



Prime Minister of India Dr. Manmohan Singh Inaugurates 5th Asian Regional Conference

It was a historic occasion for ICID during its Diamond Jubilee year. Prime Minister of India Dr. Manmohan Singh joined us to inaugurate the 5th Asian Regional Conference held alongside of 60th International Executive Council Meeting. The ICID event stood glorified with the joining of a galaxy of Cabinet Ministers in India – Finance Minister Dr. Pranab Mukerjee, Minister of Parliamentary Affairs and Water Resources Mr. Pawan Kumar Bansal, Deputy Chairman, Planning Commission Dr. Montek Singh Ahluwalia; Minister of State for Communication and Information Technology Mr. Sachin Pilot, and State Minister of Water Resources Mr. Vincent Pala, thus assuring the importance assigned to food security by the Govt. of India. The event brought together 740 delegates from 47 countries across the world. The following is the excerpt from the Prime Minister's inaugural speech.

Prime Minister Dr. Manmohan Singh said that challenges of water scarcity, population growth, and urbanization were more pressing in Asia than any other regions of the world. The climate change is likely to adversely impact on availability of surface and groundwater and its quality, affecting crop productivity. Year after year, India faces floods in one part of the country and droughts in another. The challenges of managing water resources in a rational and sustainable manner require actions on many fronts and coordination across different sectors of the economy. To address the complex inter-relationship due to climate change, the 'National Water Mission' has brought some action plans. The main objective of which is to achieve integrated water resource management by conserving water, minimizing wastages and ensuring its more equitable distribution. The Water Mission seeks to develop new regulatory structures, combined with appropriate entitlements and pricing of water. It endeavors to optimize the efficiency of existing irrigation systems. Incentive structures will be designed to promote water-neutral or water positive technologies, recharging of groundwater resources and adopting large-scale irrigation programmes that rely on improved irrigation methods like sprinklers, drips, and new technologies.



Prime Minister pointed out that there has to be a greater synergy between agricultural policies and water policies for achieving food security, especially to the poor and vulnerable sections of the population, through more efficient and sustainable use of scarce water resources. Water Resources development and its efficient use are the priority areas for investment. An assessment of the irrigation system in India indicates that efficiencies of surface water schemes can be improved from the present level of 40% to about 60% and that of groundwater systems

from the existing 65% to about 75%. Utilization of created irrigation potential is another crucial issue. Efficient water use would help in increasing the irrigated cropped area or the intensity of irrigation. Various available options have to be explored. Collaboration in research among countries will be very useful in improving water use efficiency and promoting sustainable use of water, said the Prime Minister.

(Full text of the Prime Minister's speech can be viewed at http://www.icid.org/60iec_messages.htm#pm)

International Commission on Irrigation and Drainage (ICID) was established in 1950 as a scientific, technical and voluntary not-for-profit non-governmental international organization. The ICID News is published quarterly by ICID Central Office, New Delhi, India.

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President's Message

Dear friends and members of the ICID family,

In this my first message to you for the New Year, I take this opportunity to wish you and all those close to you, the very best of health and happiness for 2010. May 2010 be a productive and fruitful year in all your endeavors. It is my fervent wish that ICID, all its national committees and work bodies will be successful in its engagements on topics which we have deemed important in our various deliberations. We have an important agenda ahead of us in terms of water scarcity and food security. And it is imperative that we focus our efforts on tackling these very important problems.

The successful conclusion of our 60th IEC and 5th Asian Regional Conference in New Delhi last December was an important milestone in ICID's history. Apart from the fact that the Prime Minister of India Hon. Manmohan Singh and several Indian government dignitaries including the federal and state Ministers of Water were able to grace our main ceremonies, we used the occasion to celebrate ICID's 60th birthday, and it was particularly important that all delegates had a chance to visit the Central Office and meet our very diligent staff. I was particularly pleased to hear Prime Minister Manmohan Singh reinforce India's commitment to investing in irrigation, and the government's priority to double the country's annual growth rate in agriculture. This is exactly the message that needs to be heard around the world if we are to reclaim the lost ground that has led to the current world food crisis. I exhort our national committees to aggressively articulate similar messages to governments, and to play a leadership role in pushing the governments to reinvest in agriculture and water.

