

**AGENDA FOR THE 5TH MEETING OF THE
SUB-COMMITTEE ON THEMES, TOPICS AND WORK PLANS OF
FUTURE ICID EVENTS (SC-E-THEMES)**

12 August 2018: 13.30-15.00 Hours
Saskatoon, Saskatchewan, Canada

Terms of Reference (ToR): (i) To deliberate and recommend the Themes, sub-themes of World Irrigation Forums and Theme and Questions of future Congresses, (ii) To set out format and technical contents of the Congress and WIFs, (iii) To review the technical outputs and outcomes and suggest follow ups, (iv) To work out the structure of meetings related to IEC, particularly the WGs at the ICID's Annual Events, to make them more effective and (v) To draw Guidelines to make the WG meetings/sessions technically richer and beneficial to the stakeholders and industries by exploring the ways of combining the meetings of workbodies with areas of common interest or holding webinars, etc.

Members: (1) PH Dr. Gao Zhanyi, Chair (China, 2017); (2) VPH Dr. Ding Kunlun, Chair, PCTA (China, 2017); (3) Mr. Ali Reza Salamat, Member, PCTA (Iran, 2017); (4) VPH Mr. Franklin E. Dimick, Chair, WG-MWSCD (USA, 2017); (5) VP Dr. Abdelhafid Debbarh, Chair, WG-CDTE (Morocco, 2017); (6) VP Mr. Ian W. Makin, Chair, WG-M&R (UK, 2017); (7) VPH Dr. Ragab Ragab, Ex-Member, ITAC-WIF2 (UK, 2017); (8) VPH Bong Hoon Lee, Ex-Member, ITAC-23rd ICID Congress (Korea, 2017); (9) VP Waseem Nazir (Pakistan, 2017) and (10) Er. Ashwin B. Pandya, Secretary General, ICID.

Sub-Committee Agenda Item 1: ATR on the Minutes of the 4th Meeting of the Sub-Committee

1. An Action Taken Report on the minutes of the 4th meeting of Sub-Committee is placed at **Annex 1**.

Sub-Committee Agenda Item 2: To review the membership of the Sub-Committee

2. As per the Notification No.15 of 2017 dated 24 November 2017, re-constituting the SC-E-THEMES, following the decision of 68th IEC meeting at Mexico City on 14 October 2017, the Sub-Committee shall consist of members as follows:

- (a) Technical Experts – one each drawn from ITAC for immediate past and future WIF and Congresses, within the span of six years.
- (b) Two Experts nominated by PCTA.
- (c) Three Experts drawn from Technical Workbodies of ICID
- (d) Chairperson of SC will be nominated from amongst the members, by the President in consultation with Secretary General.
- (e) The membership will be for a maximum of six years and the nominee of ITAC of past Event will be a member for two years after the conclusion of that particular event.
- (f) The membership shall not exceed more than 10 members.

3. Accordingly, the membership of VPH Dr. Ragab Ragab, Ex-Member, ITAC-WIF2 (UK) will be replaced with a member of ITAC for WIF3 which has been constituted vide Notification No.11 of 2018 dated 07 March 2018. Dr. K. Yella Reddy, Vice President, ICID who is a member of ITAC for WIF3 is nominated as a member of the Sub-Committee, subject to the approval of the Committee as per Sr. No. 2(e) of the composition of the membership for the Sub-Committee, as notified.

Sub-Committee Agenda Item 3: To work out the structure of meetings related to IEC, particularly the WGs at the ICID's Annual Events, to make them more effective

4. The Sub-Committee deliberated on the additional mandated task as per Resolution IEC-2/68 of 68th Council meeting in Mexico City, to work out the structure of meetings related to IEC, particularly the WGs during ICID's annual events in order to make them more effective at its first virtual meeting on 30 January 2018, and adopted the following recommendations:

- (a) Organise online WebEx meetings prior to the main physical meeting to take care of all routine matters such as attendance, membership issues, publications etc.
- (b) Organise shortened separate physical (face to face) meetings of the WGs for 90 minutes each in place of earlier 180 minutes.

