# ANNUAL REPORT 2008-09









ICID•CIID

INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE

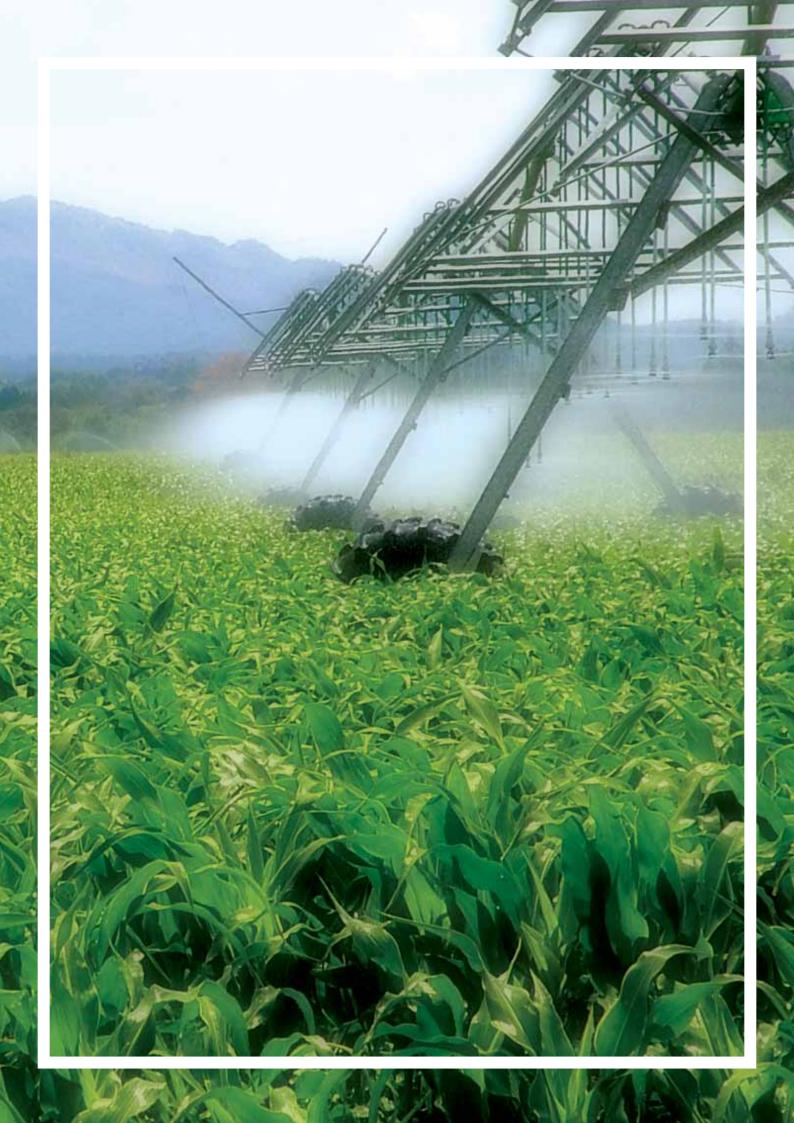




### Mission of ICID

The International Commission on Irrigation and Drainage (ICID) was established as a Scientific, Technical, Professional, and Voluntary Notfor-Profit Non-Governmental International Organization (NGO), dedicated, inter alia, to enhance the worldwide supply of food and fibre for all people by improving water and land management, and the productivity of irrigated and drained lands through the appropriate management of water, environment and the application of irrigation, drainage and flood control techniques.

The Mission of the ICID is to stimulate and promote the development of the arts, sciences and techniques of engineering, agriculture, economics, ecology and social science in managing water and land resources for irrigation, drainage, flood control and river training applications, including research and development and capacity building, adopting comprehensive approaches and the state of the art techniques for sustainable agriculture in the world.





## **CONTENTS**

From the Secretary General	1
Network Countries	2
Management	4
Member Countries' Report	7
Workbodies	13
Key ICID Events	35
Global Cooperation	48
International Participation	59
Publications	60
Central Office	64
Financial Statement	69
Appendices	
A1. Membership Network - Regionwise	72
A2. Countrywise membership on workbodies and task forces	74
A3. Regionwise membership and workbodies represented	77
A4. World irrigated area - Regionwise	80
A5. Sprinkler and micro irrigated area in member countries	83
A6. Contacts of National Committees	84
A7. Contacts of Office Bearers	87
A8. Contacts of workbody Chairpersons	88
A9. Websites of workbodies	89
A10. List of publications	90
A11. Future ICID events	92
Obituaries	93

## From the Secretary General



I have the privileged pleasure to place before you the 59th Annual Report of the International Commission on Irrigation and Drainage covering our activities spanning April 2008-March 2009.

The importance of global food security came to the fore during

the year which saw an unforeseen trend in energy and food prices and the increasingly emerging bio fuel needs to control the sharp oil prices. Naturally the phenomenon reasserted the crucial role that an important global organization like ICID should play. The sluggish trend in assigning adequate resources for handling water for food that prevailed due to the complacency of feeling of surplus or sufficient global food stock received a rude shock. Water for food was again an agenda and the WWF 5 scheduled during March 2009 at Istanbul took on board themes and topics under them which are of close relevance to the problem that the year witnessed. More importantly, UN-Water, handling the theme on achieving the MDG linking it to water for the Forum Group, recognized the crucial role that ICID could play and assigned it the coordinating role of a consortium to handle the topic. ICID was privileged to initiate the consortium, float a dynamic document capturing the crucial aspects in tune with the topic and conducted the task to its logical conclusion. ICID contributions during WWF5 were remarkable which you find in the pages within the Annual Report. A special issue of the Journal was brought out on Water for Food and Poverty Alleviation coinciding with the Forum; a notable insertion in the issue is an article giving an overview on ICID's Objectives, Achievements and Plans that covered comprehensively what we contribute to the global interests on irrigation and drainage.

In the highlights for the year we bring out our own significant annual event which is our IEC and the triennial congress event, when it is coupled with IEC. An unprecedented situation prevailed in the host country, Pakistan due to the unfortunate terrorists' bomb blasts in Marriott Hotel in Islamabad just prior to our IEC sessions in Lahore. This gave, naturally, some anxious moments for many in ICID fraternity in firming up their travel plans and joining the 59th IEC sessions and 20th congress. The attendance thinned out in comparison to usual numbers and was below the extent planned. But, thanks to our colleagues in PANCID who, notwithstanding all the difficulties, organized a memorable event admirably well. The

involvement with which the organizers helped the visiting guests was remarkable and yielded a very fruitful congress (with more than 120 papers and presentations). The meetings of the working groups and the targets that were set by them in their work plans did suffer to some extent due to thinner attendance.

In the 59th IEC, ICID elected its new President Prof. Dr. Chandra Madramootoo (CANCID nominee) unanimously who is well known to ICID fraternity. There were no changes in respect of workbodies except that TF (Poverty) stood converted to a Working Group. There was a special session at short notice to consider the impact of sedimentation of reservoirs with many NCs showing interest in the topic and deciding in favour of constituting a Task Force to look into the subject.

The key regional activity of the year was the 10th International Drainage Workshop that was organized jointly by Finland and Estonia in July 2008; the year was of course studded with other NC activities which are reflected within the report, to the extent of information available in Central Office.

The High-Level Conference on Water for Agriculture and Energy in Africa with Challenges of Climate Change was held in December 2008 in Sirte (Libya). The conference was a unique one of its type following the food crisis of the year. I had the privilege of being invited to join this event. Representatives of many of our regional national committees also participated as their National nominee and we could look into several aspects that require attention in respect of Africa's pressing water and energy needs. In fact, the ICID Focus for Africa was also highlighted in an earlier meeting of AgWA in Tunis in July 2008 and this was asserted in Sirte. Lake Chad basin NCs could hold a special interim meeting at Sirte getting an opportunity to review their problems, plans and future actions.

I hope the report comprehensively captures all contributions of ICID National Committees whose individual and independent strength matters a lot for performing better in our global commitment in agricultural water management, year after year. The need of the hour is the best agricultural water management and increased productivity.

M. Gopalakrishnan

Secretary General

## **Network Countries**

	Active Members			
S1. No.	Member Countries	Acronym	Year of Joining	
1.	Australia	ANCID	1952	
2.	Austria	AUNCID	1954	
3.	Bangladesh	BANCID	1973	
4.	Brazil	ABID	1970	
5.	Canada	CANCID	1956	
6.	Chile	CHCID	1979	
7.	China	CNCID	1963	
8.	Chinese Taipei Committee	CTCID	1969	
9.	Croatia	CRCID	1993	
10.	Cyprus	CYCID	1955	
11. 12.	Czech Republic	CZNC-ICID ENCID	1997	
13.	Egypt Estonia	ESTCID	1950 2001	
14.	Ethiopia	ETCID	1976	
15.	Finland	FINCID	2000	
16.	France	AFEID	1953	
17.	Germany	GECID	1957	
18.	Greece	GRCID	1957	
19.	Guyana	GUCID	1957	
20.	Hungary	HUCID	1955	
21.	India	INCID	1950	
22.	Indonesia	INACID	1950	
23.	Iran	IRNCID	1955	
24.	Iraq	IRQCID	2006	
25. 26.	Ireland	IRCID	1978	
26. 27.	Israel	ISCID ITAL-ICID	1950 1950	
28.	Italy Japan	INC-ICID	1951	
29.	Kazakhstan	KAZCID	2006	
30.	Korea, Rep. of	KCID-ICID	1970	
31.	Kyrgyz Rep.	KYRCID	2004	
32.	Lithuania	LICID	1994	
33.	Macedonia	MAKCID	1995	
34.	Malaysia	MANCID	1958	
35.	Mali	AMID	2005	
36.	Mexico	MXCID	1951	
37.	Morocco	ANAFIDE	1959	
38. 39.	Myanmar Nana1	MINCID NENCID	1962	
39. 40.	Nepal Netherlands	NETHCID	1973 1950	
41.	Nigeria	NINCID	1970	
42.	Niger	ANID	2007	
43.	Pakistan	PANCID	1953	
44.	Philippines	PNC-ICID	1956	
45.	Portugal	PNCID	1954	
46.	Romania	CNRID	1992	
47.	Russia	RUCID	1955	
48.	Saudi Arabia	SACID	1977	
49.	Serbia (Erstwhile Yugoslavia)	YUGCID	2002	
50.	Slovenia	SINCID	1992	
51.	South Africa	SANCID	1993	
52. 53.	Spain Sri Lanka	CERYD SLNCID	1955 1950	
54.	Switzerland	CH-AGRAM	1951	
55.	Syria	SYCID	1962	
56.	Thailand	THAICID	1950	
57.	Turkey	TUCID	1954	
58.	UK	ICID.UK	1951	
59.	Ukraine	UKCID	1996	
60.	USA	USCID	1951	
61.	Uruguay	URUCID	2007	
62.	Uzbekistan	UzNCID	1994	
63.	Zambia	ZACID	1966	

	Member	rs 'Deemed Inactive'	
		CALLED	
64.	Algeria	CNAID	1965 (1999) <sup>1</sup>
65.	Angola	ANGCID	1975 (1994)
66.	Argentina	ARCID	1975 (2004)
67.	Belgium	BELCID	1988 (1997)
68.	Bulgaria	BNCID	1960 (2006)
69.	Colombia	INAT	1966 (2003)
70.	Dominican Rep.	DOMCID	1961 (1986)
71.	Ecuador	EDORCID	1959 (1985)
72.	Ghana	GHANCID	1958 (1963)
73.	Honduras	HOCID	1979 (1999)
74.	Ivory Coast	IVCID	1969 (1982)
75.	Jordan	JORCID	1978 (2003)
76.	Kenya	KENCID	1977 (2003)
77.	Lebanon	LEBCID	1964 (1976)
78.	Libya	LICID	1988 (2000)
79.	Madagascar	MADCID	1983 (1986)
80.	Malawi	MLCID	1967 (2004)
81.	Mozambique	MOCID	1978 (2006)
82.	Panama	PANACID	1980 (1990)
83.	Peru	PERU-ICID	1965 (1973)
84.	Poland	POCID	1967 (2006)
85.	Senegal	SENCID	1966 (1992)
86.	Slovak Republic	SKNC-ICID	1996 (2006)
87.	Sudan	SUCID	1964 (2003)
88.	Surinam	SURCID	1956 (1985)
89.	Tanzania	TANCID	2000 (2006)
90.	Tajikistan	TAJCID	1997 (2003)
91.	Tunisia	TUNCID	1960 (1963)
92.	Uganda	UGCID	1963 (1983)
93.	Venezuela	VENCID	1963 (1982)
94.	Vietnam	VICID	1960 (2003)
95.	Zimbabwe	ZICID	1955 (2001)
3.5 4 /337.43 . 4			
Members 'Withdrawn in the past on their own'			

96.	Cuba	CUCID	1970 (1981) <sup>2</sup>
97.	Denmark	DENCID	1981 (1986)
98.	New Zealand	NEWCID	1979 (1986)

### Members 'Admitted but yet to pay their Subscription'

99.	Afghanistan	AFGCID	2008 3
100.	Azerbaijan	AZERCID	2005
101.	Burkina Faso	BURCID	2000
102.	Chad	ATID	2003
103.	Jamaica	JAMICID	2008
104.	Mauritius	MAUCID	1992
105.	Mongolia	MONGCID	1993
106.	Sao Tome & Principe	SAOCID	1985
107.	Turkmenistan	TURMICID	1998
108.	Yemen	YECID	1993

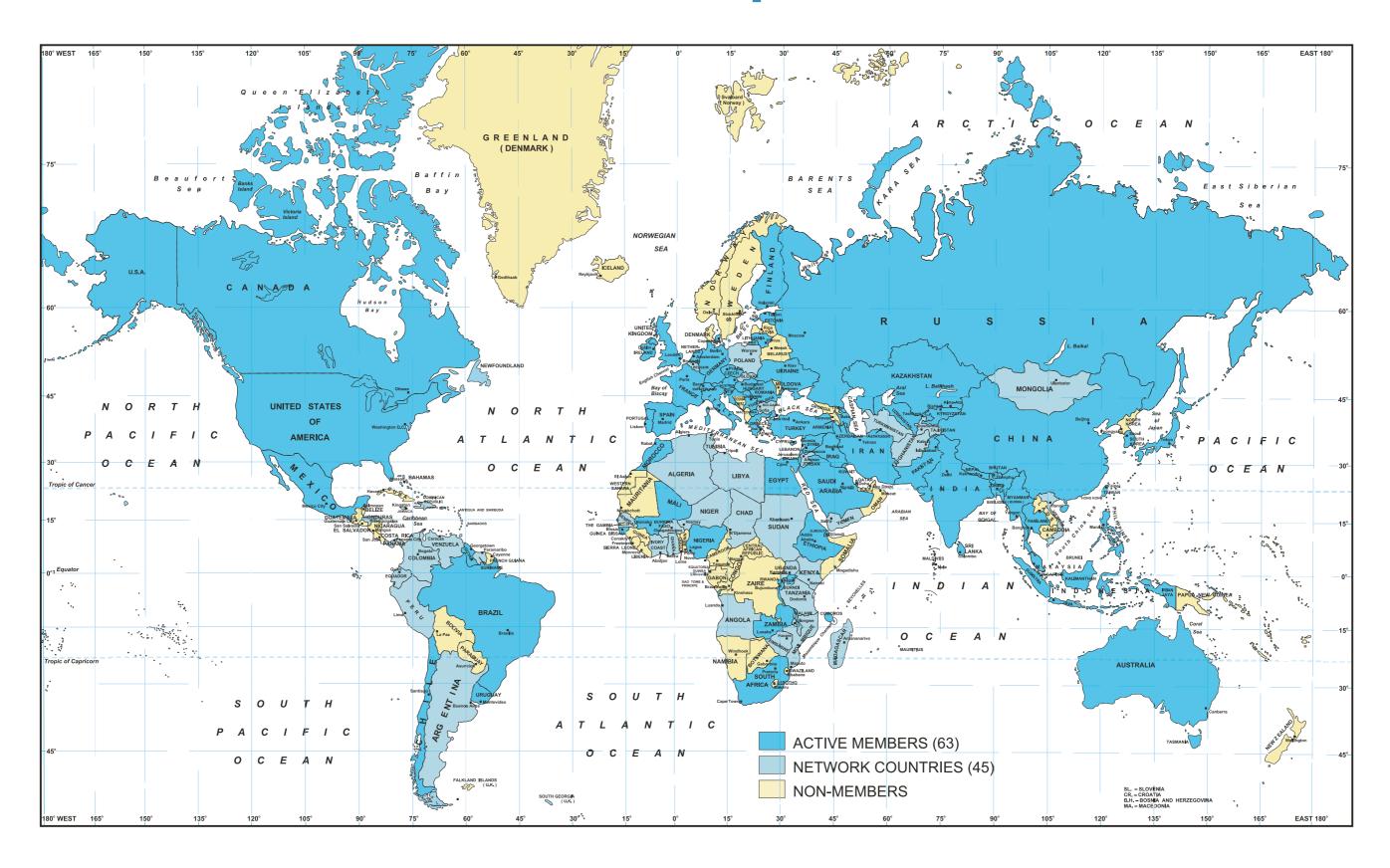
Region-wise Status of ICID Country Memberships as on 31 March 2009					
Region	Active	Deemed to be inactive	Admitted but not paid sub scription	Withdrawn	Total
Africa	8	15	4	-	27
Americas	7	9	1	1	18
Asia & Oceania	24	4	5	1	34
Europe	24	4	-	1	29
Total	63	32	10	3	108

<sup>&</sup>lt;sup>1</sup>Year of becoming inactive

<sup>&</sup>lt;sup>2</sup>Year of withdrawal

<sup>&</sup>lt;sup>3</sup>Year of admission

## **ICID** Membership Network





## Management

ICID has an active membership of 63 countries. The Commission has three permanent committees, 27 workbodies, 5 Task Forces, and a high level Council viz., International Executive Council (IEC), which governs ICID is supported by Management Board (MB), in between the Council meetings. The mandate and membership of these committees are given below;

### INTERNATIONAL EXECUTIVE COUNCIL (IEC)

The International Executive Council (IEC) is vested with the management of the affairs of the International Commission on Irrigation and Drainage (ICID). The IEC considers all matters of policy which may be initiated or sponsored by any member National Committee or Office Bearer or by the Management Board and may itself initiate and determine or otherwise advise and lay down any matter of policy. All matters affecting the executive or administrative function and financial liabilities of ICID must come up before the Council and its decision shall be conclusive. The IEC consists of the Office Bearers and representative from each National Committee and meets annually.

### MANAGEMENT BOARD (MB)

**Mandate**: The Management Board (MB) is responsible with the Central Office (CO) for the implementation of the decisions made by Council, and will decide such actions in between Council meetings as are necessary to properly effect the working of the Commission.

**Chairman:** Mr. Peter S. Lee (UK), President, ICID (September 2005 - October 2008); Prof. Dr. Chandra A. Madramootoo (Canada), President, ICID (from October 2008).

Members: (1) VPH Prof. Hector M. Malano (Australia), Chairman, PCTA; (2) VPH Dr. S. Nairizi (Iran), Chairman PFC; (3) VPH Dr. Gao Zhanyi (China), Chairman, PCSPOA; (4) PH Peter S. Lee (UK); and (4) Er. M. Gopalakrishnan, Secretary General, ICID.

### Management Team for ICID Journal (MT-JOUR)

Mandate: The Management Team for ICID Journal (MT-JOUR) shall be a special committee, and will remain as an 'ad hoc' sub-committee of Management Board to assist it in the administrative matters of managing the Journal, including related financial aspects, such as pricing, royalty, etc.

Members: (1) PH Bart Schultz, Chairman and Convener (The Netherlands); (2) Ir. Paul van Hofwegen (The Netherlands); (3) President Dr. Chandra A. Madramootoo (Canada); (4) VPH Larry D. Stephens, Chairman, C-PR&P (USA) and (5) Er. M. Gopalakrishnan, Secretary General, ICID.

### STAFF COMMITTEE (SC)

**Mandate:** The Staff Committee (SC) shall review and formulate the work procedures and the staff structure of the Central Office in keeping with the changing requirements of ICID and advise the Secretary General on the functioning of the Central Office.

Members: (1) Mr. Peter S. Lee (UK), Chairman (until October 2008); President Dr. Chandra Madramootoo, (Canada), Chairman, (from October 2008); (2) VPH Dr. S. Nairizi (Iran), Chairman, PFC; (3) Mr. A.K. Bajaj, Chairman, INCID, and (4) Er. M. Gopalakrishnan, Secretary General, ICID

### **Screening Committee**

**Mandate:** To deal with the matters pertaining to promotion, career progression and other in respect of the Central Office staff.

**Members:** (1) Er. M. Gopalakrishnan, Secretary General, ICID – Chairman; (2) Chairman, INCID or his representative – Member; and (3) One Scientist/ Engineer of a level of Joint Secretary or higher in the Government of India.

### **OFFICE BEARERS COMMITTEE (OBC)**

Mandate: The Office-Bearers Committee (OBC) shall be composed of the Office-Bearers in Office and the Honoraire Office-Bearers and will in general advise on all important questions concerning the policy, orientation and overall functioning of ICID. One of the primary duties is to make recommendations for filling the vacancies among Office Bearers.

### **ICID OFFICE BEARERS**

### **PRESIDENT**



Prof. Dr. C. A. Madramootoo (2008 - 11) Canada

### SECRETARY GENERAL



Mr. M. Gopalakrishnan (2004 - 09)



Dr.-Ing. Eiko Lübbe Germany

V

C E

P R E S

П

D

E N T S



Dr. Karim Shiati Iran

(2006 - 09)



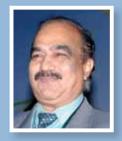
Ir. Mohd. Azhari bin Ghazalli Malaysia



Prof. Peter Kovalenko Ukraine



Dr. A. Hafied A. Gany Indonesia



Engr. Dr. Illahi B. Shaikh Pakistan

(2007 - 10)



Dr. (Mrs.) Samia El-Guindy Egypt



Mr. Shinsuke Ota Japan

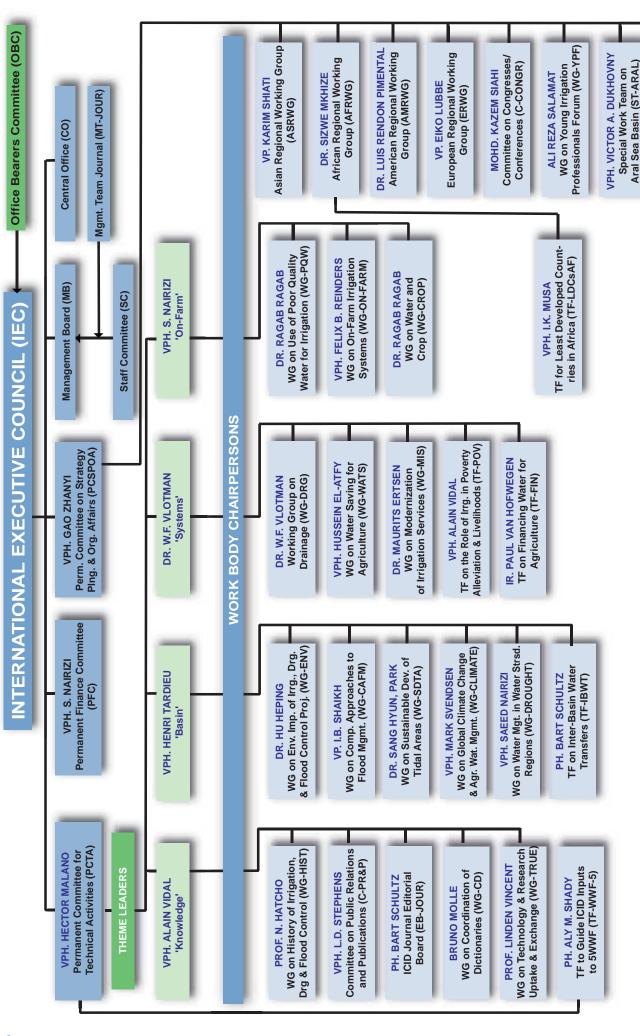
(2008 - 11)



Prof. Lucio Ubertini Italy



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PH = President Honoraire; VPH = Vice President Honoraire; VP = Vice President; WG = Working Group; TF = Task Force

Special Work Team on Lake Chad Basin (ST-LCB)

VPH. I.K. MUSA

## **Member Countries' Report**

### **New Office Bearers of National Committees**

During the year 2008-09, the following National Committees reported about election/nomination of their new Chairs/Presidents and other Office Bearers:



### ANCID, Australia

The Australian National Committee on Irrigation and Drainage (ANCID) was merged with the Irrigation Association of Australia (IAA) in 2007 to become Irrigation Australia Limited (IAL). Thus IAL has become the focal point for ICID in Australia. Mr. Peter

Toome is the National Chair while Mr. Chris Bennett is a Chief Executive Officer of IAL. Mr. Peter Toome can be contacted at p.toome@adcon.at; Tel: + 61 438 813 678 and Mr. Chris Bennett at <chris.bennett@irrigation.org.au>, Tel: +61 2 9476 0142, More information on IAL can be found at: www.irrigation.org.au.



Mr. Wang Xiaodong, Director-General of the Department of Irrigation and Drainage, Ministry of Water Resources became the new Chairman of the Chinese National Committee on Irrigation and Drainage (CNCID). Mr. Xiaodong assumed the office vacated by Mr. Li Daixin, former Chairman. Contact e-mail of CNCID is cncid@iwhr.com.



### CHICID, Chile

Mr. Juan Antonio Arrese, Director of Hydraulic Works took over as the President of Chilean National Committee on Irrigation and Drainage (CHICID).Mr.Antonio may be contacted at <juan.arrese@mop. gov.cl>. Ms. Brenda Códova Thomas is the new Secretary of

CHICID who replaced Mr. Jorge Galvez Blanco. Ms. Códova is the in-charge of the Irrigation Projects Department and her contact address is: Dirección de Obras Hidráulicas, MOP, Morandé N° 59 Oficina N° 536, Santiago, 8340652, Chile. Tel /Fax: +565 2 671 0764, E-mail: brenda.cordova@mop.gov.cl; Website: http://www.doh.gob.cl.

### ETCID, Ethiopia

Mr. Teshome Atnafie Guyo, Head, Irrigation and Drainage Development Studies Department, Ministry of



Water Resources, the Federal Democratic Republic of Ethiopia, is the new Chairman of the Ethiopian National Committee on Irrigation and Drainage (ETCID). He took over from Mr. Makonnen Loulseged, who had joined IWMI Office and subsequently serving in African Development Bank. Contact: teshome987@ yahoo.com.



### **HUCID**, Hungary

Dr. Sándor Szalai assumed the charge as the President of the Hungarian National Committee on Irrigation and Drainage (HUCID). He replaced Prof. Ferenc Ligetvari. Contact email of Dr. Szalai is Szalai.s@met. hu. Other newly elected Office Bearers of HUCID are: Vice

President Dr. László Hayde <1.hayde@unesco-ihe.org>; Vice President Mr. Sándor Vámosi <vamosi.sandor@message.hu>; and Secretary: László Menyhért Tóth, <tothlaszlo@mail.kvvm.hu>.



### INCID, India

Mr. A.K. Bajaj, Chairman, Central Water Commission, Ministry of Water Resources, has assumed the office of the Chairman, Indian National Committee on Irrigation and Drainage (INCID) with effect from 16 April 2008. Contact co-ordinates: Room No. 315

(S), Sewa Bhawan, R.K. Puram, Sector-I, New Delhi 110 066. Tel: +91 11 2610 8855, Fax: +91 11 2610 8614, E-mail: <cwcchairman@netscape.net>; <cmanoff@cwc.delhi.nic.in>. Mr. Yogesh Paitankar is the Member Secretary of INCID and the contact address is: Central Water Commission, Room No. 424 (North), Sewa Bhawan, R.K. Puram, New Delhi-110066, Telfax: +91-11-2610 7086, E-mail: iadcwc@yahoo.com, arc5delhi@gmail.com.

### IRCID, Ireland

The new contact co-ordinates of Irish National Committee on Irrigation and Drainage (IRCID) are: Dr. Olivier Nicholson, Chairman, Irish National Committee on Irrigation and Drainage (IRCID), Hydrology and Flood Response Section, Office of Public Works, 17-19 Lower Hatch St. Dublin 2, Ireland, Tel: +353-1-647-6737, Fax: +353-1-676-1714, E-mail: <oliver.nicholson@opw.ie>; Website: http://www.opw.ie/hydrology.



### IRNCID, Iran

H.E. Mr. Mohammad Reza Attarzadeh, Deputy Minister of Energy for Water and Wastewater Affairs, Islamic Rep. of Iran has been elected as the New Chairman of Iranian National Committee on Irrigation and Drainage (IRNCID). H.E. Dr. Rasool Zargar relinquished Chairmanship

due to his retirement. Contact: irncid@neda.net.ir.



### ITAL-ICID, Italy

Ms. Gabriella Zanferrari has assumed the charge of the new President of Comitato Nazionale Italiano (ITAL-ICID). She replaced VP Lucio Ubertini, who relinquished the position of President of ITAL-ICID. Contact: info@italicid.it.



### JNC-ICID, Japan

Mr. Kunihiko Naitou has taken over as the new Secretary General of Japanese National Committee on Irrigation and drainage (JNC-ICID). He took over from Mr. Mitsukuni Watanabe. The contact coordinates of Mr. Naitou are: Director, Overseas Land

Improvement Cooperation Office, Rural Development Bureau, Ministry of Agriculture, Forestry and Fisheries, 1-2-1, Kasumigaseki, Chiyoda-Ku, Tokyo 100-8950, Japan. Tel: +81-3-3595-6339, Fax: +81-3-3592-148, E-mail: jncid@nm.maff.go.jp.

### KCID-ICID, Korea

Dr. Jin Hoon Jo, Professional Civil Engineer, Rural Research Institute, Korea Rural Community and Agricultural Corporation (KRC) has assumed the office of the Secretary General, Korean National Committee on Irrigation and Drainage (KCID-ICID). The contact co-ordinates of Dr. Jin Hoon Jo are: Hyundai Apt. 104-303, Inhyun town, 1151, Jukjeon2-dong, Yongin-si, Kyeonggi-do, Republic of Korea; Tel: 031-400-1815 (Office), E-mail: <jojinhoon@hanmail.net>.



### MANCID, Malaysia

MANCID constituted a new Executive Committee at its 11th Annual General Meeting held on 14 February 2009. In the meeting, VP Ir. Mohd. Azhari bin Ghazalli was nominated as Chairman to replace Dato' Ir. Hj Ahmad Husaini bin Sulaiman, Director General of DID. The

other office bearers are –Engr. Zainor Rahim bin Ibrahim and Prof. Dr. Mohd. Amin Mohd Soom as Vice Chairmen; Engr. Hj. Mohd Azmi bin Ismail as Secretary. Contact e-mail of the Chairman is azhari@moa.gov.my.

### NINCID, Nigeria

Engr. M.N. Gundiri has assumed the office as the new Chairman of the Nigerian National Committee on Irrigation and Drainage (NINCID). Engr. Musa, Vice President Hon. has become the new Head of National Integrated Water Resources Management Commission. Contact: nincid@yahoo.co.uk; info@nincid.com.

### PANCID, Pakistan

New contact coordinates of the Pakistan National Committee on Irrigation and Drainage (PANCID) are: Mr. Javeed Iqbal Bokhary, Secretary, Office of the Chief Engineering Adviser/Chairman Federal Flood Commission, Government of Pakistan, Ministry of Water and Power, Plot No.6, Sector G-5/1 Islamabad, Pakistan, Tel: + 92 51 924 4623; +92 51 924 4603, Fax: + 9251 924461, Email: pancid@ffc.gov.pk.



### SANCID, South Africa

Dr. G.R. Backeberg has relinquished the Chairmanship of SANCID after serving the committee for two consecutive terms of three years since 2003. Mr. F. B. Reinders has taken over as the new Chairman. The other members elected to serve on the Executive Committee of

SANCID for the three year period (2008-2011) are: Vice Chairman: Dr. J.B. Stevens; Secretary: Dr. (Ms) N.J. Taylor; Treasurer: Dr. A.J. Sanewe; and Additional Member: Dr. G.R. Backeberg. Secretary Dr. (Ms) Taylor may be contacted at the Department of Plant Production and Soil Sciences, Faculty of Natural and Agricultural Sciences, University of Pretoria, Pretoria 0002; E-mail: <Nicolette.Taylor@up.ac.za>.

### THAICID, Thailand

Mr. Theera Wongsamut, Director General and Mr. Vira Vongsangnak, Deputy Director General of Royal Irrigation Department have assumed the charge of Chairman and Secretary General, respectively of the Thai National Committee on Irrigation and Drainage (THAICID). Mr. Theera Wongsamut may be contacted at <theeraw@mail.rid.go.th>, Tel: (662) 241-0065, while Mr. Vira Vongsangnak may be contacted at <veeraw@mail.rid.go.th>, Tel: (662) 669-4247.

### **Activities of National Committees**

The following is a brief report of the activities carried out by the National Committees of Brazil (ABID), Iran (IRNCID), Malaysia (MANCID), Morocco (ANAFIDE), United Kingdom (ICID.UK), The Netherlands (NETHCID), Saudi Arabia (SACID), South Africa (SANCID), and United States of America (USCID) during the period April 2008 to March 2009.

### ABID, Brazil

The Brazilian National Committee of ICID (ABID) hosted the 'XVIII National Congress on Irrigation and Drainage' (CONIRD) from 27 July to 1st August 2008 at São Mateus in Brazil. The region is well-known for its papaya and other high value crops. Ing. Helvecio Mattana Saturnino, President - ABID had invited President Lee to deliver the main speech during the Opening Ceremony on topic 'Investment in Productive Agriculture'. President Lee remarked that irrigation of pasture to free-up degraded rangelands for agro-forestry and other cropping using a variety of soil improvement techniques (no-till, terracing, mulching etc) are part of irrigation management as it is in the broader sense, managing soil moisture by any means. Fields visits were organised to see modern water application techniques and innovative cropping patterns to maximize the productivity of water, land and nutrients.

ABID President, Helvecio Saturnino, also arranged for a seminar in the capital, Brasilia, attended by representatives from all the main government agencies concerned with water



President Peter Lee with ABID President, Helvecio Saturnino and other professionals at São Mateus

and agriculture. This focused on Brazil's potential as major exporter of agricultural produce and expertise, and the crucial role played by Brazilian farmers in investing in technologies, especially farm reservoirs. Brazil already has an estimated 100,000 farm ponds. President Lee discussed the 'top-ten' technologies that could revolutionise food production and the relevance of IPTRID and the ICID WatSave awards, including the award last year (2007) to the Brazilian entry, saving more than 50% water by irrigating rice under centre pivot.

