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R. K. Jain,
Chairman, CWC
Message

The 2nd International Conference on Sustainable Water Management was organized by Water Resources Department, Govt. of Maharashtra under the aegis of National Hydrology Project, DoWR, RD&GR, Ministry of Jal Shakti during 6-8th November, 2019 at Pune. It was inaugurated by Hon'ble Minister of Jal Shakti, Sh. Gajendra Singh Shekhawat. The conference was spread over one Plenary Session followed by twelve Technical and one Industry Session covering important aspects on issues related to sustainable water management. CWC provided the technical support in organizing the event and its officers chaired/co-chaired various sessions in the Conference & also gave insightful presentations. Such conferences provide a forum for sharing of knowledge and experience of professionals involved in water resources planning, development and management including academic institutions and professionals from the

industry from all over the globe. The event was attended by more than 600 International and National delegates.

A meeting was chaired by Sh. Gajendra Singh Shekhawat, Hon'ble Minister of Jal Shakti on 09.11.2019 at Guwahati wherein issues pertaining to water sector in the North Eastern Region were reviewed. The meeting was attended by Sh. S. Sonowal, Hon'ble Chief Minister of Assam, Sh. Rattan Lal Katariya, Hon'ble MoS for Jal Shakti, Hon'ble Ministers from various North-Eastern States and senior officers from Centre/State. Hon'ble Minister of Jal Shakti, Sh. Gajendra Singh Shekhawat reviewed the Jal Jeevan Mission at Hyderabad on 11.11.2019 wherein the preparation and progress on water related schemes in the Southern States were assessed and the way forward was discussed.

The 7th meeting of the Governing Body (GB) of Pancheshwar Development Authority (PDA) was held on 29.11.2019 at New Delhi. The Indian delegation was led by Shri U.P. Singh, Secretary, DoWR, RD & GR, MoJS, GoI & Co-Chairperson of GB, PDA. It was preceded by 5th Joint Committee (JC) meeting held during 27-28th November, 2019. Several administrative and financial issues of PDA were deliberated in detail in these meetings and various

decisions were taken with regard to finalization of vision/mission statements for PDA, budget, proposal for hydrological and micro-seismic data collection, revision of compositions of GB, EIA study, Audit etc.

CWC has been providing support for International Projects such as ongoing Punatsangchhu-I Hydro Electric Project (PHEP-I) in Bhutan with installed capacity of 1020 MW. The 26th Meeting of the Technical Coordination Committee (TCC) of PHEP-I was chaired by me on 13.11.2019 in New Delhi and various decisions were taken to expedite the project.

Apart from regular monitoring of PMKSY-AIBP/CAD&WM Projects by CWC, senior officers have been monitoring the major projects/National projects like North Koel Project, Shahpurkandi Dam Project, Polavaram Project etc. on regular basis to identify bottlenecks and paving way for expeditious completion.

CWC's Regional Offices are actively engaging with the officials of States/UTs for compilation of State/UT-wise data for assessment of UIP, IPC and IPU. This is an important activity to highlight the status of irrigation development and its utilization across the country.

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Inaugural Session of 2nd International Conference on Sustainable Water Management



2nd International Conference on Sustainable Water Management



Inauguration by Hon'ble Minister of Jal Shakti



Hon'ble MoS for Jal Shakti in Exhibition Area



Address of Chairman, CWC in the Plenary Session



Chief Engineer(IMO), CWC receiving memento in the technical session

The 2nd International Conference on Sustainable Water Management was organized by Water Resources Department, Govt. of Maharashtra under the aegis of National Hydrology Project, DoWR, RD&GR, Ministry of Jal Shakti during 6-8th November, 2019 at Pune in collaboration with CWC, CGWB, CBIP and supported by the World Bank and Australian Water Partnership (AWP).

The Conference was inaugurated by Shri Gajendra Singh Shekhawat, Hon'ble Minister, Ministry of Jal Shakti, Government of India on 06.11.2019. The inaugural session was also attended by Smt. Vandana Chavan, Hon'ble Member of Parliament, Rajya Sabha; Shri U.P. Singh, Secretary, Ministry of Jal Shakti; Shri R. K. Jain, Chairman, CWC ; Shri I.S. Chahal, Principal Secretary, Water Resources Department, Government of Maharashtra; Mr. Tony Huber, Counsel General, Australian Consulate Mumbai and host of other dignitaries from Central & State Organisations. During the inaugural session, a mobile app for data entry of the water resources under India-WRIS was also launched.

