Dear Colleagues,

With over 1500 delegates from more than 60 countries, the World Irrigation Forum 3 (WIF3) at Bali, Indonesia broke all previous records of ICID events. I must thank all the NCs, Chairs, Co-Chairs, Direct Members of ICID, and the teams in Indonesia NC and ICID Central Office that worked behind the scene to ensure the success of WIF3 and its side events by our international partners. We have drawn considerable appreciation and positive feedback from the delegates of WIF3. We were also happy to receive 6 Ministers and several senior officers from various countries who participated in High Level Advisory Group deliberations and issued a statement highlighting the needs of water sector globally.

The 70th IEC meetings were equally impressive with active participation of our members, partners and diverse stakeholders. We honoured Prof Dr Chandra A Madramootoo from Canada with the second World Irrigation and Drainage prize. I would like to take this opportunity to congratulate all the winners of Watsave Awards, Best paper awards. Nine World Heritage Irrigation Structures from seven countries were recognized during the event. Keynote presentations and technical sessions were rich sources of knowledge sharing. So were the ministerial deliberations, farmers’ round-table meeting, young professionals’ training sessions, technical tours, exhibitions and cultural performances by local artists. I must say that WIF3 has raised the bar for all our upcoming events—particularly for the ICID Congress 2020 to be held at Sydney, Australia.

The logistics and arrangements at the Bali airport upon arrival, delegate transportation to the event venue next to the sea, coffee/tea breaks, lunches and dinners were simply flawless. I am sure the delegates must have returned home carrying with them very fond memories of the weeklong Bali events and will continue to cherish them for a long time to come.

We must appreciate the hard work of several months by our INACID colleagues in close collaboration with the Central Office to prepare the ground for this grand event. A special word of thanks goes out to the NCs that brought in delegates in large numbers.

Colleagues, it is my pleasure and privilege to share with you the news of another mega event where ICID is actively involved—the 6th India Water Week (IWW 2019) which is scheduled to begin next week in Delhi, India, the land of numbers, which I started way back in 2012. Previous IWWs have attracted foreign as well as Indian delegates in huge numbers, sometimes going beyond 5000. I request all of you to explore possibilities of joining us next week at the Science Center (Vigyan Bhawan), Delhi and let me also share with you that the weather here is very pleasant just before the onset of Winter season.

Hoping to see you all soon,

Best Wishes

Ashwin B. Pandya
Secretary General
FORUM STATEMENT

Preamble
Recognizing the importance of sustainable agricultural water management and to bring it to the forefront, starting from 2013, the International Commission on Irrigation and Drainage (ICID) has been triennially organizing the World Irrigation Forum (WIF). The Forum aims to bring together the stakeholders under one roof, including policymakers, experts, researchers, non-governmental organizations and farmers, among others. It provides a platform for the world irrigation and drainage community and interested development professionals to find solutions to problems plaguing agricultural water management, in time of depleting freshwater resources as a result of global warming and climate change and the rapidly changing demographics and dietary habits.

The Third World Irrigation Forum (WIF3) on the Main Theme: Development for water, food and nutrition security in a competitive environment, was organized by ICID in cooperation with the host Indonesian National Committee on Irrigation and Drainage (INACID) and the partners Food and Agriculture Organization of the United Nations (FAO), Asian Development Bank (ADB), World Bank, International Water Management Institute (IWMI), UNU-FLORES, and others. Three sub-themes were covered under the Main Theme: Sub-theme 1. Enabling policy environment for water, food and energy; Sub-theme 2. Role of civil society and NGOs with focus on farmers and extension facilities; Sub-theme 3. Improving agricultural water productivity with focus on rural transformation. In addition, there was a Meeting of the High Level Working Group (HLAG) consisting of Ministers and Senior Officers from Member and Non-Member countries, Farmers’ Roundtable, Youth engagement, 6 Workshops, 15 Supporting Events, Exhibition, Technical Tours, and Social Programmes. These events included: Key-note speeches, Paper and short-communication presentations during the sessions, Technical papers presented as posters, and displays.

