



सत्यमेव जयते

Government of India

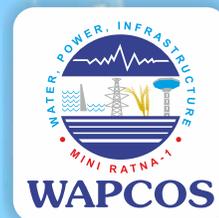
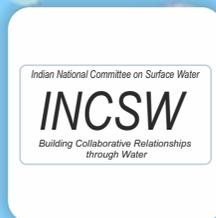
MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

9th INTERNATIONAL MICRO IRRIGATION CONFERENCE (9IMIC) ON
MICRO IRRIGATION FOR MODERN AGRICULTURE

16-18 January, 2019, Hotel Ambassador Ajanta, Aurangabad, Maharashtra, India

www.micro-irrigation2019.com

ORGANIZED BY



**If agriculture sector shines,
the purchasing power in our villages
will increase & this will further
India's economic growth**

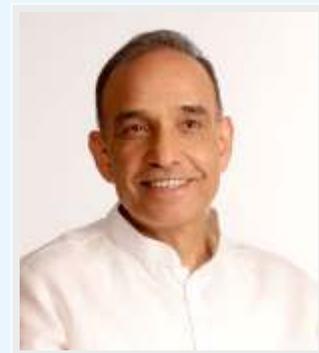
Shri Narendra Modi
Hon'ble Prime Minister of India



Shri Nitin Jairam Gadkari
Minister of Water Resources,
River Development & Ganga Rejuvenation



Shri Arjun Ram Meghwal
MoS, Water Resources, River
Development & Ganga Rejuvenation



Dr. Satya Pal Singh
MoS, Water Resources, River
Development & Ganga Rejuvenation



INVITATION

I am pleased to inform that Indian National Committee on Surface Water (INCSW) and WAPCOS are organizing the premier ICID's 9th International Micro Irrigation Conference (9IMIC) which is scheduled to be held from 16-18 January 2019 in Aurangabad, India. The theme of international conference is '**Micro Irrigation for Modern Agriculture**'.

On behalf of Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India, it gives me immense pleasure to invite you to this International Conference and Exhibition. The conference will bring the top of the line experts from India and Abroad who would share their experiences and expertise in various thematic subjects of Micro-Irrigation. The exhibition part will provide opportunity to state of the art best technology adopted world over in the field related to Micro-Irrigation.

I welcome you to Aurangabad during January 2019.

U.P. Singh

Secretary

Ministry of Water Resources, River Development and Ganga Rejuvenation
Government of India



INVITATION

On behalf of Indian National Committee on Surface Water (INCSW), it is my great pleasure to invite you to the 9th International Micro Irrigation Conference (9IMIC) to be held from 16-18 January 2019 in Aurangabad, India. The theme of international conference is '**Micro Irrigation for Modern Agriculture**'.

I am sure your participation in the conference will be very effective as the conference will attract experts from India and around the world in various thematic sessions which will help in enriching the knowledge. Apart from this you will have, the opportunity to visit the exhibition and learn about some of the best practices adopted World over in the field related to Micro – Irrigation.

Aurangabad is a UNESCO World Heritage Site city and your visit to attend the conference will also provide you a unique opportunity to put yourself amidst the city's rich culture and heritage.

I am eagerly looking forward to seeing you in Aurangabad in January 2019.

S. Masood Husain

Chairman

Indian National Committee on Surface Water (INCSW)

Central Water Commission



The world's population is projected to reach 8.5 billion by 2030 and close to 10 billion by 2050. This will lead to a significant increase in demand for food and fibre as projections show that overall food production would have to be raised by about 70 percent towards 2050 while production in the developing countries would need to be almost doubled. Similarly, present global water demand is projected to increase by 55% with increased stiff competition among various sectors. So major challenge would be to produce more with less water in a sustainable manner taking into account impacts of climate change and variability. As water stress spreads around the globe, finding ways of getting more crop per drop to meet our food needs is among the most urgent of challenges. The first answer to this call is micro irrigation, which delivers water directly to the roots of plants in just the right amounts. It can double or triple water productivity – boosting crop per drop – and it appears to be taking off worldwide. Over the last thirty years, the area under micro irrigation methods have risen by more than 1000%, to 16.5 million hectares at present.

