

News Update



A Water Secure World Free of Poverty and Hunger through Sustainable Rural

October – November 2022

From Secretary-General's Desk

Dear Colleagues,

I am happy to inform you that we successfully conducted the 24th ICID Congress and the 73rd IEC meeting in Adelaide, Australia in October 2022. The event was launched successfully with participation from almost 44 countries more than 700 participants. The major details of the event are covered in this issue of the News Update which covers the ICID activities from the month of October and November 2022.



The Congress theme this year was 'Innovation and Research in Agriculture Water Management to Achieve Sustainable Development Goals.' The event addressed two contemporary questions: Question 62: What Role Can Information and Communication Technology Play in Travelling the Last Mile? and Question 63: What Role Is Played by Multi-Disciplinary Dialogue to Achieve Sustainable Development Goals? The Special Session and Symposium were held on the topics 'Developing the future tools for managing uncertainty in irrigation water supply,' and 'Integrated Approaches to Irrigation Management in Future', respectively.

Ms. Karlene Maywald, the Hon'ble Water Ambassador of Southern Australia, delivered the 11th N. D. Gulhati Memorial Lecture for International Cooperation in Irrigation and Drainage during the Congress. Several other prominent global leaders, policymakers and experts are invited to attend the event and provide their input on the role of agricultural water management in achieving the SDGs outlined by the United Nations as

well as the ICID Vision 2030. Several technical sessions and workshops were held during the Congress on various thematic working groups of ICID. The event also hosted several side events by esteemed international organizations and Young Professionals training programs.

Along with the enriching technical sessions during the event, several awards were distributed for different achievements. WatSave awards were presented to recognize the water-saving efforts of individuals through four categories, namely, innovative water management, technology, young professionals and farmers. During the event, ICID also recognized nineteen structures as World Heritage Irrigation Structures nominated by seven countries. The Best Paper award was awarded to several researchers in China working on 'Bacillus amyloliquefaciens application to prevent biofilms in reclaimed water micro-irrigation systems', published in Volume 70, Issue 1 of the Irrigation and Drainage journal published by Wiley. African Regional Working Group was recognized as the best performing workbody for supporting integrated river basin development, training and research issues and information system for African needs by promoting links and networking among the African countries as well as regional and international institutions for enhancing cooperation and coordination. Additionally, three new Vice Presidents for ICID were elected for the period 2022-2025, details are given in this issue.

Apart from the Congress event, The third (virtual) meeting of the ICID Management Board meeting was held on 21 November 2022. The News Update contains information on the decisions made during the meeting regarding future ICID events and other important matters. In addition, this issue of News Update covers details of the 7th India

Water Week 2022, Cairo Water Week 2022 and FAO - Rome Water Dialogue. Details for other future webinars, events, paper submissions and publications are also covered in this issue.

Moving forward, several other major ICID events are lined up for the upcoming year. The 10th International Micro Irrigation Conference will jointly be hosted by the Moroccan National Committee on Irrigation and Drainage (ANAFIDE) and ICID with support from the Directorate of Irrigation and Agricultural Land Planning (DIAEA) of the Government of Morocco from 25-27 January 2023 in Dakhla, Morocco on 'Micro-irrigation in the Era of Technology Innovation and Digital Transformation'. The Fourth World Irrigation Forum (WIF4), hosted by the Ministry of Water Resources of the People's Republic of China, and the Chinese National Committee on Irrigation and Drainage (CNCID), will be organized by China Institute of Water Resources and Hydropower Research, from 22- 25 April 2023 in Beijing, China. The 25th Congress and the 74th IEC Meeting in Vizag city of Southern India in November 2023, hosted by the Indian National Committee on Irrigation and Drainage (ICID), Ministry of Jal Shakti (MoWR), GoI, and Government of Andhra Pradesh. Visit <http://www.wif.icidevents.org> to learn more.

I look forward to meeting you during the above events and thank you for your continued support.

Sincerely,

Ashwin B. Pandya
Secretary-General, ICID

**Season's Greetings and
Best Wishes for a Happy New Year 2023**

Highlights of the 24th International Congress on Irrigation and Drainage, and 73rd International Executive Council Meeting

3–10 October 2022, Adelaide, Australia



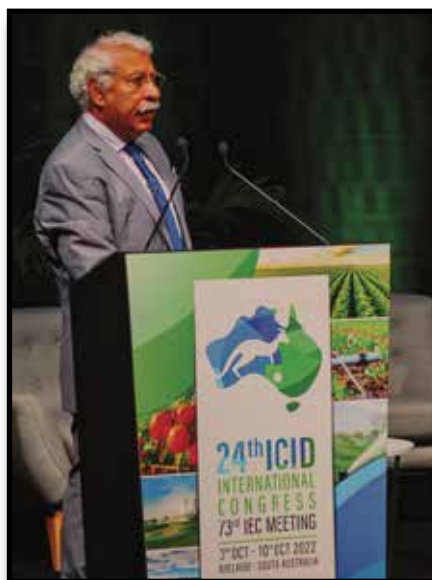
The ICID with its Australian counterpart, Irrigation Australia Ltd. (Australian National Committee on Irrigation and Drainage, IACID) organized its 24th International Congress and 73rd International Executive Council meeting and exhibition from 3–10 October 2022, at the Adelaide Convention Centre, Adelaide, Australia. The 24th ICID International Congress centred around the theme ‘Innovation and Research in Agricultural Water Management to Achieve Sustainable Development Goals.’ The event brought together irrigation and drainage professionals and a broad range of other stakeholders to share their knowledge and experience in sustainable agriculture water management focusing on irrigation management.

The 73rd meeting of the International Executive Council (IEC) was organized in three sessions. The Opening Plenary aimed at addressing all stakeholders, experts, representatives, partners, and observers with the objective to communicate issues of general concern and also presenting ICID annual awards and recognitions. The plenary session was attended by about 400 delegates from 44 countries. They participated in the various working group meetings, task teams and committees in the following two days. The main session of IEC was conducted in two sessions on 10 October 2022, took all decisions based on the outcomes and recommendations of the workbodies and permanent committees.

