



JALANSH

The Monthly Newsletter of Central Water Commission



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S. K. Haldar
Chairman

Message

Prime Minister, Shri Narendra Modi launched the 'Jal Shakti Abhiyan: Catch the Rain' campaign on the occasion of World Water Day via video conferencing on 22.03.2021. A historic Memorandum of Agreement (MoA) was signed between the Union Government, represented by the Union Minister of Jal Shakti and the states of Madhya Pradesh and Uttar Pradesh represented by the respective Chief Ministers, in the presence of the Prime Minister to implement the Ken Betwa Link Project, the first project of the National Perspective Plan (NPP) for interlinking of rivers. Since inception, CWC has been associated with the preparation of NPP, its further persuasion on various platforms and providing necessary technical assistance etc.

CWC participated in important bilateral discussions with the countries Bangladesh, Pakistan and Australia. India and Bangladesh have agreed to expand cooperation across an entire gamut of water resources issues such as the framework for river water sharing, pollution mitigation, river conservation, flood management, basin management etc. CWC is also cooperating for conducting the Joint Feasibility Study of the Ganges-Padma Barrage Project (GBP) of Bangladesh. CWC is also striving to pilot the international best practices for

improving irrigation efficiency in India and collaboration in this regard is ongoing with Australia for Subernarekha Irrigation Project in Odisha. CWC is also an important partner for India EU Water Partnership (IEWP) since its inception in 2016. The second phase of IEWP was started in 2020 and shall continue upto September, 2023.

CWC has signed an MoU with Govt. of UP for taking up the Design Consultancy & DPR preparation of proposed Ayodhya Barrage on river Saryu (Ghaghra River) at Ayodhya, UP. The proposed Barrage envisages multiple benefits such as continuous availability of the flow of water at Ghats, stabilization of irrigation facilities in existing commands, fulfilling urban & rural drinking water demands, tourism development and increased navigation opportunities.

In the beginning of the month Shri Pankaj Kumar, Secretary, DoWR, RD&GR visited CWC, HQ which was his first visit after assuming charge of the Department. During the month, CWC offices across the country actively participated in Swachhta Pakhwada and organized programmes on World Water Day to raise awareness about Swachhta and the importance of Water. Glimpses of such events are given in the subsequent section of the Newsletter.

In the end, I request everyone to follow COVID appropriate behaviour as per the direction of agencies. All the eligible readers, Officers/Staff and their family members are encouraged to get vaccinated and encourage others to follow the same.

श्री पंकज कुमार



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Launching of Jal Shakti Abhiyan Phase-2 and signing of MoA for Ken Betwa Link Project

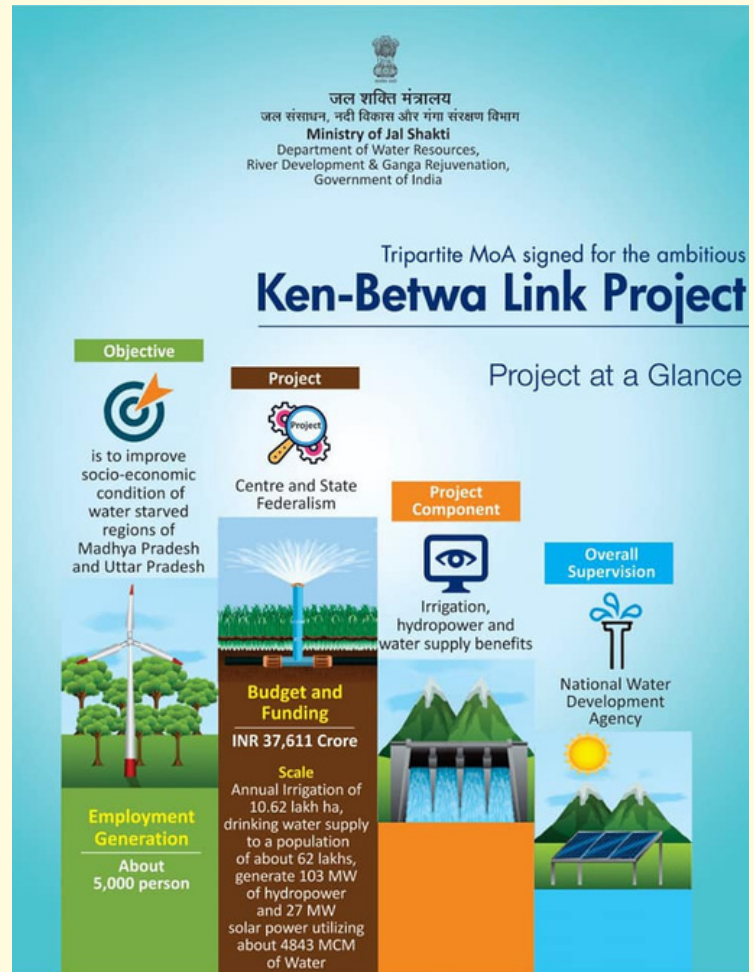


Prime Minister, Shri Narendra Modi launched the 'Jal Shakti Abhiyan: Catch the Rain' campaign on the occasion of World Water Day via video conferencing on 22.03.2021. A historic Memorandum of Agreement (MoA) was signed between the Union Government, represented by the Union Minister of Jal Shakti and the states of Madhya Pradesh and Uttar Pradesh represented by the respective Chief Ministers, in the presence of the Prime Minister to implement the Ken Betwa Link Project, the first project of the National Perspective Plan (NPP) for interlinking of rivers. Since inception, CWC has been associated with the preparation of NPP, its further persuasion on various platforms and providing necessary technical assistance etc.

Ken-Betwa River linking will help resolve the water scarcity and bring prosperity to the Bundelkhand region. The project will benefit the districts of Chhattarpur, Panna, Tikamgarh, Vidisha, Sagar, Damoh, Shivpuri, Raisen & Datia (in MP) and Banda, Mahoba, Lalitpur & Jhansi (in UP). The project envisages to transfer surplus water from the Ken River in Panna district in Madhya Pradesh to Betwa River in Jhansi district, Uttar Pradesh.

Water Resources Secretary Level meeting of India-Bangladesh

The India-Bangladesh Water Resources Secretary level meeting under the framework of the Joint Rivers Commission (JRC) was held on 16.03.2021 at New Delhi. The Indian delegation was led by Shri Pankaj Kumar, Secretary, DoWR, RD&GR and the Bangladesh delegation was led by Mr. Kabir Bin Anwar, Senior Secretary, Ministry of Water Resources, Government of the People's Republic of Bangladesh. Both sides agreed to expand cooperation across the entire gamut of water resources issues including the framework for sharing of river waters, mitigation of pollution, riverbank protection, flood management, basin management etc. A Joint Technical Working Group will provide inputs in this matter. The discussions were substantive and held in a cordial atmosphere. Both sides agreed to schedule the



The comprehensive report for the Project was prepared by NWDA which includes Daudhan Dam, Lower Orr Dam, Bina complex MPP, Kotha Barrage; repair/strengthening of Bariyarpur Pickup Weir, Parichha Weir and Barwa Sagar Dam etc. It will provide annual irrigation of 10.62 lakh hectares, 1,700 Million Cubic Meters (MCM) of water to Uttar Pradesh and drinking water supply to about 62 lakh people and also generate 103 MW of hydropower.



next round of Water Resources Secretary Level meeting under the JRC framework at Dhaka at mutually convenient dates.