Since both land and water resources are finite resources, increased agricultural production to meet the requirement of the increasing population will have to come from the same limited net sown area by increasing productivity with an optimal use of available water and land resources. Micro irrigation (drip / trickle or localized irrigation), which was introduced on commercial scale in the world sometime in the seventies, has emerged as one of the key interventions for water saving and for improving crop productivity with reduced labour input leading to increased farmer's income.

With a view to share experiences in the use of new technologies and best management practices in drip, micro-sprinkler, and other localized irrigation systems I, on behalf of the International Commission on Irrigation & Drainage (ICID) and host Indian National Committee on Surface Water (INCSW), invite you to the 9th International Micro Irrigation Conference of ICID to be held from 16-18 January 2019 in Aurangabad, India. The Theme of the International Conference is **"Micro Irrigation for Modern Agriculture"**.

I am confident that your presence at the 9th International Micro Irrigation Conference will not only be technically rewarding but also provide you an opportunity to closely interact with several hundred delegates working in this area as well as enjoying the rich historic culture of the city of Aurangabad.

I look forward to welcoming you at Aurangabad.

Eng. Felix Reinders
President
International Commission on Irrigation & Drainage (ICID)

INVITATION

BACKGROUND >>

The world's population is predicted to reach 9.1 billion by 2050 out of which about 6.3 billion are projected to live in urban areas. Growing population will lead to significant increase in demand for food and fibre and a projection shows that overall food production would be required to be doubled by 2050 in the developing countries. Similarly global water demand is projected to increase by 55% with increased competition among various sectors.

The share of water in agriculture is expected to reduce from present due to stiff competition from other sectors like industry, domestic, energy, environment etc. So, major challenge would be to produce more with less water in a sustainable manner taking into account impacts of climate change and variability.

New farming techniques, crop genetics and new and improved water efficient irrigation technologies will be the key strategies to enhance agricultural productivity for achieving food security for the human population. Conserving and enhancing the capacity of

land and other natural resources along with technologies that conserve and use water efficiently would play a significant role to sustain agriculture and in achieving food security.

Micro Irrigation (MI) technologies of drip and sprinkler irrigation systems have emerged as one of the key interventions for water saving and for improving crop productivity. Micro-Irrigation technologies have shown improvements in yield, reduction in labour requirement, improvement in output quality, etc. Evidence shows that 40% to 80% of water can be saved and water use efficiency can be enhanced dramatically in a properly designed and managed MI system compared to 30-40% under conventional practice.

In an effort to raise awareness, conserve and use water resources in an integrated manner, the 9th IMIC is a platform for congregation of local, regional, national & global ideas and opinion from decision makers, politicians, researchers and entrepreneurs in the field of Water Resources.

9th INTERNATIONAL MICRO IRRIGATION CONFERENCE

In order to promote the use of Micro Irrigation on large-scale, ICID launched the hosting of international Micro Irrigation Congress commencing from the year 1971 by its member countries. The 8th MIC was held in 2011 in Tehran, Iran. India proposes to hold the 9th Micro Irrigation Conference from 16-18 Jan, 2019 in Aurangabad, Maharashtra.

9th International Micro Irrigation Conference 2019 will form a forum where the Indian National Committee which is a part of the Ministry of Water Resources, River

Development and Ganga Rejuvenation, Government of India will generate opportunity for discussions and deliberates strategies with eminent stakeholders through seminars, exhibitions and sessions to build public awareness for use of Micro Irrigation on large-scale and to get support to implement key strategies for conservation, preservation, Inter sectoral arrangements, advanced crop technology, precision engineering techniques etc.

THEME AND SUB-THEMES

The event is not proposed as India centric but aims to address the problems of developing as well as developed world in the context of present day challenges. Different regions of the world are at different levels of endowment and development of water resources. A special feature of the event will be a host of special side events managed by international organizations and professional societies and bodies. The other highlight will be special supporting events in the related topics or Country Specific or Crop Specific or Technology Specific theme.

