



### From Secretary General's Desk...

Dear Friends,

The year 2012 peacefully made its exit leaving its footprints on the sand of time. Many of the events such as Rio+20 have left an indelible influence on the trajectory of development, while other events such as COP 18 in Qatar was not so indelible. However, all are likely to influence the **Future we want**. ICID as a community also took a number of initiatives in its efforts to support global food and water security efforts in 2012. Only time will tell whether these footprints leave indelible or not so indelible impressions on the society.

The failure of apocalyptic predictions should for sure, erase the doubts about the futility of putting more faith in such unscientific predictions. As if, science and technology needed any proof. The way technology is influencing the mankind, in its day to day activities, is unprecedented, particularly the last three decades have seen the technology entering not only our homes and offices but pockets and hearts too, literally speaking. If the futurists are to be believed, we have seen nothing so far. We are in for a hyper-change. The technologies: nanotechnology, geo-spatial technology, information and telecommunication technology and biotechnology are likely to change our lives in the coming thirty years, ten times faster than they have done so during the last thirty years.

Water sector, and in particular the irrigation and drainage community as a whole, has



failed to fully capitalize on this technology boom. Particularly, the sector has failed to bridge the gap between developed and developing countries; big and small farm holders. Drip and sprinkler irrigation, despite its successful use since 1950, has failed to serve the small-holders; the drought early warning systems have yet to penetrate African and Asian continents; bio-technological research is yet to develop drought resistant varieties to suit African conditions; irrigation applications are yet to be operationally guided by remotely monitored soil moisture conditions and so on and so forth. It is worth noting that if we want to see the new technologies to be successfully applied, we need professionals who can easily embrace these technologies.

If timely, appropriate and well directed steps are not taken, the existing technology gap is likely to widen further in future. There lies the relevance of institutions like ICID. As a professional network dedicated to managing water for sustainable agriculture, it is imperative that ICID assumes a proactive role. We have taken many small steps, but a major push is waiting.

The trajectory of our future actions will depend on how we steer discussions at the **First World Irrigation Forum**. Knowledge based strategic partnerships with other players and stakeholders alone can move us forward. And the First World Irrigation Forum, now being supported by ADB, AWC, FAO, GWP, ICRISAT, IFPRI, IWMI, UNESCO-IHE, and The World Bank, provides that opportunity. I call upon the ICID National Committees and all other partner institutions to make best use of the opportunity. We have received an encouraging response with more than 200 abstracts submitted for WIF. We are also seeking short communications from private

companies and institutions to enable them to showcase innovative tools, technologies and management practices.

In order to recognize the work undertaken by individuals and institutions over the last 15 years, ICID has instituted **World Irrigation and Drainage Prize**. Nominations are now open. I request you all to provide it wide publicity. In addition, we are continuing to support water saving in agriculture through WatSave Awards. Nominations for the WatSave Awards 2013 are also now open and I encourage ICID National Committees to please submit nominations, particularly in the Youth category.

I also encourage the ICID NCs to avail the opportunity of ICID scholarship for e-learning course being organized by UNESCO-IHE and nominate young professionals for the course.

In the year 2013, we have given a fresh look to ICID web pages, not only in its outlook but also in its contents. We have added Themes – Agriculture, Irrigation, Drainage, Flood Management, Drought Management, and Climate Change and Irrigation. Under each thematic area a number of topics have been introduced. In the coming months, with the support of expert patrons, we would like to enrich these topics to give our readers a head start on the topic. Also included is a section on Resources which provides links to open source tools related to various themes.

We are keen to get your feedback on this new approach.

Best regards,

Avinash C. Tyagi  
Secretary General

### Nominations invited for World Irrigation and Drainage Prize 2013

ICID invites nominations for the 'World Irrigation and Drainage Prize 2013' (WID Prize) instituted to recognize the contributions made by an individual or an institution promoting sustainable irrigation and enhanced agriculture production around the world.

