

News Update

February 2012

Also at <http://www.icid.org>

INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE (ICID)

Managing Water for Sustainable Agriculture



ICID to strengthen its efforts to support those who missed first Green Revolution....

Dear Friends,

Africa is the only continent which does not grow enough food to feed itself. According to one UNEP estimate food production will reduce to the extent of 25% by the year 2050 due to land degradation and water scarcity



accentuated by climate change. At the same time FAO forecasts that global food production needs to increase by 70% by 2050. Seen against the backdrop of increasing realisation that food prices have remained unnaturally suppressed as compared to all other commodities during the last fifty odd years (Bill Gates in his Annual Letter <http://www.gatesfoundation.org>) and are likely to rise for a variety of reasons, the dice appears to be rolling against Africa's less prosperous population. Even if there might not be a threat to global food security, the affordability factor can threaten food security in many parts of Africa unless local production is increased and sustained.

Dr. Borlaug, who can arguably be called the father of Green Revolution had "greatest worry", especially for sub-Saharan Africa where he noted that "... uncertain rainfall,

increasing population pressure, changing ownership patterns for land and cattle, shortage of trained agriculturalists and weaknesses in research and technology delivery systems make the task of agricultural development more difficult." These factors have resulted in the Green Revolution by-passing the African continent.

Africa holds around 60 per cent of the world's uncultivated arable land and could grow enough food, not only to meet its own needs, but to export surpluses. As Kofi Annan, Ex-UN Secretary General and the current Chair of the Alliance for Green Revolution in Africa (<http://www.agra-alliance.org>) said at COP 17, "Africa has enormous potential if the right agricultural policies are adopted and funded".

Realising this potential requires the engagement and expertise of scientists, government and multilateral institutions and farmers' organizations. The International Food Policy Research Institute (IFPRI) in its book 'Successes in African Agriculture' says Africa has developed technologies with transformative potential for turning around the fight against hunger. The New Rice for Africa (NERICA), drought tolerant maize varieties that reduce the risk and vulnerabilities, new varieties of sorghum that can raise and stabilize yields invented by Dr. Gebisa Ejeta from Ethiopia, winner of the World Food Prize in 2009, do indicate that a fertile ground is ready to be sown and nurtured. But there is crying need to link this research to adequately funded

practical programs to improve land and water management.

We need the leadership, resources, expertise and solidarity of every organization and individual if we are to find solutions to this common challenge. The national irrigation and water management authorities in Africa have an important role to play in this process. Our National Committees in Africa have the opportunity to take the required lead and bring together various players involved in providing water for use in agriculture. NCs can count on the ICID network through which experiences from other parts of the world can be shared and lessons learnt from mistakes internalized. Central Office is committed to facilitate this process and help usher second green revolution.

Coming to the task at hand to re-invigorate communication within the ICID network a weekly e-Bulletin, bringing international news on irrigation and related subjects have been started. A facebook page has also been opened for all the National Committees to share their news. A separate communication on this follows. We will appreciate receiving your feedback on communication issues.

Best regards,

A handwritten signature in black ink, appearing to read 'Avinash C. Tyagi'.

Avinash C. Tyagi
Secretary General

ICID Preparations for 6th World Water Forum

The focus of 6th World Water Forum (WWF6) to be held during 12 -17 March 2012 in Marseille France is on targets and solutions. Forum is guided by 12 Key Priorities for Action and 3 Conditions for Success translated into common and measurable goals. Under each priority, series of targets have been identified to propose workable solutions.

ICID in its effort to 'Contribute to Food Security by Optimal Use of Water' is actively involved in the preparations of

the Thematic Priority 2.2 on as well as in 2.1 on 'Balance Multiple Uses through IWRM'. Under the Theme 2.2, nine Targets have been agreed upon and will be presented at the Forum together with the opening introduction session, a multi-stakeholder panel and a synthesis session. For Theme 2.2 the Coordinator of the Core Group is FAO (Pasquale Steduto) and the Co-coordinator is ICID (Bart Schultz). Francois Brelle (AFEID) is the Co-coordinator for Theme 2.1. Target III "Increase sustainable productivity and lower costs of water management in such a way that by year 2025 there is food security at affordable prices for

all" is coordinated by Jacques Plantey and Bart Schultz; while the Target V "Increasing capacity of water storage in support of irrigated agriculture in an environmentally sufficient and socially sound management" is coordinated by Pres. Hon. Chandra Madramootoo and Jinsheng Jia, President ICOLD. ICID has submitted couple of solutions for target III and can be viewed at <<http://www.solutionsforwater.org>>.

