

Minutes of the Fourteenth Meeting of the
WORKING GROUP ON ON-FARM IRRIGATION SYSTEMS (WG-ON-FARM)
 Tehran, Iran
 17 October 2011: 13.30-17.00 hours
Strategy Theme: On-Farm

Year of Establishment: 1998

Completion of the Mandate: 2014

Mandate:

- To promote on-farm irrigation as part of integrated water resources management, and
- To promote sustainable efficient approaches for on-farm irrigation.

Members Present: (1) VPH Felix B. Reinders, Chairman, 2004 (South Africa, 1998); (2) VPH Prof. Peter Kovalenko, Vice Chairman, 2005 (Ukraine, 2001); (3) Dr. Kim Sun-Joo (Korea, 1999) represented by Dr. SO Chung; (4) Mr. Yeh Shu-Shr (Chinese Taipei, 1999) represented by Mr Y. F. Ho; (5) Mr. Yan Guanyu (China, 2002) represented by Dr Gao Zhanyi; (6) VPH Dr. J.A. Ortiz (Spain, 2003); (7) Mr. Graziano Ghinassi (Italy, 2004); (8) Mr. Hassan Shantia (Iran, 2006) represented by E Farahani; (9) Dr. Makoto Yokozawa (Japan, 2009) represented by Dr A Iwamoto; (10) Prof. Dr. Rai Niaz Ahmed (Pakistan, 2009); (11) Mr. Jeremy Cape (Australia, 2010) represented by Mr Ian Atkinson; and (12) Secretary General, ICID represented by Dr S. A. Kulkarni.

Permanent observers: (i) FAO Representative (Dr. T. Wahay)

Apologies: (1) Dr. A.K. Randev, Secretary (2009) (India, 2005); (2) Dr. Abraham Mehari Haile (The Netherlands, 2008); (3) Mr. François Chrétien (Canada, 2010); (4) Mr. Mohan Reddy Junna (USA, 2007); and (5) Mr. Bruno Molle (ISO)

Absent: (1) VPH Prof. F. Ligetvari (Hungary, 1998); (2) Mr. P. Ruelle (France, 1999); (3) Mr. J. Dunn (UK, 2002); (4) Mrs. Mira Edelbeher (Slovenia, 2009)

Member Honoraire Present: Mr. Peter Lee, President Hon., ICID (UK)

Observers: (1) Helen Murdoch (Australia); (2) Mr. Stephen Mills (Australia); (3) Eng. Othman S. Omar (Tanzania); (4) Puleng Mofokeng (South Africa); (5) Hyun-Tai, Kim (Korea); (6) Chu-Peng, Hsu (Chinese Taipei); (7) Pei-Chun Ni (Chinese Taipei); (8) Helen Reynolds (Chinese Taipei); (9) Carl Walters (Australia); (10) Kevin Minoque (Australia); (11) Hayati binti Zainal (Malaysia); (12) Hassan Al Husain (Syria); (13) Shuichi Matsushima (Japan); (14) Koji Inosako (Japan); (15) Chen Wen-Hsing (Chinese Taipei); (16) Sheng-Hsien Hsieh (Chinese Taipei); (17) Mohd Yazid Abdullah (Malaysia); (18) Sabine Walsler (Germany); (19) Jano Anter (Germany); (20) Anna Tedeschi (Italy); (21) Loh Kim Mon (Malaysia); (22) Ali Gorji; (23) Dadane Kidwax (Indonesia); (24) Dr. K. Yella Reddy (India); (25) Abdolreza Fallah Rastegar; (26) Ghasem Zaret; (27) Hossein Dehghaani Sanij; (28) Mr. Uttamraj Timilsina (Nepal); (29) Dr. Chan Chee Sheng (Malaysia); (30) Dr. Mukhamedjanov Shukhrat (Uzbekistan)

Website: <<http://www.wg-on-farm.icidonline.org>>.

Item 1 : Confirmation of the minutes of the 13th meeting of the Working Group

The minutes of the 13th meeting held at Yogyakarta were circulated and approved by the WG.

Item 2 : Review of membership of the Working Group

2.1 New nominations

The following nominations as received from National Committees of Malaysia (MANCID), Germany (GECID) and Japan (JNC-ICID) together with their CV's for the membership were accepted.