The World Irrigation and Drainage Prize, a unique award instituted by the International Commission on Irrigation and Drainage (ICID), shall be awarded to recognise the work of dedicated professionals and institutions who have actively contributed to the development of irrigation and drainage during the past 15 years. The award will be conferred upon an individual, a group of individuals or an institution without any discrimination whatsoever on the grounds of nationality, religion, race,

gender, age or political belief.

The Prize including a cash award of US\$10,000 and a 'Citation Plaque' citing the meritorious achievements of the winner will be awarded during the triennial World Irrigation Forum. The Prize would be awarded by the President of ICID at an official ceremony to be held for that purpose in the presence of the participants of the First World Irrigation Forum scheduled from **29 September 2013 – October 3, 2013**.

Nominations are invited for the WID Prize from National Committees of ICID; Governments of ICID Member countries, International organizations and Non-governmental organizations / institution maintaining formal relations with ICID, especially

those concerned with Irrigation and Drainage. Nominations must be submitted by **15th May 2013**.

The candidates nominated for this prize shall have made exceptionally significant contribution through innovations in the field of irrigation and drainage by way of (a) research, (b) management, (c) technical services, (d) advocacy, (e) operationalization of innovations and (f) sensitization of decision makers and public; resulting in increased agriculture production, at national, regional and/or international level fulfilling the criteria listed in the announcement.

The prize winner(s) would be encouraged to give an acceptance speech/lecture on the subject relevant to the work for which the Prize has been awarded. More information is available at <[http://www.icid.org/wid\\_prize.html](http://www.icid.org/wid_prize.html)>

## Participatory Irrigation Management: Mutual trust and understanding the real needs for success

Mutual trust and understanding is one of the key factors for successful water cooperation within and among communities. It was expressed by the participants of the "International UN-Water Conference on water cooperation", which took place from 8 to 10 January in Zaragoza, Spain.

The participants shared a wide range of initiatives, including experiences in rural and urban areas, and cases at country and basin level, to identify lessons learned and key success factors. The need for cooperation was highlighted as critical for sustainable water management. To actually realize cooperative water management, the implementation of a system of incentives and penalties is also required. While political will enables the development of laws and regulations, implementation should come from local organizations and institutions.

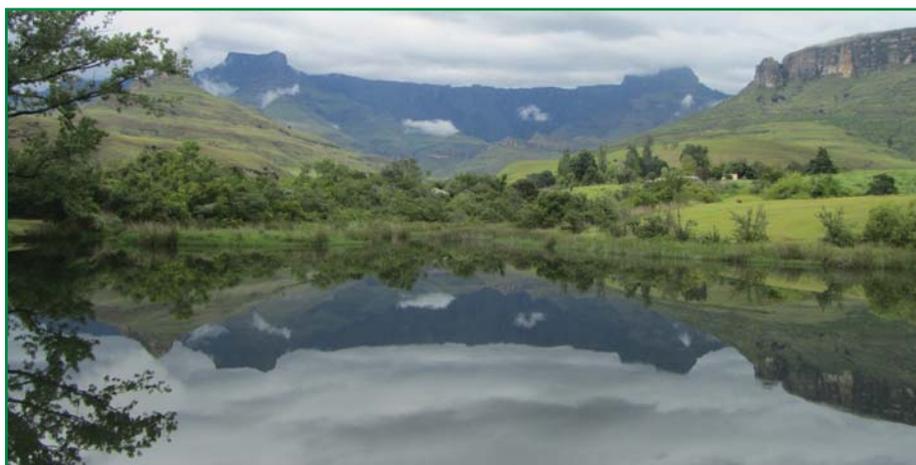
Identifying appropriate solutions can be hampered by differences in perceptions, as demonstrated by specific cases in Peru and Kenya, where projects failed because irrigation technologies were imposed without taking into consideration traditional practices and perspectives. While financing is important and water user associations are often created through development cooperation funds, it should be complemented by cooperation and mutual support between sectors and users to become sustainable.

In a paper presented by ICID on "Participatory Irrigation Management: Understanding the Role of Cooperative Culture", it was emphasized that political will, legal frameworks, accountability and institutional structures provide a solid foundation for water cooperation. It is emphasized that achieving water cooperation is the result of a long term process which requires time, patience and mutual trust".