Visit of Secretary(WR, RD & GR) to CWC

Shri Pankaj Kumar, Secretary, DoWR, RD&GR, MoJS visited CWC, HQ on 01.03.2021. This was his first visit to CWC, HQ after assuming charge of DoWR, RD&GR. During his visit, he was briefed about the activities dealt with by CWC. In this regard, a brief presentation was presented by the Chairman, CWC. The review meeting was attended by the Chairman, CWC, Member (WP&P/D&R), CWC along with other senior officials of the Commission.

Secretary, DoWR, RD&GR emphasised on the proper monitoring of water resources projects being implemented under the PMKSY-AIBP not only during the construction phase but also after completion of the projects for the better utilisation and efficiency of the resources. He suggested to focus more on the minor projects in future for proper involvement at the

MoU with IWRD, UP for Ayodhya Barrage across river Saryu(Ghaghra)

An MoU for taking up the Design Consultancy & DPR preparation of Proposed Ayodhya Barrage on river Saryu (Ghaghra River) at Ayodhya, UP has been signed between CWC and Irrigation & Water Resources Department, Govt. of UP on 26.03.2021 at an estimated cost of Rs. 3.40 Crore. The proposed Ayodhya Barrage will be located across Saryu (Ghaghra) River in the Ayodhya district of UP. The Ayodhya Barrage scheme envisages construction of approx. 900 to 1000 m long Barrage to ensure:

- Continuous availability of the flow of water at Ghats
- Provision for stabilization of irrigation facilities in Kharif and Rabi Season to the existing command area of 45,000-hectare
- Fulfilling Drinking Water Demands of Urban & Rural Water Supply to Ayodhya town in future
- Tourism Development and Increased Navigation Opportunities.

Meeting of Steering Committee and Technical Sub Committee of CAP Project Phase I

National Disaster Management Authority (NDMA) in association with the Department of Telecommunication (DoT) and Centre for Development of Telematics (C-DoT) is developing a Common Alerting Protocol (CAP) for sending alerts to the affected population for various types of disasters for which Early Warnings are provided. These alerts are to be sent through various media such as SMS, Cell Broadcast, Radio & TV Broadcast directly to the affected population after vetting by the concerned State Disaster Management Authorities (SDMA). This system was experimentally taken up for Tamil Nadu during 2020 and is being expanded to all over India in near future.

The Steering Committee for the said activity is headed by the Member (NDMA) and Chairman, CWC is one of the



community level. Further, he suggested enhancing the frequency of water assessment studies for better demand /supply management of water resources and to change the curriculum of NWA in view of the higher climatic change in the pattern of precipitation and water availability in past decades. He also sought a brief status about the activities of NWA and activities being carried out by CWC for Water Quality aspects.



Site view of Saryu at Ayodhya

After discussion with the Design unit of CWC, HQ, New Delhi, an expert team from CWC visited the project site along with the officials of IWRD, Govt. of UP from 03.03.2021 to 05.03.2021 for finalisation of Barrage Axis and to address other issues of Barrage, including its requirement.

members of the Committee. The meeting of the Steering Committee was held on 26.03.2021 to review the activities done by various stakeholders for expanding the services to all over the country at the earliest. During the meeting, it was informed by C-DoT that CWC has already completed all the preliminary requirements for the expansion of the activity and NDMA has indicated that alerts for the Level Forecasting Stations only will be sent over the CAP platform as it is directly sent to the general population through various media. Accordingly, it has been agreed that only alerts for the Level Forecast Station will be shared on CAP Platform as and when the system is ready for the entire country and alerts for Tamil Nadu, if any, will be done as is being done presently.

15th meeting of the Investment Clearance Committee

The 15th meeting of the Investment Clearance Committee of DoWR, RD & GR, Ministry of Jal Shakti was held on 25.03.2021 through video conferencing under the chairmanship of Secretary, DoWR, RD & GR, MoJS. The meeting was attended by the representatives from Govt. of Karnataka, Himachal Pradesh, Rajasthan, and

Bihar besides CWC, GFCC. Total eleven (11) projects were considered by the Committee out of which seven (7) projects were recommended for investment clearance. Four (4) projects were deferred/not recommended. The details of the project are given in the table.

Sl. No.	Name of the Project	State	Category	Cost (Rs) in crores & Price Level	Benefits	Status	Remarks
1	Upper Bhadra Irrigation Project	Karnataka	Major	16125.48 (2018-19)	CCA- 2.25 lakh Ha	Recommended	Accepted in 147 th meeting of TAC
2	Sukha Har Medium Irrigation Project	Himachal Pradesh	Medium	153.80 (2015)	CCA-2186 Ha	Deferred	Accepted in 131 st meeting of TAC
3	Parwan Multipurpose Project	Rajasthan	Multipurpose	6398.78 (2018)	CCA-2.01 Lakh Ha	Recommended	Accepted in 135 th meeting of TAC
4	Anti-erosion works on left bank of river Ganga at Bali Tola (Nazarmira) to Sabalpur Pachhiyari Tola	Bihar	Flood	45.10 (2019)	Protected Area- 1553 Ha Benefitted Population-50000	Not Recommended	Accepted in 145 th meeting of TAC
5	Bagmati Flood Management Scheme Phase III (b)	Bihar	Flood	913.215 (2018)	Benefitted Area - 130900 Ha Benefitted population- 50.40 lakhs	Recommended	Accepted in 145 th meeting of TAC
6	Construction of extended Sikarhatta Majhari low bund from Parsauri to Mahisha in length of 4.60 km	Bihar	Flood	41.92 (2019)	Benefitted Area- 6500 Ha Benefitted population-85000	Recommended	Accepted in 145 th meeting of TAC
7	Breach closure work on Left Kamala Balan embankment at km 7.38 (Village-Terha), km 36.60 (Village -Rakhwari) and right Kamala Balan embankment at km 40.60 (village-Gopalkha), km 47.30 (village-Naruar), km 55.80 (village-Kathiwar), km 57.50 (village-Kakodha), km 71.80 (village-Kumharaul), and km 79.60 (village- Bath Mansara)	Bihar	Flood	74.11 (2019)	Benefitted Area- 72300 Ha Benefitted population-7.5 lakh	Not Recommended	Accepted in 145 th meeting of TAC
8	Extension of left Bhutahi Balan embankment from km 25.00 to km 31.610 (up to Ghoghardiha to Nirmali Railway line near Parsa halt) with Revetment	Bihar	Flood	48.44 (2019)	Benefitted Area- 16900 Ha Benefitted population-3 lakhs	Recommended	Accepted in 145 th meeting of TAC
9	Anti-Erosion/Restoration works at different point on left and right bank of Ganga river in district of Buxar, Bhojpur and Patna	Bihar	Flood	67.87 (2019)	Benefitted Area- 76200 Ha Benefitted population-13.83 lakh	Not Recommended	Accepted in 145 th meeting of TAC
10	Channelization of Markandey River flood control project, in Tehsil Nahan, District Sirmour,	Himachal Pradesh	Flood	105.66 (2019)	Benefitted Area- 462 Ha Benefitted population-17406	Recommended	Accepted in 147 th meeting of TAC
11	Channelization of Giri River near village Rajban (Harijan Basti) & Nawada in district Sirmaur	Himachal Pradesh	Flood	24.77 (2019)	Benefitted Area- 233.56 Ha	Recommended	Since the cost of the scheme is less than 25 crore, it is techno economically appraised and accepted by GFCC.