Apart from Plenary Session, there were twelve technical sessions in which experts presented latest development in related field and shared their experiences. One dedicated session on best practices in water conservation was organised in which various Govt. organisations and NGOs working in the field of conservation of water resources participated. During the Industry Session, delegates got enlightened about new products and technologies in the field of modelling, equipment, application of data for creating meaningful information.

Technical Sessions

1. Basin Approach for Sustainable Water Resource Development
2. Alternate sources of Water – Desalination, Reuse & recycle of waste water
3. Best Practices & Management in Water Conservation
4. Water Information – key to Empowerment of stakeholder
5. Extreme Event Management – Flood & Drought
6. Initiatives under NHP
7. Ground Water Management & Recharge
8. Climate Change – Impact on Water Resources
9. Spatial & Remote Sensing Technology in Water Resources
10. Water Security – Jal Jeevan Mission, Water Governance & Policy
11. Advanced technologies in Water Management
12. Water Quality & Sediment Management.

A Poster Competition was also organised in which Research Scholars/ students from number of prestigious institutions participated for encouraging research and use of state of art technologies in the field of water resources development and management. An exhibition was held for two days to showcase the latest equipment, technologies and capabilities & progress by number of national & international vendors & consultants, Partner organisations etc. Field visit to Hiware Bazaar & Tata Power Station was arranged for the participants of the Conference on 08.11.2019. The event was attended by more than 600 International and National delegates. International Experts from Australia, U.S., U.K., Netherlands, Canada, South Korea, European Union, Germany, Thailand, Sri Lanka and Nepal participated in this Conference apart from Experts from World Bank and International Commission on Irrigation & Drainage. The conference provided an excellent platform to exchange ideas & good practices, create and strengthen partnerships, learn & discuss about new developments/ aspects in the field of sustainable water management.

The valedictory session was held on 07.11.2019, which was graced by Sh. Rattan Lal Kataria, Hon'ble Minister for State, Ministry of Jal Shakti, Government of India. The abstracts of the papers can be accessed from <http://nhp.mowr.gov.in/Conference-2/Proceeding.pdf>

Technical Committee headed by Chairman, CWC provided the requisite technical support in organizing the conference. In addition to above, officers of CWC chaired/co-chaired various sessions under Conference, gave insightful presentations and contributed following papers.

Paper	Authors
Policy Interventions and Institutional Reforms for Sustainable Water Management	Vijai Saran, Chief Engineer and K.S. Chaitanya, DD, CWC
Assessment of Sediment load for different flood conditions in lower reaches of River Ganga and its tributaries	N.N. Rai, Director and Rajesh Kumar, Director, CWC
An Integrated Reservoir Operation-solution for extreme Hydro-Meteorological event of 2019 in Chambal Basin	Sharad Chandra, Director, Lakshminarayan S., DD, Vasanthakumar V., DD, CWC
Use of Satellite Remote Sensing Technique in Review of Irrigation Projects	Karambeer, AD, CEA, Chetna, DD and Karishma Bhatnagar Malhotra, AD, CWC
Sustainable Reservoir Sediment Management in River Basins	Amrendra Kumar Singh, Chief Engineer and Anuj Kanwal, Director, CWC
IWRM in Murray Darling Basin and its Scope In Indian Scenario	S.K. Haldar, Member, Padma Dorji, Director and Sunil Kumar, Director, CWC
Probability based Rule Levels for Kerala reservoirs	Isly Issac, AD and Rishi Srivastava, Director, CWC
Water Information : Key to Empowerment of Stakeholder - India-WRIS, an Initiative of Central Water Commission	Karishma Bhatnagar Malhotra, AD, Ashish Awasthi, DD and Amrendra Kumar Singh, Chief Engineer, CWC

Review Meetings by Hon'ble Minister of Jal Shakti

North-East India

A meeting was chaired by Sh. Gajendra Singh Shekhawat, Hon'ble Union Minister of Jal Shakti at Guwahati on 09.11.2019 wherein issues pertaining to water sector in the North Eastern Region were reviewed. The meeting was attended by Sh. S. Sonowal, Hon'ble Chief Minister of Assam, Sh. Rattan Lal Kataria, Hon'ble MoS for Jal Shakti, Hon'ble Ministers from various North-Eastern States. Sh. U. P. Singh, Secretary, DoWR, RD&GR, MoJS, Sh. R. K. Jain, Chairman, CWC, Sh. Rajiv Yadav, Chairman, Brahmaputra Board, Sh. R. K. Sinha, Member (RM), CWC, officers from State Governments, DoWR, RD&GR/MoJS also attended the meeting.