- Mr. Yazid bin Abdullah (Malaysia)
- Mr. Jano Anter (Germany)
- Dr. Akira Iwamoto in place of Dr. Makoto Yokozawa (Japan)

2.2 Election of new Chairman

Mr. Felix Reinders (South Africa) has been serving as the Working Group Chairman from the last seven years. However, due to his new responsibility as the Chairman of the PCTA, the working group discussed about nomination/ election of a new chairperson. Mr. Jeremy Cape from Australia was proposed by the group. However, as Mr. Cape did not attend the meeting, Mr. F. Reinders would contact him to check his willingness to take over the Chairmanship.

2.3 Termination of membership.

The group terminated the membership of Mr. P. Ruelle (France) and Mr. J. Dunn (UK) due to their non-attendance consecutively for the past three meetings.

A. CONTINUING ITEMS

Item 3 : To review the progress in preparation of documents

3.1 Paper on “Improvement of the On-Farm Irrigation Systems Using Simple Water Control, Measuring and Application Devices”

The paper on “Improvement of the On-Farm Irrigation Systems using Simple Water Control, Measuring and Application Devices” has not been completed as yet. However, a presentation on this topic was planned on 21 October 2011 during the Australian technical session.

3.2 Paper on “Micro Irrigation for Smallholders and Greenhouses”

The final version of the paper “Micro irrigation for smallholders and greenhouses” by Prof. Y. Nakano (Japan) will be reviewed and will be sent to the ICID Journal Publishers for its possible acceptance before the next meeting in Australia in 2012.

Item 4 : Liaison with the ISO/TC23/SC18

The next (30th) meeting of the ISO/TC23/SC18 will be held in the City Hotel in Tel-Aviv, Israel from 14-18 November 2011. In consultation with Chairman VPH Reinders, the Central Office requested Mr. Bruno Molle to represent ICID at the TC23/SC18 meeting in Tel-Aviv. Dr. J. Mohan Reddy (USA) has also shown interest in attending the meeting. Possibility of participation of an Israel National Committee representative may also be explored. However there was no confirmation from any one to attend the meeting.

Item 5 : World-wide Usage of Micro and Sprinkler Irrigation

5.1 Datasheet on Sprinkler and Micro Irrigated Areas in ICID Network Countries

At Yogyakarta, the group noted the latest statistical information compiled by the Central Office and requested all National Committees to check for any omissions/ corrections and update their information. As suggested by the group, the Central Office once again circulated the datasheet to all National Committees and requested to confirm the data/ send the updated information. In response, the ICID Central Office received responses from the National Committees of Czech Rep., Lithuania, South Africa, and Spain.

The updated statistical information compiled by the Central Office pertaining the micro and sprinkler irrigated areas in ICID member countries is shown in **Annex 1**.

All members were requested to go through the data sheet and offer their observations or amendments, if any.

5.2 Survey of 'World-wide Usage of Sprinkler and Micro irrigation'

No discussion took place on the questionnaire prepared for collecting information on "World-wide Usage of Sprinkler and Micro irrigation".

Item 6 : Website of the Workbody

The website for the working group has been functional. There was scope to add/ update new information from member countries. The Chairperson asked all those participants of the meeting to submit information and articles, news, etc. pertaining to their countries for posting on the WG website.

Item 7 : 8th International Micro Irrigation Congress (8IMIC), Tehran, 2011

The 8th International Micro Irrigation Congress (8IMIC) will be held in Tehran during 19-23 October 2011 along with the 21st International Congress on Irrigation and Drainage. The theme of the 8IMIC is "*Innovation in Technology and Management of Micro-irrigation for crop Production Enhancement*".

IRNCID received 96 papers (comprising 55 oral and 41 poster presentations) for the 8IMIC. All the papers were reviewed by a team of experts. President Prof. Chandra Madramootoo will be the Keynote Speaker at the Opening Ceremony of the 8IMIC. VPH Felix Reinders will be the General Reporter for the 8IMIC. All the members are encouraged to attend the IMIC.