### IRNCID, Iran

On 22 March 2008, IRNCID commemorated its 40th anniversary. During the year 2008-09, IRNCID has published a Persian version of four books viz., Crop Evapo-transpiration: Guidelines for Computing Crop Water Requirements; Management, Operation and Maintenance of Irrigation and Drainage Systems; Micro irrigation in Arid and Semi-Arid Regions: Guidelines for Planning and Design; and Introduction to Virtual Water, besides four issues of Newsletters. The National Committee also organized seminars on 'Improving and Rehabilitation of Surface Irrigation Systems', 'Workshops on Drainage and Environment', and on 'Water Users Participation in the Management of Irrigation Systems'.

Following the MoU signed among IRNCID, German National Committees on Irrigation and Drainage (GECID),



German delegation in Iran



Iranian delegation in Indonesia

and German Water History Association (DWhG), a German delegation visited Iran to study ancient, as well as historic hydraulic structures - dams, weirs, water museums, Qanats etc located in cities of Tehran, Ghom, Kashan, Isfahan, Yazd, and Shiraz. The delegation also held meetings with Mahab Ghods Consulting Company (MGCC) Board of Directors and IRNCID officials to discuss on future prospects of bilateral research projects. Similarly, as per the provisions of the MoU signed between IRNCID and Indonesian National Committee on Irrigation and Drainage (INACID), an Iranian delegation visited agricultural and water structures in cities of Jakarta, West Java, Bali and Palembang in August, 2008. During the visit, the delegates saw advances in water resources management in Indonesia. IRNCID expressed its interest to expand bilateral cooperation at the Ministerial level of both the countries.

### MANCID, Malaysia

In June 2008, a MANCID delegation comprising 15 members lead by Dato' Ir.Hj.Ahmad Husaini bin Sulaiman, Director General Department of Irrigation and Drainage Malaysia and the then Chairman of MANCID visited the Royal Irrigation Department (RID), Bangkok, Thailand. The visit commenced with a briefing on 'Water Watch and Monitoring System for Warning Center' by Mr. Vira Vongsangnak, Deputy Director General (Operation & Maintenance) followed by a presentation on 'Hydrodynamic Project along Chao Phraya River', Thailand.

The MANCID delegation held meeting with Thai National Committee of ICID (THAICID) to share their knowledge and discussed about future cooperation projects. Both the National Committees signed a MoU for mutual cooperation in technology transfer and also to join forces in furthering IPTRID and ADPHT programmes. The delegation also



Members of MANCID and CNCID at Beining

visited the FAO Regional Office for Asia and Pacific and discussed on FAO's programmes in the region.

MANCID jointly with Ministry of Agriculture and Agro-Based Industry and Department of Irrigation and Drainage had organized 14th MANCID Annual Conference and 11th MANCID Annual General Meeting from 14 to 16 February 2009 at Kuching, Borneo Sarawak. The meeting approved the new constitution of the MANCID and elected new Office Bearers/ Committee Members for the 2009/2010 term. Hon.Dato' Mohd Azhari bin Ghazalli, Director of Irrigation and Agricultural Drainage, Ministry of



11th Annual General Meeting of MANCID at Borneo Sarawak

Agriculture and Agro-Based Industry is the new Chairman of MANCID replacing Dato' Ir.Hj Ahmad Husaini bin Sulaiman, Director General of Department of Irrigation and Drainage since 2008. The theme of the Conference was 'The Role of Irrigation and Drainage in Food Security, Poverty Alleviation and Environmental Sustainability: Towards attaining the Millennium Development Goals in Malaysia' and attended by 118 participants. Hon.Dato' Ir.Hj.Ahmad Husaini bin Sulaiman, Director General of Department of Irrigation and Drainage said the theme was chosen as part of the government's efforts to enhance public awareness on the implications of millennium development goal to the irrigation and drainage system.

MANCID also participated in a conference on "Efficient and Sustainable Water Use to Address Poverty Alleviation and Food Security" jointly organized by INWEPF, Japan and the Ministry of Public Works, Indonesia at Denpasar in November 2008. The conference discussed various issues and challenges towards sustainable rice production in Asia.

Vice President, Hon.Dato' Ir.Mohd.Azhari bin Ghazalli participated in the 2nd International Symposium on Water Resources and Renewable Energy Development in Asia, held at Danang, Vietnam from 10 to 11 March 2008. VP Dr. Ghazalli had liaised with Thailand, Indonesia, Vietnam and Myanmar to encourage those countries to reactivate their ICID membership. During the visit, he met Dr. Dao Trong Tu, Deputy Secretary General, Vietnam National Mekong Committee, and Pres. Peter Lee who was invited to join the Symposium, ASIA 2008. VP Dr. Ghazalli encouraged Vietnam professionals to attend the Lahore Congress and other ICID events.

### ANAFIDE, Morocco

Morocco has been an active National Committee of ICID since 1959. On 24 February 2009, the Moroccan Committee on Irrigation and Drainage (ANAFIDE) celebrated its 40th anniversary. A Conference on "The future of irrigation" was organized on the occasion. The ceremony was graced by the presence of Prof. Chandra Madramootoo, President, ICID. The President delivered a keynote on 'Solutions to the global food crisis' in which he emphasized the importance of irrigation in overcoming the current global food crisis and highlighted some recent innovations in irrigation and drainage sector in Canada. H.E. Hon'ble Minister of Agriculture Abdelaziz

Akhannouch of Morocco covered Morocco's plan 'Vert' while Vice Pres. Hon. Mohammed Ait Kadi spoke on the plans on the anvil to combat the 'Food crises' in Morocco.

Mr Abdallah BEKKALI, President of ANAFIDE stressed that increasing pressure on water resources, transfer of irrigation water to other uses, degradation of water quality and ecosystems required a mobilization of additional investment in order to increase irrigation water supply. Mr. Moha Marghi, General Secretary of Agriculture and Fisheries Ministry, underlined that Morocco has made a real progress in the field of irrigated agriculture and promotion of rural area in different aspects. He apprised about the "Green Morocco Plan" that the

country has recently initiated to modernize its agriculture. The four pillars of this new policy are: saving of irrigation water and valorisation, large irrigation institutional reform, program of elimination of the gap between dams and hydro-agricultural planning, and valorisation of small and medium hydraulics. Dr. W. Bastiaanssen, Waterwatch Director, The Netherlands examined technological progress and management of irrigation. Mr Aboudakr Seddik Gueddari, Director of the Rural Engineering Administration, Agriculture and Fisheries

Ministry highlighted that according to recent estimations, climate change could cause an additional reduction from 10% to 15% of the surface water in Morocco in the coming years. He explained that during the period 1970-2000, rainfall deficit reached 35% compared to the period 1945-1970. The Conference was attended by more than hundred participants comprising engineers, researchers and decision makers, students, etc.

### ICID.UK, United Kingdom

ICID.UK is hosted at the Institution of Civil Engineers (ICE) in London with its committee members are drawn from industry, government and academia. The membership includes 7 corporate members and 121 individuals.

ICID.UK had issued six bulletins "News and Views" containing technical papers, reports on projects and updates. It organised a number of activities comprising: technical meetings, field trips besides the regular committee meetings and an Annual General Meeting. The spring technical meeting in February 2008 addressed bio-fuel / energy crops and food shortage, impact of energy crops on water resources availability and the environment. In May

2008, the Gerald Lacey Memorial Lecture was delivered by Professor Sir Gordon Conway, Scientific Advisor DFID and President of the Royal Geographical Society. His lecture focused on "How do we feed the world?" and the need for a "doubly green revolution". In July 2008, Dr Chris Perry and Dr Ragab Ragab attended the launch the new Arab Water Academy (AWA) in Abu-Dhabi. In November 2008, a seminar on "Towards a political ecology of irrigation and water use efficiency and productivity" involving distinguished speakers from: IWMI, Australia, France, The Netherlands, Portugal, UK, and private consultants was organized. This well attended meeting was successful in imparting information and in facilitating intense debate on irrigation efficiency.



Prof. Ir. Nick van de Gissen, Chairman, NETHCID

### NETHCID, The Netherlands

During the year 2008-09, members of the Netherlands National Committee on Irrigation and Drainage (NETHCID) participated in a number of ICID and international events.

The Chinese version of the book "Manmade Lowlands - History

of Water Management and Land Reclamation of the Netherlands" coordinated by NETHCID and published in 2007 was widely disseminated. There were 4 oral presentations of papers from NETHCID members at the 10th International Drainage Workshop held at, Helsinki, Finland | Tallinn, Estonia in July 2008. Six delegates

of NETHCID participated in the 59th International Executive Council and pre-council meetings of workbodies at, Lahore, Pakistan in October 2008. NETHCID submitted a draft proposal for the 24th European Regional Conference in 2011 in the Netherlands entitled "Integrated water management for multiple land use in flat coastal areas", which was accepted by the IEC. The Editorial Board of Journal of Irrigation and Drainage, chaired by Prof. Bart Schultz, received the Best Performing Workbody Award. Pres. Hon. Bart Schultz, together with VPH Henri Tardieu, Secretary General M. Gopalakrishnan and Central office, coordinated ICID inputs on Topic 2.3 Water and Food for Ending Poverty and Hunger for 5th World Water Forum held at Istanbul in March 2009. The proceedings of the NETHCID Symposium 2008 on "The Water Professional of Tomorrow "were published as Special Issue of the journal Irrigation and Drainage Vol. 58 Supplement 2 April 2009.

### SACID, Saudi Arabia

Dr. Karim Shiati, Vice President, ICID and Chairman of the Asian Regional Working Group (ASRWG) visited Mr. Abdul kareem M. Al-Ghamdi, Director General of Irrigation Department Affairs, Ministry of Agriculture of Kingdom of Saudi Arabia and the Chairman of Saudi Arabia national Committee (SACID) on 18 November 2008. The purpose of his visit was to enhance the regional cooperation among the national committees in the West Asia. The visit led to the initiation of cooperation among IRNCID and SACID.



VP Karim Shiati (R) with Mr. Abdul kareem M. Al-Ghamdi, Chairman, SACID

### SANCID, South Africa

The South African National Committee on Irrigation and Drainage (SANCID) held its Annual General Meeting in April 2008. Dr. G.R. Backeberg, Chairman in his annual report for the year 2007/08 presented the activities of SANCID.

He highlighted the election of Dr. Sizwe Mkhize as Chair of African Regional Working Group (AFRWG), receipt of ICID WatSave Award 2007 by Dr. Abraham Singels, and the ICID Best Paper Award 2007 by the Chairman for his paper published in the Irrigation and Drainage, Vol. 55, No. 1.

### USCID, USA

U.S. National Committee on Irrigation and Drainage (USCID) held a Conference on 'Urbanization of Irrigated Land and Water Transfers' during 28-31 May 2008 at Scottsdale, Arizona (USA). The Water Management Conference on "Managing Water in a Climate Changing World: Implications for Irrigation, Drainage and Flood

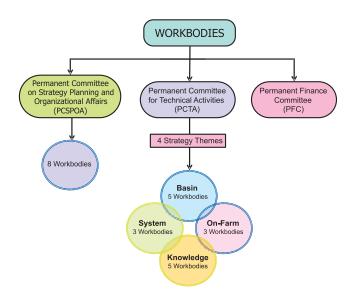
Control" was held on 17 – 20 September 2008 at Portland, Oregon. The Conference was designed to acquaint managers with the methods used by scientists to project the coming water environment, the nature of the impacts on water to be expected, and the ways in which global and regional changes affect Western irrigation, drainage and flood control. Contact: Mr. Larry Stephan, stephens@uscid.org, website: <www.uscid.org>.

### Workbodies

ICID has three permanent committees to guide the activities of various workbodies. These permanent Committees are – (1) Permanent Committee on Strategy Planning and Organizational Affairs (PCSPOA), (2) Permanent Committee for Technical Activities (PCTA), and (3) Permanent Finance Committee (PFC). A schematic of ICID workbodies is shown in Figure 1. Regionwise share of irrigated area, number of members and workbodies represented by active member countries of ICID is shown in Figure 2. This section provides a brief on the mandate, membership, and activities of various committees / workbodies.

> 140 120

100



Jumber of Members/Workbodies 80 60

Figure 2. Regionwise share of irrigated area, number of members and workbodies represented by active member countries of ICID

Figure 1. A schematic of ICID workbodies

### PERMANENT COMMITTEE ON STRATEGY PLANNING AND ORGANIZATIONAL AFFAIRS (PCSPOA)

Mandate: The Committee looks into the prospects of increasing the number of member countries and assisting the National Committees to become more active in their own countries to achieve the goals set for them from time to time. The Committee undertakes issues related to strategic planning for ICID. The Committee coordinates the activities of Vice Presidents in their areas.

Members: (1) VPH Dr. Gao Zhanyi, Chairman (China, 2005); (2) VP Dr.-Ing. Eiko Lübbe (Germany, 2006); (3) VP Dr. Karim Shiati (Iran, 2006); (4) VP Ir. Mohd. Azhari bin Ghazalli (Malaysia, 2006); (5) VP Prof. Peter Kovalenko (Ukraine, 2007); (6) VP Dr. Hafied A. Gany (Indonesia, 2007); (7) VP Dr. Illahi B. Shaikh (Pakistan, 2007); (8) VP Dr. (Mrs.) Samia El-Guindy (Egypt, 2008); (9) VP Shinsuke Ota (Japan, 2008); (10) VP Prof. Ing. Lucio Ubertini (Italy, 2008); (11) VPH Dr. Mark Svendsen (USA, 2005); (12) VPH Felix B. Reinders (South Africa, 2005); and (13) Er. M. Gopalakrishnan, Secretary General, ICID.

Ex-Officio Members: (1) Chairman, AFRWG; (2) Chairman, ERWG; (3) Chairman, ASRWG; (4) Chairman, AMRWG; (5) Chairman, WG-YPF; (6) Chairman, C-CONGR; (7) Chairman, ST-ARAL; and (8) Chairman, ST-LCB

Permanent Observers: (i) FAO Representative; (ii) World Bank Representative; (iii) GWP Representative and (iv) WWC Representative.

Activities: PCSPOA held its 19th meeting on 15 October 2008 at Lahore, Pakistan wherein 8 members, 5 ex-officio



19th meeting of PCSPOA at Lahore

members and one observer each belonging to 10 countries (China, South Africa, Germany, Iran, Indonesia, Ukraine, Pakistan, India, Mexico and USA) participated.

PCSPOA reviewed its membership in the light of retiring members (Vice Presidents) at the conclusion of the Sacramento IEC meeting and newly elected Vice Presidents at Lahore IEC, who would subsequently become its members. The Committee also considered the membership nominations received for workbodies under it and made appropriate recommendations. Steps initiated for the membership drive to enroll more countries as members of ICID were reviewed. It noted with concern that some national Committees (NCs) were falling in arrears and consequently becoming inactive. The Committee suggested that the Central Office and Office Bearers should keep contact with the inactive NCs, particularly in the region of South America and try their best to reactivate the inactive members.

PCSPOA discussed the issue of strengthening and broad

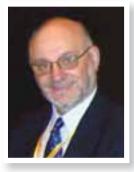
basing of National Committees and encouraged them to communicate various steps taken in this direction to the Central Office together with their revised constitutions. The Committee reviewed the tenures and activities of workbodies under it and made recommendations accordingly. It was decided to consider the suggestions for new workbodies next year.

PCSPOA considered the new item regarding the strategy for communication and cooperation between ICID and other organizations/NGOs including the farmers and other water users. The Committee reiterated that the farmers were the most important end users of irrigation and drainage techniques and stressed the need to explore more effective ways to strengthen the communication between ICID and farmers and other water users.

The Committee also took note of the proposed ICID inputs to 5 World Water Forum and felicitated the awardees of various ICID Awards that were to be presented during the Lahore Congress/ IEC.

### PERMANENT COMMITTEE FOR TECHNICAL ACTIVITIES (PCTA)

Mandate: The Permanent Committee for Technical Activities (PCTA) shall be concerned with all the technical activities of the Commission including all publications of ICID. It will be responsible for the activity of the technical bodies, for the selection of Questions/Themes for Congresses, Conferences, Special Sessions, Symposia, etc., for the settlement of the technical conclusions thereof and for making appropriate recommendations for action thereon.



VPH Prof. Hector Malano

Members: (1) VPH Prof. Hector Malano, Chairman (Australia, 2005); (2) Mr. Bruno Molle, Vice Chairman (France, 2006); (3) VPH Larry D. Stephens, Secretary (USA, 2003); (4) VPH Dr. Hussein Ehsan El-Atfy (Egypt, 2005); (5) Prof. Daniele De Wrachien (Italy, 2005); (6) Dr. Yohei Sato (Japan, 2005); (7) Dr. Nikoley G. Kolvanov (Russia, 2007); (8) Mr. Hassan B. Yuksel (Turkey, 2007); (9) Mr. A.K.

Bajaj (India, 2008) and (10) Er. M. Gopalakrishnan, Secretary General, ICID

Permanent Observers: (1) World Bank Representative; (2) FAO Representative; (3) IWMI Representative; (4) ISO Representative; (5) WWC Representative; and (6) Programme Manager, IPTRID

**Ex-Officio Members:** (1) All strategy theme leaders; and (2) Chairpersons of all workbodies under PCTA.

Activities: PCTA held its 28th meeting on 16 October 2008 at Lahore. The meeting was attended by 4 members and



28th meeting of PCTA at Lahore

27 observers (including ex-officio members and observers) belonging to 11 countries (The Netherlands, USA, India, Turkey, China, Pakistan, UK, South Africa, Canada, Iran and Indonesia). The membership proposal of Mr. AK Bajaj (INCID) was approved.

The PCTA reviewed the further steps required on the internal review on the functioning of ICID technical workbodies. It also noted the activities carried out by ICID Task Forces. PCTA was also apprised of ICID's cooperation with various international organizations and ICID Congresses and Conferences, including Council meetings up to the year 2011. The meeting congratulated the winners of Best Performing Workbody Award (BPWA), Best Performing National Committee Award (BPNCA) and the distinguished lecturer for the N.D. Gulhati Memorial International Lecture that was delivered during the Lahore IEC. The Committee approved the topics and sub-topics of/under Questions 56 and 57, Symposium and Special Session for the 21st Congress to be held in Tehran, Iran in 2011.

### PERMANENT FINANCE COMMITTEE (PFC)

Mandate: The Permanent Finance Committee (PFC) shall be concerned with the financial matters of the Commission and aspects having significant financial implications. It will review the receipts and expenditures, advise the Council on the previous year's accounts and on the proposed or provisional budget; it will make recommendations on the annual subscriptions and other support of the participating countries for the current and future years. It may give its opinion to the President and the Secretary General on the elements to be taken into account to prepare the budgets of the future years.

Members: (1) VPH Dr. Saeed Nairizi, Chairman (Iran, 2008) by replacing VPH Dr. Chandra Madramootoo, Chairman (Canada, 2006) w. e. f. October 2008; (2) Dr. K. Palanisami, Secretary (India, 2005); (3) Dr. Ing. Stefano Salbitani (Italy, 2003); (4) Dr. A.V. Kolganov (Russia, 2003); (5) Dr. Laszlo G. Hayde (Hungary, 2004); (6) Prof. Dr. Kinji Ohashi (Japan, 2004); (7) VPH Dr. Alain Vidal (France, 2006); (8) Mr. Syed Raghib Abbas Shah (Pakistan, 2006); (9) Dr. James Ayars (USA, 2007); (10) VPH Dr. Gao Zhanyi (China, 2007); and (11) Er. M. Gopalakrishnan, Secretary General, ICID

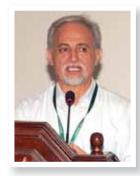
Activities: PFC held its 29th meeting on 13 October 2008 at Lahore, Pakistan in which 7 members and 6 observers were present. At the meeting, VPH Saeed Nairizi (Iran) was elected as the new Chair of PFC to replace VPH Dr. Chandra Madramootoo (Canada).



29th meeting of PFC at Lahore

PFC requested the VPs in charge of National Committees in arrears to be more proactive and persuade the defaulting NCs to clear their arrears. It was also recommended that application of the sanctions as per the By-laws be deferred

to give them a chance to clear their dues. It was suggested that the Central Office continue following up with those NCs in arrears. The Internal Review Committee has recommended that the Regional Conferences as well as specialty conferences (e.g. International Drainage Workshops) should also contribute a share of 15% of the registration fee to ICID, effective from 2009. The Review Committee has further suggested



VPH Dr. Saeed Nairizi

that the Central Office should endeavor to enhance revenue for the Commission by organizing at least one international conference in India, on its own or in cooperation with INCID or other organizations having interest in the irrigation sector. It was also recommended that the membership base of ICID be broadened for its sustainability and to have a wide representation from all the sectors, in addition to the NC network.

No comments on the Internal Review Report presented by PFC at the Sacramento IEC meeting were received from any NC. The Chairman of the Review Committee had also transmitted the report to VPH Alain Vidal, Convenor, ICID External Review. PFC endorsed the Internal Review Report for IEC's consideration and proposed to wind up the Special Committee.

Mr. A.K. Bajaj, Chairman of the Indian National Committee (INCID) announced the programme of 5th Asian Regional Conference at a reception hosted by INCID during the Lahore Congress.

Iranian National Committee (IRNCID) elaborated its proposal of the 21st Congress as regards to registration fee, no. of delegates expected, etc. PFC expressed satisfaction towards various preparations and the likely revenue that IRNCID could generate for ICID.

The necessity to augment ICID revenues was felt more than ever before. The suggestions of the Special Committee in this regard need to be considered. It was suggested that the Central Office may consider seeking the services of a specialized agency for augmenting revenue from advertisements on the ICID website. Even with the presumption of receiving a 15% share of registration fees from Regional Conferences and International Drainage Workshops, the deficit continues up to the year 2010-11. The surplus indicated during the Congress year 2011-12 is subject to receipt of anticipated amount towards ICID share of registration fee. Need for expanding the membership base was also discussed.

### **PCSPOA Workbodies**

The Permanent Committee on Strategy Planning and Organizational Affairs (PCSPOA) encompasses 8 Workbodies. The following is a brief description about the mandate, membership, and key activities carried out by each of these working groups/ work team/ committee during the period April 2008 to March 2009.

### AFRICAN REGIONAL WORKING GROUP (AFRWG)

Year of Establishment: 1994

Webpage: http://www.afrwg.icidonline.org/

#### Mandate:

- To promote links and networking among the African countries as well as regional and international institutions for enhancing cooperation and coordination; and
- To support integrated river basin development, training and research issues and information system for African needs.

Members: (1) Dr. Sizwe Mkhize, Chairman (South Africa, 2001); (2) Dr. Adama Sangare, Vice Chairman, 2008 (Mali, 2007); (3) Engr. D.B. Madu, Secretary (Nigeria, 2008); (4) Ms. Raphaele Ducrot (France, 1999); (5) Mr. Makonnen Loulseged (Ethiopia, 2007); (6) Morocco representative and (7) Secretary General, ICID.

Observers: (i) FAO Representative; (ii) World Bank Representative; (iii) IPTRID Representative (iv) Mr. Jean Syroganis Camara (Italy); (v) Mr. A. de Vito (Italy); (vi) Mr. Deric S. Mono (Zambia); (vii) Ms. Felicity Chancellor (UK); (viii) ARID Representative and (ix) SARIA Representative

Activities: AFRWG held its 19th meeting at Lahore on 14 October 2008. The Group accepted the stepping down of Dr. H. Fahmy (Egypt) from Vice Chairmanship and thanked him for his dedicated contributions. Mr. Adama Sangare (Mali) was elected as the new Vice Chairman of the Group.

President Peter S. Lee upon invitation from African Development Bank represented ICID at the initial meeting

of a multi-agency task force held at the end of 1st African Water Week on 29 March 2008 at Tunis, Tunisia to promote investment in agricultural water in Africa. The meeting was co-chaired by the African Development Bank and World Bank. The other participants (which now constitute the task force) were FAO, IFAD, IPTRID, IWMI, ICID, ARID and several bilateral donors. President Lee



Dr. Sizwe Mikhize

informed the delegates about the ICID's "Preference for Africa" and said that ICID can make a real contribution to the task force by mobilizing peer-support for more investment in agricultural water in Africa.

ICID was one of the invitees to join the FAO's organized High-Level Conference on "Water for Agriculture and Energy in Africa: the Challenges of Climate Change" held in Sirte, Libya between 15-17 December 2008.

In the 59th IEC meeting a decision was taken that ICID will be represented by its Secretary General. A brief on the Secretary General's participation is mentioned elsewhere in the Annual Report under title "Global Cooperation".

The overall purpose of the Conference was to focus on the water resources in Africa, taking into consideration the increase in demand for water for agriculture and energy sectors in the context of changing climatic conditions. The Conference acknowledged the importance of water for economic growth and sustainable development, particularly for Africa. Several member countries of ICID could participate in this Conference. Thanks to the liberal support that was provided by Libya. ICID's plan to revive Libya country membership was also activated.

### AMERICAN REGIONAL WORKING GROUP (AMRWG)

Year of Establishment: 2003

#### Mandate:

- To assist in the development of broad-based ICID National Committee in each Latin American country;
- To obtain and disseminate information on irrigation and drainage in Latin America;
- · To organize national and international discussions on

relevant scientific and technical issues; and

• To provide the catalyst for promoting better contact with the ICID and other relevant international organizations.

Members: (1) Dr. Luis Rendon Pimentel, Chairman (Mexico, 2004); (2) Dr. Dennis Wichelns (USA, 2005); (3) Dr. Jaime Collado (Mexico, 2005); (4) Representative from Brazil; (5) Representative from Canada; (6) Representative from Chile; (7) Representative from Guyana; (8) Representative from Uruguay, and (9) Secretary General, ICID.\

**Observers:** (i) VPH. Dr. Jose A. Ortiz F.-Urrutia (Spain), and (ii) Portuguese Representative



Dr. Luis Rendon Pimentel

#### **Activities:**

Only a few active members were present during its 5th meeting on 14 October 2008 at Lahore.

It was proposed that Dr. Luis Rendón Pimentel (Mexico) may continue to be the Convener of AMRWG. The Central Office continued its efforts in pursuing the active National Committees (NC) to nominate a member to represent their NC in AMRWG.

New membership of countries yet to be in ICID fold was vigorously pursued.

No Workshop could take place either at Sacramento (2007) or at Lahore (2008) due to inadequate response from membership as proposed earlier. A new theme for the workshop, however, emerged. This was to focus on 'Food Vs Fuel: Implications for Water Resources'. It was proposed to organize this Seminar during 60th IEC / 5th ARC at New Delhi, India in December 2009.

The Brazilian National Committee of ICID (ABID) hosted the 'XVIII National Congress on Irrigation and Drainage' (CONIRD) during 27 July to 1 August 2008 at São Mateus in Brazil. Upon invitation from ABID President Ing. Helvecio Mattana Saturnino, President Lee participated in the Congress and also in a seminar held in Brasilia.

### ASIAN REGIONAL WORKING GROUP (ASRWG)

Year of Establishment: 1996

Webpage: http://www.asrwg.icidonline.org/

### Mandate:

- To focus on common topics and issues;
- To enhance the transfer of appropriate technology in irrigation and drainage to and from the Asian Region; and
- To encourage membership and coordinate activities in the region.

Members: (1) VP Karim Shiati, Chairman, 2006 (Iran, 1997); (2) Mr. Tei-Cheol Kim, Vice Chairman, 2007 (Korea, 2006); (3) Mr. Anthony J. Horton, Secretary, 2007 (Australia, 1997); (4) Mr. Khem Raj Sharma (Nepal, 1997); (5) Mr. A.S. Manohardas (Sri Lanka, 1997); (6) Dr. Siripong Hungspreug (Thailand, 1998); (7) Mr. B.M. Yusupov (Uzbekistan, 1998); (8) Mr. T. Anwar Khan (Bangladesh, 1998); (9) Mr. Waseem Nazir (Pakistan, 1999); (10) Mr. Kuo, Sneng-Feng (Chinese-Taipei, 2001); (11) Mr. Sastrodihardjo Siswoko (Indonesia, 2002); (12) Mr. C.D. Khoche (India, 2006); (13) Mr. Taner Kimence (Turkey, 2006); (14) VP Shinsuke Ota (Japan, 2006); (15) Mr. Mohd. Abdul Nassir bin Bidin (Malaysia, 2007); (16) Mr. Wang Xiodong (China, 2008) and (17) Secretary General, ICID

Observers / Permanent Observers: (i) FAO Representative (Dr. Klaus Siegert); (ii) ICARDA Representative (Dr. Theib Oweis); (iii) Dr. W.F. Vlotman (Australia); (iv) INPIM Representative (Mr. David J. Groenfeldt or Mr. Peter P.C. Sun, alternate); (v) IRRI Representative (Dr. Tu Phuc Tuong); (vi) IWMI Representative (Mr. Nanda Abeywickrema); (vii) IPTRID Representative (Mr. H.W. Denecke); (viii) World Bank Representative (Mr. Geoffrey Spenser); (ix) Mekong River Basin Representative

Activities: ASRWG held its 15th meeting on 13 October 2008 at Lahore. Members from only 5 countries attended the meeting. The printed version of the TF-LDCsAS Reports was distributed amongst the participants of ASRWG and IEC meetings. The WG appreciated the dedicated efforts of Dr. Taniyama, chairman of TF-LDCsAS, and the National Committees/ Committee of Japan,



VP Karim Shiati

Chinese Taipei, Australia and Iran for their financial support in bringing out the excellent report.

The Indian National Committee (INCID) will be hosting the 5th Asian Regional Conference in New Delhi, India in December 2009. The main theme for the conference will be "Improvement in Efficiency of Irrigation Projects through Technology Upgradation and Better Operation and Maintenance".

The 6th ARC would be hosted by Indonesia National Committee (INACID) from 10-16 October 2010 in Yogyakarta, Indonesia. The theme for the 6th ARC will be "Improvement of irrigation and drainage efficiency under the small land holding condition". The WG members suggested to include "Rural land readjustment for infrastructures" as a sub-theme of the conference.

In order to contribute to the Topic 1.1 "Adapting to climate change; understanding the impacts of climate change, vulnerability assessments and adoption on measures" under the Main Forum Theme 1 "Global Changes and Risk Management", ASRWG with the leadership of Dr. Shinsuke Ota (Japan) prepared a draft report on "A strategy for irrigation and drainage adapted to climate change in Asia" involving all Asian and Oceania countries. The draft report was circulated among the members. Dr. Ota presented the report at the 5th World Water Forum held at Istanbul in March 2009.

### EUROPEAN REGIONAL WORKING GROUP (ERWG)

Year of Establishment: 1995

Webpage: http://www.erwg.icidonline.org

#### Mandate:

- To promote awareness about critical 'ICID relevant' water issues at all levels in Europe;
- To pay special attention to the environmentally sustainable water management in Europe; and
- To encourage membership and coordinate activities in the region.

Members: (1) VP Dr.-Ing. Eiko Lübbe, Chairman (Germany, 2002); (2) VP Prof. Dr. Peter Kovalenko, Vice Chairman, 2005 (Ukraine, 1999); (3) Dr. Laszlo Hayde, Secretary (Hungary, 2005); (4) VPH Prof. dr. Brane Maticic (Slovenia, 1996); (5) Dr. Michele Angelo Cuccaro (Italy, 1996); (6) Prof. Dr. Ion Nicolaesco (Romania, 1996); (7) Mr. Pedro Eduardo da Cunha Serra (Portugal, 1996); (8) Mr. Nicos Tsiourtis (Cyprus, 1996); (9) Prof. Dr. Svatopluk Matula (Czech Rep., 1997); (10) Dr. Antanas Maziliauskas (Lithuania, 1997); (11) Dipl.-Ing. Frederick M. Cate (Austria, 1998); (12) VPH Dr. Ricardo Segura (Spain, 1999); (13) VPH Dr. Henri Tardieu (France, 1999); (14) Mr. Jaakko Sierla (Finland, 2001); (15) Dr. Davor Romic (Croatia, 2002); (16) Dr. Zvonimir Vukelic (Macedonia, 2002); (17) Mr. Mati Tonismae (Estonia, 2002); (18) Prof. Dr. A. Poulovassilis (Greece, 2003); (19) Dr. John Martin (Ireland, 2003); (20) Mr. Peter Pantelic (Serbia, 2003); (21) Dr. Pol Hakstege (The Netherlands, 2007); (22) Dr. Irina G. Pankova (Russia, 2007); (23) Mr. Claude Allain Vullier (Switzerland, 2007); and (24) Secretary General, ICID

Observers: (i) Mr. Mohammed Binbilidia (IME, France); (ii) Prof. Dr. Joachim Quast (Germany)

Ex-Officio Members: (i) Chairman to be appointed, ERWG Work Team on European Water Framework Directive; (ii) VPH Dr. G.G. Guluyk, Chairman, ERWG Work Team on Drainage (Russia); (iii) VP Prof. Peter Kovalenko, Chairman ERWG Work Team on Sustainable Irrigation Management (Ukraine) and (iv) ERWG Work Team on Water Related Risk Analysis (Chairman to be appointed)

Activities: The 14th meeting of the European Regional Working Group (ERWG) was held on 14 October 2008, Lahore, Pakistan. An interim meeting of ERWG was also held on 06 July 2008 in Helsinki prior to the 10th International Drainage Workshop held in Finland/ Estonia. Members from Germany, Ukraine, Finland, Estonia, Lithuania, and three observers were present at the interim meeting.

One of the objectives of ERWG is to develop co-operation amongst professionals and organizations engaged in water and land management, which is being successfully followed. ERWG members continued the dialogue on the topic: the Water Framework Directives (WFD) and its implementation through tools of the Common Agriculture Policy in the years 2007-2013.



VP Dr.-Ing. Eiko Lübbe

The new Directives can be accessed at http://ec.europa.eu/environment/water/water-framework/wfd\_newsletter.html or http://ec.europa.eu/environment/water/.

The WG accepted the idea of merging European Work Team on Drought (EWTDRO) and European Work Team on Floods (EWTFLO) to create a new Work Team under the name Work Team on Water Related Risk Analysis (EWTWRRA) during last meeting. The WG deliberated on the new mandate of the WT and its membership. It seemed appropriate to consider the impacts of extreme events on agricultural production at situations of water scarcity and inundation and to develop risk mitigation strategies. The proposals received from ITALCID, HUCID and GECID were discussed.

