

**AGENDA FOR THE 12<sup>TH</sup> MEETING OF THE  
WORKING GROUP ON WATER AND CROPS (WG-WATER & CROP)**

04 September 2019, 11:15-13:15 hours  
Bali, Indonesia

**Strategy Theme: On-Farm**

**Presented by the Chairman**

**Year of Establishment: 2007**

**Completion of the Mandate: 2019**

**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 bio-fuel production, to develop techniques for rainfall harvesting, to promote the multifunctional use of water in paddy (rice) cultivation, to investigate the adaptation of agriculture to climate change and to promote low input agriculture.

**Website:** [http://www.icid.org/wg\\_crop.html](http://www.icid.org/wg_crop.html)

**WG-W&C Agenda Item 1: Action Taken Report by Chair**

1. The Chair will present the report on the actions taken on the decisions and proposals made at its last meeting held at Saskatoon, Canada in August 2018.
2. ICID Central Office vide e-mail of 19 November 2018 to all Chairs/ Vice Chairs/ Secretaries suggested workbodies to make full use of web-ex platform for virtual meeting so as to ensure regular contribution from the WG members as well as discuss and initiate follow-up actions emerging from the minutes of the previous WG meeting and review the progress of the action points. In order to organize the WebEx Meetings, Webinars and e-Discussions, Chair of the workbodies were requested to send the 'Expression of Interest' to initiate the processes. No web-ex meeting of the WG could be arranged during the year.
3. Uzbekistan National Committee on Irrigation and Drainage (UzNCID) has nominated Eng. Karshiyev Rustam Jurayevih (Uzbekistan) for the membership of the WG. Chairman in consultation with Vice Chair, Secretary of the WG and the Central Office have updated the membership of the WG as given at **Annex 1** (*refer electronic version for latest list*). New nominations, if any, for the membership received will be dealt suitably after the meeting. The Chair may provide further updates at the meeting.

**WG-W&C Agenda Item 2: Road Map to ICID Vision 2030: Activities on efficient use of water in crop production**

4. During Saskatoon meeting (2018), WG reviewed the activities such as Goals/Strategies, Actions, Outcomes/Outputs, Milestones and assigning Lead Persons as part of Road Map to ICID Vision 2030 and updated the progress (**Annex 2**). WG Chair will discuss the status of various activities and report progress to PCTA.

**WG-W&C Agenda Item 3: Multi-functionality of water use in paddy (Rice) cultivation**

5. At Saskatoon, the WG decided to bring out a 'Technical Report' based on papers contributed by its members in areas such as: (a) efficient use of water in crop production, (b) crop water models, (c) multifunctional water use in paddy, and (d) rain water harvesting and energy crops. In this regard, so far, National Committees of China, Indonesia and Philippines have already contributed their papers for the Technical Report of the WG.
6. As a follow-up, ICID Central Office has requested the members/NCs from Korea, Thailand, and Taiwan to contribute their papers in the area of 'Multi-functionality of water use in Paddy (Rice) cultivation' in their countries for enriching the 'Technical Report' of the working group. Contributions from Dr. Chung-Feng, Ding through Dr. Hsiao-Wen Wang (Taiwan), Prof. Won-Ho Nam (Korea) and Mr. Chalearmkiat Kongvichenwat (Thailand) are awaited. The reports from Dr. Graziano Ghinassi through Vice President Dr. Arcieri Marco (Italy) and Dr. Leon van Rensburg through Prof. Sylvester Mpandeli through (South Africa) are also awaited. Dr. Leon van Rensburg (South Africa) has since declined to contribute as rice paddy is not area of his work. WG Chair may provide further updates at the meeting.

**WG-W&C Agenda Item 4: Updating Multilingual Technical Dictionary (MTD)**

7. At Saskatoon meeting (2018), the WG noted that the issue of updating of the Multilingual Technical Dictionary (MTD) could not be discussed due to absence of Dr. P. Soman (India) which was nominated as a nodal person to undertake the task of reviewing and updating the terms of MTD. In December 2018, ICID CO has requested Dr. Soman to take lead in the activity of updating Multilingual Technical Dictionary (MTD). Dr. Soman/WG Chair may like to update the members with the latest status in the matter.