All water related international organizations and national level institutions need to join their forces in evolving fitting PIM process/WUA model to each situation by laying down the basic principles. The key features of successful WUAs in countries of Europe, America, and Asia may be amalgamated and applied in the new model of WUA.

## 'Irrigation in a Changing Environment'

*Felix Reinders and Michael van der Laan*



The South African National Committee on Irrigation and Drainage (SANCID) organized a Symposium on 'Irrigation in a Changing Environment' during 20-23 November 2012 at Drakensberg in S. Africa. The theme of the Symposium was 'Irrigation in a Changing Environment' – encompassing environmental, social and economic challenges currently facing the irrigation and drainage industry in South Africa. Close to 100 delegates attended the Symposium and they were from government institutions, universities, research institutes, commercial companies and in their private capacity.

Prof Greg Kiker from the University of Florida in his paper titled 'Climate change in the United States and South Africa: Lessons for irrigation and drainage management at the catchment scale' concluded that Climate change or variation will not only change things but it will change how we think about things. In his Keynote address, at the plenary session, he pointed out that Modelling can be used to predict various scenarios but that multiple models show uncertain futures with significant disagreement on metrics and institutional reaction.

Prof Martin Steyn from the University of Pretoria in his paper titled 'How will climate change affect future potato production and water use in South Africa?' concluded that the yields will increase by 28.5%. In his research they focused on larger potato regions in South Africa and looked mainly at temperature and rainfall as indicators. They simulated crop growth from 1961 to 2050 and came to a conclusion that

temperatures will increase with 20C in average temperature over 90 year period and there will be no change or a slight decline in annual rainfall. As potato is a temperature sensitive crop, the prediction is Further, 28 more papers were presented during seven themed sessions, including a special session on biofuel crops.

For the technical tour, the Drakensberg Pumped Storage Scheme was visited. The Drakensberg Pumped Storage Scheme is a joint venture between Eskom (The South African Electricity Energy supplier) and the Department of Water Affairs and transfers water from the Thukela River to the Sterkfontein Dam. Water is pumped in off peak electricity demand periods and released in peaked periods to generate power. Four reversible turbines situated 156 meters below ground level generate 1000 MW of electricity for the Eskom grid. The water can also be released to the Vaal system to augment water shortages in Central South Africa.

At the Gala dinner, Vice President Honoraire and Chairman of SANCID, Felix Reinders delivered the dinner speech: "Celebrating SANCID". He took the audience through a journey from inception of SANCID in 1993, its contributions in South Africa and the ICID family and highlighted its performances of more than 19 years. SANCID is at present the holder of the floating trophy for the Best ICID Performing National Committee and the trophy was also displayed at the dinner. SANCID look forward to its next Symposium in 2014 when SANCID will also celebrate its 21st anniversary in the ICID family.

### What colour is your water?

ICID.UK and the UEA Water Security Research Centre will be organizing a Seminar on "What colour is your water? - A critical review of blue, green and other 'waters'"

on 22 February 2013 at Institution of Civil Engineers (ICE) in London. The main focus of this seminar will be to critically review the colours concept applied to water resources managements e.g. blue water for freshwater that is stored and can be extracted; green

water for rainfed agricultural evaporation; greywater, brown water – polluted waste water after use and so on. Contact Mr. Tim Fuller (tim.fuller@ice.org.uk) for more information and registration.

### PANCID

The International Water logging and Salinity Research Institute (IWASRI), Pakistan, has informed that their new e-mail address would be <iwasriwapda@yahoo.com> instead of <iwasri@brain.net.pk>.

### TCHAD (ATID)

New postal address of Chad National Committee of ICID (ATID) is :

Mr. TchouadanKadjonga, Président de l'Association Tchadienne pour l'Irrigation et le Drainage (ATID), General Director of Irrigation, P.O. Box No. 47, Republic of Chad, N'djamena, Tchad E-mail : kadjonga@yahoo.fr

### SLNICID

Welcome back!

