The Monthly Newsletter of Central Water Commission

JALANSH

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Dr. R.K. Gupta
Chairman, CWC

Message

First of all, I heartily congratulate all the countrymen on the completion of 75 years of independence. It is a proud moment for me that on the occasion of 76th Independence Day when India is celebrating "Azadi Ka Amrit Mahotsav", I have got the opportunity to wish you all through this issue of Jalansh.

After a long gap of 12 years, the 38th meeting of ministerial level Joint Rivers Commission of India and Bangladesh was held on 25.08.2022, though the technical interactions under the framework of JRC have continued in the intervening period. The Indian delegation was led by Shri Gajendra Singh Shekhawat, Union Minister for Jal Shakti. The Bangladesh delegation was led by Mr. Zaheed Farooque, State Minister for Water Resources. India and Bangladesh share 54 rivers, of which 7 rivers have been identified earlier for developing framework of water sharing agreements on priority. During the meeting, it has been agreed to widen this area of ongoing cooperation by including 8 more rivers for data exchange.

Indian Water Resources Society (IWRS) have been established in lakes including Glacial Lake Outburst Flood (GLOF)/Landslide Lake Outburst Flood (LLOF) on 11.07.2022 in view of NDMA guidelines on Management of Glacial Lake Outburst Floods. The meeting was attended by the representatives from CWC, various ministries and scientific organizations with concerned officers of DoWR, RD & GR. During the meeting, the representatives of various organizations have given short presentation highlighting the activities being undertaken by them.

I attended the meeting chaired jointly by Secretary, DoWR, RD&GR, Foreign Secretary and Power Secretary at New Delhi on 21.07.2022 regarding the issues related to Indo-Nepal cooperation in the field of water resources project. The primary objective of meeting was to discuss the implications of the design parameters adopted in DPR of proposed Lower Arun Hydro Electric Project on river Arun on the Sapta Kosi High Dam Multipurpose Project (SKHDMP) in Nepal for which field surveys & investigation and other studies are under way jointly by India and Nepal.

Suggestions are welcome from all the readers of the newsletter to improve it.

RK Gupta

CONTENT

Meeting to discuss matter related to Preliminary Project Report (PPR) titled Climate Adaptation in Vennar Sub basin in Cauvery Delta Project 2

Preliminary Project report (PPR) of Externally aided project titled "Climate Adaptation in Vennar Sub basin in Cauvery Delta Project 2" amounting to ₹ 1825 Cr was submitted by Govt. of Tamil Nadu in the DEA portal of Ministry of Finance. This Project aims to modernize and improve climate resilience of irrigation and flood management infrastructure in Thanjavur, Nagapattinam and Thiruvarur Districts of Tamil Nadu falling under Vennar Sub-basin.

PPR of the project was examined in CWC w.r.t. hydrology, coastal management, irrigation planning & inter-state angles. CWC suggested that PPR may also be examined by Cauvery Water Management Authority (CWMA). However, Govt. of Tamil Nadu was of view that project does not require CWMA's views/comments as proposal neither claims any additional area of irrigation nor it proposes any new storage structure.

To take up stand on examination of the PPR by CWMA, a meeting was held under the Chairmanship of Secretary, DoWR, RD&GR on 01.08.2022 with officers of DoWR, RD&GR and CWC. During the meeting, it was decided that CWC would prepare a background note of the proposed project for further examination by CWMA. Accordingly, a background note has been provided to CWMA.

First meeting of the National Committee on Dam Safety (NCDS)

The first meeting of the National Committee of Dam Safety (NCDS) was held under the chairmanship of Dr. R. K. Gupta, Chairman, NCDS & Chairman, CWC on 02.08.2022 at New Delhi. The meeting was attended by Shri J. Chandrashekhar Iyer, Member (D&R) and all the Members of NCDS or their representatives. As per the Agenda, in the meeting various provisions of the Dam Safety Act, 2021 were deliberated for their effective implementation in all the states. As a follow up action necessary directions have been issued to the states for the decision taken in the meeting. The Agenda and minutes of the meeting are available on the CWC website.

Review meeting of IT Deployment Committee, Advisory & Monitoring Committee of Integrated Water and Crop Information and Management System (IWCIMS) under the chairmanship of Advisor to MoJS to review IWCIMS Project

Shri J. Chandrashekhar Iyer, Member (D&R), CWC attended a combined meeting of members of IT Deployment Advisory Committee, IWCIMS advisory and Monitoring Committee and Central Project Management Unit (CPMU) which was held on 18.08.2022 under the chairmanship of Advisor to MoJS. The progress made in Proof of Concept (PoC) and SWIC setting up was informed to Committee members. Member (D&R), CWC expressed various suggestions regarding integrated Water and Crop Information and Management System (IWCIMS)

Second meeting of National Dam Safety Authority (NDSA)

The Second Meeting of National Dam Safety Authority (NDSA) was held under chairmanship of Shri J. Chandrashekhar Iyer, Chairman, NDSA and Member, D&R, CWC in hybrid mode at Sewa Bhawan, New Delhi on 25th Aug 2022. The meeting was attended by the Members of NDSA and Regional Directors of NDSA joined the meeting through online from their respective stations. During the meeting various issues pertaining to smooth functioning of NDSA office were discussed.

Meeting held under the Chairmanship of Hon'ble Minister (JS) regarding Breach of Karam Dam, Madhya Pradesh

A meeting was held under the Chairmanship of Hon'ble Minister (JS) regarding Breach of Karam Dam, Madhya Pradesh. Dr. R.K Gupta, Chairman, CWC and Shri J. Chandrashekhar Iyer, Member (D&R), CWC attended the meeting. Chief Engineer, Designs (NW&S), Shri Vivek Tripathi made a presentation about the incidence and steps taken by CWC and NDSA to mitigate the situations.

Details of Breach of Karam Dam, Madhya Pradesh

Karam Dam Medium Irrigation Project is an under construction project located on river Karam, a tributary of river Narmada, near village Kothida in Dharampuri Tehsil of Dhar district in Madhya Pradesh. It is a composite dam with length 590 m and height 52 m.

On 11.08.2022, during heavy rainfall in catchment area, piping (oozing out of water from dam body with soil particles) was observed in earthen section of dam. On 12.08.2022, slope failures in downstream part of earthen dam occurred, which could eventually lead to failure of dam and uncontrolled flooding in downstream villages. After getting the information officers of Central Water Commission (CWC) and National Dam Safety Authority (NDSA) reached dam site on 13.08.2022. Various alternatives were explored and finally safe release of water by forming a channel at right abutment of dam was decided upon. The adopted option worked well and on 14.08.2022, impounded water was released without any loss of life.

Fig.1- Downstream Slope Failure

Meeting to discuss issues of Uttarakhand HE Projects and influence of DPR of lower Arun HEP Nepal on proposed Saptkosi high Dam in River Koshi

Dr. R K Gupta, Chairman, CWC, Shri J. Chandrashekhar Iyer (Member, D&R) and Shri S. K. Sibal, CE, Designs (N&W) attended the meeting taken by Hon'ble Minister of Jal Shakti in his Chamber at Shram Shakti Bhawan on 24.08.2022 along with NMCG to discuss issues of Uttarakhand HE Projects and influence of DPR of lower Arun HEP Nepal on proposed Saptkosi high Dam in River Koshi.

CWC made a presentation on various hydro-electric power projects in Ganga basin in Uttarakhand and Views of CWC on implementation of 10 HEPS were conveyed.

The 38th Ministerial level Joint Rivers Commission of India and Bangladesh

The 38th Meeting of Ministerial level Joint Rivers Commission of India and Bangladesh was held in New Delhi on 25.08.2022. The Indian delegation was led by Shri Gajendra Singh Shekhawat, Union Minister for Jal Shakti. The Bangladesh delegation was led by Mr. Zaheed Farooque, State Minister for Water Resources. Mr. AKM Enamul Hoque Shameem, Deputy Minister for Water Resources was also part of the Bangladesh delegation. The meeting assumes significance as it was held after a long gap of 12 years, though the technical interactions under the framework of JRC have continued in the intervening period. The meeting was preceded by Water Resources Secretary-level interaction on 23.08.2022.

