

**Report of the 38th Meeting of the
PERMANENT COMMITTEE FOR TECHNICAL ACTIVITIES (PCTA)
16 August 2018, 09.00-17.00 hours
Saskatoon, Saskatchewan, Canada**

Mandate: The Permanent Committee for Technical Activities (PCTA) shall be concerned with all the technical activities of the Commission including all publications of ICID. It will be responsible for activities of the technical work bodies, for selection of Questions/Themes for Congresses, Conferences, Special Sessions, Symposia, etc., for settlement of the technical conclusions thereof and for making appropriate recommendations for action thereon.

Members Present: (1) Vice President Hon. Dr. Ding Kunlun, Chairman (China, 2015); (2) Prof. Graziano Ghinassi (Italy, 2012); (3) President Hon. Mr. Peter S. Lee (UK, 2013); (4) Vice President Hon. Mr. Chaiwat Prechawit (Thailand, 2014); (5) Mr. Ali Reza Salamat (Iran, 2015) and (6) Er. Ashwin B. Pandya, Secretary General, ICID

Permanent Observers Present: (i) Mr. Ruhiza Jean Boroto (FAO) and (ii) Mr. Ian Makin (IWMI).

Ex-Officio Members Present: (i) VP Dr. Charlotte de Fraiture (Netherlands), Co-Theme Leader, Strategy Theme – Basin & Chair, WG-ENV; (ii) VP Er. Naoki Hayashida (Japan), Co-Theme Leader, Strategy Theme – Basin; (iii) VP Mr. Waseem Nazir (Pakistan), Co-Theme Leader, Strategy Theme – Knowledge; (iv) VP Ian Makin (UK), Co-Theme Leader, Strategy Theme – Schemes & Chair, WG-M&R; (v) VP Irene G. Bondarik (Russia), Co-Theme Leader, Strategy Theme – Schemes; (vi) VP Dr. Brian T. Wahlin (USA), Co-Theme Leader, Strategy Theme – Schemes; (vii) VP Er. Madhav Belbase (Nepal), Co-Theme Leader, Strategy Theme – On- Farm; (viii) VP Dr. K. Yella Reddy (India), Co-Theme Leader, Strategy Theme – On-Farm; (ix) PH Prof. Bart Schultz (The Netherlands), Chair, EB-JOUR; (x) Dr. Ruey-Chy Kao (Chinese Taipei), Chair, WG-SDTA; (xi) Dr. Tsugihiko Watanabe (Japan), Chair, WG-CLIMATE; (xii) VPH Dr. Ragab Ragab (UK), Chair, WG-WATER & CROP; (xiii) Dr. A.K. Randev, Chair, WG-SON-FARM; (xiv) VPH Dr. Hafied Gany (Indonesia), Chair, WG-IOA; (xv) VPH Ms. Mary Jean M. Gabriel (South Africa), Chair, WG-IDM and (xvi) PH Dr. Gao Zhanyi, Chair, SC-E-THEMES.

Observers: (i) President Felix B. Reinders (South Africa); (ii) PH Dr. Saeed Nairizi (Iran); (iii) VPH Laurie Tollefson (Canada); (iv) VP Er. Naoki Hayashida (Japan); (v) VP Dr. Brian T. Wahlin (USA); (vi) Mr. Nor Hisham Ghazali (Malaysia); (vii) Mr. Mortaza Yazdkhasti (Iran); (viii) Dr. Narges Zohrabi (Iran); (ix) Mr. Warren Helgason (Canada); (x) Mr. Hidefumi Murashita (Japan); (xi) Mr. Hitsuo Ishijima (Japan); (xii) Mr. Yasunori Saiki (Japan) and (xiii) Mr. Jaepil Cho (Korea).

PCTA Minutes Item 1: Water Scarcity Challenges in the Agriculture Sector: Lecture by Mr. Ruhiza Boroto (FAO)

1. Mr. Ruhiza Boroto, Senior Water Resources Officer at FAO Headquarters and Secretary, WASAG delivered a lecture on “Water Scarcity Challenges in the Agriculture Sector”, which was appreciated by the members.
2. The Committee has taken note of the ICID’s involvement in FAO-led initiative of Global Framework on Water Scarcity in Agriculture (WASAG) and recognized that the global framework has the potential to benefit farmers and rural communities to adapt and be more resilient to increasing water scarcity.
3. Mr. Boroto gave an account of development and establishment of WASAG and its various features. During the presentation, it was brought out that water scarcity occurs due to many reasons like hydrological, economic, management facilities or lack thereof and capacities available. Since the agricultural usages are developing at a relatively faster rate, the scarcity challenges have to be addressed in a time bound manner to ensure food security.
4. PCTA urged experts from member countries to actively participate in the WASAG as the framework will assist in identifying and streamlining the policies, governance and practices with a view to adapt to less water availability, in order to sustainably improve agricultural productivity and food security.

