Management.
4	Managing Water related disasters – Floods and Droughts	Role of Hydropower for Energy security.
5	Emerging Technological solutions for Efficient Water Management	Converging towards National Perspective – IBWT.
6	Water for Environment and Livelihood	Decentralised Solutions for Water Management.
7	Quality Challenges in Water Sector	Water education, Public awareness and Role of media.
8	Establishing a Collaborative Water Governance Regime	Agriculture Sustainability during Pandemics.
9	Dovetailing the Micro and Macro Intervention for Water Management	Role of Civil Society in Efficient Water Management.
10	Reuse and Recycle of Waste Water for Water Resilience and Water Market	Challenges in Urban Water Planning and Management.

Hydrological Studies

- Hydrological Studies Organization (HSO), CWC had taken up a consultancy for Hydrological Studies of Ayodhya Barrage proposed on River Saryu (Ghaghara) at Ayodhya in Faizabad district of Uttar Pradesh. Ghaghara is a perennial transboundary river originating in the Tibetan plateau near Lake Mansarovar. The river traverses through Nepal and joins the Sharda River at Brahmaghat in India. The river is also known as Karnali in Nepal. The river traverses a distance of about 1080 km before joining river Ganga at Revelganj in Bihar. Hydrological Studies comprising of computation of water availability, design flood and tail water rating curve study have been completed and sent to Water Resources Department, Government of Uttar Pradesh.
- Design flood study of Sir Arthur Cotton Barrage has been completed by HSO, CWC. Sir Arthur Cotton Barrage (SACB) is an irrigation structure originally built in 1850 in Rajahmundry on the lower stretch of Godavari River in the East Godavari district of Andhra Pradesh. The Godavari River empties into the Bay of Bengal nearly 50 miles from the barrage.



Sir Arthur Cotton Barrage

Financial Progress of Schemes/Components as on 30.04.2021

(Amount in Rs. Crore)

Sl. No.	Scheme/Component Name	BE 2021-22	Expenditure	Expenditure (in %)
1.	Development of Water Resources information System (DWRIS)	166.100	1.494	0.9
2.	Investigation of Water Resources Development Schemes (IWRD)	12.00	0.764	6.37
3.	Flood Management & Border Areas Programme (FMBAP)	27.408	0.800	2.92
4.	Infrastructure Development (ID) Schemes	4.500	0.00	0.00
5.	Dam Rehabilitation and Improvement Project (DRIP)	25.000	0.08	0.32

Water Sector- News

- Govt to use sensor-based IoT devices to effectively monitor Jal Jeevan Mission implementation (The Statesman, 01.04.2021)
- Sensor-based IoT devices to monitor rural drinking water (Millennium Post, 01.04.2021)
- Rebuild Indo-Pak ties with Indus Water Treaty (The Tribune, 02.04.2021)
- Govt. gets \$300 mn loan to ensure quality water in Asr&Ldh (The Tribune, 03.04.2021)
- TN to seek Krishna water from May (New Indian Express, 03.04.2021)
- Ggm: Groundwater levels down by 5 m in two years (Millennium Post, 05.04.2021)
- No diversion of Mahadayi water states tells SC (Deccan Herald, 06.04.2021)
- Kaleshwaram now reaches Nizamsagar (Deccan Chronicle, 07.04.2021)
- Mallannasagar to be ready by June 2 (The Hans, 07.04.2021)
- Rs. 853 crore works to make Hyd flood-proof (Telangana Today, 08.04.2021)
- Water war : Hry blames Delhi for ammonia spike (The Tribune, 08.04.2021)
- Indus and Ganges river dolphins are two different species (The Hindu, 11.04.2021)
- Several parts of India likely to receive rainfall in next 4-5 days (Millennium Post, 13.04.2021)
- TS may move SC to block Centre's plan on Krishna (Deccan Chronicle, 14.04.2021)
- SC forms committee to inspect Yamuna water entering Delhi (Times of India, 20.04.2021)
- 42-yr-old rain record in Shimla broken (The Tribune, 23.04.2021)
- IIT-M project to monitor groundwater quality (Telangana Today, 25.04.2021)
- Groundwater depletion may reduce winter cropping intensity by 20% in India (The Hindu, 25.04.2021)
- IMD predicts wet spell over several parts of country (Millennium Post, 27.04.2021)
- Hussainsagar lake is not a listed wetland, NGT told (Deccan Chronicle, 29.04.2021)

