

News Update

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



August 2021

From Secretary General's Desk...

Dear Colleagues,

ICID's various thematic working groups (WGs), task forces, office-bearers, and central office are gearing up to welcome the delegates for the upcoming 72nd International Executive Council (IEC) meeting in Morocco in November 2021. Accordingly, several WGs have met virtually recently to push forward the technical agenda of the Commission as per the ICID Roadmap 2030. Simultaneously, preparations are also underway for the 73rd IEC meeting and the Congress in Australia next year. We



have started receiving the abstracts, extended papers, and suggestions for the Congress questions, proposed solutions, and research approaches. We anticipate knowledge-rich interactions in Australia, particularly after the Pandemic experiences worldwide and its impact on our sector and food security.

ICID President and other office bearers delivered thematic webinars and served as panelists in various online sessions organized by ICID and selected multi-lateral platforms on wide-ranging issues of our sector. The outcomes of these are summarized in this issue of the ICID News Update. The President has also facilitated dialogue between ICID and several Arab states to enhance geographically diverse collaboration through participation in the Arab Water Forum next month. We also plan to use this opportunity to work with the Morocco National Committee of ICID

(ANAFIDE) for the smooth preparation and organization of the 72nd IEC meeting and related events.

I must congratulate the members and chair of the ICID WG on Value Engineering for bringing out an eBook publication. This publication provides the readers with glimpses of the challenges of the 21st Century. It delves into the way forward approaches for financial savings in water projects by applying Value Engineering principles.

We look forward to welcoming you soon during the upcoming ICID events.

Best Wishes,

Er. Ashwin Pandya
Secretary-General

Webinar on Climate Smart Agricultural Water Management Best Practices, Policy Framework, and Way Forward

Introduction

As the key natural resource, water is fundamental to all economic, social, and environmental development processes. Thus, efficient water resources management is essential for achieving poverty reduction through inclusive growth, maintaining public health and food security, providing livelihoods for a life of dignity for all, and sustaining long-lasting harmony with the essential ecosystems. Globally, rising temperatures will translate into increased crop water demand. Therefore, special impetus should be given towards mitigation at the farm-level by enhancing the capabilities of community-adopted climate-resilient technological options. This, together with an approach at a catchment level, will help to increase the overall efficiency of water use.

Given the rapid changes within the global development scenario due to demographics, climate change, and degradation of natural resources, AWM also needs to change to ensure water security, food security, and sustainable rural development. In this dynamic development scenario, the



International Commission on Irrigation and Drainage (ICID), as a network of AWM professionals, decided to give itself a reality check and reorient its vision and strategies to achieve its stated objectives. "A water-secure World free of poverty and hunger through sustainable rural development," a road map to ICID vision 2030, presents the strategies to convert this vision into actions.

The relative quantities of water being lost at the different levels in an irrigation system need to be considered carefully, and measures should be taken to reduce the losses and manage the water resources efficiently. The most significant volume of water lost is generally at the field level, where both the irrigated surface

area and percolation losses below the root zone are high. The second significant loss of water happens during the distribution of water from field to field in the field channels. Increasing water use efficiency should be one of the top priorities of countries with high irrigation demands to cope with increased climate variability, droughts, and water scarcity. This requires an emphasis on water measurement and quantification, participatory irrigation water management, capacity building of farmers, scientists, and government agencies, large-scale promotion of water-saving crop production technologies, and expansion of micro-irrigation into canal-irrigated areas.

The ClimaAdapt Project (funded by the Ministry of Foreign Affairs, Norway and coordinated by NIBIO, Norway), AP Micro Irrigation Project (funded by India's largest agricultural bank NABARD), Baseline studies on Water Use Efficiencies of Irrigation Projects (Funded by Govt. of India) have made significant contributions to capacity building, design, and implementation of various measures to improve water use efficiency in the states of Andhra Pradesh and Telangana in India. The outcomes from these projects have helped develop policy guidelines and broader adaptation of efficiency measures in the two states.