A document, title "Irrigation Sector Reform in Central and Eastern European Countries", based on the project results (Phase I), has been published and distributed as hard copy and CD during the previous meeting of the WG. Prof. Kovalenko distributed a new proposal for the Phase II of the project "Irrigation Sector Reform in Central and Eastern European Countries", prepared by the Ukrainian National Committee and Prof. Bart Schultz. However, because of financial problems, this work was required to be postponed.

The 10th International Drainage Workshop (IDW) was successfully organized by Finish and Estonian National Committees during 6-11 July 2008 at Helsinki and Tallinn. More information on 10th IDW was available on the web site: http://www.fincid.fi/idw2008.

The 23rd European Regional Conference will be hosted by Ukraine National Committee (UKCID) at Lviv, Ukraine in May 2009. The 24th European Regional Conference of ICID is proposed to be held in 2011 in The Netherlands. ERWG Letter 18 has been published (April 2008) and circulated. Copies of the newsletters can be viewed at <a href="http://www.erg.icidonline.org">http://www.erg.icidonline.org</a> and <a href="http://www.zalf.de/icid/erwg\_letter\_17">http://www.icid.org/Russia/</a>

### SPECIAL WORK TEAM ON ARAL SEA BASIN (ST-ARAL)

Year of Establishment: 1994

Webpage: http://www.icwc-aral.uz

#### Mandate:

- To assist in establishing broad based ICID National Committees in each Aral Basin country;
- To obtain and disseminate information on problems of Aral basin to other ICID countries with similar problems;
- To organize national and international discussions on related scientific and technical issues in the basin; and
- To cooperate with other international organizations in related activities.

Members: (1) VPH Victor A. Dukhovny, Chairman, 2005 (Uzbekistan, 1994); (2) Mr. John Osterberg (USA, 1996); (3) Prof. Dr. N. Hatcho (Japan, 2002); (4) Engr. M.S. Adamu (Nigeria, 2002); (5) Acad. Boris Kizyaev (Russia, 2002); (6) Mr. Ron W. Coley (Canada, 2003); (7) Mr. M. Falciai (Italy,

2004); (8) Mr. Bernard Vincent (France, 2005) and (9) Secretary General, ICID.

Permanent Observers: (i) Prof. Daene C. McKinney (IWRA); (ii) Dr. Carlos Garces-Restropo, IPTRID/FAO and (iii) The World Bank Representative

**Activities:** The 15th meeting of ST-ARAL could not be held at Lahore due to inadequate presence of its members.



VPH Victor A. Dukhovny

During the 5th World Water Forum held in Istanbul, President Madramootoo, Secretary General Gopalakrishnan discussed with Mr. Wouter Lincklaen Arriens, Lead Water Resources Specialist, ADB to explore the possibility of organizing a special session on Aral Sea Basin at the side lines of 5th Asian Regional Conference (ARC) to be held in New Delhi. Subsequently, VPH Victor Dukhovny, Chairman prepared proposal indicating scope of the planned session of Aral Sea Basin and sent to Asian Development Bank (ADB) for possible funding support.

### SPECIAL WORK TEAM ON LAKE CHAD BASIN (ST-LCB)

Year of Establishment: 2005

Webpage: http://www.st-lcb.icidonline.org/

### Mandate:

- To assist in the establishment of broad based ICID National Committees in each of the Lake Chad Basin country;
- To obtain and disseminate information on the problems of Lake Chad Basin to other ICID member countries with similar problems;
- To organize national and international discussions on related scientific and technical issues in the basin; and
- To co-operate with other international organizations in related activities.

Members: (1) VPH Engr. I.K. Musa, Chairman (Nigeria, 2007); (2) Dr. M.S. Adamu (Nigeria, 2005); (3) Dr. Sizwe Mkhize (South Africa, 2005); (4) Dr. H. Fahmy (Egypt, 2005); (5) Prof. Tom Franks (UK, 2005); (6) VPH Prof. V.A. Dukhovny (Uzbekistan, 2005) and (7) Secretary General, ICID

Permanent Observers: (1) ARID-RAID Representative (2) LCBC Representative; (3) FAO Representative (4) IPTRID Representative, and (5) World Bank Representative

Activities: Lake Chad Basin is a transboundary basin stretching over an area of 2.4 million km2 covering the countries of Chad, Niger, Central African Republic, Nigeria, Algeria, Sudan, Cameroon, and Libya. Key environmental problems of the Lake Chad basin are variable hydrologic regime and availability of fresh water; water pollution; loss

of bio-diversity; destruction and modification of eco-system; and sedimentation of rivers and water courses.

The Special Work Team held its 3rd meeting at Lahore on 14 October 2008. In absence of the Chairman VPH Engr. Musa, Secretary General M. Gopalakrishnan took over as the interim chair and conducted the meeting. In order to complete its



VPH Engr. I.K. Musa

activities effectively, the 59th IEC at the request of the Work Team has extended the tenure up to 2011. Transfer of part of inflows from the Congo/ Oubangui rivers into the Lake Chad is advocated as a means of stopping the drying up of gradual restoration of normal level of the lake. Accordingly, an inter- basin water transfer project was launched in 1994. Mr. Boubakari Mana, LCBC representative explained the contents of the LCB-IBWT project. He also volunteered to interact with as many Chad basin countries as possible.

An interim meeting of the ST was organized on 17 December 2008 at the side lines of the FAO Conference "Water for Agriculture and Energy in Africa: The Challenge of Climate Change" held at Sirte, Libya in December 2008. The meeting was attended by representatives of LCBC, Libya, and Nigeria. The work team proposed to extend an invitation to African Development Bank, LCBC Regional Parliamentary Committee, and the United Nations Economic Commission for Africa (UNECA) and other relevant international organizations to nominate their professionals as permanent observers. It was also proposed to compile presentations on LCBC made at Sirte into a report to serve as a tool for advocacy by ICID. Accordingly, the drafting committee comprising Engr. I.K. Musa, Mr. Boubakari Mana and Mr. Mohammad Bila was formed at the meeting.

The topic of the Sirte conference aptly demonstrated significant threat posed by global climate change to food security, especially for the poor resource based countries in the continent. The ST members urged ICID to involve more and more of its activities with an 'Africa Focus' as Africa will be the worst affected by climate change although it contributed the least carbon emission. A background paper for presentation at roundtable – To Lake Chad was circulated by the LCBC.

Secretary General M. Gopalakrishnan participated in the FAO Conference. Besides actively contributing to a new initiative AgWA (Agricultural Water for Africa), he interacted with FAO to enhance the cooperation between FAO and ICID in the programmes having an 'African focus'. It was also urged that IPTRID's Africa node should be initiated to achieve the desired regional focus in its programmes. Re-activation of the Libyan National Committee on Irrigation and Drainage (LICID) formed part of Secretary General's mission in Sirte.

### COMMITTEE ON CONGRESSES/ CONFERENCES (C-CONGR)

Year of Establishment: 1990

Webpage: http://www.c-congr.icidonline.org

### Mandate:

- To recommend general improvement in conduct of Congresses/Conferences Sessions;
- To recommend tasks and duties for General Reporters and Panel of Experts for Congress Questions and Special Session:
- To study and establish, if needed, the basic guidelines for recommending the tasks and responsibilities of National Organizing Committees;
- To establish appropriate procedures for selection of Congress Questions, Special Sessions and Symposia; to establish procedures for scheduling of most appropriate workshops, seminars, etc. to be held at the time of Congress;
- To establish procedures for scheduling of most appropriate workshops, seminars etc. to be held at the time of Congress;
- To make recommendations on the number and type of simultaneous meetings at Congresses/Conferences in order to improve effectiveness and attendance;
- To study and accord advice to the National Committees for methods to adopted in each case for an effective follow-up of the Conclusions and Recommendations of Congresses/ Conferences; and
- To make recommendations on printing the proceedings for distribution of abstracts in advance.

Members: (1) Mr. Mohammed Kazem Siahi, Convener (Iran) – w.e.f 18 October 2008; (2) VP Dr. Illahi B. Shaikh (Pakistan); (3) Indian Representative, INCID (India); (4) US Representative, USCID (USA); (5) Indonesian Representative,

INACID (Indonesia); (6)
Netherlands Representative,
NETHCID (The Netherlands);
(7) Ukraine Representative,
UKCID (Ukraine); (8) Nigerian
Representative, NINCID (Nigeria);
(9) Mali Representative, AMID
(Mali); (9) Dr. Vijay K. Labhsetwar,
ICID CO

Activities: The 19th meeting of the Committee on Congresses/ Conferences (C-CONGR) was



Mr. Mohammed Kazem Siahi

held on 14 October 2008 at Lahore. Vice President Engr. Dr. Illahi B. Shaikh (Pakistan) was the Convener of the C-CONGR. Mr. Javeed Iqbal Bokhary, Secretary PANCID briefly apprised the Committee about the arrangements made for hosting the 20th ICID Congress and 59th IEC Meeting at Lahore. Mr. Mehrzad Ehsani, representative of IRNCID gave a presentation on the status of preparation and detailed planning for the 21st ICID Congress and 62nd IEC in 2011 at Tehran, Iran. No representative from Nigeria was present during the meeting. Members were concerned over the 60th IEC at Abuja in Nigeria in 2009 as scheduled. (This item was later discussed in the IEC meeting and Nigeria's letter opting out to host 60th IEC was read out. The 60th IEC meetings were later decided to be held in New Delhi along with 5th ARC).

Vice President Dr. A. Hafied A. Gany representative of INACID gave a presentation on the status of preparation and detailed planning for the 61st IEC meeting and 6th ARC in Indonesia. The revised dates are 10-16 October 2010.

Mr. Voroshnov Sergey, representative from Ukraine National Committee (UKCID) gave a presentation on the status of preparation and detailed planning of the 23rd European Regional Conference (ERC) in May 2009 at Lviv, Ukraine.

It is customary to have a new Convener of C-CONGR from the host National Committee of the next Congress i.e. 21st ICID Congress in 2011 at Tehran, Iran. The IRNCID nominated Mr. Mohammed Kazem Siahi to be the new Convener of C-CONGR.

### WORKING GROUP ON YOUNG IRRIGATION PROFESSIONALS FORUM (WG-YPF)

Year of Establishment: 1993

Webpage: http://www.wg-ypf.icidonline.org/

#### Mandate:

- To provide an international platform for young irrigation and drainage professionals and encourage and promote (a high standard of professional development in the subjects of irrigation, drainage and environment) amongst the young professionals;
- To facilitate the development, acquisition and wider dissemination of knowledge and information about irrigation, drainage, flood control and environment amongst the young professionals;
- To maintain and enhance links with national and international youth having interests in the related subjects or the activities relevant to ICID objectives; and
- To educate young professional about ICID's role, objectives, activities, structure, constitution and Bylaws.

Members: (1) Mr. Ali Reza Salamat, Chairman, (Iran, 2000); (2) Dr. Sanjay Belsare, Vice Chairman, (India, 2003); (3) Ms. Nepveu de Villemarceau au Audrey, Secretary (France,

2002); (4) Dr. Maurits Ertsen (The Netherlands,2002); (5) Dr. Nariman Shamsutdinov (Russia, 2003); (6) Ms. Jianxin Mu (China, 2003); (7) Mr. Bennie Grové (South Africa, 2003); (8) Mr. Hidekazu Tagashira (Japan, 2006); (9) Engr. Qazi Tallat Mahmood Siddiqui (Pakistan, 2006); (10) Mr. Velayudan, Sv., Kalaiselvam (Malaysia, 2006) and (11) Dr. Kwang-Ya Lee (Korea, 2007)



Mr. Ali Reza Salamat

**Activities:** The 14th meeting of WG-YPF was held on 13 October 2008 at Lahore. The meeting took stock of the progress and noted that 23 National Committees have established their Young Professional Forums.

The Chairman presented the updated website (www.wg-ypf.icidonline.org) of the group. Dr. Ir Maurits Ertsen (The Netherlands) demonstrated the on-line web-based platform for the young professionals during the meeting.

A Workshop on "Capacity Building and Training in Water Sector: The Role of Young Professionals" was also held on 17 October 2008 at Lahore. All the papers of the workshop have been posted on the group's website. The WG thanked Dr. Ertsen (The Netherlands) and Dr. Sanjay Belsare (India) for their efforts in preparing the call for papers and in organizing the workshop.

### **PCTA Workbodies**

The Permanent Committee on Technical Activities (PCTA) has 16 Workbodies categorized under four strategy themes, namely - Knowledge, Basin, Systems, and On-Farm. The following is a brief description about the mandate, membership, and key activities carried out by each of these working groups/ committees during the period April 2008 to March 2009.

### STRATEGY THEME: KNOWLEDGE

### ICID JOURNAL EDITORIAL BOARD (EB-JOUR)

Year of Establishment: 1994

Webpage: http://www.icid.org/wiley\_journal.html

#### Mandate:

- To ensure with the Editor that the Journal is published in accordance with editorial policy;
- To select and recommend to IEC, through PCTA, the appointment of Editor and Associate Editors;
- To review and update editorial policy when required, to conform with the developing ICID objectives;
- To address and resolve issues pertaining to the Journal; and
- To review guidelines for authors, manuscript reviewers and book reviewers and liaise and coordinate with ICID workbodies.

Members (Editorial Team): (1) PH. Prof. dr. Bart Schultz (The Netherlands, 2002) as Chairman; (2) VPH Prof. Hector Malano (Australia, 2008); and (3) Dr. Nick C. van de Giesen (The Netherlands, 2008) as Joint Editors; (4) Ir. Prof. J.M. van Hofwegen (The Netherlands, 2008) as Editor Emeritus.

Associate Editors: (5) VPH Prof. Dr. R. Nakamura (Japan, 2001); (6) Dr. Bryan P. Thoreson (USA, 2001); (7) Prof. Dr. James Murray de Jagar (South Africa, 2003); (8) Mrs. Isabelle M. Proulx (Canada, 2003); (9) Prof. (Mrs.) Ir. Indreswari Guritno (Indonesia, 2004); (10) Dr. Benjamin de Leon Mojarro (Mexico, 2005); (11) VPH Dr. Henri Tardieu (France, 2007).

Members: (12) VPH Larry D. Stephens (USA, 2001); (13) VPH Prof. L.S. Pereira, (Portugal, 2001); (14) Prof. Daniele de Wrachien (Italy, 2001); (15) PH. Ir. Keizrul bin Abdullah, (Malaysia, 2001); (16) VPH Dr. S. Nairizi (Iran, 2001); (17)

VPH Ing. Manuel Contijoch Escontria (Mexico, 2001); (18) Dr. C. Perry (UK, 2001); (19) Dr. Muhammad Latif (Pakistan, 2002); (20) VPH Prof. Kwun, Soon-Kuk, (Korea, 2003); (21) Prof. Dr. Joachim Quast (Germany, 2004); (22) Prof. Y.C. Tan (Chinese Taipei, 2006); (23) Dr. Bruce Lankford (UK, 2007); (24) Prof. Dr. Jinzhong Yang (China, 2007) and (25) Dr. Vijay K. Labhsetwar (ICID, CO).



PH. Prof. Dr. Bart Schultz

Activities: The 15th meeting of the Journal Editorial Board (EB-JOUR) was held on 14 October 2008 at Lahore, Pakistan. Dr. Hector Malano (Australia) and Prof. Nick van de Giesen (The Netherlands) are the new Joint Editors. Prof. Bart Schultz continues as the Chairman. Reports for the year 2007 and for the period January - July 2008 were presented and discussed at the Lahore meeting.

A Special Issue on Capacity Building for Agricultural Water Management in cooperation with the Working Group on Capacity Building, Training and Education (WG-CBTE) has been published as issue 57.3 in July 2008. The EB-JOUR has chosen a new cover for its Journal 'Irrigation and Drainage' for its issues commencing from January 2009.

The EB-JOUR was adjudged for the ICID 'Best Performing Workbody Award 2008' for its outstanding work during 2005-2008. The 'Best Paper Award 2008' was jointly made to two papers, viz.,

(i) 'Revisiting currently applied pipe drain depths for waterlogging and salinity control of irrigated land in the (semi) arid zone' by L.K. Smedema, (Issue:56.4); and (ii) 'Conjunctive Water Management Options: Examples from Economic Assessment of System-level Water Saving through Liuyuankou Irrigation System, China' by S. Khan, S. Mushtaq, Y. Luo, D. Dawe, M. Hafeez, and T. Rana, (Issue: 56.5).

The Journal 'Irrigation and Drainage' is being published under Agreement with M/s. Wiley-Blackwell for the eighth year in succession. A fresh 'Agreement' with M/s Wiley-Blackwell has been signed for the period 2009-2013.

### COMMITTEE ON PUBLIC RELATIONS AND PUBLICATIONS (C-PR&P)

Year of Establishment: 1992

#### Mandate:

- To describe the economic, social and environmental aspects of water resources projects which help provide food and fibre to mankind through irrigation;
- To identify the audiences and their interests, and suggest the appropriate type of communication and who should carry it out;
- To encourage National Committees to adopt a proactive role in communicating the role of water resources projects in serving mankind;
- To encourage the use of communication specialists to ensure that the ICID public relations effort is effective;
- General management tasks Development of concept of ICID publication series; set procedure for approval of publications; identification of (inter) national publishers and setting up of cooperative arrangements; marketing and pricing; and cooperation with publishers and National Committees for sale of publication; and

Editorial management tasks - Monitoring of and liaison with authors and editors on proposed and approved manuscripts; classification of proposed manuscripts for the relevant ICID services; calculation of prices and costs; fixing number of copies of books; public relations for publications, recommendations on subsequent publications of ICID.



VPH Larry D. Stephens

Members: (1) VPH Larry D. Stephens, Chairman (USA, 1991); (2) PH Peter S. Lee (UK, 1993); (3) Ir. Paul van Hofwegen, (The Netherlands, 2008); (4) Prof. Hsieh, Yung-Hsu (Chinese Taipei, 1998); (5) Ms. Anne Currey (Australia, 1998); (6) VPH Dr. Dia El-Din Ahmed El-Quosy (Egypt, 1998); (7) Prof. Atef Hamdy (Italy, 2004); (8) Mr. B.S. Ahuja (India, 2005); (9) VPH Dr. Javad Farhoudi (Iran, 2006), and (10) Secretary General, ICID

Ex-Officio Member: (1) Mr. Satit Maneepai (Thailand).

**Activities:** Due to inadequacy of members present during the occasion, the meeting of C-PR& P could not take place, as scheduled.

### WORKING GROUP ON TECHNOLOGY AND RESEARCH UPTAKE AND EXCHANGE (WG-TRUE)

Year of Establishment: 2007

Webpage: http://www.wg-true.icidonline.org/

### Mandate:

To support research and development of technology and innovation processes for improved irrigation and drainage.

Members: (1) Prof. L. Vincent, Chairperson, 2007 (The Netherlands, 1995); (2) Dr. (Mrs.) Shaden Abdel-Gawad, Vice Chairperson, 2007 (Egypt, 2001); (3) Dr. John A. Replogle, Secretary, 2007 (USA, 1999); (4) VP Prof. L. Ubertini (Italy, 1989); (5) Dr. H. Fahmy (Egypt, 1995); (6) Mr. A. Delacourt (France, 1995); (7) Mr. J. Lelkes (Hungary, 1998); (8) Mr. Sietan Chieng (Canada, 2001); (9) Dr. (Mrs.) Irene Bondarik (Russia, 2001); (10) Prof. Jiesheng Huang (China, 2003); (11) Prof. J.G. Annandale (South Africa, 2003); (12) Prof. Yuanhua Li (China, 2003); (13) Mr. S.K. Chaudhuri (India, 2003); (14) Mr. Geoff Pearce (UK, 2003); (15) Mr. Ezzatollah Farhadi (Iran, 2005); (16) Dr. K. Palanisami (India, 2005); (17) Dr. Mohammud Che Husain (Malaysia, 2005); (18) Mr. Stephens Mills (Australia, 2005); (19) Dr. Yohei Sato (Japan, 2005); (20) Mr. Ian William Makin (UK, 2006); (21) Dr. Enrique Playan (Spain, 2006); (22) Mexican representative (MXCID); (23) Nigerian representative (NINCID); (24) Indonesian representative (INACID) and (25) Secretary General, ICID.

Observers / Permanent Observers: (1) Dr. Carlos Garces-Restrepo (Italy), IPTRID; (2) FAO Representative; (3) World Bank Representative; (4) IWMI Representative; (5) PH Peter Lee, CG-IPTRID, UK; (6) Mr. Campoare Moussa Laurent, (ARID-Burkina Faso) and (7) VPH Dr. Hussein El-Atfy (Egypt).



1st meeting of WG-TRUE at Lahore

Activities: The 1st meeting of the WG-TRUE was held under the Chairmanship of Dr. H. Fahmy (Egypt) in absence of the Chairperson/ Vice Chairperson/ Secretary. The meeting reviewed the activities suggested by the two former workbodies, namely, Working Group on Research and Development (WG-R&D) and IPTRID Advisory Committee (AC-IPTRID) and decided to keep its tenure for a four year duration so as to accomplish its mandated/ suggested activities.

### WORKING GROUP ON COORDINATION OF DICTIONARIES (WG-CD)

Year of Establishment: 1998

Webpage: http://www.wg-cd.icidonline.org/

### Mandate:

- To encourage preparation and publication of translations of the English/French revised edition of the Multilingual Technical Dictionary (MTD) on Irrigation and Drainage into additional languages;
- To produce copies of the MTD in other formats, especially electronic, so as to make it more valuable to users; and
- To produce periodic updates on all sections of the MTD.

Members: (1) Mr. Bruno Molle, Chairman, (France); (2) Dr. E. Kruse (USA); (3) Dr. P. Buri (Italy); (4) VPH Prof. Cai Lingen (China) and (5) Mr. K.N. Sharma, Secretary (ICID, CO).

Observers / Permanent Observers: (i) FAO representative; (ii) WMO representative; (iii) IWMI representative; (iv) VPH Prof. Hector Malano (Australia), Chairman, PCTA and (v) VPH Larry D. Stephens (USA), Chairman, C-PR&P.

Activities: The WG-CD held its 11th meeting on 15 October 2008 at Lahore, Pakistan.

The WG reviewed the status of revision and publication of revised version of MTD 2002 on CD-ROM. It was noted that the French translation of 20 Chapters of revised English version of the MTD had been completed. It was decided to retain the four Chapters in their original form (both in English and French) since reviewers could not be identified for their revision. As advised by the Chair, it was decided to include only the English version



Mr. Bruno Molle

of Chapter XXI on Computer Technology since at present most of the terms in the revised English Chapter did not have accepted translation in French. This will also avoid delays in bringing out the MTD on account of the slow progress in translating this lone Chapter.

The Central Office had initiated various steps to publish the revised version of MTD on CD-ROM which is expected to be released during the 60th IEC meeting at New Delhi, India in December 2009.

The translation of the MTD into Bahasa (Indonesian) language in its draft form was completed in January 2008 and a 'discussion team' was set up in July 2008 to correct the draft based on subject matter. The Indonesian version of the MTD was expected to be published in April 2009 as reported by INACID at Lahore. The progress of the Persian and Turkish versions of the revised MTD will be reported next year.

# WORKING GROUP ON HISTORY OF IRRIGATION, DRAINAGE AND FLOOD CONTROL (WG-HIST)

Year of Establishment: 1998

Webpage: http://www.wg-hist.icidonline.org/

### Mandate:

- To motivate ICID National Committees in various countries to set up their National Working Groups and provide them guidance to compile, publish, update and/ or translate documents on history of irrigation, drainage, flood control, and river engineering, incorporating relevant agricultural, political, socio-economic, climatological and geographical aspects for proper understanding of the technological developments in the subject, if possible chronologically; and
- To organize seminars at ICID Congresses in order to show to experts the importance of historical studies when planning new projects.

Members: (1) Prof. N. Hatcho, Chairman, 2002 (Japan, 1996); (2) Dr. Hubert Toussaint, Secretary (The Netherlands, 2005); (3) VPH Dr. Ricardo S. Graino (Spain, 1992); (4) Mrs. F. Sinatti (Italy, 1994); (5) Mrs. Xuming Tan (China, 1997); (6) Dr. S.H. Lee (Korea, 1997); (7) Dr. Naser Shayan (Iran, 1998); (8) VP Dr. Illahi B. Shaikh (Pakistan, 2000); (9) Dr. Laszlo Hayde (Hungary, 2001); (10) Prof. Zorko Kos (Croatia, 2002); (11) Mr. Aliyu Jada (Nigeria, 2002); (12) Mr. Satit

Maneepai (Thailand, 2002); (13) Dr. Alexus Vogel (Austria, 2002); (14) Mr. B.D. Pateria (India, 2003); (15) Mr. Jean Verdier (France, 2003); (16) VP Dr. Hafied A. Gany (Indonesia, 2005); (17) Mr. Charles L. Abernethy (UK, 2005); (18) Dr. Ing. Klaus Roettcher (Germany, 2006); (19) Prof. Wen-Pin Shu (Chinese Taipei, 2006); (20) Dr. Jeong-Woo, Na (Korea, 2007); and (21) Secretary General, ICID



Prof. N. Hatcho

**Permanent Observers:** (i) Dr. (Mrs.) B. Dolfing (The Netherlands); and (ii) Dr. Ir. M. Ertsen (IWHA)

**Activities:** The 11th meeting of WG-HIST was held on 13 October 2008 at Lahore, Pakistan under the Chairmanship of Dr. Hubert Toussaint, Secretary in absence of the Chairman.

NETHCID had agreed to formulate their contribution on 'History of Irrigation in Eastern Asia'. Dr. Segura had contacted the Chairman and informed that the preparation of 'History of Irrigation, Drainage and Flood Control in Southern Europe and the Mediterranean' is in the final stage of completion.

Dr. Klaus Roettcher (Germany) had informed the group about the phase-I of the project and that of writing of a compendium with a focus on Mediterranean area and the Middle East and requested all the members for their comments. The issue regarding loading of fresh information related to group's activities/ mandated tasks on concerned National Committee's website and linking it with the WG webpage was deliberated during the meeting. The group suggested for seeking concerned National Committee's support in this regard.

The group accepted the proposal of Dr. Hafied Gany towards organizing a History Seminar based on the documents on 'History of Irrigation in Eastern Asia', focusing especially on the use of modern water technology at the time of 61st IEC meeting in Yogyakarta in 2010. Dr. Laszlo Hayde (Hungary)

indicated that the Delft University would organize a 'Water History' Conference during 16-19 June 2010 and invited members to attend the event.

The meeting agreed to the view of the Chairman that he would function as a "person-in-charge" and decided that the nomination/ election of a new Chairman be postponed until the 12th meeting of the group. The group has proposed its new name as Working Group on "History of Agriculture Water Management".

### STRATEGY THEME: BASIN

### WORKING GROUP ON GLOBAL CLIMATE CHANGE AND AGRICULTURAL WATER MANAGEMENT (WG-CLIMATE)

Year of Establishment: 2005

Webpage: http://140.115.62.223/raywu/ICID/index.php

#### Mandate:

- To review the progression of and predictions for Global Climate Change (GCC) and climate variability;
- To explore and analyze the medium-term implications of climate change and climate variability for irrigation, drainage, and flood control;
- To stimulate discussion and raise awareness of waterrelated GCC issues within the ICID family;
- To stimulate discussion at national scales among scientists, policy makers, and, through the media, the general public on GCC and water; and
- To join the international dialogue on GCC and water

Members: (1) VPH Dr. Mark Svendsen, Chairman (USA, 2006); (2) Dr. Tsugihiro Watanabe, Vice Chairman (Japan, 2006); (3) Prof. Roland E Schulze, Secretary (South Africa, 2006); (4) VPH Dr. H. Tardieu (France, 2006); (5) VP Dr. Karim Shiati (Iran, 2006); (6) VPH Dr. André Musy (Canada, 2007); (7) Mr. Ray Shyan Wu (Chinese Taipei, 2007); (8) Dr. Kim Russell (Australia, 2007); (9) Ms Nurgül

Üzücek (Turkey, 2007); (10) Dr. Krishna Kumar Kanikicharla (India, 2007); (11) Prof. Heping Ho (China, 2008); and (12) Secretary General, ICID.

Observers/Permanent Observers: (1) Mr. Avinash C. Tyagi,

WMO; (2) Dr. Claudia Ringler, IFPRI; (3) IWMI Representative, and (4) FAO Representative

Activities: WG-CLIMATE held its 3rd meeting on 14 October 2008 at Lahore in which members and observers belonging to six countries (Canada, China, Finland, Iran, Pakistan, and USA) were present. The nomination of Prof. Heping Hu (China) was accepted for the membership. Dr. Ray Shyan



VPH Dr. Mark Svendsen

Wu (Chinese Taipei) acted as the Chairman and apprised members about WG's contribution to 5th World Water Forum on the Topic 2.3 "Water and Food for Ending Poverty and Hunger".

President Peter Lee apprised members about his participation in a World Water Assessment Programme (WWAP) expert group on storages. The importance of storage to the resilience and productivity of agriculture was brought out.

Mr. Maurice Roos (USA) made a brief presentation on "Sea level rise: What is the Water Engineer to do with all those projections?" VP Mark Svendsen and VP Karim Shiati were the nominees from ICID for the Task Force on "Water and Climate" initiated by UN-Water under the overall coordination of World Meteorological Organization (WMO).

VP Karim Shiati attended the first meeting of the Task Force on Water and Climate held on 15 August 2008 on sidelines of the Stockholm World Water Week 2008.

### WORKING GROUP ON COMPREHENSIVE APPROACHES TO FLOOD MANAGEMENT (WG-CAFM)

Year of Establishment: 1999

Webpage: http://www.wg-cafm.icidonline.org/

### Mandate:

- To identify and disseminate various structural and nonstructural measures of flood management; and
- To study the social, political and economic aspects of flood mitigation measures, ecologically sound development, international cooperation, as well as people's participation in disaster preparedness.

Members: (1) VP Dr. Illahi B. Shaikh, Chairman, 2007 (Pakistan, 2001); (2) Prof. J.L. Montanes, Secretary (Spain, 1987) until 17 October 2008; (3) Mr. V.C. Ballard (Australia, 1992); (4) Dr. Takeshi Hata (Japan, 1993); (5) Dr. Lajos Szlavik (Hungary, 1996); (6) Prof. M.F. Viljoen (South Africa, 1997); (7) Mr. P. Burrows (UK, 1999); (8) Dr. K. Emami (Iran, 1999); (9) Mr. Jin Soo Kim (Korea, 2000); (10) Prof. Josip Petras (Croatia, 2002); (11) Mr. Ahmet Seren (Turkey, 2006); (12) Mr. Maurice Roos (USA, 2006); (13) Prof. dr. Franc Steinman (Slovenia, 2006); (14) Mr. A.K. Ganju (India, 2007) (15) Ir. Jos van Alphen (The Netherlands, 2007); (16) Dr. Jianming Ma (China, 2008); and (17) Secretary General, ICID.

**Permanent Observers:** (i) FAO Representative; (ii) UNDRO Representative; (iii) WMO Representative; and (iv) World Bank Representative; (v) Mr. Ahmed Kamal (Pakistan).

**Activities:** The 23rd meeting of the WG-CAFM was held on 14 October 2008 at Lahore. Dr. Jianming Ma (China) was accepted as a new member for WG-CAFM. Mr. Ahmed



23rd meeting of WG-CAFM at Lahore

Kamal (Pakistan) was accepted as an Observer and assigned the duties of acting Secretary of the WG-CAFM until a new Secretary is elected.

The international workshop on "Flood Management: Flood Monitoring and Early Warning" was held on 15 October 2008 at Lahore. The topics for the workshop were: (i) Flood plain management; (ii) Planning and design of river training works; (iii) Flood forecasting, monitoring and early warning systems; (iv) Management of floods in the wake of rapid melting of glaciers due to global warming; and (v) Structural and non-structural measures for the management of the flash flood. Chairman Dr. I.B. Shaikh and Mr. Kamal made presentations on Flash Floods/Flood Management. In all, 12 papers were presented and the workshop was attended by about 40 participants.

The WG discussed the proposal of Mr. Kamran Emami, IRNCID on "Value Engineering" and requested him to make a detailed presentation in the next ICID meeting. It was decided to retain the present structure and name of the WG-CAFM, while agreeing to consider new issues like climate change, sea level rises, flash floods, adaptation strategy of people living in flood prone areas etc.

### WORKING GROUP ON SUSTAINABLE DEVELOPMENT OF TIDAL AREAS (WG-SDTA)

Year of Establishment: 2001

Websites: http://www.wg-sdta.icidonline.org, and http://www.webbard.co.kr

### Mandate:

- To collect information about the natural environment in tidal areas around the world;
- To identify sustainable development and conservation options in the tidal areas; and
- To find a balance between the preservation and development of tidal areas.

Members: (1) Dr. Park Sang Hyun, Chairman (Korea, Rep. of, 2002); (2) Mr. Jonathan Simm, Vice Chairman (UK, 2002); (3) Ir. Henk P. Ritzema, Secretary (The Netherlands, 2002); (4) VPH Prof. Cai Lingen (China, 2002); (5) Dr. Indreswari Guritno (Indonesia, 2002); (6) Mr. E.J. James

(India, 2002); (7) Dipl. Ing. Bernd Probst (Germany, 2003); (8) Mr. Ueda Kazumi (Japan, 2003) (9) Dr. Ruey-Chy Kao (Chinese Taipei, 2007); (10) Mr. Tech Wang Chaw (Malaysia, 2007) and (11) Secretary General, ICID.

Observers: (i) Mr. Daesu Eo (Korea, Rep. of); (ii) Mr. Robiyanto Hendro Susanto (Indonesia) and (iii) FAO/IPTRID Representative



Dr. Park Sang Hyun

Activities: The 7th meeting of the

WG-SDTA was held on 14 October 2008 at Lahore, Pakistan. The business of the meeting could not take place actively in view of scarce attendance of members. However, in an interim meeting of the WG held in February 2009 in Chinese Taipei, a lot could be achieved.

In the interim meeting the progress on various items was discussed and future plan for publication of the Handbook on SDTA was decided. The drafts of Chapter 1, 2, 5 and 7 have been completed. Chapter 3 and 4 were merged and a draft of the merged chapter is in preparation, besides the Chapter 6. The 'Vision and Principles' for SDTA, developed by Ir.

J. Simm (UK) and Dr Henk Ritzema (The Netherlands) have been included in Chapter 1. The printed version of the SDTA Handbook was proposed to be released during IEC meeting in Indonesia in 2010.

Dr. Park, Mr. Simm and Dr. Ritzema prepared a position paper "Development of tidal areas, some principles and issues toward sustainability" which was submitted and accepted for publication in the Special Issue of the 'Journal Irrigation and Drainage' published on the occasion of the 5th World Water Forum held in Istanbul in March 2009. The WG was considering to contribute to a Special Issue on SDTA of ICID Journal on Irrigation and Drainage.