The discussions during this bilateral meeting were held on a number of ongoing bilateral issues of mutual interest including river water sharing of common rivers, sharing of flood data, addressing river pollution, conducting joint studies on sedimentation management, river bank protection works etc. Both sides finalized the text of MoU on Interim Water Sharing of Kushiyara river. Both sides also welcomed finalization of the design and location of water intake point on the Feni River to meet the drinking water needs of Sabroom town in Tripura as per the October 2019 India -Bangladesh MoU on this subject.

One of the important areas of cooperation, where India has been assisting Bangladesh, is sharing of real time flood data. India has recently extended the period of flood data sharing beyond 15th October to help Bangladesh address unforeseen flood events.

India and Bangladesh share 54 rivers, of which 7 rivers have been identified earlier for developing framework of water sharing agreements on priority. During the meeting, it has been agreed to widen this area of ongoing cooperation by including 8 more rivers for data exchange. The matter will be further discussed at the Technical Level Committee of JRC.

The Joint Rivers Commission of India and Bangladesh was constituted in the year 1972 as a bilateral mechanism to address issues of mutual interest on common / border / transboundary rivers.

Meeting to resolve pending inter-State issues among States of Bihar, Jharkhand and UP on the Indrapuri Reservoir Project on Sone River.

An Inter-State meeting to resolve the issues of Indrapuri Reservoir Scheme, Bihar was held under the chairmanship of Sh. R.K. Gupta, Chairman, CWC on 31.08.2022. The meeting was attended by representatives from Govt of Bihar, Govt of Jharkhand, and Govt of Uttar Pradesh along with senior officers from CWC.

During the meeting, it was highlighted that PPR of Indrapuri Reservoir Project has been prepared with FRL and MWL of RL 169 m and RL 171 m respectively, as decided in inter-State meeting in respect of the project held in the year 2016. After detailed discussion, Chairman, CWC advised the Party States following course of action to move further in the direction of resolving the issue:

i. Govt. of Bihar may get model study for backwater / afflux done and share it with Govt. of Uttar Pradesh.

ii. Govt. of Bihar may prepare proposal for mechanism of compensation due to submergence as per latest available Guidelines and share with Govt. of Uttar Pradesh.

iii. Joint Technical Team (JTT) of Bihar and Jharkhand constituted earlier may meet again to move further in the direction of resolving the issue of sharing of 7.75 MAF of water allocated to erstwhile Bihar and achieve consensus in a time bound manner. First meeting of JTT members was suggested to be conducted as soon as possible and not later than in third week of September 2022 at Ranchi.

2nd visit to Vishakhapatnam for organization of 25th International Congress and 75th IEC Meeting of ICID

The 25th International Congress and 75th IEC Meeting of ICID are proposed to be held at Vishakhapatnam (A.P.) in November, 2023. INCID is hosting the 25th International ICID Congress and 75th IEC and these events are being organized with the collaborative efforts of INCID, State Govt of Andhra Pradesh, ICID, and Acharya N. G. Ranga Agricultural University, Guntur (A.P.).

In this regard, Shri Kushvinder Vohra, Member (WP&P), CWC & Ex-officio Additional Secretary to GoI and other senior officials of CWC/INCID and Dr K. Yella Reddy, Hon. Vice President ICID had made the first visit to Vishakhapatnam during 8-10 March, 2022 to see / assess the facilities available at various venues in Vizag to manage different events. After recce of available facilities and detailed discussions on the pros and cons of the different alternatives available for the event, Hotel Radisson Blue Resort was found to be the most suitable venue for holding the ICID events.

The 2nd visit to Vishakhapatnam was undertaken during 9-11th August, 2022 by Member (WP&P), CWC and a team of Officials from INCID, CWC, WAPCOS, State Govt of Andhra Pradesh, ICID and Acharya N. G. Ranga Agricultural University, Guntur (A.P.) for discussions regarding programme, modalities, venue, facilities, logistics, and other details, along with the visit to the nearby places/irrigation structures from the point of view of study tour etc. for the delegates during/after the event.

During the 1st day of the visit, ICID briefed the team about the typical schedule of the ICID Congress and IEC meeting along with the other Events held. ICID also gave a brief overview of the day-wise tentative schedule for the 25th Congress and 75th IEC, along with the estimated attendance for each event, based on the precedence.

On the 2nd day of the visit, the team visited Borra caves, Thatipudi Reservoir (Vijayanagaram) and Araku valley from the point of view of study tour etc. for the delegates during/after the event. The team discussed the various options for technical/study tour and it was agreed that further discussion for organizing these tours may be taken up with AP Tourism.

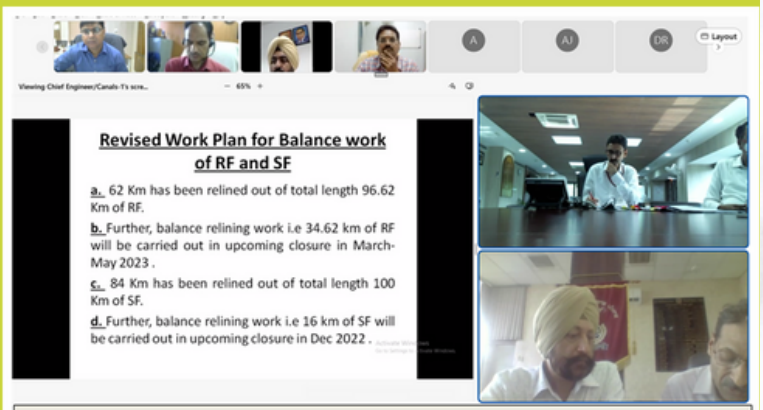
On the 3rd day of the visit, the team visited the Radisson Blue Resort and assessed the availability of space and facilities at the Resort, in view of the tentative schedule and parallel events outlined by ICID. Further, various works were assigned to the various Dept/Agencies including INCID, WAPCOS, WRD - AP Govt, & ICID.

Expert Project Review Committee for Relining of Rajasthan Sirhind Feeder

An Expert Project Review Committee under Member (WP&P), CWC has been constituted to guide/oversee the overall implementation of the project "Relining of Sirhind Feeder from RD 119700 to 447927ft and Relining of Rajasthan Feeder from RD 179000 to 496000ft" in Punjab till completion and to examine the progress of the work from all angles.

The 4th meeting of Expert Project Review Committee was held on 01-08-2022 under Chairmanship of Sh. Kushvinder Vohra, Member (WP&P), CWC & Ex-officio Additional Secretary to GoI. The meeting was attended by members of the Committee viz. officials from Government of Punjab, Government of Rajasthan, CWC and D/o WR, RD &GR.

During the meeting a presentation was made by Government of Punjab on status of works and proposed plan of works. Officials from Govt. of Punjab highlighted need for extension of both the projects on account of unsuccessful tenders in initial years, Closure period of 60 days allowed by Rajasthan Govt. instead of 70 days for Rajasthan Feeder Project and other reasons. Further, it was informed that the RCE of RF shall be approx. Rs 1833.52 Cr instead of Rs 1305.267 Cr and that of SF shall be approx. Rs 821.51 Cr instead of Rs 671.478 Cr.



Presentation by officials from Govt. of Rajasthan during the meeting

The Member (WP&P) directed that the comprehensive RCE for both the projects along with proper justification for increased cost in required proforma as per latest guidelines of RCE of CWC, shall be submitted to Project Appraisal Organisation, CWC through IBO, CWC, Chandigarh within 10 days. Also, a Central team comprising CWC officials will conduct a site visit to ascertain necessity of additional structures/ bridges proposed. Further, Member (WP&P) directed that WRD, Govt. of Punjab shall write for early audit report of expenditure incurred during 2022-2023 (till June 2022) in respect of RF and get response from them in order to process the CA proposal 2022-23 of RF which is already under consideration in Ministry.