President Prof. Dr. Ragab Ragab welcomed the members to the 73rd IEC meetings. He thanked IACID for

making excellent arrangements for the 73rd IEC meetings. The Council observed one-minute silence in remembrance of the late President Hon. Marvin Jensen (USA) and late VPH Abdellah Bekkali (Morocco) and other departed souls from the ICID fraternity.

In his opening remarks, the President emphasized the opportunity to spotlight where ICID – and various stakeholders of the irrigation and drainage sector as a whole – needs to come together to promote sustainable management of water for agriculture worldwide, as



Agenda 2030 provides an opportunity to ICID to revisit its vision and mission to align with UN SDGs, and the main theme of the 24th ICID Congress “Innovation and research in AWM to achieve SDGs”

further underlines it. The President highlighted the main initiatives of the Commission during the last year since the 72nd IEC meeting and impressed upon the need for a coherent approach towards the mission of ICID among its various stakeholders. He informed the Council about the membership drive to bring in more countries to the ICID fraternity to fulfil the vision, mission and goals of ICID may benefit almost all countries around the world. He gave a brief insight into his participation in various international meetings, which are of interest to ICID, his attendance in the virtual meetings of the ICID workbodies and ICID’s new partnerships with international organizations in the water sector. He also gave a glimpse into the recent and new initiatives like the establishment of a task force on Transboundary Water Management, the Members’ Profile Section, the Register on World Irrigation and Drainage Schemes (WIDS), and so forth.

Secretary General Er. Ashwin B. Pandya introduced the agenda for the 73rd IEC meeting and provided an overview of the important issues before the Council such as the review of the action plans identified under the Roadmap to ICID Vision 2030. Mr. Carl Walters, the representative of the Australian National Committee (IACID) presented the report bringing out the important aspects regarding agriculture water management in the country, and how they resulted in increased agriculture activity in Australia. His presentation mainly focussed on integrated approaches to irrigation management in Australia. In Australia, social and economic objectives

drove development initiatives across the Murray Darling system and adverse impacts started to emerge such as increased algal blooms, irrigation region salinization, environmental issues, less water for the environment – reversed river operation, reduced forest/wetland flooding, etc. and increased closure of Murray Mouth.

Dr. Bahrom Gaforzoda, the representative of the Tajikistan National Commission on Irrigation and Drainage (TajNCID) of ICID briefly presented the activities of TajNCID, irrigation and drainage facilities in Tajikistan with its historical perspective and the main challenges of their country's irrigation and drainage sector. Dr. Gaforzoda in his presentation gave an overview of the water resources of Tajikistan, with 947 rivers and 276 streams with a total length of 30,000 km. He informed about the initiatives by the Republic of Tajikistan at the UN General Assembly which resulted in the declaration of International Freshwater Year (2003), International Decade for Action "Water for Life" (2005-2015), International Year of Water Cooperation (2013) and International Decade for Action "Water for Sustainable Development, 2018-2028", with their country being an active member of the global water processes.

The event brought together lessons from technical, social, and institutional innovations tested in the field by water managers across different sectors and irrigators, government, researchers, and donors to build climate resilience through water management with irrigation infrastructure and communities' behaviours. The event acknowledged that water conservation & management, innovative agriculture practices, renewable energy, food systems and nutrition are interlinked and that the rising trend of losses caused by natural and human-induced disasters must be addressed, with particular attention paid to people in vulnerable situations, including least developed countries, leaving no one behind.

VP Prof. Dr. Tsugihiko Watanabe, Chair of AC-IRPID, gave a brief introduction about the objectives of the IRPID Scheme, including its organizational structure, responsibilities, and functions. VPH Dr. Marco Arcieri, Chairman, PFC presented the report of the 43rd meeting of the PFC held on 07 October 2022. The Council requested National Committees to nominate expert members well-versed in financial matters for the

membership of the PFC, which is allowed to have a maximum of 15 members.

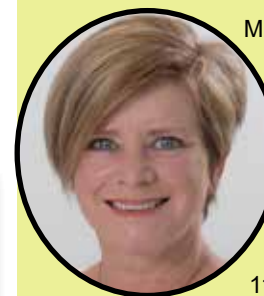
Hon. Minister of Water Resources, India, Mr. Gajender Singh Shekhawat also attended the conference. He talked about the role of India in sustainable water management for a water secure



world. He also talked about the strategies and policies of the Government of India to ensure water availability and the importance of India in emerging as a key player in the water resources management of South Asia.

The session also announced the winners of the WatSave Award, WHIS, Best Performing National Committee/Workbody, Best Paper Award and the activities of Young Professionals, election for the new Vice Presidents. & (Office Bearers). Mr. Bryan Ward, Chairman of IACID and CEO of Irrigation Australia thanked the delegates for making the event success. The event acknowledged that water conservation & management, innovative agriculture practices, renewable energy, food systems and nutrition are interlinked and that the rising trend of losses caused by natural- and human-induced disasters must be addressed, with particular attention paid to people in vulnerable situations, including the least developed countries, leaving no one behind.

11th N.D. Gulhati Memorial Lecture



Ms. Karlene Maywald, South Australian Water Ambassador and Chair of the Australian National Water Commission delivered the 11th N.D. Gulhati Memorial lecture for

International Cooperation in Irrigation and Drainage on the theme "Putting People at the Heart of What We Do". The memorial lecture, established in the memory of Late President Hon. N.D. Gulhati is held during the triennial ICID Congress. The memorial lecture aims to encourage the exchange of significant global developments relevant to irrigation and drainage engineering, including all allied aspects like the environment, sociology and economics, as well as fostering and enhancing international cooperation to meet the ICID objectives.

The focus of the lecture was on: (i) The importance of sustainable environmental management and societal behavioural change to enable our global irrigation communities to embrace the reforms; (ii) What extent of water scarcity is exacerbated by climate change; and (iii) Why is it that the world is so slow to make progress at both global and local scales?

In the address, Ms. Karlene Maywald highlighted the key principles of the core framework on conservation of the water by investment, new reforms in water quality, wastewater management and minimizes the key segment of pollution in agriculture practices. The full report can be accessed at: https://icid-ciid.org/icid_data_web/ND%20Gulhati%20Lecture%202022.pdf

About Ms. Karlene Maywald

Hon. Karlene Maywald is currently the South Australian Water Ambassador. Her previous roles include South Australian Minister for Water Security and the River Murray, Murray Darling Basin Ministerial Council Member and Chair of the Australian National Water Commission. Karlene is currently the Managing Director of Maywald Consultants and holds a portfolio of Board positions including Chair of WaterAid Australia, Chair of the Peter Cullen Environment and Water Trust and she is also the Chair of Cancer Council SA, as well as the Director of WaterAid International and the Australian Water Association.