We take great pleasure in informing that Sri Lanka National Committee of ICID

(SLNICID), after a brief period is back into ICID fold. We thank the members of the Sri Lanka National Committee of ICID for reviving the country membership. We appreciate the hard efforts of Eng. Badra Kamaladasa, Director General of Irrigation Department of Sri Lanka. We invite the SLNICID to broad-base the Committee and nominate experts/professionals on various ICID Workbodies. The contact coordinates of Sri Lanka National Committee of ICID are –

Eng. Badra Kamaladasa, Chairman, Sri Lanka National Committee, ICID (SLNICID), Director General of Irrigation, Irrigation Department, 230, Bauddhaloka Mawatha, P.O. Box 1138, Colombo 07, Sri Lanka Tel: +94 1 258 4984, Fax: +94 1 250 5890, E-mail: dir\_gen@irrigation.slt.lk, dgirrig@sltnat.lk, bkamaladasa@gmail.com

### WAPCOS CMD in ICID Central Office

Water and Power Consultancy Services (WAPCOS) India Limited (A Government of India Undertaking) is the first company that has shown its keen interest in becoming direct members of ICID. Mr. R.K. Gupta, Chairman & Managing Director of WAPCOS visited the ICID Central Office on 4 January 2013 and held discussions with Secretary General. Discussions focused on issues ranging from World Irrigation Forum (WIF) to involvement of WAPCOS in capacity development in Africa.

### Value Engineering Application in Irrigation and Flood Projects

An Internal Workshop on 'Value Engineering Application in Irrigation and Flood Projects' is being organized by ICID's Task Force on Value Engineering (TF-VE) during 64th International Executive Council (IEC) meeting to be held during **29 September – 05 October 2013 at Mardin, Turkey.**

Value Engineering (VE) is an internationally practiced methodology to achieve the best performance by a Product, Process, Service and System to perform at the minimum possible cost by analyzing the related functions and possibly Life cycle costs. VM is used to analyze products and processes, design and construction of projects, and business and administrative processes. VM helps achieve balance between required functions, performance,

quality and safety with the cost and other resources required.

The objective of the TF-VE is to promote the application of Value Methodology [(Value Engineering, Value Analysis, Value Planning, Value Management and Value Engineering Change Proposal (VECP)] in irrigation, drainage and flood management projects to increase benefits, reduce costs and ensure Sustainable Irrigated Agriculture. The workshop is being organized to gain insight into the applications of value engineering in the area of irrigation, drainage and flood management.

The main theme of the Workshop is 'Value Engineering Applications in Irrigation and Flood Projects'. The members of the WG are requested to contribute papers on the following sub-themes:

- (1) Evolution in Value Methodology;
- (2) Successful VE case studies in irrigation and flood projects;
- (3) The role of Laws and Regulations in implementation of VE;
- (4) VE programs;
- (5) Project management and VE;
- (6) Sustainability and VE;
- (7) Information Technology and VE; and
- (8) Training and Education in VE.

#### Schedule for submission of papers

- i. Submission of abstracts (max. 300 words): – **28 February 2013**
- ii. Notification of acceptance – **30 March 2013**
- iii. Submission of full paper – **30 June 2013**

### Short Course on Water Security

The University of East Anglia (UEA) will be organizing a Short Course on 'Water Security for Policy Makers and Practitioners' during 10-14 June 2013 at Norwich, UK. The course is designed for entry and mid-level water and development policy-makers and professionals in government, donor agencies, NGO or implementing agencies, environmental journalists, consultants and activists wishing to take their knowledge of water resources further.

The course will provide policy-makers with comprehensive background knowledge relevant to the increasingly important policy challenge of 'water security'. The course will explore how the multiple levels of water security – human, community, state, international and global – require broad but considered policy inputs.

