



Water Resources Department
Govt. of Gujarat



Dam Safety Society,
New Delhi



Sardar Sarovar
Narmada Nigam Limited

CALL FOR PAPERS

International Conference **DAM SAFETY 2024**

18-19 July 2024, Kevadia, Gujarat, India

&

Workshop on

Instrumentation of Dams including Seismic Instrumentation

16-17 July 2024



Organised by :

Dam Safety Society, New Delhi

In Collaboration With

**Sardar Sarovar Narmada Nigam Limited
Water Resources Department, Govt. of Gujarat**

Knowledge Partners



ICID-CIID



Central Water Commission



Dam Rehabilitation & Improvement Project



National Dam Safety Authority



आपको हि ठ नदीनियुक्त
NIH



CSMRS



CWPRS



International Centre of Excellence for Dams



Department of Water Resources Development
& Management - IIT Roorkee



Dept. of Hydrology, IIT Roorkee



भारतीय विज्ञान संस्थान
IISc, Bangalore



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www.damsafetyociety.org

INVITATION FROM PRESIDENT DAM SAFETY SOCIETY



A.B. Pandya

Dams are increasingly occupying our attention as a reliable measure of water management and energy transition Eall across the world. The importance of the reservoir storage created by the dam increases over the times and the resultant water supplies form the kingpin of the economy and well-being of the beneficiary communities. Dams, therefore have to retain their designed operations over multiple generations. It is in this context that dam safety has emerged as a discipline in its own right to ensure that our water resources assets continue to provide the benefits to the society for a long period of time.

Many of the advanced countries have already put in place legislative and technological interventions for ensuring dam safety. Still, a large swathe of the developing world is yet to establish such systems. It is necessary that a platform comes up which can bridge such gaps in knowledge and capabilities. Proposed society aims to cover all the scientific, technological and managerial aspects of dam safety.

The Dam Safety Society will provide a forum to deliberate on the unique challenges posed by existing dams for evolving unique solutions in order to ensure their safety. Dam safety touches many unique aspects of technology, economy and disaster management. There are multiple stakeholders involved in the dam safety activities namely, regulators, dam owners, service providers and researchers to name a few. However, there is no common platform where the mutual concerns of various stakeholders can be articulated. The Dam safety society will focus on such unique aspects and attempt to generate common knowledge base utilizable by the professionals.

On behalf of Dam Safety Society, I take great pleasure in inviting professionals and agencies associated with dam safety and related disciplines to the International Conference on Dam Safety 2024 on 16-17 July 2024 preceded by a two days workshop on 'Instrumentation of Dams including seismic Instrumentation' on 18-19 July 2024 at Kevadia, Gujarat, India. The Conference will provide a forum for exchange of knowledge and from leading professionals, an exhibition of latest products and processes followed by a Technical visit to Sardar Sarovar Dam.

A handwritten signature in blue ink, appearing to read 'A.B. Pandya', with a horizontal line underneath.

A.B. Pandya

President, Dam Safety Society &
Former Chairman, Central Water Commission



ABOUT THE ORGANIZERS

Dam Safety Society in association with Narmada Water Resources and Water Supply and Kalpsar Department, Government of Gujarat and Sardar Sarovar Narmada Nigam Limited is organizing International Conference: **Dam Safety - 2024** during 18-19 July, 2024 at Kevadia, Gujarat. Before the conference a two days Workshop on **Instrumentation of Dams including Seismic instrumentation** will be organized during 16 - 17 July, 2024 at the same venue.

Dam Safety Society

Dam Safety Society is established in 2023 at New Delhi with the aim to cover all the scientific, technological and managerial aspects of dam safety. The society provides a forum to deliberate on the unique challenges posed by existing dams for evolving unique solutions in order to ensure their safety. With long experience it has been realized that the approach to dam safety related works is having its distinct characteristics. The Dam Safety Society focuses on such unique aspects and attempt to generate common knowledge base utilizable by the professionals. Reaching out across the boundaries of interests and concerns amongst the stakeholders is of utmost importance if we have to implement the dam safety paradigms in the countries and regions across the world. It is in this context that a group of eminent experts and individuals have come forward and have set up "Dam Safety Society" to serve the purpose.