WHIS Recognized by ICID in 2022

ICID identifies, recognizes and maintains a record of World Heritage Irrigation Structures of archival value that are more than a century old and help understand the evolution of irrigation systems among civilizations across the world. This concept was mooted at the 63rd International Executive Council (IEC) Meeting held in Adelaide, Australia in 2012. The idea is to conserve these heritage structures for posterity on the lines of the world heritage sites recognized by UNESCO. Nineteen heritage structures have been recognized by ICID in the year 2022.



1. Dethridge Outlet/Wheel (Australia)
2. Chongyi Shangbao Terraces (China)
3. Songgu Irrigation Scheme (China)
4. Tongjiyan Irrigation Scheme (China)

5. Xinghua Duotian Irrigation and Drainage System (China)
6. Baitarani Irrigation Projects (India)
7. Lower Anicut (India)
8. Rushikulya Irrigation System (India)
9. Sir Arthur Cotton Barrage (India)

10. Al-Adhem Dam (Iraq)
11. White Bridge (Iraq)
12. Kanuki Irrigation Canal (Japan)
13. Teradani Irrigation System (Canal) (Japan)
14. Yukawa Irrigation Canal (Japan)
15. Uiseong Small Reservoir Irrigation System (South Korea)
16. Kala Wewa (Sri-Lanka)
17. Maduru Oya Ancient Dam and the Sluice (Sri-Lanka)
18. Padaviya (Sri-Lanka)
19. Hekkam Anicut (Sri-Lanka)

So far, over 140 such heritage structures have been recognized and included in the online Register by ICID. For details, please visit <https://icid-ciid.org/award/his/44>



WatSave Award Winners – 2022

WatSave Awards are annual awards that were instituted by ICID in 1997 to recognize and encourage the development of innovative ideas to facilitate robust and result-oriented technologies that could be implemented to save the usage of water for agricultural purposes. This year, the recipients received awards under four categories—Innovative Management, Technology, Young Professionals and Farmer. The winners of the 2022 WatSave Awards for various categories were:

service to farmers and supplying water at consistent flow rates enabling farmers to increase their on-farm crop production and economic productivity.

1. Technology award



Sumith Choy, Varun Ravi, N Srinivas Reddy, and Satya N Jaddu (Australia) for their work on 'Leveraging Canal Automation Technology to Improve Karnataka's Precious Water Resources.' The project is expected to improve the water efficiency within the NLBC network by up to 20% while delivering an equitable

2. Management award



Li Gendong and Su Xiaofei (China) for their work on 'Water Rights Trading of Hetao Irrigation Scheme.' The implementation of the project can play a good leading role in China's water rights management. Especially the large-area and large-scale implementation of household management of water rights confirmation, three-dimensional monitoring, and cross-industry trading, which is the first time in China and fills the gap.

3. Young professional award

Ramtin Nabipour Shiri (Iran) for his work on 'Drip Tape Irrigation of Transplanted Rice in Puddled Paddy Soil.' The research



demonstrated that drip tape irrigation of transplanted rice on puddled paddy soil is productive compared to the water-intensive conventional flooding of rice while reducing irrigation at least by 51% and also at least 24% compared to AWD irrigation.

4. Farmer Award

Nader Zarei (Iran) for his work on 'Cultivation Model Compatible with Arid and Semi-arid Climate of Iran to Increase Water's Economic Productivity.' Through his work, it was demonstrated that with the change of cultivation pattern from crops, especially wheat to fig orchards, economic productivity increased dramatically, so this index in figs is 24 times higher than wheat.



ICID Newly Elected Office Bearers – 2022-25

Mr. Bruno Grawitz (France)



Mr. Bruno Grawitz holds an engineering degree from Ecole Nationale Supérieure d'Hydraulique de Grenoble (ENSHG Grenoble, 1985) and a master's degree in Civil Engineering from Colorado State University (CSU Fort Collins, 1986). Mr. Grawitz started his career at CSU in 1987 as a Research Associate on the South Plate River basin underground water model. Bruno joined Société du Canal de Provence (SCP) in 1988, as a hydraulic engineer for the design of various hydraulic infrastructures dedicated to irrigation such as dams, canals and irrigation networks. In 1994, Mr. Grawitz was appointed in Jordan as a Project Manager for the Water Management Information System (WMIS) The objective of the project was to optimize water management for irrigation in the Jordan Valley. In 1999, Mr. Grawitz returned to France and worked on several irrigation projects in France and other countries such as Lebanon and Haiti. In 2002, he was appointed as a Project Manager in Sri Lanka for the Anuradhapura project and stayed there until 2005 after having completed some emergency work related to the December 2004 Tsunami that devastated the coastal region. In 2005, Mr. Grawitz was nominated the Associate Head of the engineering department at SCP, and then subsequently the Head of the Department in 2008. Besides his management tasks, he continued working in the irrigation and water management field. His expertise in design as well as O&M organization has been used in

Syria, Egypt, Thailand, Vietnam, Tunisia, Senegal, and Brazil. Since 2015, Bruno has held the position of Executive Director at SCP, in charge of Engineering and Services. As such, he participates in the company's strategic planning and decision regarding the main orientations. Since 2019, Mr. Grawitz is the Chairman of AFEID, the French National Committee of ICID.

Prof. Dr. Sylvester Mpandeli (South Africa)



Prof. Dr. Sylvester Mpandeli is the Executive Manager of Water Utilisation in Agriculture, Water Research Commission, South Africa and has more than 22 years of working experience, managing research, development and innovation across the agriculture, water, and environmental sectors. He has published more than 136 scientific papers, books, book chapters, technical reports and conferences/workshops focusing on agricultural water management and climate change adaptation.

He has been very active in ICID activities for the last 10 years and was Chairman of the African Regional Working Group and is a member of the ICID Permanent Committee on Strategy and Organization (PCSO) and is also a registered Agricultural Scientist under the category Professional Natural Scientist in terms of Section 11 of the Natural Scientific Profession Act, 1993.