Speaker

VPH Dr. Kaluvai Yella Reddy is the Dean (Faculty of Agril. Engg & Technology) of ANGR Agricultural University, Andhra Pradesh, India. He has more than 35 years of experience in teaching, research, project management, and administration. He obtained B.Tech (Agril Engg) from Dr PDKV, Akola, M.Tech. and Ph.D. degrees from IIT, Kharagpur and PG Diploma from University of Arizona, USA. Obtained 'World Heritage Irrigation Structures (WHIS) Awards' for 6 projects of India (2 in 2018 and 4 in 2020) and got the approval of the International Executive Committee (IEC) of ICID for hosting ICID Congress in Vizag, AP, India in 2023.

Panelist

Dr. Marco Arcieri, Vice President, ICID & Secretary General, Comitato Nazionale Italiano ICID (ITAL-ICID)

He graduated from the Faculty of Agricultural Sciences of Basilicata, where he also gained his International PhD on "CROP SYSTEMS, FORESTRY AND ENVIRONMENTAL SCIENCES". His professional experience brought him to visit more than 40 Countries worldwide, in order to implement international research projects and attend to various Workshops and Meetings, both as a speaker and an invited guest.

He is currently the Senior Vice President of ICID and the SECRETARY GENERAL of ITAL-ICID, the National Committee of Italy. Also, he is a member of ICID Task Force to Guide the Partnership Process (TF-GPP) – Support to the High Level Advisory Group (HLAG) on "PARTNERSHIP FOR AGRICULTURE WATER MANAGEMENT"; member of ICID Panel of Judges for evaluations of nominations (PoJs) invited under the "SCHEME FOR RECOGNITION OF HERITAGE IRRIGATION STRUCTURES"; Head of the ICID REGIONAL NODE FOR THE MEDITERRANEAN AREA – IRPID PROGRAM; Chair of the ICID PERMANENT FINANCE COMMITTEE; member of ICID Working Groups "Water & Crop", "European" and "History"; member of the Steering Committee of UN FAO WASAG - GLOBAL FRAMEWORK ON WATER SCARCITY and a PERMANENT OBSERVER to UN Agencies FAO, IFAD and WMO.

Dr. K. Palanisami (Emeritus Scientist @IWMI) is international agriculture and water expert with a specialization in Agriculture economics and water policy

and climate change. He worked in several countries for about 12 years as a visiting professor and project scientist. He was also a consultant to World Bank, JICA, IFAD, and ADB projects implemented in different countries. He received several awards and fellowships at the national and international level for his water and agriculture-related works. Currently, he is serving as Emeritus Scientist of IWMI, Consultant to the ADB's SIMP in India, and Adjunct Professor, Water Technology Centre, Tamilnadu Agril University.

Er. Anshuman - Associate Director, Water Resources Division of TERI (The Energy and Resources Institute) has been working in the field of water sector for last 24 years. His key qualifications include M. Tech. in energy & environmental management from the Indian Institute of Technology (IIT), N. Delhi. His expertise in the water sector lies in the areas related to integrated water resource management, water use efficiency, water quality & quantity assessments where he has carried out several comprehensive research studies in the context of the source (surface water, groundwater), issues (water scarcity, pollution, use efficiency etc.), sectors (irrigation, domestic & industrial) and stakeholders (Central/State Governments and local communities). He has executed several related projects, presented several papers at national and international fora, and has several relevant national & international publications.



Webinar on Dialogue: Enhancing water security through improved agricultural water productivity: new knowledge, innovations, and applications

UKZN's Centre for Transformative Agricultural and Food Systems (CTAFS) partnered with South Africa's Water Research Commission (WRC) to co-host a virtual dialogue on enhancing water security through improved agricultural water productivity.

Delving into new knowledge, innovations, and applications around agricultural water productivity, the event included an address from WRC Chief Executive Officer Mr. Dhesigen Naidoo, and a keynote presentation from World Bank senior irrigation specialist Dr. Petra Schmitter.

