From Secretary General's Desk...

Dear Colleagues,

I C I D h a s recently signed a memorandum of understanding (MoU) with ICARDA-CGIAR to further expand its reach in the middle-east



region, particularly for the semi-arid and arid countries with a very long experience of dealing with water scarcity in the agriculture sector. We hope this partnership helps the ICID member National Committees (NC) advocate and sensitize their national leaders and policymakers about the perennial need for technological developments in

irrigation for improved agricultural water management under the emerging climatechange scenario.

The Young Professionals Training and the 5th African Regional Conference were successfully organized at Marrakech, Morocco, in November 2021. However, the ICID International Executive Council Meeting had to be divided into two parts – the face-to-face one in Morocco and then online from the Central Office in India due to travel emergencies announced during the events. The IEC's resolutions deliberated and passed will be covered in the December 2021 issue of the ICID News Update. Other side events concluded successfully and are reported in this issue.

I am delighted to share that so far, ICID has recognized more than 100 World Heritage Irrigation Structures (WHIS)

since the inception of the program, with 16 of them for the year 2021. The WatSave Awards in four categories and the Best Paper Award were announced in the IEC session held in Morocco. Further details are available in this issue.

The Central Office organized 2 beneficial webinars during November 2021, which are described in detail in this issue.

I am sure by the time you receive this News Update; you will be busy in New Year celebrations. Please have a wonderful year ahead and keep in touch.

Ablandye

Ashwin Pandya Secretary-General, ICID

International Center for Agricultural Research in the Dry Areas (ICARDA) Signs MoU With the International Commission on Irrigation and Drainage (ICID)

Er. Ashwin B Pandya, Secretary-General of the ICID and Mr. Aly Abousabaa, ICARDA Director-General and CGIAR CWANA Regional Director, signed a memorandum of understanding to establish a formal framework for the future collaboration between ICID and ICARDA. This framework aims to build on the expertise and innovation of the two organizations in water management and efficiency while promoting knowledge sharing, collaborative programs, projects, and capacity development activities. The agreement will also build on longstanding relationships with key stakeholders on joint activities such as



participation in the recently concluded Arab Water Forum.

The MoU will also draw on each organization's past success in resource mobilization and technical assistance opportunities, as well as push for regional capacity development, education, and training through joint seminars, training, webinars, and workshops. Eng. A.B Pandya also invited the Mr. Aly Abousabaa, Director-General ICARDA as an observer to the ICID International Executive Council, ICID Congress/World Irrigation Forums whenever appropriate.

ICARDA works in severely resource-stressed areas that face serious water scarcity, climate variability, severe

environmental degradation, extreme temperatures, and drought. ICARDA implements proven agricultural technologies and climate-smart water irrigation techniques to improve on-farm water use and efficiency for higher water and land productivity. ICARDA's Integrated innovations include maximizing in-situ water through conservation interventions, fine-tuning when and how to irrigate to produce "more yield per drop", water-harvesting and water-conservation techniques in rainfed agriculture, and exploring the safe use of treated wastewater to produce more feed, forage, and trees.

The 5th African Regional Conference, YP Training for Young African Professionals and Related Side Events, 23-30 November 2021, Marrakech, Morocco



The opening session was chaired by the Minister of Agriculture, Maritime Fisheries, Rural Development and Water and Forests, Dr Mohamed SADIKI, in the presence of the President of ICID, Dr Ragab RAGAB and the President of ANAFIDE, Mr Aziz FERTAHI. This first day saw the participation of 380 face-to-face participants from 34 countries including the host country Morocco and spread over 5 continents (South Africa, Burkina Faso, Djibouti, Senegal, Niger, Benin, Mali, Chad, Togo, Nigeria, Zambia, Mauritania, Ghana, Ethiopia, Sudan, Egypt, Kenya, Rwanda, Tunisia, Saudi Arabia, Australia, United States, United Kingdom, France, India, Indonesia, Malaysia, Japan, South Korea, Russia, Lithuania, Portugal, and Nepal), in addition to the presence of international organizations (FAO and World Bank).

