Dear Colleagues,

It gives me immense pleasure in saying that the final preparations for the upcoming World Irrigation Forum (WIF3) and the 70th IEC Meetings of ICID are almost complete and the host Indonesian national committee and ICID office bearers are ready to welcome the delegates and their spouses for this week long event with a variety of activities, including IEC meetings, technical sessions, working group workshops, international side events, training of young professionals, study tours and cultural performances.

On the number of delegates expected to participate I have some good news to share that more than 500 international and a similar number of Indonesian delegates have already registered, and in all probabilities we are looking at a large lively gathering of stakeholders, including, ministers of water, senior government officers, international technical experts, engineers, young professionals, farmers and others.

Keynote speakers from various international agencies have confirmed their participation. International teams of experts have developed 3 background papers for the 3 sub-themes of WIF3. The papers have been reviewed by ICID and are being included in the publications to be distributed during the event.

Ministerial meeting, farmers roundtable, 14 side events by ICID’s international partners, 6 thematic workshops by ICID working groups, and 2 training sessions for young professionals will also feature during the week.

On other fronts, ICID has been invited for deliberations on drainage and storm-water management in Abu Dhabi where President Felix will deliver a keynote speech on ICID. I recently gave a presentation on ‘Irrigation Management and Modernization’ in the plenary session of the conference organized by CNCID in Beijing, China. The World Bank experts visited the Central Office to discuss with ICID the irrigation performance monitoring using remote sending, a new project of the Bank for India.

In the closing, I look forward to meeting you in Bali, Indonesia in less than 2 weeks’ time. Have a safe and comfortable journey!

Best Wishes

Ashwin B. Pandya
Secretary General

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The countdown has begun for the 3rd World Irrigation Forum and the 70th International Executive Council Meeting of ICID scheduled for 1-7 September 2019 at Bali in Indonesia. These meetings will be attended by some 750 participants consisting of 493 international participants and 257 national participants from Indonesia. The event is being hosted by INACID—the National Committee of ICID in Indonesia.

The triennial World Irrigation Forum (WIF) aims to bring together all the stakeholders involved in irrigation of multi-disciplines and all scales, including the policy makers, experts, research institutions, non-governmental organizations and farmers.

Indonesia is one of the eleven founder members of ICID which was established in 1950. Indonesia is the largest archipelago in the world, comprising about 17,541 islands. The accessible water resources potential of Indonesia is about 2,530 km3. Even though Indonesia has a lot of water resources, only two percent or about 96 m3/capita/year is being utilized, with 76% of it being used for agriculture.

Around 85 booths will be available for the exhibitors during the event. In addition, a stage and giant screen will be provided to enable exhibitors promote their products and other attractions / presentations / performances.

Fourteen supporting events are being organized by Daugherty Water for Food Global Institute, Nebraska, USA; Food and Agriculture Organization of the United Nations (FAO); ICOLD, Spain; Global Water Partnership (GWP)/ Indonesia Water Partnership (IWP); INACID; Asian Development Bank (ADB); and, Japanese National Committee of ICID (JNCD).

Six International Workshops are being organized as parallel events by Working Groups of ICID on (i) Integrating research, practice and policy - an exchange of expertise from Basin perspective; (ii) Modernizing Irrigation Services for Water, Food and Nutrition Security; Historical Management of Water; (iv) Innovation of Developing Services for Water, Food and Nutrition Security; Historical Management of Water; (v) Integrating research, practice and policy - an exchange of expertise from Basin perspective; (ii) Modernizing Irrigation Services for Water, Food and Nutrition Security; Historical Management of Water; (iv) Innovation of Developing Services for Water, Food and Nutrition Security; Historical Management of Water; (v) Participatory Irrigation Management and Management Transfer, Approaches and condition for successful PIDM; and, (vi)
President Felix to Deliver Keynote Speech at Abu Dhabi

ICID President Eng. Felix Reinders has been invited to be the keynote speaker at the 5th Annual Conference on ‘Future Drainage and Storm Water Networks’ at Abu Dhabi in United Arab Emirates 29-30 September 2019. The presentation of President Felix will focus on ‘A water secure world free of poverty and hunger: Challenges of the Water-Energy-Food Nexus.’