The event will be a multi-disciplinary dialogue in the form of a conference discussing issues

related to the theme. 9th Micro Irrigation Conference will focus on the theme of **“Micro Irrigation for Modern Agriculture.”**

The Sub-Theme are as follows:

➤ **Sub-Theme 1: Micro Irrigation Design, Innovations, and New Techniques for increased Crop Productivity**

- Technical details, arrangements
- Industry Studies, New Technology, Accessible Technology & Products
- Fertigation & Chemigation
- Success/Failure Stories
- Solar Power Integration

➤ **Sub-Theme 2: Micro Irrigation fund & Government support through Micro Irrigation**

- Innovative financing
- Micro Irrigation Fund
- PPP intervention for Micro-Irrigation
- Challenges in financing of Micro-Irrigation

➤ **Sub-Theme 3: Micro Irrigation for 'Cluster Level Farming & small farm holders**

- Productivity, Surface Water Linking, Energy Efficiency
- Reclaimed Water, Urban Irrigation,

- Sustainability, long term solutions
- Social Upliftment, Innovative Management and Impact on Women
- Role of Participatory Irrigation Management

➤ **Sub-Theme 4: Operation & Maintenance Services and Capacity Development for the Micro Irrigation Systems**

- Techniques, Problems, solutions, Participatory Approach
- Capacity development of farmers and service providers
- Skill Development
- Contract Management

TARGET PARTICIPANTS >>>

Event will be targeted to a wide range of participants including policy makers, manufacturer of various industries (irrigation, agriculture, construction etc.), Engineering companies, Trade organisations (retail,

wholesale, import/export), government departments, trade associations, research institutes, universities, academicians and other public organisations.

PAPER SUBMISSION PROCESS >>>

The paper presentation will have to fall under the purview of any one of the topics within the sub-themes specified for the conference.

Important Dates for the submission and processing of paper are:

- **30th September 2018** – Last date for Synopsis submission

- **31st October 2018** – Communication on approved Synopsis
- **30th November 2018** – Submission of Full length paper
- **31st December 2018** – Notification of Acceptance of paper

The online procedure for paper submission is available on the event website.

HIGHLIGHTS OF THE EVENT >>

The conference aims and plans to provide a global platform for professionals and exhibitors by showcasing knowledge and technologies from the world over and providing business to business opportunities to the water resources communities. Following high level concurrent events are also proposed:

- Irrigation Minister's Round Table
- Farmer's Pavilion & NGO session
- Sponsors Workshops on Specific Crops
- Workshop on specific Agro Climatic Zone
- Micro Irrigation Awards to Farmer, practitioner, Company, Government

The event will showcase various programmes that include:

Conference: 3 days of action packed exchange of Ideas on Policy for the Development of the Micro Irrigation in Modern Agriculture for Sustainable Water, Food & Agriculture

Exhibition: Core focus - 3 days Industry Sponsored Technology Based Exhibition of products depicting latest Technology for use of Micro Irrigation

Supporting Events: Focus on Women Participation, Rural Development and Farmers

Participation, Crop/Technology/ Country Specific events

Cultural Tour(s): Full day Cultural Tour after the conference to focus on rich cultural heritage of India located in that Area,

Study Tour(s): Full day Study Tour after the conference to focus on one of the largest micro Irrigation System of India located in that Area and visit to a Factory.

Accompanying Person: Full 3 days engagements in local shopping cum cultural tours for Handicrafts, Shops etc.

Social Networking: Other ICID National Committee's Program Dinner, Spouse Club, Folk Dance/ Film Show

A large group of eminent international and national persons and local farmers shall be invited for sharing their experiences in the field of latest development in micro irrigation technology to enhance crop production and water management for optimal use in agriculture, technical and sociological interventions for sustainable Water, Food & Agriculture.