First Meeting of the Indian side of India-Bangladesh Joint Technical Committee for conducting the Joint Feasibility Study of the Ganges-Padma Barrage Project (GBP) of Bangladesh

The first meeting of the Indian Side of India-Bangladesh Joint Technical Committee for conducting the Joint Feasibility Study of the Ganges-Padma Barrage Project (GBP) of Bangladesh was held online on 10.03.2021 under the chairmanship of Member (D&R), CWC. During the meeting, various provisions of draft Terms of Reference (ToRs) of the Committee as forwarded by the DoWR, RD&GR and as received from Govt. of

Bangladesh side were discussed and the members were requested to provide their valuable inputs/ suggestions for modifications, if any. Further, M/sWAPCOS was requested to prepare a draft RFP at an early date, for consideration of the Indian Side of the JTC. The meeting was attended by representatives from DoWR, RD&GR, MEA, CWPRS, IIT Roorkee, CIFRI and M/sWAPCOS, besides officers from CWC.

Meeting for 2nd phase of India EU Water Partnership (IEWP)

Shri Kushvinder Vohra, Member (WP&P), CWC convened a meeting on 17.03.2021 with the EU Delegation and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to finalise the Concept Note for 2nd phase of India EU Water Partnership and Agenda items for 2nd meeting of Joint Working Group (JWG) of India EU Water Cooperation.

In the meeting, the overall objective of IEWP (as per India EU MoU) was retained in the Concept Note and the work done in the 9 priority areas of the first phase of IEWP were briefly discussed. It was decided that 9 priority areas of Phase-I will be dealt under four thematic pillars:

- River Basin Management;
- Irrigation and Efficient Water Use;
- Environmental Flow Assessment; and
- Safe Reuse of Treated Water

Sensitivity Analysis of Sub-catchment size in Design Flood Estimation of Mahi Bajaj Sagar Dam, Rajasthan

Ms Payal Goyal, Assistant Director, Hydrology (South) Directorate, delivered a presentation on "Sensitivity Analysis of Sub-Catchment Size in Design Flood Estimation" on 01.03.2021.

Design flood review study is an integral part of dam safety review. The design flood for the river valley projects is generally estimated using the hydro-meteorological approach, where design storm and unit hydrograph are two essential inputs. In theory, the principle of the unit hydrograph applies to a basin of any size. However, in practice, to meet the basic assumptions in the derivation of the unit hydrograph, it is essential to use storms, which are uniformly distributed over the basin and producing rainfall excess at a uniform rate. Such storms rarely occur in large areas. The limit on catchment size is generally about 5000 sq. km, beyond which the reliability of the unit

Major, Medium and Minor Irrigation Census and Water Body Census – Integrating the Processes

Member(WP&P), CWC has constituted an internal Group for MMI Census and Water Bodies Census. The first internal meeting of the Group was held under the Chairmanship of Shri K. Vohra, Member(WP&P) on 23.03.2021. At the outset, he apprised the members about the importance of compilation of a database of all the projects in the country. He also added that difficulty is being faced in the collection of data for UIP, IPC, IPU and compilation of compendium of MMI projects in the country. He suggested that to overcome these difficulties, it will be easier to conduct MMI Census and Water Bodies Census.

In the meeting, it was decided that a draft list of



The Capacity Building has been given emphasis and has been kept as one of the five cross-cutting (vertical) pillars.

The Nodal officers for each thematic pillar were also identified from CWC, CGWB, NMCG, DDWS, and DoWR, RD&GR. The Phase-II of IEWP shall continue from 01.11.2020 to 30.09.2023.



hydrograph method diminishes. To estimate the sensitivity of catchment size, the design flood of Mahi Bajaj Sagar dam having a catchment area of 6149 sq. km was discussed considering three cases- A single catchment, two sub-catchments and five sub-catchments.

Major, Medium and Minor Irrigation Census and Water Body Census – Integrating the Processes

parameters to be captured in the MMI Census & Water Bodies Census shall be prepared by Project Monitoring Organization (PMO), CWC and circulated to all the members for review & suggestions. In pursuance of the discussions held in the first meeting, a draft list of parameters was prepared by PMO and circulated to all the members.

The suggestions from the members were discussed during the 2nd meeting held on 24.03.2021. Based on the discussions held in the meeting, a consolidated draft list of parameters to be captured in the MMI Census & Water Bodies Census has been prepared.

Parwan Major Multipurpose Irrigation Project, Rajasthan

The Parwan Project is Irrigation cum drinking water supply project located on the Parwan River in the Jhalawar district of Rajasthan. The Parwan River is a tributary of river Kalisindh, a main tributary of river Chambal. The project envisages the construction of about 38 m high concrete gravity dam with a gross storage capacity of 490 MCM out of which 50 MCM will be supplied for drinking purposes to 820 villages of Kota, Baran and Jhalawar districts of Rajasthan. Construction work is in progress under the vetting consultancy of CWC for the project. A joint site visit by a team consisting of CWC and WRD, Rajasthan officials was conducted on 04.03.2021 to assess the foundation features of dam blocks as reported by GSI, Jaipur in their mapping report.

During the month of March-2021, the following drawings of different components of the project were vetted and released for construction:



- 3 No drawings pertaining to under sluice of block No.12 & 13.
- 3 No drawings pertaining to spillway pier & crest reinforcement, dowel arrangement and profile stepping details.
- 4 No drawing pertaining to concreting in the Stilling basin no. 1 to 4 of block no. 5 to 8.

JWG meeting under MoU signed between India and European Union

The second meeting of the Joint Working Group was held online in two sessions, the first one on 24.03.2021 and the second one on 31.03.2021. The meeting was chaired by Additional Secretary, DoWR, RD&GR. The meeting had participants from DoWR, RD&GR, CWC, Central Ground Water Board, National Mission for Clean Ganga, Dept. of Science and Technology, Dept. of Biotechnology, Dept. of Drinking Water and Sanitation, European Union Delegation and Gesellschaft für Internationale Zusammenarbeit (GIZ). The EU Member States of Germany, Hungary and The Netherlands participated based on their respective Memorandum of Understanding/Expression of Intent Agreements on IEWP with the EU Delegation. Portugal participated in the role of the present EU Presidency. Major decisions taken during the meeting are as under:

- All 9 Priority Areas of the IEWP project Phase-1 will be taken into IEWP project Phase-2 under four Thematic

Pillars on River Basin Management, Irrigation and efficient water use, Environmental Flows assessment and Safe reuse of treated water.

- Under the agenda point on Research & Innovation, it was agreed that follow-up shall be made trilaterally between the EU Delegation, Dept. of Science and Technology, Dept. of Biotechnology.
- Under the agenda point on 5th India-EU Water Forum, it was agreed that a shortlist of topics (selecting 1-2 topics out of a larger list, e.g. including urban water planning and non-point-source water pollution, rainwater harvesting, water use efficiency in different sectors as well as bearing in mind the IEWP thematic areas/activities and the topics of the research and innovation projects) shall be developed in the coming weeks as initial preparatory steps at the technical level.
- It was also agreed to convene the next JWG meeting at end of the year 2022 or early 2023. It may also be considered earlier if required.

Visit of Team of Experts (ToE) for preparing action plan for restoration of the Tapovan Vishnugad HEP

A Team of Experts (ToE) visited the recently damaged Vishnugad Hydro Electric Project(520 MW), Uttarakhand from 15.03.2021 to 19.03.2021. The team comprises of Shri S.K. Kamboj (Director, Gates), Shri N.S. Shekhawat (Director, HCD), Shri Manoj Meena (Director, BCD) & Shri Vivek Johri (Deputy Director, BCD) and experts from other related organizations (CEA, GSI and CSMRS). The ToE has been constituted at the request of M/s NTPC Ltd. for preparing a comprehensive phase-wise action plan for restoration of the HEP. The project was severely damaged by an avalanche lead flash flood which happened on 07.02.2021 carrying a large amount of water mixed with silt & huge boulders.