Prime Minister Manmohan Singh further called on us to engage the private sector in irrigation expansion and food production, and to engage women in our decision making, since women play a key role in food production in many countries.



We heard similar messages at the Fifth World Water Forum in Istanbul last year. I therefore urge the national committees and workbodies to take on these issues and report back to us either in your newsletters or at the upcoming IEC in Indonesia on your progress to advance such matters.

Let me once again take this opportunity to thank ICID and the Government of India for organizing such an excellent set of meetings, and in making our stay in Delhi so productive and hospitable. It will always remain one of my most memorable IECs. Last but not least we all owe a special word of gratitude to our Secretary General, Mr. M. Gopalakrishnan and the staff of Central Office for being so attentive and welcoming. They went out of their way to ensure that the meetings occurred without a hitch and that all foreign delegates were well received. Several of you mentioned that it was an excellent opportunity to visit the Central Office and to put a face to the name.

The Secretary General and our Central Office staff are all hard working people who ensure that ICID business is conducted in a very professional manner. In my view, we get very good value for our money, compared to other organizations, and it is important that national committees support the work of Central Office. I can assure you that the

Management Board, the Staff Committee, and the Permanent Finance Committee work extremely hard to control costs and drive up the efficiency of the operations. These committees do not take their work lightly, and have been in the vanguard of changing the way the organization operates. Your support is therefore critical.

I close by reminding you that the theme of World Water Day this year is: Clean Water for a Healthy World. Agriculture and our work in ICID are very much embedded in this year's theme. There is no hiding the fact that agriculture gets a very bad rap from the public as a polluter of water. For sure, irrigation and drainage water and runoff carries pesticides, sediments, fertilizers, and salt. But I have always said that those of us working in water and agriculture have also been leaders in devising new drainage and irrigation technologies to control water quality. We have led the development of water table management, sub-irrigation, controlled drainage, salt management systems, and riparian buffers all aimed to improve the quality of water from agriculture. We have also worked with colleagues in wastewater engineering and public health to devise safer methods to reuse wastewater and drainage water for irrigation. Furthermore, we understand the complexities of multiple uses of water, and have therefore installed water quality monitoring networks and designed rural drinking water systems to safeguard human health, particularly where irrigation water supplies are contaminated by drainage water.

I therefore implore you to use World Water Day as an opportunity to showcase ICID's leadership in the above topics. As a professional body, we have much to offer the world.

Yours truly,

A handwritten signature in blue ink that reads "Chandra A. Madramootoo". The signature is fluid and cursive, written over a white background.

Chandra A. Madramootoo
President

Prof. Chandra A. Madramootoo reappointed as Dean of Faculty of Agricultural and Environmental Sciences, McGill University, Canada

McGill University Board of Governors has reappointed President Chandra A. Madramootoo as Dean of the Faculty of Agricultural and Environmental Sciences

for a further five-year term. He was congratulated by the Board of Governors for the leadership that he has shown regarding finding solutions to global food

security. ICID fraternity heartily congratulates Prof. Madramootoo on this occasion and hopes to derive more from his leadership.

Challenges in Doubling Global Food Production

President Chandra Madramootoo in his opening speech at 60th International Executive Council meeting deliberated on the key issues and challenges in producing sufficient food to meet the demand by the growing world population: A summary

Rising Food Prices: Since last year, rising food prices have become a global issue; some economists called the food crisis the 'Silent Tsunami', while others attributed it to ignoring earlier indicators/ signs of the food crisis. There has been declining investment in agricultural research, in water resources development and management, and in agricultural production, in general. Since we had ignored these to our peril, there were riots in some countries. Subsequently, Heads of States of many countries announced measures to check rising food prices in order to avoid political turmoil.