The other speakers listed for the conference include ICID Secretary General Er. Ashwin B Pandya and ICID Executive Director Er. Harish Kumar Varma.

The conference is being organized under the patronage of Urban Planning and Municipalities, Abu Dhabi City Municipality and will be presided over by Eng. Eisa Mubarak Ali Al Mazzouie, Executive Director of Municipal Infrastructure and Assets - Abu Dhabi City Municipality.

The conference will consist of elaborate discussions on the UAE Government’s efforts to:
- Integrate the latest technologies, including Big Data Analytics and IoT to its infrastructure
- Reduce flooding risk through stormwater management and urban drainage strategies
- Adequately control and replenish Abu Dhabi’s groundwater levels
- Maintain and upgrade the existing drain networks on Abu Dhabi island and suburbs
- Find non-traditional methods of draining stormwater, especially in remote areas,
- Empowering the private sector, through Public-Private-Partnerships (PPP) to develop sustainable infrastructure that can make use of the ponds created by the collection of excess water

The conference will be attended by key Government Stakeholders, Real Estate Developers, Design & Engineering Consultants and International Associations and Academia, among others.

Web link: http://www.abudhabidrainageandstormwater.com/
SG Er. Pandya Addresses Plenary Session in China

The National Center for Efficient Irrigation Engineering and Technology Research—Beijing (NCEI) organized a two-day conference of ‘The Belt & Road Forum on Irrigation & Drainage Development and Science & Technology Innovation’ at Beijing in China, 30-31 July 2019. The event was hosted by China Institute of Water Resources and Hydropower Research (IWHR) and Chinese National Committee on Irrigation and Drainage (CNCID). The theme of the conference was Green Irrigation and Drainage Cooperation and Innovation.

Prominent Invitees included the International Commission on Irrigation and Drainage (ICID); the Food and Agriculture Organization (FAO); the World Bank (WB); and, the International Water Management Institute (IWMI).

Irrigation of Hetao is believed to have begun during Qin and Han Dynasties (3rd Century BC - 3rd Century AD). At the end of Qin Dynasty, there were 40 canals from which 13 main canals took shape. Today, the irrigation system of the district has 13 main canals, 48 distributary canals, 372 branch canals and 86,000 lateral channels and furrows. The drainage system of the district has one main drainage canal, 12 major drainage canals, 59 distributary drainage canals and over 17,000 channels for drainage. Hetao has been recognized as World Heritage Irrigation Structure (WHIS) by ICID.

The delegates were taken on a field visit to the Hetao Irrigation District on 1 August 2019. Hetao is located at the bend of the Yellow River in the Inner Mongolia. It is one of the three super irrigation districts of China.

The World Bank visits ICID Central Office to discuss Irrigation Performance Monitoring using Remote Sensing

Mr. Ijsbrand H. de Jong, The World Bank’s Lead Water Resources Specialist and Dr. Maria Iskandarani, International Development Expert along with a consultant visited ICID Central Office on 8 August 2019. In the meeting ICID was represented by SG Aswin Pandya, ED Harish Varma, Director-KM Dr. Sahdev Singh and Knowledge Officer Ms. Prachi Sharma.

In a collaborative effort, the World Bank has tied up with NITI Aayog and the Ministry of Jal Shakti to study the modalities of developing an irrigation performance monitoring system (IPMS).
that can be applied across India by (i) preparing a conceptual framework for measuring irrigation performance, and (ii) identifying cost effective technologies and tools for assessing scheme performance by using remote sensing techniques supplemented with hydrological models and field observations.