The Council of Agriculture, Executive Yuan, Taiwan; the WG-

SDTA, the Chinese Taipei Committee of ICID (CTCID), and the Chi-seng Water Management Research and Development Foundation, Taipei jointly organized an international workshop on 'Tidal area feature and natural processes' during 24-26 February 2009 in Taipei. The CTCID invited the working group members to participate and present their papers. The group also proposed to organize a workshop on SDTA at the time of 60th IEC meeting in December 2009 at New Delhi, India. The theme of the workshop will be "Monitoring Systems for Sustainable Development of Tidal Areas". Mr. Johnathan Simm resigned during the year his role as Vice-Chairman of the WG due to other pressing assignments. The Working Group acknowledged his efforts and contributions in preparing the handbook and the position paper.

### WORKING GROUP ON ENVIRONMENT (WG-ENV)

Year of Establishment: 2008

(Erstwhile Working Group on Environmental Impacts of Irrigation, Drainage and Flood Control Projects; 1986 -2008)

### Mandate:

To provide guidance to policy makers, planners, designers, and managers in the irrigation and drainage sector on the environmental aspects. The environmental aspects are physical, chemical, ecological, socio-economic, as well concern to the effects on climate and human health. By looking at environmental aspects the group will aim at for management of a sustainable environment, maximizing positive and minimizing adverse effects of irrigation and drainage systems.

Members: (1) Dr. Hu Heping, Chairperson, 2005 (China, 2000); (2) Prof. Yih-Chi Tan, Vice Chairman, 2005 (Chinese Taipei, 1995); (3) Dr. Ge van den Eertwegh, Secretary, 2006 (The Netherlands, 2005); (4) Mr. Barkat Hadid (Syria, 1991); (5) Dr. Smiljan Juvan (Slovenia, 1995); (6) Dr. Shaden Abdel Gawad (Egypt, 1996); (7) VP Dr. Eiko Lubbe (Germany, 1997); (8) Prof. Almeida Fernandez (Portugal, 1997); (9) Mr. Mohammed Kazem Siahi (Iran, 2000); (10) Mr. Osmo Antero Purhonen (Finland, 2002); (11) Mr. Stefano Salbitani (Italy, 2003); (12) Dr. Choi, Joong-Dae (Korea, 2003); (13) Mr. Belguenani Hassane (Morocco, 2003); (14) Prof. Dr. Natha Hungspreug (Thailand, 2003); (15) VPH Dr. Jose A. Ortiz Fdz.-Urrutia (Spain, 2005); (16) Dr. Dennis Wichelns (USA, 2005); (17) VP Dr. Illahi B. Shaikh (Pakistan, 2006); (18) Prof. Dr. N. Hatcho (Japan, 2006); (19) Dr. Serge Marlet (France, 2006); (20) Mr. Taner Kimence (Turkey, 2006) and (21) Secretary General, ICID

Observers/Permanent Observers: (1) FAO Representative; (2) ICOLD Representative; (3) World Bank Representative; (4) Dr. D. Zimmer, France; (5) Mr. Primoz Banovec, Slovenia; (6) VPH Dr. H. El-Atfy, Egypt and (7) VPH Prof. Hector Malano, Australia



Dr. Hu Heping

Activities: At its 22nd meeting, the erstwhile Working Group on Environmental Impacts of Irrigation, Drainage and Flood Control Projects (WG-ENV) held at Sacramento, decided to wind up its activities and form a successor group. At Lahore, the Group was renamed as 'Working Group on Environment (WG-ENV)'.

The newly constituted WG-ENV held its maiden meeting on 13 October 2008 at Lahore. The Group has its new mandate and agreed to develop a website and upload the documents that are of relevance. It was also decided that the Secretary will act as an editor and a coordinator of the paper for the Special Issue of ICID Journal. The Secretary agreed to prepare one of the chapters and circulate it amongst the members for their views/ comments. The WG-ENV will review the position paper and present at the time of the 60th IEC at New Delhi in 2009, for consideration.

### WORKING GROUP ON WATER MANAGEMENT IN WATER STRESSED REGIONS (WG-DROUGHT)

Year of Establishment: 2008;

Webpage: http://www.wg-iadws.icidonline.org

### Mandate:

The mandate covers three thematic areas as follows;

**Drought management strategies:** This thematic topic mainly intends to capture field experiences of the implementation of drought risk management strategies as far as livestock and crop production and rural livelihood improvement are concerned.

**Coping with water scarcity:** The topics to be addressed under this theme include:

Critical evaluation of the validity of the crop water requirement computations based on climate data as a tool to be used in coping with water scarcity; Approaches and strategies for incorporating economical justification when deciding the amount of water to be allocated for agricultural production; Re-defining, as necessary, the conventional irrigation efficiency concept; and Design, operation and maintenance of sand dams - Under-ground water reservoirs.

Rainfall management for sustainable agriculture: This topic may, at the outset, seem to be outside the scope of ICID. However, if the ultimate objective of the ICID - increasing agricultural productivity and improving rural livelihood - is to be realized, innovation and implementation of smart rainfall management technologies will be essential, since 60% of global food production comes from rainfed agriculture. Furthermore, rainfall supports extensive forest areas that significantly contribute to human and livestock livelihood and sustainability of natural ecosystems.



Dr. Abraham Mehari Haile and VPH Dr. S. Nairizi at the 1st meeting of the WG-DROUGHT at Lahore

Members: (1) VPH S. Nairizi, Interim Chairman (Iran, 2008); (2) VPH Franklin E. Dimick, Secretary (USA, 2008); (3) Dr. Ragab Ragab (UK, 2008); (4) Mrs. Mu Jianxin (China, 2008); (5) VPH Hussein El Atfy (Egypt, 2008); (6) Mr. Anthony John Horton (Australia, 2008); (7) Mr. Graziano Ghinassi (Italy, 2008); (8) Dr. Tsugihiro Watanabe (Japan, 2008); (9) Prof. Chang-Chi Cheng (Chinese Taipei, 2008); (10) Dr. Abraham Mehari Haile (The Netherlands, 2008); (11) Secretary General, ICID

Activities: The 1st meeting of the WG-DROUGHT was held on 15 October 2008 at Lahore, Pakistan. Dr. Nairizi, Chairman of the erstwhile WG-IADWS explained that the main outputs of the WG have been the preparation of papers and reports on the following five topics: (i) Literature review and data base; (ii) Drought indices; (iii) Drought management strategies; (iv) Drought prediction; and (vi) Non conventional use of water for agriculutre.

For the year 2009, the core task of the new working group would be to update the above documents and make the material ready for publication in the form of a book.

### STRATEGY THEME: SYSTEMS

### WORKING GROUP ON WATER SAVING FOR AGRICULTURE (WG-WATS)

Year of Establishment: 1994;

Webpage: http://www.wg-wats.icidonline.org/

#### Mandate:

To recognize proven water saving success, and to identify and promote successful water conservation measures.

Members: (1) VPH Dr. Hussein El-Atfy, Chairman (Egypt, 2000); (2) VPH Dr. Alain Vidal (France, 1995); (3) VPH Dr. J.M.M. Mendiluce (Spain, 1996); (4) Dr. Hsu, Shiang-Kueen (Chinese Taipei, 1997); (5) Mr. D. Datta (India, 2003); (6) Mr. Neil Louis Lecler (South Africa, 2003); (7) Prof. Atef Hamdy (Italy, 2004); (8) Mr. Kim Russell (Australia, 2005); (9) Mr. Mehrzad Ehsani (Iran, 2006); (10) VPH Dr. Mark Svendsen (USA, 2007); (11) Dr. Yuanhua Li (China, 2007) and (12) Secretary General, ICID.



 $15 th \ meeting \ of \ the \ WG-WATS \ at \ Lahore$ 

Activities: The 15th meeting of the WG-WATS was held at Lahore on 15 October 2008. The meeting was conducted under the chairmanship of VPH M.H. Amer in the absence of Chairman El-Atfy. The group adopted the new mandate. The Central Office brought out a document "Water Saving in Agriculture" which was released at the Lahore Congress. The publication contains water saving contributions of the past WatSave award winners and some select papers related to water savings. IRNCID has volunteered to translate the book in Persian language. PH Hennessy had informed his



VPH Dr. Hussein El-Atfy

desire to stand down as Permanent Observer of the group. The group accepted the request of PH Hennessy and expressed thanks for his outstanding contribution and leadership to the WG for 6 years.

For the WatSave Awards 2008, in all, 5 nominations from 4 National Committees were received. The awards were sponsored by Pakistan

National Committee (PANCID). The Award winners in three categories - Technology, Innovative Water Management and Young Professionals were declared during the IEC meeting. The group proposed to explore commercial sponsorship for the WatSave awards in the future.

### WORKING GROUP ON DRAINAGE (WG-DRG)

Year of Establishment: 1983

Webpage: http://www.wg-drg.icidonline.org/

#### Mandates

- To promote drainage as part of integrated water resource management; and
- To promote sustainable approaches for drainage and related projects through a balanced integration of (i) environmental; (ii) economic; and (iii) social and cultural aspects.

Members: (1) Dr. W.F. Vlotman, Chairman, 2001 (Australia, 2000); (2) Dr. James Ayars, Vice Chairman, 2007 (USA, 2005); (3) Mr. B. Vincent, Secretary (France, 2007); (4) VPH Prof. Dr. B. Maticic (Slovenia, 1987); (5) VPH Dr. M.H. Amer (Egypt, 1988); (6) Mr. I. Dakar (Syria, 1991); (7) Dr. M.S. Adamu (Nigeria, 1992); (8) PH Ir. Keizrul bin Abdullah (Malaysia, 1994); (9) Dr. Chung Sang-Ok (Korea, 1996); (10) Mr. Chen, Hung-Kwai (Chinese Taipei, 1997); (11) Ms. Wang Shaoli (China, 1999); (12) Dr. E. Christen (Australia, 2000); (13) Dr. Mohammad Bybordi (Iran, 2000); (14) Dr. M. Nawaz Bhutta (Pakistan, 2002); (15) Mr. Rauno Peltomaa (Finland, 2002); (16) Dr. (Ms.) Waltina Scheumann (Germany, 2003); (17) Mr. AT van Coller (South Africa, 2006); (18) Ms. Nurgül Üzücek (Turkey, 2006); (19) VP Dr. Shinsuke Ota (Japan, 2006); (20) Dr. H. Fahmy (Egypt, 2006); (21) Dr. Yurii Yanko (Russia, 2006); (22) Dr. Gurbachan Singh (India, 2008) and (23) Secretary General, ICID



26th meeting of the WG-DRG at Lahore

Observers / Permanent Observers: (i) FAO Representative; (ii) World Bank Representative; (iii) President Dr. Chandra A. Madramootoo (Canada); (iv) IPTRID Representative; (v) PH. Aly M. Shady (Canada); (vi) PH Prof. Bart Schultz (Netherlands); (vii) VPH Prof. H. Malano (Australia) and (viii) VPH Dr. Safwat Abdel-Dayem (Egypt)

Activities: WG-DRG held its 26th meeting on 13 October 2008 at Lahore. It took note of the 10th International Drainage Workshop (IDW10) that was successfully held at Helsinki and Tallinn from 6-11 July 2008. The workshop was jointly organized by National Committees of Finland (FINCID) and Estonia (ESTCID). The workshop was attended by more than 105 delegates from 24 countries. The



Dr. W.F. Vlotman

proceedings of the workshop were brought out in hard copy and CD formats. It was also made available via ICID's Text Delivery Service.

During the meeting, three presentations were made and discussed. These were: (1) "Drainage development and water management in the Indus Basin" by Dr. M.N. Bhutta (Pakistan); (ii) "Use of salt tolerant plant for rehabilitation of waterlogged and saline lands in Pakistan" by Mr. Ali Hassan Shah (Pakistan); and (iii) "Sub-surface drainage for reclamation and management of waterlogged and saline soils; Indian experience" by Dr. Gurbachan Singh (India).

The Group thanked Dr. W.F. Vlotman and Dr. Chandra Madramootoo for their efforts in organizing and editing the special issue of the ICID Journal "Drainage – an Essential Element of Integrated Water Management" brought out as Volume 56 in December 2007 to commemorate 25th Anniversary of the WG.

The Egyptian National Committee (ENCID) offered to host the 11th International Drainage Workshop along with the 63rd IEC to be held in 2012.

### WORKING GROUP ON MODERNIZATION OF IRRIGATION SERVICES (WG-MIS)

Year of Establishment: 2007

Webpage: http://www.wg-mis.icidonline.org/

#### Mandate:

To provide a continuing focus in ICID for sustainable improvement of irrigation service delivery through progressive modernization of infrastructure, management and institutions

Members: (1) Dr. Maurits Ertsen, Chairman, 2007 (The Netherlands, 2007); (2) Dr. Francois Brelle, Vice Chairman (France, 2007); (3) Dr. Wllem F. Vlotman, Secretary (Australia, 2008); (4) Mr. Lee, Tsong-Hwei (Chinese Taipei, 2007); (5) Mr. Thomas E. Mitchel (USA, 2007); (6) Dr. Jiesheng Huang (China, 2007); (7) Dr. M.K. Siahi (Iran, 2007); (8) VP Dr. Illahi B. Shaikh (Pakistan, 2007); (9) Mr. Ian William Makin (UK, 2008); (10) Mr. Sezar Ercan (Turkey, 2008); (11) Dr. Ashwani Kumar (India, 2008); (12) Ms. Marina Pintar (Slovenia, 2008); (13) Prof. Filali B. Abdelwahab (Morocco, 2008); (14) Dr. Masayoshi Satoh (Japan, 2008); (15) Dr. José M. García-Asensio (Spain, 2008); (16) Dr. Lee, Yong-Jig

(Korea, 2008); (17) Mr. Andre Roux (South Africa, 2008); and (18) Secretary General, ICID.

**Permanent Observers:** (i) FAO Representative; (ii) IPTRID Representative; (iii) PH Peter S. Lee (UK); and (iv) Mr. H. Plusquellec (USA/France)

Activities: WG-MIS held its 2nd meeting at Lahore on 14 October 2008 and was attended by five members and three observers from 5 countries. Dr. Dr. Maurits Ertsen, Chair conducted the meeting.

Nomination of Dr. Willem F. Vlotman (Australia) was accepted as Secretary of the WG; while nominations of Mr. Andre Roux (South Africa); Dr. Jose M. Garcia-Asensio (Spain); Dr. Masayoshi



Dr. Maurits Ertsen

Satoh (Japan); Mr. Sezar Ercan (Turkey); Dr. Ashwani Kumar (India); Ms. Marina Pintar (Slovenia); Prof. F.B. Abdelwahab (Morocco); Dr. Lee, Yong-Jig (Korea) and Dr. Ian Makin (UK) were accepted for the membership.

A draft work plan of the group for the period 2007-2013 was tabled at the meeting and will be refined involving all members and other interested partners.

### STRATEGY THEME: ON-FARM

### WORKING GROUP ON 'ON-FARM' IRRIGATION SYSTEMS (WG-ON-FARM)

Year of Establishment: 1998

Webpage: http://www.wg-on-farm.icidonline.org/

#### Mandate:

- To promote on-farm irrigation as part of Integrated Water Resources Management; and
- To promote sustainable efficient approaches for on-farm irrigation.

Members: (1) VPH Felix B. Reinders, Chairman, 2004 (South Africa, 1998); (2) VP Prof. Peter Kovalenko, Vice Chairman, 2005 (Ukraine, 2001); (3) Mr. Stephen Mills, Secretary (Australia, 2001); (4) VPH Prof. F. Ligetvari (Hungary, 1998); (5) Dr. H. Sourell (Germany, 1999); (6) Dr. Kim Sun-Joo (Korea, 1999); (7) Mr. Yeh Shu-Shr (Chinese Taipei, 1999); (8) Mr. P. Ruelle (France, 1999); (9) Prof. Pedro Liao de Sousa (Portugal, 1999); (10) Mr. J. Dunn (UK, 2002); (11) Mr. Yan Guanyu (China, 2002); (12) Mr. M.S. Bala (Nigeria, 2002); (13) VPH Dr. J.A. Ortiz (Spain, 2003); (14) Mr. Graziano Ghinassi (Italy, 2004); (15) Prof. Y. Nakano (Japan, 2004); (16) Dr. A.K. Randev (India, 2005); (17) Mr. Hassan Shantia (Iran, 2006); (18) Mr. Mohan Reddy Junna (USA, 2007); (19) Dr. Abraham Mehari Haile (The Netherlands, 2008); and (20) Secretary General, ICID.

**Permanent Observers:** (i) Mr. Bruno Molle (ISO) and (ii) FAO Representative



11th meeting of WG-ON-FARM at Lahore

**Activities:** WG-ON-FARM held its 11th meeting at Lahore on 14 October 2009 in which 6 members and 12 observers were present.

The Group accepted the nomination of Dr. Abraham Mehari Haile (The Netherlands) for the membership. The Manual on "Performance Evaluation of Sprinkler and Drip Irrigation Systems" authored by Dr. Graziano Ghinassi (Italy) was released at the opening ceremony of the Congress. The WG thanked Dr. Graziano Ghinassi for his dedicated work and also the Italian National Committee (ITAL-ICID) for generous financial support in bringing out this book. Dr. S.A. Kulkarni, Executive Secretary at the Central office was thanked for his inputs in bringing out the manual.

Representative of IRNCID underscored their commitment to host the 8th International Micro Irrigation Congress (IMIC) along with the 62nd IEC and 21st Congress of ICID at Tehran, Iran in October 2011. The work plan of the group, proposed up to 2011 was discussed.

### WORKING GROUP ON USE OF POOR QUALITY WATER FOR IRRIGATION (WG-PQW)

Year of Establishment: 1995

Webpage: http://www.wg-pqw.icidonline.org/

#### Mandate:

- To promote a safe and good management of poor quality water for irrigation;
- To minimize the negative impact on human health and the environment;
- To promote the multiple use of poor quality water; and
- To give consideration to the Institutional and legislation aspects with regard to the use of poor quality waters.

Members: (1) Dr. Ragab Ragab, Chairman (UK, 1997); (2) Dr. Frans Huibers, Secretary (Netherlands, 1999); (3) VP Dr. Karim Shiati (Iran, 1997); (4) Dr. H. M. du Plessis (South Africa, 1998); (5) Dr. Jan Salek (Czech Rep., 1998); (6) Dr. N.K. Tyagi (India, 1998); (7) Mr. Jose Manuel Arango Maldonado (Mexico, 1998); (8) Dr. Wen-Lin Chang (Chinese Taipei, 1998); (9) VPH Dr. Gao Zhanyi (China, 1998); (10) VP Dr. Samia El- Guindy (Egypt, 1999); (11) Dr. Ramzan Choudhry (Pakistan, 2000); (12) Mr. S. Seyama (Japan, 2001); (13) Mr. C.G. Croke (Australia, 2001); (14) Mr. Martin Roche (USA, 2002); (15) Ms. Esther O. Ogunniyi (Nigeria, 2002); (16) Mr. Ghannami Mohamed (Morocco, 2003); (17) Mr. Bernard Vincent (France, 2003); (18) Dr. Jorge Tarchitsky (Israel, 2004) and (19) Secretary General, ICID

**Permanent Observer:** (i) FAO Representative and (ii) ICBA Representative (UAE)



13th meeting of WG-PQW at Lahore

**Activities:** WG-PQW held its 13th meeting at Lahore on 14 October 2008 in which 5 members and 4 observers were present. Dr. Ragab Ragab, Chairman conducted the meeting. The group approved its new mandate.

The group took note of the side event on the topic "Role of Water in Addressing the Challenges of Poverty and Food Security" organized by ICID and Israel National Committee (ISCID) at the CSD-16 on 12 May 2008 at New York. In the side event, the panel discussion was moderated by President Peter Lee. Representatives from IFAD, FAO, Winrock International, WWC, besides ISCID participated.

Dr. Jorge Tarchitzky (Israel) elaborated on the use of treated wastewater for irrigation to increase food production in arid areas, and emphasized that this approach could be a feasible solution for all sizes, from big metropolitan areas to small villages. Presentation of Dr. Tarchitzky made at side event was posted on the group's webpage.

A news item on "Efficient use of recycled water for irrigation – showcase: Israel" was published in ICID Newsletter 2008/2 issue

### WORKING GROUP ON WATER AND CROP (WG-CROP)

Year of Establishment: 2008

Webpage: http://www.wg-crop.icidonline.org/

#### Mandate:

- To promote the efficient use of water in crop production;
- To provide input to test crop water models;
- To investigate the use of energy crops for biofuel production;
- · To develop techniques for rainfall harvesting;
- To promote the multi-functionality of water use in paddy rice cultivation;
- To investigate the adaptation of agriculture to climate change; and
- To promote low input agriculture.

Members: (1) Dr. Ragab Ragab, Chairman (UK, 1993), (2) Prof. A. Mermoud, Secretary (Switzerland, 1991); (3) VPH Dr. B.I. Maticic (Slovenia, 1987); (4) Prof. M.E.V. Scarascia (Italy, 1988); (5) Prof. R.G. Allen (USA, 1991); (6) Mr. L.C.

Tollefson (Canada, 1993); (7) VPH Prof. Cai Lingen (China, 1995); (8) Dr. Y. Nakano (Japan, 1996); (9) Mr. Tai Cheol Kim (Korea, 1996); (10) Mr. Chen Yih-Rong (Chinese Taipei, 2001); (11) Mr. Vincente Carelon (Spain, 2003); (12) Dr. Andrew Sanewe (South Africa, 2005); (13) Dr. Florent Maraux (France, 2006) and (14) Secretary General, ICID



Dr. Ragab Ragab

Permanent Observers: (i) FAO

Representative; (ii) Mr. Herbert H. van Lier (CIGR) and (iii) Prof. D. Wrachien (Italy)

Activities: 1st meeting of the Working Group on Water and Crops (WG-CROP) was held on 15 October 2008 at Lahore, Pakistan. However, a full fledged business meeting was not possible due to scarce attendance of members present. It was proposed to develop activities around the mandate during the next meeting of the WG in December 2009 at New Delhi.

Prof. Andre Mermoud (Switzerland) resigned as the secretary of the WG. The Chairman on behalf of the WG thanked Prof. Andre Mermoud for his excellent efforts in promoting the WG activities.

### **Task Forces**

# TASK FORCE TO GUIDE ICID INPUTS TO THE 5TH WORLD WATER FORUM (TF-WWF 5)

### Terms of Reference (ToR):

- To liaise with the 5th World Water Forum Program Committee and other International Bodies;
- To provide overarching lead role on behalf of ICID for inputs to by liaising with -
  - (i) National Committees for inputs to the themes and sub-themes of the 5th World Water Forum that are of direct relevance to ICID, (ii) Coordinating with Workbodies on specific subjects related with 5th World Water Forum;
- To liaise with Turkish National Committee (TUCID) for preparatory work of 5th World Water Forum;
- To coordinate joint contributions with other water-related International Organizations; and
- To suggest ICID inputs for 5th World Water Forum for consideration in IEC.

Members: (1) PH Aly M. Shady, Chairman (Canada); (2) PH Dr. Bart Schultz, Coordinator (The Netherlands); (3) PH Peter S. Lee (UK); (4) President Dr. Chandra A. Madramootoo (Canada); (5) VPH Prof. Hector Malano, Chairman, PCTA (Australia); (6) VPH Dr. Alain Vidal; (7) VPH Prof. Riota Nakamura (Japan); (8) VPH Prof. Victor A. Dukhovny (Uzbekistan); (9) Dr. (Mrs.) Shadan Abdel Gawad (Egypt); (10) Turkish National Committee Representative; and (11) Er. M. Gopalakrishnan, Secretary General, ICID.

**Activities:** The TF-WWF5 was established at the 57th IEC meeting held at Kuala Lumpur in 2006. The TF held its second meeting on 15 October 2008 at Lahore in which 6 members and 6 observers belonging to five countries participated.

The TF reviewed the status of ICID involvement in various Themes and Topics of the 5th World Water Forum till its Lahore meeting. The TF was apprised of the two meetings of consortium members held in Montpellier (France) on 03 September 08 and in New Delhi, India on 10 October 2008 to consider and offer their comments and suggestions on the draft topic scoping paper and session plans for the Topic 2.3 "Water for food for ending poverty and hunger" for which ICID was identified as the Topic Coordinator. ICID worked with a consortium of about 80 national and international organizations to develop the topic, questions,



2nd meeting of TF-WWF5 at Lahore

main issues, sessions and panel presentations and discussions. Four sessions were planned spanning 11 hours with more than half of the time allocated to discussion on the broader or specific issues raised. Draft Topic Scoping Paper and Draft Session Situation Document were uploaded on the Virtual Meeting Space (VMS) of the 5th World Water Forum website after incorporating the suggestions relevant to the topic received from consortium members. In addition to the above, some workbodies of ICID also contributed to various topics of interest. Pres. Chandra Madramootoo, in conclusion summarized key recommendations of the ICID sessions at the wrap-up Session of Theme 2.

World Water Development Report 3 (WWDR 3) brought out under UNESCO's World Water Assessment Programme (WWAP) once in 3 years explained the process. The WWDR coincides with World Water Forums. The TF was apprised of by Secretary General on the background as well as processes followed in the preparation of the WWDR 3.

This third edition signifies an important transition in the WWDR series; a transition from a status on the world's water-related challenges to a report that paints a holistic picture of our global water resources, with water sub-sectors and challenge areas understood within the broader context of socio-economics. It acknowledges that most decisions that have an impact on water resources (on their state and on how we use and manage them) come from outside the 'water box' of the traditional water sector. The report considers the impact of externalities, identifies pressures on the resource and examines ways different water uses interact with some suggestions on the desirable responses to sustainably address the global water needs of life, livelihoods and human aspirations.

Secretary General M. Gopalakrishnan as one of the TAC members for the ICID also participated in the 5th World Water Forum held at Istanbul.

# TASK FORCE ON INTER-BASIN WATER TRANSFERS (TF-IBWT)

#### Terms of Reference (ToR):

- To collect the relevant information on existing and projected inter-basin water transfers for irrigation, drainage and flood management;
- To analyze the crucial issues of such transfers and recommend good practices to deal with such issues;
- To compile the collected information and circulate to National Committees for comments; and
- To publish the material as ICID reference document.

Members: (1) PH Prof. dr. Bart Schultz, Chairman (The Netherlands); (2) VPH Dr. Jose A. Ortiz Fdz.-Urrutia (Spain); (3) Mr. Maurice Roos (USA); (4) Prof. Dr. T. Hata (Japan); (5) Prof. Zhu Ruixiang (China); (6) Dr. Frank Quinn (Canada); (7) Mr. Syed Jamait Ali Shah (Pakistan); (8) Er. M. Gopalakrishnan, Secretary General, ICID and (9) Mrs. Jancy Vijayan, Joint Director, ICID Central Office (Coordinator).

Permanent Observers: (i) Dr. C.D. Thatte (ICOLD); (ii) Mr. Boubakari Mana (Lake Chad Basin Commission) and (iii) Dr. Stephen Maxwell Donkor (UN Water/Africa Section/Ethiopia).

Activities: The TF-IBWT was established in 2003 with the main objective of compiling the global experiences of IBWT. A Special Session of the TF (concluding one of the TF) was held on 13 October 2008 at Lahore, under the Chairmanship of PH Prof. dr. Bart Schultz. The draft report as finalised by the Chairman was tabled at the Special Session. Presentation on country case studies on



PH Prof. dr. Bart Schultz

IBWT were also made by Mr. Maurice Roos, USA, Prof. Zhu Ruixiang, China, Mr. Syed Jamait Ali Shah, Pakistan, and Mrs. Jancy Vijayan, Central Office, ICID. In the light of various presentations, members deliberated on issues and modifications to be incorporated in the draft report. It was decided to circulate the revised draft version amongst an external review committee comprising Vice President Hon. Frank Dimmick (USA), Mr. Johannes De Vries (USA), Prof. Okamoto (Japan), Vice President Hon. M. Abu Zeid (Egypt), and Ir. Dick de Bruin (The Netherlands).

# TASK FORCE ON ROLE OF IRRIGATION ON POVERTY ALLEVIATION AND LIVELIHOODS (TF-POVERTY)

(The Task Force has since been converted into Working Group as per the decision of the 59th IEC held at Lahore)

#### Terms of Reference (ToR):

- Synthesize specific knowledge and experience from the irrigation sector, to design pro-poor actions in a wider understanding of irrigation, i.e. supplementary irrigation along the whole rainfed-irrigated continuum (aka agriculture water management);
- Look for technical solutions that work within a clearly defined socio-economic context, so that it can be mobilized on a case specific approach; and
- Emphasize multiple-use irrigation systems (MUS) as a specific approach to alleviate poverty in this context.

Members: (1) VPH. Dr. Alain Vidal, Chairman (France, 2007); (2) Dr. Dennis Wichelns (USA, 2008); (3) PH Peter S. Lee (UK, 2008); (4) Mr. Audrey Nepveu (France, 2008); (5) Prof. Linden Vincent (The Netherlands, 2008); (6) Secretary General, ICID

Permanent Observers/ Network Members: (1) Dr. Wouter Linklaen Arriens (ADB); (2) Mr. Ian Makin (ADB); (3) VPH Henri Tardieu (AFEID) (4) Mr. Christelle Pezon (Agro-Paris Tech); (5) Mr. Simon Cook (CPWF-BFP); (6) Mr. Annette Huber-Lee (CPWF); (7) Ms Nancy Johnson



1st meeting of TF-POVERTY at Lahore

(CPWF); (8) Mr. Jonathan Woolley (CPWF); (9) Mr. Jean-Marc Faures (FAO); (10) Mr. Rudolph Cleveringa (IFAD); (11) Mr. Intizar Hussain (INPIM); (12) Mr. Paul Polak (IDE); (13) Mr. Bob Yoder (IDE) (14) Mr. Monqieu Mikhail (IDE) (15) Prof. Barbara van Koppen (IWMI); (16) Dr. Andrew Keller (Keller-Bliesner Engineering); (17) Mr. Steve Vosti (UC David); (18) Dr. Salah Darghouth (World Bank); (19) Dr. Julienne Roux (World Bank); (20) Mr. Mary Renwick (Winrock)

Activities: TF-POVERTY was established in 2007 with the main purpose to contribute to 5th World Water Forum's Topics 2.3 – Water and food for ending poverty and hunger, and 2.4 – Multiple Use Systems, respectively coordinated by ICID and FAO/UN-Water. Chairman Dr. Alain Vidal had organized an interim meeting of the Task Force on 3 September 2008 at Montpellier. The TF held its 1st meeting on 14 October 2008 at Lahore in which 3 members and 8 observers were present. Since Dr. Alain Vidal, Chairman did not attend the meeting, it was initiated by

Er. M. Gopalakrishnan, Secretary General, ICID. He then requested Dr. Dennis Wichelns (USA) to act as a Chairman for the meeting.

Dr. Alain Vidal, Chairman of the TF established a webpage http://afeid.montpellier.cemagref.fr/Poverty/TF-POVERTY.html. This is hosted by CEMAGREF. Valuable information, bibliography, and links related to the TF have been posted on the webpage.

In view of the importance of the subject, the members proposed that the TF may be converted to a regular Workbody. The proposal for the conversion of the Task Force into a regular Workbody (in view of the ICID's key role to contribute to the poverty alleviation and improvement of livelihoods in developing countries) was approved in the 59th IEC Lahore.

# TASK FORCE ON FINANCING WATER FOR AGRICULTURE (TF-FIN)

#### Terms of Reference (ToR):

The focus of the TF was to get a better understanding and insight (assessment) of - the demand for financing; for whom are those investments in agriculture water go; the present financing mechanisms, constraints met from the demand side, and the changes and innovations for more appropriate mechanisms to enable better access to finance.

Members: (1) Ir. Paul van Hofwegen, Chairman (The Netherlands); (2) Mr. Eric Viala, Vice Chairman (USA) (3) Secretary General, and (4) Dr. Vijay Labhsetwar, Director, ICID (Coordinator).

Activities: The TF was established in 2007. The 2nd meeting of Task Force on Financing Water for Agriculture (TF-FIN) could not be held at Lahore due to scarce attendance of members. National Committees of Malaysia (MANCID), France (AFEID), India (INCID), Turkey (TUCID), Iran (IRNCID), and Pakistan (PANCID) have nominated

their professionals for the membership of the TF for consideration.

The TF has agreed to focus on: (i) exploring a better understanding and gaining an insight on the demand side of financing water for agriculture; (ii) the need for an appropriate financing mechanisms in the fast changing environment of the agricultural sector due to increasing demands for food (population growth and diet change), more competition also from agro-fuels; (iii) the consequent increases in market prices of staple agro-produce; and (iv) the need for climate change adaptation.

It was proposed to prepare a framework document for the whole set of activities including guidelines for the case studies. The TF would prepare a draft paper to allow financing institutions (e.g. Global Exchange for Social Investment), donors and other relevant institutions, national committees to provide feedback and additional contributions. Subsequently, the activities would focus on integration of perceptions and translation into joint action proposals to enhance access to finance and stimulate investments in water management for sustainable agriculture.

#### TASK FORCE FOR IDENTIFYING PRIORITY ISSUES FOR LEAST DEVELOPED COUNTRIES IN AFRICA (TF-LDCSAF)

#### Mandate:

- To create a knowledge base to understand the problems faced by Least Developed Countries in Africa;
- To work out requirements of the LDCs; and
- To identify level and extent of support from ICID and explore the avenues for bilateral/multilateral cooperation.

Members: (1) VPH Engr. I.K. Musa, Chairman (Nigeria); (2) Dr. H. Fahmy (Egypt); (3) Dr. S. Mkhize (South Africa); (4) Mr. Makonnen Loulseged (Ethiopia); (5) Mr. Moise Sonou (ARID Representative); (6) Secretary General, ICID; (7) Dr. S.A. Kulkarni, Executive Secretary, ICID, Coordinator

**Activities:** The TF-LDCs-AF was formed at the instance of the AFRWG. The TF held its 4th meeting at Lahore on 13 October 2008. Since Engr. I.K. Musa did not attend the meeting, Dr. H. Fahmy was requested to lead the discussions.

It was reiterated to reactivate the inactive LDCs, bringing other LDCs additionally under ICID fold through the regional organizations like RAID-ARID, SARIA, FARA etc. Mr. Sangare (Mali) volunteered to identify national/ local focal persons/institutions in the LDCs through ARID. Dr. Fahmy suggested contacting the Nile Basin Initiative (NBI). The draft report of the TF



VPH Engr. I.K. Musa

as prepared by Engr. Musa was tabled at the meeting. Another version of the draft report was prepared by Dr. Sizwe Mkhize in collaboration with Messrs Reinders, Dr. Andrew Sanewe of SARIA and Marie Jean Gabrieon. Both the reports were available with the Central Office and might be merged to form a single report. It was proposed that the final outcome/recommendations of the TF-LDCs-AF be presented either at a special workshop to be organized on the occasion of the 3rd African Regional Conference at Abuja in October 2009 (since cancelled) or at 60th IEC at New Delhi in December 2009.