During the meeting, a presentation was made by Sh. P.M. Scott, CE, Brahmaputra & Barak Basin Organization (B&BBO), CWC on various schemes being implemented by the Ministry in the region and status thereof. Hon'ble Union Minister reviewed the progress of all the schemes, held detailed deliberations on various issues faced by the States in the water sector and on the way forward for resolution of the issues.

HPRB Meeting of Brahmaputra Board

10th Meeting of High Powered Review Board (HPRB) of Brahmaputra Board was held on 09.11.2019 at Guwahati under the Chairmanship of Shri Gajendra Singh Shekhawat, Hon'ble Union Minister of Jal Shakti, Government of India. Along with others members of HPRB of Brahmaputra Board; Shri Rattan Lal Kataria Minister of State for Jal Shakti; Shri Sarbananda Sonowal, Hon'ble Chief Minister, Assam; Hon'ble Ministers from representing States viz. Sh. Siddhartha Bhattacharya, Education Minister of Assam; Sh. Wangki Lowang,



Minister of PHE & Water Supply, Arunachal Pradesh; Sh. Brodiong Nongsiei, Minister of Water Resources, Meghalaya; Sh. Letpao Haokip, Minister of Water Resources, Manipur; Sh. Sonam Lama, Minister of Rural Development, Sikkim; Adviser, Water Resources Department, Nagaland; Sh. Upendra Prasad Singh, Secretary, DoWR, RD&GR, MoJS; Sh. Rajiv Yadav, Chairman, Brahmaputra Board & Member, Convenor, HPRB of Brahmaputra Board; Chief Secretaries of Arunachal Pradesh and Assam; Sh. R. K. Jain, Chairman, CWC; Sh. R. K. Sinha, Member (RM), CWC; Sh. T. S. Mehra, Commissioner(B&B), MoJS, DoWR, RD&GR; Sh. P. M. Scott, Vice-Chairman, Brahmaputra Board & Chief Engineer (B&BBO) and Sh. V. D. Roy, Secretary, Brahmaputra Board (Superintending Engineer, CWC) attended the meeting. During the meeting activities of Brahmaputra Board including monitoring of flood management works in NE Region, Restructuring of Brahmaputra Board and new initiatives for setting up of North Eastern Water Management Authority were discussed.

Southern India

Shri Gajendra Singh Shekhawat, Hon'ble Minister of Jal Shakti chaired the Regional Review Meeting for Southern States & UTs regarding Jal Jeevan Mission on 11.11.2019 at Hyderabad. Dr. P. Anil Kumar, Hon'ble Minister of Water Resources, Andhra Pradesh, Sh. K. S. Eshwarappa, Hon'ble Dy. CM & Minister of RD, PR and Youth services, Karnataka, Sh. Dayakar Rao, Hon'ble Minister of RD, PR and RWS, Telangana and officials from State Govts. of Telangana, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and UTs of Puduchery and Lakshadweep and Ministry of Jal Shakti, Gol attended this meeting.

In the meeting, the Hon'ble Minister discussed the progress on drinking water related schemes in the Southern States. He emphasized the urgency to start work on Jal Jeevan Mission which aims at providing Functional Household Tap Connections (FHTCs) in rural areas by 2024. Sh. Parameshwaran Iyer, Secretary, D/o. Drinking Water Supply & Sanitation gave a presentation on the Scheme, the steps that are needed to be taken for proper implementation of the programme and the proposed modalities. Further, the states were appraised regarding gains under Swachh Bharat Mission and the steps to be taken in the next phase that is ODF Plus. Each State Govt. gave a presentation on the preparedness to take up the scheme. Govt. of AP requested to raise the norm of the Mission from 50 LPCD to 100 LPCD. Govt. of Telangana requested to help in payment of interest component of loans taken



under Mission Bhagiratha - a project for safe drinking water for every village and city household in Telangana State.

From D/o. Water Resources, RD & GR, Ms.T. Rajeshwari, Additional Secretary, Sh. K. Vohra, Commissioner (SPR), Sh. BRK Pillai, Commissioner (CAD), etc. attended the meeting. From CWC, Chief Engineer, KGBO along with officers from other regional offices of CWC attended the meeting.