**WG-W&C Agenda Item 5: International Workshop on 'Improving the water use efficiency and productivity within water energy food nexus' in September 2019 at Bali, Indonesia**

8. As agreed during the Saskatoon meeting (2018), WG is organizing an International Workshop on 'Improving the Water use Efficiency and Productivity within the Water-Energy-Food-Nexus' on 01 September 2019 at Bali, Indonesia. The objective of the workshop is to bring together experts from all over the world to share information, experience, and views on how to apply the principles of water-food-energy nexus in agriculture. The workshop will be focused on the following topics: (i) How improved water use efficiency and productivity impact the Nexus; (ii) Water-Food-Energy nexus at field, regional and country scales - Examples of Applications; (iii) How the Environment and ecosystem services benefit from the Nexus; (iv) Economic analysis of food production within the Nexus; (v) Management practices that promote the Nexus; and (vi) Institutional and Governance issues in implementing the Nexus. The Review Committee/ Chair has accepted 11 abstracts. Chair may provide the outcome of the workshop at the meeting.

**WG-W&C Agenda Item 6: ICID-IWRA Collaboration**

9. During the Saskatoon meeting, WG Chair VPH Dr. Ragab informed that the International Water Resources Association (IWRA) was looking for new collaboration between ICID and IWRA for mutual benefits such as (i) organizing joint seminars, and (ii) bring out a Special Issue of the Journal based on selected papers from the WG workshops/seminars, possibly with financial support from IWRA. In December 2018, ICID Central requested Dr. Ragab to explore the opportunities for such collaboration thereby enhancing the scope of activities of the WG. The Chair may provide further updates during the meeting.

**WG-W&C Agenda Item 7: Publications of the Working Group**

10. At Saskatoon, the Group considered to publish a few selected papers from the past International Workshops (2013 and 2015) and International Workshop (2019) with the support from IWRA. These selected papers of the past International Workshops of the WG could be considered for publication in the ICID Journal and/or Technical Report of the WG referred to item 3. Chair may apprise the members at the meeting.

**WG-W&C Agenda Item 8: Disseminate of activities of WG**

**WG-W&C Agenda Item 8.1: Website of the Group**

11. At Saskatoon, the group noted that the website of the working group [http://www.icid.org/wg\\_crop.html](http://www.icid.org/wg_crop.html) was updated with new membership list, agenda, minutes, events, etc. WG Chair Dr. Raqab encouraged and requested the members of the WG to share their materials/ documents/articles/papers/presentations/ related to the activities of the group based on the mandate of the group for uploading on the website. In response, WG Chair Dr. Ragab shared the latest version of SALTMED 2019 and the details of the web-links which have been uploaded on the WG website for use by its members. The Chair may apprise the members during the meeting.

**WG-W&C Agenda Item 8.2: Web-based Seminar/e-discussions**

12. During the Saskatoon meeting (2018), WG discussed about the organization of webinar to share vast knowledge and expertise available within the WG and members from the NCs. In this regard, the Chairman of the WG encouraged and requested the members of the Group to use the platforms such as e-discussion, web-based seminars on the relevant topics based on the mandate of the WG. In December 2018, ICID CO requested the members of the WG to come forward and organise e-discussions/ webinars as relevant to the mandate of the group. WG requested to Dr. K. Yella Reddy (India) to take lead and coordinate the activity for the WG. The Chair/Dr. Reddy may provide further updates during the meeting.

**WG-W&C Agenda Item 9: Merger of WG-BIO-FUEL with WG-WATER & CROP**

13. As per Resolution IEC-2/69, vide notification no .21 of 2018 dated 13 December 2018, the ICID Central Office has notified merger the Working Group on Water for Bio-Fuel and Food (WG-BIO-FUEL) with Working Group on Water & Crops (WG-WATER & CROP) as approved by International Executive Council (IEC) during the 69<sup>th</sup> meeting

of ICID held in August 2018 at Saskatoon, Canada. In this regard, WG has requested Dr. Fuqiang Tian (China), Ex-Chairman of WG-BIO-FUEL to provide a feedback of the WG-BIO-FUEL during the meeting. Dr. Tian may formally join the WG and perhaps lead the BIO-FUEL related activities under this WG.

**WG-W&C Agenda Item 10: New Sub-topic ‘Water Use and Productivity’**

14. At Saskatoon, it was noted that Dr. Saeed Nairizi (Iran), President Hon. ICID, informed the members of the WG that the water requirements of the greenhouse crops are still estimated in a traditional way and there is a need to work out the actual requirements of various crops under greenhouse conditions.