EXHIBITION >>

There will be an exhibition running in parallel supporting the theme and showcasing the technologies, latest development and solutions available for the areas of Irrigation, latest development in Micro irrigation technology to enhance crop production and water management for optimal use in agriculture. Active association of all water related organizations, companies will be solicited to promote products and services depicting latest Technology for use of micro irrigation to the world in general and India in particular :

- 100+ exhibitors are targeted
- 1000+ visitors are targeted which includes Students, Academician, Commercial Farmers, Business Visitors;
- 2,000 sqm of show space;
- Regional pavilions targeted for: the Netherlands, France, Germany, Japan, Korea, USA, Israel, Hong Kong, Taiwan, Italy, Denmark, Water Environment Federation etc;
- National organizations targeted for Micro Irrigation equipment manufacturers, service providers and international support organizations

Key Exhibition Sections:

- Exhibition of products depicting latest Technology for use of micro irrigation
- Micro Irrigation for Greenhouse technologies, Nurseries & Horticulture, Landscaping & Sports fields & High Tech Irrigation Farm
- Pressurized irrigation network and expansion of Micro-Irrigation in irrigated agriculture
- Reused water for Irrigation & Energy saving for Irrigation
- Pumps, pipes, valves, machinery
- Water collection and utilization of flood water for Irrigation
- Technology and equipment for Soil treatment and agricultural practices

Advantages for Exhibitors :

The exhibition will provide a unique networking opportunity to the exhibitors for displaying products and services to the practising water resource professionals from participating countries. Exhibitors will also have a unique opportunity to spread their network in this region and find new joint ventures and profit from the growing business in this emerging and technologically important area. Business firms will have the opportunity of direct

interactions with thousands of potential clients, highly qualified visitors including decision makers, enormous PR and promotional opportunities, joint ventures, expanding their business in the rapidly growing Indian water market and to increase brand visibility/image.

Facilities Provided to Exhibitors

Free hosting of exhibitor's profiles and company website links on event web portal and one delegate at concessional rate for the conference.

Exhibition Participation Fee

Bare Space- INR 10,000 per sqm

Shell Scheme- INR 12,000 per sqm

Exhibitor desirous to take Bare space will have to make payment for minimum 27 sqm. The shell scheme minimum space will be 9 sqm (3mX3m) and multiple of 3m. The layout of exhibition plan will be uploaded on the website www.micro-irrigation2019.com

PARTICIPATION IN CONFERENCE >>>

Delegates attending the conference as well as exhibitors can sign up/register for both the conference and exhibition online. Please note that expressing interest through registration is free of cost. However, participation in the conference is subject to clearing of dues.

Early registration fee incentive of Rs 1000/USD 10 will be applicable up to 15th October 2018. The registration fee payable by the delegates including author of papers for the conference is as follows:

| Country | Full Delegate | Young Professional* | Retired Professional** | Accompanying Person |
|---------|---------------|---------------------|------------------------|---------------------|
| India | INR 13000 | INR 6500 | INR 6500 | INR 6500 |
| Foreign | USD 500 | USD 250 | USD 250 | USD 200 |

* Up to 40 years of age ** Beyond 62 years of age

All payments shall be in equivalent Indian Rupees. To avail the concession in the registration fee, age proof, retirement certificate has to be submitted to the Conference Secretariat.

The registration fee covers admission to all official functions, technical sessions, one set of pre-session papers, official lunch/dinner and tea in between sessions. The registration for accompanying persons will cover admission to all official lunches, dinners and cultural programme.

On the completion of the registration process, the delegates/exhibitors will be able to access

the details, receive the latest announcements regarding submissions and acceptance of synopsis/papers, details of person registered, key note speakers, session-wise details, booking of exhibition space, transport and accommodation rate and guidance and facilities on other features of Micro Irrigation Conference.

Payment Method

Demand draft/cheque is payable at New Delhi. Online payment facilities are provided on the event website.

PROMOTIONAL FACILITIES >>

The Micro Irrigation Conference will provide excellent opportunities to national and international organizations, Central/State Government organizations, public sector undertakings, industrial organizations, equipment manufacturers, entrepreneurs, financial and funding institutions, consulting and construction organizations to publicize themselves by being Platinum/Golden/Silver sponsors or Supporter of the Conference. The sponsorship fees payable and benefits are mentioned below. Interested organizations may communicate their willingness to the conference Secretariat.

