CALL FOR PAPERS

INTERNATIONAL DAM SAFETY CONFERENCE

10-12th October, 2022

Jaipur, Rajasthan (INDIA)

DRIP

Dam Rehabilitation and Improvement Project

Central Water Commission

INCOLD

Indian National Committee on Large Dams

ESTD. 1927

New Delhi

Central Board of Irrigation & Power

MESSAGE

Dams, being a major infrastructure component of water resources, play a vital role in providing significant benefits to humankind and also overall water security to the country. Storage of water behind dams regulates natural streamflow, allowing for benefits resulting from increased water availability, renewable energy production and reduction of adverse impacts caused by natural extremes of floods and drought. Growing population is causing a steady increase in demand for water, food and energy to meet basic needs as well as higher standards of living. At the same timedams may create new hazards with risks to downstream life and property in the event of dam failure resulting from an uncontrolled or catastrophic release of stored water. It is in this context, the Dams Engineering profession has a profound duty and moral responsibility: namely, building urgently needed dams, reservoirs and levees in the most effective and sustainable way, while also ensuring that they are safe during their whole lifespan.

For almost a century, the International Commission on Large Dams (ICOLD) has been committed to promote attention to dam safety. As an important part of societal concerns, this has always been among the highest organizational commitment as stated in the ICOLD Mission Statement:

> "*ICOLD leads the profession in setting standards and establishing guidelines to ensure that dams are built and operated safely, efficiently, economically, and are environmentally sustainable and socially equitable*."

ICOLD has played a significant role in improvement of dam safety, through its work in collecting and analysing information on the lessons learned from past failures and major incidents. Since its inception, ICOLD and its thousands of dam professionals in 104member countries have continuously contributed to the improvement of dam safety through publication of technical papers and exchange of experience during Annual International Symposium Meetings held every year and Congresses held on triannual basis. Also playing a key role has been the work of its Technical Committees with the publication of Technical Bulletins summarizing the recommended state-of-the art best practices.

Since the creation of ICOLD, the number of failures compared to the total number of dams in operation have been reduced about tenfold, a dramatic achievement reflecting the worldwide influence of ICOLD. Nonetheless, constant vigilance and commitment to dam safety is still required in order to continue this successful record. Any dam incident is a matter of the graves concern to dam professionals and a reflection on all ICOLD members: Unintentional dam breaching can have catastrophic consequences, resulting in loss of life and injuries, as well as widespread damage to property, infrastructure and the environment. The understanding of the factors affecting dam safety is also in constant evolution. The changing conditions of dam safety include the following factors:

- The ageing of existingdams infrastructure is creating new concerns related to the ageing of construction material and equipment.
- More and more emerging and developing countries are now building dams, but they may lack experience in dam safety management.
- The increasing participation of the private sector in the dam business creates new governance conditions for dam safety.
- Climate change creates new opportunities and challenges for dams but at the same time it posesnew natural hazards, which must be assessed and managed.
- Because the sites most suitable for dams have already been largely utilised, new dams have tobe built on more and more challenging sites, especially regarding geological conditions.

ICOLD has come out with **World Declaration on Dam Safety** to restate the fundamentals of dam safety that have been learned by generations of engineers over the time. Furthermore, all involved institutions are reminded to ensure, through the fulfilment of their responsibilities, that those principles in order to minimize risks to humankind associated with dams and reservoirsbe respected. This common effort will contribute immeasurably to the overarching ICOLD vision for "Better Dams for a better World."

I welcome the ICOLD international experts and national experts in on 10-12th October, 2022 at Jaipur, India and hope that the 6th edition of Dam Safety Conference being organized by INCOLD, CWC and DRIP will be a grand success.