In total more than 1500 participants from 60 countries, including ministers and vice ministers from 9 countries and heads, or representatives of 10 International Organizations attended the Forum. Based on this, the following statements were formulated and supported by the participants at the concluding session of the Forum.

Main statements

The focus of WIF3 was to address global food security, poverty alleviation and environment protection, through sustaining economically and socially viable irrigation and drainage development and management. We, therefore:

- recognize that the world is facing rapid population growth and urbanization, changes in land use, climate and diets, increasing droughts and floods, environmental degradation, etc.;
- reaffirm that sustainable development and management of agricultural water is a priority issue for achieving food security and poverty alleviation;
- recognize the need to achieve water security. To this end it is vital to course-correct and increase water productivity by improving agricultural
Water management at all levels, in particular with respect to the specific challenges facing least developed and emerging countries, in meeting the sustainable development goals (SDG) and maintaining rural development. Therefore, the participants of WIF3 share the view on the following:

- We encourage the adoption of land and water policies that provide an effective environment for sustaining water resources, delivering of appropriate services and improving resilience in agricultural water, and incentives for sustainable agricultural water use;

- We support the implementation of integrated water resources management (IWRM) at the levels of river basin, irrigation and drainage schemes and on farm through (international) cooperation to achieve sustainable water management;

- We will contribute to the building of new and maintaining, strengthening and improving existing infrastructure for multiple purposes, including water storage, irrigation and drainage, application of water saving and information technologies, rural water supply, energy production, environmental water use, and disaster prevention, that are economically sound, environmentally sustainable and socially equitable;

- We endeavour to improve water productivity for agriculture by clarifying roles and responsibilities in irrigation and drainage system operation and maintenance, where applicable reforming of irrigation and drainage management institutions, improved agricultural water service provision to farmers, and encouraging engagement of private sector and civil society organisations;

- We intend to support farmers in improving their individual irrigated and rainfed agriculture to increase crop productivity and conserve water with a view to achieve sustainable production of sufficient food for the rapidly increasing urban population;

- We promote increased and effective use of financial resources, including encouraging international financing institutions, development partners and governments to enhance support for agricultural water management;

- We support increased collection, use and dissemination of data to improve performance of the sector and support of evidence-based policy making. We encourage scientific research, education, development and adoption of innovations in practice;

- We want to contribute to the creation of an environment in which the younger generation and women are encouraged and capable to engage in agriculture, and to empower young professionals to contribute with new skills to agricultural water management. This will include strengthening, training and education for young professionals.

These general statements are based on the outcome of the various sessions. The detailed outcomes are specified in the attached Addendum.

The participants like to thank the organisers and the donors for preparing, hosting and supporting this interesting and important event.

Bali, Indonesia
Wednesday 4 September 2019

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**World Heritage Irrigation Structures Recognized by ICID in 2019**

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 at 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 2019.

1. Hetao Irrigation System, China
2. Qianjinbei Irrigation System, China
3. Abbas Abad Complex, Iran
4. Kurit Dam, Iran
5. FazlAli Khan Qanat, Iran
6. Shushtar Historical Hydraulic System, Iran
7. Berra Irrigation Plant, Italy
8. Migliaro Water Diversion Gate, Italy
9. Panperduto Dam, Italy
10. Jukkoku-bori Irrigation System, Japan
11. Minuma-Dai Irrigation System, Japan
12. Kurayasu and Hyakken Rivers Irrigation and Drainage System, Japan
13. Kikuchi Irrigation Systems, Japan
14. Terusan Wan Mat Saman (Canal), Malaysia
15. Minneriya Reservoir, Sri Lanka
16. Alamo Irrigation System, United States of America
17. Theodore Roosevelt Dam, United States of America

So far, over 90 such heritage structures have been recognized by ICID.