Mr. Kushvinder Vohra (India)



Mr. Kushvinder Vohra, an officer of the Central Water Engineering Service, is presently working as a Member (Water Planning & Projects) of the Central Water Commission and Ex-officio Additional Secretary to the Government of India and is also a Chairman of the Upper Yamuna River Board. He has over 35 years of experience in the Water Resources Sector. He has worked extensively in matters related to water resources development and management, basin planning, planning & appraisal of water resources projects, formulation and implementation of schemes such as inter-state water issues, international water treaties, inter-state river water disputes, water tribunals, and human resources management among others.

He has made an extensive contribution to various journals including International Journals on the issues related to water resources development and management. He has appeared in various talk shows on issues related to water resources on TV/Radio. He was awarded the Water Digest Award 2018-19 for Best Infrastructure Pioneer Project and the Aqua Foundation Excellence Award 2019 for his work in Sustainable Development in Food and Agriculture (2019). He has also received the Eminent Water Resources Engineer Award – 2019 by the India Water Resources Society (IWRS) for his contribution to the development of the water sector in India. He has chaired and is currently chairing various committees on policy/technical issues related to water resources.

5th Best Performing Workbody Award

The 5th Best Performing Workbody Award (BPWA) was presented to the African Regional Working Group (AFRWG) by President Prof. Dr. Ragab Ragab on the occasion of the 73rd IEC Meeting and 24th ICID Congress held in Adelaide, Australia, October 2022. The performance of a workbody is



adjudged based upon a set of criteria and its contribution towards the mandate and mission of ICID. The Award was presented to Vice President Hon. Dr. Eng. Mohamed A. Shehata Wahba (Egypt), Chairman, AFRWG.

Best Paper Award Awarded by ICID – 2022

The ICID Journal 'Irrigation and Drainage' is the flagship publication of ICID. The journal is a prestigious, peer-reviewed publication, publishing original papers on scientific, engineering, environmental and socio-economic issues associated with irrigation and drainage. It is a rich resource of reference to professionals, engineers, researchers, university professors, and students of irrigation, drainage, and agriculture disciplines. Its management is governed by an International Editorial Board (EB).

'Best Paper Award' was started in 2006 to recognize the outstanding papers contributed to 'Irrigation and Drainage', annually. The award consists of a citation plaque and either US\$ 500 cash or US\$ 800 worth of Wiley books from M/s. Wiley Blackwell (UK).

During the 73rd IEC Meeting, the Best Paper Award 2022 was presented to Jiaxin Wen, Yang Xiao, Peng Song, Bo Sun, Tahir Muhammad, Lianghe Ma, An Waier Aosiman, Yunkai Li from China for their outstanding paper entitled 'Bacillus



amyloliquefaciens application to prevent biofilms in reclaimed water micro-irrigation systems' published in Volume 70 Issue 1 (2021) of Irrigation and Drainage - the Journal of ICID.

Reclaimed water (RW) applied in drip irrigation systems could be a solution to cope with the challenges of limited freshwater resources. Biofilm growth in irrigation systems is an unavoidable issue when using RW. To date, strong chemical bactericides mostly dominate the commercial market in controlling biofilms. However, recently scientists have been concerned about their real efficacy and environmental risks. This study assesses a low-concentration

microbial antagonist (i.e., *Bacillus amyloliquefaciens* inoculums, BAI) intermittently injected into the systems to mitigate biofilm formation in three types of drip emitters using two kinds of treated RW. The results indicated that the application of BAI significantly ($p < .05$) mitigated the microbial biomass within biofilms when compared with the control groups (no-BAI). In addition, BAI reduced the contents of extracellular polysaccharides and proteins of biofilms, which decreased the total biomass in BAI treatments by 44.9%–73.8%. Consequently, BAI effectively improved the emitter performances and increased the discharge variation rate by 31.9%–44.3%. These findings might provide a new perspective to control biofouling when applying RW in irrigation systems, with potential implications for sustainable water management in agricultural production.

You can access the paper at: https://icid-ciid.org/award/best_paper_award/58



7th India Water Week 2022

The Seventh India Water Week was held from 1-5 November 2022 at the India Expo Centre, Greater Noida, National Capital Region (NCR) of Delhi on the theme "Water Security for Sustainable Development with Equity." It was a multi-disciplinary international conference focusing on new approaches for long-term water planning and management by incorporating principles of sustainability and equity evolved over the years by national and international water experts and organisations, with concurrently running exhibitions enriching the theme and showcasing the technologies and solutions available for the areas under deliberation of the conference. The exhibition, which was running parallel to these events, was showcasing the technologies, latest developments and available solutions for water and wastewater management. It was a unique



networking opportunity for the exhibitors to display products and services to the practising water resources professionals from participating countries. It enabled them to find new joint ventures from the growing business in this emerging and technologically important area. Visitors showed keen interest in the products and technologies on display at various

stalls and interacted with the experts present there.

Marked as the largest event for water resources in India, the 7th India Water Week 2022 was held from 1-5 November 2022, organized by the Indian National Committee on Irrigation & Drainage (INCID), on behalf of the Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Government of India with nodal Ministries of Agriculture, Environment, Forest and Climate Change,



Rural Development, Urban Development, Power, New and Renewable Energy and Niti Aayog along with their associated expert organizations, public sector units, key international bodies and public as well as private business houses. The inauguration ceremony was marked by the magnificent presence of the Hon. President of India, Smt. Droupadi Murmu; Hon. Minister of the Jal Shakti, Sh. Gajendra Singh Shekhawat, the Minister of State for Tribal Affairs and Jal Shakti, Shri Bishweswar Tudu, the Union Minister for Culture, Tourism and Development of North Eastern Region, Shri G. Kishan Reddy; Shri G. Asok Kumar, DG of National Mission of Clean Ganga (NMCG) among several other high-level dignitaries. The ICID was represented by Er. A. B. Pandya (Secretary General), Er. H. K. Verma (Executive Director, ICID) and Ms. Prachi Sharma (Knowledge Officer, ICID).