- (c) Organising a series of internal workshops (90 minutes) on the specific items related to the mandate of the working group and combining the outcome of these workshops to produce WG output/Report/Document as appropriate.
- (d) Assign the time bound specific tasks emerging from the mandate of the WG to the members for effective results.
- (e) Restructure the Plenary Session of IEC to allow the chairs/WGs to disseminate the work of their WGs to all stakeholders.

5. The Chair will present these recommendations as part of the Committee's report to PCTA and PCSO for their consideration and appropriate recommendations.

Sub-Committee Agenda Item 4: To draw Guidelines to make the WG meetings/sessions technically richer and beneficial to the stakeholders and industries by exploring the ways of combining the meetings of workbodies with areas of common interest or holding webinars, etc. – To finalize the recommendations

6. The Sub-Committee considered the mandate (v) as listed in the agenda item 4 at its virtual meeting held on 30 January 2018, and made the following recommendations, while exploring ways of combining the meetings of workbodies with areas of common interest and drawing guidelines for making the sessions technically richer and beneficial to the stakeholders and participating industries:

- (a) Organize combined meetings of the WGs for the duration of time saved from shortening the separate WG meetings, say of 180 minutes. This combined meeting could be in the shape of workshop/seminar/panel discussion on the common issues emerging from the mandate of the concerned WGs.
- (b) While ICID has four strategy themes i.e. Basin, Knowledge, On-farm and Schemes; 'On-farm' has only three WGs; namely, WG-PQW, WG-SON-FARM and WG-WATER & CROP; which can perhaps come together in 2018 on trial basis to understand the actual working of the concept and the benefits thereof.
- (c) Webinars (on-line) on the topics/areas of common interest of the concerned WGs could be held during the year.
- (d) A lot of on-line coordination prior to the annual meetings among the Chairs/members would be prerequisite for successful combined meetings (workshop/seminar/panel discussion) at the time of IEC.
- (e) In order to take final decision on the combined meeting of the WGs for strategy theme 'On-Farm', WG Chair of respective WGs may also be invited to join next meeting.

7. At the second virtual meeting held on 10 April 2018 in which the Chairs of workbodies under Strategy Theme – On-Farm as well as the Co-Theme Leaders for ST-ON-FARM were invited to join in order to consider their views, prior to making the recommendations about the idea of combined meeting should be pilot tested during the 69th IEC meeting in Canada meeting in August 2018. The Sub-Committee cautioned that this will need more homework before the meeting to make the idea successful. After the deliberations, the following decisions were taken:

- (a) Strategy theme leaders should guide and coordinate development of modalities of conducting meeting and agenda for the combined meeting of the three WGs (WG-PQW, WG-SON-FARM and WG-WATER & CROP) under the Strategy Theme ON-FARM.
- (b) A web-ex meeting may be organised among Strategy Theme Leaders and WG- Chair, Vice Chair, Secretary with the support of ICID CO to discuss modalities of organising such combined meeting, development of common agenda to channelize commonalities. Strategy theme leaders will indicate tentative date for web-ex meeting for undertaking doodle poll to arrive at most convenient date and time for the web-ex meeting.
- (c) Based on the outcome and suggestions emerging from the web-ex meeting of the theme, ICID CO with the help of Theme Leaders would develop common agenda for the combined meeting of the WGs under the theme.

8. As a follow up of the above decisions, a virtual meeting of the Co-Theme Leaders of ST-ON-FARM and the Chairs, Vice Chairs and Secretaries of the workbodies under ST-ON-FARM was organized on 7 June 2018 to discuss the modalities for holding a combined meeting, development of common agenda, etc.

9. The Committee will be apprised about the outcome of the meeting and how much practical it would be in real terms, while presenting the report of the Committee at PCTA meeting for its consideration and making appropriate recommendations to the Council meeting.