The consultants appointed for this project will offer a conceptual framework for irrigation performance, including the identification of indicators and methodology for a balanced assessment of irrigation performance along the intervention results chain, i.e., from financial investment (input) to making available new irrigation areas (outputs) to strengthening effective management of irrigation schemes (intermediate outcome), access to and use of the infrastructure and water resource, farmers’ satisfaction and efficient and equitable use of irrigation services, and eventually farmers prosperity and sustainable use of resources across space and time.

The consultants will identify remote sensing technologies, products and methodologies that are freely accessible and allow for low-cost data collection and analysis of indicators or proxies of indicators developed above. ICID showcased its past and on-going activities on remote sensing tools for irrigation infrastructure monitoring as well as on-field application of water.

Webinar on Advanced Micro-Irrigation Technology by Dr.Yaohu Kang

A Webinar on Advanced Micro-Irrigation Technology was presented by Dr.Yaohu Kang, Professor of Geographic Sciences and Natural Resources Research (IGSNRR), University of Chinese Academy of Sciences on 29 July 2019 outlining the importance of using micro irrigation to improve the water efficiency in relation to food production.

Here is the gist of Prof. Kang’s lecture: Irrigation is very important for agriculture and food security. For example, over 75% of the country’s total grain production, over 90% of the total cotton and the total vegetable production are from about 50% of the total irrigated land areas in China. Irrigation is also important for the food security, agricultural and socio-economic development for African countries.

Micro-irrigation has the advantage of: (1) increasing beneficial use of available water; (2) improving fertilizer and other chemical applications; (3) enhancing plant growth and yield; (4) eliminating weed growth; (5) decreasing energy requirements; (6) improving cultural practices; reducing salinity hazards to plants; etc. Starting from the goals of high quality, high and stable yield, water saving, efficient utilization of fertilizers and control of agricultural non-point source pollution, advanced precise micro-irrigation & fertigation technology has become the fundamental trend of irrigation development in the world.

In the past 27 years, we have carried out long-term systematic research on micro-irrigation theory and technology, including hydraulic analysis and design, micro-irrigation system model suitable for different users and its key equipment (filtration systems, fertilizer injection systems, control systems, etc.), farmland water and nutrient management methods, irrigation and fertigation scheduling, and salinization preventing method etc.
ICID Executive Director Er. Harish Kumar Varma and Director (Knowledge Management) Dr. Sahdev Singh delivered lectures to MS and PhD students of the Indian Institute of Technology (IIT) Roorkee on 9 August 2019. The group consisted of about 60 students including some students from Africa and Afghanistan.

The lectures were aimed at educating the students on ICID initiatives with special reference to Knowledge Management, Young Professionals (YP) training and ICID Young Professionals e-Forum (IYPeF). The presentations were meant to encourage the IIT Roorkee students to join IYPeF and contribute in on-going e-Discussions on various relevant topics of irrigation water management from source to crop fields.
The Global Framework on Water Scarcity in Agriculture (WASAG) will make several presentations at the three-day session of SIWI World Water Week 2019, Stockholm in collaboration with its partners including FAO, IWMI, IFAD, OECD, CGIAR, World Bank and others from 26-28 August 2019.

Established in 2017, WASAG formed its thematic working groups in 2018 and organized the first WASAG international forum under the patronage of the Government of Cabo Verde in 2019.

A presentation on ‘Water and Migration’ titled ‘Water migration and rural development from knowledge to action’ is scheduled for 26 August 2019. The session will discuss the impact of migration from rural areas to urban areas and from poorer nations to richer nations highlighting potential interventions and the state of community members left behind.