Young professionals and students from various universities visited the stalls

of water companies and government departments. The visit gave them a unique perspective on water management with insights on how they could be a part of India's front warriors towards achieving its SDG 6 (Sustainable Development Goal 6) and becoming a water-efficient country.

The motto of India Water Week was water security for sustainable development aimed at learning about the future plans and schemes charted out to build a smart and water-efficient India. Water took centre stage due to the increasing regional and environmental needs, industrialization pollution, over-extraction of groundwater, sanitation and water availability. There was an abundance of rich deliberations during the planned sessions of seminars, which put the spotlight on sustainable agriculture and water management, water security, groundwater resources, quality challenges in the water sector, micro and macro interventions of water management, the impact of climate

change, SDG 6, and demanded and supply management for water. Water is already in shortage and the impact of climate change is likely to exacerbate the situation. Water seldom flows according to administrative boundaries and sharing of water among the administrative units is always challenging. The likelihood of conflicts due to water-related issues could increase as the population continues to grow with the increasing challenges of climate change. Additionally, the burgeoning competition for water among domestic, agricultural, industrial and environmental needs, calls for water security and sustainable development of this precious natural resource among the stakeholders. With this background, India Water Week 2022 focused on new approaches for long-term water planning and management by incorporating principles of sustainability and equity.



Secretary General Engr. A.B Pandya participates in a South – Asian regional conference organised by Global Water Partnership

A Regional Conference on Integrated Water Management in South Asian Countries was hosted by the Global Water Partnership – Sri Lankan Counterpart and organized on 9 – 10 November. The South Asian countries which participated in the conference were India, Bhutan, Pakistan & Sri Lanka. The Conference led to a discussion on varied strategies for integrated water management and the key role and progress of the individual countries in this direction. The statistic of the individual country is based on technical reports & data on water availability, groundwater aquifers, rainfall pattern and effects of climate change on key water resources. The other components which were discussed are policies and investments to fix the

accessibility of clean water in the last section of the community.

Secretary General Er. A.B. Pandya represented ICID at the conference. He talked about decades of experience of ICID in integrated water management, which covers more than 95% of the irrigated area across the globe. He also highlighted the role of ICID through its vision 2030 which supports its member countries in fulfilling its target in water management, water security and water recharge complementing the Sustainable Development Goals (SDG 6).

About Global Water Partnership (GWP): The GWP is a decade-long international partner of ICID. It is a global action network with over 3,000 Partner

organisations in 179 countries. The network has 69 accredited Country Water Partnerships and 13 Regional Water Partnerships. The network is open to all organisations involved in water resources management: developed and developing country government institutions, agencies of the United Nations, bi- and multi-lateral development banks, professional associations, research institutions, non-governmental organisations, and the private sector. GWP's action network provides knowledge and builds capacity to improve water management at all levels: global, regional, national and local. GWP does not operate alone. Its networking approach provides a mechanism for coordinated action and adds value to the work of many other key development partners.

ICID participates in the Workshop organized by International Water Resources Association IWRA on 23 November 2022

A workshop on multi-stakeholder consultation on the Transformative Future for Water Security (TFWS) was held in New Delhi, India. The workshop was organized by IWMI-India in collaboration with ICID, Indian Council of Agriculture Research (ICAR), CGIAR & ITC Pvt. Ltd.

The ICID was represented by Secretary General Er. A.B. Pandya with the other



member of ICID including Er. H. K. Verma (Executive Director, ICID) and Ms. Prachi Sharma (Knowledge Officer, ICID). The introductory speech was delivered by Dr. Alok Sikka, IWMI - India representative, Dr. Mark Smith, DG – IWMI, Sri-Lanka; Prof. Dr. Ramesh Chand, Member NITI Aayog & Dr. Shreya Chakraborty, IWMI.

The main objectives of the workshop were two folds: The first objective was to discuss water challenges in changing climate, rural-urban transformation, and the socio-economic context of India. The second objective aimed to hear

the voices of different stakeholders on transformative actions needed to achieve water security and identify priority action areas for water research and knowledge creation. Identifying priorities for water research and knowledge creation would support the government, business and development communities and stakeholders to work on science-based solutions for water security driven by climate change, mounting water demand for food production, energy generation and economic development, deteriorating water quality, and degrading wetlands and ecosystem services.

The workshop had a wide discussion on the outcomes of different regional dialogues, including South Asia which will be consolidated to identify 5-6 transformative missions for water research and innovation for development. TFWS aimed to enable the science, policy, business and development communities to commit to the Water Action Agenda of the UN 2023 Water Conference, to align activities to promote each mission and catalyze and deliver impacts.



▶ WEBINAR

ICID is Organizing a Webinar on “Low Land Development in Indonesia”, 22 December 2022 at 15:30 hours (IST)

ICID, in cooperation with the Department of Civil and Environmental Engineering, Faculty of Engineering, Universitas Gadjah Mada (UGM), Yogyakarta, Indonesia, is organizing a webinar on “Low Land Development in Indonesia” scheduled on 22 December 22. The webinar will be given by the speakers including Mr. Budi Santoso Wignyosukarto (Indonesia), and President Hon. Prof. Em. Dr. Bart Schultz (Netherlands) and Panelists VP Ir. Hisham Ghazali (Malaysia), and Mr. Paavan Kumar Reddy (India). For more information, please click the link https://icid-ciid.org/inner_page/231

About

Out of 162.4 million ha of land resources in Indonesia, about 39.4 million ha are lowlands that consist of 20 million ha of tidal lowland and 13.4 million ha of non-tidal lowland. Almost 9 million ha of tidal lowland has the potential for agriculture development. Up to now, 3.9 million ha of lowland in Sumatera, Kalimantan, Sulawesi and Papua, has been reclaimed and developed for agriculture and aquaculture.

Lowland area is either waterlogged or temporarily/permanently covered with a water layer. The lowlands have their characteristics in accordance with their geographical and hydro-topographical conditions. Based on those conditions, they can be divided into two sub-groups, i.e., coastal swamps and inland swamps (lebak). The coastal swamps are influenced by tidal fluctuations of the sea and inland swamps are mainly influenced by river floodplain characteristics. Lowlands are also important areas in

Indonesia for biodiversity with their mangroves, peat swamp forests, and fresh and brackish swamp forests.