As the conference and its side events were held in hybrid mode (online and face to face) in two languages with a simultaneous translation, a large number of people from all over the world were able to follow its sessions which took place in the conference rooms of the Kenzi Rose Garden hotel in Marrakech.

During the conference opening speech, Mr. Mohammed SADIKI, Minister of Agriculture, Maritime Fisheries, Rural Development and Water and Forests, recalled the importance of such a topic for Africa. "This subject is of extreme importance for our African continent and far beyond, which continues to adapt its agriculture to climate change which is increasingly striking people's minds and mobilizing all the nations of the earth", he declared.

For his part, Mr. Aziz Fertahi, President of the National Association for Land Improvements, Irrigation, Drainage and the Environment (ANAFIDE) added: "The topic chosen for this 5th edition of the African regional conference has been thought through for a long time and is hardly trivia I. First, the choice of such a topic is unifying since, today, most African countries are facing similar problems in the agricultural sector. although to varying degrees. Irrigation offers enormous potential to increase the resilience of agriculture in Africa and contributes to its development. The 5th African Regional Conference on Irrigation and Drainage will provide an opportunity to discuss this major subject, but also other related subjects ".

Following on from this important meeting, the 72nd Executive Council of ICID was held. Morocco has been a permanent member of ICID since 1959. ANAFIDE, the Moroccan National ICID Committee which is an NGO, is an association founded in 1970 and recognized as being of public utility. in 1988. At the opening of this 72nd IEC on the 26th of November in Marrakech, an award ceremony was organized. The Watsave Prize for innovation in water saving through an innovative irrigation management system was awarded by CIID to Morocco in the person of Mr. Ahmed El Bouari, Director of Irrigation and Agricultural Land Planning and Vice President of ICID. Indeed Morocco has the merit of being the first country in the world to have initiated in 2005 a PPP (Public Private Partnership) project in irrigation. Through this project, the management of the irrigation scheme of El Guerdane

located south west of Morocco in the Souss region has been entrusted to a private company. The project aimed to save irrigation water through use of drip irrigation and also safeguard the water table of El Guredan from depletion. The prize was sponsored by ETCOMAR, a private Moroccan Company.

Other prizes awarded by ICID include the Innovation Prize for Water Saving in Irrigation which was awarded to Dr Abdel-Azim Abdrabbo Shehata (Egypt). The Prize for the best farm for young irrigation professionals was awarded to Dr Alison McCarthy (Australia), while the Prize for the best farm in irrigation was awarded to Mr. Ansari Gholamreza (Iran).

ICID has recognized the system of KHETTARAS as a world irrigation heritage structure. Khettaras are water tunnels which have been used for centuries in Moroccan arid provinces to harvest rain water and collect undeground water and channel it by gravity to villages where it is used for drining water and irrigating crops.

ANAFIDE organized a series of activities in the form of side events which took place back to back with the 5th African Regional conference or in parallel with it. These activities are listed below

-the conference was thus preceded by an IYP: international training session for the benefit of young African water professionals from November 19 to 23, 2021 on the theme "Micro-irrigation systems to reduce the impact of climate change". 43 participants from 14 countries attended (South Africa, Nigeria, Burkina Faso, Senegal, Zambia, Benin, Soudan, Egypt, Kenya, Ethiopia, Tuinisa, Mali, Djibouti, Morocco). The sponsors of

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this training are the Chinese National Committee of ICID, the Afro-Asian regional development organization (AARDO), ICID, the Regional Boards of Irrigation in Morocco (ORMVAs) and ANAFIDE. This training is a major contribution of Moroccan National Committee of ICID to enhance capcity building in Africa in the sector of irrigation

In partnership with ANAFIDE, FAO through its regional office in Cairo organized a side event on November 24 in the afternoon under the theme "Water-Energy- Agriculture Nexus". The World Bank participated with an intervention entitled "Governance and technology for a resilient and sustainable water-agriculture nexus