# **Key ICID Events**



59TH INTERNATIONAL
EXECUTIVE COUNCIL
(IEC) MEETING AND
20TH TRIENNIAL
CONGRESS, LAHORE

The 59th International Executive Council (IEC) meeting and the 20th ICID Congress were held at Lahore, Pakistan from 13 to 18 October 2008. The theme of the Congress was "Participatory Integrated Water Resources Management: From Concept to Action". More than 500 delegates including nearly 150 from over 24 countries and several international organizations participated in various events. The six day programme was packed with over 30 workbody meetings, N. D. Gulhati memorial lecture, symposium, special session, seminar, workshops, two Congress questions (54 and 55), International Executive Council (IEC) meeting, technical exhibition/ display, and a technical tour. Membership applications of Afghanistan and Jamaica were discussed and accepted during the IEC meeting.

Pakistan National Committee (PANCID) and Water and Power Development Authority (WAPDA) together organized the entire event very successfully. H.E. Raja Pervaiz Ashraf, Minister for Water and Power, Islamic Republic of Pakistan in his inaugural speech at the Congress opening ceremony said that in Pakistan, water has played a very significant role in the economic development and will continue to be a driving force in the future. 'Agriculture is the largest sector of Pakistan economy, with primary commodities accounting for 25% of GDP and 47% of total employment, and contributes more than 60% of foreign exchange earnings. Although Pakistan has one of the largest contiguous irrigation systems in the world, yet the country is approaching the utilization limits of its water resources and heading towards becoming a water scarce country' said the Minister. The closing ceremony was graced by the presence of H.E. Rana Muhammad Iqbal Khan, Acting Governor of Punjab State.



President Peter Lee in his welcome speech said that agricultural water management comprises a broad spectrum ranging from rain harvesting, runoff capture, soil moisture conservation, supplementary, deficit, and full irrigation to surface and subsurface drainage. He said that for survival we need 100 times more water for food than for drinking

and basic hygiene. Not surprisingly, agriculture is the largest user of freshwater, after nature. But fortunately agriculture is able to use water not available to others (e.g. rain water and soil moisture). 'Agriculture is a lot less wasteful than domestic use as it has high consumptive use component' said the President.

President Lee expressed concern over declining investment in irrigation, stagnation of crop yields and diversion of land and water to other uses and stressed the need for more investment at both, farm (private) and system (public) levels to enable higher water and crop productivity. President said that ICID is the only organization of its kind speaking for agriculture in the world of water. ICID is an important partner organization in UN Water, hosts IWALC Secretariat, and also coordinating the Topic 2.3 for the World Water Forum 5.

## Congress Questions

The Questions which were central to the theme of the Congress were: Question 54 on "Sustainable integrated water resources management" and Question 55 on "Role of public and private sectors in water resources development and management".

**Dr. Hussam Fahmy** (Egypt), General Reporter of Q54 in his plenary presentation said that sustainability of irrigated agriculture is typically threatened by water scarcity and soil

degradation. Climate change, emerging world wide food crisis and bio-fuel production will probably add to the viciousness of these threats. As recognized by the participants of the Congress, IWRM paradigm provides some hope to achieve sustainability for irrigated agriculture. However, IWRM is a concept that does not easily render itself for implementation.



Dr. Gao Zhanyi (China), General Reporter of Q55 observed that in manycountries institutional reforms in irrigation and drainage system management towards stakeholder-controlled management are ongoing. Transfers of systems or of responsibilities are especially taking place in Asia, Central and South America, Central and Eastern European countries.

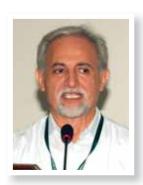


Prof. Dennis Wichelns (USA), Chairman Special Session 'Implications of global changes on irrigation and drainage system development and management' described the importance of managing the world's land, water, and air resources wisely, particularly in light of recent global changes and trends. Dr. Wichelns noted that



the world's natural resources represent "natural capital" that can be used wisely or allowed to depreciate, just as financial capital can be invested wisely or squandered over time.

**VPH Dr. Saeed Nairizi** (Iran) made a presentation on the Strategy Theme "On-Farm". He emphasized the need for focused attention in improvement of surface irrigation technology as it is a dominant method of irrigation in developing countries.



An international workshop on "Capacity building and training in water sector: the role of young professionals" was held under the chairmanship of **Dr. Maurits Ertsen** (The Netherlands).

A special session was organized at the instance of PANCID/WAPDA



to discuss some specific issues like impact of global climate change on Himalayas and reservoir sedimentation. Major projects like Tarbela suffer due to high sedimentation yields affecting life of the reservoir. Delegates from Bhutan, China, Chinese Taipei, India, Pakistan, Vietnam, and USA discussed their national scenarios, in some cases, with full presentations. A decision to study the problems of sedimentation by ICID partnering other organizations was agreed to.

A Seminar on 'Lessons to learn from the history of water management in large river basins and drought' and a Symposium on 'Integrated water management in the river basin context' were also held. The outcome of the deliberations of various meetings, Congress questions and key recommendations in the form of 'Lahore Declaration' were brought out.



## **Glimpses of 20th Triennial Congress, Lahore**







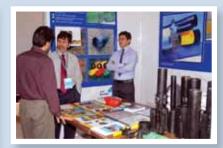
















## Representatives of ICID Member Countries/ Committee in the 59th IEC Meeting at Lahore



USA (USCID)

Chinese Taipei (CTCID)

Ukraine (UKCID)

#### **New Office Bearers**



Prof. Dr. Chandra A. Madramootoo (Canada) was elected as the new President of ICID for three years tenure (2008-11) replacing the outgoing President Peter S. Lee (UK). Three new Vice Presidents - Dr. (Mrs.) Samia El-Guindy (Egypt), Mr. Shinsuke Ota (Japan), and Prof. Ing. Lucio Ubertini (Italy) were elected for the tenure of three years (2008-2011) to replace the outgoing Vice Presidents - Dr. Mark Svendsen (USA), Mr. Felix B. Reinders (South Africa), and Dr. Gao Zhanyi (China).

### President

Prof. Dr. Chandra A. Madramootoo obtained PhD in Agricultural Engineering from McGill University, Canada in 1985. Prof. Chandra started his career as Irrigation Engineer in 1977 and steadily rose to the position of Full Professor of Agricultural and Biosystem Engineering Department, McGill University in 1995. Since 2005, he is the Dean, Faculty of Agricultural and Environmental Sciences and Associate Vice Principal, McGill University. He is a founding Director, Brace Centre for Water Resources Management and was named the James McGill Professor, Bioresources Engineering Department in 2000. His other recent appointments include - Member, Governing Board, ICRISAT, India, Board of Directors, VALACTA and APIA.

Prof. Madramootoo is an internationally recognized expert in irrigation, drainage, water quality, agricultural research, and development. He has successfully supervised over 50 water,

irrigation, drainage and soil/land management research and development projects at McGill University, trained over 75 M.Sc. and Ph.D. students and published over 300 book chapters, manuscripts in refereed journals, technical reports and papers. Prof. Madramootoo has been invited to deliver over 75 keynote talks to national and international audiences, and presented over 200 papers at national and international conferences.

Since over two decades, Dr. Madramootoo has worked as a member of the Canadian National Committee on Irrigation and Drainage (CANCID) and served on numerous workbodies of ICID. He was Vice President of ICID from 2000-2003 and presently is the Chairman of the CANCID. He has participated in many IECs and Congresses and was the key force behind the successful organization of the 18th ICID Congress and 53rd IEC at Montreal in 2002. Prof. Madramootoo is member of various professional societies. He has to his credit 15 awards from different organizations. He also holds the membership of McGill University Senate, Senate Nominating Committee, and Senate Committee on Physical Development. Prof. Madramootoo is a consultant to the Canadian International Development Agency (CIDA), World Bank, International Program on Technology and Research in Irrigation and Drainage (IPTRID), Agriculture and Agri-Food Canada, FAO and the Inter American Development Bank on water resources, irrigation, drainage, water quality, agriculture, and land resources projects in Asia, Africa and the Caribbean.

#### Vice Presidents



Dr. Samia El-Guindy is an emeritus professor in the National Water Research Center, Ministry of Water Resources and Irrigation (MWRI), Egypt. She received her PhD from Martin Luther University, Germany in 1976. Her research interests spanned over more than 35 years and focused on land drainage and

salinity control as well as water quality aspects and its environmental impacts.

Currently, Dr. Samia El-Guindy is the Director of the Egyptian-Dutch Advisory Panel Project on Water Management (APP). The project role is mainly advising the MWRI on Policy issues. Dr. El-Guindy has published over 200 reports, journal articles and scientific researches in the different fields of water management. She is a member in the irrigation and drainage national committee. She is a member of the Working Group on Poor Quality Water (WG-PQW) since 2000. She has participated in about eighteen ICID meetings. She holds membership in the Egyptian and Global Water Partnership as well as many other national professional organizations and scientific associations. Dr. El-Guindy gained the Egyptian National Award in social and water science as well as a certificate of honour from H.E. President of Egypt.



Prof. Dr. Lucio Ubertini started his academic career at the Institute of Agricultural Hydraulics of the University of Perugia as a full professor and was its Director for about ten years. During this period, he led a research team on non-structural interventions for the improvement of irrigation systems and also in deriving

the characteristics of agricultural drought from agrometeorological data. Prof. Ubertini has contributed towards numerous advances in the study of the terrestrial hydrologic cycle that have shaped modern hydrology. He has more than 150 publications in international and national journals, proceedings, documents and books.

Prof. Ubertini has led the ITAL-ICID as its Vice President (1994-2000) and as the President (2000-2007). He has played a leading role in many other international scientific organizations such as IAHR, IAHS, ICID, IUGG, and also in many UN organizations like UNESCO, FAO, WMO, and WWAP. His contribution to the developing countries through the establishment of the Water Resources Research and Documentation Centre (WARREDOC) at Perugia is well acknowledged.



Mr. Shinsuke Ota graduated in Agricultural Engineering from Kyoto University in the year 1972. He also served as the Secretary General of JNC-ICID from 1997-1998. Mr. Ota has worked for Ministry of Agriculture, Forestry and Fisheries (MAFF) for 32 years and was engaged in Design, Planning and Policy Making

concerning agriculture and rural development in Japan. Mr. Ota actively participated in several events of ICID including IECs and Congresses. He established the International Network for Water and Ecosystem in Paddy Fields (INWEPF) besides being member in many ICID workbodies.

# NEW CHAIRS, VICE CHAIRS AND SECRETARIES OF ICID WORKBODIES

VPH Dr. S. Nairizi (Iran), is the new Chairman of the PFC. He is also the Interim Chairman of the WG-DROUGHT; while VPH Franklin E. Dimick (USA) is the new Secretary and the WG-CAFM has new Secretary Mr. Ahmed Kamal (Pakistan).

#### **RELEASE OF NEW BOOKS**

Three books viz., (i) Report of ICID Task Force for Least Developed Countries in Asia; (ii) Manual on Performance Evaluation of Sprinkler and Drip Irrigation Systems; and (iii) Water Saving in Agriculture, as brought out by the Central Office were released at the hands of the Minister. The Central Office has also published Congress proceedings (printed volume) with 'Abstracts' and a 'CD-ROM' containing all full length papers of all events.

#### FUTURE CONGRESSES/ CONFERENCES/ WORKSHOPS APPROVED BY THE 59th IEC

- 23rd European Regional Conference (ERC),18-24 May 2009 at Lviv, Ukraine (held)
- The 3rd African Regional Conference (AFRC), 11-14 October 2009 at Abuja, Nigeria (Since cancelled)
- 5th Asian Regional Conference (ASRWG), 6-11 December 2009 at New Delhi, India (60th IEC meeting now to be held at New Delhi)
- 61st IEC and 6th Asian Regional Conference (ARC),10-16 October 2010 at Yogyakarta, Indonesia
- 62nd IEC and 21st International Congress on Irrigation and Drainage, 15-23 October 2011 at Tehran, Iran
- 8th International Micro Irrigation Congress will be held in conjunction with the 21st Congress in 2011
- 24th European Regional Conference (ERC), May 2011 in the Netherlands
- 4th African Regional Conference, 2011, Mali (It will now be the 3rd)

### **ICID Awards and Honors 2008**

At the Lahore meeting, the annual WatSave Awards, the triennial Best Performing Workbody Award (BPWA), and the Best Performing National Committee Award (BPNCA) were presented for their outstanding contribution and excellence. Similarly, all those retiring Vice Presidents, Chairs of Workbodies were honored for their dedicated contribution to ICID's mission by presenting plaques.

#### **WATSAVE AWARDS**

WatSave Awards were instituted in the year 1997 to recognize outstanding contribution to water saving/conservation for sustainable irrigated agriculture. Each award carries prize money of US\$ 2000 and a Citation.

Dr. Yella Reddy, Mr. Satyanarayana and Mrs.G Andal (India) have jointly received the Innovative Technology award for their water saving contribution on "Micro irrigation: A Technology for Prosperity". The innovation is related to the replacement of a fully portable sprinkler system with a semi-permanent system in Andhra Pradesh State of India. In using portable sprinkler systems, farmers have been experiencing problems



Dr. Reddy receiving the award from H.E. the Acting Governor of Punjab, Pakistan

with respect to storage and operation time needed to shift the system to different areas. Changing to a semi-permanent sprinkler system provides for advantages like labour saving, operational convenience and better working conditions in the field. The innovative sprinkler system has become popular in the state and its adoption leads to water savings of about 50% over traditional surface irrigation methods.



Dr. Atta receiving the award from H.E. the Acting Governor of Punjab,

President Lee Looks on

Dr. Yousri Ibrahim Atta, Associate Professor at Water Management and Irrigation Systems Research Institute (WMRI), Egypt received the Innovative Water Management award for his water saving contribution "Innovative Method for Rice Irrigation". In Egypt, rice is traditionally grown under flood irrigation. To reduce the amount of irrigation water required as well as to increase water productivity, a new method of growing rice on strips has been adopted. This involves planting of rice in two strips along each furrow. In the traditional method, the rice seedlings are planting at a distance of 20x20 cm giving a density of 25 tillers/m<sup>2</sup>, while with the new method, the seedlings are planted in 2 strips 10 cm apart but still maintaining the same density of 25 tillers/m<sup>2</sup>. This strip method or ice cultivation has now been made mandatory by the MWRI as it allows for a 40% savings in water.

Dr. Amgad Elmahdi, Research Scientist at CSIRO Land and Water, Australia received the Young Professionals award for his water saving contribution 'Water Banking: A Conjunctive Water Use Management Approach for Water Saving and Improve Productivity and Environmental Performance'. Water banking is the storage of surplus instream flows during the wet season into aquifer storage to be used during deficit periods i.e., when the irrigation demand exceeds the available requirements by diversion of in-stream flows. Underground storage reduces greatly evaporation losses as compared to surface storage. Based on work in the Murrumbidgee River system, the research has helped increase

understanding of how to improve the environmental quality of the river through better irrigation demand management.



Dr. Amgad Elmahdi

#### **BEST PERFORMING NATIONAL COMMITTEE AWARD (BPNCA)**

ICID in 2002 instituted an Award to recognize the Best Performing National Committee (BPNC). The award is presented at every triennial Congress. The performance of a National Committee is judged on the basis of various facets demonstrated by the participating National Committees between two successive ICID Congresses (over a three year period). The award carries a Trophy and a Memento.

Iranian National Committee on Irrigation and Drainage (IRNCID) has won the 3rd Best Performing National Committee Award (BPNCA) for its outstanding achievements and contributions to ICID activities. IRNCID joined ICID in the year 1955 and has been very effectively contributing to its various activities since then. IRNCID is fairly broad-based and has organized several scientific and technical events. The NC has also brought out a number of publications in the field of irrigation and drainage. IRNCID professionals have contributed a number of valuable papers to ICID Journal,



IRNCID members with the Best Performing National Committee Award

ICID Congresses and Regional Conferences during this period. The award was received by VP Dr. Karim Shiati from H.E. Rana Mohammad Iqbal Khan, Acting Governor of the Punjab State.

#### **BEST PERFORMING WORKBODY AWARD (BPWA)**

BPWA is presented at every Congress from 2005 to recognize 'Excellence in Performance by Workbodies'. The Award carries Citation/ Certificate/Plaque to Chairman and all members.

ICID Journal Editorial Board (EB-JOUR) is the winner of the Best Performing Workbody Award (BPWA) 2008. ICID Journal acts as a mouthpiece to communicate ICID's more than half a century's experience to the international water community in the promotion and transfer of water and land management technology and related issues. The award was presented by H.E. Rana Mohmmad Iqbal, Acting Governor of Punjab to President Hon. Prof. Dr. Bart Schultz (The Netherlands), Chairman, EB-Journal.



PH Prof. Bart Schultz receiving the Award from H.E. Rana Mohmmad Iqhal,
Acting Governor of Punjab

# PLAQUES TO RETIRING PRESIDENT/ VICE PRESIDENTS/ CHAIRS OF WORKBODIES

Mr. Peter S. Lee (UK) President (2005-2008);

Retiring Vice Presidents (2005-2008)-Dr. Mark Svendsen (USA),Mr. Felix B. Reinders (South Africa), and Dr. Gao Zhanyi (China);

Retiring Chairs of Workbodies -VPH Prof. Dr. Chandra Madramootoo, Canada (Chairman, PFC, and VP Shaikh, Pakistan (Chairman, C-CONGR)

#### **BEST PAPER AWARD 2008**

ICID has instituted the 'Best Paper Award' in 2006 in recognition of the outstanding paper contributed to Irrigation and Drainage, the Journal of ICID. The award comprises a citation plaque and Gift Books from M/s. John Wiley & Sons Ltd. (UK) and is given to the best paper published in the issues of the Journal in the preceding year (January-December). The Best Paper Award 2008 was presented to the following two papers:

- 'Revisiting currently applied pipe drain depths for waterlogging and salinity control of irrigated land in the (semi) arid zone' by L.K. Smedema, (*Issue: 56.4*); and
- 'Conjunctive Water Management Options: Examples from Economic Assessment of System-level Water Saving through Liuyuankou Irrigation System, China'by S. Khan, S. Mushtaq, Y. Luo, D. Dawe, M. Hafeez, and T. Rana, (Issue: 56.5).

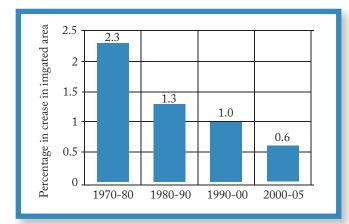
# Irrigation in the Context of Today's Global Food Crisis

The 7th N.D. Gulhati Memorial Lecture for International Cooperation in Irrigation and drainage was delivered by VPH Chandra Madramootoo at Lahore Congress. The lecture provided an overview of the challenges facing irrigation and drainage community, and the need to better manage our irrigation and drainage systems to reduce poverty and hunger. The following is a summary of some key aspects of his presentation.

#### GLOBAL IRRIGATION DEVELOPMENT

Of the 1500 million ha of global crop land about 277 million ha (18%) are irrigated. The largest share of the irrigated area is in Asian region (70%), followed by North and Central America (11%), Europe (9%), Africa (5%), South America (4%), and Oceania (1%). During the last four decades the crop land has increased marginally, while population has more than doubled leading to a reduction in the area of land needed to produce food for a person. Irrigation has played an important role in increasing crop productivity. However, the rate of irrigation expansion has declined from 2.3% in 1970-80 to 0.6% in 2000-05 (see figure). Some countries will increasingly face water scarcity. Future needs of water for food are huge and improved water management systems will be required to cope with the demand.

#### **GLOBAL FOOD SITUATION**



During the last four decades the crop area harvested has hardly increased, while the world cereal production has increased by about two and half fold. In general, the overall food prices (in USD) are up by 75% since 2000. Cereals, in particular rice and wheat dominate food supply and provide the largest share of energy to the world's population. However, globally, close to one billion people still remain malnourished, of which some 800 million live in least developed countries (LDCs). The Millennium Development Goals (MDGs) has targeted to reduce this number by half by 2015. In fact the preliminary goal of MDG attempts to highlight this given its importance. This translates into a need of reducing 22 million per year,

while current rate is only 6 million per year - posing a big challenge to bridge the gap between the target and achievement.

There are contradictory views as regards the impact of increasing biofuel crop production on food availability. Some view that this might cause food shortage and consequent hike in the food prices; while a few



VPH Chandra Madramootoo

others opine that bio-fuels provide LDCs and poor farmers new opportunities for employment to improve their economy and livelihoods.

# ON-FARM WATER MANAGEMENT AND SYSTEM MODERNIZATION

There has been growing concerns over declining irrigation system performance and investment benefits, especially in the large-scale public irrigation schemes. Improvement in both viz., conveyance efficiency and on- farm water management is a key for increasing the overall irrigation efficiency. Efficiency gains of 14% in gross withdrawal can also be achieved through reuse of return flows. Improved surface irrigation methods like level furrows, sprinkler and micro irrigation methods and use of advanced techniques of irrigation scheduling can help improve on-farm water management. Modernization of irrigation and drainage systems in a broad sense (technical, management, financial, environmental) will be required at a large-scale, especially in emerging countries to achieve the required increase in food production, and also, in some cases, to save water for other uses.

#### **INVESTMENT IN AGRICULTURE**

It is seen that the public spending on agriculture is the lowest in the agriculture based countries, while the share of agriculture in GDP is the highest. National and international investments in agriculture, official development assistance (ODA), and the World Bank's lending in irrigation have been declining steadily and a complacency set in that is a major cause of the recent global food shortage.

#### THE WAY FORWARD

Inmostdeveloping countries, the agricultural sector is considered as an engine of growth and national governments therefore should reinvest in agriculture and associated infrastructure. In order to reduce water withdrawals for irrigation, upgrading

of irrigation infrastructure through rehabilitation and modernization should be given priority. Other aspects like timely maintenance of irrigation and drainage infrastructure, investment in water storage and water saving technologies, combating the twin menace of waterlogging and salinity through drainage are required. Public-private investment in infrastructure is to be encouraged. One size does not fit all, and solutions have to be case specific.

Maximizing basin water productivity through multi-objective decision making process, developing a rapid innovative

research agenda, capacity building at all levels and building of institutional support for local, regional and international markets will go a long way in achieving food security. External factors, like impacts of bio-fuel production, climate change, virtual water trade, changes in agriculture markets and the prices of commodities will influence agriculture growth and allied activities. Such changes will require additional adaptations in the development of water management measures to sustain global food production to desired levels and avoid the probability of a severe crisis in the coming years.

## **Lahore Declaration**

The target of the First Millennium Development Goal (MDG 1) is reducing hunger by 50 % by 2015. Notwithstanding the progress made to some extent, realisation is still lagging behind considerably. It is disheartening to observe that there are indeed depleting levels of global food stock. This has caused food scarcity resulting in a steep increase in food prices during 2008. This has brought us back to the global agenda on water for agriculture and better agricultural water management, the primary mission of the International Commission on Irrigation and Drainage (ICID).

The 20th ICID Congress in Lahore was rightly conducted on a theme quite relevant to the current needs of Food Security. The theme of Participatory Integrated Water Resources Management: From Concept to Action' covered several sub themes. The participation of over 150 international delegates and 400 local delegates in Pakistan, which has the world's largest contiguous irrigation system could help a fair assessment of the opportunities and bottlenecks in the implementation of Water Management For Sustainable Agriculture Production 'and identifying the issues of importance.

In due consideration to the transactions in the Congress, deliberations in the ICID specialized working groups and recommendations of various stakeholders, the following key recommendations emerged:

- (1) To achieve the required increase in Food Production in light of the rising demand, there is an urgent need to modernize and expand the irrigation and drainage systems and to improve their operation and maintenance in the broadest since as a tool to assume primary importance.
- (2) The increase in worlds' population and an enhancing standard of living for the people world over ask for more production to meet the increasing demands. The looming climate change and its likely impacts on water management for agriculture requires cooperation of cutting across boundaries especially in regard to the Himalayan River Systems
  - Sharing knowledge and information, intensification of data collection networks, research and technology to adapt to the increased needs under the impacts of climate change;
  - A review of the operation of storage systems keeping in view the dynamics of climate change: need for enhancing storage dam based reservoir systems, enhancing soil water storage with water harvesting structures, check dams, recharging groundwater, farm dams and enhancing grain banks virtual water storage;
  - Design and operation of irrigation systems using treated or partially treated water including waste water re-use; and
  - Dealing with mineral tolerant plants, saline land crops and crops to withstand waterlogging. For the countries served by the Himalayan Rivers, it will be of special importance to improve in addition the knowledge on the processes in the snow clad regions.
- (3) Experiences discussed in the congress reflect that participatory water management of schemes involves that the water users' contribute positively to sustainable operation and maintenance of systems. In the emerging countries the responsibility for operation and maintenance has been generally in hands of the Governments. In such cases the transfers concern the transfer of responsibility and ownership of full or parts of the systems gradually getting handed over to the farmers, and/or irrigation or drainage agencies. In the countries with a transition economy, problems of concern differ, such as the need for looking into the

- layout of the systems, which had hitherto been mostly based on the large-scale agricultural production. The transfer of irrigation system management from the traditional government agencies towards water management agencies and water users associations, the funding of modernization and resulting operation and maintenance, lack of good governance, unaffordable pumping systems and environmental degradation came up as emerging issues.
- (4) Investment in the modernization of (large-scale) surface irrigation schemes will result in better service provisions. The partial transfer of such schemes for participatory irrigation management will help better governance, cost recovery in stages and efficient water use.
- (5) Assets created in the recent past for enhancing water availability, particularly dam based reservoirs are facing the challenge of loss of live storage at a pace that is becoming critical: the high rate of sedimentation in Himalayan reservoirs and other river systems in China, Iran, Turkey call for a global initiative to study this aspect; cooperation of international organizations like International Commission on Large Dams (ICOLD), International Hydropower Association (IHA), International Association of Hydraulic Research (IAHR) besides ICID and Research Institutions who are doing works in this regard can pool the knowledge and share it to address the problems of handling this issue.
- (6) In an exclusive session on Tarbela Reservoir sedimentation, the international delegates had an appreciation of the tremendous magnitude of the impending problem arising out of loss of storage; they reviewed available solutions but acknowledged that the Tarbela case as such is unique asking further research, innovative solutions applying frontier knowledge and beyond and exchange ideas. ICID shall in accordance with its By Laws, constitute a Task Force to study this aspect of reservoir sedimentation involving experts of the member countries and liaise with other international organizations like ICOLD, IHA, etc.
- (7) The international participants expressed their high appreciation for the efforts of all involved in the host country to make their stay as good as possible under the present day conditions.

# 10th International Drainage Workshop, Finland and Estonia



Workshop participants at old Parliament House, Helsinki

ICID's 10th International Drainage Workshop (IDW10) was successfully held in Finland and Estonia from 6 to 11 July 2008. The workshop was jointly organized and hosted by the National Committees of Finland (FINCID) and Estonia (ESTCID) under the aegis of Working Group on Drainage (WG-DRG) and attended by 110 participants from 25 countries. There were six keynote speakers - Pres. Hon. Prof. Bart Schultz (The Netherlands), Vice Pres. Dr.-Ing -Eiko Lübbe (Germany), Vice Pres. Hon. Prof. Chandra Madramootoo (Canada), Prof. Wayne Skaggs (USA), Dr. Seppo Rekolainen (Finland), and Dr. Willem F Vlotman (Australia), and 29 oral and over 20 poster presentations

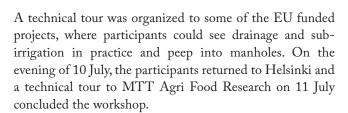
The objectives of the agricultural drainage have been evolved over the years and vary with the circumstances. The primary objective is to make agricultural production possible and profitable. Agricultural drainage can be seen as a part of integrated land and water resources management, where environmental aspects play an important role. The water quality is as important to farming as the public opinion and sustainability of farm production. The topics of the workshop focused on the water quality of agricultural drainage and the methods to mitigate nutrient and phosphate leaching. The effects of extreme weather conditions on agricultural drainage were also included in the topics. Finally, drainage was placed in the context of the environment, economic and social/cultural aspects and suggestions were made on how to proceed with key performance indicators for sustainable integrated water management, where drainage is a driver of this sustainability.

Very interesting field-scale data was presented including conflicting results. What is good for nitrogen (N) reduction is not for phosphorus (P) reduction. Multiple solutions were presented. Field research on drain spacing and depth, rice husk

envelopes, trace elements, bio diversity in re-shaped drains (brook, stream, river), and formulation of Manning's 'n' for natural streams were some of the interesting topics presented followed by lively discussions. One of the main challenges for the drainage community is to translate the 'research results' as presented in the workshop into 'design guidelines'. We need to make sure that we also reach the planners and designers of drainage systems and get them involved early. There were fresh and frank presentations and discussions on some of the past results with controlled drainage. Some explanation as regards the movement of water and constituents such as Nitrates and Phosphorous, if they did not discharge from the controlled drainage system, was provided. The hypoxia problem (green algae effect) in the Gulf of Mexico as a result of water discharge from the Mississippi could not be solved by controlled drainage alone but required a range of concurrent measures such as winter cover crop, catch cropping, and buffer zones. More attention needs to be paid to describe the context of the drainage work with respect to current guidelines (those of the US Environmental Protection Agency or the EU Water Framework Directive).



(L to R) Dr. W. Skaggs, President, ASABE, President Hon. Bart Schultz, VPH Madramootoo, Jouni Lind, State Secy, MAF, Finland and President Lee



#### **KEY HIGHLIGHTS**

Silver pellets: It is not necessary to have a single solution to a problem, and Prof. Wayne Skaggs gave a model to remember this: there is no silver bullet that will solve all our problems in a unique fashion; rather we need to think in terms of many silver pellets. Solving leaching of N and P through water management is but one of the solutions, whereas farm, crop and land use management were shown to be effective measures too; many silver pellets rather than one silver bullet.

Transfer of knowledge: Another silver pellet presented was the potential of applying the methods that resulted in long-term reductions in N and P in the Rhine basin to the hypoxia problem in the Gulf of Mexico. It was encouraging to see that the extension service in the US is very much alive and that private industry is taking an interest in becoming drainage ambassadors (www.admcoalition.com). It was also noted that solutions may be explored with other organisations outside the ICID such as the UN Water Portal, GWP, etc. There was a need for more results to be presented as a follow up of implementation of the EU WFD, so that those could be compared and possibly applied in other basins outside the EU.



Participants at the Poster Exhibition



Subsurface drainage and sub-irrigation at Laheotsa, Estonia

Innovations: There were several silver pellets that can be classified as innovations: new methods of flow measurement in pipes, a bio-filter placed in subsurface drains, classifying flow resistance in natural streams, and a different type like – use hurricane Katrina's experience to emphasize that a billion dollar of investment will safeguard 100's of billions of dollars in damage prevention. Hence, if we classify the potential damage in areas and link this to the investment in research needs and propose preventative measures, we may find a more willing ear at political levels to spend money on improved drainage water management.

# **Global Cooperation**

#### **UNESCO**

ICID received an invitation from the Assistant Director General for Natural Sciences, UNESCO to attend the 18th Session of the IHP Intergovernmental Council and a Workshop on "River Basins–From Hydrological Science to Water Management" held in Paris from 9-14 June 2008 as an Observer. ICID nominated Vice President Hon. Alain Vidal to attend the session.

#### WORLD WATER ASSESSMENT PROGRAMME (WWAP)

The triennial World Water Development Report (WWDR) is the United Nations System flagship report on water, a comprehensive review of the state of the world's freshwater resources. The mandate to produce the reports dates back to decision by the UN-CSD at its 6th Session in 1998, calling on the United Nations system to compile periodic assessments and analyses of water resources availability (with a focus both on quantity and quality) and present a global picture of the sate of freshwater resources and major challenges. The Reports provide a mechanism for monitoring changes in the resources and its management and tracking progress towards achieving targets, particularly those of the Millennium Development Goals and the World Summit on Sustainable Development.

Co-ordinated by the World Water Assessment Programme (WWAP), the development of the 3rd World Water Development Report (WWDR 3) is a joint effort of the 25 UN agencies and entities which make up UN-Water, governments, international organizations, non-governmental organizations and other stakeholders. ICID retained the privilege of being invited as an NGO of importance given its role as water management for agriculture.

Secretary General M. Gopalakrishsnan is a member by invitation, of the Technical Advisory Committee constituted by the World Water Assessment Programme Secretariat under UNESCO which is assigned the task of bringing out World Water Development Reports, periodically. These reports are released during the World Water Forums.



Secy. General M. Gopalakrishnan with members of the Technical Advisory Committee of the WWDR 3

The second preparatory meeting (or "Integration Meeting") for the production of the third edition of the UN World Water Development Report took place in Perugia and TAC meetings were also took place which was attended by SG M. Gopalakrishnan. The first preparatory meeting or "Inception Meeting" took place in Paris in November 2007 in which also SG participated earlier.

Experts, comprising of chapter writers, coordinators and others from twenty-six countries discussed the second draft of the chapters and their integration and TAC could independently advise, as appropriate.

Secretary General had good interaction with ITAL-ICID; Prof. Lucio Ubertini, Dr. Scarascia were a few with whom he could exchange views on ICID matters.

#### **UN-WATER**

ICID is one of the partner organizations of the UN-Water. ICID has been actively participating and contributing to various initiatives like preparation of the 3rd World Water Development Report and Task Forces.

Dr. Avinash C. Tyagi, Director, Climate and Water Department, World Meteorological Organization, and Coordinator of the 'UN-Water Task Force on Water and Climate' had invited ICID to contribute to the Task Force. The objective of the Task Force was to facilitate the member

countries in assessing the impacts and adopting strategies for meeting the challenges of climate change in the water sector and to strengthen UN-System coordination on activities related to water and climate change. ICID had nominated Dr. Mark Svendsen, Chairman, WG-CLIMATE and Dr. Ir. Karim Shiati, Chairman, ASRWG with the objective that ASRWG can contribute to regional issues and the WG-CLIMATE could contribute to thematic side.

#### FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)

Director General, FAO had invited ICID to participate in the Ministerial Conference on "Water for Agriculture and Energy in Africa: the Challenges of Climate Change" to be held in Sirte, Libyan Arab Jamahiriya, from 15 to 17 December 2008. The purpose of the Conference was to address the water resources in Africa, taking into consideration the increased demand by the agricultural and energy sectors in the context of changing climatic conditions.