Prof. Bart Schultz, Chair ICID Task Force on WWF6 and Co-coordinator of Priority 2.2 is spearheading ICID participation and attended the 3rd Coordinators meeting

held on 1 February 2012 at Paris. A draft Core Group Sessions Proposal Report and the revised draft Metaplan have been circulated among all National Committees, Chairs of workbodies, Office Bearers and other stakeholders and can be accessed at <<http://www.icid.org/wwf6>>. All those who are planning to attend the Forum need to register and upload their digital passport photograph online.

The details of registration and updates of the WWF6 can be accessed at <www.worldwaterforum6.org>. All ICID members are encouraged to participate in the Forum and join the sessions related to Priorities 2.2 and 2.1

Seoul Congress 2014

There is compelling evidence that climate change poses a real threat to agricultural production and food security, thereby jeopardizing the livelihood and prosperity of rural communities. At the same time, the contribution that climate smart agriculture can make to reducing greenhouse gas emissions has been undervalued. To address these and other related issues the theme chosen for Seoul Congress is: **Securing Water for Food and Rural Community under Climate Change.**

The delegates to the Congress will deliberate on following related questions in order to search solutions

Question 58: How Irrigation and Drainage play an important role in Climate Change Adaptation?

58.1 Understanding Impacts of Climate Change on Land and Water Use

58.2 Revisiting Design and Operation Criteria for Irrigation and Drainage Facilities

58.3 Managing Frequent Floods and Droughts

Question 59: How do Irrigation and Drainage interventions secure food production and livelihood for rural community?

59.1 Securing water and livelihood of rural community

59.2 Improving Irrigation Efficiency

59.3 Water Sharing and Water Transfer in Water Stressed Areas

Special Session: New partnership for Rural Development

Symposium: Non-point Sources Pollution (NPS) and Best Management Practices (BMPs)

(‘Call for Papers’ will be available in due course of time)

Call for Papers for - Workshops at 63rd IEC

Internal Workshop on ‘Water Saving Achievements’

An Internal Workshop on “Water Saving Achievements” is being organized by ICID’s Working Group on Water Saving for Agriculture (WG-WATS) during the 63rd International Executive Council (IEC) meeting and 7th Asian Regional Conference (ARC) to be held during 24-30 June 2012 at Adelaide, Australia.

The aim of the workshop is to share experiences with other institutions on the national, regional, and international levels in the field of water saving techniques together with some successful water saving case studies and lessons learned.

The main theme of the Workshop is “Water Saving approaches and achievement in irrigated agriculture”. The following subtopics will be dealt with under two key topics:

1. Conventional, Engineering, Agronomic, Management, and Institutional water saving aspects
 - On-Farm Water Application techniques like micro and sprinkler systems
 - Construction of en-route storages in irrigation schemes
 - Selecting crop (varieties) with higher yields per unit of water
 - Promoting participatory irrigation and drainage management (PIM)
 - Irrigation scheduling based on soil crop climate factors
 - Promoting public awareness in water saving/conservation measures through media
2. Non-conventional innovative technologies
 - Use of low energy precision application irrigation systems
 - Use of internet, mobile, communication and remote sensing,
 - Controlled drainage techniques
 - Bio-technology - genetically modified crop varieties
 - Total channel control system (TCC)

Abstract in 600 words (in word file) to be submitted by 1 April 2012 and full length papers submitted by 30 May 2012.

Contacts: Prof. Dr. Mohamed Hassan Amer, Chairman, ENCID (E-mail : encid@link.com; eg: idw11@nwrcegypt.org); Tel. No : (+202) 44464626; Fax No.: (+202) 44464504

International Workshop on ‘Country Policies and Developments of Water for Bio-Energy and Food’

An International Workshop on ‘Country Policies and Developments of Water for Bio-Energy and Food’ is being organized by ICID Task Force on Water for Bio-Energy and Food (TF-BIO-ENERGY) during ICID’s upcoming 63rd International Executive Council (IEC) and 7th Asian Regional Conference (ARC) to be held on 24-30 June 2012 at Adelaide, Australia.