Item 8 : Work plan of the Group

- 8.1** The work plan of the Working Group was discussed and adjusted and is shown as **Annex 2**.
- 8.2** Possibility of organizing the next Micro Irrigation Congress was discussed. Representatives from countries attending the meeting were asked if they would be interested to host the next (9th) Congress. Australia indicated that they will discuss the matter within IACID and provide feedback at the next meeting.
- 8.3** Australia announced that the new irrigation technology called Fast Furrow Irrigation System was developed and has proved to be water efficient.

Item 9 : Upgrading/ modernization of surface irrigation systems

The Working Group still awaits the response from Professor Mohan Reddy, since he expressed his interest in preparing a book on Upgrading/ modernization of surface irrigation systems. However, there was no feedback from Dr. Reddy. Central Office is asked to follow up.

Item 10 : Nomination of WG for the 3rd Best Performing Workbody Award (BPWA)

The working group submitted its candidature for the "3rd Best Performing Workbody Award" but was not successful. It was however a worthwhile experience for the group and will consider to submit for its candidature again next time at the time of the 22nd Congress in 2014.

Item 11 : Any other business

Irrigated area and irrigation efficiency

The data was compiled from various countries on page A-141 Annexure 3 of the printed Agenda of the WG. The group emphasized that it would be interesting to compare the irrigation efficiency levels achieved among countries, and that there was a need to standardize the efficiency measuring methodology, internationally. Some countries are using groundwater sources while the others use the surface water sources and thus the overall irrigation efficiency varies. It was also noted that the application rate of the systems needs to be included in efficiency computation as well.

The group suggested that Chinese National Committee (CNCID) may like to constitute a Work Team to work on this important topic. WG will extend technical support as required.

The following presentations were made at the meeting:

- “*Software on Drip Irrigation System*” by Dr. Ghinassi from Italy.
- “Irrigation efficiency: A South African framework” by Mr. Felix Reinders (South Africa).
- “*Low Pressure Irrigation System*” presented by Mr. E. Farahani (Iran).

All the presentations will be posted on the WG website.

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

Sprinkler and Micro Irrigated Area in Member Countries
(Arranged in descending order of the total sprinkler and micro irrigated area)
 (Data provided by National Committees)

Sl. No.	Country	Total irrigated area (Million hectares)	Sprinkler irrigation	Micro Irrigation	Total sprinkler and micro irrigation	Percentage of total irrigated area	Year of reporting
			Hectares				
1	USA	24.7	12,348,178.14	1,639,676.11	13,987,854.25	56.5	2009
2	India	60.9	3,044,940.00	1,897,280.00	4,942,220.00	8.1	2010
3	China	59.3	2,926,710.00	1,669,270.00	4,595,980.00	7.8	2009
4	Russia	4.5	3,500,000.00	20,000.00	3,520,000.00	78.2	2008
5	Brazil	4.45	2,413,008.00	327,866.00	2,740,874.00	61.6	2006
6	Spain	3.41	732,925.00	1,628,705.00	2,361,630.00	69.3	2010
7	Italy	2.67	981,163.00	570,568.00	1,551,731.00	58.1	2010
8	France	2.9	1,379,800.00	103,300.00	1,483,100.00	51.1	2011
9	South Africa	1.67	920,059.00	365,342.00	1,285,401.00	77.0	2007
10	Saudi Arabia	1.62	716,000.00	198,000.00	914,000.00	56.4	2004
11	Iran	8.7	460,000.00	270,000.00	730,000.00	8.4	2009
12	Australia	2.545	524,480.00	190,720.00	715,200.00	28.1	2000
13	Canada	0.87	683,029.00	6,034.00	689,063.00	79.2	2004
14	Ukraine	2.18	618,000.00	48,000.00	666,000.00	30.6	2010
15	Mexico	6.2	400,000.00	200,000.00	600,000.00	9.7	1999
16	Korea	1.010	200,000.00	400,000.00	600,000.00	59.4	2009
17	Egypt	3.42	450,000.00	104,000.00	554,000.00	16.2	2000
18	Germany	0.54	525,000.00	5,000.00	530,000.00	98.1	2005
19	Japan	2.50	430,000.00	60,000.00	490,000.00	19.6	2010
20	Romania	1.5	448,000.00	4,000.00	452,000.00	30.1	2008
21	Slovak Rep.	0.313	310,000.00	2,650.00	312,650.00	99.9	2000
22	Israel	0.231	60,000.00	170,000.00	230,000.00	99.6	2000
23	Morocco	1.65	189,750.00	8,250.00	198,000.00	12.0	2003
24	Hungary	0.22	185,000.00	7,000.00	192,000.00	87.3	2008
25	Syria	1.28	93,000.00	62,000.00	155,000.00	12.1	2000
26	Turkey	5.34	110,000.00	26,000.00	136,000.00	2.5	2009
27	UK	0.11	105,000.00	6,000.00	111,000.00	100.9	2005
28	Finland	0.086	79,000.00	1,000.00	80,000.00	93.0	2009
29	Portugal	0.63	40,000.00	25,000.00	65,000.00	10.3	1999
30	Kazakhstan, Rep.	2.13	57,355.00	-	57,355.00	2.7	2006