Sardar Sarovar Dam, Kevadia

In the history of human endeavor to intervene and harness the natural resources for its welfare, Sardar Sarovar Dam Project emerges as one of the very few projects across the globe that have played a significant role in bettering the quality of life for millions. With its unique features and unparalleled dimensions, SSP has undoubtedly occupied a remarkable position on the world atlas of water resources development. Apart from its manifold benefits in terms of long term water, energy and food security and thereby sustainable development of Gujarat State, SSP has overcome many engineering and technological challenges during its journey from concept to completion. In true sense, it is an Engineering Marvel. TIME magazine, in 1994 described the Narmada Project as one of the "Eight Modern Wonders Abuilding". Such a recognition brings to the Project that glory which the Tajmahal enjoys in the field of ancient structures. It has become a tourism hub with the Statue of Unity, tallest of the world.

Water Resources Department

For harnessing valuable and restricted sources of water procedures such as preservation of small, medium and large scale water reservoirs, joint use of underground water, conservation of underground water and re-use, salinity ingress, transfer of additional quota of water (to other areas) etc. are required to be adopted. For assessing all these, Water Resources Department, Government of Gujarat is working with a clear vision of maximum harnessing of the water resources for the use of the people of Gujarat. In spite of acute scarcity of water, thanks to effective water resource management of Gujarat that it has marked high standards of agricultural, industrial and economic development.

ABOUT THE VENUE

Kevadia (now known as Ekta Nagar), a Census town in Narmada district in the Indian State of Gujarat, is home to Sardar Sarovar Project. The town is best known as the location of the Statue of Unity, the tallest statue in the world. The town has several tourist attractions besides Iconic Sardar Sarovar Dam and Statue of unity and is a very sought after venue of various events. The town houses many world class hotels with convention centers for conferences.



About the Conference “Dam Safety 2024”, 18-19 July 2024

India ranks third globally with about 6000 large dams. This conference will bring 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 Dam Safety 2024 Conference will provide an opportunity in terms of participation by Indian and overseas professionals and organizations.

The conference will have Plenary Session, Technical Sessions, and Sessions 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 experts and organizations of repute have agreed to participate in this Conference.

CALL FOR PAPERS FOR CONFERENCE

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. DSS reserve the right to publish the technical papers / compendium on their website or in any other media; therefore, consent in this regard shall be given by the Principal Author while uploading the paper on www.dss.org

CONFERENCE THEMES AND TOPICS

THEME A : Global Best Practices in Dam Safety Management and Governance

Legislation and regulatory frameworks; Technical rules, guidelines and best practices; Human resources and capacity building; Risk Informed Decision Making; Integration of policies, people and processes; Dam safety management systems

THEME B : Dam Safety Assurance Under Climate Change

Climate change impacts on dam safety; Flood risk management; Design flood review and managing revised floods; GLOF Management; Optimization of reservoir operation and integrated reservoir management

THEME C : Dam Health Monitoring and Health Assessment

Dam Health Monitoring, Data Acquisition and Processing; Dam Instrumentation; Real-time performance monitoring; Investigations; In-situ investigations; Latest Technologies; Geophysical methods for health assessment; Under water monitoring ; Seepage and leakage detection Monitoring and remedial measure

THEME D : Risk Management Approach to Dam Safety Management

Risk Assessment and Management; Risk Tolerability Criteria; Risk Control Measures; Structural, Hydraulic, Hydrologic & Hydro-mechanical Safety Reviews of existing dams

THEME E : Rehabilitation of Dams

Structural, Hydraulic, Geo-technical & other health issues and rehabilitation measures; Advanced materials and techniques; Refurbishment of Gates ; Rehabilitation Case Studies; Contractual Challenges; Reservoir De-sedimentation

THEME F : Operation, Maintenance and Emergency Management

Operation & Maintenance Requirements; Emergency Action Plans & Disaster Management; Early Warning Systems; Decision Support Systems; Standard operating procedures ; People's Participation

THEME G : Lessons Learnt From Dam Failure Incidents

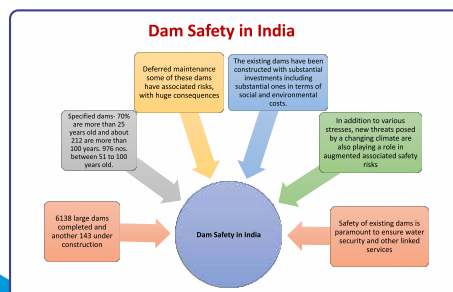
Causes of Dam Failures; Case Histories of Dam Failure Incidents; Lessons Learnt

TIME LINES

The timeline for submission and acceptance of papers is as follows: Full papers: 30th April, 2024