Indonesia has about 60% of the world’s tropical peatlands across an area of around 22.5 million ha. Since the beginning of the last century, Bulginess, Banjarese and Malays have reclaimed coastal strips of Indonesia. The main motivation is to find new living spaces because of the limitation of further expansion possibilities in their village of origin (after Collier et al., 1981). Most of the Bulginess has many years of experience in the practice of how to reclaim lowland areas and coping with the related soil and water management problems. They are pioneers in this field. They reclaim those lands mainly for agricultural purposes. With their simple technique, about 2 million ha area has been reclaimed along the eastern coast of Sumatra (Riau, Jambi, South Sumatra and Lampung provinces and along the western and southern coast of Kalimantan.

Rice production on Java will continue to decrease in future as the urban requirements or land and water are in strong competition with the requirements for rice cultivation and it is estimated that the rate of the loss of agricultural land is about 30,000 to 40,000 ha/year. Since 1960, the Indonesian Government is reclaiming the lowland with the following objectives (Swamp Directorate, 1980):

- (i) To increase the national food production, mainly rice, to obtain self-sufficiency.



- (ii) To provide agricultural land for transmigrants to support the Government Transmigration Program.
- (iii) To support regional development.
- (iv) To increase the income per capita; and
- (v) To increase the security on coasts along the border lines.

In the coastal zones of Indonesia, there are nearly 6~8 million ha of mineral soil containing pyrite (acid sulphate soils) and peaty soils and about 16 million ha of deep peat soils. This makes Indonesia the country with the largest area of pyritic soils in the world and one of the largest with peat soils. Activities such as reclamation and development of both soil types are very environmentally sensitive. The presence of acid sulphate soils is a major problem in the cultivated swamplands of Indonesia. If this problem is not recognized and solved, the result will be a low yield and the environment will deteriorate to a level which will make the land uninhabitable, and the people will have to abandon the area.



Decisions During the Third (Virtual) Meeting of Management Board 2022

Rescheduling of IEC Meeting

- (a) 74th IEC Meeting and 25th ICID Congress, 1-8 November 2023, Vizag, Andhra Pradesh, India
- (b) 75th IEC Meeting and 9th Asian Regional Conference, 1-7 September 2024, Sydney, Australia
- (c) 76th IEC Meeting and 5th World Irrigation Forum, September 2025, Kuala Lumpur, Malaysia
- (d) 77th IEC Meeting and 27th European Regional Conference, 2026, Marseille, France

Ministerial Roundtable

MB was informed that for the successful organization of the Ministerial Roundtable, at least five to six months of preparation is generally required, as the invitations need to be delivered to the Hon'ble Ministers through the National Committees well in advance. MB was apprised that the theme and the background note of the Ministerial Roundtable once developed by the host NC will have to be later considered by the Task Force to Guide the Partnership Process (TF-GPP) for planning the Roundtable and its successful organization.

Setting up a Task Force to review the mandate and outcomes of the WGs

MB decided to constitute the TF with the title "Task Force to review the mandates and outcomes of the WGs in order to reorganize and restructure the workbodies under PCTA" with the following composition and mandate:

Composition

- Prof. Dr. Ragab Ragab, President, ICID
- Prof. Dr. Tsugihiko Watanabe, Chair, PCTA
- Strategy Co-Theme Leaders of ST-Basin
- Strategy Co-Theme Leaders of ST-Knowledge
- Strategy Co-Theme Leaders of ST-On-Farm
- Strategy Co-Theme Leaders of ST-Schemes
- Additional Members co-opted by TF
- Er. Ashwin B. Pandya, Secretary General, ICID

Mandate

- To consider the level of activities in WGs and consequently, the strategic plan may be reviewed during the IEC meeting next year.
- To recommend the new structure and mandates of WGs in line with the demands of the sector and consultation with WG members and Chairs.

- To look at the process and diligence of WGs and contributions in the presence and absence of Chairs.
- To collect suggestions and review the mandates with reference to time and context.
- To prepare a strategic plan and report which will be presented to PCTA for its consideration and review prior to its presentation to the next IEC.
- TF may meet and decide about any additional members from experts from within/ outside the ICID to be co-opted.

Setting up a Task Force to look into the Overall Sustainability of ICID (Technical, Organizational and Financial Aspects)

The ITAC constituted should have a minimum of five members from the host NCs and will advise the Organizing Committee on Themes, Questions, Special Sessions and Symposium / Technical Programs that will be organized during the Congress.

MB approved the composition and terms of reference (ToR) for the ITAC for the 25th ICID Congress, which is scheduled to be held in Vizag, India from 1-8 November 2023.

Terms of Reference (ToRs)

- Develop the scope of each session, design the programs of various sessions, and enable the successful organization of the sessions;
- Organize the schedule of all the events, programs and sessions in terms of date, time and hall/room;
- Identify the keynote speakers etc. related to the Congress Sessions;
- Promote the Congress as a whole and in particular Special Session and Symposium and
- Draft the Congress Outcomes.

Other Portfolio

MB noted that in mutual agreement between the Government of Cabo Verde and FAO, the second WASAG International Forum scheduled from 2 to 5 November 2022 is now scheduled from 7 to 10 February 2023 at Praia, Cabo Verde. VPH Dr. Marco Arcieri will represent ICID at the 2nd WASAG international forum. ICID Office Bearers such as PH Felix B. Reinders, WASAG Chair and PH Dr. Chandra Madramootoo, Member, WASAG Steering Committee, may also attend the Forum.

National Committee's Updates

The updates relevant to the ICID National Committees are given below:

Korean National Committee on Irrigation and Drainage (KCID)

The new address for the KCID is given below:

#870, Haeon-ro, Sangnok-gu, Ansan-si, Gyeonggi-do, 15634, Republic of KOREA

Australian National Committee on Irrigation and Drainage (IACID)

Please find below the details for the IACID new appointment.

Ms. Naomi Carragher, Business Administration Manager, Irrigation Australia Ltd, Secretariat, Irrigation Australia's Committee on Irrigation and Drainage (IACID), 11/58 Metroplex Ave., Murarrie, QLD 4172, PO Box 13, Cannon Hill, 4170

10th International Micro Irrigation Conference organized by ANAFIDE 25-27 January 2023 in Dakhla, Morocco

The International Commission on Irrigation and Drainage (ICID) proudly announces the convening of the 10th International Micro Irrigation Conference in Dakhla Morocco, and invites the irrigation and drainage professionals from the world over to contribute and showcase their work through the presentation of papers.