Visit to Shahpurkandi Dam by CWC Officials

The Second meeting of the Monitoring Committee constituted by the Ministry to oversee/monitor the implementation of the Shahpurkandi Dam (National Project) on river Ravi in Punjab and other works was held under the Chairmanship of Member (WP&P), CWC on 15.11.2019. The committee visited the dam site and reviewed on-going works. The Committee also visited the Head Regulator site for the Hydel Channel, site for the proposed syphon for the Kashmir canal, the site for the proposed aqueduct for the Ravi canal and the bridge on Lakhampur-Basohli road which is coming under submergence.



Meeting with MP/Rajasthan Officials on Floods

A meeting was organised under the chairman-ship of Chairman, CWC with officials of Water Resources Departments of Madhya Pradesh and Rajasthan along with officials of CWC on 14.11.2019 at CWC, New Delhi to discuss the issues of extreme flood and high risk situation at Gandhi Sagar (M.P.), Rana Pratap Sagar, Jawahar Sagar and Kota Barrage and their downstream areas during the month of September, 2019. The meeting had a Presentation by Chief Engineer, Gandhi Sagar dam. Further, the issues of hydrological data & analysis for preparing conceptual action plan, provision of additional spillway, pre-emptying of Gandhi Sagar & Rana Pratap Sagar dam, instrumentation, adequacy of rain gauge network in the catchment, establishment of inflow forecast system, timely issue of flood forecasts by CWC, sharing of rainfall data, setting up of a Flood Forecast station at Dholpur etc. were discussed in the meeting. All concerned were suitably directed to take necessary timebound actions in the matter.



26th Meeting of the TCC of PHEP-I

The 26th Meeting of the Technical Coordination Committee (TCC) of Punatsangchu-I Hydroelectric Project (PHEP-I), Bhutan was held on 13.11.2019 in New Delhi. The meeting was chaired by Shri R. K. Jain, Chairman and Member (D&R), CWC. Apart from Bhutanese side and consultants for the projects, officers from CEA, CWC, NHPC and WAPCOS participated in the meeting.

CWC is providing the civil design consultancy for this 1020 MW Hydroelectric project. Project is under implementation since 2008 and the original completion schedule of 2016 has been exceeded due to emergence of complex geological issues on several occasions. Various design/construction issues with regard to Dam Energy Dissipation Arrangement (EDA), piles near National Highway, aggregate size for concreting, revised schedule for completion of the project by March, 2025 etc. were discussed in detail during the meeting and decisions were taken to expedite the various components of the project.



Visit to Ghaggar Basin

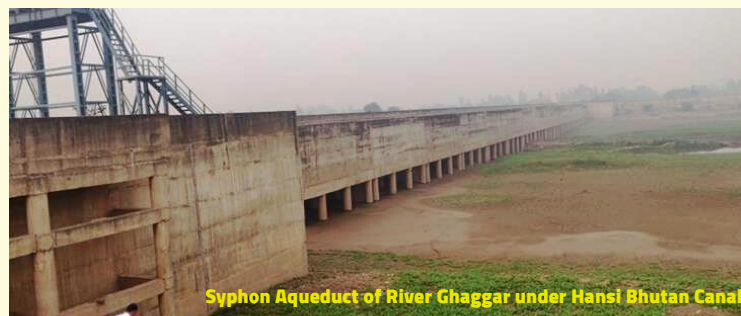
Member (RM), CWC conducted site visit to Ghaggar Basin during 10-11th November, 2019 and held discussions with concerned officers of Punjab and Haryana State as well as representative of CWPRS.

During the discussions, Member (RM), CWC asked to accord top priority to collection of data required for Mathematical Model Study by CWPRS by the end of year 2019 as directed by Hon'ble Supreme Court. Officers from Govt. of Haryana informed that out of around 350 km of River length to be surveyed, a reach of approximately 100 km lying in the territory of Haryana has been surveyed.

It was also decided that M/S Land & Coast, Surveyors & Contractors shall put on more resources on field so that the work may get completed in all respect by November, 2019. Officers from Water Resources Dept., Punjab were requested to coordinate with the contractor for speedy completion of work in their territory. They were also requested to deposit their share of cost to Haryana Govt. by November, 2019.