Communication of accepted papers: 31st May, 2024

Submission of Power Point slides (limited to 15) for oral presentation: 15th June 2024



About the Workshop on “Instrumentation of Dams including Seismic instrumentation” 16-17 July 2024

Instrumentation in dams has now become more important, keeping in view the need for the overall safety of the structure and its proper maintenance and up-keep. However, it has been experienced that in most of the cases the concerned officers and staff do not have proper exposure to the field of instrumentation, maintenance of instruments and maintenance of relevant records/data etc. It is therefore, important to disseminate knowledge about these concepts to as many engineers and dam authorities as possible. It is with the idea, to acquaint the in-service engineers/officers/staff with the updated knowledge, Dam Safety Society propose to organize a workshop on the subject, "Instrumentation of Dams including Seismic Instrumentation".

This Workshop aims at including presentations, exercises, and instrumentation equipment displays /demonstrations which all are intended to provide workshop participants with improved insight, understanding, and comfort with respect to instrumentation. The Workshop also aims to cover a variety of topics related to dam instrumentation monitoring. Attendees will learn the fundamentals and advances as well, what questions need to be answered by an instrumentation system, considerations to remember when evaluating the data, how does automation improve monitoring program, and be exposed to emerging technologies.

Workshop exercises will allow discussions of real-world scenarios. The scenarios will involve both embankment and concrete dams, planning of instrumentation system as well as data evaluation. A significant portion of the instrumentation workshop will be devoted to hands-on exercises design to walk participants through the entire scope of instrumentation from planning to design to evaluating data. Instrumentation equipment suppliers will have displays that will be used to enhance the "foundational" presentations, and the workshop will offer time for one-on-one discussions with equipment suppliers regarding general or special questions, issues, challenges, etc.

Fundamentally, the Workshop will seek to maximize the opportunities for educational discussions among the participants, presenters, and instrumentation equipment suppliers about real-world situations, and how they might best be addressed.

The Workshop will provide a general overview for the understanding of the factors that influence the accuracy and reliability of dam instrumentation data. Novice to seasoned professionals will all benefit from the Workshop. Engineers, dam owners, geologists, technicians, and government agencies all should attend.

The following broad topics will be deliberated during the Workshop

- Traditional Dam Safety Instrumentation
- Monitoring and assessing structural behavior through instrumentation data
- Emerging and Future Dam Safety Instrumentation and Tools
- Owner's Perspectives and Presentations on Data
- Seismic instrumentation and monitoring of dams
- Assessing Seismic performance of dams through recorded event data from the dam
- Instrumentation of existing dams & Equipping existing dams with instrumentation
- Best practices of automated data acquisition, processing data evaluation, management and visualization
- Case Studies on Dam Safety Instrumentation
- Use of office automation tools for managing the recorded instrumentation data

Lectures will be delivered by eminent experts in the field. An Industry session is also planned wherein industries can showcase their products. Participants can also present few Case Studies also.



EXHIBITION - (16-19 July 2024)

Exhibition Booth of 3m x 3m will be provided at the venue of the Conference. The exhibition will provide a scope to present the new technologies, materials and mechanisms including software. Participants will enjoy sufficient time and opportunity to inspect the exhibition, and exhibitors will have an excellent opportunity of accessing a large number of potential buyers/decision makers each day. This opportunity will be allotted on first-cum-first served basis. The Charges for one Booth will be Rs. 2.00 lacs.

WHO SHOULD ATTEND?

The conference will be of interest to Dam Designer & Operators, Engineers, Geologists, Regulatory Bodies, Government Departments, Dam Building Contractors & Consultants, Suppliers of Products & Services for Rehabilitation of Dams, instrumentation Companies, Technical and Research Institutes, Universities dealing with the Dam, Organization & Associations active in the supply of Dam Repairs Chemicals Companies and Funding Agencies.

OFFICIAL LANGUAGE

The official language of the Conference is English.

REGISTRATION FEE The registration fee payable by the delegates, including authors of papers, for participation in the Workshop and/or Conference is as follows:

Delegates	Workshop only	Conference Only	Both Workshop & Conference
India	Rs 7,500	Rs 10,000	Rs 15,000
Other Countries	US \$ 100	US \$ 125	US \$ 200

Notes:

- The Fee for Full-Time Students is 50% of Delegate Registration Fee.
- A discount of 25% will be given to Life members of Dam Safety Society.