The results of the survey on the 1st WASAG International Forum on Water Scarcity in Agriculture that took place from 19-22 March 2019 in Praia, Cabo Verde will be presented in the WASAG Showcase Event on Cabo Verde on Tuesday 27 August 2019. Three presentations are lined up for the event. These include:

(i) Presentation on ‘Water and Nutrition’ themed ‘The Multiple bridges connecting the water-nutrition divide: what’s new?’ The session will focus on water-nutrition linkages with the help of new case studies and explore possibilities of establishing nutrition-sensitive water management and broaden the water-nutrition network;

(ii) Presentation on ‘Drought Preparedness’ titled ‘A big push for drought resilience—can it include all?’ The session will discuss what it takes for countries to address drought proactively, across sectors and scales, turning the spotlight on drought risk mitigation options that are integrated and inclusive.

(iii) Presentation showcasing ‘Event on Cabo Verde’ and dealing with ‘WASAG—Focus on Cabo Verde and on innovative financing.’ This session will study practical, collaborative and innovative solutions and tools for the WASAG Investment Framework to facilitate greater access by all to finance agriculture water projects related to climate change.

The final session on 28 August 2019 will depict how WASAG is a collective responsibility towards addressing water scarcity in agriculture in the context of climate change by focusing on the needs of one specific country, Cabo Verde and by illustrating how financing mechanisms, one of the six WASAG working groups, can practically contribute with innovative solutions.

The Moroccan National Committee of ICID (ANAFIDE), is organizing the 5th African Regional Conference on Irrigation and Drainage 16-19 March 2020 at the Water Museum, Marrakech, Morocco. The theme of the conference is: “Sustainable Management of Irrigation for Improved Resilience of Agriculture in Africa.”

There are four sub-themes for the conference: (i) Strategies to cope with water scarcity—which will explore alternatives to cope with Climate Change including integrated planning and management of water resources which take into account qualitative and quantitative factors; (ii) Valorization of irrigation water—which will deal with issues/challenges of land and water management, promotion of crops with high added value, innovative and workable financing mechanisms etc.; (iii) Management of Irrigation at different scales—which will discuss management of small, medium and large irrigated schemes; and, (iv) Drainage and ecological issues—related to the impact of Climate Change on the performance of both drainage and irrigation systems.

Website: www.5arcid.ma

Billed as the largest water resources event in India, the 6th India Water Week 2019 is being organized by the National Water Development Agency on behalf of Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Government of India in co-ordination with nodal Ministries of Agriculture; Environment, Forest and Climate Change; Rural Development; Urban Development; Power; New and Renewable Energy; NITI Aayog along with their associated expert organizations and Public Sector Units, key International Bodies and Public as well as Private Business Houses.

The motto of India Water Week is: Water Cooperation for Peace, Progress and Prosperity. Water is taking centerstage due to the increasing social & environmental needs, industrialization, pollution and over extraction of ground water. The climate change impact is likely to exacerbate the situation. Burgeoning competition for water among domestic, agriculture, industry and environmental needs, calls for a cooperation amongst the stakeholders for sustainable development of this precious natural resource. 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 population in the 21st century continues to grow with the added manifestation of climate change.

The event is scheduled for September
24-28, 2019 at Vigyan Bhawan in New Delhi and features a multi-discipline conference bundled with promotional facilities and a 3000 sqm exhibition. Over 1500 national and international delegates are expected to participate in the event.

The theme for this edition of IWW is: Water Co-operation – Coping with 21st Century Challenges. Several presentations are slated for this conference under the sub-themes: (i) Future Challenges; (ii) Cooperation for Management of Water Resources to Optimize Benefits to the People; (iii) Capacity Building—Need of the Century; and, (iv) International and Regional Cooperation in Water Sector.

ICID has been appointed Nodal Organization for two Panel Discussions (PD): (i) Preparing Young Professionals (YPs) for Future Challenges in the Water Sector; and, (ii) Learning from the Best Practices in Water Management. The following are synopsis for these two panel discussions:

**PD-9: Preparing Young Professionals (YPs) for Future Challenges in the Water Sector**

This session will address three main concerns: (i) Future challenges in water sector and problems faced by Young Professionals in the Water Sector; (ii) Out-of-the-box opportunities for multi-disciplinary Young Professionals already working in the sector and those who want to contribute to it; and, (iii) Desired action at various institutional, technological, financial and societal levels to create new functions and activities across the water value chain for harnessing the abundant young talent to solve future water related problems in a more sustainable manner under rapidly changing climate and its adverse impacts on water resources.