D.K. Sharma
Vice President, ICOLD & President, INCOLD

INVITATION FROM CHAIRMAN, CWC

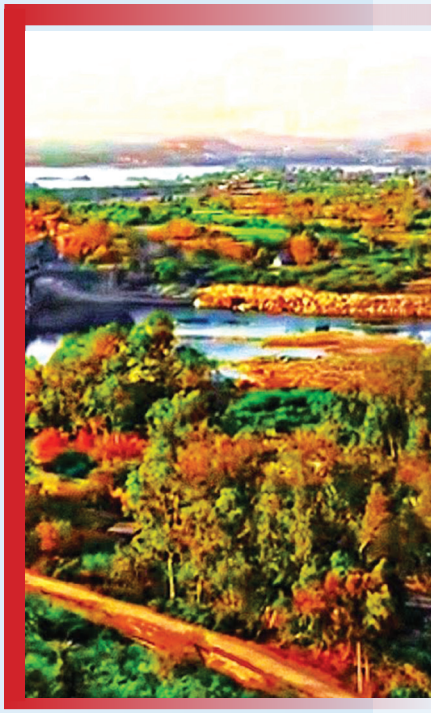
On behalf of the Central Water Commission, Department of Water Resources, RD&GR, Ministry of Jal Shakti, Government of India, I take great pleasure in inviting professionals and agencies associated with dam safety and related disciplines to the International Dam Safety Conference 2022 to be held in Jaipur, Rajasthan, India during 28-30th September, 2022.

The Conference will provide a forum for exchange of knowledge and experience in dam and dam safety engineering. The program will include enlightening presentations from leading professionals, an exhibition of latest products and processes followed by a study tour to dams.

India ranks 3rd globally with around 5300 large dams in operation and around 400 under construction. Government of India, Ministry of Jal Shakti has enacted The Dam Safety Act 2021 which provide for surveillance, inspection, operation and maintenance of the specified dams for prevention of dam failure related disasters and to provide for institutional mechanism to ensure their safe functioning. Policy makers, dam owners, dam professionals, institutions, scientists and industry from all over the world are expected to participate in this event. Looking forward to seeing you in Jaipur in September, 2022.

DR. R. K. GUPTA
Chairman
Central Water Commission
New Delhi, India

ABOUT THE CONFERENCE



India ranks third globally with 5334 large dams in operation and 411 large dams under construction. Central Water Commission (CWC) is coordinating and implementing the ongoing Dam Rehabilitation and Improvement Project (DRIP) with the support of World Bank. As part of the institutional strengthening component of DRIP, CWC has been organizing the Dam Safety Conference on an annual basis. The conference brings together dam professionals and experts in the various inter-related disciplines from within India and around the world to discuss, reflect and share knowledge, technology and experience in addressing dam safety issues.

The International Dam Safety Conference in October 2022 is 6th in the series of Dam Safety Conferences organized earlier in Chennai (2015), Bengaluru (2016), Roorkee (2017), Thiruvananthapuram (2018) and Bhubaneshwar (2019). All these conferences received an overwhelming response in terms of participation by Indian and overseas professionals and organizations.

INCOLD in collaboration with CWC, DRIP, CBIP and Water Resources Department, Government of Rajasthan is organizing the International Dam Safety Conference - 2022 during 10-12th October, 2022 in Jaipur, Rajasthan. The conference will have one Plenary Session, seven Technical Sessions, and one Session dedicated to Industry. There will be valuable presentations during the Plenary Session by eminent dam safety professionals. Several oral presentations are planned during the Technical Sessions which will cover various facets of dam safety. National and overseas organizations will showcase contemporary developments in technologies, construction materials, products, instrumentation, and services in an exhibition to be organized at the Conference venue. Several international organizations of repute including the International Commission on Large Dams (ICOLD) as well as various National Committees on Large Dams have agreed to be the Organizing Partners for this Conference.

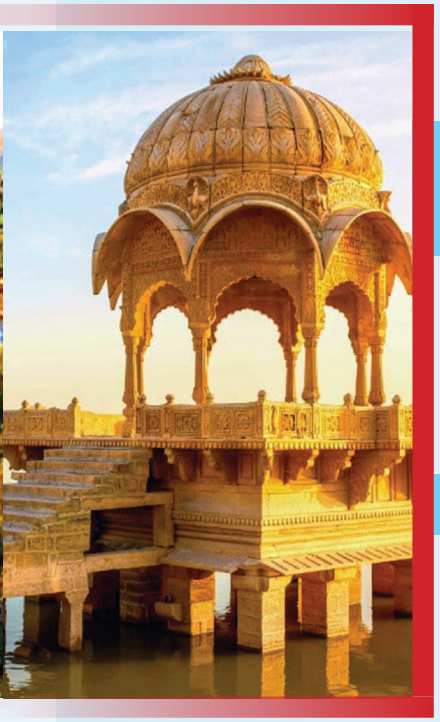
ABOUT THE ORGANIZERS

Indian National Committee on Large Dams, India (INCOLD) is the National Committee of International Commission on Large Dams (ICOLD), representing India with its Secretariat at CBIP office at New Delhi, which provides a forum for the exchange of knowledge and experience on various aspects of dam engineering.