For details, please visit <https://www.icid.org/icid_his1.php>
WatSave Awards are annual awards that were instituted by ICID in 1997 to recognize and encourage 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 2019 WatSave Awards for various categories were:

1. James Winter and Tony Quigley (Australia - Management Category) for Trangie-Nevertire Renewal: An Irrigation Infrastructure Modernisation Success Story

2. Fuqiang Tian (China - Technology Category) for Mulched drip irrigation (MDI), a recently developed surface drip irrigation method combining film coating for both saving water and labor, and increasing crop yields

3. Mohammad Bijankhan, Ali Mahdavi Mazdeh, Hadi Ramezani Etedali, Fatemeh Tayebi and Narges Mehr (Iran - Young Professionals Category) for Applications of constant flow rate control valve in water-saving

4. Karan Jeet Singh Chatha (India - Farmer Category) for Water Conservation by use of Sprinkler and Drip Technologies in Community-based Paddy Cultivation

For details, please visit [https://www.icid.org/awards_ws.html](https://www.icid.org/awards_ws.html)

Adaptive Measures in Farm Level Water Management to Cope with Climate Change

A workshop for young professionals on Adaptive Measures in Farm Level Water Management to Cope with Climate Change was jointly organized by WG Water & Crop, ICID and the Norwegian Institute of Bioeconomy Research (NIBIO) on 1 September 2019 in India.

The plenary session was addressed by Dr. Yella Reddy, VP, ICID and Dean, ANGRAU, India. He also gave a brief description of the objectives of the workshop during his address.

The crop water demand is likely to increase as a result of global warming and climate change. This calls for measures at the farm-level to adopt climate resilient technological options to counter the same through efficient use of water.
Maximum water loss occurs at the fam-
level both at the irrigated surface area
and percolation losses below the root
zone. The second major loss of water
happens during the distribution of water
from field-to-field in the field channels.

Water use efficiency needs to be
increased on a war footing in countries
where irrigation demands are high so
that they may be able to cope with
increased climate variability, droughts
and water scarcity. This requires
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 Clima Adapt Project (funded by the
Ministry of Foreign Affairs, Norway and
coordinated by the Norwegian Institute
of Bio-economy Research (NIBIO,
Norway), AP Micro Irrigation Project
(funded by NABARD, India), Base line
studies on Water Use Efficiencies of
Medium Irrigation Projects (Funded by
Govt. of India) have made significant
contributions to capacity building, design
and implementation of various climate
smart measures to improve water use
efficiency in the states of Andhra Pradesh
and Telangana in India. The outcomes
from these projects have helped in
developing policy guidelines and wider
adaptation of efficiency measures in the
two states. They also focused on (i) Sharing
the international experiences on WUE; (ii)
Identifying the needs and strengths of the
Young Professionals (YPs) to meet future
demands; (iii) Group work participative
interaction by the Young Professionals;
(iv) Key recommendations to engage YPs
in the water sector and more specifically
in improving WUE in the countries.

The interactive session on group work
revolved around Climate impacts on
water resources; Innovative adaptive
measures to improve WUE; Valuation
of water resources; Capacity building
of YPs through integrated partnerships.
The workshop was designed to engage
young professionals in the water sector
by encouraging their participation in
the discussions, conclusions and key
recommendations.

Newly elected Vice Presidents

Dr. Mochammad Amron of Indonesia,
Prof. Dr. Hesham Mostafa Mohamed Ali
of Egypt and Dr Shavkat Khamraev have
been appointed new presidents of ICID
for the next three years (2019-2022) during
the 70th International Executive Council
of ICID held at Bali, Indonesia in September
2019. They have replaced Dr. (Mrs.) Irena
G. Bondarik of Russia, Mr. Waseem Nasir
of Pakistan and Mr. Madhav Belbase of
Nepal who retired by rotation on completion
of their three-year term this year. The other
six Vice Presidents who are part of the
nine-member team of Vice Presidents are:
Er. Naoki Hayashi of Japan, Dr Brian T.
Wahlin of USA, Dr. K. Yella Reddy of India,
Dr. Marco ARCIERI of Italy, Dr. Kamran
Emami of Iran and Mr. Ahmed EL BOURI
of Morocco.

Dr. Mochammad Amron

Dr. Mochammad Amron is a Lecturer
with the State University of Jakarta,
Indonesia. He is also a conservation and Land
Reclamation Engineer. He completed his
masters from Reading University, UK in 1981
and obtained his doctorate degree from
Texas Tech University in 1993. With more
than 30 years of rich experience in
the irrigation and drainage sector, Dr.
Mochammad has been actively involved in
teaching, research, assessment, extension,
project management and administration. His
professional journey witnessed multifarious
organizations like World Bank, Indonesian
Hydraulic Engineer Association, INA Global
Water Partnership, and International
Commission on Large Dam- Director of Certification Board.