The session will focus on agricultural water use as irrigation accounts for more than 75% of freshwater withdrawals in most developing countries due to poor infrastructure, outdated technologies and inefficient management practices. The future has to be more multi-disciplinary, data-driven, and the water sector stakeholders need to be well informed for long-term policy development, better academically prepared by integrating climate science in water education, context-specific innovators and social entrepreneurs, and the role of YPs in all these is absolutely critical for a brighter future for the whole human civilization.

**PD-11: Learning from the Best Practices in Water management**

India is blessed with a rich historical tradition of irrigation systems perpetuated by an age-old practice of community managed sustainable irrigation systems across the country. Irrigation water supplied through the reservoirs play a key role in achieving the country’s agricultural production. However, the water supply reliabilities of these reservoirs have been compromised due to climate change and lack of proper care and maintenance necessary for optimum operation. Up-gradation and modernization are needed for smooth functioning of these government / community-managed sustainable irrigation systems under the changing environment.

Being a major water consumer, the overall efficiency of the Irrigation Sector plays a major role in water utilization and water allocation. Proper and scientific irrigation layouts are essential for better water utilization efficiency. Use of drip / sprinkler and such micro irrigation techniques need to be adopted. With the use of balancing reservoirs and small farm ponds will lead to improve irrigation water use efficiency.

To achieve these goals in accordance with the national water policy, beneficiaries’ participation needs to be encouraged. States like Andhra Pradesh, Telangana and Maharashtra etc. had gone one step ahead and taken lead in formation of water users associations (WUAs). But these are not yet performing up to the task.

The session will focus on various water demands; inter basin / district / state water issues and increasing water availability for each sector. Success stories of best water management practices and impact of Participatory Irrigation Management (PIM). This session will address the following concerns: (i) How to meet the challenges emerging out of evolution of demands and changes in supply regimes; (ii) How to improve the efficiency in Water management by adopting best practices? (iii) Present status of people’s involvement in water management and steps to improve the situation; and, (iv) Successes and failures that lead to the best managed irrigation systems and future plans for identification of best practices in Water management.

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**Symposium on Sustainable Development of Dams and River Basins**

The International Commission on Large Dams (ICOLD) will hold its 88th annual meeting and organize a symposium on Sustainable Development of Dams and River Basins at New Delhi in India April 4-10, 2020.

The sub-themes and topics for discussion in the symposium are: (i) Modern Technologies in Survey and Investigation for Sustainable Dam Development; (ii) Simulation Methodologies for Dam Analysis and Design; (iii) Advances in Dam Safety, Risk Assessment and Management; (iv) Advances in Rehabilitation of Dams and Appurtenant works; (v) River Basin Development and Management including Optimization of Reservoirs Operation; (vi) Innovative Construction Methodology and Contracting Practices; (vii) Impacts of Climate Change—Sustainable Dams and Hydropower Development including Pumped Storage; and (viii) Engineering Challenges and Safety of Tailing Dams. Besides these, there will be committee workshops, technical workshops and technical tours.

Website: www.ICOLD2020.org
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**ICID-CID**

International Commission on Irrigation and Drainage (ICID)

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**Editorial Team:** Dr. Sahdev Singh, Mr. Madhu Mohanan, Ms. Prachi Sharma, Ms. Shreshta Sharma, Mr. Vincent Van Ross

**Layout:** Keshav Dev Tanwar

48 Nyaya Marg, Chanakyapuri, New Delhi 110021, India

E-mail: icid@icid.org; Website: http://www.icid.org