Impacts of Bio-fuel: In some countries like Mexico there were riots due to rising corn flour prices as a result of shifting away of corn for food production to fuel production. This was exacerbated by the collapse of the international banking system, particularly in North America and to some extent in the parts of Europe further worsening the food crisis. As a result, many people in the least developed and some developing countries were not able to pay for their daily food requirements; another 100 million people or more were added to the population suffering from the hunger and malnutrition. Thus all the gains that were achieved towards reaching the Millennium Development Goal1 (MDG1) suffered set back.

Participation of Women: In some countries over 80% of the people producing food are women but their contribution has been overlooked for too long. It is therefore very important to develop training programs and build capacity to strengthen the participation of women in the local communities. Women's participation in the context of improvement in rural livelihoods to stimulate rural economies, has assumed priority.

Integrated Rural Development: Land and water are valuable assets of any country and play a crucial role in boosting agriculture production and improving the socioeconomic conditions of the people. Instead of looking at land and water simply as production units or inputs, one can use them to access credits and markets. Although the concept of integrated rural development is not new and has been on the international agenda

for many years, ICID need to revisit and explore its advantage.

Rainfed Agriculture: In the past decades irrigated agriculture has made significant contribution to the green revolution. Worldwide, over 50% of our cereal production comes from irrigated lands, comprising about 40% in the developing countries and 10% in the developed countries. Given the fact of climate change, drought, water scarcity, ICID needs to discuss about water harvesting, water storage, water conservation, and management at the watershed scale to be able to grow more than one crop a year in the rainfed areas.

Institutional Reforms: Enhancing of land and water productivity through increasing system efficiency, rehabilitation and modernization of infrastructure are to form part of ICID's agenda. However, in view of what is obtained on assets, credits, and markets, creating some of the institutional reforms that would give much higher levels of efficiency and larger returns on investments from small holdings will continue to be a challenge.

Impacts of Climate Change: The importance of water management, water harvesting, and water storage should not be neglected. The arid and semi arid tropics are the home to the world's poorest of the poor. Nearly 800 million face the challenges due to unpredictable climate, low and inadequate rainfall, poor soils and inadequate physical and social infrastructure. It is predicted that in this region the temperature will increase by about 5 degrees Celsius and decrease in the rainfall of about 10% by the year 2050. ICID need to address the challenges of potential impacts of climate change on these areas

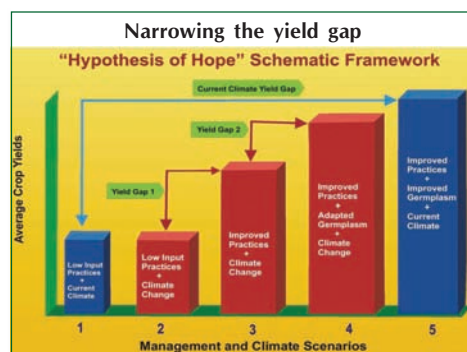


Germplasm and Biotechnology have potential in developing the drought tolerant crop varieties. This alone would not however solve the problem of low crop yields. We need to tackle the challenge of managing water. Thus adopting an integrated approach of using improved germplasm, improved agronomic and water management practices, would narrow the crop yield gap under conditions of scarcity and climate change

Involvement of private sector: Globally, especially in developing countries, it is still the public sectors that invest heavily in agricultural research; very little investment for 'Research and Development' comes from the private sector. ICID will have to play a role in bringing the private sector in its fold. More involvement of the private sector in ICID activities is required not just for financial reasons. A closer contact with industry can be mutually rewarding for knowledge brokering besides more research investments in water and agriculture.

ICID can rebuild its leadership in irrigation and drainage research to be more "client driven" rather than "donor driven". There is a need to make some headway in bringing back ICID at the forefront of the research agenda to achieve some of the aforesaid goals and challenges.