He was the former Director General of Water Resources,
Ministry of Public Works, Republic of Indonesia and has worked in varying
capacities with the Indonesian government from 1976 to 2012. He has been associated
with ICID as an active Asian working group member and is currently serving as the
Executive Director Member of Indonesian Water Partnership, Indonesian National
Water Resources Council.

Prof. Dr. Hesham Mostafa Mohamed Ali

Prof. Dr. Hesham Mostafa Mohamed Ali is the Chairman, Egyptian National
Committee on Irrigation and Drainage (ENCID) and Vice President, National
Water Research Center, National Water Research Center, Ministry of Water
Resources and Irrigation, Egypt. Dr. Hesham Mostafa, Egypt, obtained his
Ph.D. in Civil Engineering, Irrigation and Drainage, from Colorado State University,
USA. He was the former deputy chairman of the Egyptian National Committee for
Irrigation and Drainage (ENCID) and the President of ENCID from 1st April 2019.
He has been very active in its activities for the last 10 years. He has attended many
international conferences and workshops for ICID, WIF and WWF and he was the
chairman of the regional training sector, and former director of the water management
research institute of the Ministry of water resources and irrigation of Egypt. Dr.
Hesham Mostafa is a prolific professional in the field of Irrigation and Drainage, water
management, capacity development and building in all water resources fields and
large experience for Nile basin initiative.

Dr. Shavkat Khamraev

Dr. Shavkat Khamraev is the Head of Uzbekistan National Committee (UzNCID) and Hon'ble
Minister of Water Resources, Ministry of Water Resources, Uzbekistan. He
graduated with honors from Tashkent Institute of Engineers of Irrigation and
Agricultural Mechanization in 1986 and received a degree in hydraulic engineering.
After graduation, he worked at the Central Asian Research Institute for Irrigation
(SANIRI), where he was engaged in scientific activities aimed at the development
of water management. His research focused on improving the efficiency and rational use
of water in agriculture. In 1995. He defended his thesis and became a candidate of
agricultural sciences. In addition to scientific activities, Dr. Khamrayev has thirty years
of practical experience.

Dr. Khamrayev has been continuously leading the republic’s water industry
for more than 14 years. As Minister of Water Management of the Republic of Uzbekistan, he has done tremendous
work on the development of the country’s complex water management and achieved
concrete results in the management and use of water, improving the ameliorative
condition of irrigated land, building and modernizing large canals, pumping stations
and water reservoirs, and introducing water-saving irrigation technologies etc. Shavkat
Khamraev has been working as Chairman of the Uzbekistan National Committee on
Irrigation and Drainage (UzNCID) since 2005.
Changes in JNCD Secretariat

Japanese National Committee of ICID (JNCD) has announced two changes during the 3rd World Irrigation Forum Meeting at Bali in September 2019:

Mr. Kenji Miyagawa has taken over as the new Secretary General of JNCD from his predecessor Mr. Mitsuo Ishijima and Mr. Shin Takano has taken over as Deputy Secretary General of JNCD from his predecessor Mr. Hidefumi Murashita.

CBP Training Program on Micro Irrigation in Modern Agriculture

Dr. Sahdev Singh, Director-Knowledge Management-ICID, conducted a training program on Micro Irrigation in Modern Agriculture at the CBIP, Bhopal on 17 September 2019. The thrust of the program was: Capacity Development for Micro-Irrigation Systems. The program focused on the need for capacity development at various levels of micro-irrigation for modernization and optimization of agricultural output. The recommendations included education of farmers, infrastructure development, adoption of latest technology, human resource development, better governance, participatory management, efficient use of water etc. The training program was accompanied by a graphic ppt presentation to drive home the points that were being made.