The run-of-river project is being developed by NTPC on River Dhaul Ganga near Joshimath in Chamoli District of Uttarakhand.

Presentation on “Design of Concrete Tunnel Lining, Polavaram Irrigation Project, case study” and “Hydraulic Design of Intake-Parametric Study of Froude Number”

Polavaram Irrigation Project, Andhra Pradesh is a national project, for which the design consultancy for headworks is being provided by the Designs(NW&S) Organization under CWC. The irrigation tunnel under the project is a free flow, D-shaped, 18.1 m diameter and provided with a 1200mm thick M30 PCC lining. The Expert Team led by Member(WP&P), during its visit to the project site, pointed out that the thickness of 1200mm of concrete lining was not as per the common design practice and appeared to be on the higher side and, therefore, recommended that the same may be got vetted from CWC. Accordingly, this additional issue was referred to the Designs(NW&S) Unit. The HCD(NW&S) Directorate examined the same and observations thereon were sent to the project authority. The concrete lining was designed using the provision of IS 4880-IV Code for “Structural design of Concrete Lining”. It was observed that provisions of the IS 4880-IV are meant for the circular tunnel and do not accurately represent the non-circular or D-shape tunnel. Also, many provisions of the IS-4880-IV found to be outdated.

To address the above, the structural analysis of the non-circular D-shape concrete tunnel lining was carried out in the STAAD software. The pattern of the deformations and resultant stresses were studied for different thicknesses and load combinations and the results of

Relining of Rajasthan Feeder and Sirhind Feeder

The second meeting of the Expert Project Review Committee under the Chairmanship of Member(WP&P), CWC was held on 03.03.2021 which was continued on 05.03.2021 & 08.03.2021 through Video Conferencing to review the status of works in respect of Relining of Rajasthan Feeder from RD 179000 ft to 496000 ft and Sirhind Feeder from RD 119700 ft to 447927 ft.

During the meeting, the representative of Govt. of Rajasthan requested for reducing the canal closure period for the aforesaid work and rescheduling drinking water releases to Rajasthan to ensure availability of drinking water during proposed closure/work execution programme of Rajasthan Feeder. However, Chief Engineer, Canals, Govt. of Punjab informed that it is difficult to reduce the proposed canal closure duration in Rajasthan Feeder (RF) from 70 days to 45 days due to some field & contractual issues. He agreed to consider the same subject to Rajasthan indemnifying them of any legal and/or financial implications arising out of this.

The Chairman of the Committee requested Rajasthan to take appropriate action regarding the above request of Punjab. He further advised Rajasthan to approach an appropriate forum like the Technical Committee Meeting

the different analyses were found to be satisfactory. The final appropriate thickness is under finalization.

In the presentation delivered on 24.03.2021, the deficiencies in the IS 4880-IV, with emphasis to update and make it more equipped to cover different type of tunnels were highlighted and the design of the concrete tunnel lining carried out in the STAAD software and its outcome were discussed. Member (D&R), CWC expressed that the existing Codal provisions are needed to be reviewed.

The Hydraulic Design of Intake in respect of the Froude Number was also discussed. Parametric Study of the Froude Number was carried out referring to various literature and using data from different projects. It was suggested that against the recommended value of $Fr=0.33$ as per IS-9761 Code for “Hydropower Intakes-Criteria for hydraulic design”, higher values up to 0.5 may be considered as many projects are performing satisfactorily even with $Fr>0.33$. The suggestion was made to validate the same with the physical model studies. It was highlighted, that doing so, will improve the economy and performance of the projects.

The above presentation was delivered by Shri. Darpan Talwar, Director & Ms. Manu Dubey, DD, HCD(NW&S) Directorate, CWC.



(TCM) of Bhakra Beas Management Board (BBMB) to take cognizance of emerging scenario and to take appropriate decision based upon the outcome of the same.

Representative of Govt. of Rajasthan mentioned that necessary steps would be immediately taken to take up the matter in TCM of BBMB and formal request for closure period which is now proposed would be sent to the Govt. of Punjab shortly. Further, he mentioned that the matter regarding indemnifying Govt. of Punjab of legal/financial implication due to the reduction of closure period would also be taken up at the appropriate level in the State of Rajasthan.

Presentation held on Sheet Pile Cofferdam: Design, Analysis and Construction Practices of Bhadbhut Barrage Project, Gujarat

A presentation was made by CMDD (N&W) Directorate on 08.03.2021 on Sheet Pile Cofferd Dam – Design, Analysis and Construction practices with a case study of the ongoing construction of a cofferdam at Bhadbhut Barrage Project. This project is located across the river Narmada, 25 km upstream from the mouth of the river, where it flows into the Gulf of Khambhat.

The project is part of the larger Kalpasar Project, which entails the construction of a 30-km dam across the Gulf of Khambhat between Bharuch and Bhavnagar districts. Kalpasar Project aims to store Gujarat's 25% average annual surface water resources. This reservoir will store about 8,000 Million Cubic Metres (MCM) of surface water and will be one of the world's largest freshwater reservoirs in the sea. This will tap the excess waters of the Narmada, Mahisagar and Sabarmati rivers in the reservoir and prevent salinity ingress. CWC is the design review consultant for the project. Currently, the construction of the cofferdam is in progress.

For the construction of the Main barrage, diversion of the river is required. Double Sheet Pile Cofferd Dam with Sand Filling type has been proposed for the diversion works. Clear spacing between two sheet piles is kept as

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 25.03.2021, the live storage available in these reservoirs was 76.372 BCM which is about 44% of the live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was

Webinar on Subernarekha Irrigation Efficiency Pilot Project

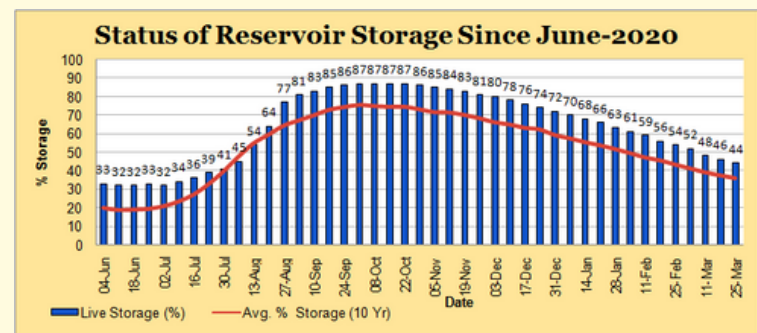
A webinar on Subernarekha Irrigation Efficiency Pilot Project was organized on 10.03.2021 to showcase Australian experience related to irrigation efficiency activities in South-East Asian Countries and to further discuss the scoping study to be undertaken for Subernarekha Irrigation Pilot Project.

Shri P. Dorje Gyamba, Chief Engineer (POMIO), CWC welcomed all officials from the Australian Side & the Indian Side and made a brief presentation on the Subernarekha Irrigation project showing the location of the Dam and the identified study area - Kichakeswari Panipanchayat command. Australian Water Partnership



10.0 m. The top level of the Sheet pile is proposed as 9.00 m. In the working side of cofferdam berm with top-level +3.00m, 7m wide at the top and filling slope is 1V:2H is proposed. River bed level of 3.00m and HFL of 7.50 m is considered for the design purpose.