59th IEC had nominated Secretary General to represent ICID at the Conference. The Secretary General wrote to the National Committees of Mali (AMID), Niger (ANID), Nigeria (NINCID), South Africa (SANCID) and Zambia (ZACID) about the Conference and provide their perceptions on the issues proposed to be discussed in the Conference. The Conference was attended by more than 400 participants, including 37 Ministers, from 48 African countries, 54 representatives of Intergovernmental Organizations, 34 representatives of Civil Society Organizations, and 10 representatives from six Organizations of the United Nations system. Many member countries of ICID participated in the Conference.

The Committee of the Whole, which was open-ended, examined the issues under the three themes, viz., (1) Prospects for food and energy demands by 2015 and projections for 2030-2050, (2) Assessing investment requirements: defining investment envelopes for water control in Africa, and (3) Financing mechanisms and implementation strategies.

While joining the new initiative AgWA (Agriculture Water Partnership): A New Partnership for Agricultural Water in Africa with other organizations (IPTRID, AfDB, FAO, IWMI etc.), Er. Gopalakrishnan agreed to extend assistance to AgWA. Utilizing the opportunity Secretary General made contacts with Libya National Committee to explore the possibilities and revive their interest in ICID. Libya's great efforts to promote agriculture in a challenging environment are unique; this is so because water is being assured with 'man made rivers', modern technologies that ensures water saving in a most difficult environment.

ICID Special Team on Lake Chad basin (ST-LCB) held an interim meeting wherein it was stressed the need of more focus on Lake Chad issues and urged all the member countries impacted by Lake Chad to join ICID.

Vice Presidents Dr. Karim Shiati, Mr. Shinsuke Ota, Ir. Mohd. Azhari bin Ghazalli and Dr. Hafied Gany, and Mr. Theera Wongsamut Chairman of THAICID were nominated to attend the 29th FAO Regional Conference for Asia and the Pacific held at Bangkok from 26 to 31 March 2009.

ICID is represented at various meetings and sessions of FAO from time to time. Dr. Maria Elisa Venezian Scarascia (Italy), Secretary General, ITAL-ICID is ICID's permanent representative in FAO.

#### INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT (IFAD)

ICID in collaboration with IFAD and FAO deliberated on agricultural water needs at a side event at the UN-CSD-16 meetings in New York on 12 May 2008. Dr. Rudolph Cleveringa of IFAD was the Convener of the session 2.3.2: How can food market measures boost rural development and poverty alleviation? of the topic 2.3 coordinated by ICID at 5th World Water Forum. IFAD has also offered to help in widening the membership network of ICID in Africa region.

ICID has a Permanent Observer status at the Executive Board of Governing Council of IFAD. ICID was invited to participate in their 32nd Session of the Governing Council held on 18-19 February 2009 at Rome as Prof. Lucio Ubertini, Vice President, ICID joined the session representing ICID.

#### INTERNATIONAL HYDROLOGICAL PROGRAMME (IHP)

ICID was invited as an Observer to attend the 18th Session of the IHP Intergovernmental Council and a Workshop on "River Basins–From Hydrological Science to Water Management" held in Paris from 9-14 June 2008. A few Office Bearers of ICID could join this event.

## INTERNATIONAL PROGRAMME FOR TECHNOLOGY AND RESEARCH IN IRRIGATION AND DRAINAGE (IPTRID)

The IPTRID Secretariat had floated a Strategic Framework and medium term work plan for a renewed IPTRID program. Dr. Hans W. Wolter was appointed as the international consultant to lead the process. The IPTRID Secretariat had planned an Expert Consultation meeting on 1-2 July 2008 in

Rome to discuss the Strategy, and the Steering Committee meeting on 3 July 2008. Mr. Peter Lee, President, ICID chaired the Steering Committee meeting and reported its outcome in a special meeting to consider the future plans of IPTRID, in the sideline of 59th IEC held at Lahore.

#### **UN-CSD-16, NEW YORK**

The United Nations' Commission on Sustainable Development (CSD) was established by the UN General Assembly in December 1992 to ensure effective follow-up of the United Nations Conference on Environment and Development (UNCED), also known as the 'Earth Summit'. The CSD meets annually in New York in two-year cycles, with each cycle focusing on clusters of specific thematic and cross-sectoral issues. The Cycle (2008-2009) focused on the thematic issues of Agriculture, Rural Development, Land, Drought, Desertification, and Africa. The Commission emphasized the need for ramping up investment in research and development in innovative and sustainable agricultural technologies and infrastructure in developing countries.

The 16th session of UN-CSD was held from 5 to 16 May 2008 at New York focusing on the thematic issues. On this occasion, more than 80 side events, besides the main sessions were held. ICID organized a side event with the support of Israeli National Committee of ICID and Permanent Mission of Israel to the UN and FAO under the theme of 'Role of Water in Addressing the Challenges of Poverty and Food Security' on 12 May 2008. The focus of the side event was to highlight ICID contribution to the various themes and subtopics of the 5th World Water Forum with particular focus on-Water for food for ending poverty and hunger, Ensuring adequate water resources and storage infrastructure to meet agricultural, energy and urban needs, and Efficient water management and sustainable use of marginal water

The panel discussion was moderated by Peter Lee, President ICID and participated by representatives from IFAD, FAO, Winrock International, WWC, besides ISCID. President Lee in his opening speech highlighted the linkages between water, food and poverty. It was noted that agriculture, which addresses poverty and food security is the largest user of water. The challenge of the global increase in food demand requires improving the access to water and land for the rural poor.



FAO-IFAD side meeting, (from LtoR) President Peter Lee, Dr. Mary Renwick (Winrock), Hon Maria Mutagamba, Minister of Water and Environment, Uganda and Dr. Pasquale Steduto (FAO)

Jean-Marc Faurés (FAO) pointed out that the new challenges for irrigated agriculture stem from the rising food prices and tighter commodity markets, increasing environmental concerns, aging irrigation infrastructures, climate change, and growing demands for bio-energy. The rapid changing context causes increasing scarcity of water resources and affects the poor. Dr. Daniel Zimmer of the World Water Council (WWC) illustrated that if water productivity and diet pattern remain unchanged; there will be a need for an additional water supply to agriculture, reaching to an annual 5600 billion cubic meters by 2050, from the present 2600 billion cubic meters. Dr. Mary Renwick from Winrock International underscored that the multiple-use of water services can bring financial and non-financial benefits in addressing multiple dimensions of poverty. Dr. Jorge Tarchizky (Israel) elaborated on the use of treated wastewater for irrigation to increase food production in arid areas, and emphasized that it could be a feasible solution for all sizes, from big metropolitan areas to small villages.

#### UN CONVENTION TO COMBAT DESERTIFICATION (UNCCD)

A request was received from UNCCD Secretariat seeking information on the marking of the 2008 World Day to Combat Desertification (WDCD) on 17 June by ICID. Accordingly, Central Office organized an expert speech on the theme "Combating Land Degradation for Sustainable

Agriculture" on ICID Foundation Day on 24 June 2008. Mr. Sanjay Kumar, Deputy Inspector General, Government of India, National Afforestation and Eco-development Board was invited to deliver a talk.

#### WORLD METEOROLOGICAL ORGANIZATION (WMO)

ICID had received an invitation to represent in the 14th Session of Regional Association II (Asia) held in Tashkent, Uzbekistan from 5-11 December 2008. ICID had requested

Prof. Victor A. Dukhovny, Vice President Hon. ICID to participate.

#### GLOBAL WATER PARTNERSHIP (GWP)

Following the MoU signed between GWP and ICID in 1997, ICID has been actively contributing in various activities of the GWP. The South Asia Global Water Partnership had organized the 2nd South Asia Water

Stakeholders roundtable at New Delhi on 30 April 2008. Secretary General M. Gopalakrishnan, together with other professionals from the Central Office, participated in the roundtable.

#### THE INTERNATIONAL UNION FOR CONSERVATION OF NATURE (IUCN)

ICID was invited to attend the IUCN meeting on 'India-Bangladesh Transboundary Project' in New Delhi on 19

November 2008. Secretary General M. Gopalakrishnan responded to the invitation ensuring ICID participation.

# INTERNATIONAL WATER-RELATED ASSOCIATIONS' LIAISON COMMITTEE (IWALC)

An informal meeting of IWALC took place in the sidelines of 5th World Water Forum held in Istanbul, Turkey. The World

Association for Sediment Research (WASER) has sought to be one of the members of IWALC. This has been agreed to.

#### INTERNATIONAL WATER MANAGEMENT INSTITUTE (IWMI)

An IWMI- FAO- ADB workshop on 'Trends and Transition in Asian Irrigation' was held during 19-21 January 2009 at Bangkok. Secretary General M. Gopalakrishnan was invited to participate in the workshop. As a follow up of an earlier initiative of FAO with IWMI and others in Beppu 1st Asia Pacific Water Summit on 'Re-inventing Irrigation and Agricultural Water Governance in the Asia Pacific to meet MDGs', the workshop attempted to take further action to ensure Asia's food security and committing assured water needs to the effect. Deliberating on the future of the large scale rice-based systems in Southeast Asia, discussions took place in regional groups aimed at covering Central Asia, East South East Asia and South Asia; the interim review of the issue paper flagged a few issues distinctly unique for the

regions. One of the sub sessions concerned 'PIM as a tool of effective future water governance'. There were some mixed reactions on the appropriateness of PIM and some argued as to its effectiveness despite several decades of attempt in that direction in many countries in Asia and elsewhere.

The 7th Annual Partners' Meet of IWMI-Tata Water Policy Programme was held in ICRISAT Campus, Andhra Pradesh, India from 2-4 April 2008 under the theme of "Managing Water in the Face of Growing Scarcity, Inequity and Declining Returns: Exploring Fresh Approaches". From ICID Central Office, Dr. S.A. Kulkarni, Executive Secretary chaired a Technical Session on "Where do we subsidize micro irrigation systems in India".

#### INTERNATIONAL WATER RESOURCES ASSOCIATION (IWRA)

President Lee received an invitation from IWRA to chair and participate in the XIII World Water Congress of

the International Water Resources Association held at Montpellier, France from 1 to 4 September 2008.

#### INTERNATIONAL McGILL CONFERENCE ON GLOBAL FOOD SECURITY, MONTREAL

An international 'McGill Conference on Global Food Security' was held at McGill University at Montreal, Canada during 24-26 September 2008. The Conference brought together senior policy and decision makers in international institutions and government, international scholars, representatives of the private sector, NGOs working in agriculture and food in the developing countries, to discuss possible strategies and interventions which could be implemented to restrain the current global food crisis. The Organizers intended to use this opportunity to sensitize the Canadian public to the magnitude of the crisis and broadly define some possible roles for various Canadian institutions, which were grappling with what their responses to the current crisis ought to be. ICID was represented through the Canadian National Committee on Irrigation and Drainage (CANCID). Other participating organizations were FAO, IRRI, the World Bank, IFPRI, WFP, IICA, OECD, CIDA, and IDRC.

Secretary General M Gopalakrishnan on invitation spoke on the Indian perspective of the food crisis, giving the views of the farmers and the public. President Chandra Madramootoo chaired the Organizing Committee and also acted as the Convenor of the conference. Some key messages of the Conference were: The global food crisis will not come to an end very soon; Declining national and international investments in agriculture; One size does not fit all; Building resilience in vulnerable communities; Impacts of malnutrition on children; Linkages between agriculture, food and nutrition; Water, land and environment; Breaking the cycle of poverty; Farmers are the backbone of the economy; Use the agricultural sector as an engine of growth; Building institutional support for local, regional and international markets; Reinvesting in agriculture and associated infrastructure; Building a rapid innovative research agenda; and Building capacity at all levels.

#### WORLD BANK (SOUTH ASIA WATER COOPERATION)

The Abu-Dhabi Knowledge Forum is initiated as an offshoot of the ongoing Abu-Dhabi Dialogue on South Asia Water Cooperation about which an insertion was made in my last year's report. The Himalayan region countries (like Afghanistan, Bangladesh, Bhutan, China, Nepal and Pakistan) are represented through their Governments, Science and Technology Organisations, besides others drawn from the Academia and Civil Society in this Group. The Abu-Dhabi Knowledge Forum, a sub set of the larger Abu Dhabi Dialogue Group is to identify the internal strength and weakness of the region and explore areas where a coordinated research and training activities would be of immediate use. In so far as agricultural water management and flows are concerned, the floods as well as drought mattered and some progress was made in focal groups to identify the cooperation possibilities cutting across borders. The Group felt the need for an increased effort to advance the knowledge transcending borders. In the light of the Global Climate Change impacts, the Himalayan River system as a whole, from the source to sea had to be studied: the

data gap surfaced as the priority attention area. Given the wider implications on the economy of a sizeable population whose livelihood depends on the Himalayan Rivers, the Dialogue process aimed to envision augmenting the scientific data base with joint efforts and cooperation. While the assessment of the impact of climate change was a starting point for coordinated research, the need to look into water governance structure and current management in place shall also be looked into. Exploring future management options to maximize benefits by increasing water use efficiency came to the fore.

The occasion brought together some in the ICID fraternity together. Most of the participating countries were active ICID members and this helped to convey to the assembly not only the role that ICID could play in looking to the objectives of the knowledge forum.

SG utilized the opportunity for strengthening ICID base. Bhutan and Afghanistan were invited to join ICID fold during this meeting through the experts present from these countries.

#### WORLD WATER COUNCIL (WWC)

ICID is one of the Constituent Members of the WWC. In 2007, WWC and ICID entered into an agreement of partnership by signing a MoU facilitating both the organization to work together in addressing issues concerned with management of 'Water for Agriculture'.

One of the four Associate Centers of WWC is functioning

for over 6 years in New Delhi. ICID Secretary General is currently the President of the New Delhi Centre of WWC (NDC-WWC). The Centre facilitates regular meetings / brainstorming sessions on matters relating to water within the broad framework of objectives of WWC. This Forum serves as an excellent platform for water professionals' meet in the region and enables discussions on a wide range of issues.

## 5th World Water Forum, Istanbul

The 5th World Water Forum was convened in Istanbul, Turkey from 16-22 March 2009. The Forum seeks to enable multistakeholders' participation and dialogue to influence water policy-making at a global level, in pursuit of sustainable development. The main theme of the Forum "Bridging Divides for Water" was addressed through six themes, viz., global change and risk management; advancing human development and the Millennium Development Goals; managing and protecting water resources; governance and management; finance; and education, knowledge and capacity development. The Forum theme was explored through 24 topics, more than 100 thematic sessions, 7 regional sessions, and a series of political processes involving local authorities, parliamentarians, ministers and head of States. A Water Expo, Water Fair, Children's Forum, Youth Forum, and meetings of various stakeholders groups including women were also held. More than 33,000 participants from 192 countries representing governments, UN agencies, inter-governmental organizations, NGOs, academia, business and industry, youth and the media attended the Forum.

A Task Force titled "To guide ICID inputs to WWF-5" was constituted under the Chairmanship of PH Aly Shady. ICID coordinated the discussions on the Topic 2.3 Water and Food for Ending Poverty and Hunger of Theme 2 "Advancing Human Development and the Millennium Development Goals." The Topic was dealt in 4 sessions namely, 2.3.1 How to achieve the required food production to meet the growing demand? (Convener: Dr. Colin Chartres, IWMI); 2.3.2 How can food market measures boost rural development and poverty alleviation? (Convener: Dr. Cleveringa Rudolph, IFAD); 2.3.3 Water for bio-energy or food? (Convener: Mr. Akkineni Bhavani Prasad, CIFA, India); and 2.3.4 How can better water management reduce poverty and hunger? (Convener: Dr. Chandra Madramootoo, ICID).

Earlier, a 'Draft Topic Report' and a 'Draft Session Situation' were prepared under the leadership of Pres. Hon. Bart Schultz and Vice Pres. Hon. Henri Tardieu. The draft reports attempted to provide an overview of the relevant aspects to the questions related to these four sessions in consultation with 50 Consortium Partners and 17 Consultation Partners interested in the topic. The summary of recommendations of the first three Sessions was presented in the 4th Session (2.3.4) by President Chandra Madramootoo.

Besides coordination of the Topic 2.3, ICID also contributed to Sessions 1.1.3, 1.2.3, 1.3.3, 2.2.1, 2.4.2, 3.2.3, 3.3.3,

3.3.4, 4.2.4, 5.1.4, 6.3.2, Topic 5.2, and Sessions on Drought, Water Management 2020, Mega disasters, and Irrigation. In the Session on Drought, VPH Dr. Saeed Nairizi, Iran, described activities related to drought, water scarcity and risk management undertaken by ICID. He said that ICID addressed drought management strategies and indices and suggested that future work needed to include implementation and redefinition of conventional understanding of agricultural water use.

In a Special Session on Efficient Use of Water in Agriculture VPH Dr. Gao Zhanyi made presentation on 'Efficient use of water' in Chinese Agriculture. The session focused on country experiences in irrigation in Mexico, China and Turkey. The panels addressed legal and institutional arrangements, planning and development, and operation and maintenance. In ensuing discussions, participants and panelists drew attention to: water banks to regulate the transfer of water rights, the need to modernize irrigation, and the economic sustainability of water user associations, implications of energy costs and irrigation technology, the need for a stepwise approach to increasing irrigation efficiency, and the use of flexible financing and agricultural development funds to increase productivity in water use. Corruption was also touched upon amongst various issues.



(L-R) Pres. Hon. Bart Schultz, Pres. Chandra Madramootoo, and Pres. Hon. Peter S. Lee at the Wrap-Up Session of Theme 2



(L-R): Secretary General M. Gopalakrishnan, Alison Bartle, Aqua-Media International, and Akkineni Bhavani Prasad, CIFA, India at the Forum Venue

# Increase Investment in Irrigated Agriculture to Alleviate Poverty and Hunger

Addressing to the delegates at the synthesis session of the Topic 2.3, Pres. Chandra Madramootoo, placed the debate on poverty and hunger in the context of the food crisis, which he said threatens progress on the MDGs.

Pres. Madramootoo said that global demand for food will double in the next 25 to 30 years due to population growth and change of diet. He emphasized the need for increased investment in irrigated agriculture which should be mostly borne by the country themselves as there was a decreased interest on the agenda of the donors. Empowering farmers on local markets will result in better prices at farm gate; better income to farmers resulting in a better financial sustainability of irrigation services. Investment in water management should anticipate impacts of climate change. Although development of the bio-fuel can generate income from the poor rural areas, President said that it should be given priority to grow those in rainfed agriculture system. Pres. Madramootoo said that ICID should include smallholders and consider the issues of financing and marketing. ICID also needs to develop linkages with private sector for financing and propose the ways and means to empower farmers to take control of land and water. He solicited contributions from all member countries for sharing their knowledge and experiences.

Dr. Jonathan Woolley, CGIAR stated that, despite being the major user of diverted water resources, agriculture has remained on the margins of the Forum. He urged consideration of how to place agriculture more centrally in discussions. Dr. Salih Abdin, Arab Water Council, identified challenges to food production, including population growth, natural disasters and the use of agricultural products for biofuels. He underscored the need for international cooperation and systematization of international food trade.



(L-R) VPH K. Mohtadullah, Dr. Jonathan Woolley, CGIAR, Pres. Chandra Madramootoo, Ms. Nathalie Chartier-Touze, FWP, Parviz Koohafkan, FAO, and VPH M. Ait Kadi, Morocco at the Synthesis Session 2.3.4

The panel Chair, VPH Khalid Mohtadullah, lauded the recommendations of all the three sessions. In discussions,

participants considered the implications of the financial crisis on poverty and hunger and called for coordinated action across ministries at national and international levels. Panelists and participants discussed, inter alia, land tenure and water rights; preparing for higher commodity prices; dialogue with the donor community; technology transfers and technology for increasing water productivity; the link between oil prices and food prices; and threats to food production from land degradation and drought.

At the Wrap-Up session of the Theme 2, 'Advancing Human Development and the MDGs', Dr. Pasquale Steduto, Chair of UN-Water, introduced the four topics under the Theme. On Topic 2.3 'Water and food for ending poverty and hunger', Pres. Madramootoo, covered the outcome of sessions and highlighted the importance of micro-finance mechanisms, integrated approaches for food and energy; and the development of local markets. He noted that farmers are part of the solution not the problem.



(L-R): Secretary General M. Gopalakrishnan, Alison Bartle, Aqua-Media International, and Akkineni Bhavani Prasad, CIFA, India at the Forum Venue

It was brought out that water was directly or indirectly linked to all development and environment targets, and serves as a link between them. Water management was therefore a fundamental prerequisite in order to achieve current targets and beyond. Sessions and topics presented many fundamental challenges and ideas for action. Mr. Johan Kuylenstierna, UN-Water, closed the wrap-up session with the general recommendations that water must be further integrated into relevant sector planning (health, agriculture, energy); policy making must become more integrated (agriculture, energy and water sectors) to achieve more appropriate scaled responses to global challenges and changes; the water debate must move beyond the water box: influencing macro-economic policies, infrastructure development policies and spatial planning policies will be essential. The planning process for the steps beyond 2015 must also start now.

# **Topic 2.3: Water and Food for Ending Poverty** and Hunger – A Synthesis

The Topic 2.3: Water and Food for Ending Poverty and Hunger was coordinated by the International Commission of Irrigation and Drainage (ICID). The collective efforts of the Topic Coordinators, Session Conveners, Co-conveners, Panelists, Reporters, support staff from the host country, Turkey, and a wider audience during the sessions ensured a smooth conduct of all the four sessions. The following is a synthesised outcome of the Topic 2.3.

The key questions posed through Topic 2.3 were:

- How to reconcile agricultural and water policies to avoid both global and local food crises?
- How can institutional and technical water management improvements and investments contribute to increase food production?
- How can scientific findings more effectively be transferred to practical technologies, especially supporting the poor farmers?
- How can poor farmers benefit from new market opportunities?
- How can local community and regional developments benefit from bio-energy?
- The questions raised were well discussed and the outcome is categorized as follows:

#### (A) Political, economic, and social considerations

- Better integration between food production and natural resources management (land-water and climate) is needed,
- Enhancement of public and private investments in infrastructure to re-emphasize decentralization and governance systems, and public-private partnerships for the financing of research, and project implementation are needed,
- Rural sanitation and wastewater re-use need to be coupled to agriculture and water investment agendas,
- Increasing agricultural productivity and access to food, and reducing hunger will hinge on conducive policies, adequate institutions, improved market infrastructure and social safety nets. What is important is peace and stability for all these measures to be sustainable in the long term,
- An enabling condition that determines the roles of all the stakeholders and promotes synergies in their interaction is needed.

## (B) Technological, environmental, and legal considerations

- Capacity building is required for better policies and more timely implementation, and to train decision makers to make the right decisions at the right time and to create the conditions for promoting successful technological breakthroughs,
- Better linkages between research and education and better communication of research findings are necessary,

- Food price volatility especially for poor small-holders need to address climate change proofing of agricultural water related goods and services, e.g. drought and flood resistant crops, innovative rural finance and insurance schemes, dual purpose transport networks, local level food storage facilities, field to fork reduction of food losses, weather and price information and knowledge,
- Protect rights of the poor to use water for production of basic food demands,
- Ensure enabling governance and policies.

#### (C) Key messages

- Food production improvement by sustainable increase in crop production and equitable distribution is achievable,
- Smallholder agriculture, irrigation and the rural water agenda have been neglected for decades. The current crises offer double dividend opportunities for diversified livelihoods for smallholder farmers, in developing and emerging country economies, women and men, young and old. One needs to recognize small farmers as rural entrepreneurs and as such are part of the solution to economic development, not the source of the crises,
- Higher/right food prices will ensure that there is better water management.

#### (D) Recommendations

- Create grassroots water resources management institutions (financing, land, water, micro credit),
- Mainstream water in national and international strategic development planning,
- Consider diverse options for agricultural water management: rainfed, irrigated, water harvesting. Integrate these options in an optimum manner,
- Water, energy and agriculture are intimately related. Deal with them as an integrated entity; dealing with agriculture in this context will have the added value of enabling the sector to attract better attention from development organizations and the donor community.
- Move from water management to integrated resource management (land degradation, water, infrastructure, institutions, markets, etc.),
- Water and resource management have both external and internal dimensions, which are to be given equal attention

#### (E) Commitments

- While fixing water resource management problems, time has come to involve people from multiple sectors and stakeholders in resolving them, jointly,
- International partnerships to promote the goal are the call of the hour. Concerted efforts by ICID, FAO, IFAD and other organizations independently and jointly in formulating integrated programmes (waterenergy-local, cultural) and dialogue with donor
- communities to mobilize advanced technologies should be a priority follow up action; and
- Extending the state of art technologies and making them accessible to small-holders will help achieve the ultimate objective of poverty eradication.

ICID undertook the task of bringing out a synthesis report comprising presentations, comments made during the sessions, recommendations and initiatives.



Delegates at the Session 2.3.4



Participants at the Forum closing ceremony

## **Africa Partnership, Tunis**

President Peter Lee represented ICID at the initial meeting of a multi-agency task force to promote investment in agricultural water in Africa. The meeting held in Tunis at the end of the 1st African Water Week (26-28 March 2008) was co-chaired by the African Development Bank and the World Bank, and the participants (which now

constitute the task force) were FAO, IFAD, IPTRID, IWMI, ICID, ARID and several bilateral donors. Pres. Peter Lee announced ICID's "Preference for Africa" and said that ICID can make a real contribution to the task force by mobilizing peer support for more investment in agricultural water in Africa.

## **World Water Day**

The World Water Day (WWD) is being celebrated across the globe on 22 March every year commencing from 1994. The day is dedicated to enhance the reach of the 'Voice of Water' and create awareness and understanding on one of humanity's most vital resources. ICID joins other international agencies in their efforts to celebrate World Water Day by encouraging its National Committees to organize activities to mark the event. The theme of the WWD 2008 was "Sanitation" and of the WWD 2009 was "Shared Water- Shared Opportunities". The following is the gist of the WWD 2008 and 2009 celebration reports as received from some National Committees of ICID.

#### **BANCID, BANGLADESH**

Bangladesh National Committee on Irrigation and Drainage (BANCID) in association with the Institute of Water Modelling (IWM) organized a half day seminar entitled "Sustainability of the Buriganga River-Augmentation of Dry Season flow" in Dhaka. Mr. Emaduddin Ahmad, Executive Director, IWM presented the keynote address. He touched upon the issues relating to pollution and water quality of Buri Ganga River. This was followed by a documentary film on the pollution of the peripheral

rivers of the Dhaka city and discussions from the floor. The seminar was chaired by Mr. H. S. Mozaddad Faruque, Director General, Bangladesh Water Development Board, while the Advisor, Ministry of Agriculture and Water Resource was the Chief Guest. A number of eminent water experts, academicians, and scientists, representatives of civil societies / NGOs, and about 150 members of the BANCID attended the seminar.

#### **NETHCID, THE NETHERLANDS**

The Netherlands National Committee of ICID (NETHCID) organized a symposium on "The Water Professional of Tomorrow" at Wageningen University. The symposium was addressed by a group of 10 national and international eminent speakers from diverse backgrounds (academia, NGO's, water user associations, government) and disciplines (technical, public administration, social, and communication). The needs and challenges of the water professional of tomorrow were considered. The

speakers dealt with the new challenges likely to be faced by these professionals in their careers and the importance of enhancing the required knowledge and skills. The symposium was attended by about 120 participants.

The EB-JOUR has brought out a special issue of the ICID Journal Irrigation and Drainage (Vol. 58, Suppl. 2, April 2009) covering the presentations made at the symposium.

#### PANCID, PAKISTAN

Pakistan Engineering Congress celebrated the World Water Day on 22nd March 2009. Theme of the WWD 2009 was "Shared Waters-Shared Opportunities". Engr. Dr. Mubashar Hasan (Ex-Finance Minister) and Prof. of Civil Engineering Department, UET Lahore chaired the proceedings. Six papers were presented by eminent speakers. Engr. Aftab Aslam Agha, President Pakistan Engineering Congress gave a brief genesis of celebrating the 'World Water Day' across the world, and said that the purpose was to enlighten the people about the importance of this precious and rare natural commodity. It was highlighted that lack of strong political will to develop and implement the laws and agreements needed to effectively coordinate water usage within various sectors to manage the resources in an integrated manner has added to the problem; trans-



Participants at the Forum closing ceremony

boundary as well as national water development and management were strongly linked to sustainable and responsible growth. An integrated approach focusing on river basins and aquifer systems was needed on principles of regional cooperation.

World Water Day was also celebrated at Water Management Research Centre (WMRC) at University of Agriculture, Faisalabad on 31st March 2009. In addition to conducting research on efficient use of water in agriculture and disseminating the research outcomes to farming community, the Centre is also creating awareness for saving water at all levels and expanding the existing limited water resources of Pakistan. Mr. Syed Jamait Ali Shah, Commissioner, Indus Water in his keynote address highlighted the different aspects of Indus Water Treaty 1960. He told that the Commissions of both the countries had made some 110 special tours and organized 102 meetings to mutually settle the various issues under Indus Water Treaty.

#### **UKCID, UKRAINE**

Ukraine National Committee on Irrigation and Drainage (UKCID) celebrated the 'World Water Day 2008' by organizing a meeting in the 'State Scientific and Technical Library' in Kiev. The purpose of the meeting was to attract state and public organizations to the problems concerned with water. The issues discussed included current status of

water resources, consequences of Chernobyl catastrophe, new technologies of water purification, ecology, water and health. The efforts of the Ukrainian National Committee to evolve measures to increase efficient use of water resources were also highlighted in the meeting.

# **International Participation**

# Southern African Regional Irrigation Association (SARIA), South Africa

The annual workshop on "Rainwater harvesting and conservation in the Eastern and Southern region of Africa" of the Southern African Regional Irrigation Association (SARIA) was held on 4 - 5 February 2009 at Bloemfontein, South Africa.

The workshop was sponsored by the Water Research Commission (WRC) of South Africa and the National Department of Agriculture (DoA). Rainwater harvesting and conservation has been prioritized for research and extension in several Eastern and Southern African countries. The purpose of the workshop was to facilitate the exchange of ideas and practices between researchers and advisory agents involved in rainwater harvesting and conservation. It also aimed to build a shared understanding of the necessary activities and priority areas for research and extension. Besides the workshop, field visits to a research farm and rural community practicing 'In-field Rainwater Harvesting' were organized.

A total of 39 delegates attended the workshop. Participants included SARIA members from 9 of the 14 SADC countries, as well as Kenya. Workshop participants discussed various biophysical and socio-economic issues relating to rainwater harvesting and conservation.

The workshop was preceded by a SARIA steering committee meeting on 3 February 2009. During the steering committee meeting, SARIA member countries discussed a Memorandum of Agreement which was later adopted with



Participants at the SARIA workshop

the signing of the document by representatives from each country. Member countries without National Committees on Irrigation and Drainage committed themselves to establish national interest groups in their countries which will eventually lead to the formation of National Committees that will join the ICID membership network. Currently, from among the SARIA countries, only South Africa, Tanzania and Zambia are members of ICID.

#### ASIA 2008, DANANG, VIETNAM

An international symposium on 'Water resources and renewable energy in Asia' was organised by the publisher of the 'Hydropower and Dams' in Vietnam in March, 2008. Pres. Peter Lee and Vice President Azhari bin Ghazalli (Malaysia) participated in the symposium representing ICID. Pres. Lee highlighted the desired agricultural and rural development perspective in the conference. The meeting provided a valuable opportunity to wedge across the need for more dependable water resources and our

continuing support for investment in storage for supporting agriculture.

Vice President, Ir. Mohd. Azhari bin Ghazalli hold discussions with Dr. Dao Trong Tu, Deputy Secretary General, of Vietnam National Mekong Committee. He also met the members of the Vietnam National Committee of ICID (VICID) to discuss ICID matters and encouraged them to attend the Lahore Congress.

#### INTERNATIONAL FORUM ON WATER RESOURCES AND HYDROPOWER, CHINA

ICID received an invitation for the 50th anniversary of China Institute of Water Resources and Hydropower Research (IWHR) held on 16 – 18 October 2008 in Beijing. ICID was one of the co-sponsors of this event. Honouring

their invitation to ICID, President Lee graced the function and reiterated ICID support to work with IWHR in the inaugural session.

## **Publications**

Not only had the creation of a dynamic knowledge base but also its dissemination among the professionals across the world remained the core ICID mission objective. This is achieved through various publications like ICID Journal, News Update, Newsletter, Position Paper, Special publications, and Proceedings of congresses, workshops etc. besides the website. The Regional Working Groups and the National Committees too contribute richly to this exercise of knowledge dispersal. Brief information of the key publications brought out during 2008-09 is given below:

## **Special Publications**

#### WATER SAVING IN AGRICULTURE

A unique ICID initiative for the 'Global Water Saving' is through Program well known as "WATSAVE" came up with an objective of promoting successful water saving/conservation practices in agriculture among member countries of ICID. Following this, in 1997, WatSave Awards were instituted by ICID in order to recognize 'outstanding' contributions to water savings across the world.

A compilation of successful water saving experiences/ initiatives, tools and research studies contributed by the past WatSave Award winners as well as by select experts from Australia, Brazil, China, India, Egypt, South Korea, Pakistan, South Africa, Spain, The Netherlands, Turkmenistan, UK and USA has been brought out during the year that was well received by the experts and professionals around the world.

**Author:** ICID; October 2008; Paper bound; 91 pp+ xii; **ISBN**: 81-89610-08-2 **Price:** National Committees/ Members and Booksellers: US\$ 20; Non-ICID Members: US\$ 40

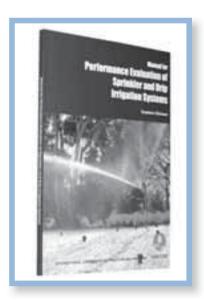


# MANUAL FOR PERFORMANCE EVALUATION OF SPRINKLER AND DRIP IRRIGATION SYSTEMS

Worldwide, the use of pressurized irrigation methods, namely sprinkler and micro irrigation have been steadily increasing to cope up with water scarcity. These technologies allow an efficient use of not only water but also other inputs like fertilizers and energy. They substantially increase crop yields. Nevertheless, pressurized irrigation methods should not be considered as panacea for improving on-farm water management.

It is essential to conduct diagnostic analysis and performance evaluation of the systems on periodic basis to ensure the optimal operation of these systems. This manual authored by Graziano Ghinassi, Italy, has rich contents on the research and practical experience in operation and maintenance of pressurized irrigation systems. The manual provides comprehensive information on both theoretical and practical aspects of various performance indicators and field evaluation techniques of drip and sprinkler irrigation systems, besides case studies from various countries.