Central Water Commission (CWC) is a premier technical Organization under the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, Government of India. CWC is coordinating and furthering in consultation with the State Governments concerned, schemes for control, conservation, and utilization of water resources throughout the Country, for the purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Hydro Power Development.

The Department of Irrigation, Rajasthan came into existence on the 14th December 1949 after having carved out from Public Works Department State of Rajasthan with the objective of increasing the production of food and fodder and to establish a suitable irrigation system to control the losses due to drought and flood.

Central Board of Irrigation and Power, is a Premier Institution set up by the Government of India in the 1927. CBIP has been rendering dedicated services to the professional organization, engineers and individuals in the country related to Power, Water Resources and Renewable Energy Sectors for the last 93 years. CBIP has grown into an eminent organization of international importance while serving the nation equally with great distinction.



Organizing Partners: Reputed global organizations are being taken on board as Organizing Partners so that they can contribute to the efficient planning and management of the Technical Sessions and encourage participation from the world community, to facilitate addressing the dam safety concerns of global dam professionals adequately during the Conference.

DAM REHABILITATION AND IMPROVEMENT PROJECT (DRIP) PHASE-II AND III

DRIP Phase II and Phase III

This Project is a State Sector Scheme with Central component. The Objective of the Project is to improve the dam safety and operational performance of selected dams of the Country, with emphasis on institutional strengthening with system wide management improvement alongwith sustainable operation and maintenance of the project.

CALL FOR PAPERS

Technical Papers reflecting the developments in technology, materials, instrumentation, and methods including case histories of dam safety and management issues and solutions, relevant to the Session Themes and Topics are invited for presentation in the technical sessions. Full papers, including main body, figures, and tables, should not be more than 6 pages on the A4 format; Guidelines to Authors published on the website may be referred to for more details on formatting. All the papers received will be reviewed by a panel of experts for the quality of contents and their relevance to the themes of the Sessions and compliance with the Guidelines before acceptance. Authors of accepted papers will be requested to submit presentation slides. Authors of papers not included for oral presentation, may make a poster presentation of their papers.

Soft copies of all the accepted papers will be distributed to the participants during the Conference. In addition, select technical papers, after necessary editing, will be published as a compendium following the Conference. CDSO and CWC reserve the right to publish the technical papers / compendium on their websites or in any other media; therefore, consent in this regard shall be given by the Principal Author while uploading the paper.

CONFERENCE SESSION THEMES, TOPICS AND PROPOSED ORGANIZING PARTNERS	
PLENARY SESSION	**Emerging Challenges in Dam Safety Management** Keynote speakers on Financial, Legal framework, Technical, Social, Cultural and/or Environmental challenges and how to overcome them.
TECHNICAL SESSION 1	**Global Best Practices in Dam Safety Management and Governance** Legislation and regulatory frameworks; Technical rules, guidelines and best practices; Portfolio management; Integrated flood risk management; New methods in selecting design floods and risk analysis, Risk Governance; Human resources and capacity building; Technological needs; Integration of policies, people and processes
TECHNICAL SESSION 2	**Sustainable Dam and Reservoir Management** Water resources management challenges; Dam safety management systems, Life-Cycle Management, Water quality and ecology; Role and benefit of dams; Optimization of reservoir operation and integrated reservoir management; Assessment and management of reservoir sedimentation; Social and environmental impact assessment and management; Trifecta: Water, energy, food; Innovative technologies, knowledge application and best practices;
INDUSTRY SESSION	**Contemporary Developments in Technology, Construction Materials, Products, Instrumentation, and Services**
TECHNICAL SESSION 3	**Dam Health Monitoring, Data Acquisition and Processing** Hydro-meteorological and seismic systems; Geotechnical, structural, hydro-mechanical and communication systems; Real-time performance monitoring and analysis of data; Automation of instrumentation, Instrumentation for earthquake hazard assessment; Surveillance and monitoring by latest technologies (Satellite, terrestrial radar, laser based technologies); Recent advances in dam health investigations: hydrologic safety, Acquisition, effective analysis and usability of monitoring data; Data processing: Design, construction and operation;
TECHNICAL SESSION 4	**Operation, Maintenance and Emergency Management** Operating Rules and operational activities; Maintenance procedures; Cost- benefit analysis of O&M; Resources and capacity building for O&M : Disaster and emergency management (prevention, preparedness, response and recovery); Cost-benefit analysis of Emergency Management; Resources and capacity building for Emergency Management; Integration of Operation, Maintenance and Emergency Management