Sub-Committee Agenda Item 5: To consider the Report of ITAC for WIF3, Bali, Indonesia, 2019

10. The Management Board in its sixth meeting (6/17) held on 22 November 2017 approved the constitution of an International Technical Advisory Committee (ITAC) for the 3rd World Irrigation Forum (WIF3) to be held at Bali, Indonesia during September 2019. Vide Notification No. 11 of 2018, dated 11 March 2018 notified the Constitution of ITAC for WIF3 under the Chairmanship of PH Dr. Gao Zhanyi then notified. The first virtual meeting of ITAC for WIF3 was held on 28 June 2018. PH Dr. Gao Zhanyi, Chair, ITAC for WIF3, will present the report on the technical aspects of WIF3 at the Sub-Committee for its consideration and suggestions.

Sub-Committee Agenda Item 6: Theme and Topics for 25th ICID Congress, 2023

11. The venue for the 25th ICID Congress is yet to be fixed; however, the Sub-Committee may consider suggesting topics for Theme and Questions for the Congress. The list of topics for Themes and Questions covered/decided up to 24th ICID Congresses can be accessed or downloaded from http://www.icid.org/congress_topics.pdf.

12. At the Mexico meeting (2017), the Sub-Committee considered following topics for the Theme and Congress Questions 64 and 65 proposed by the Central Office.

Theme: Tackling Water Scarcity in Agriculture

Question 64: Innovative water resources that could be tapped for irrigated agriculture?

Question 65: On-farm techniques for saving water?

13. The Committee decided that the topics for the Theme and Questions for the Congress will be evolved through discussions by correspondence or virtual meetings before 69th IEC meeting. Once topics for Theme and Questions for the 25th ICID Congress are approved, ICID CO will facilitate development of further proposals.

14. The Sub-Committee may suggest topics for the Theme and Questions 64 and 65 for the 24th ICID Congress for the consideration of PCTA for making appropriate recommendation to the Council.

Sub-Committee Agenda Item 7: Theme and Sub-Themes for 4th World Irrigation Forum, 2022

15. The Committee noted that the venue for the 4th World Irrigation Forum is yet to be fixed; however, decided to discuss the Themes and Sub-Themes for WIF4 through virtual meetings and correspondence by 69th IEC meeting. The list of topics for Themes and Sub-Themes covered/decided upto WIF3, together with the Themes for World Water Forums (WWFs) up to 8th WWF can be accessed or downloaded from http://www.icid.org/wwf-wwf_topics.pdf. The Central Office will facilitate the development of proposal for the Theme and Sub-Themes.

16. The Sub-Committee may suggest the topics for the Theme and Sub-Themes for WIF4 for the consideration of PCTA in order to make appropriate recommendation to the Council.

Sub-Committee Agenda Item 8: A Review of the Technical Outputs of 23rd Congress Questions

17. The Sub-Committee may consider the outcome of the 23rd ICID Congress placed at **Annex 2** and make appropriate recommendations.

Sub-Committee Agenda Item 9: Any Other Business



**ACTION TAKEN REPORT ON THE MINUTES OF THE
Fourth Meeting of SC-E-THEMES
08 October 2017, Mexico City, Mexico**

Item	PCTA Recommendation	Decision of 68 th IEC	Action Taken
4. Review the outcome of WIF2, Chiang Mai, Thailand and Suggest Follow-ups			
	Endorsed the recommendation of the Sub-Committee that the technical outputs of Congress Questions could be improved and monitored continually and measures be taken to increase the quality of papers with the focus to answer the designated questions, while encouraging the NCs and WBs to organize and recommend authors to write and submit the relevant papers.	Endorsed by the Council by accepting the Report of PCTA.	This aspect is proposed to be brought to the attention of ITAC for 24 th Congress, when it is constituted for taking care of the technical aspects of the event.