15. Given above, the new sub-topic ‘Water Use and Productivity’ has since been included in the mandate and a Task Team (TT) has been established with members, such as (i) VP Dr. K. Yella Reddy (India); (ii) PH Dr. Saeed Nairizi (Iran); (iii) VPH Dr. Ragab Ragab (UK); and (iv) Dr. Chung-Feng, Ding (Chinese Taipei). As a follow-up, ICID Central Office has requested the members to take lead, develop a one-page concept note and a short action plan with responsibilities assigned to undertake activities under this item. In response, Dr. Chung-Feng, Ding (Chinese Taipei) has shared a research paper titled “Greenhouse Cultivation of Cherry Tomato and Asparagus in Taiwan”. Dr. Ding may present his paper briefly. WG Chair Dr. Ragab may apprise the WG members at the meeting.

16. Further, it was reported that Mr. Syaiful Mahdi (Indonesia) emphasized on the importance of ‘Effective Rainfall’ in crop water requirement as part of the rain-fed agricultural water management. The WG has since included this topic in the mandate of the group and Mr. Syaiful Mahdi was requested to take lead and develop a short action plan for activities under this topic in cooperation with the members of the Group. Mr. Syaiful Mahdi (Indonesia) has since expressed his inability, due to personal reason, to take up this task. The Chair may re-assign the task to some other WG members.

**WG-W&C Agenda Item 11: Joint Session of Strategy Theme On-Farm, September 2019, Bali**

17. At Saskatoon, the working group successfully organised the Joint Session meeting of Strategy Theme ‘On-Farm’ on 15 August 2018. Similarly, this year too, a Joint Session of three WGs under Strategy Theme On-Farm will be organised on 5<sup>th</sup> September 2019 at Bali during 70<sup>th</sup> IEC and WIF3. WG-WATER & CROP, WG-SON-FARM and WG-NCWRI (*formerly known as WG-PQW*) fall under the Strategy theme ‘On-Farm’. In this respect, an Online/WebEx meeting was organised on 31 May 2019. The minutes of the WebEx meeting are available at **Annex 3**. Members of the WG are requested to participate in the Joint Session of Strategy Theme ‘On-Farm’ on 5 September 2019 at Bali, Indonesia.

**WG-W&C Agenda Item 12: International Young Professionals Training Program, 22-25 April 2019, Gyeonggi Province, Republic of Korea – Response from YPs on Questionnaire**

18. As agreed at Saskatoon meeting in August 2018, the Korean National Committee (KCID) organized the International Young Professionals Training Program (YP-TP) on “Climate Resilient Smart Irrigation Systems” from 22-25 April 2019 at Gyeonggi Province (Republic of Korea) in collaboration with the Chinese National Committee (CNCID) and ICID. KCID has also organized an International Workshop on “Irrigation Technologies to Mitigate Climate Change” on 26 April 2019 to provide an opportunity to the young professionals to have a broader and in-depth exposure to emerging irrigation technologies and management scenarios considering the urgent need for a sustainable climate change-resilient agriculture sector. During the YP training, thirty-four young professionals from 17 countries participated and gained the knowledge. As part of YP training, each YP was requested to provide their response to the following five questions: (i) How the recent climatic extremes are affecting water management for agriculture in your country/region? (ii) What new and innovative approach and technologies are being adopted to address these climate change issues? (iii) What management approach and solutions are being considered to adapt to climate change? (iv) How would you like to modify/augment water management practices and policies in region to generate a long term strategy? (v) What is your view and contribution to promote climate smart agriculture?

19. The responses received from the YPs have been compiled, and the same is available at: <https://www.icid.org/ypqnresponse.pdf>. It is felt that some of the responses may be relate to the mandate of the WG and the group may like to take note of the views and suggestions from YPs from different countries and discuss the relevant issues during the meeting.

**WG-W&C Agenda Item 13: Tenure of the Working Group (Summary Report)**

20. The Working Group on Crops and Water Use was first established in 1986. The Group was renamed as Working Group on Sustainable Use of Natural Resources for Crop Production (WG-CROP) in 1997 with new mandate and further renamed as Working Group on Water and Crops (WG-CROP) in 2007 with another new mandate. The tenure of the WG, however, was extended intermittently and the WG is now expected to complete its

mandate in 2019. Since the WG has prolonged tenure, a “Summary Report” of the WG may be presented during the meeting. The Chair may highlight the achievements of the WG.