PCTA Minutes Item 2: ATR on the minutes of the 37th Meeting of PCTA

5. The Committee noted with satisfaction the ATR on the minutes of the 37th meeting of PCTA.

PCTA Minutes Item 3: Membership of the PCTA and Workbodies

6. PCTA considered the proposals for its membership and for the membership of various workbodies associated with it and recommended for their approval by IEC. Consequent upon the acceptance by the Council,

the updated, consolidated membership of all workbodies, including those of PCTA and its workbodies, is given in **Annex 3 (Page 51)** of 69th IEC minutes.

7. The Committee opined that for the inclusion of a new member in the WG, processes may be reviewed and confined between the WG Chair and CO which will eventually save some time during the PCTA meetings.

PCTA Minutes Item 4: Road Map to ICID Vision 2030: Review of the Action Plan 2017-2021

8. The Committee noted that the activities identified in the Action Plan 2017-21, appended to the 'Road Map to ICID Vision 2030' (http://www.icid.org/icid_vision2030.pdf) are committed to be achieved over a period of five years. These activities identified by the various RWGs, WGs, NCs and Central Office under various strategies of ICID's six organizational goals so as to put the Vision to Action over a five-year period, need to be reviewed and monitored annually during the Council meetings, the Committee reiterated.

9. The Committee noted that with satisfaction that the actions in implementing the elements of 'way forward', suggested in the Chapter 5 of the Road Map such as (i) Broad-basing NCs, (ii) Enhancing regional cooperation, (iii) Facilitating technical support to NCs, (iv) Training and capacity development, (iv) Serve as knowledge hub in AWM, (v) Knowledge exchange and collation by WGs, (vi) Extensive use of ICT, (vii) Online services, (viii) Well-organized ICID events, (ix) Efficient functioning of WGs, (x) Encouraging participation of YPs, (xi) Awarding excellence and (xii) Strengthening international collaboration and partnerships have been initiated under different action points; however, the need to enhance the visibility of NCs remains a challenge.

10. The Committee recognized the pivotal role played by the Working Groups in converting the vision into action, by focussing their activities towards measurable outputs which could form part of the products that could be disseminated to the NCs and might be useful to the NCs in achieving the goals set as part of their national mandates. The Committee noted that the Action Plan 2017-21 will be monitored through the existing mechanisms under PCTA, under which the WGs have been requested to monitor the progress of activities and report it to their respective Permanent Committees. The Strategy Theme leaders will also take stock of the progress of the activities to be undertaken by the WGs under four strategy themes of PCTA and present it in their synthesis reports and later to the Council meeting.

11. The Committee considered the report of SC-E-THEMES on the mandated additional tasks to (i) work out the structure of the meetings, related to IEC, particularly the WGs at the ICID annual meetings to make them more effective and (ii) 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. and recommended that the experience gained in the present event may be utilized for optimizing the time and resources utilization at the physical meetings of WGs.

12. The Committee reviewed the Action Plan 2017-21 based on the progress achieved by WGs reporting to the Committee and recommended that the existing mechanism to monitor the Action Plan is adequate. The Strategy Theme Leaders and WG Chairs should provide report on progress of activities under Road Map

PCTA Minutes Item 5: International Research Program for Irrigation and Drainage (IRPID) Scheme

13. The Committee noted with satisfactions that the Regional Nodes of IRPID in China and Iran are functioning well and more National Committees are interested in establishing Regional Nodes within the framework of the Revised IRPID Scheme (http://www.icid.org/irpid_scheme.pdf).

14. Proposals for the establishment of three RNs in Africa, Mediterranean, Central Asian and Caucasus Regions may be accepted. No request received from MXCID for RN for Spanish speaking countries.

15. The Committee recommended that the RNs and participating NCs may use and populate Irrigation Research (IrriSEARCH) database template developed by CO, with information on the various institutions involved in Research in AWM developed by CO.