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 07 delegates	1 delegate and 1 booth or 05 delegates	04 delegates	03 delegates	05 delegates	05 delegates	05 delegates
Logo on home page website	✓	✓	✓	✓	✓			
Speaking Opportunity	✓	✓						
Event specific recognition Logo on promo materials	✓	✓	✓	✓	✓			
Use of logo on promo materials	✓	✓	✓	✓	✓	✓	✓	✓
Exhibition booth	✓	✓	✓					
Insert in Delegate Bag	✓	✓	✓	✓	✓	✓	✓	✓
On-site signage (Logo)	✓	✓	✓	✓	✓	✓	✓	✓
Sponsor page of Final Bulletin (Logo)	✓	✓	✓	✓	✓	✓	✓	✓

PAYMENT MODE: Demand draft in favour of Dam Safety Society, payable at New Delhi

ONLINE PAYMENT/NEFT

- Bank Name: Canara Bank,
- Branch Address: Delhi Diplomatic Enclave, 7/48, Malcha Marg, Chanakyapuri, New Delhi 110021
- Saving Bank Account No. 110138299383
- Account Holder Name: "Dam Safety Society"
- IFSC Code: CNRB0000157
- Swift Code: CNRBINBDFS MICR Code No. 110015007



GENERAL INFORMATION

Airport

The nearest airport to Kevadia is Vadodara (BDQ) Airport which is 70.3 km away. Other nearby airports include Surat (STV) (129.3 km) and Ahmedabad (AMD) (172.8 km).

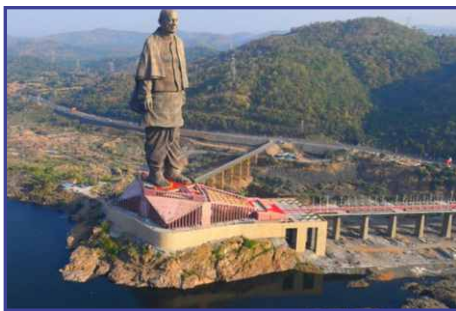
TOURIST ATTRACTION

Wxo Tourism & River Rafting

at a distance of 7 km from Sardar Sarovar Dam, 7 km from the Statue of Unity, and 13 km from Kevadiya Railway Station, Khalwani is an eco-tourism zone located near the Dyke - 4 in Kevadiya. It is one of the top places to visit as part of the Kavadiya tour. Khalwani is located along the bank of a perennial stream fed by the waters released from the Godbole Gate. The area is surrounded by hillocks bearing typical deciduous forests of this area. The chirping of birds, the flowing waters of Narmada, the undulating terrain and the various shades of green foliage make this place ideal for camping and hiking. The nearby Shoolpaneshwar Sanctuary is a treasure trove for wildlife enthusiasts. Khalwani also provides accommodation in the form of tree houses and tents. It also offers several activities for tourists including bird-watching, breakfast with butterflies, tree walks, and cycling. There are also activities like River Rafting, Trekking, Rock Climbing, botanical exploration, and Selfie on Burma Bridge for adventure enthusiasts. Visitors can get first-hand knowledge of apiary, poultry, pottery, archery, and painting using herbal colours.



River Rafting is undoubtedly one of the most enthralling adventure sports one must try in Kevadiya. Narmada, the largest west-flowing river in the country, has now ushered in the thrilling experience for the adventure enthusiasts who can now enjoy river rafting in a 5 km stretch with whirlpools, rapids, and many turns which provide an exciting and unforgettable rafting experience for the first time in Gujarat. Eligibility of Age for admission is above 14 years to a maximum of 55 years.



The Statue of Unity is an iconic 182 meters tall tribute to one of India's foremost Statesmen and leaders - Sardar Vallabhbhai Patel. The monument is located between the Vindhyachal and Satpuda ranges, rising on Sadhu-Bet Island in the Narmada River, approximately 3.5 kms downstream from the famous Sardar Sarovar Dam in Gujarat.

Sardar Sarovar Dam

a concrete gravity dam, 1210 meters (3970 feet) in length and with a maximum height of 163 meters above the deepest foundation level, is completed and



it has been dedicated to Nation at the worthy hands of Hon'ble Prime Minister of India Shri Narendra Modi on 17.09.2017.

The dam is the third highest concrete dam in India, the first two being Bhakra (226 metres) in Himachal Pradesh and Lakhwar (192 meters) in Uttar Pradesh. In terms of the volume of concrete involved for gravity dams, this dam is ranking as the second largest in the world with an aggregate volume of 6.82 million cu.m. The first is Grand Coule Dam in USA with a total volume of 8.0 million cu.m. This dam with its spillway discharging capacity of 85,000 cumecs (36.00 lacs cusecs), is the third in the world, Gazenba (1.13 lac cumecs) in China and Tucurri (1.0 lac cumecs) in Brazil being the first two.