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 and environmental needs, industrialization, pollution and over extraction of ground water. The impact of climate change 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 increasing challenge 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 an exhibition spread across a 3000 sqm area. 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: (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:

Website: www.indiawaterweek.in/

Water and Heritage

Learning from the past to leap into the future

Dr. Sahdev Singh - Director (Knowledge Management) ICID

Nodal Organization: International Commission on Irrigation and Drainage (ICID)

India with its geographical diversity consists of regions with varied availability and sources of water. This natural history has influenced cultural practices over the centuries. Traditions of water conservation were highly sophisticated and deeply imbedded by the local communities. As cities have expanded, connection with nature has become diluted and migrant populations have little or no connection with the land they inhabit. The loss of context both natural and cultural is one of the reasons for the intense environmental pollution invading our nation. The way to a sustainable society lies within the memory and culture of its people. This session will bring together experts and young professionals from diverse backgrounds presenting their views, providing the relevance of water heritage to achieve Sustainable Development Goals (SDGs) and also good practices of how we can be inspired by our past to move forward towards sustainable use of water.
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.

Report of Workshop on Water Accounting Released by Iran Regional Node

The Workshop Report titled ‘Water Accounting: Concepts and Tools’ was released in August 2019 by the International Research Program for Irrigation & Drainage—Iran Regional Node (IRPID-IRN).

The report lists the proceedings of the International Training Workshop on Water Accounting Concepts and Tools that was jointly organized by IRPID-IRN, Food and Agricultural Organisation (FAO), International Commission on Irrigation and Drainage (ICID), Ministry of Energy-Iran, Khuzestan Water and Power Authority (KWPA) and Iranian National Committee on Irrigation and Drainage 23-26 February 2019

The main objective of the workshop was to familiarize decision makers with different aspects of water accounting and the need to develop and implement water accounting system. A wide range of audiences attended the workshop including high level decision makers, industry and university administrators, and in general, water and agricultural sector specialists mainly from member countries of International Research Program for Irrigation and Drainage-Iran Regional Node (IRPID-IRN). This workshop was the first event of its kind in worldwide events pertinent to water accounting, where Food and Agriculture Organization of the United Nations (FAO) and International Commission on Irrigation and Drainage (ICID) collaborate to hold a joint training program.

Meeting of High-Level Advisory Group (HLAG)

A meeting of the High-Level Advisory Group (HLAG) was held at the third World Irrigation Forum (WIF 3) in September 2019 at Bali, Indonesia for deliberations on policies related to Agriculture Water Management with a view to put an end to rural poverty.

It is no secret that efficient water management in agriculture is key to poverty alleviation. Therefore, political will is of paramount importance in formulating and implementing policies related to agriculture water management. This calls for constant interactions at the political, bureaucratic and official levels so that there could be regular exchange of ideas, concerns and networking to garner partnerships with the idea of achieving common goals and promoting prosperous rural societies.

The HLAG meeting was directed at bringing policy planners and high-level national representatives to share their ideas for improvement in policies and initiatives. This also provided an opportunity for exchanging their experiences with regard to implementation of policies concerning irrigation and water management at national levels.

The meeting considered crucial issues like (i) enabling policy environment for water, food and energy; (ii) role of civil society and NGOs with focus on farmers and extension facilities; and (iii) improving agricultural water productivity with focus on rural transformation.

The HLAG meeting was attended by ICID President Eng. Felix B Reinders, ICID Secretary General Er. Ashwin B Pandya and ministers from Indonesia (Minister of Public Works and Housing—Dr. Ir. M. Basuki Hadimuljono, M.Sc.), Egypt (Minister of Water Resources and Irrigation—Mohammed Abdelaty Sayed Khalil), Malasia (Minister of Agriculture—YB Dato Salahuddin bin Ayub), Nepal (Minister of Energy, Water Resources and Irrigation—Barshaman Pun); Sri Lanka (Minister of Agriculture, Rural Economic Affairs, Livestock Development, Irrigation and Fisheries & Aquatic Resources Development), and China (Ministry of Water Resources: Tian Xue Bin).

International partners such as Asian Development Bank, Food And Agriculture Organization, Islamic Development Bank and World Bank made presentations at the meeting.
24th ICID Congress and 71st IEC Meeting
22-28 September, 2020, Sydney, Australia
Theme: Innovation and Research in Agriculture Water Management to Achieve Sustainable Development Goals