

**MINUTES OF THE 4<sup>TH</sup> MEETING OF THE  
WORKING GROUP ON SUSTAINABLE ON-FARM IRRIGATION  
SYSTEM DEVELOPMENT (WG-SON-FARM)**

04 September 2019, 14.00-16.00 hours  
Bali, Indonesia

**Strategy Theme: On-Farm**

**Presented by the Chairman**

**Year of Establishment: 2016**

**Extended the completion of the Mandate: 2022**

**Mandate:** (a) On-farm irrigation structures and water distribution system networks are properly designed, installed, managed and maintained; (b) Soil moisture is monitored, technical and management measures for enhancing the water infiltration and retention capacities of soils are investigated and implemented; (c) Trade-offs among on-farm irrigation technologies, socio-economic and environmental benefits are optimized; (d) Innovative local institutional arrangements are developed and promoted for operation and maintenance; (e) Top-notch scientific and development relevant research is conducted and its results are translated into actionable recommendations.

**Members Present:** (1) Dr. A.K. Randev, Chair (India); (2) Mr. Suman Sijapati, Secretary (Nepal); (3) Dr. Graziano Ghinassi (Italy); (4) Prof. Chang Eon Park (Korea, Rep. of); (5) Dr. Teoh Chin Chuang (Malaysia); (6) Dr. Chen, Ching-Tien (Chinese Taipei); (7) Dr. Yu-Min Wang (Chinese Taipei).

**Observers:** (1) Dr. Keigo Noda (Japan); (2) Dr. Petra Schmitter, IWMI representative (Myanmar); (3) Yu-Chuan Chang (Chinese Taipei); (4) Shiang-Min Chen (Chinese Taipei); (5) Dr. Wen-Shon Lin (Chinese Taipei); (6) Dr. Yong Tryjon (Chinese Taipei); (7) Rui Qi, Chen (Chinese Taipei); (8) Yu-Ting Weng (Chinese Taipei); (9) Tzu-Hsuan, Wen (Chinese Taipei).

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

**WG-SON-FARM Minutes Item 1: Action taken report by Chair**

1. At the onset, Chair presented the report on the actions taken on the decisions and proposals of the working group at its last meeting held at Saskatoon in August 2018.
2. Chair Dr. Randev informed the meeting that online / virtual meeting of the Joint Session of Strategy theme “On-Farm” was organized by the Central Office on 31 May 2019 in which Chairs of the three workbodies viz. WG-SON-FARM, WG-WATER&CROP and WG-NCWRI were involved in discussions along with other members. The Chair informed about the outcome of the meeting emphasizing that presentations having commonality among the mandate of three Working Groups was presented in the Joint meeting of the Strategy Theme on 5 Sept 2019.
3. The group noted that Dr Haile was absent in the meeting and hence WG agreed to discontinue the membership of Dr Haile. Mr. Mohd Yazid bin Abdullah (Malaysia) had not contributed to the activities of the group during last two years so recommended to be discontinued. The membership of the new member, Dr Teoh Chin Chuang, nominated by the Malaysian National Committee (MANCID) was accepted for the membership of the group by the members of the WG. It was proposed to replace Mr. Taku Mori in place of Dr. Akira Iwamoto as he retired from the service. Membership status is given in **Annex 4 (page 27)**.

**WG-SON-FARM Minutes Item 2: Road Map to ICID Vision 2030 – Status of activities on sustainable on-farm irrigation**

4. The group reviewed the activities as part of Road Map to ICID Vision 2030 and updated the progress (refer **Annex**). At the meeting, country over view paper titled “On Farm Irrigation Systems in Italy” by Dr Graziano Ghinassi (Italy) and thematic paper titled “Environment Friendly Management of Probiotic Rice Intensification in Taiwan” by Pro Yu-Min Wang (Chinese Taipei) were presented after completing the agenda items. Mr Chris Nicholson and Mr Nick Ottalloran presented a paper titled ‘Improved Decision Making on Overhead Spray Irrigation Systems’ in the meeting of Joint Session on Strategy Theme “On-Farm” on 5 September 2019. The presentation covered the details of field survey conducted over 20 places, data analysis, findings and practical use of the methodology for making better decisions. For the next year, three members namely Mr. Taku Mori (Japan), Dr. Teoh Chin Chuang (Malaysia) and Prof. Chang Eon Park (Korea, Rep. of) agreed to present one paper (each) in the next meeting of the WG going to be held in Australia in 2020.