ANAFIDE also organized

The meeting of Irrigation Development and Management Companies "SAGI"irectorate (West African Network including: Mali, Mauritania, Chad, Burkina Faso, Senegal and NIGER). The program of working sessions and a study day (25 November 2021) which brought together the senior managers of SAGIs, major players in irrigation in Sub-Saharan Africa and the Directors of the Regional Offices for Agricultural Development in Morocco and their employees as well as the Directorate of Irrigation and Agricultural land Planning (DIAEA). The objective of

this activity is to exchange experience and lessons learnt in the field of irrigation and to share the Moroccan experience in this field. This activity was conducted in partnership with the French National Committee of ICID 5Association for Water, Irrigation and Drainage 'AFEID'. By doing this ANAFIDE is contributing to south south cooperation and promotion of ICID membership within Africa.

A workshop for young African professionals: Sustainable management of water in irrigation held on November 26.

A workshop on the use of geosynthetics as a coating for irrigation canals and water storage structures, in partnership with the International Association of Geotextiles; organized on November 25 in the afternoon. This activity aims at modernizing irrigation schemes and hydraulic structures in order to save irrigation water through the reduction of seepage

An exhibition of irrigation technologies and hydro-agricultural developments which ran from 23 to 26 November. Took part in this exhibition of Moroccan contractors, companies of irrigation equipment and engineering companies well known in the sector of irrigation and related civil engineering works both on the national and African level. These companies are members of REMIG:

Moroccan Interprofessional Irrigation Network chaired by Mr Ahmed El Bouari Director of Irrigation and Agricultural Land Planning and Vice President of ICID.

At the end of the closing ceremony of the 5th African regional conference on November 26 afternoon, a message of loyalty and allegiance to His Majesty King Mohammed VI May God assist him was addressed to the royal cabinet by Mr. Aziz Fertahi, President of ANAFIDE. This message was read by the General Secretary of ANAFIDE at the closing ceremony.

Morocco continues to make great strides in controlling its water resources, thanks to the quality of its forward-looking vision through which it intends in particular to erect 40 new dams by 2030 and thus achieve storage capacity, of 30 billion m3 of surface water. In addition, within the framework of the water saving irrigation program carried out by the Ministry of Agriculture, Maritime Fisheries, Rural Development and Water and Forests, Morocco aims to achieve the objective of 1 million ha drip irrigated by 2030. On the other hand, efforts are continuing to resort to the use of non conventional water resources, including the reuse of treated of wastewater and the desalination of seawater for irrigation purposes in particular.

World Heritage Irrigation Structure Recognized (WHIS) by ICID in 2021

During the recent 72nd IEC Meeting at Marrakech, Morocco, 16 World Heritage Irrigation Structures were recognized by ICID for the year 2021.

Recognized Structures are listed below:

CHINA:

(i) Li Canal-Gaoyou Irrigation District, (ii) Liao River Irrigation District, and (iii) Sakya Water Storage Irrigation System

INDIA:

(i) Kalingarayan Anicut and Kalingarayan Channel System, (ii) Grand Anicut Canal (Kallanai Dam) (iii) Dhukwan Weir, and (iv) Veeranam Tank

IRAQ:

(i) Hindiya Barrage and (ii) Waterwheels of Heet

JAPAN:

(i) Teragaike Pond and Teragaike



Waterway and (ii) Usa Irrigation System

MOROCCO:

Khettaras

REPUBLIC OF KOREA:

(i) Gangjin Lotus Small Reservoirs Irrigation System (ii) Gudeuljang Irrigated Rice Terraces in Cheongsando

SRI-LANKA:

- (i) Ethimale (Reservoir) Tank Bund
- (ii) Dam Old Sluices of Parakrama

WatSave Award Winners 2021

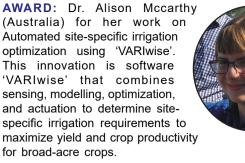
This year, the recipients received awards under all four categories — Innovative Management, Technology, Young Professionals, and Farmer. The winners of the 2021 WatSave Awards for various categories announced during the 72nd IEC Meeting are:

(A) INNOVATIVE WATER
MANAGEMENT: Mr. EL Bouari
Ahmed (Morocco) for hi s work
on "First PPP Irrigation Project
in the World (EI GUERDANE
Scheme) in South of Morocco".
This innovative management
approach combines government
and private sector efforts to
improve the technical, economic, and
'financial conditions of the management
of the irrigation water service.