A panel of experts joined the discussion, including the President of the International Commission on Irrigation and Drainage, Professor Ragab Ragab; lecturer in Water Productivity and Remote Sensing at the IHE Delft Institute for Water Education

Dr. Abebe Chukalla; Dr. Aidan Senzanje of UKZN's Discipline of Bioresources Engineering, UKZN alumnus Dr. Vimbayi Chimonyo of the International Maize and Wheat Improvement Center in Zimbabwe, and WSP Africa civil engineer Mr. Peter Townshend. Welcoming participants, Co-Director of the CTAFS Professor Tafadzwa Mabhaudhi said the event's goal was to prompt conversation to provide information for a book being compiled to synthesize knowledge on enhancing water security through improved agricultural water productivity in the global South.

Dr. Schmitter's presentation highlighted emerging solutions with the potential to contribute to water security, noting the importance of the scale of interventions and a nexus approach, honing in on enhancing storage and access to water, and incentivising smart water use. 'If



we are going to manage our water use in agriculture better, we need to think holistically about our approaches and interventions, but also across the water-energy-food (WEF) sector using a multi-risk framework,' she said.

Mabhaudhi thanked Schmitter for the insightful presentation covering the breadth of agricultural water management, calling it a masterclass that included theory and placed significant emphasis on designing context-specific solutions while considering the heterogeneity of scale. Mr.

Naidoo's presentation touched on critical events occurring in the global community that would determine the trajectory of water and agricultural development in the future and paid special attention to movements towards the democratisation of agriculture as a model to achieve zero poverty and universal food and nutrition security. 'It is not just about better science, better productivity, and better water management. It is about plugging this into the right paradigm to deal with the inequality in the world and having open food access,' said Naidoo. 'Not only is water a great building block around economic recovery and development, but the agricultural enterprise is also a pivotal player in determining whether

or not we have a green future. If we have successful agriculture moving into the next 20 years, the realization of the net-zero by the 2050 target will be highly achievable.'

The discussions proceeded to a panel debate chaired by WRC Executive Manager Professor Sylvester Mpendeli. 'We need to address water productivity and link it with new approaches including a circular economy, the WEF nexus, and sustainable food systems,' said Mpendeli as he highlighted key WRC projects working towards this goal.

During the panel debate, President Ragab Ragab addressed current water issues requiring rational management

of supply and demand, and Dr. Abebe discussed the need to improve productivity since freshwater and land per person available for agriculture is declining. Dr. Senzanje gave a general presentation on water productivity, highlighting the importance of open-mindedness to different management systems to benefit the water resources.

Dr. Chimonyo discussed how crop diversity could improve water productivity by examining cereal and legume intercrop systems, while Townsend addressed the effective use of irrigation water using automatic water control equipment.



President Dr. Ragab Addresses the Water Resources Forum of the Fifth China-Arab States Expo

On August 18, the Water Resources Forum of the Fifth China-Arab States Expo was held in Yinchuan, China. President Ragab Ragab delivered a video speech for the Forum on behalf of ICID.

In his speech, President Ragab gave a comprehensive introduction to the efforts made by ICID in fostering the development of irrigation, drainage, and flood management and bolstering global food security. He reviewed ICID's exchanges and cooperation with China's water sector and expressed willingness to carry such friendly relations forward in the joint effort to improve the irrigation and drainage capacity of developing countries and contribute to better global water governance.

The China-Arab States Expo, founded in 2013 and held every two years, is a high-level international platform promoting cooperation between China and Arab countries under the Belt and



Road framework. As one of the core events of the Fifth China-Arab States Expo, the Water Resources Forum, themed "economical, intensive, and safe utilization of water resources through digital empowerment", is aimed at exploring the possibility of a water cooperation mechanism incorporating countries, regions, organizations, and enterprises, strengthening the water policy and innovation exchanges between China, the Arab region and other countries along the Belt and Road, encouraging the

transfer of advanced water technologies, and promoting practical cooperation in the field of intensive and safe use of water resources. Due to the impact of the COVID-19 Pandemic, the Forum adopted an online-plus-offline mode. Vice Minister of Water Resources of China, President of the Arab Water Council, Sudanese Ambassador to China, and other guests also delivered video speeches.