(President Madramootoo's PPT presentation can be accessed at http://www.icid.org/60iec_president_iec_pp.pdf)



Highlights of the 60th IEC and 5th ARC

The 60th International Executive Council (IEC) meeting, pre-council workbody meetings, and 5th Asian Regional Conference (ARC) of the ICID were held at the magnificent Vigyan Bhawan in New Delhi from 6 to 11 December 2009. The event marked the 60th anniversary of the foundation of ICID in India. The theme of the 5th Asian Regional Conference was "Improvement in Efficiency of Irrigation Projects through Technology Up-gradation and Better Operation & Maintenance". In all 242 papers received for the 5th ARC were presented in 20 Technical Sessions. Over 32 Workbody meetings and 8 Special Sessions were also held on the occasion. The events were hosted by the Indian National Committee of ICID (INCID) with the organizational support from Central Board of Irrigation & Power (CBIP). The key highlights of the event are presented here.



From left: Vice Presidents Mr. S. Ota (Japan), Prof. P. Kovalenko (Ukraine), Prof. L. Ubertini (Italy); President C. Madramootoo (Canada), Secretary General M. Gopalakrishnan; Vice Presidents Dr. K. Shiati (Iran), Dr. A. Gany (Indonesia) and Dr. E. Lübbe



The International Executive Council (IEC) meeting was attended by representatives of 31 National Committees/Committee; Presidents Hon. ICID and International Organisations



A Memorandum of Understanding (MoU) for Bilateral Collaboration between ICID and Ministry of Energy, Islamic Republic of Iran (through IRNCID) was signed by President Chandra Madramootoo and H.E. Mohammad Reza Attarzadeh, Deputy Minister for Water and Waste Water Affairs, Iran



A Special Cover marking the 'Diamond Jubilee' Year (1950-2009) of the ICID was released by Mr. Sachin Pilot, the Minister of State for Communications and Information Technology in the presence of Mr. Pawan Kumar Bansal, Minister of Water Resources and Dr. Pranab Mukherjee, Finance Minister

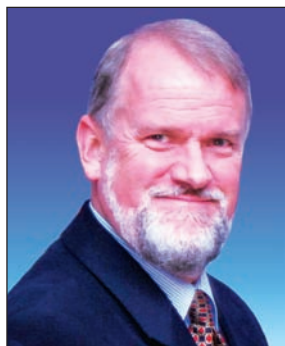


Closing ceremony was graced by the presence of Finance Minister Dr. Pranab Mukherjee as the Chief Guest, Mr. Pawan Kumar Bansal, Minister of Water Resources, Dr. Montek Singh Ahluwalia, Deputy Chairman, Planning Commission, Mr. Vincent H. Pala, Minister of State for Water Resources, Mr. Sachin Pilot, Minister of State for Communications & Information Technology



An exhibition of Irrigation Equipments and Organisations in Water Sector was organised alongside the 5th ARC. It was participated by 30 agencies from Government and private organisations, companies from abroad and India

New Vice Presidents (2009-12)



Dr. Willem F. Vlotman (Australia)



Dr. László G. Hayde (Hungary)



Mr. A.K. Bajaj (India)

Profiles of the new Vice Presidents can be viewed at <<http://www.icid.org/ob.html>>

Retiring Vice Presidents (2006-09)



Dr.-Ing. Eiko Lübbe (Germany)



Dr. Karim Shiati (Iran)



Ir. Mohd. Azhari bin Ghazalli (Malaysia)

Award Winning Water Saving Contributions 2009



The work of Messrs Shahaji Somawanshi, Bharat Kawale and Sanjay Belsare, India on **“Increased Productivity from Participatory Management of Bulk Water Entitlements”** won the **Innovative Water Management Award**.



Prof. Dr. Rai Niaz Ahmad (Pakistan)'s contribution in developing and promoting **‘Wheat Bed Seeder’** won the **Innovative Technology Award**.



Dr. Malcolm Gillies (Australia)'s work on **‘Observational Approach to the Optimization of Surface Irrigation’** won the **Young Professionals Award**.



Mr. Arvind Nalkande, a farmer from India received a ‘Special Recognition’ for his initiative on **“Rainwater Conservation through Natural Cracks in Deep Black Soils”**.