TECHNICAL SESSION 5	**Safety Reviews and Risk Assessment** Comprehensive dam safety reviews; Dam safety standards; Uncertainty, complexity, and ambiguity; Risk-informed assessments – the system approach; Risk tolerability guidelines; Human-induced risk management; Incidents and accidents case histories; Disasters case histories
TECHNICAL SESSION 6	**Major Rehabilitations and other Risk Reduction Investments** Foundation treatments; Structural Rehabilitation design; Refurbishment of gates: Dam rehabilitation and construction management; Re-instrumentation, enhanced monitoring and overall surveillance; Other dam safety investments; Investments outside the dam: upstream and downstream planning; Risk communication
TECHNICAL SESSION 7	**DRIP Rehabilitation Case Studies** Dam Rehabilitation case studies of ongoing Dam Rehabilitation programs in Indonesia, Sri Lanka and India. It may include various aspects of rehabilitation i.e. pre-rehabilitation investigations, structural rehabilitation, technical regulations and current practices, financial planning institutional capacity building, project management contractual challenges, etc

CONFERENCE INFORMATION

10th October, 2022	NCDS Meeting	Sightseeing Tour-Jaipur	Cultural Evening Welcome Dinner
11th October, 2022	IDSC-2022	Exhibition	Concert Evening Banquet Dinner
12th October, 2022			Concert Evening Farewell Dinner

CONFERENCE SESSION PLAN

10th October, 2022		
0830-0915	Registration	
0915-1100	Inauguration	
1100-1115	Tea	
1115-1300	**Plenary Session: Emerging Challenges in Dam Safety Management.**	
1300-1345	Lunch	
1345-1530	**Technical Session 1: Global Best Practices in Dam Safety Management and Governance**	
1345-1530	**Technical Session 2: Sustainable Dam and Reservoir Management**	
1530-1545	Tea	
1545-1730	Industry Session: Contemporary Developments in Technology, Construction Materials, Products, Instrumentation, and Services	
11th October, 2022		
0845-1030	Technical Session 3: Dam Health Monitoring, Data Acquisition and Processing	
0845-1030	Technical Session 4: Operation, Maintenance and Emergency Management	
1030-1045	Tea	
1045-1230	Technical Session 5: Safety Reviews and Risk Assessment	
1045-1230	Technical Session 6: Major Rehabilitations and other Risk Reduction Investments	
1230-1315	Visit to Exhibition and Poster Session	
1315-1400	Lunch	
1400-1545	Technical Session 7: DRIP Rehabilitation Case Studies	
1545-1600	Tea	
1600-1645	Visit Exhibition and Poster Session	
1645-1745	Valedictory Session	

TIME LINES

The timeline for submission and acceptance of papers is as follows:

Full papers:	15th August, 2022
Communication of accepted papers:	1st September, 2022
Submission of PowerPoint slides (limited to 12) for oral presentation:	25th September, 2022
Communication of papers selected for oral presentation:	15th September, 2022

Exhibition

Space will be made available to selected exhibitors to showcase their technologies, instruments, construction materials, products, and services related to dam safety. Organizations interested to participate in the exhibition should submit the 'Request for Exhibition' indicating the nature of display and space required, online at our website by ..... 2022. Depending on the availability, space will be assigned; preference will be given to organizations sponsoring events or items for the Conference. The exhibition stalls will remain open after the day's sessions have ended to provide an opportunity for networking between participants and the exhibitors.