SPONSORSHIP

PARTNER SPONSOR: INR 30,00,000 (US\$ 50,000)

Free registration for Twenty delegates with Company name and logo on conference web Page (linked to the company website) / promotion material like proceedings volume, banner/signage, stationary items etc. A Full page advertisement in the post Session Proceedings. Time slot for technical presentation in the Special Sponsor session of the choice (except Inaugural, Plenary &

Valedictory sessions), Distribution of Literature/Brochures.

**CO-PARTNER SPONSOR:
INR 20,00,000 (US\$ 35,000)**

Free registration for fifteen delegates with Company name and logo on conference Web Page (linked to the company website) / promotion material like proceedings volume, banner/signage, stationary items etc. A Full page advertisement in the post Session Proceedings. Time slot for technical presentation in the Special Sponsor session of the choice (except inaugural, plenary & valedictory sessions), Distribution of Literature/Brochures.

**PLATINUM SPONSOR:
INR 10,00,000 (US\$ 17,500)**

Free registration for Ten delegates with Company name and logo on conference Web Page (linked to the company website) / promotion material like proceedings volume, banner/signage, stationary items etc. A Full page advertisement in the post Session Proceedings. Time slot for technical presentation in the Special Sponsor session of the choice (except inaugural, plenary & valedictory sessions), Distribution of Literature/Brochures.

**GOLD SPONSOR:
INR 6,00,000 (US\$ 10,000)**

Free registration for Seven delegates Company name and logo on conference web Page (linked

to the company website) / promotion material like proceedings volume, banner/signage, stationary items etc. A Full page advertisement in the Post Session Proceedings Distribution of Literature/Brochures

**SILVER SPONSOR:
INR 3,00,000 (US\$ 5,000)**

Free registration for five delegates Company name and logo on conference Web Page (linked to the company website) / promotion material like proceedings volume, banner/signage, stationary items etc.

**SUPPORTER:
INR 1,00,000 (US\$ 1,500)**

Free registration for two delegates

Company name and logo on conference proceedings volume

ADVERTISEMENT OPPORTUNITIES

A limited space will be made available on first-come-first-served basis, for coloured advertisement to the organization involved in the concerned field, in the event website and post session proceedings (A4 size coloured) are being brought out on the occasion of the conference. The interested organizations are required to send the advertisement material, i.e. Art Work/Negative/Positive along with payment after discussions on the event secretariat email.



Ajanta Caves (A- UNESCO World Heritage)



Ellora Caves (A- UNESCO World Heritage)



Sculptures at Ajanta and Ellora Caves



Bibi Ka Maqbara, Aurangabad



Jayakwadi Dam Bird Sanctuary



Farmer's Micro Irrigation Site

ORGANISERS >>

ICID: The International Commission on Irrigation and Drainage (ICID), established in 1950 is a leading scientific, technical, international not-for-profit professional organization. The professional network consists of experts from across the world in the field of irrigation, drainage, flood management, and a wide spectrum of agriculture water management. The main mission is to promote 'Sustainable agriculture water management' to achieve 'Water secure world free of poverty and hunger through sustainable rural development'. ICID is a knowledge sharing platform dedicated to issues that covers the entire spectrum of agricultural water management practices ranging from rainfed agriculture to supplemental irrigation, land drainage, deficit irrigation to full irrigation, etc. In addition, drainage of agricultural lands forms the core theme of commission's activities.

INCSW-CWC: The Indian National Committee on Surface Water (INCSW) has been constituted by MoWR, RD & GR during the year 2013 (earlier ICID) with the objective of promoting & building national and international collaborations with water resources institutions and organisations. INCSW is currently an arm of Central Water Commission (CWC) and headed by Chairman CWC. It comprises of members representing