For details of the award winning water saving contributions, please access <<http://www.icid.org/awards.html#watsave>>

The Best Paper Award 2009

The Best Paper Award 2009 went to Ms. Jianxin Mu (China), Dr. Shahbaz Khan

(Australia); and Dr. Gao Zhanyi (China) in recognition of their outstanding paper titled *“Integrated Water Assessment Model for Water Budgeting Under Future*

Development Scenarios in Qiantang River Basin of China” published in Issue 57.4 of Irrigation and Drainage – The Journal of ICID.

[SOUND PRINCIPLE NO. 33]

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Highlights of the Special Sessions

On the sidelines of the 60th IEC meeting/ 5th ARC, 8 Special Sessions of current importance were held. This issue covers key highlights of some of them. The remaining sessions will be covered in the next issue of the ICID News.

Mekong River Commission

An overview of the Mekong River Basin's resources, development opportunities, and challenges were the highlights of this Special Session. The importance of regional cooperation particularly, 'Basin Development Process' for the water resources development and planning was emphasized. The resettlements related issues are managed on 'project by project basis'. Rules and procedures for water utilization have been negotiated, agreed and approved by MRC Council. These include procedures for data and information exchange and sharing, procedures for notification and prior consultation and agreement, water use monitoring, maintenance of flows on the mainstream, and water quality. The minimum flows of the Mekong River will be implemented based on the procedures for maintenance of flow on the mainstream following the 'Technical

Guidelines' being drafted by the MRC member States.

The Climate change may not be a major issue for the Mekong basin; however, rapid developments in the basin in the next 20 years will have potential impacts like increase in salinity intrusion on Vietnamese delta, impacts on mangrove forest, accelerated coastal erosions etc. Integrated river basin development planning might be difficult to achieve without active participation of the upstream countries. The MRC has strong modelling tools; however, fishery impacts could not be calculated using hydrological and hydrodynamic models.



The big challenge for MRC would be to harmonize and satisfy all those needs of the riparian states in the near future. Basin development planning programme would be an important tool in bringing the integrated basin perspectives into national planning, and for sustainable development and management of water resources.

Water Governance

The Middle Eastern Water Governance Benchmarking Project was devised to characterizing countries' capacity for water governance: it has evolved a methodology for assessing and benchmarking national level water governance. An overview of the water governance concepts, the project's approach to assessing water governance, and the online database for the project (www.rewab.net), which enables researchers to query policy and legal documents in the database was

presented. Good water governance in combination with physical infrastructure is the key to the effective, fair, and efficient sharing of increasingly scarce water resources.

It was suggested to recognize importance of dealing with variability and the differences in practicing water governance in closed and open basins. Indonesian case of dealing the challenges of governing multiplicity of organizations involved was mentioned. The importance of developing sound indicators of the quality of water-related services, the

relationship between water governance and Integrated Water Resource Management (IWRM), and the challenges of scaling up a water governance assessment program was emphasized. It was concluded that trans-boundary basin governance is a perspective that strives for sustainable, equitable and efficient water resources management, while incorporating the political realities of international borders. Building the capacity of trans-boundary institutions is a key to mitigating future conflicts over international water resources.

Future of Irrigation in Asia

Irrigation will continue to play an important role in Asia in view of the recent food crisis and climate change threats. By 2050, population in Asia will reach 5.0 billion people, up from 3.5 billion in 2000. In much of Asia, land and water resources are already used intensively and there is not much scope for expansion. While a judicious combination of unlocking value from rainfed farming, sustainable use of groundwater and international trade in food grains has the potential of providing the extra food that Asian population will need by 2050. Increasing productivity in

irrigated lands would still remain central in meeting the food demand. Groundwater irrigation plays a significant role and irrigation reform is needed to make it perform better. However, virtual water trade would remain politically challenging solution. And the dependence on rainfed farming alone could be risky. The use of the term "atomistic irrigation" to describe groundwater irrigation is not appropriate since, groundwater use is often enabled through surface water recharge and through electricity subsidies and hence interconnected with other sectors of the economy. There was limited success to PIM/IMT in Asia so far but ways and means to enhance its value are tried.

