

**Minutes of the First virtual meeting of
Working Group on Sustainable On-Farm Irrigation
System Development (WG-SON-FARM)
15 March 2023: 12:30 hours (Indian Standard Time)**

Members present: (1) Dr. A.K. Randev, Chair (India); (2) Dr. Guan Guanghua (China); (3) Prof. Luo Yufeng (China); (4) Dr. Yu-Min Wang (Chinese Taipei Committee); (5) Dr. Chen, Ching-Tien (Chinese Taipei Committee); (6) Dr. Shao-Yiu Hsu (Chinese Taipei Committee); (7) Prof. L.B. Roy – Direct Member (India); (8) Dr. Hossein Dehghanisani (Iran); (9) Dr. Graziano Ghinassi (Italy); (10) Prof. Chang Eon Park (South Korea); (11) Mr. Ömer Faruk Akbulut (Turkey); (12) Dr. Caner DEMİR (Turkey); (13) Mr. İbrahim Burak Yeşiloğlu (Turkey).

Observer: Mr. Ashok Kharya (India)

Dr. A. K. Randev, Chair of the WG welcomed all the WG members and especially thanked Mr. Carl for successfully conducting the WG meeting in Adelaide, Australia in 2022. Dr. Randev informed the members that there are about 8 agenda items that have been framed so that new members get the required grasp over the mandate of the WG in the light of their respective expertise and started the meeting as per agenda items.

Agenda item 1: Review of the previous WG meetings including status of membership, review of the mandate and activities of the WG

1. The Chair presented a brief of the historical background of the WG and informed the members that the present title of the WG was reconstituted in 2015 by making additions to the mandate of the WG so as to comprehend the multi-disciplinary aspect for optimisation of environmental benefits.
 - 1.1 Regarding **membership** of the WG, the chair apprised the members that the Chinese Taipei Committee (CTCID) has nominated Dr. Shao-Yiu Hsu while Turkish National Committee (TUCID) has nominated Dr. Caner Demir, Ph.D in Land Consolidation and Mr. İbrahim Burak Yeşiloğlu, Mapping Engineer, thereby raising the total number of members of the WG to 27 (as up to 2021 it was 24). The Chair especially welcomed the new members with the remarks that experience in diverse fields shall enrich the WG's contributions in light of the WG's mandate. Three members each from China and two from India were added in 2021. However, in the previous WG meeting at Adelaide as per the draft minutes, only 7 Members and 6 observers could attend the meeting. A huge gap of interaction has been faced by the WG members due to unavoidable reasons, especially from 2020 onwards.
 - 1.2 The Chair informed the members that all the members are having experience related to **the mandate of the WG**, specifically (i) designing, installing, operation, and maintenance of On-Farm Irrigation systems; (ii) soil moisture and water infiltration and retention capacities of soils; (iii) optimization of trade-offs among on-farm irrigation technologies, socio-economic and environmental benefits; (iv) innovative local institutional arrangements for operation and maintenance and (v) top-notch scientific research and recommendations for development in different countries through the mutual exchange during ICID events.
 - 1.3 Activities of the WG, as per Road Map to ICID Vision which have three (3) goals, six (6) strategies, and eight (8) activities, briefly include outcome in the form of preparation of the position/overview/thematic research and development related documents/papers; presentation in the internal or international workshops, conferences for dissemination of technologies on a larger scale; publication of the papers; collection and collation of micro and sprinkler data; and updating Multilingual Technical Dictionary (MTD). Deeper and more analytical designs of papers will definitely enrich the mandate.

Agenda item 2: Presentations by the WG members

- 2.1 The Chair informed that during previous meetings, 9 presentations have been made by the WG members – six presentations in Mexico (2017) and three presentations in Bali (2019). As proposed by Mr. Carl, a paper entitled “improved decision making on overhead spray irrigation systems” was presented by Mr. Chris N, and Mr. Nick O in the Joint Session at Bali.
- 2.2 Mr. Taku Mori from Japan re-submitted a revised version of the position paper but the present status could not be discussed during the meeting in absence of Mr. Mori. However, Dr. Randev informed that the paper can be reviewed online and conveyed for finalization. Dr. Teoh Chin from Malaysia and Dr. Chang Eon Park from South Korea had already conveyed their inability to finalize one paper, however,

Dr. Teoh Chin from Malaysia may update the paper and send it either directly to ICID Central Office or Chair for finalization. Dr. Randev made a request to all the members, specifically the new members who joined the WG after 2020, that in the light of the mandate of the WG, each member of the WG may send one's name along with the title of the paper (may be covered under either position/overview or thematic paper category) to the CO or the Chair and present the same paper in the next WG meeting going to be held in November 2023 at Vizag, India.

- 2.3 As per Road Map, the next presentations were to be made on position, overview, and technical papers, as three papers and one article were proposed during 2022. WG Chair requested all the members that at least 4 members should voluntarily come forward for the preparation of either type of paper and to make a presentation during the next WG meeting at Vizag. Communications regarding any clarification on either type of paper/s (position, overview, or thematic) may be done by mail to the Chair - (ashwanirandev19@gmail.com).
- 2.4 However, as suggested during Adelaide meeting minutes item no. 2, Country papers developed by Australia and Malaysia and presented during special sessions/workshops during the 73rd IEC could be considered as part of the Road Map of ICID Vision. It is appreciated that papers as per the mandate of the WG may be accepted as a part of the Road Map.