During the site visit on 11.11.2019, Member (RM) examined various issues of Ghaggar River such as drainage congestion, lack of maintenance, environmental concerns etc. He also held discussions with local inhabitants of the area to assess the ground situation. Following places were visited :

- Syphon Aqueduct of River Ghaggar under Hansi Butana Canal
- Syphon Aqueduct of Bhakra Main Line (BML) Canal over River Ghaggar at Khannauri
- Flood Embankment of River Ghaggar near Makror Sahib Bridge



Project Monitoring

CWC through its HQ and field offices monitors the water resources projects under execution. This helps in identification of bottlenecks, ensures that the funds are being utilized properly and forms the basis for assessing further funding requirements. A total of 6 monitoring visits have been carried out by CWC field units during November, 2019 for on-going prioritized projects under Pradhan Mantri Krishi Sinchayee Yojana -



IMCT Visits

Various officers of CWC were nominated to represent MoJS in IMCTs for on-the-spot assessment of damages caused by disasters in the recent months. Some of the visits of related IMCT were carried out in the month of November, 2019.

The IMCT for Uttar Pradesh, divided into two groups, visited 8 nos. of flood affected districts during 1st-4th, November, 2019. Team also had meeting with Hon'ble CM on 05.11.2019.

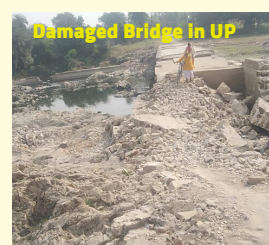
Very Severe Cyclonic Storm BULBUL struck east coast of India in November, 2019 after Extreme Severe Cyclonic Storm FANI which hit in May 2019. Although cyclone BULBUL didn't make landfall in Odisha and passed closely along the coast of Odisha during 8-9th November, 2019 towards West Bengal and Bangladesh, yet it affected coastal and nearby districts of Odisha from Puri onwards upto Baleswar. IMCT for Odisha was divided into 2 teams. Sh. Amrish Pal Singh, SE(C), CWC as part of Team-B visited various gram panchayats of Kendrapara and Jagatsinghpur district during 14-15th November, 2019 to assess the

Accelerated Irrigation Benefit Programme (PMKSY-AIBP). A proposal for release of 1st installment of CA of Rs. 9.098 Crore in respect of SRSP-II of Telangana has been forwarded to DoWR, RD & GR, MoJS on 25.11.2019 with due recommendation of CWC, HQ. During November, 2019, CA amounting to Rs. 485.43 crore to Sardar Sarovar (Gujarat) and Rs. 31.699 crore to Arjuna Sahayak (UP) was sanctioned under PMKSY-AIBP.

States	Name of Officer, Designation and location S/Sh	Remarks
Uttar Pradesh	B.C. Viswakarma, Director, CWC, Lucknow	Floods
Odisha	Amrish Pal Singh, SE(C), CWC, Bhubaneswar	BULBUL Cyclone
West Bengal	Sanjeev Kumar Suman, Director, CWC, Kolkata	BULBUL Cyclone
Maharashtra	Milind Panpatil, Director, CWC, Nagpur	Kyaar Cyclone
Rajasthan	S.D. Sharma, Director, CWC, Jaipur.	Drought

damage caused by cyclone "BULBUL". Crops, river/saline embankment, river/canal roads, and irrigation infrastructure were reported to be damaged.

Sh. Sanjeev Kumar Suman, Director, M & A Dte., CWC, Kolkata was a part of IMCT for assessment of damage caused by cyclone Bulbul in West Bengal and visited the affected areas viz. Namkhana & Patharpratima blocks of Kakdwip Subdivision, West Bengal on 15.11.2019 and had a meeting with Chief Secretary, Govt. of West Bengal on 16.11.2019.



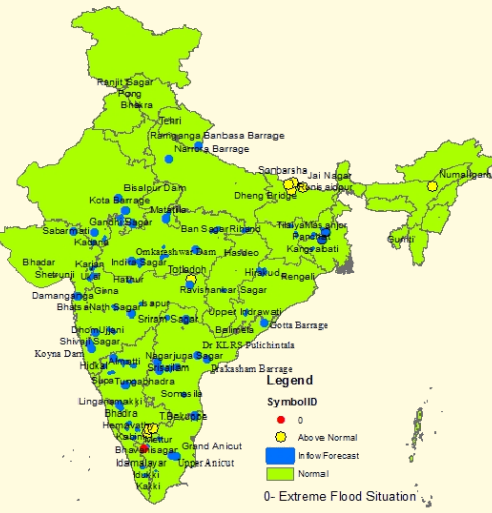
Committee Meeting for Salinity Ingress Management Projects

The 2nd meeting of Committee for Preparation of DPR & New scheme for Salinity Ingress Management Projects was held at CWC, New Delhi on 14.11.2019 under the Chairmanship of Shri Ravi Shanker, Chief Engineer (P&D), CWC. Members from CWC, NIH, CWPRS, CGWB and State of Gujarat participated in the meeting.