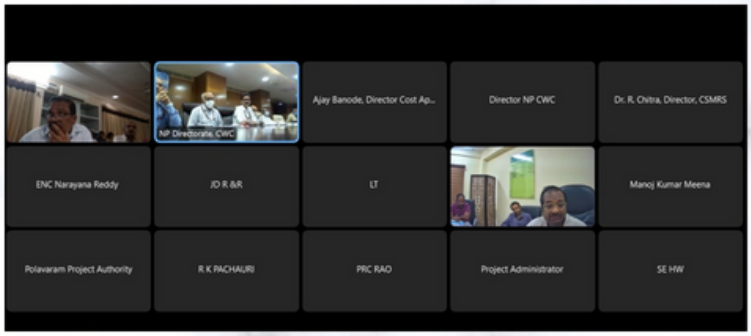
Meeting to review progress on assessment of benefits and other related matters of Polavaram Irrigation Project at +41.15m

Polavaram Irrigation Project (National Project) is being executed on River Godavari near Ramayyapeta village of Polavaram Mandal, West Godavari District, Andhra Pradesh. This multipurpose major project envisages construction of an earth cum rockfill (ECRF) dam along with saddle earth dams, a spillway, irrigation tunnels, navigation tunnel and channel and two main canals on both flanks to create ultimate irrigation potential of 4.36 Lakh Ha. The project also envisages generation of 960 MW of hydropower, drinking water supply to 540 villages and diversion of 84.7 thousand million cubic feet (TMC) of water (including losses) to Krishna basin.

Physical & Financial Progress

- Total Progress of the Project (including Works, LA and R&R) - 47.94 % (as on September 2022)
- Total expenditure incurred on the Project since inception – Rs. 20,690.00 Cr. (as on 30/09/2022)
- Total amount reimbursed by GoI to GoAP - Rs. 13045.148 Cr. (under NP) upto September 2022.

A meeting under the Chairmanship of Sh. Kushvinder Vohra, Member (WP&P), CWC & Ex-officio Additional Secretary to



GoI, was held on 08.08.2022 to discuss the progress on assessment of the benefits and other related matters of Polavaram Irrigation Project (PIP) at +41.15 m.

During the aforesaid meeting, discussions were held about finalization of revised working table duly accounting for impact of unapproved projects and to ascertain whether some benefits can be achieved as envisaged earlier. Subsequently, issues of submergence of impounding area during recent monsoon was also discussed. Member (WP&P), CWC directed concerned CWC Dte. to examine the revised working table at the earliest. Further, all concerned were directed for early action in this regard.

Meeting regarding integration of Parbati Kalisindh Chambal Link and Eastern Rajasthan Canal Project

The then Ministry of Irrigation (now Ministry of Jal Shakti) formulated National Perspective Plan (NPP) for water resources development in August, 1980 through inter basin water transfer links from water surplus basin to water deficit basin. Under the NPP, the National Water Development Agency (NWDA) has identified 30 links (16 under Peninsular Component and 14 under Himalayan Component) for preparation of Feasibility Reports (FRs). One of these identified link Parbati-Kalisindh-Chambal (PKC) link is being modified by integration with Eastern Rajasthan Canal Project.

A meeting was held on 03.08.2022 under the chairmanship of Secretary, Department of Water Resources, RD & GR regarding integration of PKC Link and Eastern Rajasthan Canal Project, Rajasthan. The meeting was attended by officials from NWDA and CWC. During the meeting following decisions were taken:

1. NWDA will share the Study Report of the modified PKC link project with the Govt. of Rajasthan and MP for their observations.
2. CWC shall examine the availability of water at CWC Dholpur site in Chambal basin, as claimed by the Govt. of Rajasthan. In this regard, Rajasthan will depute a team of officers dealing with the matter to the CWC headquarters for an expeditious examination and resolution of the issue related to the water availability.
3. Alternate options shall be explored by CWC / NWDA in consultation with the States concerned to arrive at an effective and optimal resolution of the issue, mutually beneficial and acceptable to both the States.
4. The concerned States need to enhance their engagements and interactions, which would effectively help create a conducive ecosystem for both the States to move towards an amicable resolution of the issues.

Further, another meeting was held on 22.08.2022 under the chairmanship of DG, NWDA, in this regard. During the meeting, following decisions were taken to resolve the matter between Rajasthan and M.P.:

1. Government of Rajasthan may submit the data and assessment of water availability in Chambal basin to know whether ecosystem and water availability during non-monsoon period affected or not in Chambal River as per meeting held on 3rd August, 2022.
2. Government of Madhya Pradesh may submit the details of likely impact on the state on account of higher diversion of water in ERCP at 50 percent availability.

CWC may review the hydrology at diversion points in light of the discussions held during the meeting and give a note on the surplus water availability in Chambal basin as raised by Government of Rajasthan.

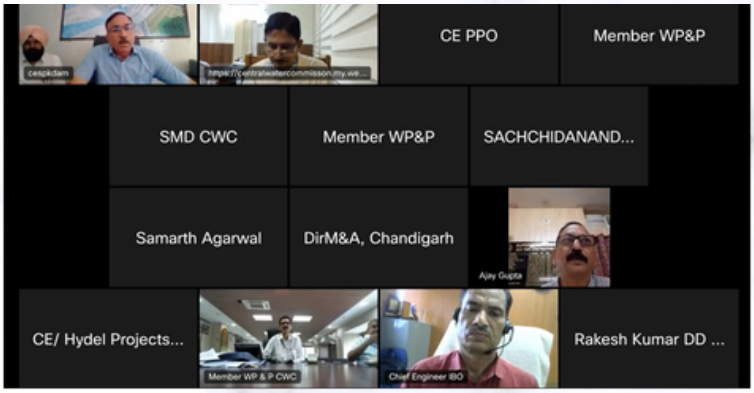
Review the progress of Shapurkandi Dam

The Shahpurkandi Dam Project (National Project) is on river Ravi, 11 Km downstream of Ranjit Sagar Dam and 8 Km upstream of Madhopur Headworks. It envisages construction of 55.5 m high concrete dam, 7.70 km long Hydel Channel along the left bank of river, 2 nos. head regulators, one to feed Shahpurkandi Hydel Channel (Left side) in Punjab and the other to feed Ravi Canal (right side) in J&K.

Physical & Financial Progress of Project

- Main Dam in Excavation- 94.85 % & Concreting- 76.61 %,
- Power House- 86.76% excavation
- Total expenditure - Rs 1675.88 Cr (since inception) upto August 2022

SKDP Authority has requested for extension of project completion timeline by 6 months i.e from June, 2022 to Dec, 2022. In this regard, 8th meeting of Monitoring Committee under Chairmanship of Sh. Kushvinder Vohra, Member (WP&P), CWC & Ex-officio Additional Secretary to GoI, was held on 01.08.2022, wherein representatives of Project Authority (SKDP), Jal Shakti Department (Govt of J&K), Water Resources Department (Govt of Punjab), Punjab State Power Development Corporation Limited (PSPDCL) & Central Electricity Authority participated.



During the meeting, various issues like arbitration by Contractual Agency, wild-life clearance and revised cost proposal of Shahpurkandi Dam Project was discussed. Further, Member (WP&P), CWC directed that all works of project required for impounding of reservoir 1st time during monsoon season of 2023 should be completed. Further, based on the justifications provided to the Committee members, the Committee with consensus decided to recommend for grant of 6 months' extension for the implementation of the project ie. till December 2022 as per Para 10 of the Cabinet Note of SKDP.

Shri Kushvinder Vohra, Member (WP&P Wing), CWC nominated as President of Indian Water Resources Society (IWRS)

Shri Kushvinder Vohra, Member (Water Planning & Projects), Central Water Commission & Ex-Officio Additional Secretary to Government of India, was nominated as President of Indian Water Resources Society (IWRS) for period of 2023-2025, during its 37th Annual General Body meeting (AGM) and EC meeting of IWRS held on 13-08-2022 at New Delhi.