21. As far the tenure is concerned, it emerged in the Joint Session (**Item 3, Annex 3**) to extend the tenures of the WG-WATER & CROP (closing in 2019) and WG-SON-FARM (closing in 2022) to year 2025, which is also the closing of the WG-NCWRI. The Joint Session is organized, since 2018, by the three WGs i.e. WG-WATER & CROP, WG-SON-FARM and WG-NCWRI (erstwhile PQW) with the aim to make the meetings more-lively, reduce number of parallel events, if possible.

**WG-W&C Agenda Item 14: Any other business**



**NOTES FOR CHAIRPERSON:**

1. Draft minutes of this meeting to be submitted to ICID Secretariat at Bali, Indonesia after the meeting.
2. Chair to participate and present the WG report to PCTA meeting on 6 September 2019.

**A. Members and their attendance at 2017 and 2018 Meetings**

Sl. No.	Members	Member from (Year)	2017		2018		Remarks
			Self	Contributed by mail	Self	Contributed by mail	
1.	VPH Dr. Ragab Ragab, Chairman (UK)	2007	•		•		
2.	VPH Laurie C. Tollefson, Vice-Chairman (Canada)	2009	•		•		
3.	Dr. K. Yella Reddy, Secretary (2010) (India)	2009	•		•		
4.	Mrs. Gao Hong (China)	2012	•		•		
5.	Dr. Marco Arcieri (Italy)	2014	•				
6.	Ir. Adang Saf Ahmad (Indonesia)	2015	•		•		
7.	Dr. P. Soman (Direct Member), JISL	2015	•				
8.	Prof. Won-Ho Nam (Korea)	2017	-	-	•		
9.	Dr. Chung-Feng, Ding (Chinese Taipei)	2018	-		•		
10.	Prof. Dr. Zeinab Hussien Behairy (Egypt)	2018	-	-			Provisional Member (2018)
11.	Dr. Kazumi Yamaoka (Japan)	2018		-	•		
12.	Secretary General, ICID						
<b>Permanent Observers</b>							
1.	FAO representative						
2.	Mr. Herbert H. Van Lier, CIGR						
3.	Prof. D. Wrachien (Italy)						
4.	ICRISAT representative						
<b>Observer</b>							
1.	Mr. Syaiful Mahdi (Indonesia)	2015	•		•		

**B. New Nomination received from the National Committee**

Sl. No.	Name	Country	Remarks
1.	Eng. Karshiyev Rustam Jurayevih (Uzbekistan)	Uzbekistan	Recommended as member, subject to his presence else provisional member



**ROAD MAP TO ICID VISION 2030 – ACTIVITIES OF WG-WATER & CROPS**

<b>Goals/ Strategies</b>	<b>Activities</b>	<b>Outcomes/ Outputs</b>	<b>Milestone for Year 2018</b>	<b>Milestone for Year 2019</b>	<b>Milestone for Year 2020</b>	<b>Resolution Lead Person</b>
<b>Strategy 5:</b> Supporting water productivity enhancement	5.3 Develop guidelines on efficient use of water in crop production	Guidelines	Outline of guidelines – introduction	Release the first draft guidelines	Finalise the draft guidelines and publish	Merge Item 5 and B1. Dr Marco Arcieri (Italy)
<b>Strategy B1:</b> Supporting Development of Appropriate Policies	1.13 Technical Report on Efficient Use of Water in Crop Production	Report	Prepare the first draft report for discussion	Release the second draft report	Finalise the draft report and publish	Dr Marco Arcieri (Italy)
<b>Strategy C3:</b> Promoting Regional Cooperation	3.2 International Workshop/seminar on 'Improving Water Productivity in the frame work of Water Energy Food Nexus'	Workshop proceedings	Announcement of workshop	Orgnaising Workshop in Canada	Publication of papers in the Special Issue of the Journal	VPH Laurie C Tollefson (Canada)
<b>Strategy D2:</b> Developing Technical Documents in Non-technical Language	2.2 Crop – Water-Energy Nexus	Technical Report		Workshop	Workshop	Dr K Y Reddy (India)
<b>Strategy E2:</b> Strengthening Extension Services with AWM information						Dr Nader Heydari (Iran)
<b>Strategy E3:</b> Developing and Promoting Tools of AWM	3.1 Support research and development of modelling tools	Development of suitable Models, Sensors, Tools for field use	Prepare action plan	Draft report on various developments	Consolidation and final report	Dr Ragab Ragab
<b>Strategy F3:</b> Technical Training of Young Professionals from Member countries	3.9 Training on Crop Water Models Aqua Crop	Conduct Training workshops		Training workshops		All Members are responsible.