Flood Situation during November-19

CWC through its field divisions collects hydrological and hydrometeorological data on a real-time basis during the flood season every year. Using this data, flood/inflow forecasts are formulated for 325 locations (197 Level and 128 Inflow Forecast Stations) and disseminated to various user agencies. During November, one CWC station on



River Bhavani at Odendurai in Coimbatore district of Tamil Nadu observed **Extreme Flood Situation** on 17.11.2019. Cumulative summary of other flood categories since May 2019 is given in the adjacent table.

Flood Category	No. of Stations*
Above Normal	51
Severe	96
Inflow Forecast	74

* during May to Nov-2019.
No. of station did not increase further in the month of November, 2019.

Governing Body Meeting of PDA

The 7th meeting of the Governing Body (GB) of Pancheshwar Development Authority (PDA) was held on 29.11.2019 at New Delhi. The Indian delegation was led by Shri U.P. Singh, Secretary, DoWR, RD & GR, MoJS, GoI & Co-Chairperson of GB, PDA while the Nepalese delegation was led by Shri Dinesh Kumar Ghimire, Secretary, Ministry of Energy, Water Resources and Irrigation (MoEWRI), GoN and Co-Chairperson of GB, PDA. Sh. R. K. Jain, Chairman, CWC being a Member of GB also participated in the meeting.

The GB meeting was preceded by the 5th meeting of the Joint Committee (JC) of PDA on administrative and financial matters which was held during 27-28th November 2019 at New Delhi. The Indian and Nepalese delegations for JC were led by Shri Nitishwar Kumar, Joint Secretary (Admin) and Pravin Raj Aryal, Joint Secretary respectively. Shri Ashok S. Goel, Chief Engineer, CWC & CEO, PDA, Shri Chiranjeev Chataut, ACEO, PDA, Shri Rajiv Kumar, Director, CWC & ED (Environment), PDA and other senior officers of DoWR, RD&GR participated in the JC and GB meetings besides other participants from India and Nepal.

Several administrative and financial issues of PDA were deliberated in detail in these meetings and various decisions were taken with regard to Budget, proposal for hydrological and micro-seismic data collection, revision of compositions of GB, EIA study, Audit etc. Annual budget for FY

TEC Meeting for North Koel

The 24th meeting of the Technical Evaluation Committee (TEC) for completing the balance works of North Koel Project (NKP) was held on 26.11.2019 at CWC, New Delhi under the chairmanship of Member (WP&P), CWC.

Status of commencement of work at Dam site after issuance of 'No Objection Certificate' (NOC) from the Forest Department of GoI; status of land acquisition; progress of various components of the balance works of the project by the WAPCOS; status of Cabinet approval for 7th Revised Cost Estimate (RCE); report of Sub-Committee-1 on the issue of illegal outlets in Jharkhand portion of RMC of the project etc. were discussed during the meeting. As the monsoon season is already over, Member (WP&P), CWC and Chairman (TEC) asked WAPCOS, GoI and GoB to expedite the progress of works, so that project may be completed at the earliest.

Visit to Barinium HEP

Barinium H.E. Project is proposed on River Chenab in Paddar Valley of District Kishtwar, J&K. The PFR of the project was prepared by M/S WAPCOS Ltd. for Jammu & Kashmir State Power Development Corporation (JKSPDC). Now, work of preparation of DPR of the Project is entrusted to CWC, Jammu by JKSPDC.



Erstwhile Ministry of Water Resources accorded Administrative Approval and Expenditure Sanction amounting to Rs 15.47 Crore under IWRD scheme for S&I and preparation of DPR of Barinium H E Project by CWC. To firm up the location of various components of the proposed Barinium H.E. Project, a team of CWC Civil Designers/Hydrology Experts led by Shri S K Sibal, Chief Engineer, Designs (N&W), officers from CSMRS and GSI visited proposed project during 26-28th November, 2019.



Signing of Minutes of GB Meeting

2020 amounting to Nepali Rupees 2351.63 Lakh (Indian Rupees 1469.77 Lakh) was approved by the GB. Vision and mission statements for PDA were also approved by GB.