**Author:** Graziano Ghinassi, Italy; October 2008; Paper bound; 119 pp+ xvi; **ISBN**: 81-89610-11-2; **Price:** National Committees/ Members and Booksellers: US\$ 20; Non-ICID Members: US\$ 40



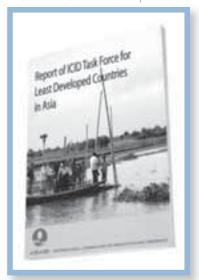
## REPORT OF ICID TASK FORCE FOR LEAST DEVELOPED COUNTRIES IN ASIA

Of the world's 50 Least Developed Countries (LDCs), 10 are located in Asia, 5 in Oceania, 34 in Africa, and 1 in South America. Development and management of irrigation, drainage and flood control play a key role in poverty eradication and increasing the productivity of agriculture in LDCs.

ICID in 2003 established a Task Force for Least Developed Countries in Asia (TF-LDCs-AS) to investigate the problems and needs of LDCs and to identify the priority issues that need to be addressed for their development. The Task Force chaired by Dr. S. Taniyama (Japan), finalized a report that gives an insight into the problems faced by LDC members and some desirable steps for their betterment. The findings indicate that the LDCs have common problems like – capital shortage, poor governance, limited capacity to service financial borrowings, inadequate legal systems, and underdeveloped farmer organizations.

Author: ICID; August 2008; Paper bound; 146 pp+ vi; ISBN: 81-89610-12-0

The publication is available as a gratis (US\$ 10 towards handling charges) on request to all.



#### TRANSACTIONS OF THE 20TH CONGRESS

The 20th International Congress on Irrigation and Drainage of ICID was held in October 2008 at Lahore, Pakistan. The theme of the Congress was 'Participatory Integrated Water Resource Management – From Concepts to Actions'. The pre-congress proceedings in hard copy contain all the 'abstracts' of accepted 91 technical papers (contributed by 231 authors from 23 countries) together with its French translation, and the full length papers published in a CD-ROM. The papers were related to the Congress Question 54: Sustainable Integrated Water Resources Management; Question 55: Role of Public and Private Sectors in Water Resources Development and Management; Special Session: Implication of Global Changes on Irrigation and Drainage System Development and Management; Symposium: Integrated Water Management in the River Basin Context; and Seminar: Lessons to Learn from the History of Water Management in Large River Basins and Drought.

Edited by ICID; October 2008, ISBN: 81-89610-13-9; 81-89610-14-7 **Price:** National Committees/Members and Booksellers: US\$ 117; Non-members: US\$ 232



## **Publications Received from National Committees**

#### A. BOOKS/PROCEEDINGS

- (i) Qureshi, B.A., and Sial, B.A.: 'Irrigation, Drainage and Flood Control in Pakistan', Pakistan National Committee on Irrigation and Drainage (PANCID), October 2008
- (ii) INACID: 'Seeing is Believing', A technical report of the INACID delegation based on the Visit to IRNCID, Iran, from 26 May to 4 June 2008; Bilateral collaboration between Indonesian National Committee (INACID) and Iranian National Committee (IRNCID)', INACID, Indonesia, June 2008
- (iii) FINCID: 'Proceedings of the 10th International Drainage Workshop of ICID Working Group on Drainage, Helsinki/Tallinn 6-11, July 2008', FINCID/Helsinki University of Technology, 2008, pp 404 (Also available in CD ROM).
- (iv) Linoli, A: 'Land Reclamation, Irrigation and Flood Protection in Italy over the Centuries – Volume IV: Section VIII: From the Mid XIV Century to the End of the XV Century; Section IX: The

- XVI Century and the Development of Land Reclamation', Italian Committee on Irrigation and Drainage (ITAL-ICID), October 2008
- (v) SARIA Water Research Commission, South Africa/SANCID: Proceedings of the workshop on 'Rainwater Harvesting and Conservation in the Eastern and Southern Region of Africa', CD ROM.

#### B. NEWSLETTERS

- (i) KCID Newsletter, Korean National Committee on Irrigation and Drainage, 2008, Vol. 39, No. 4; and 2008, Vol. 40, No. 10
- (ii) ERWG Letter, European Regional Working Group (ERWG) of the ICID, April 2008, No. 18
- (iii) IRNCID Newsletter, Iranian National Committee on Irrigation and Drainage (IRNCID), October 2008
- (iv) USCID Newsletter, the U.S. Committee for Irrigation and Drainage, No. 100, 2008

## **Periodicals**

#### THE ICID JOURNAL - IRRIGATION AND DRAINAGE

The ICID Journal 'Irrigation and Drainage', a peer reviewed technical journal carrying selected articles is a flagship publication of ICID. It is published through M/s Wiley-Blackwell (UK) and its management is governed by an International Editorial Board (EB). The Chairman of the EB is Prof. dr. Bart Schultz from the Netherlands, Past President ICID. The EB is composed of joint and associate editors and members from around the world.

The Journal is published in five issues per year of about 128 pages each. Some Special Issues are also brought out to focus on the current issues of significance. During 2008 over 200 papers have been received. In all, 156 authors from 35 countries had contributed their papers. For each regular issue, Central Office had submitted two page brief on relevant and current topics of ICID interest. A *Special Issue (57.3)* on the 'Role of Capacity Building in Irrigation and Drainage' was also published in July 2008.

The Journal is widely distributed among ICID membership. Each National Committee gets 10 free copies of the Journal besides free online access for all Office Bearers and workbody members. Additional copies of the Journal are available at subsidized rates to ICID members. The Journal was priced at US\$ 545 (5 issues) for institutional member, and US\$ 373 for individual members.

The full text of Irrigation and Drainage is available through Wiley InterScience (http://www.interscience.wiley.com/journal/ird) for all issues published since 2001. Access to abstracts is freely available to all guest users, with viewing of

full text papers and Early View papers limited to paid subscribers only. All papers have linkage to other CrossRef papers from the reference lists.

In2002,Irrigation and Drainage had entered in



the ISI Science Journals Citation Index under the number ISSN 1531-0353. Compared to 2007, the impact factor of the journal has gone up from 0.598 to 0.623, indicating a good upward trend. The EB-JOUR was selected for the 2nd Best Performing Workbody Award of the ICID for its work during 2005 – 2008.

In 2008, the 2nd Agreement with Wiley-Blackwell on the publication of 'Irrigation and Drainage' came to an end. In the

meantime ICID and Wiley-Blackwell have entered in a new 5 year Agreement with ICID for the period 2009 - 2013.

The Journal can be subscribed by contacting Sarah Stevens,

M/s. John Wiley & Sons Ltd., E-mail: sasteven@wiley.co.uk. Online order can also be placed. For more information, please visit: http://www.interscience.wiley.com/journal/ird

#### **ANNUAL REPORT 2007-08**

The annual report covering the period April 2007 to March 2008 was brought out by the Central Office in September 2008. The printed version of the report was sent to all the National Committees/ Committee, and Office Bearers. The report was also posted on ICID website.

#### **NEWSLETTER**

The Newsletter is a colorful 12 page bulletin of ICID, published quarterly. publishes brief invited technical articles of current interests from eminent professionals, outcomes/report of the key ICID events, and a commercial advert. President ICID provides messages in the Newsletters. Articles



published in the Newsletters are cited by many international organizations like the World Bank, the World Watch Institute, and professionals in technical papers. During the period April 2008 to March 2009 4 issues of the Newsletter (2008/3, 2008/4, 2009/1, and 2009/2) were published.

#### NEWS UPDATE

The News update is a four page monthly bulletin of ICID and covers current news from National Committees, visits of Office Bearers, important announcements about ICID and other related events, ICID Journal alerts, updates on Text Delivery Service (TDS), vacancy announcements, besides messages from the



Secretary General. During the period April 2008 to March 2009, 12 issues of the News Update were published. These are posted on ICID website on 15th of every month.

Soft versions of both News Update and Newsletter issues are first posted on ICID website (www.icid.org/news.html) and subsequently published in printed version. Hard (printed) copies are sent by post to all National Committees, Office Bearers, international organizations and a few others on request. Soft versions (pdf) of both News Update and Newsletter are electronically circulated among thousands of professionals across the world. All those institutions and individuals interested in getting these periodicals can subscribe through the homepage of the ICID website.

## **Central Office**

ICID operates from a secretariat called as Central Office (CO), housed in its own building located at 48, Nyaya Marg, Chanakyapuri, New Delhi, India. The Central Office is the network hub for the communication and knowledge dissemination. It provides essential support services to ICID member countries/National Committees, Workbodies, Office Bearers, liaise with UN and other water related international organizations, and other stakeholders, besides financial management of the Commission.



ICID Central Office

#### **STAFF**

The CO has a total sanctioned staff strength of 28 of which 19 staff members were in position at the end of March 2009. The CO staff works under the overall supervision of Secretary General, ICID. The staff comprises professionals and support staff. The professionals are - Er. K.N. Sharma, Secretary; Dr. S.A. Kulkarni; Executive Secretary; Dr. V.K. Labhsetwar, Director; and Er. (Mrs.) Jancy Vijayan, Joint Director. The supporting staff assists in various activities including administration, finance, web services, library, Text Delivery Service (TDS), and operation and maintenance of the Central Office and its premises. During the year 2008-09, 9 positions (about 30% of the sanctioned staff) were kept vacant to effect economy. The work allocation amongst the professionals during the reporting period of 1 April 2008 to 31 March 2009 was as follows:



Location Map

# **Work allocation among Central Office professionals**



Er.K.N. Sharma
Secretary



Dr. S. A. Kulkarni
Executive Secretary



Dr. V. K. Labhsetwar

Director



Er. Mrs. Jancy Vijayan

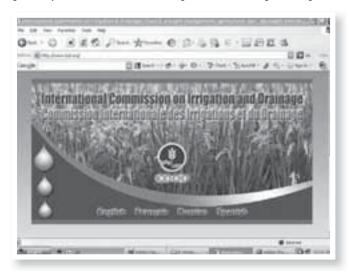
Ioint Director

Secretary	Executive Secretary	Director	Joint Director
WORKBODIES	WORKBODIES	WORKBODIES	WORKBODIES
<ul><li>PCTA</li><li>PCSPOA</li><li>PFC</li><li>WG-CD</li><li>TF-WWF5</li></ul>	<ul><li>WG-MIS</li><li>WG-DRG</li><li>WG-PQW</li><li>WG-ON-FARM</li><li>WG-CLIMATE</li><li>WG-WATS</li></ul>	<ul><li>C-CONGR</li><li>EB-JOUR</li><li>WG-CROP</li><li>WG-CAFM</li><li>WG-SDTA</li><li>AMRWG</li></ul>	<ul><li>C-PR&amp;P</li><li>WG-TRUE</li><li>WG-ENV</li><li>WG-YPF</li><li>WG-HIST</li><li>ST-ARAL</li></ul>
Other activities	• ST-LCB • AFRWG	<ul><li>ERWG</li><li>WG-DROUGHT</li></ul>	<ul><li>ASRWG</li><li>TF-IBWT</li></ul>
<ul> <li>Management Board</li> <li>Staff Committee</li> <li>Office Bearers Committee</li> <li>Administration (part)</li> <li>Accounts</li> <li>ICID Website</li> <li>UNESCO/ IWALC</li> <li>BPNCA / BPWA</li> <li>WWC / WWF 5</li> <li>N.D. Gulhati Lecture</li> <li>Strategy Themes</li> </ul>	• TF-LDCAF • TF-POVERTY  Africa Region	Americas and Europe Regions	Asia Region
		Other activities	Other activities
	Other activities	ICID Journal     News Update	<ul><li>Annual Report</li><li>Protocol &amp; Liaison with</li></ul>

### **ICID** Website

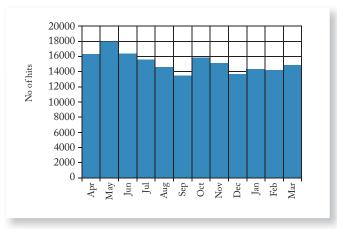
The ICID website <a href="http://www.icid.org">http://www.icid.org</a> was first launched in 1997 and since then it has been growing immensely. The website provides instant access to a wide range of information on irrigation, drainage, and flood management. The website has French, Russian, and Spanish versions linked to key information. The main sections of the website are – Web Updates, News, About ICID, National Committees, Work Bodies, ICID Events, Publications, Database, Advertisers Catalogue, Awards, Affiliated Organizations, Text Delivery Service (TDS), and Vacancies.

The current and recent issues of the monthly News Update, quarterly Newsletter, Annual Report and other special reports



can be accessed on the website. The Advertisers Catalogue provides a platform to manufacturers, institutions, consultancy organizations to display their company profile. The website is updated on regular basis and got a good increase in number of hits with an average of 16,000 hits per month.

An additional domain name ICIDONLINE.ORG has been allotted to each workbody. For easy access to the websites, a File Transfer Protocol (FTP) is made available to the



ICID website visits

Chairpersons enabling them to upload and manage information related to their workbodies. Currently, some 21 workbodies are making use of this facility.

## **Technical Library**

The Central Office library houses technical books, reports, proceedings, and periodicals, besides ICID's own publications. The Library receives about 50 periodicals. With the acquisition of 260 new books during the period 1 April 2008 to 31 March 2009, the Library has acquired 31,270 technical reference documents. Newspaper clippings covering important developments in the irrigation and related sectors, both within India as well as internationally are also added from time to time. The Library has a collection of about 52 video cassettes and 174 CD-ROMs on various aspects of development, operation, maintenance, and rehabilitation of irrigation works.



## **Text Delivery Service**

The 'Text Delivery Service' (TDS) was launched by the ICID in August 2001, through its website. The main objective of the TDS is to facilitate easy access and communication of literature (both published and grey) on various aspects of irrigation, drainage, and flood management to all professionals across the world, including ICID members. The ICID Library Catalogue is made available in electronic format for online searching of desired literature using keywords - name of author, title, etc. Complete document, wherever available can be viewed/downloaded through "resources available link" provided at the end of the search mode on the ICID website. The TDS facility is widely availed by many professionals worldwide. In 2008-09, 649 papers under 'Article section' and 260 publications under 'Book section' were added to TDS making a cumulative tally of 7,761 under 'Article section' and 31,270 under 'Book section'.



## **Visitors to Central Office**

Mr. A.K. Bajaj, Chairman, Central Water Commission and Indian National Committee on Irrigation and Drainage (INCID) visited Central Office on 5 May 2008. He was felicitated by Secretary General Gopalakrishnan for becoming Chairman of CWC/ INCID.



Mr. Syed Raghib Abbas Shah, Secretary General, Organizing Committee for 20th ICID Congress, visited Central Office on



28 July 2008 to discuss issues related with Lahore Congress. He apprised about the various preparations by PANCID and WAPDA towards the hosting of 59th IEC meetings and 20th Congress at Lahore.

**President Prof. Chandra Madramootoo** who was on a brief mission to India to attend ICRISAT Governing Council Meeting held discussions on the various preparations towards 5th World Water Forum with the Secretary General at Hyderabad on 9 March 2009.



Mr. Suman Sijapati from Nepal National Committee of ICID (NENCID) visited the Central Office on 8 August 2008 and held discussions with Secretary General Gopalakrishnan. Secretary General highlighted the ongoing programmes and future activities of the Commission. He invited NENCID to participate actively in the 20th Congress, 59th IEC meetings and other allied events such as Asian Regional Working Group Meeting and WG-YPF Workshop etc. to be held in October 2008 at Lahore, Pakistan.

Pres. Hon. dr. Bart Schultz, Coordinator, Task Force to Guide ICID Inputs to 5th World Water Forum (TF-WWF-5) visited the Central Office to chair the 2nd meeting of the Consortium Members held on 10 October 2008 in New Delhi where the Draft Topic Scoping Paper and Session Plans for Topic 2.3 of the 5th World Water Forum were discussed and reviewed based on the comments and inputs received from various Consortium Partners.

#### 59TH FOUNDATION DAY OF ICID

ICID was established on 24 June 1950 at New Delhi. To commemorate the 'ICID Foundation Day', the Central Office as well as other National Committees celebrates this day every year by organizing some event. Central Office celebrated the 59th Foundation Day by organizing a presentation on 'Desertification and Climate Change' on 24 June 2008 at New Delhi. The presentation was made by **Dr. Sanjay Kumar**, Deputy Inspector-General, Ministry of Environment and Forests, Government of India. The Indian Water Resources

Society (IWRS) and the New Delhi Centre of World Water Council (NDC-WWC) also joined the celebrations. Dr. Kumar focused on climate change impacts leading to land degradation, promoting alternative rural livelihood policy, public-private partnerships and participatory approach in mitigation and adaptation efforts. More than 50 professionals from government and private organizations, and academia attended the event.



# **Financial Statement**

## Consolidated Receipts and Payments Account (1 April 2008 to 31 March 2009)

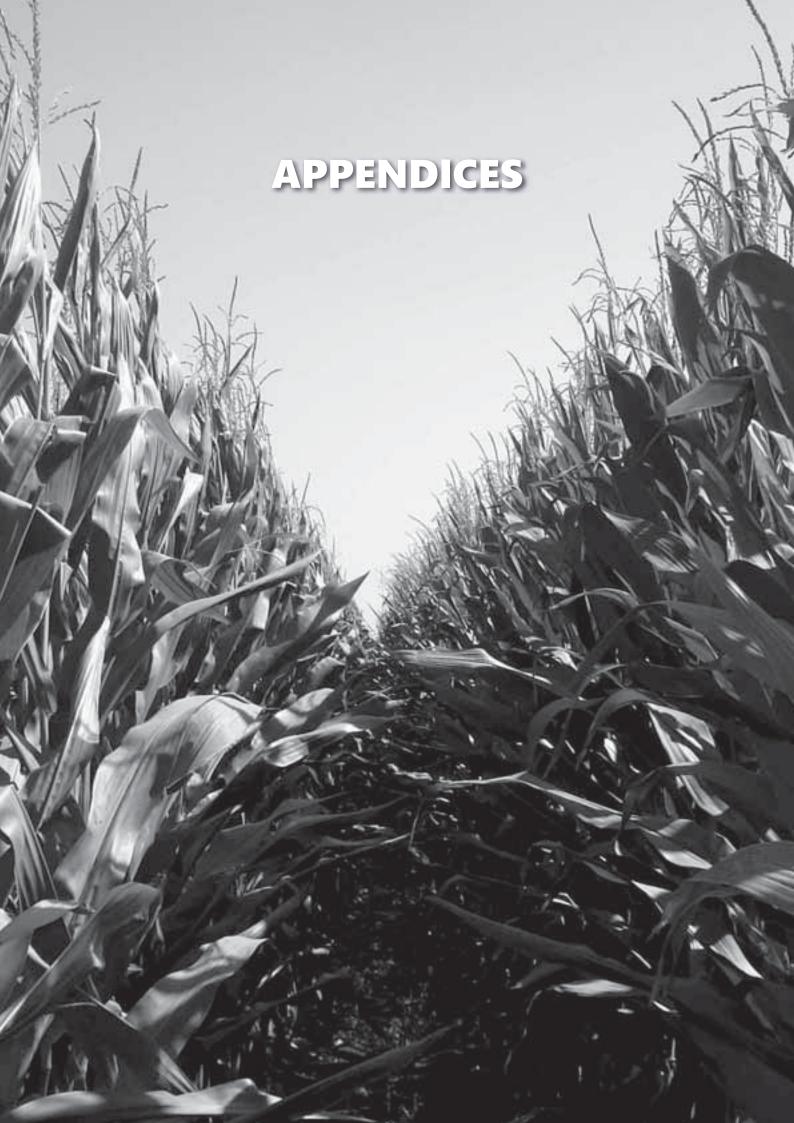
	2008-09 (Rs.)	2007-08 (Rs.)
RECEIPTS		
Membership Subscription	7 082 834	9 556 932
Publications	1 564 707	537 911
Conference Support	1 691 200	160 000
Interest	940 085	1 190 962
Others	2 541 360	306 553
Let out property (Rent)	16 289 641	-
Total Receipts	30 109 827	11 752 358
PAYMENTS		
Salaries and Retirement dues	15 166 102	10 488 720
Services and Maintenance	1 973 213	2 034 038
Property Tax and Utilities	1 884 257	1 752 515
Rehabilitation / Refurbishing	266 905	-
ICID Journal	1 474 800	1 398 800
Printing and Distribution	2 302 694	451 580
Subscription to other organizations	151 776	-
Travel Expenditure on Meetings	892 779	1 139 931
Payment to L&DO (MoUD) from Rent	-	-
Others	9 152	-
Contingency	-	-
Total Payments	24 121 678	17 265 584
SURPLUS (DEFICIT)		
Surplus (Deficit) (1)	5 988 149	(5 513 226)
Grant Receipts	-	220 150
Grant Utilization	-	-
Surplus (Deficit) of Grants (2)	-	220 150
Net Surplus (Deficit) (1) + (2)	5 988 149	(5 293 076)
	As on 31.3.2009	As on 31.3.2008
ASSETS		
Property and Equipments	8 933 472	9 330 183
Receivables	7 505 664	2 391 173
Stocks	1 154 760	1 475 953
Cash at bank and imprest	26 611 337	23 926 926
Total Assets	44 205 233	37 124 235

LIABILITIES		
Accounts payable	3 114 948	3 114 948
Grants	-	284 784
Gratuity Fund	2 982 138	2 869 781
Superannuation Fund	1 583 289	1 503 292
Total Liabilities	7 680 375	7 772 805
NET ASSETS RESERVES	36 524 858	29 351 430
TESERY ES		
General Fund	35 785 167	28 659 628

The expenses incurred during the financial year 2008-09 were Rs.24.12 million, against the receipts of about Rs.30.11 million, thus showing a surplus of about Rs.5.99 million. The surplus mainly resulted due to receipt of outstanding rent arrears from let-out property and deferment of payment to Land and Development Office (L&DO) of the Govt. of India of their share from rent accruals.

#### **EXTERNAL SUPPORT**

The Agriculture and Agri Canada, Praire has sponsored CDN \$ 10000/- for bringing out various publications related to 20th ICID Congress. National Committees of Australia, Iran, Japan, Taipei have provided their funding support of US\$ 4,000 for printing of the Report 'ICID Task Force for Least Developed Countries in Asia (TF-LDCsAS)'.



# **Membership Network - Regionwise**

	AFRIC	A		AMERI	CAS		
	Active		Active				
1. 2. 3. 4.	Egypt (ENCID) Ethiopia (ETCID) Mali (AMID)(2005) Morocco (ANAFIDE)	(1950) <sup>1</sup> (1976) (1959)	1. 2. 3. 4.	Brazil (ABID) Canada (CANCID) Chile (CHICID) Guyana (GUCID)	(1970) <sup>1</sup> (1956) (1979) (1957)		
5. 6. 7. 8.	Niger (ANID) (2007) Nigeria (NINCID) South Africa (SANCID) Zambia (ZACID)	(1970) (1993) (1966)	5. 6. 7.	Mexico (MXCID) Uruguay (URCID) USA (USCID)	(1951) (2007) (1951)		
	Deemed to be i	nactive		Deemed to be	e inactive		
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	Algeria (CNAID) Angola (ANGCID) Ghana (CHANCID) Ivory Coast (IVCID) Kenya (KENCID) Libya (LICID) Madagascar (MADCID) Mozambique (MOCID) Senegal (SENCID) Sudan (SUCID) Tanzania (TANCID) Tunisia (TUNCID) Uganda (UGCID) Zimbabwe (ZICID)	(1965) <sup>1</sup> - (1999) <sup>2</sup> (1978) - (1994) (1958) - (1963) (1969) - (1982) (1977) - (2003) (1988) - (2000) (1983) - (1986) (1967) - (2004) (1978) - (2006) (1966) - (1992) (1964) - (2003) (2000) - (2006) (1960) - (1993) (1963) - (1983) (1955) - (2001)	1. 2. 3. 4. 5. 6. 7. 8. 9.	Argentina (ARCID)  Colombia(INAT)  Dominican Republic (DOMCID)  Ecuador (EDORCID)  Honduras (HOCID)  Panama (PANACID)  Peru (PERU-ICID)  Surinam (SURCID)  Venezuela (VENCID)  Withdrawn on	$(1975)^1$ - $(2004)^2$ (1966) - $(2003)(1961)$ - $(1986)(1959)$ - $(1985)(1979)$ - $(1999)(1980)$ - $(1990)(1965)$ - $(1973)(1956)$ - $(1985)(1963)$ - $(1982)$		
	Admitted but not paid subscription			Admitted but not pa	•		
1. 2. 3. 4.	Burkina Faso (BURCID) Chad (ATID) Mauritius (MAUCID) Sao Tome and Principe (SAOCID)	(2000) <sup>3</sup> (2003) (1992) (1985)		Jamaica (JAMICID)	(2008) <sup>3</sup>		

 $<sup>{}^{1}\!</sup>Y\!ear\ of\ joining,\ {}^{2}\!Y\!ear\ of\ becoming\ inactive,\ {}^{3}\!Y\!ear\ of\ admission,\ {}^{4}\!Y\!ear\ of\ withdrawal$ 

	ASIA AND OCEA	ANIA	EUROPE				
	Active		Active				
1.	Australia (ANCID)	$(1952)^1$	1.	Austria (AUNCID)	$(1954)^1$		
2.	Bangladesh (BANCID)	(1973)	2.	Croatia (CRCID)	(1993)		
3.	China (CNCID)	(1983)	3.	Cyprus (CYCID)	(1955)		
4.	Chinese Taipei (CTCID)	(1969)	4.	Czech Republic (CZNC-ICID)	(1997)		
5.	India (INCID)	(1950)	5.	Estonia (ESTCID)	(2001)		
6.	Indonesia (INACID)	(1950)	6.	Finland (FINCID)	(2000)		
7.	Iran (IRNCID)	(1955)	7.	France (AFEID)	(1953)		
8.	Iraq (IRQCID)	(2006)	8.	Germany (GECID)	(1957)		
9.	Israel (ISCID)	(1950)	9.	Greece (GRCID)	(1957)		
10.	Japan (JNC-ICID)	(1951)	10.	Hungary (HUCID)	(1955)		
11.	Kazakhstan (KAZCID)	(2006)	11.	Ireland (IRCID)	(1978)		
12.	Korea (KCID-ICID)	(1970)	12.	Italy (ITAL-ICID)	(1950)		
13.	Kyrgyz Republic (KYRCID)	(2004)	13.	Lithuania (LNCID)	(1994)		
14.	Malaysia (MANCID)	(1958)	14.	Macedonia (MAKCID)	(1995)		
15.	Myanmar (MINCID)	(1962)	15.	Netherlands (NETHCID)	(1950)		
16.	Nepal (NENCID)	(1973)	16.	Portugal (PNCID)	(1954)		
17.	Pakistan (PANCID)	(1953)	17.	Romania (CNRID)	(1992)		
18.	Philippines (PNC-ICID)	(1956)	18.	Russia (RUCID)	(1955)		
19.	Saudi Arabia (SACID)	(1977)	19.	Serbia (YUGCID)	(2002)		
$\frac{1}{20}$ .	Sri Lanka (SLNICID)	(1950)	$\frac{1}{20}$ .	Slovenia (SINCID)	(1992)		
$\frac{20.}{21.}$	Syria (SYCID)	(1962)	$\frac{20.}{21.}$	Spain (CERYD)	(1955)		
$\frac{21.}{22.}$	Thailand (THAICID)	(1950)	$\frac{21.}{22.}$	Switzerland(CH-AGRAM)	(1951)		
23.	Turkey (TUCID)	(1954)	23.	UK (ICID.UK)	(1951)		
24.	Uzbekistan (UzNCID)	(1994)	24.	Ukraine (UKCID)	(1996)		
24.	OZDERISTAII (OZIVCID)	(1774)	24.	Okraine (OKCID)	(1770)		
	Deemed to be inacti	ve		Deemed to be inact	ive		
1.	Jordan (JORCID)	$(1978)^1$ - $(2003)^2$	1.	Belgium (BELCID)	(1988)1 - (1997)2		
2.	Lebanon (LEBCID)	(1964) - (1976)	2.	Bulgaria (BNCID)	(1960) - (2006)		
3.	Tajikistan (TAJCID)	(1997) - (2003)	3.	Poland (POCID)	(1957) - (2006)		
4.	Vietnam (VICID)	(1960) - (2003)	4.	Slovak Republic (SKNC-ICID)	(1996) - (2006)		
	Withdrawn on their o	N11/9		Withdrawn on their	0.72743		
	vv tilidrawn on then t	JWII		Withdrawn on their	OWII		
	New Zealand (NEWCID)	$(1979)^1 - (1986)^4$		Denmark (DENCID)	$(1981)^1 - (1986)^4$		
	Admitted but not paid sub	scription					
1.	Afghanistan (AFGICID)	$(2008)^3$					
$\frac{1}{2}$ .	Azerbaijan (AZERCID)	(2008)					
$\frac{2}{3}$ .	Mongolia (MOGCID)	(1993)					
	Turkmenistan (TURMICID)	(1998)					
4. 5.	Yemen (YECID)	(1998)					
٦.	remen (TECID)	(1773)					

 ${}^{1} Year\ of\ joining,\ {}^{2} Year\ of\ becoming\ inactive,\ {}^{3} Year\ of\ admission,\ {}^{4} Year\ of\ with drawal$ 

Region	Active	Deemed to be inactive	Admitted but not paid subscription	Withdrawn	Total
Africa	8	15	4	-	27
Americas	7	9	1	1	18
Asia and Oceania	24	4	5	1	34
Europe	24	4	-	1	29
Total	63	32	10	3	108

# **Countrywise Membership on Workbodies** and Task Forces

S. No.	Country (National Committee/ Committee Acronym)	No. of members	No. of Workbodies (WBs) Task Forces (TFs)	No. of members attended Lahore meetings, Oct. 2008	Names of Workbodies (WBs) and Task Forces (TFs)
1	Australia (ANCID)	9	15	-	WG-CAFM, WG-DRG, C-PR&P, MB, ASRWG, WG-ENV, WG-CLIMATE, PCTA, EB-JOUR, WG-CD, WG-WATS, WG-TRUE, WG-ON-FARM, WG- DROUGHT, WG-PQW
2	Austria (AUNCID)	2	2	-	ERWG, WG-HIST
3	Bangladesh (BANCID)	1	1	-	ASRWG
4	Brazil (ABID)	-	-	-	-
5	Canada (CANCID)	8	9	3 (5)*	WG-TRUE, ST-ARAL, MB, SC, EB-JOUR, WG-DRG, WG-CROP, WG-CLIMATE, TF-IBWT
6	Chile (CHICID)	-	-	-	-
7	China (CNCID)	14	20	9 (15)	WG-DRG, WG-TRUE, ASRWG, WG-ENV, WG-WATS, WG-MIS, WG-ON-FARM, WG-CLIMATE, WG-PQW, WG-YPF, PFC, WG-SDTA, WG-CD, PCSPOA, C-CONGR, WG-CROP, WG-HIST, WG-CAFM, EB-JOUR, WG-DROUGHT
8	Chinese Taipei (CTCID)	14	15	8 (8)	WG-DRG, WG-SDTA, ASRWG, WG-ENV, EB-JOUR, C-PR&P, WG-WATS, WG- DROUGHT, WG-ON-FARM, WG-HIST, WG-CROP, WG-PQW, WG-CLIMATE, WG-MIS, TF-IBWT
9	Croatia (CRCID)	3	3	-	WG-HIST, WG-CAFM, ERWG
10	Cyprus (CYCID)	1	1	-	ERWG
11	Czech Republic (CZNC-ICID)	2	2	-	ERWG,WG-PQW
12	Egypt (ENCID)	7	12	5 (9)	WG-TRUE, WG-DRG, WG-ENV, WG- WATS, WG-DROUGHT, PCSPOA, PCTA, WG-PQW, C-PR&P, AFRWG, ST-LCB, TF-LDCsAF
13	Estonia (ESTICID)	1	1	-	ERWG
14	Ethiopia (ETCID)	1	2	-	AFRWG, TF-LDCsAF
15	Finland (FINCID)	3	3	3 (3)	ERWG, WG-ENV, WG-DRG
16	France (AFEID)	13	19	1 (1)	ERWG, WG-TRUE, AFRWG, WG-MIS, WG-ENV, WG-CROP, WG-CD, WG-ON-FARM, PCTA, EB-JOUR, TF-POVERTY, WG-CLIMATE, WG-HIST, PCSPOA, PFC, WG-WATS, WG-YPF, WG-PQW, ST-ARAL
17	Germany (GECID)	7	8	3 (6)	ERWG, WG-ENV, PCSPOA, EB-JOUR, WG-HIST, WG-DRG, WG-ON-FARM, WG-SDTA
18	Greece (GRCID)	1	1	-	ERWG

S. No.	Country (National Committee/ Committee Acronym)	No. of members	No. of Workbodies (WBs) Task Forces (TFs)	No. of members attended Lahore meetings, Oct. 2008	Names of Workbodies (WBs) and Task Forces (TFs)
19	Guyana (CUCID)	-	-	-	-
20	Hungary (HUCID)	4	6	1 (3)*	WG-HIST, PFC, ERWG, WG-TRUE, WG-ON-FARM, WG-CAFM
21	India (INCID)	18	21	1 (1)	TF-IBWT, WG-TRUE, WG-DRG, WG-CAFM, C-PR&P, WG-YPF, WG- CLIMATE, WG-WATS, WG-SDTA, PCTA, ASRWG, C-CONGR, EB-JOUR, PFC, WG-HIST, WG-MIS, WG-ON-FARM, WG-CD, WG-PQW, WG-CROP, TF-FIN
22	Indonesia (INACID	4	6	1 (3)	WG-SDTA, WG-HIST, WG-SDTA, EB-JOUR, ASRWG, PCSPOA
23	Iran (IRNCID)	12	17	7 (14)	WG-DRG, WG-CAFM, WG-WATS, WG-TRUE, C-PR&P, WG-DROUGHT, WG-ON-FARM, EB-JOUR, PFC, WG-YPF, WG-HIST, ASRWG, WG-PQW, PCSPOA, WG-CLIMATE, WG-ENV, C-CONGR
24	Iraq (IRQCID)	-	-	-	-
25	Ireland (IRCID)	1	1	-	ERWG
26	Israel (ISCID)	1	1	-	WG-PQW
27	Italy (ITAL-ICID)	12	16	-	WG-CD, AFRWG, ERWG, PCTA, WG-CROP, EB-JOUR, ST-ARAL, WG- IDROUGHT, WG-ON-FARM, WG-WATS, C-PR&P, PCSPOA, WG-ENV, PFC, WG- HIST, WG-TRUE
28	Japan (JNC-ICID)	12	19	1 (1)	WG-CAFM, WG-HIST, WG-ENV, WG-SDTA, EB-JOUR, ST-ARAL, WG-CROP, WG-ON-FARM, PFC, ASRWG, WG-TRUE, TF-IBWT, PCTA, WG-PQW, WG-DRG, WG-YPF, PCSPOA, WG-CLIMATE, WG-MIS
29	Kazakhstan (KAZCID)	-	-	-	-
30	Korea (KCID-ICID)	11	11	-	WG-ENV, WG-DRG, WG-SDTA, PCSPOA, WG-CAFM, WG-ON-FARM, WG-CROP, ASRWG, EB-JOUR, WG- HIST, WG-YPF
31	Kyrgyz Republic (KYRCID)	-	-	-	-
32	Lithuania (LTCID)	1	1	-	ERWG
33	Macedonia (MAKCID)	1	1	-	ERWG
34	Mali (AMID)	1	1	1 (1)	AFRWG
35	Malaysia (MANCID)	6	7	-	WG-DRG, EB-JOUR, ASRWG, WG-SDTA, PCAPOA, WG-TRUE, WG-YPF
36	Mexico (MXCID)	5	3	1 (1)	AMRWG, WG-PQW, EB-JOUR
37	Morocco (ANAFIDE)	3	3	-	WG-ENV, WG-PQW,WG-MIS
38	Myanmar (MNCID)	-	-	-	-
39	Nepal (NENCID)	1	1	-	ASRWG
40	Netherlands (NETHCID)	14	17	8 (12)*	WG-ON-FARM, ERWG, WG-CAFM, WG-HIST, WG-ENV, WG-YPF, WG-PQW, WG-POVERTY, WG-SDTA, EB-JOUR, WG-DRG, C-PR&P, WG-TRUE, WG-MIS, WG-DROUGHT, TF-FIN, TF-IBWT,
41	Niger (ANID)	-	-	-	-