Ministry of Water Resources (MoWR)/CWC, Central Soil and Materials Research Station (CSMRS), Central Water and Power Research Station (CWPRS), National Institute of Hydrology (NIH), Department of Science & Technology (DST), Ministry of Agriculture, Water and Land Management Institute (WALMI), Indian Institutes of Technology (IIT), NGOs etc. Director INCSW Sectt., CWC is the Member Secretary of the Committee. INCSW has been envisaged as an apex body to coordinate the R&D activities in surface water in general and R&D Programme of MoWR, RD & GR in particular. The subject domain of the INCSW is very broad and covers almost every aspect of water resources sector viz. Hydrology, Hydraulics, Irrigation, Hydro environment, Water Governance etc. INCSW promotes innovations and technologies related to water resources engineering and management in India. Participation in international programmes related to surface water and sponsoring events, talk shows, seminars on various aspects of water resources issues is among one of the objectives of INCSW. INCSW is the National Committee of ICID for India and the organiser for the international conference & exhibition.

WAPCOS Limited is a “**MINI RATNA-I**” Public Sector Enterprise under the aegis of the Union Ministry of Water Resources, Ganga Rejuvenation & River Development. Incorporated on June 26th 1969 under the Companies Act, 1956; WAPCOS is a technology driven consultancy and Engineering, Procurement and Construction organization with strong home country and global presence in the field of Water, Power and Infrastructure sectors. WAPCOS has the requisite experience & expertise to undertake projects of any scale and complexity in the sectors of its operation. WAPCOS portfolio of projects is both impressive and diverse in nature. The quality management systems of WAPCOS comply with the Quality Assurance requirements of **ISO 9001:2015** for Consultancy Services in Water Resources, Power and Infrastructure Development Projects & also with the Quality Assurance requirements for Engineering, Procurement & Construction Projects related to Residential, Office Buildings, Civil Works, Roads & Highways, Irrigation, Agriculture and Water Projects, Electrical Power Projects for Generation, Substation, Transmission etc. WAPCOS has vast experience in organising of National and International conference of repute for several Indian and Overseas Clients. Apart from India, WAPCOS has successfully completed / ongoing consultancy assignment in about 60 countries covering Asia, Africa, Middle East, South America. WAPCOS has its presence and providing consultancy services in 45 countries.





9th International Micro Irrigation Conference (IMIC)

16-18 January 2019, Aurangabad, Maharashtra

Program (tentative)



| Date/2019 | 15-Jan | 16-Jan | 17-Jan | 18-Jan | 19-Jan | 20-Jan |
|-------------|---------------------------------------------------|--------------------------------|----------------------------|----------------------------------------|-----------------------------------------------|--------------------------------------------------------------|
| Day/Hours | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| 09.00-10.00 | Registration | Registration | Registration | Registration | S T U D Y T O U R | C U L T U R A L T O U R |
| 10.00-11.30 | Pre-conference National Micro Irrigation workshop | 9th IMIC Opening Ceremony | Technical Parallel Session | Technical Parallel Session | | |
| 11.30-12.00 | HEALTH BREAK | | | | | |
| 12.00-13.00 | Pre-conference National Micro Irrigation workshop | Plenary Session I | Technical Parallel Session | Technical Parallel Session | | |
| 13.30-14.15 | LUNCH BREAK | | | | | |
| 14.15-15.45 | Pre-conference National Micro Irrigation workshop | Plenary Session II (Parallel) | Technical Parallel Session | Plenary Session IV | | |
| 15.45-16.15 | HEALTH BREAK | | | | | |
| 16.15-17.45 | Pre-conference National Micro Irrigation workshop | Plenary Session III (Parallel) | Technical Parallel Session | Panel discussion / Valedictory session | | |
| 19.00-22.00 | | Welcome Dinner | Sponsored Dinner | Sponsored Dinner | | |

| | |
|--|----------------------------------|
| | Registration |
| | Plenary/Parallel Sessions |
| | Pre-conference National workshop |

| | |
|--|-----------------------|
| | Special Sessions (SS) |
| | Supporting event (SE) |
| | Field Visit |
| | Health / Lunch break |

CONTACTS

INCSW Sectt. Central Water Commission

Room No. 2, First Floor, Wing-4
West Block-1, R K Puram, New Delhi -110066, India
Phone 91-11-29583435
Email: incsw-cwc@nic.in
Web site: <http://www.cwc.gov.in/incsw>