IWRS is a society having headquarter at Roorkee (Department of Water Resources Development and Management, IIT, Roorkee) and its Executive office at Delhi. (Sewa Bhawan, Central Water Commission). Presently, IWRS have 7927 life members and 479 individuals are having life fellowship. Further, 31 institutions have been granted life membership of IWRS as well.

IWRS have been established in 1980s with following aim and objective:

- The advancement of research, planning development, management, education and training as well as establishment of a common meeting group for physical, biological and social scientists, engineers and other persons, concerned with water resources.

- To undertake research, planning, development, education and training in the field of conservation, management and optimal use of water.

- To provide a focal point for the collection, organization and dissemination of ideas and information relating to the broad spectrum of water problems.

- To honor individuals for their pioneering and meritorious contribution in the field of water resources, by electing them as Honorary Life Members or inviting them to be the Patrons of the Society.

- To deliberate, decide and express its views on various socio-economic,-political and policy issues regarding water resources development, utilization, conservation and management and work towards resolving them for the benefit of society.

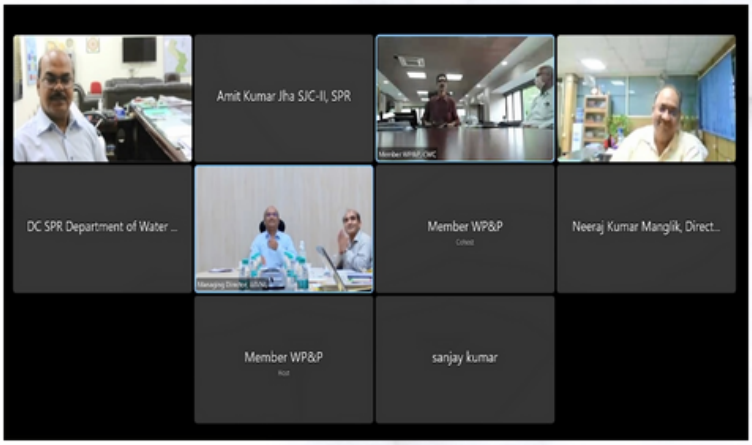
IWRS also consist of Local Centers and Student Chapters. The Local Centers/Students chapters are established at places having at least 50 life members of the Society. Presently, there are 41 Local Centers spread all across the country and 690 students under Students chapter.

The Executive Committee (EC) headed by President is responsible for overall management of the Society. The President is selected from personals with outstanding contribution to Water Resources Development, Management and Education.

Meeting review implementation of Lakhwar Multi-purpose Project

Lakhwar Multipurpose Project envisages construction of a 204 m high concrete dam across river Yamuna in Uttarakhand with live storage of 330.66 MCM. The total installed capacity of the project is 300 MW (3X100MW), would provide irrigation benefit to 33,780 ha and 78.83 MCM of drinking and industrial water supply. The project also envisages construction of Katapather Barrage at 13.6 Km downstream of Lakhwar dam. The project is to be executed by Uttarakhand Jal Vidyut Nigam Limited (UJVNL). Lakhwar Multipurpose Project was accepted in 141st TAC meeting held on 11.02.2019 at Revised Cost of Rs. 5747.17 Crores at July 2018 (PL). Funding of Lakhwar MPP has also been approved by Cabinet Committee on Economic Affair (CCEA) in its meeting held on 15.12.2021.

A Meeting under the Chairmanship of Sh. Kushvinder Vohra, Member (WP&P), CWC & Ex-Officio Additional Secretary to GoI, regarding audited statement of already incurred expenditure for processing of Central Assistance (CA) for the implementation of Lakhwar Multipurpose Project was held on 16th August, 2022.



During the meeting, these issues were discussed for further working out the eligible balance cost for central assistance. The issue of reimbursement against the expenditure incurred on works, establishment & others of charges in respect of Lakhwar Multipurpose project was also discussed. Regarding reimbursement on expenditure on establishment, admin & other charges and also requesting beneficiary states to contribute in the establishment cost & other cost of water component, Member (WP&P) CWC stated that the matter may be raised with UYRB.

Tour to Vadodara-Kevadia-Daman-Mumbai w.r.t. visit of standing committee on water resources

The Parliamentary Standing Committee on Water Resources undertook an on-the-spot Study Visit to Ahmedabad, Kevadia, Vadodara, Daman and Mumbai from 20th August to 26th August, 2022 in connection with the examination of implementation of various programmes and schemes of the Ministry of Jal Shakti.

MTBO, Central Water Commission, Gandhinagar was made a nodal department for the Study-visit programme of the Committee on Water Resources to Kevadia (Ekta Nagar) and Vadodara from 21st August to 23rd August, 2022. MTBO, Central Water Commission, Gandhinagar was entrusted for all administrative and technical arrangements including boarding, lodging, transport etc. for the committee.

During the study visit of the committee to Kevadia (Ekta Nagar) and Vadodara from 21st August to 23rd August, 2022, meetings/discussion/presentations were held over following issues/topics:-

- Sardar Sarovar (Narmada) Project.
- Implementation of Accelerated Irrigation Benefits Programme (AIBP), Water Sector Reform Activities, Management of Irrigation System by Water User Agencies in the State of Gujarat.
- Encroachment of water bodies and implementation of PMKSY-RRR scheme in Gujarat

During the said Study Visit, the Chairman, CWC, Member (WP&P), CWC, Commissioner (SPR), DoWR, RD&GR, Chief Engineer (PMO), CWC, Chief Engineer (DSO), CWC, Chief Engineer (MTBO), CWC and other officers from MTBO, CWC, Gandhinagar were present and actively participated/involved in all technical and administrative matters.

It is a feeling of pride and joy to say this that the study visit of the committee to Kevadia (Ekta Nagar) and Vadodara from 21st August to 23rd August, 2022 was highly successful and in this regard Lok Sabha secretariat had also sent an Appreciation Letter to MTBO, CWC, Gandhinagar.

Weekly report on Dam incidents to the office of Hon'ble Minister of Jal Shakti

The weekly situational report on dams is being compiled and submitted to the office of Hon'ble Ministry of Jal Shakti on weekly basis. During the month of August, seepage of water occurred in the Karam Dam, District Dhar of Madhya Pradesh. On 11th August, 2022, it was reported that due to heavy rainfall in catchment area, water had impounded up to RL 296m and piping was observed at RD 430 m resulting in slope failure. Member (Disaster and Resilience), NDSA along with other officers of the CWC immediately rushed to the Project Site for the immediate action so as to avoid the disaster downstream. A detailed report on this was submitted to DoWR, RD & GR, MoJS by NDSA. Project Authorities successfully completed the procedure for cut to empty the reservoir and since then slopes are stable. Subsequently, a team of National Institute of Disaster Management (NIDM) visited the Project Site to oversee the Disaster Management practices being adopted at site. CWC officers were part of the NIDM visiting team. The report is under preparation.

Weekly Report on the Inspection of Dams

The weekly report on dam inspections carried out state wise and constitution/establishment of State Committee on Dam Safety (SCDS) & State Dam Safety organization (SDSO) is being submitted to PMO through DoWR, RD & GR, MoJS on every Friday. As on 14.10.2022, it has been reported by the states that inspection of 3874 dams out of 5334 Large Dams has been carried out in the year 2022.

As per the provisions of the Dam Safety Act (DSA), 2021, the State Govt has to constitute State Committee on Dam Safety (SCDS) and State Dam Safety organization (SDSO). As on 14.10.2022, 28 States/UTs have constituted SCDS and 25 States/UTs have established SDSO.

Meeting regarding establishment of Center of Excellence under India-Denmark Cooperation

Under India-Denmark collaboration following actions points have been identified:

(i) Establish a Centre of Excellence for Smart Water Resource Management &
(ii) Establish a lab for clean rivers in Varanasi on the lines of Smart City Lab in Panaji.

Series of meetings & discussions have been held between DoWR, RD&GR, CWC and Denmark Side during Dec'2021 to August'2022 in order to develop a common approach for preparing the 2 proposals.