(B) TECHNOLOGY AWARD:
Dr. Abdrabbo Abdel-Azim Abdrabbo
Shehata (Morocco) for his work
on "Hybrid Irrigation Method
for Water Saving in Irrigated
Agriculture". This innovative
method provides a hybrid
between surface and pressurized
irrigation methods to overcome the
disadvantages of both the methods.







(C) YOUNG PROFESSIONAL

Mr. Gholamreza Ansari (Iran) for his work on "Increasing Wheat Water Productivity in Wheat Based System in Iran (Case Study: Darab City)". Local adoption and implementation of conservation agriculture based on crop management are one of the most important aspects of this project.



Irrigation and Drainage Journal Best Paper Award - 2021

During the 72nd IEC Meeting, Marrakech Morocco, the Best Paper Award 2021 was presented to Yan-Ping Wang, Lin-Sen-Zhang, Yan Mu, Wei-Hong Liu, Fu-Xing Guo and Tian-Ran Chang from China for their paper entitled 'Effect of a Root-Zone Injection Irrigation Method on Water Productivity and Apple Production in a Semi-Arid Region in Northwestern China' published in Volume 69 Issue 1 (2020) – The Irrigation and Drainage Journal of ICID.

Within the Chinese Loess Plateau, water resources are scarce and irrigation efficiency is a challenging issue. Traditional surface drip irrigation

(SDI) methods have failed to improve irrigation efficiency and reduce surface evaporation in the region. An easy-to-install and practicable root-zone injection irrigation (RII) method, with a low risk of emitter clogging and which uses subsurface infiltration-promoting apparatuses (SIPA) to deliver water directly to the root zone, was designed and tested in an apple orchard over 3 years in northern Shaanxi, China. In the 0–0.6 m soil layer (where the apple roots are concentrated), the RII method produced consistently higher soil water content than the SDI method over all three growing seasons. The soil water content was consistently higher than 60% of field capacity, thus meeting the water requirements of fruit-bearing apple trees. In addition, the RII method alleviated soil desiccation, significantly increased apple yields and improved fruit quality



compared with the SDI method using the same volume of irrigation water. Both irrigation efficiency and water-use efficiency were improved with the RII method. These results provide a theoretical basis for the utilization of the RII irrigation method in apple orchards in semi-arid regions, which may improve water conservation and the sustainability of apple production.

keywords: Injection irrigation; soil water distribution; evapotranspiration; apple yield; irrigation efficiency; water productivity.

For the full-length paper, please visit: https://onlinelibrary.wiley.com/doi/full/10.1002/ird.2379

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IGS-ICID Webinar on Improving the Performance of Canals with Geosynthetics on the theme "Geosynthetics to Reduce Seepage Losses and Improve Structural Integrity of Canals"

Many parts of the world experience water scarcity caused by climate change. On the other hand, a constantly increasing population stresses the global food demand. One of the paths forward is to put in place better water management strategies to reach better vields and ensure food security. This series of webinars is intended to present geosynthetics to the engineering community specializing in canal design and restoration. Renowned experts were selected by the Technical Committee on Hydraulics of the International Geosynthetics Society to present this series of webinars on the use of geosynthetics in canals. Geosynthetics have been used successfully in construction for decades. They offer cost-effective and durable solutions for numerous applications in geotechnical engineering. They are used in large canals and medium to small canals: to control seepage, avoid erosion, stabilize banks, or ensure structural integrity. They have been used successfully in thousands of kilometres of canals in all parts of the world: the Americas, Europe, Asia, the Middle East, Africa, and Australia/New Zealand.

About the International Geosynthetics Society (IGS): The IGS is a learned society dedicated to the scientific and engineering development of geotextiles, geomembranes, related products, and associated technologies. The purpose of



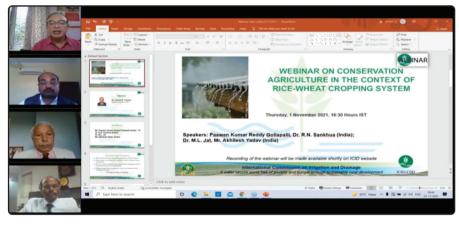
the IGS is to provide an understanding of and promote the appropriate use of geosynthetics throughout the world.