The GB approved extension of tenure of Team of Experts/ Officials (ToE/O) till March, 2020 and directed to convene the next meeting of ToE/O by mid-January, 2020. This Joint Team, led by Chairman, CWC from Indian side, is working to resolve various outstanding issues in the draft DPR for the project.



Dam Rehabilitation and Improvement Project (DRIP)

CWC design team visit to Hirakud dam

Hirakud dam in Odisha is one of the longest earthen dams in the world and the fourth largest dam in India in terms of storage capacity. As part of rehabilitation, additional Spillway, at a cost of Rs. 370 crores, is being constructed for this dam under DRIP to safely discharge the flood waters to the tune of 9,000 cubic metres per second. CWC is providing technical support for timely review of the designs for the additional Spillway of Hirakud dam. CWC design team along with officials from CPMU, GSI, CSMRS inspected the ongoing construction of Additional Spillway of Hirakud dam during 18-20th November 2019.



Empanelment of Experts for Dam Safety Review Panels (DSRP)

CWC is inviting online applications from experienced and qualified experts for empanelment in the DSRP for a period of three years. The State DSOs may use these empanelled experts as per their procedures taking due concurrence of these empanelled experts to constitute their DSRPs for inspection of their dams. The 6th Meeting of DSRP Empanelment Committee under the Chairmanship of Member (D&R), CWC was held on 25.11.2019 in New Delhi to discuss the empanelment of received applications. During this meeting, 14 applications were reviewed and 4 of them were recommended for empanelment as experts for appointment as members of DSRPs. The details of these empanelled experts are available at www.damsafety.in.



Dissemination of EAP and Stakeholder Consultation Meetings

Emergency Action Plans (EAP) for dams help in improving the emergency preparedness of all the stakeholders namely the affected population, dam operation and maintenance personnel, organizations engaged in providing rescue and relief as well as those maintaining law and order. EAPs are being prepared for all the dams covered under DRIP. EAP Stakeholders' Consultation Meeting was organized 05.11.2019 at Bhadra dam in Karnataka. EAPs pertaining to Kuttiyady Augmentation Project comprising 8 dams and Kakayam Dam were presented during the workshop in the Districts of Kozhikode and Wayanad (Kerala State) during 20th-21st November 2019. Representatives from NDMA, SDMA, IMD, NRSC, GSI, Dam Owner's representatives and Districts' Authority, villagers in the downstream of the dam participated in the workshop.



Training Programmes



Training programme on "Dynamic Analysis Procedure for Dams" was conducted by Dr A.K. Chopra from University of California, Berkeley, USA and Dr. Arnkjell Lokke from Norwegian Geological Institute, Norway during 6-8th November, 2019 at CWC, HQ for 34 officers



Two hands-on training program on DHARMA were held in Gujarat during 13-15th November & 27-28th November, 2019 for 56 officials of State Govt.



Induction training Programme for SPMU Officials of Manipur & Meghalaya for DRIP II was organized in Delhi during 13th -22nd November 2019 to equip the State engineers to successfully complete the preparatory activities for implementing DRIP Phase II

Water Sector in News

- Cyclone Maha batters Lakshadweep and Kerala coast (The Hindu, 01.11.2019)
- In MGNREGA plan, govt focus on water conservation (The Indian Express, 01.11.2019)
- India continues search for Saraswati river (The Hindustan Times, 02.11.2019)
- Centre forms committee to draft new water policy (The Hindu, 12.11.2019)
- Shimla to get Kol Dam water by 2022 (The Tribune, 14.11.2019)
- 3 months after overflowing Bhakra level below normal (The Tribune, 18.11.2019)
- Centre to form panel to look into Mahadayi dispute (The Hindustan Times, 20.11.2019)
- Mullaperiya Dam is safe : Union Minister (Asian Age, 22.11.2019)
- Centre nudging M.P., U.P. on Ken-Betwa (The Hindu, 25.11.2019)
- Water conservation projects commissioned in Hailakandi (Assam Tribune, 29.11.2019)

State-wise Re-assessment of UIP, IPC and IPU

A High Level Committee (HLC) was constituted by Ministry to re-assess the Ultimate Irrigation Potential (UIP), Irrigation Potential Created (IPC) and Irrigation Potential Utilized (IPU) (state-wise) in January, 2018 under the chairmanship of Chairman, CWC with representation from erstwhile MoWR, RD & GR, MoA&FW, MoRD, CGWB, NITI Ayog, NRSC, States/UTs etc. In 2nd meeting of HLC, it was decided that field unit of CWC shall be

involved in data collection and a sub-group be formed at state level involving regional offices of CWC and concerned officials of State/UTs. In this regard, 26 sub-groups have been formed for specific states/UTs. During November, 2019 meetings of these sub-groups were held in Maharashtra, Sikkim and Andhra Pradesh under the chairmanship of respective Chief Engineers of Regional offices of CWC.