ICID President's Activities – August 2021

1	Working Group on Institutional and Organizational Aspects of Irrigation/ Drainage System Working Group on Use of Non-Conventional Water Resources for Irrigation (WG-NCWRI) Chairman: Dr. Wenyong Wu	05 August 2021
2	Working Group on Climate Change and Agricultural Water Management (WG-CLIMATE) Chairman: Prof. Ray-Shyan Wu	11 August 2021
3	Working Group on Modernization and Revitalization of Irrigation Schemes (WG-M&R) Chairman: Mr. Ian William Makin	23 August 2021
4	Working Group on Managing Water Scarcity Under Conflicting Demands (WG-MWSCD) Chairman: Mr. Franklin E. Dimick	25 August 2021

welcome



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 & 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 & 24th ICID Congress combined with the Irrigation Australia National Conference & Exhibition to be held 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.



Andrew Ogden

Chairman
Irrigation Australia

A handwritten signature in blue ink.



Momir Vranes

Chairman
IACID Australian
National Committee

A handwritten signature in blue ink.



Bryan Ward

Chief Executive Officer
Irrigation Australia

A handwritten signature in blue ink.

President of the Moroccan National ICID Committee (ANAFIDE) Writes an Open Letter about the Morocco Events

The 72nd International Executive Council meeting of ICID and the 5th African Regional Conference - Theme "Sustainable Management of Irrigation for Improved Resilience of Agriculture in Africa" 23-30 November 2021, Marrakech, Morocco

Irrigation has been practiced in Morocco for many centuries. Water distribution is governed by embedded rules particularly in southern Morocco where scarce soil and water resources are valued. During the sixties, Morocco initiated plans to irrigate one million ha of agricultural land along with the "Dams Policy". Thanks to this rewarding orientation the country has managed to build more than one hundred and forty dams and supply with irrigation water close to a million and a half hectares.

Presently, the country continues to devote major attention to promote irrigated agriculture and enhance water-saving systems within the framework of the "Green Morocco Plan". Large as well as small and medium irrigation schemes are being irrigated with surface water from dams or rivers and/or from groundwater. At present, irrigation is contributing to a large share of gross domestic product in several African countries. To value the efforts made in this area, Morocco is continuing its south-south cooperation with African countries particularly in the framework of "the Triple A Initiative", aiming at a better adaptation of African Agriculture to Climate Change.

Although substantial progress has been accomplished to develop irrigation, there are still several challenges related to increasing water scarcity, low irrigation efficiency, constraints from climate change, insufficient resilience of small farms, low agricultural productivity, and degradation of natural resources. Most of the African countries are confronted with similar common problems to varying degrees within the agriculture sector. Irrigation represents and remains a great potential towards a better resilience of agriculture in Africa.

To cover these issues and exchange experiences about lessons drawn, innovative technologies, irrigation development strategies to reduce negative impacts of Climate Change on African agriculture, ANAFIDE is organizing under the auspices of ICID and in collaboration with IAV Hassan II and the African Regional Working Group (AFRWG) of ICID, the 5th Regional African Conference on irrigation and drainage with the main topic: "SUSTAINABLE MANAGEMENT OF IRRIGATION FOR IMPROVED RESILIENCE OF AGRICULTURE IN AFRICA". This conference will take place at the Water Museum, Marrakech, Morocco from November 23 to 30, 2021. It will bring together stakeholders, decision-makers, professionals as well as researchers, and donors. ANAFIDE is a long-time active member of ICID and has already organized the 30th IEC meeting in 1979 in Rabat as well as the 38th IEC and the 13th International ICID Congress in 1987 in Casablanca. It will spare no effort to make this coming conference very successful.