Webinar on Conservation Agriculture in the Context of Rice-Wheat Cropping System

Rice Wheat cropping systems (RWCS) in Indo-Gangetic planes have played a vital part in ensuring India's food security. However, this cropping system has raised concerns over the sustainability of agriculture, affecting and producing deteriorating effects on soil health, excessive water consumption, and producing residual in soil and water. Rice and Wheat cropping system in North Western states produces 34 million tons of paddy residues, of which Punjab contributes about 65%, i.e. 22 million tons. In Punjab, paddy and wheat crops are harvested through mechanized harvesters. While wheat straw has been used as fodder for animals, paddy straw with high silica contents remains on the field, amounting to about 5 tons per hectare. Disposal or utilization of rice straw in a small window of 20-25 days for timely wheat sowing is a major task. The absence of appropriate, cost-effective technologies during the paddy harvest and wheat sowing period induces residue burning, as it remains the easiest option for farmers.

Numerous concerns have been flagged with crop residue burning in agriculture. The main apprehension is deteriorating soil health which occurs due to nutrient losses. The burning of crop stubble increases the temperature in the soil up to 33.8–42.2 °C. Long-term burning also reduces total nitrogen and carbon, potentially mineralized nitrogen, and a



loss in soil organic matter. ITC Limited during course of implementation of sustainable agriculture programme for last three years have concluded that the crop residue management should have win-win approach where farmer get benefitted with good production and lower the operational costs and in the same way ecosystem/environment also protected. Paddy stubble is burnt as a temporary and labour-saving measure to prepare the fields for sowing wheat in the Rabi season. Burning releases smoke and fine particulates in the air, adversely impacting air quality in the region.

ITC provided alternative solutions both in-situ and ex-situ mechanisms, which farmers in large areas adopted. Paddy crop produces about 2.5 tonnes of residue per acre, which they burnt it. ITC deployed

a 'comprehensive ecosystem approach' to facilitate change of farmer behaviour and adoption of in situ incorporation on a scale that would drastically reduce the incidence of stubble burning in the district. The approach mobilized all stakeholders – farmers, the Agriculture Department, Krishi Vigyan Kendras, machinery owners and hirers – and made farmer training widely available and ensured infrastructure sufficiency to enable on-time farmer access to machinery during harvesting.

The project has been implemented since 2018, initially with 46 villages and currently amplified to 416 villages this year 2021 to make agriculture practices climate-smart and reduce stubble burning by 90% in the project area. Last year under the project, about 84% area was

ensured under Non-burning from the total area of 1,09,295 acres with coverage of 9756 farmers in 253 villages of Kapurthala District. A snapshot of the conservation method wise has been provided at the bottom.

For the better understanding about the field practices being followed by the farmers and to discuss the challenges faced by the farmers to adopt new technologies with round the year engagement extension mechanism from paddy sowing to wheat harvesting in achieving the conservation agriculture in paddy through Direct seeded rice and Machine Transplantation and on other hand minimum tillage through Happy Seeder and Super Seeder technology in Wheat crop.

In this webinar, the whole ecosystem in achieving the conservation agriculture ranging from awareness activities, structured modular training, farmer groups meetings and impact of the work was showcased along with a future plan of action with the machinery mapping and linkage with farmers to achieve the 86,000 acres minimum tillage in wheat crop.

Speaker – Er. Paavan Kumar Reddy Gollapalli, (YP, ICID and Programme Executive, ITC Limited)

Reddy is currently working with ITC Limited as a Programme Executive of Watershed to plan, review and monitor the natural resource management works of the Social Investments Programme in Punjab, Himachal Pradesh and Uttarakhand. Reddy has a rich experience in the evaluation of irrigation schemes, micro-irrigation systems and the adoption of new technologies in tackling field level problems. He is actively representing the ICID platforms for technology learnings and mobilizing the rural non-profit organizations to adopt the methodologies in the local context. He is experienced in Crop Residue Management and Water Stewardship designing and implementation.