**ONLINE/VIRTUAL MEETING OF JOINT SESSION OF STRATEGY THEME – ON FARM**

**Date: 31 May 2019; Time: 18:30 hours (India Time)**

**MINUTES**

**Members present:** (1) VP Dr. K. Yella Reddy (India), Strategy Theme Leader – ‘On-Farm’ and Secretary of WG-WATER & CROPS; (2) VPH Ragab Ragab (UK), Chair of WG-WATER & CROPS; (3) VPH Laurie C. Tollefson (Canada), Vice-Chair of WG-WATER & CROPS; (4) Dr. A.K. Randev (India), Chair of WG-SON-FARM; (5) Mr. Carl Walters (Australia), Vice-Chair of WG-SON-FARM; (6) Dr. Wenyong Wu (China), Vice-Chair of WG-NCWRI; (7) Er. A.B. Pandya, Secretary General; (8) Er. Harish Kumar Varma, Executive Director; and (9) Dr. Vijay K. Labhsetwar from ICID Central Office.

**ISSUES FOR DISCUSSIONS**

**Item 1: Background / Introduction**

At the onset, Er. A.B. Pandya, Secretary General, welcomed all the members present and briefly narrated the background for the meeting. He reiterated that the consensus during the Canada meeting (2018) was to proceed with the development of a common agenda for the combined meeting of three WGs i.e. WG-WATER & CROP, WG-SON-FARM and WG-NCWRI (erstwhile PQW) with the aim to make the meetings more-lively, reduce number of parallel events, if possible.

**Item 2: Outcome / Recommendations of the Joint Session of Strategy Theme – On Farm**

Name of the Strategy Theme: During the Joint Session of Strategy Theme – On Farm held in Canada (2018), the new names proposed for the Strategy Theme were ‘Water Productivity’ or ‘Water Productivity and Environmental Sustainability’. However, considering reservations from PH Dr. Gao Zhanyi, Chair of SC-E-THEMES, members unanimously agreed to a revised name of “*On-farm Water Management*”. This would be placed for confirmation during the Bali meeting.

Structure of the Joint Session: SG A.B. Pandya brought the attention of the members to four components of the joint meeting i.e. WG Presentations, Workshops / Seminars, Panel Discussions and Webinar/e-Discussions and sought the opinion of the Chairs and members.

It was agreed to make WG presentations of mutual interest in the Jt. Meeting. WG-WATER & CROP is already organizing an International Workshop on ‘*Improving the water use efficiency and productivity within the water-energy-food nexus*’ on 01 September 2019 at Bali and members from the other WGs were invited to contribute to this workshop. As far ‘Panel Discussion’, it was thought appropriate to organize a 60-minute discussion on “*Building capacities for farm level water management*” (tbc) and Chaired by the Theme leader/s. Webinar/e-Discussions are to be organized during the year and not at the Joint Meeting.

**Item 3: Tenure and expected output of the WGs of Strategy Theme ‘On-Farm’**

Given the variable tenures of the three WGs and to bring out an expected output (guidelines / position papers, technical reports etc.) in due course of time, it was thought appropriate to extend the tenures of the WG-WATER & CROP (closing in 2019) and WG-SON-FARM (closing in 2022) to year 2025 which is closing of the WG-NCWRI (PQW). A proposal to this effect will be made to PCTA at Bali.

**Item 4: Draw a combined agenda for the Joint Session on 05 Sept.2019 (13:30 to 17:00 hours)**

The task of preparing a combined agenda was assigned to ICID Central Office. Accordingly, a draft agenda has been prepared. Chairs and members are requested to peruse the agenda and improve the same as appropriate by 01 July 2019 as time is scarce and confirmations have to be sought.

**Item 5: Any other suggestion / observations**