Agenda item 3: Publications

- 3.1 Previous publications, pending for a long period of time entitled (i) "Improvement of On-Farm Irrigation Systems using simple water control, measuring and application devices" and (ii) Micro Irrigation for small holders and greenhouses" – no response has been received from Er. Felix, Former President, ICID even during 2022 also. **Therefore, it is suggested that long pending papers may be dropped and new papers may be developed for publication.**
- 3.2 Dr. Hossein Dehghanisani from Iran is finalizing a paper entitled "Micro Irrigation under Saline conditions", and will give updates on the paper during the next WG meeting. The Chair thanked all the members for very good achievements in respect of presentations and Webinars during previous years. He requested Members that the authors of papers should modify the papers as per guidelines for Irrigation and Drainage Journal of ICID for publication in IRD Journal. Any paper of the Members published in the Journal other than the IRD Journal may also be informed to the WG Chair/Vice Chair/Secretary for record and further use.

Agenda Item 4: Webinars

- 4.1 The Chair informed all the WG members on previous presentations made by the WG members quoting Dr. Grazano Ghinassi, Researcher, Dept. of Agriculture, Univ. of Florence, Italy, who delivered a Webinar on "Smart Technology to reduce energy consumption for water spreading and pipe production in hose reel sprinkler irrigation" on Dec 5, 2018. Prof. Yaohu Kang from Geographic Sciences and Natural Resource Research, University of Chinese Academy of Sciences, delivered a Second Webinar entitled "Importance of Micro irrigation to improve water use efficiency in relation to food production" showing the importance of micro irrigation in the world. On July 29th, 2019. Mr. Carl and his team delivered the 3rd Webinar entitled "Organization of Irrigation Automation Systems" on July 22nd, 2021. This paper has highlighted the contribution of many institutions including University of Melbourne, in the irrigation modernization project by developing the required innovations that led to saving of water simultaneously taking care of environmental parameters. Members are informed to participate in the Webinar facility for highlighting their research/ development work. Interested members may convey their names along with the title either to the chair or CO, ICID.

Agenda item 5: Internal /International Workshop on Micro irrigation systems impacting Agricultural Growth and Farm Incomes

- 5.1 As decided in the previous WG virtual meeting held on November 5, 2020, an internal workshop may be changed to an international Workshop under the same theme so as to make it more comprehensive enabling more participation of International Scholars. However, during the Adelaide meeting as per the Minutes item no. 7, the group suggested the organization of a workshop on Adoption of Technology and barriers as identified by the end users during the 74th IEC and 25th ICID Congress after discussing this in the virtual meeting. Thus, the matter is open for holding of workshop-Internal or international, title of the workshop, contributors, etc. Due to paucity of time, it was decided that this issue would be discussed and finalized in the next WG meeting.

Agenda item 6: 10th International Micro Irrigation Conference in 2023, Morocco

- 6.1 The 10th International Micro Irrigation Conference was organized from 25-27 January 2023 at Dakhla by the Moroccan National Committee of ICID (ANAFIDE) in collaboration with the Council of the Moroccan Community Abroad (CCME), in partnership with ICID and with support of the Ministry of Agriculture, Fisheries, Rural Development, Water and Forestry (MAPMDREF). The theme of the conference was 'Micro-irrigation in the Era of Technology Innovation and Digital Transformation,' which aimed to share experiences of using new technologies and best management practices in drip, micro-sprinkler, and other localized irrigation systems. The event witnessed participation from several countries such as South Africa, Nigeria, Niger, Senegal, Egypt, Mauritania, the United Kingdom, France, Portugal, Italy, Spain, Lithuania, Australia, the United States, India, and Japan.

Agenda item 7: Water and crops' productivity relation

- 7.1 All the WG members were informed to have basic information on relation between irrigation through On-Farm Irrigation systems and agricultural crops produced viz. productivity of crops with system and without system so as to have an idea on incremental benefit in crops production on account of installation of drip/sprinkler systems on farms – only exchange of information through discussion among members. The Chair suggested to include these two important parameters in their respective papers.

Agenda item 8: Any other business

- 8.1 The Chair informed, although, each WG amongst three working Groups under Strategy theme "On-Farm" has exclusive objectives and methodology so need to be independent yet on common issues, joint efforts are to be made by the members of all the WGs. Extension of the WG term up to 2025 has already been approved by IEC.
- 8.2 The Chair informed further regarding restructuring of the WGs vide message from Prof Ragab Ragab, President ICID dated November 24th, 2022 that this issue has already been considered and a suggestion has been made that due to the exclusive nature of each WG same mandate of the WG should continue up to 2025. However, as per objective 5 of the WG on top-notch scientific research may include use of new technologies like Drones, automation, nano irrigation systems, transboundary surface and groundwater management, etc. that will make approach of the WG more comprehensive covering all the groups of countries having different levels of development. This is due to the fact the restructuring of WGs has been considered for economizing time and cost but that will be at the cost of in-depth details of each objective of exclusive mandate of the WG. This may further squeeze the level of information to be shared amongst participating countries. However, a detailed and more discussion on the same issue may be held at the Vizag meeting.
- 8.3 No other issue emerged during the meeting. Hence meeting ended with thanks to all the members.

[Note: Clarification on any item by any WG member may please be sent to ashwanirandev19@gmail.com].