Panellist Speaker: Dr. R.N. Sankhua (India)

Dr. R.N. Sankhua presently working as Chief Engineer, (South), NWDA, Ministry of Jal Shakti, Govt of India. He has contributed 183 papers to International/National Journals/Int Conf and completed 23 remote sensing and GIS projects. As Chief Engineer, South, he guided and accomplished the Detailed Project Reports of Godavari-Krishna, Krishna-Pennar, Pennar-Cauvery, Cauvery-Vaigai-Gundar and Damanganga-Ekdhare-Godavari (DEG), Damanganga-Vaitarna-Godavari (DVG) and Bedti-Varada-Dharma River links.

Panellist Speaker: Dr. M.L. Jat, Principal scientist and systems agronomist, CIMMYT (India)

Dr. M.L. Jat is a principal scientist and

systems agronomist who coordinates research on sustainable agriculture in maize and wheat based systems across Asia. Jat specifically leads CIMMYT's climate-smart agriculture research portfolio in South Asia as part of the CGIAR Research Program on Climate Change, Agriculture and Food Security. He focuses on developing and scaling conservation- and precision-based agriculture.

Panellist Speaker: Mr. Akhilesh Yadav (Regional Manager-North, ITC Limited)

Mr. Yadav is a seasoned development professional with more than 18 years of experience in the Corporate Social Responsibility (CSR) space, particularly sustainable agriculture, Watershed management, Non-farm livelihoods, Education, drilling, health, and Sanitation. He is currently leading the ITC Limited Social Investment Programme in the North-Western states as Regional Manager. He has been associated with the company for the last 15 years in various regions across India. He has high expertise in the most pressing issues like Climate Change, Agriculture, Agri-extension, Technology in Agriculture, Public Health, Livelihoods, Policy Advocacy, Resource Economics.

ICID Initiative for a Global Inventory of Irrigation and Drainage Schemes



Need a Global View

Irrigated agriculture forms the kingpin of the food and water security of the country and the region. Systematic irrigation is practised through irrigation projects of various sizes, which provide the assured source for a sustainable and timely water supply. Thus, an irrigation

project forms the atomic unit of irrigation and water resources development. Across the world, irrigation is practised under varying agro-climatic conditions and topography and area appropriate solutions for the same determine the features of individual irrigation projects.

A global view of the irrigation and drainage projects provide great insights into various development approaches followed across the world, their success and their performance. It is observed that the topographic, hydrologic, agronomic and social conditions form a unique combination in which an irrigation

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project gets planned and implemented. Hence, there is a need to have a global view of the developments which show us the measures adopted and their contexts under a multi-dimensional environment. Attempts are made by various researchers and practitioners to examine specific issues but examination of a project as a whole in a global context requires a repository of information through which the individual projects of interest can be visualized and approached for lessons.

ICID is the only major international scientific and technical organization that, through its membership network, spans across more than 90% of the irrigated areas of the world. The necessity for having a global view of projects devoted to irrigation and drainage is greatly felt by the member countries and also across the world by various agencies. ICID has, therefore, taken initiative to collect and provide a community knowledge base of irrigation and drainage projects which can work as a common pool resource for understanding the status of development and approaches used for the development and management project under varying conditions.

Setting up a Register of World Irrigation Schemes

Various registers exist in the field of engineering structures and other entities, the most notable from the water resources angle being the World Register of Dams being maintained by the International Commission on Large Dams (ICOLD). ICID is also maintaining a World Register of Heritage Irrigation Structures and awards recognition to the structures meeting the eligibility criteria.

Most registers examined are about structures and individual components of a system and none recording the features of irrigation and/or drainage project on a worldwide scale. It is, therefore, felt that such a register should be established for irrigation projects and ICID being a key player in the fields of irrigation and drainage is the most suitable agency for the establishment of a Register on "World Irrigation Projects". The authenticity of the projects in the register will be obtained through ICID National Committees

The facility is presently located at www. icidevents.org/WorldIrrPrjs/ Default.aspx and is in the development phase. At the appropriate time, once a critical mass of data is available, the same will be migrated to a dedicated domain duly registered.