The International Micro Irrigation Conference (IMIC) aims to bring together all the stakeholders relevant to the field of irrigation, drainage, and other related aspects of water management. IMIC is a multi-sectoral platform creating avenues for discussions and engagement for everyone, the governments of relevant countries, policymakers, the multi-lateral and bi-lateral organizations, civil society institutions, the grass-root farmers as well as corporate leaders. Every IMIC attracts veterans, experts, and acclaimed researchers and academicians from various sectors to bring all possible issues and forthcoming solutions to the International Micro Irrigation Conference concerning the sector. In fact, in its 9th edition, IMIC held in Aurangabad, India, in January 2020 witnessed participation of several hundreds of attendees.

The 10th International Micro Irrigation Conference, jointly hosted by the Moroccan National Committee on Irrigation and Drainage (ANAFIDE) and ICID with support from the Directorate of Irrigation and Agricultural Land Planning (DIAEA), will be held during 25-27 January 2023 in

the Conference center of the city of Dakhla in Southern Morocco. Beside being a true heaven of peace between lagoon and ocean, Dakhla is a growing economical center with increasing areas of irrigated land where high value added crops are grown in greenhouses. An important irrigation project will soon be implemented in the region of Dakhla. It consists of irrigating an area of 5,000 ha using desalinated sea water powered by wind energy.

Theme: Micro-irrigation in the Era of Technology Innovation and Digital Transformation

Given the above, papers are invited and discussed under the following Sub-themes:

- Sub-Theme 1:** Public Policies and the Promotion of Micro Irrigation: Lessons Learned
- Sub-Theme 2:** Innovation in Micro-Irrigation Design and Technology to Improve Resilience to Climate Change
- Sub-Theme 3:** Micro-Irrigation for small-Scale Farming, Challenges, Opportunities and Initiatives
- Sub-Theme 4:** Micro Irrigation to Promote the Nexus "Water - Energy - Food"

Sub-Theme 5: Digital Transformation for the Management of Micro-Irrigation

Sub-Theme 6: International Coopération for the Développement of Micro Irrigation

The abstracts and full papers have been submitted by the end of November. The authors will be notified regarding oral/poster presentations by **15 December 2022**. For information, please visit: <http://10imic.ma>

Contact Coordinates:

10IMIC Scientific Secretariat:

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The Cairo Water Week 2022

The Cairo Water Week 2022 was held from October 16 to 19 in Egypt, under the theme "Water at the Heart of Climate Action", bringing together political leaders and global actors in the water community. The CCW – 2022 focused on Five Themes:

- (i) Water Security & Climate Change
- (ii) Protecting the Deltas
- (iii) Water-Related Adaptations to Climate Change
- (iv) Water, Climate Change and Future Cooperation, and
- (v) Climate Water – Related Disasters Preparation and Management.

ICID organized its 5th African Young Professional Forum as part of this event in a hybrid mode. President Prof. Dr. Ragab as keynote speaker addressed the session on the topic "The Water-Food-Energy Nexus: How important the nexus is and what are the benefits at Local, Regional, National and Transboundary levels."



The International Fund for Agricultural Development (IFAD) is an international financial institution and a specialized United Nations agency dedicated to eradicating rural poverty and hunger.

For more detailed information, please visit: https://job.ifad.org/psc/IFHRPRDE/CAREERS/JOBS/c/HRS_HRAM_FL_HRS.CG_SEARCH_FL.GBL?Page=HRS_APP_JBPST_FL&JobOpeningId=8831&PostingSeq=1&SiteId=1000&languageCd=ENG&FOCUS=Applicant&ifad_back=y

25th International Congress on Irrigation and Drainage

1–8 November, 2023, Vizag (Visakhapatnam), Andhra Pradesh, India



The 25th ICID International Congress on Irrigation and Drainage and the 75th International Executive Council Meeting is being organized by the Govt of Andhra Pradesh and the Indian Irrigation Commission on Irrigation & Drainage (INICID) on the main theme "Tackling Water Scarcity in 'Agriculture' during 1–8 November, 2023 at Vizag (Visakhapatnam), India. During the Congress, the papers will be presented and discussed, answering Questions 64 & 65.

In addition, Special Sessions, Symposiums, Training, Workshops, and a large number of side events will also be held as part of this mega event.

International Commission on Irrigation and Drainage (ICID) strives for a water-secure world free of poverty and hunger through its mission to facilitate prudent agriculture water management. "Enabling Higher Crop Productivity with Less Water Energy" is the most cherished goal of ICID Vision 2030. Through its tri-annual Congresses, ICID, provides a forum to exchange knowledge, information and technology solutions alternative water resources and increasing water productivity through on-farm interventions to tackle agricultural water scarcity.

QUESTION 64: What alternative water resources could be tapped for irrigated agriculture?

- Q.64.1: Reinforcing conventional sources of irrigation water**
- Q.64.2: Tapping non-conventional sources of water**

Q.64.3: Empowerment of farmers

QUESTION 65: Which on-farm techniques can increase water productivity?

- Q.65.1: Improving management of existing facilities**
- Q.65.2: Improved agronomics practices**
- Q.65.3: Efficient application of irrigated water**

SEMINAR: National policies for safe re-use of wastewater in irrigation

Symposium: Tackling Climate Change – Role of Storages for Irrigation

Contact Organizer:

Indian National Committee on Irrigation and Drainage (INICID), Mr. R. Girdhar, Director, Indian National Committee on Irrigation and Drainage (INICID) C/o Remote Sensing Directorate, Central Water Commission, Department of Water Resources (RD and GR), Ministry of Jal Shakti, Govt. of India, 425(N), Sewa Bhawan, R.K. Puram, New Delhi 110066 and **Andhra Pradesh Government:** VPH Dr. Yella Reddy, E-mail: icid.25congress@gmail.com, yellark@gmail.com, Website: www.icid25congress.in

ICID Central Office:

Er. Balasaheb Anantrao Chivate, Director (Technical), ICID, E-mail: icid@icid.org, Website: <https://icid-ciid.org/event/detail/25>

Call for Papers: Announced for the 6th Arab Water Week

The 6th Arab Water Week #AWW2023 Conference will be held from 5 - 7 March 2023 in Amman, Jordan on the theme "Towards Agile and Smart Water Utilities". The main topics of discussion are listed below:

- Digitization at Water and Wastewater Utilities
- Water Systems
- Sanitation Systems
- Water, Energy, Environment and Food (WEEF) Nexus
- Knowledge Transfer for Utilities through
- Water Diplomacy (Shared and Transboundary Water Resources)

The conference is offering a minimum of 16 daily sessions, a total of 50 sessions, with feature presentations from leading experts in the water and wastewater sector, presenting both theoretical and practical experience.