Water productivity can be worked out from the district to sub-district level to national and the basin level, using both conventional measures as well as remote sensing techniques. There is a scope in improving water productivity through increasing crop yields, wider access to groundwater irrigation, improved farm management practices, multiple use of water for irrigation as well as fish production and on farm water harvesting. The access to irrigation and levels of poverty were closely correlated and provision of irrigation can be a powerful tool for poverty alleviation.

ICID Events 2010-11

61st IEC Meeting and 6th Asian Regional Conference, 10-16 October 2010, Yogyakarta, Indonesia



The theme of the conference is **"Improvement of irrigation and drainage efficiency through participatory irrigation development and management under the small land holding conditions"**. The deadline for submission of

abstract(s) has now been **extended to 26 March 2010**. For more information, please contact: Indonesian National Committee of ICID (INACID), Ministry of Public Works, Directorate General of Water Resources, Main Building, 3rd Floor, Jalan Pattimura No. 20, Kebayoran Baru, Jakarta Selatan, Indonesia. Tel: +62 21 723-0317, 723-0318; Fax: +62 21 7261956, E-mail: inacid2010@gmail.com; inacid_indonesia@yahoo.co.id;

secretariat@icid2010.org; Website: <http://www.icid2010.org>.

For assistance related to participation such as travel, accommodation, ground transportation, local tours and car rental, please contact the Conference Organizer: Pactoconvex Ltd., Lagoon Tower Level B1, The Sultan Hotel, Jl. Jend. Gatot Subroto, Jakarta 10270, Indonesia. Tel: +62-21-5705800; Website: <http://www.pactoconvex.com>

24th European Regional Conference, December 2010, Orleans, France

The title of the conference is **"Groundwater resource: An essential resource to be saved and managed"**. For details, please

contact: Mr. Sami Bouarfa, Secrétaire Général, Association Française pour l'Étude des Irrigations et du Drainage (AFEID), 361, rue Jean-François Breton, F - 34090 Montpellier, France.

Tel: +33.4.67.04.63.16,
E-mail: afeid@cemagref.fr,
sami.bouarfa@cemagref.fr, Website:
<http://afeid.montpellier.cemagref.fr>

25th European Regional Conference, 16-20 May 2011, Hampshire Hotel Plaza, Groningen, The Netherlands

The title of the conference is **"Integrated water management for multiple land use in flat coastal areas"**. For more details, please contact:

Bert Toussaint, Chairman of Organizing Committee, Ministry of Transport, Public Works and Water Management, Rijkswaterstaat Centre for Corporate Services, P.O. Box 2232, 3500 GE Utrecht, The Netherlands. Tel: +31 6

207 91 372, E-mail: bert.toussaint@rws.nl or contact Pol Hakstege, Secretary, NETHCID, Tel: +31 88 7972316, E-mail: pol.hakstege@rws.nl.
Nethcid2011@rws.nl, Website: <http://www.nethcid.nl>

21st International Congress on Irrigation and Drainage, 62nd IEC Meeting, and 8th International Micro irrigation Congress, 15-23 October 2011, Tehran, Iran



The theme of the 21st Congress is **"Water productivity towards food security"**. For details, please contact:

IRNCID Secretariat, No. 1, Shahrzad Alley, Kargozar St., Zafar St., Tehran, Iran, Postal Code: 19198-34453.
Tel: (+9821) 2225 7348 – 22250162,

E-mail: irncid@gmail.com,
icid2011@gmail.com, Website: <http://www.icid2011.org>. The Call for Papers can be downloaded from the website.

3rd African Regional Conference, 2011, Mali

For details, please contact: Dr. Adama Sangare, Secretary General, Association

Malienn des Irrigations et du Drainage (AMID), Au Modibo Keita, Im Sulla and Fils, BP 1840, BAMAKO, Mali. Tel: (223)222 75 21, Mobile No: (223)674

08 94, Fax: (223) 223 48 82, E-mail: a.sangare@betico.net; betico@betico.net



Please note that commencing from this issue the ICID Newsletter is renamed as ICID News

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