S. No.	Country (National Committee/ Committee Acronym)	No. of members	No. of Workbodies (WBs) Task Forces (TFs)	No. of members attended Lahore meetings, Oct. 2008	Names of Workbodies (WBs) and Task Forces (TFs)
42	Nigeria (NINCID)	5	7	-	WG-DRG, ST-ARAL, ST-LCB, WG-ON- FARM, AFRWG, WG-HIST, TF-LDCsAF
43	Pakistan (PANCID)	9	13	4 (12)	WG-CROP, WG-DRG, WG-PQW, EB- JOUR, ST-ARAL, TF-IBWT, ASRWG, PFC, WG-HIST, WG-CAFM, C-CONGR, WG-ENV, WG-YPF
44	Philippines (PNC-ICID)	-	-	-	-
45	Portugal (PNCID)	4	4	-	WG-ENV, WG-ON-FARM, EB-JOUR, ERWG
46	Romania (CNRID)	1	1	-	ERWG
47	Russia (RuCID)	8	8	1 (1)	WG-TRUE, ERWG, PCTA, PCSPOA, ST- ARAL, PFC, WG-YPF, WG-DRG
48	Saudi Arabia (SACID)	-	-	-	-
49	Serbia Republic (YUGCID)	1	1	-	ERWG
50	Slovenia (SINCID)	4	5	-	WG-ENV, WG-CROP, WG-DRG, ERWG, WG-CAFM
51	South Africa (SANCID)	12	14	2 (5)	WG-TRUE, WG-DRG, WG-YPF, EB- JOUR, WG-WATS, AFRWG, ST-LCB, WG-PQW, WG-ON-FARM, PCSPOA, WG-CROP, WG-CLIMATE, WG-MIS, WG-CAFM
52	Spain (CERYD)	6	10	-	TF-IBWT, WG-CROP, WG-MIS, WG- WATS, WG-HIST, ERWG, WG-TRUE, WG-ON-FARM, AMRWG, WG-ENV
53	Sri Lanka (SLNICID)	1	1	-	ASRWG
54	Switzerland (CH-AGRAM)	2	2	-	WG-CROP, ERWG
55	Syria (CYCID)	2	2	-	WG-DRG, WG-ENV
56	Thailand (THAICID)	3	4	-	ASRWG, WG-ENV, C-PR&P, WG-HIST
57	Turkey (TUCID)	5	7	3 (4)	WG-MIS, WG-ENV, WG-CAFM, WG- DRG, PCTA, WG-CLIMATE, ASRWG
58	United Kingdom (ICID.UK)	13	16	1 (4)	WG-HIST, ERWG, WG-CAFM, AFRWG, ST-LCB, WG-WATS, EB-JOUR, MB, C-PR&P, WG-TRUE, WG-MIS, AC- IPTRID, ST-ARAL, WG-CROP, WG- SDTA, WG-DROUGHT
59	Ukraine (UKCID)	1	3	1 (2)	ERWG, WG-ON-FARM, PCSPOA
60	Uruguay (URUCID)	-	-	-	-
61	USA (USCID)	15	24	5 (11)*	WG-CROP, WG-ON-FARM, WG-DRG, WG-MIS, WG-TRUE, PFC, TF-FIN, EB-JOUR, WG-CD, WG-WATS, ST-ARAL, WG-PQW, WG-CAFM, C-PR&P, C-CONGR, PCTA, PFC, PCSPOA, ST-LCB, WG-CLIMATE, AMRWG, WG-ENV, WG-POVERTY, TF-IBWT
62	Uzbekistan (UzNCID)	2	3	-	ST-ARAL, ST-LCB, ASRWG
63	Zambia (ZACID)	1	1	-	AFRWG

 $<sup>*</sup>Number\ in\ parenthesis\ indicates\ no.\ of\ workbodies\ attended\ by\ these\ members\ at\ Lahore.$ 

### **APPENDIX - 3**

# Regionwise Membership and Workbodies Represented

### **AFRICA**

S1. No.	Country	Acronym	Committees	Regional Working Groups	Working Groups	Work Teams/ Task Forces	Total WBs and TFs represented	Number of members
1	Egypt	ENCID	3	1	6	2	12	7
2	Ethiopia	ETCID	-	1	-	1	2	1
3	Mali	AMID	-	1	-	-	1	1
4	Morocco	ANAFIDE	-	-	3	-	3	3
5	Niger	ANID	-	-	-	-	-	-
6	Nigeria	NINCID	-	1	3	3	7	5
7	South Africa	SANCID	2	1	10	1	14	12
8	Zambia	ZACID	-	1	-	-	1	1
	TOTAL		5	6	22	7	40	30

#### **AMERICAS**

S1. No.	Country	Acronym	Committees	Regional Working Groups	Working Groups	Work Teams/ Task Forces	Total WBs and TFs represented	Number of members
1	Brazil	ABID	-	-	-	-	-	-
2	Canada	CANCID	3	-	4	2	9	8
3	Chile	CHICID	-	-	-	-	-	-
4	Guyana	GUCID	-	-	-	-	-	-
5	Mexico	MXCID	1	1	1	-	3	5
6	Uruguay	URCID	-	-	-	-	-	-
7	USA	USCID	7	1	12	4	24	15
	TOTAL		11	2	17	6	36	28

#### ASIA AND OCEANA

Sl. No.	Country	Acronym	Committees	Regional Working Groups	Working Groups	Work Teams/ Task Forces	Total WBs and TFs represented	Number of members
1	Australia	ANCID	4	1	10	-	15	9
2	Bangladesh	BANCID	-	1	-	-	1	1
3	China	CNCID	4	1	15	-	20	14
4	Chinese Taipei	CTCID	2	1	11	1	15	14
5	India	INCID	5	1	13	2	21	18
6	Indonesia	INACID	2	1	3	-	6	4
7	Iran	IRNCID	4	1	12	-	17	12
8	Iraq	IRQCID	-	-	-	-	-	-
9	Israel	ISCID	-	-	1	-	1	1
10	Japan	JNC-ICID	4	1	12	2	19	12
11	Kazakhistan	KAZCID	-	-	-	-	-	-
12	Korea	KCID-ICID	2	1	8	-	11	11
13	Kyrgyz Rep.	KYRCID	-	-	-	-	-	-
14	Malaysia	MANCID	2	1	4	-	7	6
15	Myanmar	MYAMA	-	-	-	-	-	-
16	Nepal	NENCID	-	1	-	-	1	1
17	Pakistan	PANCID	3	1	8	1	13	9
18	Philippines	PHINCID	-	-	-	-	-	-
19	Saudri Arabia	SACID	-	-	-	-	-	-
20	Sri Lanka	SLNICID	-	1	-	-	1	1
21	Syria	SYCID	-	-	2	-	2	2
22	Thailand	THAICID	1	1	2	-	4	3
23	Turkey	TUCIO	1	1	5	-	7	5
24	Uzbekistan	UzNCID	-	1	-	2	3	2
	TOTAL		34	16	106	8	164	125

#### **EUROPE**

S1. No.	Country	Acronym	Committees	Regional Working Groups	Working Groups	Work Teams/ Task Forces	Total WBs and TFs represented	Number of members
1	Austria	AUNCID	-	1	1	-	2	2
2	Croatia	CRCID	-	1	2	-	3	3
3	Cyprus	CYCID	-	1	-	-	1	1
4	Czech Rep.	CZNC-ICID	-	1	1	-	2	2
5	Estonia	ESTCID	-	1	-	-	1	1
6	Finland	FINCID	-	2	1	-	3	3
7	France	AFEID	4	2	12	1	19	13
8	Germany	GECID	2	1	5	-	8	7
9	Greece	GRCID	-	1	-	-	1	1
10	Hungary	HUCID	1	1	4	-	6	4
11	Ireland	IRCID	-	1	-	-	1	1
12	Italy	ITAL-ICID	4	2	8	2	16	12
13	Lithuania	LTCID	-	1	-	-	1	1
14	Macedonia	MAKCID	-	1	-	-	1	1
15	Netherlands	NETHCID	2	1	12	2	17	14
16	Portugal	PNCID	1	1	2	-	4	4
17	Romania	CNRID	-	1	-	-	1	1
18	Russia	RuCID	2	2	3	1	8	8
19	Serbia	YUGCID	-	1	-	-	1	1
20	Spain	CEYRD	-	2	7	1	10	6
21	Slovenia	SINCID	-	1	4	-	5	4
22	Switzerland	CH-AGRAM	1	1	1	-	3	2
23	UK	ICID.UK	4	2	8	2	16	13
24	Ukraine	UKCID	1	1	1	-	3	1
	TOTAL		22	30	62	9	123	106

### **GRAND TOTAL**

Regions	Committees	Regional Working Groups	Working Groups	Work Teams/ Task Forces	Total WBs and TFs represented	Number of members
AFRICA	5	6	22	7	40	30
AMERICAS	11	2	17	6	36	28
ASIA AND OCEANIA	34	16	106	8	164	125
EUROPE	22	30	62	9	123	106
GRAND TOTAL	72	54	244	32	363	289

# **World Irrigated Area - Regionwise**

S1. No.	Country	Irrigated area (million ha)	S1. No.	Country	Irrigated area (million ha)
	AFR	ICA	35	Guineabissau	0.017
1	Egypt	3.422	36	Gabon	0.015
2	Sudan	1.863	37	Congo, Dem. R.	0.011
3	South Africa	1.600	38	Sao-Tome & Prn.	0.010
4	Morocco	1.445	39	Uganda	0.009
5	Madagascar	1.086	40	Namibia	0.007
6	Algeria	0.569	41	Rwanda	0.006
7	Libya	0.470	42	Cape Verde	0.003
8	Tunisia	0.394	43	Liberia	0.003
9	Ethiopia	0.290	44	Gambia	0.002
10	Nigeria	0.282	45	Brunei Darsm, Fr Poly	
11	Mali	0.235		Barbados, Congo, Rep. Botswana, Djbouti, and	
12	Somalia	0.200		Sub-Total	13.581
13	Tanzania	0.184			
14	Zimbabwe	0.174	46	AMER	
15	Zambia	0.156	46 47	USA Mexico	6.320
16	Senegal	0.120	48	Brazil	3.500
17	Mozambique	0.118	49	Argentina	1.550
18	Kenya	0.103	50	Peru	1.200
19	Guineabissau	0.095	51	Chile	1.090
20	Angola	0.080	52	Colombia	0.900
21	Burundi	0.074	53	Cuba	0.870
22	Ivory Coast	0.073	54	Ecuador	0.865
23	Niger	0.073	55	Canada	0.785
24	Swaziland	0.070	56	Venezuela	0.575
25	Malawi	0.056	57	Bel-Lux	0.400
26	Mauritania	0.049	58	Dominican Rep.	0.275
27	Cameroon	0.033	59	Uruguay	0.197
28	Ghana	0.031	60	Guyana	0.150
29	Chad	0.030	61	Bolivia	0.132
30	Sierra Leone	0.030	62	Guatemala	0.130
31	Burkina Faso	0.025	63	Costa Rica	0.108
32	Mauritius	0.022	64	Nicaragua	0.094
33	Eritrea	0.021	65	Honduras	0.080
34	Togo	0.018	66	Haiti	0.075

)I. No.	Country	Irrigated area (million ha)	S1.	No.
7	Paraguay	0.067	104	
8	Surinam	0.051	105	
9	El Salvador	0.045	106	
70	Panama	0.043	107	
71	Puerto Rico	0.040	108	
72	Jamaica	0.025	109	
73	Palest, OT	0.020	110	
74	Benin	0.012	111	
75	Newcaledonia, Trinid	lad and	112	
	Tobago, Belize, St. Lu		113	
	Malta, Bahmas, and S		114	
	Sub-Total	42.009	115	Q
	AS	SIA	116	Laos
76	India	60.850	117	Bahrain,
77	China	57.780	1	China, H.K
78	Pakistan	19.590	1	Sub-Total
79	Iran	8.700		
80	Turkey	5.340	118	Australia
81	Thailand	4.986	119	New Zealand
82	Bangladesh	4.730	1	Sub-Total
83	Indonesia	4.500		
84	Uzbekistan	4.281	400	D :
85	Iraq	3.520	120	Russia
86	Vietnam	3.000	121	Spain
87	Japan	2.530	122	Italy
88	Afghanistan	2.386	123	France
89	Kazakhstan	2.122	124	Ukraine
90	Myanmar	1.870	125	Romania
91	Turkmenistan	1.800	126	Greece
92	Saudi Arabia	1.620	127	Portugal
93	Phillipines	1.520	128	Bulgaria
94	Azerbaijan	1.455	129	Netherlands
95	Syria	1.333	130	UK
96	Nepal	1.170	131	Germany
97	Korea Rep.	1.120	132	Denmark
98	Kyrgystan	1.070	133	Albania
99	Sri Lanka	0.743	134	Moldova Rep
100	Tajikistan	0.722	135	Hungary
100	Yemen	0.722	136	Latvia
101	Georgia	0.330	137	Slovak Republi
102		U.407	1 T T	

Sl. No.	Country	Irrigated area (million ha)	S1. No.	Country	Irrigated area (million ha)
139	Norway	0.127	150	Croatia	0.011
140	Sweden	0.115	151	Slovenia	0.008
141	Poland	0.100	152	Martinique	0.007
142	Finland	0.080	153	Guadeloupe	0.006
143	Macedonia	0.055	154	Austria	0.004
144	Lithuania	0.043	155	Estonia	0.004
145	Cyprus	0.040	156	Ireland	NA
146	Belgium	0.040	157	Bosnia & Herzegovina	0.003
147	Switzerland	0.040	158	Fr Guiana	0.002
148	Serbia, Rep. of	0.032		Sub-Total	24.210
149	Czech Rep.	0.024		TOTAL	284.242

#### Note:

Bold: Active National Committees of ICID

Italic: Inactive National Committees of ICID

Data pertaining to other countries is as per FAO

# **Sprinkled and Micro-Irrigated Area in ICID Member Countries**

(Arranged in descending order of the total sprinkler and micro irrigated area)

## (Data provided by respective National Committees)

Country	Total irrigated area (million ha)	Sprinkler Irrigation	Micro Irrigation	Total sprinkler and micro irrigation	Percentage of total irrigated area	Year of reporting
			Hectares			
USA	21.6	10,900,000	1,200,000	12,100,000	56	2003
China	57.8	3,000,000	1,400,000	4,400,000	7.6	2007
India	56.8	2,350,586	1,325,956	3,676,542	6.5	2008
Russia	4.5	3,500,000	20,000	3,520,000	78.2	2008
Spain	3.36	715,102	1,502,327	2,217,429	66.0	2007
Brazil	3.5	1,570,000	340,000	1,910,000	54.6	2004
France	1.575	1,379,800	103,300	1,483,100	94.2	2000
Italy	2.535	1,047,680	365,700	1,413,380	55.8	2000
South Africa	1.6	848,000	296,000	1,144,000	71.5	2004
Saudi Arabia	1.17	716,000	198,000	914,000	78.1	2004
Australia	2.384	524,480	190,720	715,200	30	2000
Canada	0.87	683,029	6,034	689,063	79.2	2004
Mexico	6.2	400,000	200,000	600,000	9.7	1999
Korea	1.12	200,000	400,000	600,000	53.6	2006
Ukraine	0.694	542,000	25,000	567,000	81.7	2008
Egypt	3.3	450,000	104,000	554,000	16.8	2000
Germany	0.54	525,000	5,000	530,000	98.1	2005
Japan	2.56	430,000	60,000	490,000	19.1	2004
Iran	8.05	290,000	160,000	450,000	5.6	2003
Turkey	5.13	200,000	170,000	370,000	7.2	2006
Slovak Rep.	0.313	310,000	2,650	312,650	99.9	2000
Israel	0.231	60,000	170,000	230,000	99.6	2000
Morocco	1.65	189,750	8,250	198,000	12	2003
Hungary	0.22	185,000	7,000	192,000	87.3	2008
Syria	1.28	93,000	62,000	155,000	12.1	2000
Great Britain	0.11	105,000	6,000	111,000	100.9	2005
Finland	0.086	85,000	700	85,700	99.7	2000
Portugal	0.63	40,000	25,000	65,000	10.3	1999
Kazakhstan, Rep.	2.13	57,355		57,355	2.7	2006
Malawi	0.055	43,193	5,450	48,643	88.4	2000
Lithuania	0.045	44,518		44,518	98.9	2004
Chile	1.09	16,000	23,000	39,000	3.6	2006
Chinese Taipei	0.46	12,300	13,400	25,700	5.6	2001
Bulgaria	0.04	21,000	3,000	24,000	60	2008
Czech Rep.	0.16	11,000	5,000	16,000	10	2008
Philippines	1.43	7,175	6,635	13,810	1	2004
Poland	0.083	5,000	8,000	13,000	15.7	2008
Malaysia	0.38	2,000	5,000	7,000	1.8	2006
Macedonia	0.022	5,000	1,000	6,000	27.3	2008

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8.	Engr. Dr. Illahi B. Shaikh (2007-2010)	Vice President	pakfloodcommission@hotmail.com
9.	Dr. (Mrs.) Samia El-Guindy (2008-2011)	Vice President	app@link.net
10.	Mr. Shinsuke Ota (2008-2011)	Vice President	ota@n-renmei.jp
11.	Prof. Lucio Ubertini (2008-2011)	Vice President	ubertini@cidra.ing.uni, Lucio.Ubertini@uniroma1.it

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3.	VPH Dr. Gao Zhanyi	PCSPOA	gaozhy@iwhr.com
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5.	VPH Larry D. Stephens	C-PR&P	stephens@uscid.org
6.	Prof. L. Vincent	WG-TRUE	Linden.Vincent@wur.nl
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### **APPENDIX - 9**

# **Websites of ICID Workbodies**

Workbodies	Websites
ERWG	http://www.erwg.icidonline.org
AFRWG	http://www.afrwg.icidonline.org
WG-YPF	http://www.wg-ypf.icidonline.org
C-CONGR	http://www.c-congr.icidonline.org
WG-TRUE	http://www.wg-true.icidonline.org
EB-JOUR	http://www.icid.org/wiley_journal.html
WG-CD	http://www.wg-cd.icidonline.org
WG-WATS	http://www.wg-wats.icidonline.org
WG-HIST	http://www.wg-hist.icidonline.org
WG-CAFM	http://www.wg-cafm.icidonline.org
WG-DRG	http://www.wg-drg.icidonline.org
WG-CROP	http://www.wg-crop.icidonline.org
WG-PQW	http://www.wg-pqw.icidonline.org
WG-ON-FARM	http://www.wg-on-farm.icidonline.org
WG-SDTA	http://www.wg-sdta.icidonline.org/
WG-CLIMATE	http://www.wg-climate.icidonline.org/
ASRWG	http://www.asrwg.icidonline.org/
WG-MIS	http://www.wg-mis.icidonline.org
AC-IPTRID	http://www.fao.org/iptrid
ST-LCB	http://www.st-lcb.icidonline.org
TF-POV	http://afeid.montpellier.cemagref.fr/Poverty/ TF-POVERTY.htm

# **List of ICID Publications**

Sl. No	Publication Title	Year of Publication	List Price US \$*	For NCs/ Members & Booksellers Price US \$*	
	(A) SPECIAL PUBLICATION	NS			
1.	Water Saving in Agriculture	2008	40	20	
2.	Manual for Performance Evaluation of Sprinkler and Drip Irrigation Systems in Different Agro-Climatic Regions of the World	2008	40	20	
3.	Micro Irrigation in Arid and Semi-Arid Regions – Guidelines for Planning and Design	2006	60	30	
4.	Planning and Designing of Micro-Irrigation in Humid Regions	2005	20	10	
5.	Manual on Planning of Structural Approaches to Flood Management	2005	40	20	
6.	Application of Geosynthetics in Irrigation and Drainage Projects	2004	30	15	
7.	The Indus Basin - History of Irrigation, Drainage and Flood Management	2004	140	70	
8.	Danube Valley - History of Irrigation, Drainage and Flood Control	2004	150	75	
9.	CD-ROM Version of Multilingual Technical Dictionary	2002	50	25	
10.	Historical Dams	2001	130	65	
11.	CD-ROM Version of ICID Watsave Activities (Handling Charges)	2001	_	-	
12.	Canal Operation Simulation Models	2000	20	10	
13.	ICID Survey on Funding of Operation, Maintenance and Management of Irrigation Projects	2000	30	15	
14.	Remote Sensing and Geographic Information Systems in Irrigation and Drainage - Methodological Guide and Applications	2000	50	25	
15.	CD-ROM ICID@50 (Handling Charges)	2000	-	_	
16.	Guidelines for Rehabilitation and Modernization of Irrigation Projects	1999	20	10	
17.	Manual on Non-structural Approaches to Flood Management	1999	40	20	
18.	Selection Criteria for Irrigation Systems	1995	30	7	
19.	L'Automatisation Des Reseaux D'Irrigation En Canaux (F)	1994	28	7	
20.	Criteres de Choix des Systemes D'irrigation (F)	1992	30	7	
21.	A Guide to Acquiring a Computer System for the Management of Water Resources	1992	33	8	
22.	Guidelines on The Construction of Horizontal Subsurface Drainage Systems	1990	32	8	
23.	Improvement in Irrigation Management with Special Reference to Developing Countries, State-of-the-Art No.4	1987	25	2	
24.	Design Practices for Covered Drains in an Agricultural Land Drainage System - A Worldwide Survey	1987	50	3	
25.	Automatisation des Systemes d'Irrigation de Surface a Travers Le Monde (F)	1987	10	2	
26.	Automated Farm Surface Irrigation Systems Worldwide	1986	10	2	
27.	Guide 106 de la ciid - Developpement du Beton Bitumineux et de la Membrane Bitumineuse (F)	1985	13	2	
28.	ICID Guidelines 106 - Development of Bitumen Concrete and Membranes	1985	13	2	
29.	Design Practices of Open Drainage Channels in an Agricultural Land Drainage System – A Worldwide Survey	1984	25	2	

S1. No	Publication Title	Year of Publication	List Price US \$*	For NCs/ Members & Booksellers Price US \$*
30.	State-of-the-Art Irrigation, Drainage and Flood Control No. 3	1984	25	2
31.	State-of-the-Art Irrigation, Drainage and Flood Control No. 2	1981	22	2
32.	State-of-the-Art Irrigation, Drainage and Flood Control No.1	1978	22	2
33.	Manual of Flood Control Methods and Practices	1983	20	2
34.	Irrigation and Drainage in the World (Vol.1-1981, Vol.2-1982, Vol.3-1983)	1981-83	75	7
	(B) TRANSACTIONS AND PROC	EEDINGS		
35.	Transactions - 20th Congress on Irrigation and Drainage, Lahore, Pakistan, 2008 on the theme 'Participatory Irrigated Water Resource Management - From Concepts to Actions' and CD-ROM	2008	232	117
36.	Proceedings of the International Workshop on Water Saving Practices in Rice Paddy Cultivation, 14-15 September 2006, Malaysia Only CD-ROM	2006	20 10	10 5
37.	Proceedings of the International Workshop on Environmental Consequences of Irrigation with Poor Quality Waters: Sustainability, Management and Institutional, Water Resources, Health and Social Issues, September 2006, Malaysia Only CD-ROM	2006	30	15
38.	Proceedings of the International Workshop on Multiple Roles and Diversity of Irrigation Water, 14 September 2005', Beijing, China, 2006	2006	20	10
39.	Transactions - 19th Congress on Irrigation and Drainage, Beijing, China, 2005 on the theme "Use of Water and Land for Food Security and Environmental Sustainability" (Abstracts Vols. – 1A, 1B, General Reports – 1C, and Keynote Addresses – 1D and CD-ROMs) Only CD-ROMs	2005	450 250	225 125
40.	Transactions - 18th Congress on Irrigation and Drainage, Montreal, Canada, 2002 on the theme "Food Production under Conditions of Water Scarcity, Increasing Population and Environmental Pressures" (Abstracts Volumes 1A, 1B; General Reports - 1C and Cd-rom)	2002	200	100
41.	Transactions - 17th Congress on Irrigation and Drainage, Granada, Spain, 1999 on the theme "Water for Agriculture in the Next Millenium", Vols. 1a-1j (10 Volumes) and Vol. 2	1999	425	110
	(C) OTHER PUBLICATION	NS		
42.	Report of ICID Task Force for Least Developed Countries in Asia (Handling Charges)	2008	10**	10**
43.	CD-ROM version of Task Force Reports – An ICID Input to WWF 3 and 4	2007	10	5
44.	Sector Vision : Water for Food and Rural Development - Country Position Papers	2000	10	5
45.	Checklist to Assist Preparation of Small-Scale Irrigation Projects in Sub-Saharan Africa	1998	10	5
46.	Watsave Scenario	1997	10	5

<sup>\*</sup> Postal Charges Extra, \*\* Handling charges

### **Future ICID Events**

#### ICID COUNCIL MEETINGS

**60th IEC Meeting, 6-11 December 2009, New Delhi, India.** Contact: Member Secretary, Indian National Committee on Irrigation and Drainage (INCID), C/o Central Board of Irrigation and Power (CBI&P), Malcha Marg, Chanakyapuri, New Delhi 110021, India. Tel: 91-11-2611 5984, 91-11-2611 1294, Fax: 91-11-2611 6347, E-mail: sunil@cbip.org, cbip@cbip.org, Website: http://www.incid2009delhi.org.

61st IEC Meeting, 10-16 October 2010, Yogyakarta, Indonesia. Contact: The Indonesian National Committee of International Commission on Irrigation and Drainage (INACID), Ministry of Public Works, Directorate General of Water Resources, Main Building, 3rd Flood, Jalan Pattimura No. 20, Kebayoran Baru, Jakarta Selatan, Indonesia. Tel: +62 21 723-0317, +62 21 723-0318; Fax: +62 21 726-1956, E-mail: inacid\_indonesia@yahoo.co.id, inacid2010@gmail.com, secretariat@icid2010.org, Website: http://www.icid2010.org.

**62nd IEC, 15-23 October 2011, Tehran, Iran.** Contact: Dr. S.A. Assadollahi, Secretary General, Congress Secretary, Iranian National Committee on Irrigation and Drainage (IRNCID), No. 1, Shahrsaz Alley, Kargozar St., Zafar Ave., Tehran, Iran, Postal Code: 19198-34453. Tel: (+9821) 2225 7348 – 22250162, Fax: (+9821) 2227 2285, E-mail: irncid@gmail.com, icid2011@gmail.com, Website: http://www.icid2011.org.

#### ICID REGIONAL CONFERENCES

5th Asian Regional Conference, 6-11 December 2009, New Delhi, India. Theme: Improvement in efficiency of irrigation projects through technology upgradation and better operation and maintenance. Contact: Member Secretary, Indian National Committee on Irrigation and Drainage (INCID), C/o Central Board of Irrigation and Power (CBI&P), Malcha Marg, Chanakyapuri, New Delhi 110021, India. Tel: 91-11-2611 5984, 91-11-2611 1294, Fax: 91-11-2611 6347, E-mail: sunil@cbip.org, cbip@cbip.org, Website: http://www.incid2009delhi.org.

6th Asian Regional Conference, 10-16 October 2010, Yogyakarta, Indonesia. Theme: Improvement of irrigation and drainage efficiency under the small land holding condition. Contact: The Indonesian National Committee of International Commission on Irrigation and Drainage (INACID), Ministry of Public Works, Directorate General of Water Resources, Main Building, 3rd Flood, Jalan Pattimura No. 20, Kebayoran Baru, Jakarta Selatan, Indonesia. Tel: +62 21 723-0317, +62 21 723-0318; Fax: +62 21 726-1956, E-mail: inacid\_indonesia@yahoo.co.id, inacid2010@gmail.com, secretariat@icid2010.org, Website: http://www.icid2010.org.

#### ICID CONGRESS AND INTERNATIONAL MICRO IRRIGATION CONGRESS

21st International Congress on Irrigation and Drainage and 8th International Micro Irrigation Congress (IMC), 15-23 October 2011, Tehran, Iran. The theme of the Congress is - Water productivity towards food security, and theme of the IMC is - Innovation in Technology and Management of Micro Irrigation for Enhanced Crop and Water Productivity. Contact: Dr. S.A. Assadollahi, Secretary General, Congress Secretary, Iranian National Committee on Irrigation and Drainage (IRNCID), No. 1, Shahrsaz Alley, Kargozar St., Zafar Ave., Tehran, Iran, Postal Code: 19198-34453. Tel: (+9821) 2225 7348 – 22250162, Fax: (+9821) 2227 2285, E-mail: irncid@gmail.com, icid2011@gmail.com, Website: http://www.icid2011.org.

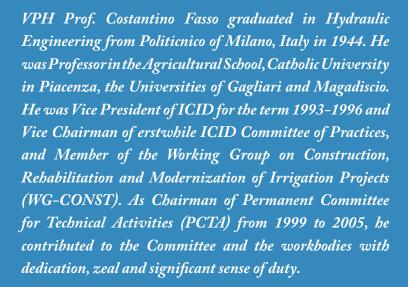
#### RELATED EVENTS

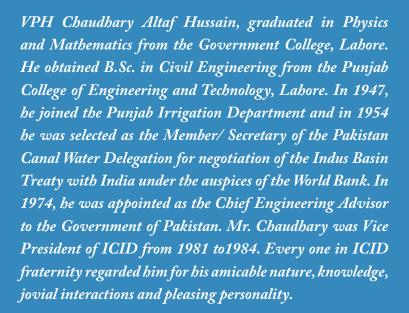
5th International Conference on Irrigation and Drainage, 4-7 November 2009, Salt Lake City, USA. Contact: Mr. Larry D. Stephens, Executive Vice President, United States Committee on Irrigation and Drainage (USCID), 1616 Seventeenth Street, Suite 483, Denver, CO 80202, USA. Tel: +1 303 628 5430; Fax: +1 303 628 5431; E-mail: stephens@uscid.org; Website: http://www.uscid.org/09intconf.html.

12th Inter Regional Conference on Enviro Water, 9-11 November 2009, Marrakech, Morocco. Contact: Dr. El Houssine BARTALI, Coordinator, 12th Inter Regional Conference on Enviro Water, E-mail: h.bartali@iav.ac.ma, anafid@menara.ma, Website: http://www.12thenvirowaterconference.com.

# **OBITUARIES**

It is with profound grief and sorrow that we report about the sad demise of Vice Presidents Hon. Prof. C. Fasso (Italy) VPH Altaf Hussain (Pakistan).



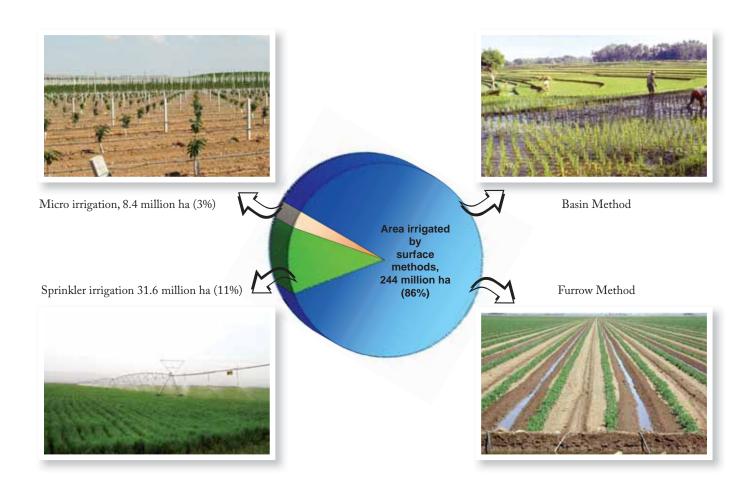


ICID family offers heartfelt condolences to the bereaved families of Vice Presidents Hon. Fasso and Altaf Hussain. May their soul rest in eternal peace!

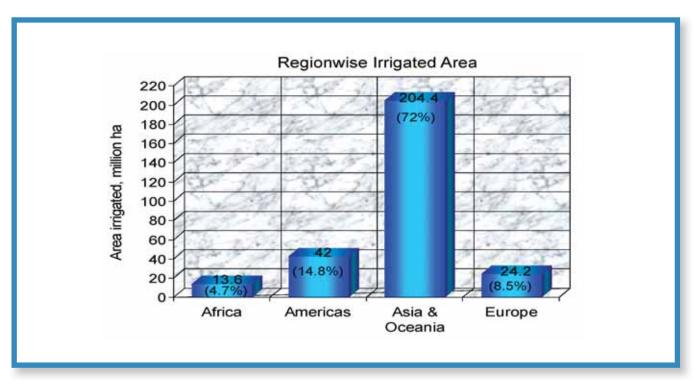




# **WORLD IRRIGATED AREA**



## (World Irrigated Area: 284 million ha, 2008)





# INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE

Central Office : 48 Nyaya Marg, Chanakyapuri, New Delhi 110 021, India Tel : +91 11 2611 6837, +91 11 2611 5679, +91 11 2467 9532, Fax : +91 11 2611 5962

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