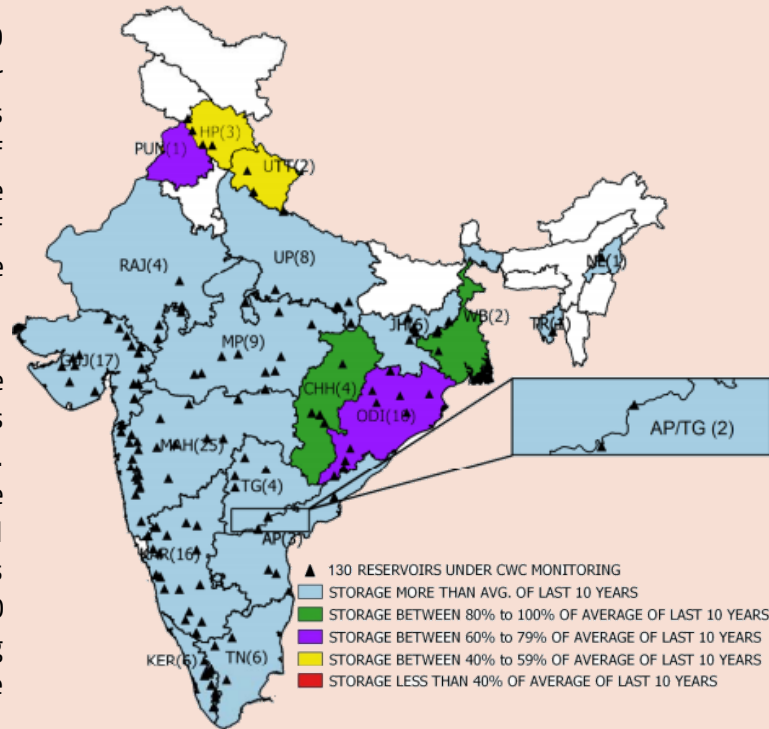
Data Corner-History of Water Resources Assessment in India

Sl. No.	Earlier studies	Year	Water Resources Assessment (BCM)	Remarks
1	First Irrigation Commission	1901-03	1443	Using Runoff coefficient method (Excluding then Burma, Assam, and East Bengal)
2	Khosla's Formula	1949	1673	Using Empirical formula
3	CW&PC	1954-66	1881	Using Statistical Analysis of flow data + Rainfall-Runoff (RR) relationship
4	CWC Publication	1988	1880	Including GW corrections
5	CWC	1993	1869	Using Flow data & RR relationship
6	National Commission for Integrated Water Resources Development (NCIWRD)	1999	1953	Based on 1993 study of CWC (Data for Brahmaputra & Krishna was revised)
7	CWC using Space Input	2019	1999.2	Latest Assessment

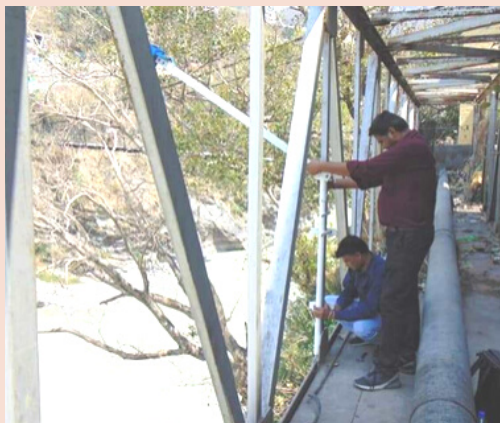
Reservoir Monitoring

CWC is monitoring the live storage status of 130 reservoirs of the country and issues a weekly reservoir bulletin every Thursday. Out of the above, 44 reservoirs have hydropower benefit with an installed capacity of more than 60 MW. The total live storage capacity of these 130 reservoirs is 174.233 BCM which is about 67.58% of the live storage capacity of 257.812 BCM created in the country.