Construction of the main barrage will be done in two phases. In Phase-1, cofferdam will be constructed up to 400m from left and right bank plus length required as per site condition inside each side of the bank. After completing the construction of the barrage in phase-1, the cofferdam constructed in phase-1 will be removed. In phase-2 cofferdam will be constructed in the central river portion for the remaining length of the main barrage.



89.162 BCM and the average of the last ten years of live storage was 62.748 BCM. Thus, the live storage available in 130 reservoirs is 86% of the live storage of the corresponding period of last year and 122% of the ten year's average storage.

(AWP) partners presented three models of scoping studies for irrigation efficiency projects previously undertaken in three different South-East Asian Countries namely Indonesia, Cambodia and Vietnam.

Chief Engineer (POMIO), CWC concluded that since various data/ information regarding the identified command area under the Subernarekha Irrigation project has been conveyed to the Australian side, therefore a proposal may now be prepared by the Australian side including physical-financial aspects for carrying out the scoping study and shared with CWC for joint discussions regarding the future course of action.

DRIP

Workshop to discuss various procurement related procedures of DRIP-II and III

A virtual workshop to discuss various procurement related procedures of DRIP Phase-II & Phase-III was held on 05.03.2021. State officials were sensitised about the procurement rules and regulations to be followed during the implementation period of the new Scheme. Lessons learnt and experiences of the ongoing DRIP were also shared with the participants. Experts from CPMU and World Bank gave detailed presentations to the participants followed by a session to resolve the queries. About 250 officials from 18 States participated



in the workshop including representatives of the World Bank and CPMU.

Final World Bank Review Mission

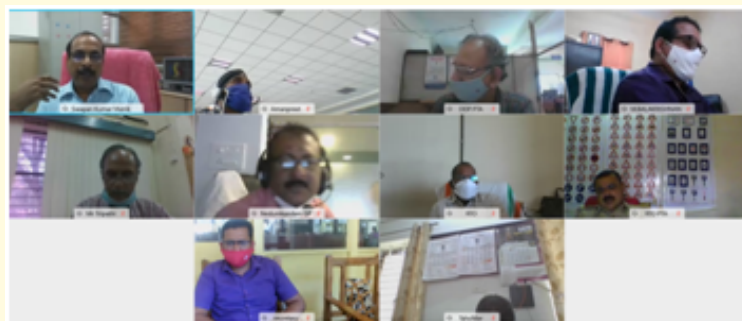
The final World Bank Review Mission was held in hybrid mode during 10th-16th March 2021. Deliberations were done on the Status of project implementation and progress of Results Framework as per the Project Appraisal Document (PAD) of original DRIP as well as Additional Financing. The mission was physically attended by the representatives of Kerala WRD, KSEB, DVC (10.03.2021), TANGEDCO, Tamil Nadu WRD, UJVNL (11.03.2021), Odisha WRD, Madhya Pradesh WRD, Karnataka WRD (12.03.2021), 8 no. of Academic



Institutes (15.03.2021) followed by a virtual wrap-up meeting with all Implementing Agencies on 16.03.2021.

Stakeholder Consultation Meetings for the implementation of published EAPs for the dams of Kerala WRD and Karnataka WRD.

The Stakeholder Consultation Meetings (SCM) to disseminate the published Emergency Action Plans (EAPs) for seven dams of Kerala WRD and one dam of Karnataka WRD, as a part of implementation requirement were held through virtual platform on 09.03.2021 and 26.03.2021 respectively. This program is a part of the risk mitigation strategy to communicate the associated risks to all stakeholders. These meetings were attended by officials of CWC, NDMA, SDMA, IMD, NRSC, GSI, All India Radio, District Authorities and villages in downstream of the dam. Under DRIP, EAPs



have been published for 197 no. of dams and SCMs have been conducted for 102 no. of dams.

Meeting by Chairman to finalize the detailed background note on Glacier Management in the Country in connection with meeting of Parliamentary Standing Committee on Water Resources

A meeting was held under the Chairmanship of Chairman, CWC on 30.03.2021 to finalize the detailed background note on Glacier Management in the Country in connection with the meeting of the Parliamentary Standing Committee on Water Resources on 08.04.2021. The meeting was attended by CWC officers at CWC, HQ. The representatives from the Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD& GR), Geological Survey Of India (GSI), Ministry of Earth Sciences (MoES), Ministry

of Environment, Forest and Climate Change (MoEF&CC) and National Institute of Hydrology (NIH) had also participated in the meeting through video conferencing. During, the aforesaid meeting, a detailed discussion was held among all the participants regarding Glacier management in the Country and all the participants were requested to send detailed inputs/observations for finalizing the background note to be sent to the Parliamentary Standing Committee.

69th Meeting of Standing Committee of Brahmaputra Board through VC

The 69th Meeting of the Standing Committee of Brahmaputra Board was held on 02.03.2021 through video conferencing under the Chairmanship of Chairman, Brahmaputra Board. Member(RM), CWC attended the

meeting as a member of this Committee. Various administrative and technical matters related to the Brahmaputra Board were discussed during the meeting.

Sarasvati Heritage Project, Haryana

A joint inspection of CWC, CSMRS, GSI & Haryana Irrigation & Water Resources Department (HIWRD) officials to Sarasvati Project area under the Chairmanship of Director, CSMRS, Shri S.L Gupta was carried out on 05.03.2021 to review the geotechnical investigation requirements of the Somb-Sarasvati barrage, Sarasvati reservoir and interconnecting pipeline. Shri Manoj Kumar Meena, Director BCD(N&W) and Shri Vivek Johari, Deputy Director BCD(N&W) participated in the joint visit from CWC.

The team inspected the old barrage axis located at 477m u/s of the Rampur-Gainda Bridge where the GSI officials deliberated the various deleterious geological features with special emphasis on tectonic, ground movement/stresses, hydro-geological and rock mass aspects of the Himalayan Frontal Thrust (HFT) exposed 175m d/s of the old barrage axis. The association of such features with major palaeo-seismic events in the area were also highlighted. Because of the above features and to minimize such unwanted geological features, an alternative axis suggested by GSI at ± 250 m u/s from the old barrage axis, was also deliberated by the team. The team agreed to the selection of a new/alternative barrage axis in view of GSI deliberation, constraints regarding layout plan, statutory clearances deliberated by HIWRD official and availability of bedrock on either bank. The team members also agreed to 5 nos. of drill holes for a depth of 70m deep for the geological evaluation of the foundation area as suggested by GSI and additional 6 nos. of drill each 25m deep, for carrying



out various test/investigations required for barrage and associated designing structures as suggested by CWC.

During the inspection of the Sarasvati Reservoir area, CSMRS official suggested tests for soil investigation on a grid pattern of 500m x 500m up to the depth of excavation. Team also suggested carrying out studies to rule out the presence of any palaeochannel in the reservoir area.

The proposed pipeline alignment was also visited by the team at various locations where the team advised the HIWRD to construct the field ground markings in the form of Burji at suitable locations and to conduct soil investigation at various locations. The revised alignment of the pipeline shall be submitted by HIWRD.