Sl. No.	Country	Total irrigated area (Million hectares)	Sprinkler irrigation	Micro Irrigation	Total sprinkler and micro irrigation	Percentage of total irrigated area	Year of reporting
			Hectares				
31	Malawi	0.055	43,193.00	5,450.00	48,643.00	88.4	2000
32	Chile	1.09	16,000.00	23,000.00	39,000.00	3.6	2006
33	Chinese Taipei	0.38	18,850.00	8,750.00	27,600.00	7.3	2009
34	Bulgaria	0.588	21,000.00	3,000.00	24,000.00	4.1	2008
35	Czech Rep.	0.153	11,000.00	5,000.00	16,000.00	10.5	2007
36	Philippines	1.52	7,175.00	6,635.00	13,810.00	0.9	2004
37	Poland	0.1	5,000.00	8,000.00	13,000.00	13.0	2008
38	Slovenia	0.0073	8,072.00	733.00	8,805.00	121.0	2009
39	Malaysia	0.38	2,000.00	5,000.00	7,000.00	1.8	2009
40	Macedonia	0.055	5,000.00	1,000.00	6,000.00	10.9	2008
41	Lithuania	0.0044	4,463.00	-	4,463.00	101.4	2010
42	Estonia	0.001	500.00	500.00	1,000.00	100.0	2010
	Total	211.8918	35,072,650.1	10,082,729.1	45,155,379.3	21.3	

Working Group on ON-farm Irrigation Systems (WG-ON-FARM)**Work plan (2011-2014)**

2011	2012	2013	2014
<ul style="list-style-type: none"> Continue updating datasheet on "Sprinkler and micro irrigated areas in ICID member countries" 	<ul style="list-style-type: none"> Continue updating datasheet on "Sprinkler and micro irrigated areas in ICID member countries" 	<ul style="list-style-type: none"> Continue updating datasheet on "Sprinkler and micro irrigated areas in ICID member countries" 	<ul style="list-style-type: none"> Continue updating datasheet on "Sprinkler and micro irrigated areas in ICID member countries"
8th International Micro irrigation Congress (IMIC) in Tehran, Iran		Plan and coordinate with the Organizers of the 9th International Micro irrigation Congress	Plan and coordinate with the Organizers of the 9th International Micro irrigation Congress
<ul style="list-style-type: none"> Circulate the questionnaire again among members of the group for their final comments 	<ul style="list-style-type: none"> Finalize the revised questionnaire on "Survey of world-wide usage of sprinkler and micro irrigation" and circulate to NCs 	<ul style="list-style-type: none"> Compile information received from countries filled in "Survey of world-wide usage of sprinkler and micro irrigation". 	Prepare draft compilation for circulation among national committees
<ul style="list-style-type: none"> Review paper on "Micro irrigation for smallholders and greenhouses" 	<ul style="list-style-type: none"> Publish paper on "Micro irrigation for smallholders and greenhouses" 		
<ul style="list-style-type: none"> Prepare paper on "Field Water Management and Soil Conservation under Spate Irrigation" 	<ul style="list-style-type: none"> Publish paper on "Field Water Management and Soil Conservation under Spate Irrigation" 		