**WG-SON-FARM Minutes Item 2.1: Publications of the Working group**

5. After discussion with the Ex-Chair President Hon. Felix Reinders, Chair Dr Randev informed the members that the finalization of the article entitled “Improvement of the on-farm irrigation systems using simple water control, measuring and application devices” is a useful document and will be submitted to the ICID Central Office and second paper entitled “Micro irrigation for smallholders and greenhouses” by Kyoto from Japan will again be taken up for its possible publication in the ICID Journal.

**WG-SON-FARM Minutes Item 3: Collection and collation of micro and sprinkler data**

6. Regarding access to the website and providing the updated information in respect of data pertaining to the countries so that the datasheet of Sprinkler and Micro Irrigation can be updated regularly, Chair informed the members of the WG that a questionnaire on Sprinkler and Micro Irrigation data will be modified and sent to the Central office for collection of data from the National Committees for which the National Committees of USA and Turkey have provided the updated data. The Chair emphasized the need to have same basis with respect to time when publishing any data for further collation or before publication in ICID report. The updated table of total sprinkler and micro area (in descending order) is available at <http://www.icid.org/sprinklerandmicro.pdf>.

**WG-SON-FARM Minutes Item 4: Dissemination of activities of WG****WG-SON-FARM Minutes Item 4.1: Website of the group**

7. Members were requested to see the website of the working group <http://wg-on-farm.icidonline.org/> which was fully updated including new membership list, agenda, minutes and presentations made during the meeting. The members were also requested to share information, knowledge & experience and provide papers, presentations, articles, reports etc. related to any outcome of their research or development efforts in their respective fields for uploading on the WG website for wider dissemination. The members suggested to upload new questionnaire finalized for updating data and presentations made in the meeting of the WG on the website of the WG.

**WG-SON-FARM Minutes Item 4.2: Webinar/ Web based seminar**

8. The group noted that Dr. Graziano Ghinassi (Italy) delivered an ICID webinar on the topic ‘Smart technology to reduce energy consumption for water spreading and pipe production in hose reel sprinkler irrigation’ on 5 December 2018. The proceeding of the webinar is available at [http://www.icid.org/icid\\_webinar\\_13.html](http://www.icid.org/icid_webinar_13.html).

**WG-SON-FARM Minutes Item 5: Updating Multilingual Technical Dictionary (MTD)**

9. TF-MTD meeting was held on 3 September 2019 and the members of the WG were acquainted with list of chapters of the MTD and informed to undertake the review of the concerned terms under chapter of the WG depending on their domain of expertise and suggest changes/ modifications and additions of new term(s), if any along with pictures, links and videos related to respective term(s). The members were also requested to go through the ICID website for the said purpose (<http://www.icid.org/xinlogin/login.php>).

**WG-SON-FARM Minutes Item 6: Joint Session of Strategy Theme On-Farm, September 2019, Bali**

10. The members of the WG were informed that a Joint Session of three WGs under Strategy Theme “On-Farm” will be organized on 5<sup>th</sup> September 2019 at Bali during 70<sup>th</sup> IEC and WIF3 and they were requested to participate in the Joint Session of Strategy theme On-Farm. WG-WATER & CROPS, WG-SON-FARM and WG-NCWRI fall under the strategy theme ‘ON-FARM’. In this respect, 1<sup>st</sup> online WebEx meeting was organized on 31 May 2019. Mr. Carl Walter, Vice Chair of the WG informed that he will make a presentation of paper in this joint meeting.

**WG-SON-FARM Minutes Item 7: 9<sup>th</sup> International Micro Irrigation Conference, 16-18 January 2019, Aurangabad, India – Feedback**

11. The Chair informed the members that the 9<sup>th</sup> International Micro Irrigation Conference (9IMIC) was successfully organized from 16-18 January 2019 in Aurangabad, Maharashtra, India on the theme ‘Micro Irrigation in Modern Agriculture’. Around 700 delegates from 30 countries participated in the conference that provided a global platform to professionals and exhibitors to showcase their knowledge and technologies from around the world. The members of the WG were informed further that the recommendations of the 9IMIC can be accessed at [https://www.icid.org/9th\\_microirri.html](https://www.icid.org/9th_microirri.html).