TREADTalks: Chamoli Flood: How Can we build resilience

Shri N. N. Rai, Director, Hydrology (South) Directorate delivered a TREADTalks Webinar on "Chamoli Flood: How can we build Resilience?" on 22.03.2021. Glacial surges like the recent Chamoli incident and GLOFs (Glacial Lake Outburst Floods) necessitate the need to mitigate damages and minimize losses. In the Himalayan region, major rivers originate from glaciers where large portions of freshwater resources are locked up in ice and snow. In the last few decades, glaciers have been retreating, resulting in the formation of precarious glacial lakes in the Upper Himalayan region. Due to a rapid rate of ice and snowmelt, caused possibly by global warming, water accumulation in these lakes has been increasing in the Himalayas. The lakes located at the snout of the glacier are mainly dammed by the lateral or end moraine, where there is a high tendency of breaching. Such lakes could be dangerous as they hold a large quantity of water. Breaching and the instantaneous discharge of water from such lakes can cause flash floods leading to damage downstream in enormous proportions.



The GLOFs can be of a very high magnitude. Their impact and eroding ability will depend upon the attenuation pattern of its hydrograph, which can be estimated by a dam break simulation coupled with hydrodynamic routing. This may be helpful in planning and designing suitable measures for monitoring and planning infrastructure to minimise such damages.

This webinar was organised by CPR-CWC Dialogue Forum and can be accessed from the following link: <https://www.facebook.com/CentreforPolicyResearch/videos/437963490768225/>

Monitoring visits for Projects under PMKSY-AIBP and NIP in Uttar Pradesh

Madhya Ganga Canal (MGC) Project Stage-II

Shri G. L. Bansal, Director and Shri Mayank Suhrird, Deputy Director, CWC, Agra carried out 2nd Monitoring visit of the MGC Project Stage-II during 15th -18th March, 2021. Officials of Irrigation & Water Resources Department, Govt. of Uttar Pradesh accompanied them during the visit. Land acquisition, earthwork & construction work on pucca works as Village Road Bridge (VRB), Provisional Road Bridge (PRB), syphon aqueduct etc., in the main canal, branches and distribution system are in progress. The overall progress of the project is about 68%. The target date of completion of the project is March, 2022.

Madhya Ganga Canal (MGC) Project Stage-II envisages the utilization of 1943 MCM surplus water of river Ganga during monsoon by diverting it through the Left

Arjun Sahayak Pariyojna

The above officers also visited the Arjun Sahayak Pariyojna during 23rd -25th March, 2021 along with the officials of the State Govt. of UP. Earthwork in Arjun Feeder, Kabrai Feeder, raising of Kabrai Dam and the main canal is almost completed and construction work on pucca works as VRB, PRB, syphon aqueduct etc., is in progress. The overall progress of the project is about 96%. The target date of completion of the project is June, 2021.

Arjun Sahayak Pariyojna envisages the use of 279 MCM surplus water of river Dhasan during the rainy season to fill Arjun, Chandrawal and Kabrai dams through feeder channels from the existing Lahchura Dam. The project will provide additional irrigation to 44381 ha land out of

Kachnoda Dam Construction Project, U.P.

The above officers also visited "Kachnoda Dam Construction project, U.P.", a project identified under the National Infrastructure Pipeline (NIP). Various issues/bottlenecks being faced were discussed with concerned officers from Irrigation & Water Resources Department, Lalitpur, U.P. during 22nd-23rd March, 2021 and the visit report has been submitted to CWC, HQ.

Presentation on CWC Initiative towards Irrigation Improvement/Modernization in the Envirotech Asia Conference 2021

A presentation was made on "CWC's initiative towards improving irrigation performance/modernization" by Shri Sanjay Kumar Singh, Director, CWC in Envirotech Asia Online Exhibition on Water and Waste Management Technology on 07.03.2021. Current interventions like Jal Jeevan Mission, Jal Shakti Abhiyan, PMKSY, Swachh Bharat Mission along with initiatives of CWC such as Support for Irrigation Modernisation Programme, Performance Evaluation and Benchmarking of Irrigation projects were discussed during the event.



Bank Regulator of existing Chaudhary Charan Singh Barrage at Bijnor, for Kharif irrigation in the districts of Amroha, Sambhal and Moradabad in UP. The project has a GCA of 2.55 lakh ha and a CCA of 2.25 lakh ha. The ultimate irrigation potential is 146532 ha out of which areas proposed under paddy and other Kharif crops are 78902 ha and 67630 ha respectively.



which area under Kharif is 18963 ha and Rabi is 25418 ha. In addition to this, 15104 ha area in the existing commands of Arjun, Chandrawal & Kabrai dams shall be restored. On completion of the project, Mohaba, Hamirpur and Banda Districts of UP will be benefitted. Both the projects are included under PMKSY-AIBP.



Data Corner- Status of National Projects

Sl. No	Name of the National Project/State	Benefits : 1) Irrigation (Hectare) 2) Power (Mega Watt) 3) Storage (MCM)	Status (as on 25.03.2021)
1	Gosikhurd Irrigation Project / Maharashtra	1) 2.50 lakh 2) 26.5 3) 1147.14 (Gross)	Ongoing
2	Saryu Nahar Pariyojana / Uttar Pradesh	1) 14.04 (National Project (NP) Component : 4.73) 2) NIL 3) Barrage	Ongoing
3	Polavaram Irrigation Project / Andhra Pradesh	1. 4.36 lakh 2. 960 3. 5511 (Gross)	Ongoing
4	Shahpurkandi Dam Project / Punjab	1) 0.37 lakh 2) 206 3) 120.71 (Gross)	Ongoing
5	Teesta Barrage Project / West Bengal	1) 9.23 lakh (NP component 5.27) 2) 1000 3) Barrage	Irrigation Potential of 1.97 lakh hectare created. However, the project is at standstill since 2014-15 due to land acquisition issues.
6	Lakhwar multipurpose project/ Uttarakhand	1) 0.3378 lakh 2) 300 3) 587.84 (Gross)	Accepted by Advisory Committee of DoWR, RD & GR
7	Renukaji Dam project / Himachal Pradesh	1) Drinking water 2) 40 3) 498.33 (Live)	Accepted by Advisory Committee of DoWR, RD & GR
8	Kishau multipurpose project /Himachal Pradesh & Uttarakhand	1) 0.97 Lakh 2) 660 3) 1824 (Gross)	Revised DPR under Preparation
9	Ujh Multipurpose Project / J&K	1) 0.77 lakh 2) 196 3) 925 (Gross)	Accepted by Advisory Committee of DoWR, RD & GR
10	Ken-Betwa Link Project / Madhya Pradesh & Uttar Pradesh	1) 9.04 lakh (CCA) 2) 78 3) 3495 (Live)	Appraisal Stage for Phase-II
11	Kulsi dam Project / Assam	1) 0.0395 lakh (GIA) 2) 55 3) 525.64 (Gross)	Appraisal Stage
12	NoaDihing Dam Project / Arunachal Pradesh	1) 0.036 Lakh (CCA) 2) 72 3) 322.00 (Gross)	Appraisal Completed
13	Bursar HE Project / J&K	1) 1.74 lakh (Indirect) 2) 800 3) 616.74 (Gross)	Appraisal Stage
14	Gyspa HE Project / Himachal Pradesh	1) 0.50 lakh ha 2) 300 3) 912.78 (Live)	DPR Stage
15	2 nd Ravi Vyas Link Project/Punjab	Harness water flowing across border (about 0.58 MAF in non-monsoon period)	PFR Stage
16	Upper Siang Project / Arunachal Pradesh	1) Indirect 2) 9750 3) 1776.21 (Gross) 4) Flood moderation	PFR Stage

Administrative News

■ Shri S. K. Halder, Chairman, CWC has been given the additional charge of Chairman, Cauvery Water Management Authority for a period of 6 months from 01.01.2021 (retrospectively).

■ Shri Aditya Sharma, Chief Engineer, Narmada Basin Organization, CWC, Bhopal has been given the additional charge of Executive Member, Narmada Control Authority for a period of 6 months from 04.02.2021.