In this regard, a hybrid meeting was held under the chairmanship of Sh. Kushvinder Vohra, Member (WP&P) & Ex-Officio Addition Secretary, GoI, on 31-08-22 to discuss matters regarding establishment of Center of Excellence for Smart Water Resource Management (SWaRM). The meeting was attended by officials from CWC and representatives of Denmark Embassy and Govt. of Denmark. The discussions primarily focused on resources to be shared under India-Denmark collaboration and the fields in which Denmark Govt can provide support to CWC. Modeling and capacity building in areas such as Flood Forecasting, Morphology of rivers, Dam Break Analysis, GLOF (Glacial Lake Outbrust Flood), Integrated Water River Management, Flood & Drought management and others, were deliberated upon wherein both side could cooperate.

After detailed discussions, two sides agreed to nominate one principal nodal officer for more regular communication, identifying areas of cooperation and firming up of road map ahead.

Visit of Central team to Pathanamthita and Alappuzha District, Kerala under JSA: CTR 2022

Shri Rajeev Kumar Tank, Deputy Director, Central Water Commission, M/o Jal Shakti (Technical Officer) along with Dr. Sanjay Kumar, Director, Department of Financial Services, M/o Finance (Central Nodal Officer) visited Pathanamthitha District, Kerala from 22nd August 2022 to 24th August 2022 and Alappuzha District, Kerala from 25th August 2022 to 27th August 2022 to observe the progress of ongoing & completed works in the district related to JSA-CTR and also to interact with district authorities for Jal Shakti Abhiyan 2022.

The team visited roof top rain water harvesting structure with dug well recharge site at Govt HSS Omallor, Jal Shakti Kendra, Stream renovation using coir geotextile in Chenneerkkara Panchayat, Farm pond in Chenneerkkara Panchayat, Amrit Sarovar Thelliyoor Chira in Ezhumattoor Panchayat, Tribal Areas who are using spring water, Stone pitched contour bund in Athikkayam Village, proposed site for Amrit sarovar at Ranni Angadi Panchayath etc in Pathanamthitha District.

(a) Stream renovation by coir geotextile, (b)Farm Pond, (c)Amrit Sarovar, (d)Gravity based natural purification system, (e)Rain water harvesting structure, (f)Amrit Sarovar

The team visited Gravity-based natural water purification system at Kannadi, Kuttanad Taluk, Jal Shakti Kendra, Rainwater Harvesting Structure in St. Joseph's Higher Secondary School, Pulinkunnu, Amrit Sarovar (Velliyakulam Pond) in Thanneermukkam Panchayath, Amrit Sarovar (Perumkulam Pond) at Thanneermukkam Panchayath, Intensive Afforestation at SMSJHS, Thycattussery, Renovated Pond at Thanakulam etc. in Alappuzha District.

Interim meeting of Supervisory committee on Mulla Periyar Dam

In view of excessive rainfall in the States of Kerala and Tamil Nadu, concerns were raised by State of Kerala on the inflows in the Mullaperiyar reservoir. Accordingly an interim meeting of Supervisory Committee on Mulla Periyar Dam was held under the chairmanship of Chairman, Supervisory Committee and Chief Engineer, DSO, CWC in hybrid mode at Sewa Bhawan, New Delhi on 18th Aug 2022. The meeting was attended by all the members of Supervisory Committee along with officials from both the States i.e. Govt. of Tamil Nadu and Govt. of Kerala. In the meeting, follow up action on decisions taken in 15th Meeting of Supervisory Committee were reviewed/discussed and the timelines were set on various agenda points.

A group of CWC officers led by Shri S.K. Sharma, Director, Embankment & BCD (E&NE), Designs visited the proposed Madhura Irrigation Project located in Cachar District of Assam State from 23.08.2022 to 25.08.2022.

During the visit, CWC officers along with GSI and NEID-I Officers visited three proposed dam/barrage axis. Team also explored the command area for canal layout and alignment. Necessary observations on the three proposed axis were submitted by CWC officers. NEID-I officers were suggested to mark out the proposed 13000 Ha command area and carry out necessary topographical, command area survey to finalize the type and height of structure.

Flood Situation in the country -August 2022

Regular Flood Forecasting Activity commenced on 01.05.2022 in Brahmaputra and Barak and Jhelum basins. During the period from 1st May to 31st August 2022, 6569 flood forecasts (4070 Level and 2499 Inflow) were issued, out of which 6124 (3847 Level and 2277 Inflow) forecasts were within limit of accuracy with a percentage accuracy of 93.22%. 175 nos. of Red Bulletin (for Extreme flood situation) and 106 nos. of Orange Bulletin (for severe flood situation) were issued in the month of August from Central Flood Control Room.

Summary of Flood Situation during 01.05.2022 to 31.08.2022

Extreme Flood Situation

Eight FF station observed Extreme Flood Situation.

Sl. No.	State	District	River	Station	Period	
					From	To
1.	Assam	Nagaon	Kopili	Kampur	15/05/2022 16/06/2022	21/05/2022 22/06/2022
2.	Bihar	Kishanganj	Mahananda	Taibpur	29/06/2022	29/06/2022
3.		Supaul	Kosi	Basua	02/08/2022	02/08/2022
4.	Telangana	Bhupalpally	Godavari	Kaleswaram	14/07/2022	15/07/2022
5.		Kumarambheem	Wardha	Sirpur(T)	14/07/2022	17/07/2022
6.	Andhra Pradesh	Alluri Sitharama raju	Sabri	Chinturu	15/07/2022	19/07/2022
7.	Rajasthan	Karauli	Chambal	Manderial	25/08/2022	25/08/2022
8.		Dholpur	Chambal	Dholpur	25/08/2022	26/08/2022

52 flood monitoring station observed Extreme flood situation.

Severe Flood Situation for FF Stations

87 FF Stations observed Severe Flood Situation in the States of Assam, Bihar, Jammu & Kashmir, West Bengal, Tamilnadu, Andhra Pradesh, Telangana, Chhattisgarh, Odisha, Uttar Pradesh, Maharashtra, Jharkhand, Madhya Pradesh, Uttarakhand, Rajasthan, NCT Delhi and Gujarat.

Above Normal Flood Situation

39 FF Stations in Assam, Bihar, Uttar Pradesh, Tripura, West Bengal, Uttarakhand, Maharashtra, Andhra Pradesh, Tamilnadu, Kerala, Odisha, Telangana and Rajasthan observed Above Normal Flood Situation.

Reservoirs having Inflow above threshold limit

77 reservoir received inflows above their threshold limit in Andhra Pradesh, Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamilnadu, Telangana, Jharkhand, Kerala, West Bengal and Uttar Pradesh.

12th Meeting of TARC for the work "Consultancy Services of Physical based Mathematical Modelling for Estimation of Sediment Rate and Sediment Transport in Seven (7) River Basins"

12th Meeting of TARC for the work "Consultancy Services of Physical based Mathematical Modelling for Estimation of Sediment Rate and Sediment Transport in Seven (7) River Basins" was held on 30.08.2022 at CWC (HQ), New Delhi under the chairmanship of Chief Engineer, HSO, CWC. The objectives of the study were to establish a methodology for modeling of sediment generation from basin catchments, its transportation mechanism through channels/rivers and its retention/deposition by flood water retention structures like reservoirs, as well as morphological behavior of river reaches. In the meeting, Compliances of the Comments on the Draft Final reports submitted by the consultant were discussed.

Meeting to discuss matter related to Polavaram Irrigation Project

An internal review meeting was held on 11.08.2022, which was chaired by Secretary, DOWR, RD&GR. Dr. R.K Gupta, Chairman CWC and Shri J. Chandrashekhar Iyer, Member(D&R),CWC attended the meeting. During review, various issues were discussed pertaining to Polavaram Irrigation Project.

Meetings of Sub-Committee for framing the draft Rules/Regulations under Section 54 of Dam Safety Act, 2021

Fourth meeting of the Sub-Committee was held on 18.08.2022 under the chairmanship of Chief Engineer (DSO), CWC & Member (Policy & Research), NDSA, in CWC wherein discussion regarding the regulations to be drafted as per the decision taken in the first meeting of NCDS held on 02.08.2022 was made.