A Message from Irrigation Australia

COVID-19 disrupted events on a global scale and Irrigation Australia was not immune from the impact of this pandemic. We were very disappointed not to hold the 24th Congress & C 71st IEC Meeting, combined with the biennial Irrigation Australia Conference & Exhibition as scheduled in 2020. After our efforts to win the right to host this event and the extensive planning and work undertaken, we were very determined that the event could still be held in a post-pandemic environment. The date and location may have changed but the enthusiasm, commitment and warm hospitality of the organising committee has not.

Accordingly, on behalf of Irrigation Australia and the ICID Australian National Committee (IACID) we extend a warm invitation to you to participate in the 73rd IEC Meeting & Detailed in the Targation Australia National Conference & Detailed in Adelaide, Australia from 3 October to 10 October 2022.

The Australian irrigation industry is delighted to have the opportunity to host this event and showcase our irrigated agricultural industry to the world. To add value to your participation in the International Congress, we have combined it with our biennial Irrigation Australia Conference and Exhibition, the biggest irrigation event in the southern hemisphere. ICID delegates will be able to attend the local conference sessions and our large international exhibition in addition to the comprehensive ICID program.

The theme for the 24th ICID Congress is 'Innovation and research in agricultural water management to achieve sustainable development goals'. Australia is the driest continent on earth and the efficient use of water

is at the forefront of our objectives and strategies to expand our domestic production of food production and to maintain our reputation as an exporter of high-quality foods to a growing world population.

The event will be hosted in Adelaide. which is Australia's 5th largest city and home to a vibrant culture of arts. culture and great food. It is renowned for its fantastic places to visit and close proximity to some of the leading agricultural production in Australia. The famous wine producing region of the Barossa Valley is easily accessible on a day trip from the city and here you can experience some of the finest wines and cellar doors in Australia. and in fact the world. The organising committee will be arranging a selection of interesting and informative study tours and further details on these will be released during 2021. Registrations and an invitation to submit abstracts will re-open in 2021 but you are welcome to register your interest now to ensure you receive communications to keep you updated with what will be an exciting and important event on the international irrigation calendar.

It is a great privilege to be awarded the opportunity to host the International Congress, which is being held in southern hemisphere for the first time since its inception in 1951. We hope that you plan well ahead to attend this event and take this long-awaited opportunity to catch up with old acquaintances, make new friendships and enjoy some 'true blue' Australian hospitality. If you have any questions or require assistance, please do not hesitate to contact us via email at icid2022@irrigation.org.au.

We look forward to seeing you in 2022 in Adelaide.



Invitation To Join the Membership of ICID

International Commission on Irrigation and Drainage (ICID), established in 1950 is the leading scientific, technical and professional international organization, which focuses on irrigation, drainage and flood management. Through its membership network, ICID presently represents 90% of the irrigated area of the world. It hardly needs any reemphasis that 80% of world's water resources are consumed by agriculture to ensure food security, and hence the role of irrigation and drainage becomes very important on the agenda of global water management. ICID provides a platform for sharing the knowledge gained and share the innovative practices and methods in irr7igation, drainage and flood management and is recognized as a thought leader in the irrigation and water management field. The Vision of ICID is to achieve "A Water Secure World Free of Poverty and Hunger through Sustainable Rural Development", and to achieve this vision, ICID has formulated a 'Road Map to ICID Vision 2030'. Kindly visit the website http://icid-ciid.org/ for more information.

ICID primarily works at national level with professionals from each country coming together on a National Committee platform often managed at relevant ministry level or under their tutelage. All international professional and developmental institutions like the World Bank, Asian Development Bank, Islamic Development Bank, World Water Council, UN Water, Global Water Partnership and International Water Management Institute, Food and Agriculture Organization of UN and many more are very closely associated with ICID activities and outputs.