Financial Progress of Schemes/Components

(Amount in Rs. Crore)

Sl. No.	Scheme/Component Name	RE 2020-21	Expenditure	Expenditure (in %)
1.	Development of Water Resources information System (DWRIS)	130.00	128.535	98.9%
2.	Investigation of Water Resources Development Schemes (IWRD)	9.00	8.299	92.2%
3.	Flood Management & Border Areas Programme (FMBAP)	10.576	9.3574	91.7%
4.	Infrastructure Development (ID) Schemes	5.75	5.7357	99.75%
5.	National Hydrology Project	8.886	8.903	101.53%
6.	Dam Rehabilitation and Improvement Project	21.80	21.45	98.40%

Training

Sr. No.	Name of the Program	Dates & Duration	No of participants	Category
I	Training Programs			
a)	Distance Learning Program on Water Resources Sector of India for School Teachers – Batch 1	01st-03rd March 2021	156	Mass Awareness
b)	Mandatory Cadre Training Program for Assistant Research Officers of CWC	08th-19th March 2021	27	Cadre Purpose Oriented Purpose
c)	Training program through Distance Learning on "Python Programming & Java Script"	08th-26th March 2021	20	Oriented
d)	Training-cum-Webinar on Basic Concepts of Canal Alignments for Irrigation Projects	11th,12th and 15th March 2021	29	Oriented
ii	Workshop			
e)	Workshop on Planning, Design and Implementation Aspects of Pipe Irrigation Network	05.03.2021	20	Workshop

New Post Graduate Course in IISc, Bengaluru/IIT Roorkee

Introduction of regular Post Graduate Degree Course in Dam Engineering and establishment of Center of Excellence in Dam Safety are important activities planned under DRIP Phase-II and Phase-III. Three academic institutes namely IIT Roorkee, IISc Bangalore and IIT Madras have agreed in principle to start this

course. Admission procedures at IISc Bangalore and IIT Roorkee for this course are underway for academic session 2021. Officials from Central and State DRIP Implementing Agencies are eligible to apply for this course.

Water Sector News

- ✈ Modi's 'Catch the Rain' pitch to address water woes (Deccan Herald, 01.03.2021)
- ✈ Phase 2 of Jal Shakti Abhiyan to commence from April : Govt (Times of India, 03.03.2021)
- ✈ Reckless de-silting could kill Doddakallasandra Lake's rich biodiversity, study warns (Deccan Herald, 04.03.2021)
- ✈ Rajasthan seeks Central assistance for water projects (The Hindu, 07.03.2021)
- ✈ China gives green light for first downstream dams on Brahmaputra (The Hindu, 08.03.2021)
- ✈ MP to release extra water, Ken-Betwa plan gets a boost (Times of India, 14.03.2021)
- ✈ India, Pak Indus Commissioners set to meet on March 23-24 (Indian Express, 15.03.2021)
- ✈ No fresh permission to hydel projects in Upper Ganges region in 6 years' (Millennium Post, 16.03.2021)
- ✈ 'Funds to Bengal, Raj, Ch'garh & Punjab for water projects remain unspent' (The Statesman, 17.03.2021)
- ✈ Melting glaciers, rising temp could spell doom : Minister (The Tribune, 20.03.2021)
- ✈ PM to launch 'Jal Shakti Abhiyan : Catch the Rain' (Hindustan Times, 22.03.2021)
- ✈ 24 'dead' lakes in Hyderabad as water quality worsens (Deccan Chronicle, 25.03.2021)
- ✈ PM assures Bangla oppn party of inking Teesta water-sharing pact (Indian Express, 27.03.2021)
- ✈ Untreated waste polluting Beas river (The Tribune, 31.03.2021)

History – Kangsabati Reservoir Project

A Boon to West Bengal

In 1959, another distinct step towards self-sufficiency in regard to food production in the densely populated State of West Bengal was the inauguration of work on the 126 ft high Kangsabati dam at Gorabari, about 35 mile from Bankura. The project provides irrigation facilities, absorbs much of the flood waters of the Kangsabati river giving relief to the people who live in the plains beyond the Midnapore town. An anicut near Midnapore completed in 1784 was the only irrigation structure existing across the Kangsabati prior to Kangsabati Reservoir Project.

The River

The Kangsabati river rises at 2,103 ft above sea level in the hills of Chottanagpur and flows in south-east direction. Continuing in the same direction through multiple districts of West Bengal, the river enters the Hooghly, east of Nandigram after a total course of nearly 229 mile. Some of the important tributaries of the Kangsabati on its right bank are the Bhairab Banki, the Tarafeni and the Kalliaghari. The only important tributary on its left bank is the Kumari which joins near Ambikanagar.

Original Proposal

The project originally proposed envisaged the construction of a

dam near Khatra in Bankura district, canals taking off on both banks directly from the dam and two pick up barrages across the rivers Silabati and Bhairab Banki. The project was estimated to cost Rs. 25.14 crores and irrigate eight lakh acres of Kharif and one and a half lakh acres of Rabi crops.