The fifth meeting of the Sub-Committee was held on 29.08.2022 under the chairmanship of Chief Engineer (DSO), CWC & Member (Policy & Research), NDSA in CWC wherein suggestions regarding the changes/ modifications in respective draft regulations were discussed and finalized.

Work related to Technical Evaluation and critical examination of web based tool Seismic Hazard Assessment Information System (SHAISYS) being developed by IIT Roorkee and CWPRS Pune under DRIP.

A meeting was taken by Shri J. Chandrashekhar Iyer, Member (D&R), CWC on 4th of August 2022 at 1100 Hrs in the office of Member (D&R), CWC, New Delhi with IIT Roorkee team to review the progress and discuss the way ahead.

Meeting for Finalization of the proposal for establishment of International Centre for Excellence for Dams (ICID) at IIT Roorkee

The meeting was organized on 03.08.2022 at CWC, New Delhi under the chairmanship of Dr. R.K. Gupta, Chairman CWC. Shri J. Chandrashekhar Iyer, Member(D&R) also attended the meeting to discuss the proposal of establishment of International Centre of Excellence for Dams (ICID) at IIT Roorkee with Dr. N.K. Goel, Professor, Department of Hydrology, Coordinator, M. Tech. program on Dam Safety and Rehabilitation and his team.

MediGadda Barrage, Telengana

Interaction with IIT Roorkee Civil Engineering Department and Earthquake Engineering Faculty related to Dam Safety at Roorkee

Dr R. K. Gupta, Chairman, Central Water Commission (CWC) and Mr J. Chandrashekhar Iyer, Member(D&R), CWC, visited IIT Roorkee on 29th August 2022. They visited the Seismological Observatory of the Earthquake Engineering Department and further, Member (D&R) visited the Hydraulics Laboratory. They interacted with 1st and 2nd-year students of Dam Safety & Rehabilitation course at IIT. During interactions, Chairman CWC highlighted the need for Dam Safety and pressed upon the importance of the course in the present context. Member (D&R), who also holds the post of Chairman of the National Dam Safety Authority, also emphasized the requirement for Dam safety experts in India and encouraged students to work on the various aspects of Dam safety and related studies.

Financial Progress of Schemes as on 31.08.2022

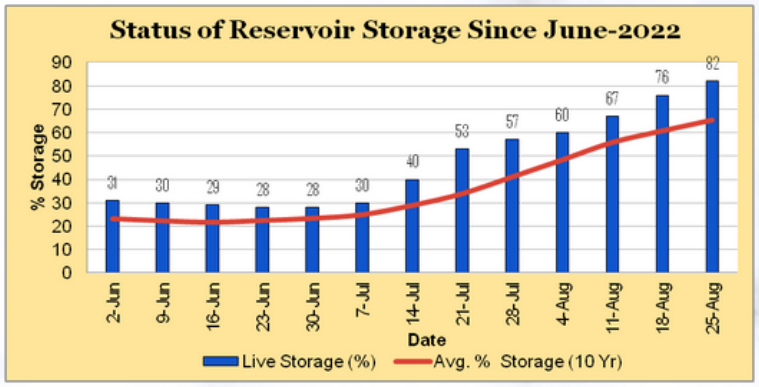
(Amount rounded-off in ₹ Crore & Specific to CWC's component)

Sl. No.	Scheme/Component Name	BE 2022-23	Expenditure	Expenditure (in %)
1.	Development of Water Resources information System (DWRIS)	185.00	53.149	28.73%
2.	Investigation of Water Resources Development Schemes (IWRD)	08.000	5.6985	71.23%
3.	Flood Management & Border Areas Programme (FMBAP)	23.203	3.3687	14.52%
4.	Direction & Administration(D&A)-Major Works and OE(SAP)	11.15	0.132	1.18%
5.	National Hydrology Project	44.37 (RE)	5.9192	13.34%

Reservoir Monitoring

CWC is monitoring live storage status of 143 reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. Out of these reservoirs, 46 reservoirs have hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of these 143 reservoirs is 177.464 BCM which is about 68.83% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country.

As per reservoir storage bulletin dated 25.08.2022, the total live storage available in these reservoirs is 144.969 BCM which is 82% of total live storage capacity of these reservoirs. However, last year the total live storage available in these reservoirs for the corresponding period was 112.694 BCM and the average of last 10 years live storage was 115.811 BCM. Thus, the live storage available in 143 reservoirs as per the bulletin dated 25.08.2022 is 129% of the live storage of corresponding period of last year and 125% of storage of average of last ten years.



Water Sector-News

- 6k dead, Rs. 60K-cr washed away in rains : Govt (Thye Morning Standard, 01.08.2022)
- India, Israel set to strengthen ties in water sector, 17th expo opened (The Pioneer, 05.08.2022)
- 4th National Water Awards Launched on Rashtriya Puraskar Portal (Orissadiary.com, 06.08.2022)
- Jal Jeevan Mission : A Maharashtra village holds a lesson for the rest of India (The Indian Express, 08.08.2022)
- Odisha on tenterhooks over threats of Mahanadi flood (Millennium Post, 14.08.2022)
- North India may face irreversible decline in freshwater storage by 2060 : Study (Millennium Post, 17.08.2022)
- India needs robust flood management policy (Business Line, 18.08.2022)
- 75 eco-hubs to come up on banks of Ganga this year (The Times of India, 22.08.2022)
- India, B'desh make progress on sharing of river waters (The Tribune, 27.08.2022)
- BBMB inks pact with Himachal for 42 MW Baggi Hydro Project (Millennium Post, 30.08.2022)

Data Corner- State-wise Decadal Water Level Fluctuation with Mean [November (2011 to 2020] and November 2021