The Moroccan national committee of ICID is pleased to invite you to attend and contribute to this important regional conference that will be held in Morocco at the Water Museum in Marrakech, famous for its historical sites and its parks, especially the Menara olive grove and the Agdal Gardens. An irrigation system built under the Almoravids dynasty is still used to water the city's gardens. Your participation in this conference will also allow you to visit Moroccan achievements in modernized irrigated agriculture and appreciate historical attractive places in the country.

Aziz FERTAHI

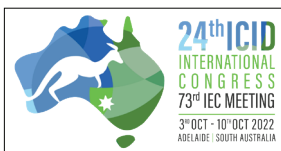
President

Moroccan National Committee of ICID (ANAFIDE)



ICID Forthcoming Events

5th African Regional Conference (ARC) and 72nd International Executive Council (IEC) - Theme "Sustainable Management of Irrigation for Improved Resilience of Agriculture in Africa" to be held from 23-30 November 2021, Marrakech, Morocco. Website: <http://5arcid.ma/en/>



73rd IEC Meeting & 24th ICID Congress combined with the Irrigation Australia National Conference & Exhibition to be held in Adelaide, Australia from 3 October to 10 October 2022. Website: <https://www.icid2022.com.au/icid-home/>

74th IEC Meeting and 4th World Irrigation Forum (WIF4) will be held during 16-22 April 2023 in Beijing, China.

75th IEC Meeting and 25th ICID Congress will be held in November 2023, Visakhapatnam (Vizag), Andhra Pradesh State, India

76th IEC and 9th Asian Regional Conference (AsRC) will be held from 27 April-2 May 2024 in Sydney, Australia.

President Dr. Ragab Addresses "The Virtual Conference of AQUA 360: Water for All – Emerging Issues & Innovations"

The virtual conference "AQUA≈360: Water for All - Emerging Issues and Innovations" took place from 31st August to 2nd September 2021. This international conference was hosted by the University of Exeter, United Kingdom. The AQUA≈360, invited the contribution on the topics: Water Quality, Water Quantity, Water Treatment, Wastewater Treatment, Water & Wastewater Infrastructure Resilience & Sustainability, Water Smart Cities & Climate Change Adaptation, Water for food, Aqua Net Zero (approach to reduce greenhouse gases) & Digital Water

The event covered the internationally leading scientists, engineers, planners and practitioners, and "rising stars" is to provide an exciting opportunity to discuss and showcase cutting-edge water management research and technical, institutional, modelling, planning and community-driven social and policy innovations. The event was designed to enable cross fertilisation of new ideas



for delivering sustainable, resilient, energy-efficient, and intelligent water management to address climate change, rapid urbanisation, and water pollution and secure safe and sufficient water and sanitation for all.

The ICID was represented by President Dr. Ragab Ragab. He talked about the role of ICID, their networks and how they help the nations to achieving the UN-SDGs in the area of irrigation, hunger, agriculture & efficient water development. President Dr. Ragab Ragab chaired the

session at the second day of the event. He involved as a member of the Scientific Committee. In his session the topics covered were "Re-engineering traditional urban water management practices with smart metering and informatics" and "The WATERAGRI Project". He also took part in the closing ceremony and announced three posters which were awarded the Prizes as a member of the Scientific Committee.

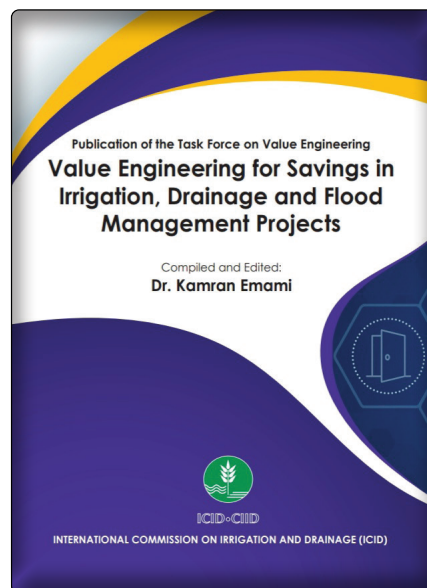


New ICID Publication

Value Engineering for Savings in Irrigation, Drainage, and Flood Management Projects

The United Nations Sustainable Development Goals (SDGs), adopted in September 2015, are targets set to be achieved by 2030. Most countries of the world have agreed to work together towards achieving these goals.