For chute spillway Radial gates, 7 in number and size 60' x 60' and for service spillway, 23 Radial gates of size 60' x 55' are provided to negotiate the design flood. 10 number of temporary construction sluices, each of size 2.15 m x 2.75 m. are provided in the body of the spillway at RL 18 m. Another set of 4 permanent river sluices are provided at RL 53.0 m. The design of the dam allows for a horizontal seismic coefficient of 0.125g and it also covers an additional risk due to reservoir induced seismicity. Most sophisticated seismic instruments for monitoring and evaluation of the stresses in the body of the dam as well as the effect on the periphery of the reservoir have been installed.

CONFERENCE SECRETARIAT DAM SAFETY SOCIETY

C/o ICID Central Office, 48 Nyaya Marg Chanakyapuri, New Delhi-110 021, India

Tel: 91-11-26116837, 26115679 Fax: 91-11-26115962

E-mail: damsafetyociety@gmail.com ; Web : www.damsafetyociety.org

CONTACT PERSON

Mr. Sunil Sharma, Secretary General, Mobile : 9811299136

OFFICE BEARERS



Mr. Devendra K. Sharma
Vice President, DSS &
Vice President, ICOLD



Dr R K Gupta
Vice President, DSS &
Former Chairman, CWC



Mr. Vivek Kapadia
Vice President, DSS &
Director (Civil), SSNNL



Mr. Sunil Sharma
Secretary General, DSS &
Former Chief Manager, CBIP



Mr. Tarun Agarwal
Treasurer, DSS & Supdt. Engr.,
Haryana Irrigation Deptt.



Water Resources Department
Govt. of Gujarat

International Conference DAM SAFETY 2024

18-19 July 2024, Kevadia, Gujarat, India



Dam Safety Society,
New Delhi



Sardar Sarovar
Narmada Nigam Limited

& Workshop on Instrumentation of Dams including Seismic Instrumentation

16-17 July 2024, Kevadia, Gujarat, India

Please Tick here ✓ Workshop Conference Both Workshop & Conference

(To be filled in block letters preferably typed)

1. Name of Participant

(Surname) (First Name) (Prefix Prof./Dr./Mr./Mrs./Ms.)

2. Designation: _____

3. Name of Organisation: _____

4. Mailing Address: _____

City _____ State _____ PIN _____

Phone / Mobile _____ Fax _____ E-mail _____

5. Payment details: For Participation Fee, Please Refer Brochure

PAYMENT MODE

Demand draft in favour of Dam Safety Society, payable at New Delhi

ONLINE PAYMENT/NEFT

- Bank Name: Canara Bank,
- Branch Address: Delhi Diplomatic Enclave, 7/48, Malcha Marg, Chanakyapuri, New Delhi-110021 (For NEFT/RTGS) :
- Saving Bank Account No. 110138299383
- Account Holder Name: "Dam Safety Society"
- IFSC Code: CNRB0000157
- Swift Code: CNRBINBDFS
- MICR Code No. 110015007

Registration Form duly filled in, together with necessary payments to be mailed to

CONFERENCE SECRETARIAT

DAM SAFETY SOCIETY

C/o ICID, 48 Nyaya Marg, Chanakyapuri, New Delhi 110 021, India

Tel: 91-11-26116837, 26115679

Fax: 91-11-26115962 E-mail:damsafetyandsociety@gmail.com

Web : www.damsafetyandsociety.org

CONTACT PERSON

Mr. Sunil Sharma, Secretary General, Mobile : 9811299136

NOTES:

1. Participants will have to make their own arrangement for travel, boarding and lodging, etc.
2. Last date for receipt of Registration Form is 30th June 2024.
3. Spot registration facility will also be available, provided prior information is received.

Registration Fee for Conference

Countries	India	Other Countries
Delegates	Rs. 10,000*	US\$ 125
Workshop:		
Delegates	Rs. 7,500*	US\$ 100
For Both the Event:		
Delegates	Rs. 15,000*	US\$ 200

Notes:

- a) The Fee for Full-Time Students is 50% of Delegate Fee.
- b) A discount of 25% will be given to Life members of Dam Safety Society.

REGISTRATION FORM