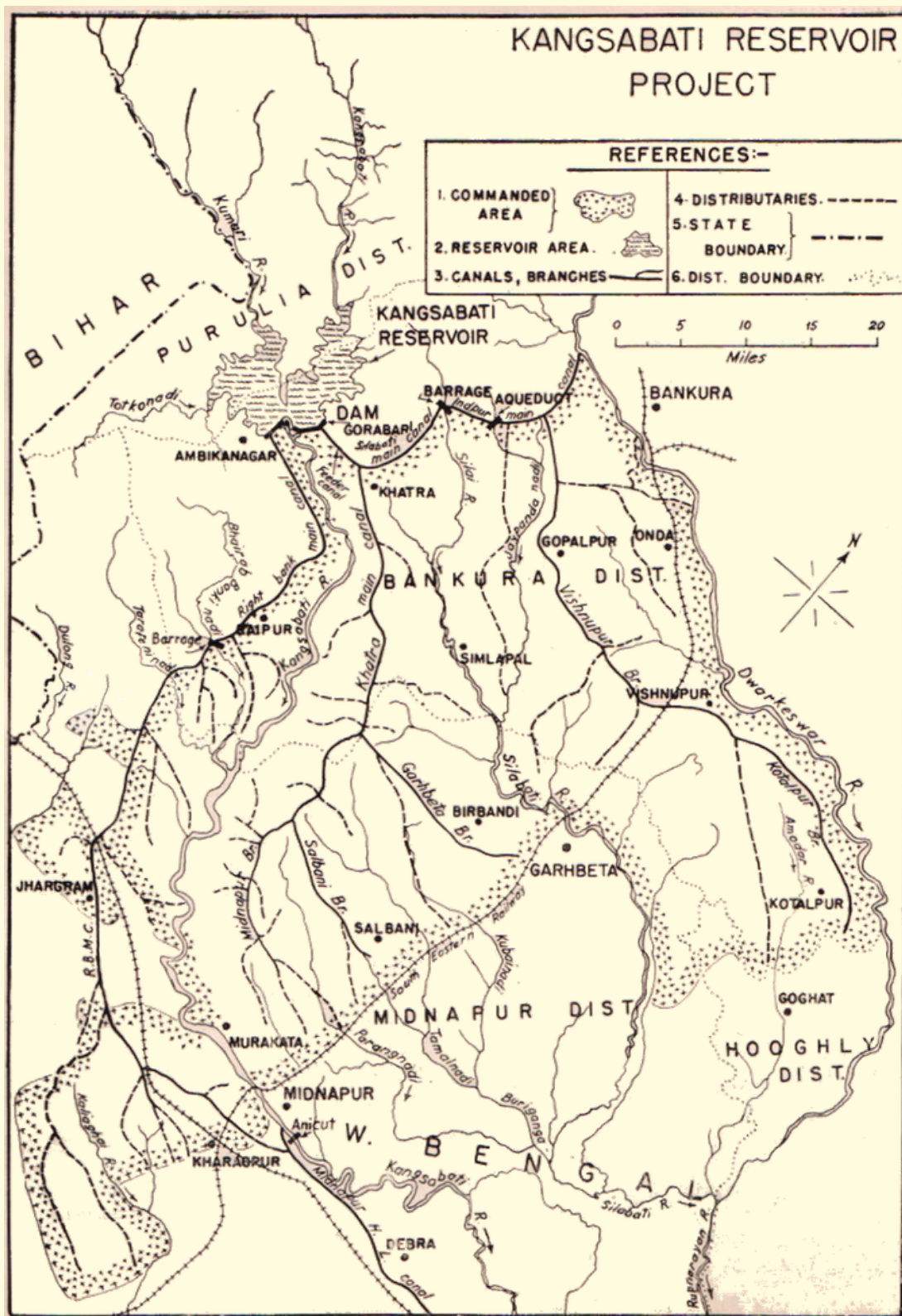
Revised Proposal

The location of the dam site had to be reviewed as it would yield no irrigation till the completion of the whole dam. This would necessitate an expenditure of nearly Rs. 18 crores before any benefit could be derived. Earlier

there was a proposal for the transfer of the Kangsabati catchment lying in then Bihar State to West Bengal. Bengal engineers took advantage of this and investigated the possibility of fixing the dam site higher up so as to bring some of the high-level lands in the western part of the Bankura district under irrigation. They finally selected the site nearly three-fourth of a mile above Ambikanagar where the river Kumari joins the Kangsabati.

Irrigation

Within the command area of the Kangsabati project,



irrigation facilities already exist in the form of tanks, wells and a number of small irrigation schemes. These benefit, however, only a small fraction of the proposed area. The scheme envisages Kharif irrigation of eight lakh acres and Rabi irrigation of one and a half lakh acres and meeting the needs of the Midnapore canals during critical periods. The Kangsabati canal system includes ten regulators, 77 canal drops to negotiate steep falls in the country traversed and 131 bridges for crossings.

Left Bank Canal System

The left bank canal system irrigates nearly 80 percent of the command area. Taking off from the head-regulator with a discharge of 7,880 cusec, the left bank canal runs initially as the feeder canal and later as the Silabati main

canal till it meets the Silabati river. Thereafter, up to the tail end (near Dwarakeswar river) it flows as the Indpur main canal, crossing on its way the Jaypanda river on an aqueduct.

Right Bank Canal System

Taking off from the Head outlet in the body of the main dam with a discharge of 2,840 cusec the right bank main canal crosses the Bhairab Banki river where a pick-up

Gallery



A Swachhhta Awareness rally was organized by CWC HQ, New Delhi on 26.03.2021.



Swachhhta Pakhwada has been celebrated from 16.03.2021 to 31.03.2021. Cleanliness activities through Shramdan at CWC HQ, New Delhi

Original -KANGSABATI PROJECT Features at a Glance

Location	At Ambikanagar in Bankura district, West Bengal, about 2.4 km u/s of the confluence of Kumari with Kangsabati		
Catchment	3561 sq km		
Dam:			
Type	Earthen, rolled filled type		
Height (Over deepest foundation)	Across Kangsabati	40 m	
	Across Kumari	41.2 m	
Length	Across Kangsabati-	5.2 km	
	Across Kumari-	4.8 km	
	Connecting dam-	0.4 km	
	Total-	10.4 km	
Spillway	11 bays of 9 m width and 10 m height fitted with radial gates		
Reservoir:			
Water spread	117 sq km		
Capacity	1135 million Cum		
Flood discharge	5663 cum per sec		
Canals System:			
Length of main canal and distributaries	3862 km		
Benefits:			
Irrigation	3.24 lakh ha		
Cost	Rs. 25.5 crores		

weir, to serve as a level crossing, was provided. Six miles lower down, it crosses the Tarafeni where an aqueduct is provided. The right bank main canal runs throughout up to its tail end near Kharagpur, almost parallel to the Kangsabati river, feeding en-route a number of distributaries.

Source: Bhagirath & Govt. Website:



नर्मदा बेसिन संगठन, केन्द्रीय जल आयोग में स्वच्छता पखवाडा 16 से 31 मार्च 2021 मनाया गया जिसमें दिनांक 26.03.2021 को इस कार्यालय के अंतर्गत विभिन्न स्थलों में स्वच्छता अभियान चलाया गया



Shri Goverdhan Prasad, Director, Hydrology (North) Dte attended 116th Meeting of Permanent Indus Commission as an Advisor of the Commissioner (Indus), Department of Water Resources, RD & GR during the meeting on 23rd -24th March, 2021 held at New Delhi

World Water Day



World Water Day is observed on 22nd March every year to focus attention on the importance of water. On this occasion, a pledge was taken by Chairman, CWC with other officials in CWC HQ, New Delhi

Bharat Ka Amrut Mahotsav

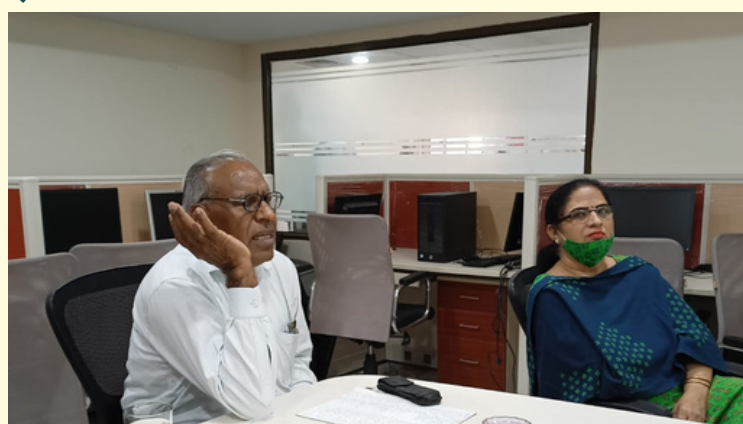


Shaheed Diwas celebrations on 23rd March, 2021 by KGB, CWC Hyderabad



On 22.03.2021, celebrating the World Water Day, a Vichar Manch on issues related to "Water and Sanitation" was organised in Mahi & Tapi Basin Organization, CWC, Gandhinagar

हिंदी कार्यशाला



के.ज.आ. (मुख्यालय) में दिनांक 11.03.2021 को ऑनलाइन माध्यम से आयोजित हिंदी कार्यशाला में आमंत्रित वक्ता श्री प्रेम सिंह, संयुक्त निदेशक (सेवानिवृत्त) ने 'मानक वर्तनी तथा पारिभाषिक शब्दावली' विषय पर प्रभावशाली जानकारी प्रदान की

Field Activity



Sh. Kayum Mohammad, Director & Sh. Ashwani Kumar Verma, Deputy Director visited the Construction site of Garada dam, Rajasthan on 03.03.2021



Director (Monitoring) and DD(Monitoring), CWC, Bengaluru visited Sonthi Lift Irrigation Scheme under National Infrastructure Pipeline (NIP) during 30.03.2021 to 31.03.2021



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