CONFERENCE VENUE

Jaipur, Rajasthan

Jaipur is the capital and the largest city of the Indian state of Rajasthan. As of 2011, the city had a population of 3.1 million, making it the tenth most populous city in the country. Jaipur is also known as the *Pink City*, due to the dominant colour scheme of its buildings. On 6 July 2019, UNESCO World Heritage Committee inscribed Jaipur the "Pink City of India" among its World Heritage Sites. Jaipur was founded in 1727 by the Kacchawa Rajput ruler Jai Singh II, the ruler of Amer, after whom the city is named. It was one of the earliest planned cities of modern India, designed by Vidyadhar Bhattacharya.

Jaipur is a popular tourist destination in India and forms a part of the west Golden Triangle tourist circuit along with Delhi and Agra. It also serves as a gateway to other tourist destinations in Rajasthan such as Jodhpur, Jaisalmer, Udaipur, Kota and Mount Abu.

POST CONFERENCE TOURS - 13th MARCH, 2022

Ranthambore National Park

Ranthambore National Park is one of the biggest and most renowned national parks in Northern India. The park is located in the Sawai Madhopur district of south eastern Rajasthan, which is about 130 km from Jaipur.

Udaipur also known as the "City of Lakes", is a city in the state of Rajasthan, India. It is the historic capital of the kingdom of Mewar in the former Rajputana Agency. Udaipur is a tourist destination and is known for its history, culture, scenic locations and the Rajput-era palaces. It is popularly known as the "City of Lakes" because of its sophisticated lake system. It has seven lakes surrounding the city. Five of the major lakes, namely Fateh Sagar Lake, Lake Pichola, Swaroop Sagar Lake, Rangsagar and Doodh Talai Lake, have been included under the restoration project of the National Lake Conservation Plan (NLCP) of the Government of India. Besides lakes, Udaipur is also known for its historic forts and palaces, museums, galleries, natural locations and gardens, architectural temples, as well as traditional fairs, festivals and structures.

Kota Barrage is the fourth in the series of Chambal Valley Projects, located about 0.8 km upstream of Kota City in Rajasthan. Water released after power generation at Gandhi Sagar dam, Rana Pratap Sagar dam and Jawahar Sagar Dams, is diverted by Kota Barrage for irrigation in Rajasthan and in Madhya Pradesh through canals on the left and the right banks of the river. The work on this dam started in 1954 and was completed in 1960.

SPONSORS OPPORTUNITIES

Opportunities Available	Platinum	Golden	Silver	Bronze	Supporter	Kit Sponsor	Lunch Sponsor	Dinner Sponsor
Opportunities Available	1	2	3	4	5	6	7	8
Investment	INR 10.00 lacs	INR 7.00 lacs	INR 5.00 lacs	INR 3.00 lacs	INR 2.00 lacs	INR 5.00 lacs	INR 5.00 lacs	INR 5.00 lacs
Benefits	2 delegates and 1 double booth or 10 delegates	2 delegate and 1 single booth or 06 delegates	1 delegate and 1 booth or 04 delegates	04 delegates	03 delegates	03 delegates	03 delegates	03 delegates
Exclusive Event Sponsor with space for pop-up banner								
Logo on home page website								
Speaking Opportunity								

Event specific recognition Logo on promo materials	✓							
Slide at Opening Plenary	Logo							
Targeted email to registered delegates	1 time	1 time	-	-	-	-	-	-
Use of logo on promo materials	✓	✓	✓	✓	✓	✓	✓	✓
Sponsor recognition sign at booth	✓	✓	✓	✓	✓	✓	✓	✓
Insert in Delegate Bag'	✓	✓	✓	✓	✓	✓	✓	✓
On-site signage	Logo	Logo	Logo	Logo	Logo	Logo	Logo	Logo
Sponsor page of Final Bulletin	Logo	Logo	Logo	Logo	Logo	Logo	Logo	Logo
Sponsor Ribbon	✓	✓	✓	✓	✓	✓	✓	✓

MEDIA PARTNERS

Reputed media houses and other interested organizations are invited to be Media Partners for this Conference and the exhibition. In return, suitable publicity is provided for the media partners on the Conference website and during the event. Selected organizations may also participate in the exhibition and make a brief presentation of their activities and services during the Industry Session. This will be a mutually beneficial partnership where the brand and logo of the media partners will gain publicity amongst a large gathering of dam professionals, dam owning agencies and other national and international organizations involved in dam design, construction, operation, maintenance, and rehabilitation from across the world.

Conference Secretariat

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