Any geographical area independently administered by a sovereign government and having interest in the activities of the Commission is eligible to become a Member National Committee (NC) of ICID. The Commission advocates for the National Committees to be broad-based, multi-disciplinary and should provide a platform for collaboration among various institutions having related aims within their countries. Also an Institution/ Company or an Individual can be a DIRECT Member of ICID through their National Committee (NC).

Countries can have advantage of technologies and skills which are being showcased for the benefit of world communities at different levels of development through ICID activities. The developing world is actively looking for the relevant technological and managerial interventions in the critical sector of Irrigation and Drainage and I am sure your country also leverage to your advantage. This new opportunity has great potential to enhance the working of ICID and hopefully will result in greater global exchanges of experiences and multidisciplinary innovations. By joining ICID, the country would be able to receive:

- Exposure of research and latest technical activities to the professionals including approach and exposure to Irrigation and Drainage Journal (IRD) and other ICID publications, webinars etc.
- ii. Capacity building for professionals and young professionals
- iii. Networking with various world institutions and professionals
- iv. Wide knowledge base
- v. Participation in ICID activities like Congress, World Irrigation Forum (WIF), Regional conferences, International Executive council (IEC) etc.
- vi. Many other benefits

For joining ICID Membership and procedure for application and subscription amount, etc., please access the link - https://www.icid.org/join_nc.html Alternately, you may contact Er. Balasaheb Anantrao Chivate, Director (Technical), International Commission on Irrigation and Drainage (ICID), <icid@icid.org> for more information and/or clarifications, if any. The Secretary General, International Commission on Irrigation and Drainage (ICID)

ICID Forthcoming Events

73rd IEC Meeting and 24th ICID Congress 3-10 October 2022, Adelaide, Australia Theme: Innovation and research in agriculture water management to achieve sustainable development goals Website: https://www.icid2022.eom.au/

74th IEC Meeting and 4th World Irrigation Forum 16-22 April 2023, Beijing, China, Theme: Modernization of Irrigation Schemes Contact: cncid_office@sina.

75th IEC Meeting and 25th ICID Congress 6-13 November 2023, Vizag, Andhra Pradesh, India Theme: Tackling Water Scarcity in Agriculture Contact: rishi1964@yahoo .com, yellark@gmail.com

10th International Micro Irrigation Conference 25-27 January 2023, Agadir - Dakhla, Morocco Theme: Micro Irrigation in the Era of Technology, Innovation and Digital Transformation, Website: http://anafide .net/

76th IEC Meeting and 9th Asian Regional Conference 1-7 September 2024, Sydney, Australia Website: http://www.irrigationaustralia.com.au/

77th IEC Meeting and 5th World Irrigation Forum September 2025, Kuala Lumpur, Malaysia; Theme: Challenges and future needs in moderrnization of irrigation for food security and sustainability; Contact mancidmalaysia@gmail.com

Important Announcements

Call for Papers: 24th ICID International Congress on Irrigation and Drainage 03-10 October Adelaide, South Australia

The Congress Theme: Innovation and Research in Agricultural Water Management to Achieve Sustainable Development Goals

The Congress aims to provide a platform for irrigation and drainage professionals and the broad range of other stakeholders to share their knowledge and experience in sustainable agriculture water management, focusing on irrigation management and its related/integrated aspects. To find out further information and to submit an abstract, please visit Irrigation Australia's conference website https://www.icid2022.com.au/call-for-papers/how-to-submit-papers/

For all the information on submitting an extract - you can also download the ICID Call for Papers Flyer on the following link: https://mcusercontent.com/ad3d7801a3707d168c030e520/files/2a975c86-852a-f3bc-5cf7-a2a4ef6483c7/24cong_callforpapers.pdf

Launch of Dam and Network Safety Assurance (DNSA) Course - 3rd Batch

Inviting registrations/ nominations for online certification in dam and network safety assurance- Batch-III - ICID invites you to join the first-ever LMS-based certificate course on dam and network safety assurance. The course covers the entire gamut of establishing a dam and network safety regime and all the techniques involved in assuring the dam and network safety. You can register online here https://damsafety.co/register and for more information click https://damsafety.co/