Participants are expected to acquire a wide variety of tools and analytical frameworks from a variety of disciplines. While the focus is on policy, the extensive field and analytical competence of the lecturers ensures that participants benefit from grounded theory and experience. Participants can expect to leave the course with an ability to critically assess and address current water security policy, to gain an appreciation of the relations between water security and energy, climate, food, human or national security and to have extended their networks and resource base. For more information, please access their website at <<http://www.uea.ac.uk/international-development/dev-co/professional-training/water-security-for-policy-makers-short-course-2013>>

**Contacts:** Dr. Kamran Emami (Iran), Convener of TF-VE and Workshop Chairman (E-mail : [kkemami@gmail.com](mailto:kkemami@gmail.com); [emami@kuritkara.com](mailto:emami@kuritkara.com)) and Dr. Vijay K. Labhsetwar, Director, ICID and Workshop Coordinator (E-mail : [icid@icid.org](mailto:icid@icid.org))

### Water Trading and Global Water Scarcity – New Book

Water scarcity is an increasing challenge in many parts of the world, yet conventional supply-side economics and management are insufficient to deal with it. In this book the role of water trading as an instrument of integrated water resources management is explored in depth. It is also shown to be an instrument for conflict resolution, where it may be necessary to reallocate water in the context of increasing scarcity.

Recent experiences of implementation in different river basins have shown their potential as instruments for improving allocation. These experiences, however, also show that there are implementation challenges and some limitations to trading that need to be considered. This book explores the various types of water trading formulae through the experience of using

them in different parts of the world. The final result is varied because, in most cases, trading is conditioned by the legal and institutional framework in which the transactions are carried out. The role of government and the definition of water rights and licenses are critical for the success of water trading.

The book studies the institutional framework and how transactions have been undertaken, drawing some lessons on how trading can improve. It also analyses whether trading has really been a positive instrument to manage scarcity and improve water ecosystems and pollution emission problems in those parts of the world which are most affected. The book concludes by making policy proposals to improve the implementation of water trading. A list of contents and more information is available at <http://www.routledge.com/books/details/9780415638210/>

## Forthcoming Events

### ICID Events

**ICID's 1st World Irrigation Forum (WIF) and 64th IEC meeting, 29 September - 5 October 2013, Mardin, Turkey.** Contact: Mrs. Serpil KOYLU, Turkish National Committee, ICID (TUCID), Delvet Mahallesi'nönü Bulvarı No. 16, 06100 Cankaya, Ankara, Turkey, Tel/ Fax :+ 90 312 425 4614, E-mail : [tucid@dsi.gov.tr](mailto:tucid@dsi.gov.tr), [serpil.koylu@dsi.gov.tr](mailto:serpil.koylu@dsi.gov.tr), Website: <http://www.icid2013.org>

**12th International Drainage Workshop (IDW), June 2014, St. Petersburg, Russia.** Contact: Ms. Irena G. Bondarik, Secretary General, National Committee of the Russian Federation on Irrigation and Drainage (RuCID), E-mail: [ibond@online.ru](mailto:ibond@online.ru), [rusiptrid@mail.ru](mailto:rusiptrid@mail.ru)

**22nd ICID Congress and 65th IEC, 14-20 September, 2014, at Gwangju Metropolitan City, Republic of Korea.** Contact: Ir. Hun Sun Lee, Korean National Committee on Irrigation

### Take advantage of Irrigation and Drainage Online

The ICID journal, Irrigation and Drainage is available online FREE via Wiley online library for all ICID office bearers, work body members and subscribers.

Note: link to the renewed Wiley website: [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1531-0361](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1531-0361)

Now available on the website Volume 61.5, December 2012 Click on [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1531-0361](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1531-0361) for direct access to the page with the papers of this issue of Irrigation and Drainage at the Wiley site

## Obituary

It is with deep regrets that we inform the sad demise of President Hon. Aly M. Shady, Senior Policy Advisor of Canadian International Development Agency (CIDA) on 27th December 2012 in a hospital in Ottawa, Canada.

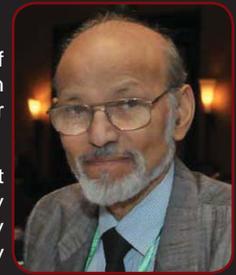
Mr Aly Shady, a visionary who made efficient water management as the mission of his life by addressing the technical, policy and governance issues at global level, was born in January 1942. A graduate from Cairo University and McGill University in Canada, he had wide experience in policy development, public administration, soil salinity control and reclamation, environmental management, institutional strengthening and capacity building. Working in CIDA, he supported the development of water resources in more than 38 countries.