THE 23rd ICID CONGRESS: TOWARDS A NEW GREEN REVOLUTION 2.0

The 23rd International Congress on Irrigation and Drainage was held from 8-14 October 2017 in Mexico City, Mexico. The main theme of the Congress was “Modernizing Irrigation and Drainage for a new Green Revolution”. An ‘Abstract Volume’ and a USB containing full papers was published for the Congress and made available to the delegates. The general rapporteurs for the thematic questions of the Congress, Dr. Gao Zhanyi for question 60 and Mr. Ding Kunlun for question 61, presented the gist based on 151 papers and posters submitted from more than 25 countries.

As a result of intense deliberations, the following recommendations that emerged for Question 60 and Question 61 that can be summarized as follows:

Question 60: Water Productivity: Revisiting the Concepts in Light of Water, Energy and Food Nexus

1. To improve irrigation services through modernization, there is need to revisit water productivity by identifying challenges and opportunities. Various water saving measures should be passed through the water-energy-food prism for identifying challenges in associated domains and help find opportunities.
2. Investing in improving irrigation technologies and techniques help saving agricultural water and can improve equitability of distribution amongst the common stakeholders but the technology transfer is important through capacity building.
3. Many techniques are available, especially the ICT based ones and also the measurement techniques for assessing the actual releases and regulating them. Water losses at the field level have been minimized using a suite of techniques.
4. Volumetric extraction systems for aquifers allow monitoring of allocated and recharge volumes from aquifers.
5. Water reuse/ recycle needs assessment of site specific conditions in the contexts and should avoid stakeholder conflicts for water transfers and adoption of structural and operational reforms.
6. Water, energy and food nexus has multidimensional features and is compounded by climate and social changes as has been revealed by studies in a number of countries across the globe.
7. Water footprint indicators seem to be useful in assessing water management in irrigated areas. Various water management techniques adopted, strongly influence the water footprints for specific crops at the field level.
8. Considerable advances are being made in the satellite image processing areas as well as simulation modeling, which need be leveraged for better impact assessment of measures adopted or proposed for sectoral water management.
9. Water security has environmental and social aspects. While managing an extreme situation, both have to be considered in conjunction with each other. Analysis of water laws and legal frameworks to achieve sustainable water management leading to water security is necessary.
10. Challenges of water security emerging from international basins need be addressed through cooperation mechanisms based on principles of international water law.
11. User's role in water management is important at the basin level and need to be coordinated with better information dissemination.
12. To achieve water security through reuse/ recycle of water, policies have to take associated health issues into account.

Question 61: State of Knowledge of Irrigation Techniques and Practicalities within Given Socio-Economic Settings

1. The definition of precision agriculture evokes different understanding amongst the community covering a wide range of options and technologies for application management at the field level and also the necessary decision support in a spatial and temporal manner for directing water in a required manner.
2. Advances in technologies like ICT and cloud-based computing models for real time decision support coupled with accurate determination of the status in the field using drones enable the application to large areas with multiple holdings as against large farms only in the past.

3. ET based irrigation scheduling has the potential to improve on-farm efficiency.
4. The importance of organizing small farm holder community and ensuring institutional support is required for making the benefits of modernization reach them effectively.
5. Role of operating decisions play an important part in improving irrigation efficiencies and it is required that operations may be kept simple to avoid irrigator errors.
6. A number of software tools are available for simulating for irrigation system evaluation, design and operational analysis. Further progress in this area is required for using better infiltration models while maintaining computational speeds.
7. New technologies have to be adaptable in order to reap benefits after their implementation. Scaling up effects should be properly understood before large scale implementation and adoption by the user communities.
8. Adaptability of the technologies should be seen in various contexts of climatic conditions, environmental and socioeconomic conditions and then their validity should be determined.
9. Land tenure and size of landowners are important factors for adaptation of new irrigation technologies particularly in developing countries. However, new approaches like land pooling and cooperative farming can provide windows of opportunities to implement the techniques and thereby improve efficiencies.