S. No	Name of State	No. of wells Analysed	Rise						Fall						Rise		Fall		Wells showing no change	
			0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m							
			No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andhra Pradesh	706	419	59.3	87	12.3	50	7.1	124	17.6	14	2.0	11	1.6	556	79	149	21	1	0
2	Arunachal Pradesh	10	2	20.0	0	0.0	0	0.0	8	80.0	0	0.0	0	0.0	2	20	8	80	0	0
3	Assam	167	71	42.5	3	1.8	1	0.6	83	49.7	6	3.6	3	1.8	75	45	92	55	0	0
4	Bihar	593	395	66.6	78	13.2	11	1.9	102	17.2	7	1.2	0	0.0	484	82	109	18	0	0
5	Chandigarh	12	4	33.3	2	16.7	1	8.3	3	25.0	1	8.3	1	8.3	7	58	5	42	0	0
6	Chhattisgarh	687	290	42.2	66	9.6	30	4.4	23	33.5	45	6.6	26	3.8	386	56	301	44	0	0
7	Dadra & Nagar Haveli	17	15	88.2	0	0.0	0	0.0	2	11.8	0	0.0	0	0.0	15	88	2	12	0	0
8	Daman & Diu	5	2	40.0	1	20.0	1	20.0	1	20.0	0	0.0	0	0.0	4	80	1	20	0	0
9	Delhi	86	29	33.7	21	24.4	15	17.4	12	14.0	3	3.5	6	7.0	65	76	21	24	0	0
10	Goa	68	9	13.2	0	0.0	1	1.5	52	76.5	5	7.4	1	1.5	10	15	58	85	0	0
11	Gujarat	746	278	37.3	122	16.4	112	15.0	140	18.8	50	6.7	44	5.9	512	69	234	31	0	0
12	Haryana	183	66	36.1	6	3.3	8	4.4	65	35.5	19	10.4	19	10.4	80	44	103	56	0	0
13	Himachal Pradesh	86	40	46.5	5	5.8	2	2.3	36	41.9	1	1.2	1	1.2	47	55	38	44	1	1
14	Jammu & Kashmir	213	100	46.9	4	1.9	3	1.4	99	46.5	4	1.9	3	1.4	107	50	106	50	0	0
15	Jharkhand	198	132	66.7	17	8.6	1	0.5	45	22.7	3	1.5	0	0.0	150	76	48	24	0	0
16	Karnataka	1290	709	55.0	265	20.5	123	9.5	159	12.3	20	1.6	14	1.1	1097	85	193	15	0	0
17	Kerala	1304	868	66.6	145	11.1	39	3.0	227	17.4	17	1.3	8	0.6	1052	81	252	19	0	0
18	Madhya Pradesh	1297	590	45.5	164	12.6	97	7.5	345	26.6	70	5.4	31	2.4	851	66	446	34	0	0
19	Maharashtra	1727	856	49.6	321	18.6	161	9.3	317	18.4	47	2.7	24	1.4	1338	77	388	22	1	0
20	Meghalaya	24	10	41.7	1	4.2	0	0.0	13	54.2	0	0.0	0	0.0	11	46	13	54	0	0
21	Nagaland	2	1	50.0	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	1	50	1	50	0	0
22	Odhisha	1245	650	52.2	32	2.6	2	0.2	517	41.5	35	2.8	8	0.6	684	55	560	45	1	0
23	Pondicherry	6	3	50.0	1	16.7	0	0.0	2	33.3	0	0.0	0	0.0	4	67	2	33	0	0
24	Punjab	176	46	26.1	7	4.0	1	0.6	74	42.0	38	21.6	10	5.7	54	31	122	69	0	0
25	Rajasthan	918	248	27.0	80	8.7	44	4.8	290	31.6	114	12.4	141	15.4	372	41	545	59	1	0
26	Tamil Nadu	538	201	37.4	146	27.1	113	21.0	54	10.0	13	2.4	11	2.0	460	86	78	14	0	0
27	Telangana	537	203	37.8	114	21.2	133	24.8	73	13.6	5	0.9	9	1.7	450	84	87	16	0	0
28	Tripura	22	8	36.4	0	0.0	0	0.0	11	50.0	3	13.6	0	0.0	8	36	14	64	0	0
29	Uttar Pradesh	646	358	55.4	102	15.8	21	3.3	118	18.3	32	5.0	15	2.3	481	74	165	26	0	0
30	Uttarakhand	45	23	51.1	3	6.7	2	4.4	9	20.0	4	8.9	4	8.9	28	62	17	38	0	0
31	West Bengal	721	417	57.8	87	12.1	34	4.7	117	16.2	34	4.7	31	4.3	538	75	182	25	1	0
	Total	14275	7043	49.3	1880	13.2	1006	7.0	3328	23.3	591	4.1	421	2.9	9929	70	4340	30	6	0

Training Activity by NWA, Pune during August-2022

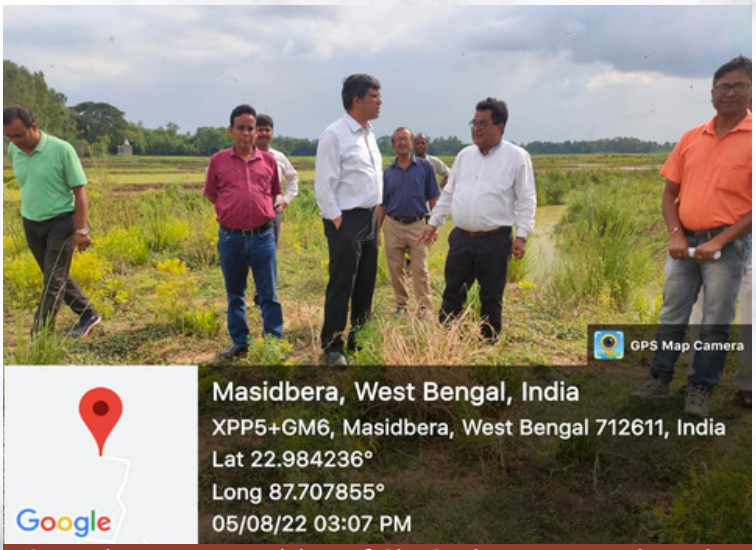
Sr No.	Name of Training Programme	Duration	No. of Trainee per course	Category
1	Procurement through e-GEM	11-12 August 22	219	Technical
2	Management Development Program	22-26 August 22	29	Non-Technical
3	River Basin Management Cycle Training under the aegis of NMCG with GIZ, India (Under IEWP)	29 Aug - 02 Sept 22	24	Technical

54th Meeting of CDRC

Date of Meeting	08.08.2022
Total cases considered	03
Commercial Cases	01
Non Commercial	02
No. of cases approved by the committee	03

Gallery/Azadi Ka Amrut Mahotsav

Signing of MoU between CWC and IWRD, U. P. for S&I and Preparation of DPR of Panchnad Project in presence of E-in-C, IWRD, U. P.



Central Team comprising of Sh. Sanjay Kumar Jain, Joint Secretary, D/o Public Enterprises, M/o Finance (Central Nodal Officer) and Sh. Varid Gupta, Assistant Director, Central Water Commission, M/o Jal Shakti (Technical Officer) visited East Champaran and West Champaran districts in Bihar for Jal Shakti Abhiyan 2022.

Independence day/Har Hath Tiranga Campaign

History- GIRNA PROJECT

The Girna River rises on the eastern slopes of Sahyadri Hills in Nasik District. The river flows through Nasik and East Khandesh Districts of Maharashtra State and finally drains into the river Tapi.

Original Programme

In the original Girna Project prepared in 1955 it was proposed to construct a masonry dam across the Girna River at Panzan with a gross storage of 311 million cu m (11,000 million cu ft) and a canal on left bank directly taking off from the dam. Length of this canal was 93 km (58 mile) with a gross command of 59,730 ha (1,47,597 acre), excluding reserved forests. The canal had to pass through a difficult terrain in the first several miles necessitating high banks and embankments and one tunnel. This project was estimated to cost Rs. 907 lakhs and was approved by the Central Water and Power Commission.

After carrying our further detailed studies of hydrology of this river, command and irrigation. Soil conditions, etc., subsequently it was found desirable to radically change the conception of the project.

Revised Proposal

In the revised project the storage capacity of the dam was increased substantially to utilize the available dependable yield. The direct canal on the left bank was omitted since this was seen to be very costly and the lands served were in many reaches inferior with very shallow soils. Instead, canal systems from two pick-up weirs on the river lower down were proposed. For the upper canal system it was proposed to remodel the existing Jamda Canals and make them perennial. The lower canal ex-pick-up weir at Dahigaon was proposed as an entirely new work.

The Scheme

The Girna Project as included and being executed in Second Five Year Plan comprises:

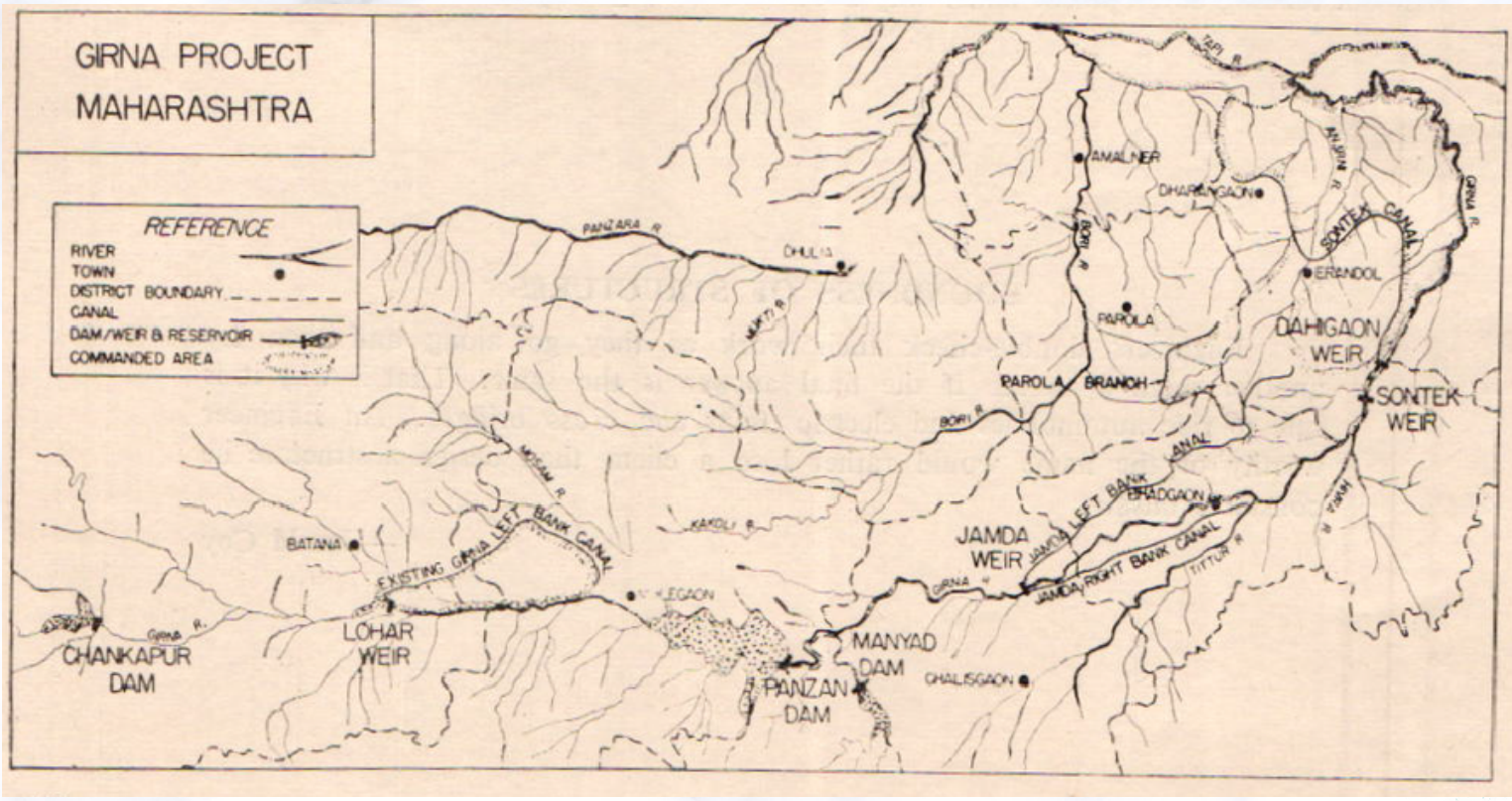
(a) A storage dam at Panzan in Nasik District to hold a gross storage of 680 million cu m (24,000 million cu ft) of water;
(b) A storage of about 42 million cu m (1,500 million cu ft) on the Manyad River – a tributary of Girna downstream of Panzan Dam;
(c) Construction of a new weir at Jamda Immediately downstream of the existing old weir;
(d) Remodelling and extension of Jamda Left Bank Canal system;
(e) A weir at Dahigaon 64 km (40 mile) downstream of Jamda weir; and
(f) Left Bank Canal about 64 km (40 mile) long with distribution system from Dahigaon weir.

Panzan Dam

The Panzan Dam is an earth-cum-masonry dam 43 m (140 ft) high above the deepest foundation level. The dam is flanked on the left by an earthen embankment 427 m (1400 ft) long where the firm rock is available at shallow depths and on the right by an earthen embankment 549 m (1,800 ft) long where the rock is deep-seated.

Spillway

The spillway is located in the masonry portion and is designed to pass a maximum flood discharge of 8.438 cu m (298,000 cu ft) per sec. It is designed with an ogee crest for a flood lift of 8 m (27 ft). It will have 14 tainter gates of 12.5 m x 6.4 m (41 ft x 21 ft) size.



Earth Dam

The earth dam is 40.5 (133 ft) high above the lowest river bed level and rests on a 6 to 12 m (20 to 40 ft) deep deposit of sand in the river bed and on a 24 m (80 ft) thick deposit of silt and lenticular sand on the right bank.

In a length of about 183 m (600 ft) therefore only a partial cut-off is provided. The previous deposits of 4.6 to 6.1 m (15 to 20 ft) thickness below the bottom of this partial cut-off are proposed to be grouted by a mixture of swelling type bentonite and cement in suitable proportions for reducing their permeability to safe limits in order to eliminate the danger of piping through foundations.

Jamda Pick-up Weir

There is an existing weir at Jamda with a rectangular section of 2.4 m (8 ft) width and 3.7 m *12 ft) average height. It follows a zigzag alignment over the rock outcrops. Strengthening of the existing section involved the risk of blasting the rock close to the existing weir for the additional widths of foundations and the difficult of bonding the new masonry with the old one. Moreover it was found to be almost as costly as a new weir. Therefore a new weir just downstream of the existing one with straight alignment and at right angles to the river course is now provided. This weir will be 347 m (1,140 ft) long and 7 m (23 ft) high (maximum) passing a flood of 9,712 cu m (343,000 cu ft) per sec.

JAMDA CANALS SYSTEM

The existing Jamda Left Bank Canal, having a carrying capacity of 7.1 cu m (250 cu ft) per sec is being remodeled to carry 17 cu m (595 cu ft) per sec and the length is being extended by 13 km (8 mile) – that is the canal length will increase from 43 to 56 km (27 to 35 mile). The distribution system is also being extended to irrigate the lands coming under the increased command. The remodeled canal will be able to command a gross area of 41,480 ha (102,500 acre) and irrigate annually 18,656 ha (46,100 acre). The existing Jamda Left Bank Canal was commanding a gross area of 28,733 ha (71,000 acre) with seasonal irrigation for an area of about 12,545 ha (31,000 acre).

The existing Jamda Right Bank Canal is 18 km (11 mile) long and has a carrying capacity of 3 cu m (105 cu ft) per sec at head. No work is proposed on this canal, except some improvements to the distribution system. After these improvements this canal will irrigate an area of 3,642 ha (9,000 acre) out of a gross commanded area of 7,284 ha (18,000 acre). The irrigation under this canal is also of the same perennial pattern as on Jamda Left Bank Canal. The Right and Left Bank Canals are connected to the head regulators on either flanks of the new weir.

Dahigaon Weir

The other pick-up-weir will be at Dahigaon 64 km (40 mile) downstream of Jamda. In the approved project the location of this weir was just near the village Sontek. The weir is 390 m (1,280 ft) long and 9.8 m (32 ft) high and will pass a peak discharge of 11,412 cum (403,000 cu ft) per sec at 6.7 m (22 ft) head.

Left Bank Canals

The left bank canal will be 64 km (49 mile) long and carry a maximum discharge of 21 cum (735 cu ft) per sec at head. The canal has a gross command area of 57,796 ha (142,820 acre) out of which it is proposed to irrigate 34,803 ha (86,000 acre) annually. The command is divided into two zones, the perennial and the non-perennial. The perennial zone is located at the beginning of the canal with an annual irrigation of 16,997 ha (42,000 acre) with the same crop pattern as on Jamda Canals System. The non perennial zone is located at the tail portion of command with an annual irrigation of 17,806 ha (44,000 acre) for two seasonal crops.

Construction Progress

The construction of masonry portion of the Panzan Dam was started in early 1959.

The work of Jamda Weir has already been let out on contract in early 1960 and the weir and new regulators are expected to be ready before long.

The work on Dahigaon Weir has also been let out on contract early in 1960 and the weir and the head regulator are also expected to be ready shortly. The work on the first 29 km (18 mile) of this canal with distribution system is expected to be completed soon. The work on the remaining portion of canal km 29 to 64 (mile 18 to 40) and distribution system will be completed by June 1963.

Benefits

The Project was estimated to cost Rs. 8.65 crores. According to latest figures the cost is expected to go up to about Rs. 12.55 crores. The project will irrigate 57,500 ha (142,000 acre) in Chalisgaon, Bhadgaon, Parola, Erandol and Amalner Talukas of East Khandesh District of Maharashtra on completion.

(Source: Bhagirath Nov 1961)

Central Water Commission

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

Designed & Published by

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