He guided several vital professional associations such as International Commission on Irrigation and Drainage (ICID), International Water Resources Association (IWRA), American and Canadian Societies of Agricultural Engineering, International Soil Science Society, American Society of Agronomy etc. in their efforts to support nations in their fight against hunger and poverty. He organized several international conferences and served on the management teams of many professional organizations and was the recipient of a number of Awards and Honours. He was one of the three founding members of World Water Council, the Global Think Tank on Water.

Mr. Aly Shady was the President of ICID from 1996-1999 and its Vice President from 1990-1993. He served in ICID with distinction representing the Canadian National Committee of ICID since 1979. He was the Chairman of Task Force to Guide ICID Inputs to 3rd, 4th, 5th and 6th World Water Forum (WWF3-5). Mr. Aly Shady has over 100 publications and five books to his credit in the area of irrigation and drainage.

PH Aly Shady's contribution and dedication to ICID are widely recognized in the ICID fraternity and will be long remembered. At this time of great grief, ICID fraternity records its profound sympathy and heartfelt condolences to the bereaved family and to the members of the Canadian National Committee of ICID (CANCID). May his soul rest in peace!

More tributes from Prof Braga, President – WWC; Dr. Jun Xia, President – IWRA; Dr Gao Zhany, President - ICID and many more can be seen at <http://www.icid.org/obituary.html>



and Drainage (KCID), E-mail: [kcidkr@gmail.com](mailto:kcidkr@gmail.com), [kcid@ekr.or.kr](mailto:kcid@ekr.or.kr), Website: <http://www.icid2014.org>

### Other Events

**2nd India Water Week, April 8-12, 2013, New Delhi** will center around the theme "Efficient Water Management: Opportunities and Challenges". The event will provide a wide ranging conference and a series of side events around the improved water use efficiency areas in the fields of Agriculture and Irrigation, Energy generation and Industry, and Urban and Rural Drinking water supply. For more information visit <http://www.indiawaterweek.in/>

**7th International Conference on 'Using 21st Century Technology to Better Manage Irrigation Water Supplies', 16-19 April, 2013 at Phoenix, Arizona, USA.** Contact: Vice President Hon. Larry D. Stephens and Executive Vice President of USCID (E-mail: [stephens@uscid.org](mailto:stephens@uscid.org)), Website: <http://www.uscid.org>.

**7th Water Malaysia 2013 Conference, 23-25 April 2013, Kuala Lumpur Convention Centre - Kuala Lumpur, Malaysia.** All information is available at <http://www.watermalaysia.com>

**2nd International Conference on Food and Environment, 22-24 April 2013, Budapest,**

**Hungary.** All information is available at <http://www.wessex.ac.uk/food2013?e=4-66534>

**The National and International Conference on Groundwater (NGWA Summit 2013), 28 April to 02 May 2013 at San Antonio, Texas, USA.** All information is available at <http://groundwatersummit.org>

**3rd Edition of the International Exhibition of Water, Water Expo and Forum, 22-25 May 2013 at Exhibition Park, El Jadida Road, Casablanca, Morocco.** All information is available at <http://www.eauexpo.com>

**5th Delft Symposium on Water Sector Capacity Development titled "Developing Capacity from Rio to Reality - Who's Taking the Lead?" 29-31 May 2013 at UNESCO-IHE, Delft, The Netherlands.** All information is available at <http://www.unesco-ihe.org/About/News/5th-Delft-Symposium-on-Water-Sector-Capacity-Development-29-31-May-2013> and <http://www.unesco-ihe.org/Navigation>

**1st Inter-regional Conference on Land and Water Challenges entitled "Water, Environment and Agriculture : Challenges for Sustainable Development", 10-14 September 2013 at Bari, Italy.** All information is available at <http://www.landandwater2013.iamb.it>

## INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE

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