**WG-SON-FARM Minutes Item 8: International Young Professionals Training Program, 22-25 April 2019, Gyeonggi Province, Republic of Korea – Response from YPs on questionnaire**

12. The members of the WG were informed about the International Young Professionals Training Program (YP-TP) on “Climate Resilient Smart Irrigation Systems”, organized by the Korean National Committee (KCID) from 22-25 April 2019 at Gyeonggi Province (Republic of Korea) in collaboration with the Chinese National Committee (CNCID) and ICID ; as well as KCID also organized an International Workshop on “Irrigation Technologies to Mitigate Climate Change” on 26 April 2019. During YP training, thirty-four young professionals from 17 countries participated and gained the knowledge. All the members of the WG were informed to go through the responses of Young Professionals of various countries at <https://www.icid.org/ypqnrresponse.pdf>. After discussion, it was felt that some of the responses relates to the mandate of the WG and the group may like to take note of the views and suggestions from YPs of different countries.

**WG-SON-FARM Minutes Item 9: Any other business**

13. The members of the WG were informed about the questions raised by PH Seed Nairizi, firstly on question “Does technology help to save water ?” raised in the last meeting at Saskatoon. This was discussed in the meeting and the members opined that as scientifically water saving has been recorded under field situations during technological interventions with respect to on farm irrigation systems, so it should not be a matter of confusion. Secondly, related to definition of Irrigation Efficiency, it was considered by the members that scale specific and input/ output related efficiencies have related meanings and way of interpretation discipline wise and for definition of Irrigation Efficiency – it may be approached in the MTD under related chapter on On-Farm Water Management. Any addition or deletion in the definition given in MTD if found/ thought justifiable may be communicated to the CO.

14. After completing the agenda items, two presentations viz. one overview paper and second thematic paper were made as mentioned under item 2.



## Annex [Appendix XXIII, Item 2]

## ROAD MAP TO ICID VISION 2030 – ACTIVITIES OF WORK BODIES

Goals/ Strategies	Activities	Outcomes/ Outputs	Milestone for Year 2017	Milestone for Year 2018	Milestone for Year 2019	Milestone for Year 2020	Milestone for Year 2021
<b>Goal A: Enable higher crop productivity with less water and energy</b>							
<b>A1.Strategy:</b> Modernizing irrigation systems	1.3 Prepare country overview papers	Papers	Prepare two country overview papers	Prepare one country overview paper	Prepare two country overview papers		
<b>A5.Strategy:</b> Supporting water productivity enhancement	5.1 Prepare how to do thematic documents ready	Technical Document	Prepare one how-to-do document	Prepare one how-to-do document	Prepare one how-to-do document	Prepare one how-to-do document	Prepare one how-to-do document
	5.2 Develop a position paper on key issues on sustainable on-farm irrigation systems	Position paper	Prepare first draft paper	Finalize the position paper	Prepare second draft paper	Finalize the position paper	
<b>Goal C: Facilitate exchange of information, knowledge and technology</b>							
<b>C3.Strategy:</b> Promoting regional cooperation	3.9 Organize international workshop, seminar or symposium	Compilation of proceedings	First internal Workshop	Organization of the 9th International Micro Irrigation Conference (IMIC) in January 2019 at Aurangabad, India	Hosted 9th International Micro Irrigation Conference (IMIC) in January 2019 at Aurangabad, India	Second workshop	Third workshop
<b>C4. Strategy:</b> Compile, collate and share knowledge and experiences	4.20 Database on sprinkler and micro irrigation in the world	Database	Updating database	Updating database	Updating database	Updating database	Updating database
	4.27 Research article on state of the art for publication in Irrigation and Drainage Journal	Study report	Prepare one article	Publication in Journal	Prepare one article	Publication in Journal	Prepare one article
<b>Goal E: Encourage Research and Support Development of Tools to Extend Innovation into Field Practices</b>							
<b>E2. Strategy:</b> Strengthening Extension Services with AWM information							
<b>E5.Strategy:</b> Compilation of Global Data Sets on Irrigation and Drainage	5.1 Datasets for irrigated area	Database	Updating database	Updating database	Updating database	Updating database	Updating database
	5.2 Datasets for Pressurised Irrigation Systems	Database	Updating database	Updating database	Updating database	Updating database	Updating database

(Source: Consultative Group (CG) Report: A Water Secure World Free of Poverty & Hunger: A Road Map to ICID Vision 2030)