Increasing fuel prices and the quest to reduce greenhouse gas emissions has triggered an interest in the development of biofuels. Biofuel production under irrigated agriculture has the potential to reduce greenhouse gas emissions. This can occur by producing biofuels i.e. fuels derived from biomass sources such as corn, soybeans, crop residues, trees and grasses, etc. Substitution of biofuels for fossil fuels has the potential to reduce greenhouse gas emission significantly and provide a major source of transportation fuel. A major concern however is that pursuit of energy security through increased biofuel development could aggravate water insecurity in many parts of the world. In addition, rising demand for biofuels can provide an incentive to grow biofuels instead of staple food. The impact here would be greatest on poorer countries. The contribution of biofuels to greenhouse gas reductions will be dependent on policies, fossil fuel prices, technologies used to convert biomass to energy and per acre yield of crop. This workshop is designed to share valuable experiences/technologies from participating countries.

The authors requested to contribute on the following sub-topics:

- Provide an update on the production and usage of biofuels in your country.
- Discuss the potential impact of biofuel development on world water scarcity and water insecurity.
- Discuss the potential biofuel production under irrigated conditions in reducing greenhouse gas emissions.
- Discuss the potential impact of increasing biofuel demand on food production.

Abstract in 600 words (in word file) to be submitted by 1 April 2012, Acceptance of abstracts by 15 April 2012, Full length papers by 1 May 2012

Contacts: Workshop Chair: Mr. Laurie C. Tollefson (Canada), E-mail: laurie.tollefson@agr.gc.ca; Workshop Coordinator: Dr. Vijay K. Labhsetwar (ICID), E-mail: icid@icid.org

USCID Vice President Luis Garcia visits Central Office

Prof Luis Garcia, Director of IDS (Integrated Decision Support group) and Professor and Head of the Department of Civil and Environmental Engineering at Colorado State University, and an active member of the US Committee on Irrigation and Drainage (USCID) (currently serves as its Vice President) visited Central Office on 23rd January. He had wide ranging discussions with Secretary General Mr. Avinash C. Tyagi and Executive Secretary Dr. S.A. Kulkarni, exploring the ways and means to compile and disseminate wealth of information on irrigation, drainage, and flood management available in Universities



Prof. Luis A. Garcia (third from left) at the picture display gallery at the Central Office

and Research Institutions for the benefit of ICID members, and making available scientific tools and techniques of adoption of climate change impacts to policy makers, irrigation managers and farmers especially in developing countries. Prof Garcia was apprised of the current status of active members in the region. Prof Garcia assured that he would use his contacts in the Latin American countries and explore the possibilities for active involvement of the National Committees in the region. Prof Garcia visited Eastern parts of India in connection with the collaborative project "Development of Integrated Modeling Framework by integrating Hydrologic and Crop Models for assessing Climate Change Impact" between his institute with Dr. Adlul Islam, Senior Scientist, ICAR. Valuable contributions made by President Hon. Mervin Jensen and other past Office Bearers from USA were recalled.

Visit of Mr. Kenzo Hiroki, Vice-chair of Steering Committee, GWP

Dr Kezo Hiroki, Principal International Centre for Water Hazard and Risk Management (ICHARM), Tsukuba, Japan (www.icharm.pwri.go.jp) visited the Central Office on 1st February and discussed various issues for possible collaboration between ICID and ICHARM

in the area of flood management. Dr Hiroki expressed his keen interest in the work undertaken by ICID on History of Irrigation and Drainage through its Working Group (WG-HIST) (wg-hist.icidonline.org/). He is a keen follower of the History of Water Management around the world. Ideas on the need and requirements for a small international museum on Irrigation and Drainage were also discussed. Considering the vast experience of Japan and UNESCO-ICHARM in managing floods, they were invited to participate in the activities of ICID. Issues related to strengthening collaboration with GWP were also discussed as Dr Hiroki is also the vice-chair of the Steering Committee of Global Water Partnership www.gwp.org.