If you are interested in giving a 20-minute presentation, please send a 350-word abstract to the Arab Countries Water Utilities Association (ACWUA) at: AWW_Speaker@acwua.org before December 30, 2022.

The Arab Water Week (AWW) is a biennial international assembly in the Arab region that attracts decision-makers, water management practitioners, and professional organizations from the international arena and across the region.

It was first launched in Amman, Jordan in December 2010, and organized by the Arab Countries Water Utilities Association (ACWUA) in partnership with the Jordanian Ministry of Water and Irrigation (MWI) and the League of Arab States- Arab Ministerial Water Council (LAS- AMWC).

AWW is a unique international event in the Arab region, which tackles water

management issues by establishing innovative partnerships and platforms of collaborative work on water and wastewater issues in the region. The importance of this event lies in providing a platform for greater coordination among the existing network of key stakeholders active in the water sector in the region.

AWW does not only provide an opportunity to define and enhance communication channels, create synergies and share successful experiences and best practices but also facilitates the creation of new partnerships that complement and maximize the impact of ongoing work in this sector for the benefit of all countries in the region. For detailed information please click the link <https://arabwaterweek.com/index.html>

OBITUARY

Dr. Bernard Vincent (France)

We were extremely saddened and shocked to hear the sad news of the passing away of Dr. Bernard Vincent, whose memorable association with the International Commission on Irrigation and Drainage began nearly two decades back when he became a Member of ICID's Working Group on Use of Poor Quality Water for Irrigation (WG-PQW) in 2003. He also served as the Chair, Secretary and Member of a number of ICID workbodies, which dealt with topics like Drainage, Land Drainage and Irrigation and Drainage in the States under Socio-Economic Transformation.



Dr. Vincent was a highly respected member of the ICID family and served the Commission with utmost sincerity and professionalism. His impact and services were immense not only to the French National Committee of ICID (AFEID) but also to ICID, at large.

On behalf of the ICID fraternity, we express our deep sympathy and condolences to the bereaved family and the French National Committee. We wish strength and peace to his near and dear ones, and you in particular, at this time of grief.

Dr. Sándor Szalai (Hungary)

It is with utmost sadness we are informing you that the President of the Hungarian National Committee of ICID (HUCID), Dr. Sándor Szalai passed away on June 7, 2022. Dr. Szalai was a transformative visionary with a keenness



to reform Hungarian irrigation for national economic development. He actively led and championed networking within the irrigation and drainage sectors in Hungary. On behalf of the ICID fraternity, we express our deep sympathy and condolences to the bereaved family and the Hungarian National on Irrigation & Drainage. We wish strength and peace to her near and dear ones at this time of grief. May his soul rest in eternal peace!

FAO's Land and Water Division organized a technical webinar on Integrated Water Resources Management

FAO's Land and Water Division organized a Technical Briefing on "Integrated Water Resources Management for Food Security and Climate Resilience" on 26 October 2022 for FAO Permanent Representatives and Missions. This meeting aimed to inform FAO Members about the overall role of water for sustainable development, the overlapping crises on water, food, energy, biodiversity, climate, and health, and the need for integrated management of precious water resources.

The briefing was opened by FAO Deputy Director General, Ms. Maria Helena Semedo, who emphasized the crucial role of water as one of the world's most precious resources. Water is not only core for nutritional security and human health, but also for ecosystems and the services they provide. Ms. Semedo also highlighted the importance of FAO's contribution to the upcoming 2023 UN Conference and concluded by inviting all participants to join this "New FAO Water Journey".

The importance of water to the Sustainable Development Agenda has then further been spotlighted by Ambassador Yael Rubinstein. Ms. Rubinstein complemented the remarks by Ms Semedo and highlighted again the vital role of water in food systems and our lives, as life on this planet would be impossible without water.

The technical part of the meeting was then opened by a joint keynote presentation

prepared by FAO, IWMI, and WMO, held by Mr. Lifeng Li, Director of FAO Land and Water Division. In his keynote presentation, Mr. Li highlighted that both climate change and mismanagement of existing water resources put water under increasing stress and competition. Citing the latest IPCC report, Mr. Li elaborated on the risk that global warming would soon outpace our capacity to adapt and that there is, therefore, a finite window of time for adaptation.

The briefing was structured along four technical sessions on the importance of water for food security and nutrition, biodiversity and the environment, water, sanitation and hygiene, as well as economies. During these sessions, experts from the respective fields and international organizations emphasized the need for urgent actions to safeguard water resources, which are currently under severe stress and increasing competition.

Summarizing the discussions, Mr. Li called for integrating water into all three dimensions of sustainable development, in particular managing the Water-Energy-Food-Ecosystem (WEFE) nexus. FAO, therefore, proposes and supports countries to develop a National Water Roadmap towards the 2030 Agenda, based on the example of the National Pathways to Sustainable Agrifood Systems that was presented at the UN Food System Summit 2021. Through country-led national water dialogues and concrete actions, these National Water Roadmaps serve as a good reference



point for countries to reaffirm water-related objectives to achieve all SDGs by 2030 as a voluntary commitment to be shared during the upcoming UN 2023 Water Conference.

Scaling up support for implementing water actions for food security and climate resilience through integrated water management can deliver better production, a better environment, better nutrition and better life. As Mr. Lifeng Li, Director of the FAO Land and Water Division mentioned in his closing remarks "We are calling for innovation, bold actions, and stronger commitments. It is the time to join forces to create the paradigm shift that is needed for change.

For full access, please visit: <https://www.flickr.com/photos/landandwater/albums/72177720303186584>



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