Water, as the main input for food production, has played the most significant role in the societal evolution over much of the recorded human history. Numerous civilizations flourished and vanished over a period of time because of the way they managed their agricultural water. By being, a direct or indirect, part of 7 out of 17 SDGs, water assumes inclusive dimension both as a natural resource for rural development and an essential input for industrial and human (life-style) consumption. In this context, ICID Vision 2030 of "A water secure World free of poverty and hunger through sustainable rural development" has been defined and a relevant roadmap has been developed in 2017. The SDG #1 clearly states that "By 2030, eradicate extreme poverty for all people everywhere". The share of the world population in extreme



poverty declined from almost 99% two centuries ago to below 10% in 2015.

More than 700 million humans (some 10 percent of world population) are living in conditions of extreme poverty in 2021. Projections by Crespo Cuaresma et al. published in 'Nature' in 2108 showed that the number of people in extreme poverty may fall to about 450 million people by 2030. To fully eradicate extreme poverty

for all people everywhere may require equivalent to savings of approximately \$250 billion annually which is less than 0.3% of world GDP. Based on worldwide experience, Value Methodology can facilitate average savings of about 20% to 30% of total project costs in developing countries. In this context, ICID formed a Task Force on 'Value Engineering (VE)' which prepared this document for promoting VE in water sectors. The "Transition Generation" is most important part of the humanity that has to cope with the mega challenges of the 21st century. The "Transition Generation" must be inspired and empowered to adopt Value Methodology resulting in enhanced costs savings. In this context, it is envisioned that Value Methodology may prove to be an effective and efficient tool.

This publication provides the readers with a glimpse of challenges and the meaning of the 21st Century along with the way forward for financial savings in water projects through application of the principles of 'Value Engineering'. The same can be downloaded or accessed at: https://icid-ciid.org/icid_data_web/TF_VE_e-Publication2021.pdf



OBITUARY



We deeply regret to inform on an immeasurable loss to the team of ICID and the water community as a whole - Viktor A. Dukhovniy passed away on 14 August 2021 in his 88 age.

We lost an Outstanding Leader, Mentor, Scholar, and, most importantly, a Person who was not indifferent! We loved Viktor Dukhovniy for endearing, profound and concerned about others. He left a tremendous legacy and guidance to all of us to work for the well-being of the people around the world.

The whole long-term field activity of V.A. Dukhovniy is connected with the development and implementation together with those "water giants" of the 1960...1970s of the so-called integrated method of irrigation and land development in such large-scale areas as Golodnaya steppe, then Karakum canal zone, Djizak and Karshi steppes, Asht and Kizili schemes in Tajikistan, Lyailyak in Kyrgyzstan, rice-growing zones in Karakalpakstan.

Since 1969, V. Dukhovniy actively participated in the work of international organizations. He was a member of the Soviet Committee on Irrigation and Drainage since 1966, participated as a rapporteur at the 8th ICID Congress in Mexico in 1969, where he presented a report on integrated development of the Golodnaya Steppe, in Moscow - 1975, in Athens - 1978, etc. He chaired the scientific committee of the 1st Afro-Asian Conference of ICID in Tashkent in 1976. His articles were published in the 1st and 2nd volumes of ICID Scientific Proceedings in 1978 and 1982. He earned the great respect of the entire ICID family for the involvement of 5 Central Asian countries in this organization. His participation in the Advisory Committee led to the development of the IPTRID network (SIC ICWC is one of IPTRID centers). V. Dukhovniy was the Vice-Chairman of the ICID working group on the Aral Sea Basin and a member of the working group on drainage. At the ICID Congress in Canada he was awarded the "Prize of Excellence".

To his family, relatives and friends we have on behalf of the ICID fraternity, presented our affectionate condolences, and our feelings of deep sadness. May his blessed memory live forever in the hearts of all who knew him as a talented and intelligent leader, a great scientist and a bright man.