India Water Week, Curtain raiser

Ministry of Water Resources, Government of India, is organizing 'India Water Week - 2012' during 10-14 April 2012 at New Delhi, India under the theme "Water, Energy and Food Security - Call for Solutions". ICID, through Secretary General Mr. Tyagi is part of the Organizing Committee. The curtain raiser function for the event was organized on 2nd February. A key feature of the Water Week will be the Exhibition Water Expo 2012 covering the entire gamut of technologies and facilities available for water resources management. Chair of INCID, Mr R.C.Jha, who also heads the IWW Organizing Committee, chaired the curtain raiser function. For more details please visit www.indiawaterweek.in

Launch of regional assessment of water interventions to improve livelihoods

On invitation from the organizers (FAO-Asian Institute of Technology), Dr. Vijay K. Labhsetwar, Director participated in a regional consultative workshop on 'Water Interventions for Improving Smallholder-Farming and Rural Livelihoods in Asia' from 24-26 January 2012 at Bangkok, Thailand. The objective of the workshop was to obtain inputs for a regional study on the role of water interventions to improve rural livelihoods in East, South and South East Asia. Besides regional experts and international organizations, national consultants from Bangladesh, Cambodia, China, India and Sri Lanka attended the workshop. After intense deliberations, a methodology was evolved for regional assessment.

ICID WatSave Awards 2012

Nominations are invited for the 'WatSave Awards 2012' from individuals / team through National Committees (NC) / Committee. Awards are given in four categories viz. (i) Technology; (ii) Innovative Water Management; and (iii) Young Professionals; and (iv) Farmer.

The last date for the receipt of the entries through the National Committees, along with a completed 'Nomination Form' in the ICID Central Office, New Delhi, is 30 March 2012. The nominations sent directly to the ICID Central Office will not be entertained. Please visit www.icid.org/awards.html for other details or contact Dr. Vijay K. Labhsetwar, Director, ICID at icid@icid.org.

Drought Early Warning

Drought Early Warning for Africa, in short DEWFORA, a three year applied project funded under the 7th Framework Programme of European Commission and launched in January 2011 (www.dewfora.net), is designed to bring the state-of-the-art in drought forecasting and warning into the operational domain to strengthen preparedness and adaptation to droughts in Africa. Secretary General attended the Advisory Committee meeting of the project in Sram-el-Shiekh, Egypt from 7-9 February 2012. Drought early warning and seasonal hydrologic predictions have the potential to improve agriculture water use efficiency. Irrigation authorities and various National Committees in Africa have the potential to make use of the outcomes of the DEWFORA project and should explore the possibility of participating in these stakeholders' forum at the national level.

"Productivity of Low Quality Waters for Irrigation Uses"

During the Tehran Congress (2011) Vice President Dr. Ragab Ragab (UK) chaired a session on "Productivity of Low Quality Waters for Irrigation Uses" (Q 56.3). 13 oral presentations and 9 posters were accepted for the session. The papers were focused on the use of non-conventional water resources for irrigation and its management. The session concluded that use of sewage water proved to be a good source of organic N-fertilizer and can improve soil properties. Reliable and successfully tested models can be useful tools for managing water, crop and field. They can be run with "what if" scenarios without

conducting expensive field experiments. Under drought conditions due to climate change impacts, it is expected that the non conventional water resources will be in high demand and at the same time pose new challenges. However, the societies are still reluctant to use such waters in many parts of the world and there is need for greater public education on the subject.

The readers may refer to the congress transactions for more details on the papers and author details.

News from ICID National Committees

CNCID (China)

As informed by the Chinese National Committee on Irrigation and Drainage (CNCID) the new e-mail address of their Chair Prof. Wang Aiguo as <agwang@mwr.gov.cn>

KCID (Korea)

Dr. Park Sang Hyun (Korea), Ex-Chairman of ICID Working Group on Sustainable Development of Tidal Areas (WG-SDTA) has informed his new contact are: Vice President, Water Resources Department, ISAN Corporation (Zip No.: 431-060), 1608-4, Gwanyang-dong Anyang-si Gyeonggi-do, Korea, Tel: +82-31-389-0077, Fax: +82-31-387-4434, E-mail: pash3142@empas.com, pashflow@gmail.com.

PNCID (Portugal)

The Portuguese National Committee on Irrigation and Drainage (PNCID) has informed that Eng. Pedro Teixeira will be the new President of PNCID. He replaces Mr. José Augusto Rodrigues Estêvão. ICID fraternity extends warm welcome to Eng. Pedro Teixeira and expresses thanks to Mr. José Augusto Rodrigues Estêvão, former President of PNCID for his contributions to ICID. Engr. Pedro Teixeira's contact details are: General Director of DGADR, President, Portuguese National Committee on Irrigation and Drainage (PNCID), Av Afonso Costa, No. 3, 1949-002 Lisboa, 600082440, Portugal, Tel : +351 218 442 200; Fax: +351 218 442 202; E-mail: dgadr@dgadr.pt