As per the bulletin dated 29.04.2021, the live storage available in these reservoirs was 58.55 BCM which is about 34% of the live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 72.076 BCM and the average of the last ten years of live storage was 48.826 BCM. Thus, the live storage available in 130 reservoirs is 81% of the live storage of the corresponding period of last year and 120% of the ten year's average storage.



Gallery



Installation of Lidar sensor at Devprayag Site of CWC by IIT Roorkee Under WMO Hydrohub project



Under Bharat ka Amrut Mahotsava: India@75-Jallianwalah Bagh Massacre Commemorative Day celebrations on 13.04.2021 by UKSD Miraj, KGBO, CWC Hyderabad



Regional Team of CWC, CGWB and Brahmaputra Board Officers led by CE, Barak & Other Basin Organization, CWC met Secretary PHE, Nagaland at Kohima on 19.04.2021 before visit to Longleng and Zunheboto.

Polavaram Project- Progress



Erection of Hydraulic Cylinder



Erection of Bottom Horizontal Girder of Radial Gate



Upstream Cofferdam-Placement of Filters and Core

Obituary

With much grief, our readers are informed regarding the sad demise of Shri Jitendra Panwar, Director, CWC and Shri L. Kodandaramaswamy, Deputy Director, CWC. Both officers were posted at Bengaluru. They met with tragic accident on 01.04.2021 while returning from a Monitoring visit to Project in Karnataka.

Shri Jitendra Panwar joined CWES Group 'A' on 19.10.2000 as an Assistant Director in CWC. During his initial service, he was associated with Sardar Sarovar Project. As an Executive Engineer, he was involved with Hydrological observation of eight west flowing rivers (Tapi, Lower Narmada, Kim, Daman Ganga, Ambica, Purna, Vaitrana, Dhadhr), Metrological observation, Flood Forecasting etc. Apart from serving in all wings of CWC, he also worked in Sardar Sarovar Construction Advisory Committee (SSCAC).

Shri L. Kodandaramaswamy joined CWC on 01.12.1993 as Design Assistant and was involved in Hydrological Analysis such as Water Availability, Design Flood and Reservoir Sedimentation studies related to planning and design of major water resources projects in Ganga and

History-Sir Arthur Cotton

Born on 15.05.1803, Sir Arthur Cotton devoted his life for the construction of irrigation and navigation canals throughout British India. He contributed immensely to the construction of Dowleswaram Barrage (Rajamahendravaram), the Prakasam Barrage and the Kurnool Cuddappah Canal (K. C. Canal).

The K.C. Canal connects the two major districts i.e., Kurnool district & Kadapa district. The K.C. Canal is 150 years old major irrigation system that takes off from the right flank of Anicut constructed across Tungabhadra River near Sunkesula Village in Kurnool district. The Sunkesula Barrage across River Tungabhadra is located near Sunkesula village in Kurnool District of Andhra Pradesh 30kms from Kurnool town. The construction of the canal system was contemplated in the year 1863 and was completed by the year 1870. It runs for a total length of 305.65 KM i.e. from Sunkesula Anicut up to 234.64 km in Kurnool District and the remaining length of 71.01 km in Kadapa District. The Dowleswaram Barrage is an irrigation structure built-in 1850 on the lower stretch of Godavari River before it empties into



Late Shri L. Kodandaramaswamy, Deputy Director & Late Shri Jitendra Panwar, Director, CWC (L to R)

Indus river basins. In field setup, he worked as Assistant Engineer in Bhima Sub Division and also handled works of Upper Krishna Sub Division III, Mangaon. He was also associated with Monitoring of PMKSY-AIBP projects both at HQ level and field level.

CWC has lost two of its beloved dedicated officers in line of their duty. Whole Organization condoles their sad demise and convey deepest heartfelt sympathies to the bereaved families for the irreparable loss.



The Bay of Bengal. Rebuilt in 1970, it was renamed after Sir Arthur, the engineer who built the original one.



Central Water Commission

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

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