World Bank signs \$105 Million Project to Improve Urban Services in two cities of Punjab (India)

The Government of India, the Government of Punjab, and the World Bank have signed a \$105 million Punjab Municipal Services Improvement Project to strengthen urban services in Amritsar and Ludhiana, the two largest cities in Punjab, India.

A major focus of the project will be on providing efficient water supply and sanitation services in Amritsar and Ludhiana, cities that are the engines of economic growth for the state of Punjab. The improvements in the water supply are expected to benefit more than 3 million people in 2025 and an estimated 5 million projected population in 2055. Industrial and commercial users would also benefit from the good quality reliable water supply.

The project will finance all new raw water systems, water treatment plants, transmission systems, and reservoirs to supply clean water to cover entire cities under a Design; Build, Operate and Transfer (DBOT) contract. The DBOT operator will manage the operations and maintenance of these water supply systems under the direct supervision of the municipal corporations in the two cities through city-level water utilities.

Amritsar and Ludhiana get their water by pumping out groundwater from hundreds of bore wells dug up across the two cities. Pumping groundwater directly from these bore wells leads to significant water loss and wastage as households are not incentivized to save. Studies have also revealed that Amritsar district's groundwater is contaminated with arsenic and Ludhiana's groundwater with nitrates and other heavy metals. The project will shift water supply from rapidly depleting and highly contaminated groundwater sources, to a centralized treatment plant

drawing water from local canals (surface water sources). Studies have shown that this shift is likely to have significant health benefits.

The Government of Punjab has launched several initiatives to address urban service delivery gaps and strengthen the Urban Local Bodies (ULBs) in the state. The state has devolved authority and responsibility for infrastructure development and service delivery to large municipal corporations. Several schemes to improve waste management, water supply, sewerage, street lighting, and public transport are presently underway.

Focus on administrative and e-governance improvements, especially those with a public interface (such as improved systems for permits, payments, and grievance redress), will benefit the users of municipal services in both cities. The project will also provide sub-grants to all the municipal corporations in Punjab to finance critical non-medical interventions that address impacts of the COVID-19 crisis, and to improve their readiness to tackle disasters.

The \$105 million loans from the International Bank for Reconstruction and Development (IBRD), has a final maturity of 12.5 years including a grace period of three years.

https://www.developmentaid.org/#!/news-stream/post/105322/world-bank-urban-services-punjab?utm_source=Newsletter&utm_medium=Email&utm_campaign=NewSDigest&token=d135b62f-06e8-11ea-8cc5-52540068df95



UPDATES from Spanish National Committee

Mrs. Inmaculada Bravo Dominguez
Spanish Ministry of Agriculture (MAPAMA)
Spanish National Committee on Irrigation and Drainage M^o DE AGRICULTURA Y PESCA, ALIMENTACIÓN Y MEDIO AMBIENTE D.G. de Desarrollo Rural y Política Forestal S.G. de Regadíos y Economía del Agua Gran Vía de San Francisco, 4-6; 3^a planta. Despacho 3.10 28005 MADRID, Tel: +34 91 347 58 12, E-mail: ibravo@mapama.es

Prof. Dr. Ricardo Segura Graino
Vice President Hon., ICID,
C/ Príncipe de Vergara 206
5D 28002 Madrid
Tel: +34 91 597 58 71
E-mail: rseguragr@yahoo.es

Dr. J.A. Ortiz Fdz.-Urrutia
Vice President Hon., ICID
E-mail: aeryd@aeryd.es





ICID•CIID

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 irrigation, 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:

- i. 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•CIID

International Commission on
Irrigation and Drainage (ICID)

Editorial Team: Dr. Sahdev Singh, Mr. Madhu Mohanan, Ms. Prachi Sharma, **Layout:** Keshav Dev Tanwar
48 Nyaya Marg, Chanakyapuri, New Delhi 110021, India
E-mail: icid@icid.org; Website: <http://www.icid.org>