NINCID (Nigeria)

Engr. I.K. Musa (Nigeria), Vice President Hon. ICID has informed his new postal address as: 18 Ajayi Crowther Street, Asokoro District, Abuja, Nigeria. E-mail: <majidadimusa@yahoo.com>

ICID.UK (United Kingdom)

ICID and the University of East Anglia (UEA) Water Security Research Center are organising a Seminar titled 'Water-food-energy nexus: Challenges and opportunities' on 24 February 2012 in London, United Kingdom (UK). The key issues that interlink energy, food and water will be discussed during the seminar. Given the enormity of this subject, the emphasis will be on discussing types of linkages, early insights, emerging ideas and research opportunities. For more information, please contact: Mr. Tim Fuller, Secretary, ICID.UK (E-mail: icid@ice.org.uk; Tim.Fuller@ice.org.uk); Website: <<http://www.icid.org.uk/>> and <<http://www.uea.ac.uk/watersecurity>>

USCID (USA)

The U.S. National Committee on Irrigation and Drainage (USCID) announced its first Water Management Conference titled 'Irrigated Agriculture Responds to Water Use Challenges Strategies for Success' during 3-6 April 2012 at Austin, Texas, USA. Please access the conference website: <<http://www.uscid.org/12txconf.html>> more details.

ZwCID (Zimbabwe)

The National Committee of Zimbabwe has recently revived its structure and Dr. Conrade Zawe is the new Chairman and Eng. T.A. Thebe is the interim Secretary. We congratulate them on their efforts and welcome them back hoping that they will be able to re-activate their membership soon. ZwCID can be contacted at: tathebe@gmail.com.

Forthcoming Events

ICID Events

The 63rd IEC Meeting and 7th Asian Regional Conference, 24-30 June 2012, Adelaide, Australia. Contact: Mr. Ian Atkinson (Australia), E-mail: IACID@irrigation.org.au, ian.atkinson@irrigation.org.au or SANE Events for Irrigation Australia Limited (IAL), E-mail:

New Additions to ICID's TDS Database (January 2012)

The TDS Database has been enriched by the addition of following:

Article Section – 40 additions (Articles / Papers)

- (i) Hydropower & Dams, 2010, Vol. 17, No. 2 (4 articles); and 2011, Vol. 18, No. 5 (5 articles)
- (ii) Indian Journal of Power and River Valley Development, March-April 2011, Vol. 61, Nos. 3 & 4 (2 articles)
- (iii) Journal of Environmental Science & Engineering, October 2010, Vol. 52, No. 4 (3 articles)
- (iv) World Water, March/April 2011, Vol. 34, No. 2 (3 articles)
- (v) Lakes & Reservoirs – Research and Management, September 2011, Vol. 16, No. 3 (7 articles); and December 2011, Vol. 16, No. 4 (7articles)
- (vi) Journal of Hydraulic Research, 2011, Vol. 49, No. 6 (7 articles)
- (vii) California Agriculture, January-March 2012, Vol. 66, No. 1 (2 articles)

Book Section – 18 additions; till date 31925 additions have been made to TDS database. The Text Delivery Service (TDS) database can be accessed by visiting ICID website: www.icid.org.

IAL2012@saneevent.com.au, Conference Website: www.irrigation.org.au/2012.

11th International Drainage Workshop (IDW), 23-27 September 2012, Cairo, Egypt. Contact: Prof. Dr. Mohamed Hassan Amer (Egypt), E-mail: encid@link.com.eg, IDW website: www.encid.org.eg/idw11

Other Events

Fourth International Conference on Water Resources and Renewable Energy Development in Asia, 26-27 March 2012, Shangri-La Hotel, Chiang Mai, Thailand. Contact: Mrs. Margaret Bourke, Conference Project Manager, Aqua-Media International Ltd., E-mail: mb@hydropower-dams.com

Asian Irrigation Forum 2012, Asian Development Bank, 11-13 April 2012, ADB Headquarters, Manila, Philippines. Contact person : Mr. Ian W. Makin (E-mail: imakin@adb.org), Principal Water Resources, Specialist, Asian Development Bank, Manila; Website: www.adb.org

IWA World Congress on "Water, Climate and Energy", 13-18 May, 2012, Dublin, Ireland. For more information, please visit <www.iwa-wcedublin.org>

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