Andhra Pradesh-04.11.2019



Sikkim-21.11.2019



Maharashtra-26.11.2019

Reservoir Monitoring

CWC is monitoring live storage status of 120 reservoirs of the country on a weekly basis and is issuing a weekly bulletin on every Thursday. The total live storage capacity of these 120 reservoirs is 170.328 BCM which is about 66.06% 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 30.11.2019, live storage available in these reservoirs is 147.017 BCM, which is 86% of the total live storage capacity of these reservoirs. The live storage available in 120 reservoirs is 142% of the live storage of corresponding period of last year and 134% of storage of average of the last ten years.

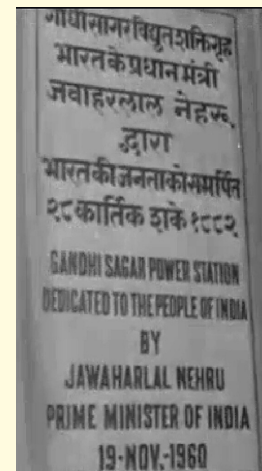
History- Chambal Valley Development Project

Chambal Valley Development Project is remarkable symbol of inter-state cooperation between state of Rajasthan and Madhya Pradesh in the field of Water Resources development. It included components such as, Gandhisagar Dam, Kota Barrage & canals, Rana Pratap Sagar Dam & Kota Dam and their HE Projects which were taken up in phases. The Chambal Control Board was constituted in April, 1955 by the Govt. of India following the decision of the inter-state conference in March, 1955 to ensure efficient, economical and expeditious execution of the Chambal Valley Development project. The then Deputy Minister for Irrigation and Power, Gol was the chairman of the board which also had representation from Ministry of Finance, Gol, erstwhile Central Water & Power Commission, and States of Madhya Pradesh & Rajasthan.

Foundation stone for the construction of Gandhi Sagar Dam / Power Station was laid by the Prime Minister Pt. Jawaharlal Nehru on 07.03.1954. The work employed local labour and generated huge employment opportunity. The work was completed in 1960. It is 513 m long dam having catchment area of about 22500 Sq Km and gross storage capacity of 8.6 BCM. Dam has 10 crest gates and 9 sluice gates. The work on the Power Station commenced in October 1957 when foundation was laid by Shri V. V. Dravid, Minister for Labour and Chambal, Govt. of Madhya Pradesh. It was dedicated to Nation on 19-11-1960. The total expenditure on the construction of Gandhi Sagar Dam and Power Station was about Rs. 18.4 crore. The expenditure on construction of Power Station was Rs. 4.80 crore. Gandhi Sagar Power Station is 65 meter long and 56 feet wide. The Power Station has five turbines of 23 M.W. capacity, thus having a total installed

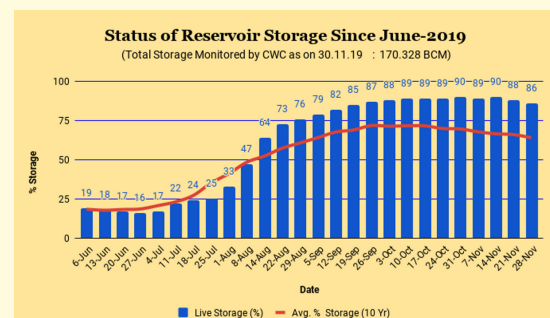


Gandhisagar Dam



capacity of 115 M.W. The downstream Kota Barrage was completed in June 1959 at the cost of Rs. 3.1 crore having 19 spillway gates. This has been a unique structure built on deep and highly pervious foundation. Two canals were constructed at the cost of about Rs. 30 crore for irrigating about 5.66 Lakh Ha of land in the State of Rajasthan and Madhya Pradesh.

The designing of Gandhisagar Dam, Power House and Kota Barrage (Phase-1) was a unique experience which proved and strengthened the self-reliance of Indian Engineers for planning and executing major river valley projects fraught with complex problem of design and construction.



Central Water Commission

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