PCTA Minutes Item 6: Review of reports of the activities of Workbodies under the Strategy Theme – Basin (ST.B)

PCTA Minutes Item 6.1: Working Group on Water for Bio-Fuel and Food (WG-BIO-FUEL)

16. In absence of Chair Dr. Fuqiang Tian (China) and Vice-Chairman Mr. Sanjay Belsare (India), Mr. Morteza Yazdekstasi (Iran) presented the report of the WG. Since the WG-BIO-FUEL meeting could not be held due to non-availability of members, the Committee recommended that the WG may be merged with WG-WATER & CROP, which was subsequently approved by IEC.

PCTA Minutes Item 6.2: Working Group on Climate Change and Agricultural Water Management (WG-CLIMATE)

17. WG Chair Dr. Tsugihiko Watanabe presented the report of the WG-CLIMATE. The WG organized an internal Workshop on the theme “Agricultural water management under the changing climate”. As per the activity plan for the Vision 2030, the WG proposed to organize a workshop during the 70th IEC in Bali in September 2019 with cooperation from other work bodies. WG Chair reported that one joint session of ICID, PAWEES and INWEPF will be organized during “PAWEES & INWEPF International Conference Nara” from 20-22 November in 2018 at the Nara, Japan. Dr. Watanabe apprised about the progress in updating MTD and the completion of the first draft.

PCTA Minutes Item 6.3: Working Group on Environment (WG-ENV)

18. WG Chair VP Prof. (Ms) Charlotte de Fraiture presented the report at the Committee meeting. WG decided to organize a virtual WebEx meeting relating to the case studies on the “Positive Ecosystem Services from Irrigation and Drainage Systems”. The WG proposed to organize a workshop on “Poor Quality Waters” during the 70th IEC meeting in September 2019 in Bali, Indonesia,

19. Dr. Michael van der Laan from South Africa was elected as Vice Chair in place of Prof. Hachó while Dr. Seija Virtanen from Finland was elected as Secretary of the WG.

PCTA Minutes Item 6.4: Working Group on Managing Water Scarcity under Conflicting Demands (WG-MWSCD)

20. VPH Franklin E. Dimick (USA), Chair of the WG presented the report of the meeting of the WG-MWSCD. The Committee noted that the WG propose to organize an International Workshop during the 71st IEC Meetings and 24th ICID Congress in September 2020 at Sydney, Australia. The Committee also noted that the Technical Report of the erstwhile WG-DROUGHT titled ‘Water Management in Water Stressed Regions’ is now available on the ICID website http://www.icid.org/report_water_stressed_regions.pdf for downloading.

PCTA Minutes Item 6.5: Working Group on Sustainable Development of Tidal Areas (WG-SDTA)

21. Dr. Ruey-Chy Kao, Chair of the WG presented the report considering the new mandate of the WG. Ir. Hj. Nor Hisham Bin Mohd Ghazali (Malaysia) was elected as the new Secretary of the WG.

22. The WG proposed to organize a ‘Side Event’ on ‘Integrated Development of Tidal Areas’ and International Workshop on ‘Integrating Research, Practice, and Policy - An Exchange of Expertise from Basin Perspective’ during the 3rd World Irrigation Forum (WIF3) at Bali, Indonesia in 2019. A Short Course on the theme “Tidal Prediction & Typhoon Wave Model” will be organized by the WG in Taiwan in December 2019. The WG introduced ‘Ground Water and the Land Subsidence on the Coastal Area’ as a new area for discussion by the members and to be included in the Road Map to ICID Vision 2030.

23. The WG also proposed to organize Web-based seminar on topic ‘Discussion on Drainage Capacity and Flood Disaster in Tidal Areas under a Variable and Changing Climate’ in January 2019 and e-discussion on ‘Integration of Drainage tail, Land subsidence, Ground water and Management in Tidal Areas’ in April 2019.

24. The Committee noted that a Special Issue of ICID Journal titled “Sustainable Development of Tidal Areas: Climate Change and Environmental Impacts” (Volume 67, Issue 3) was published in July 2018.

PCTA Minutes Item 6.6: Working Group on Adaptive Flood Management (WG-AFM)

25. In the absence of Chair Dr. Kamran Emami (Iran), Mr. Maurice Roos (USA) presented the report and the following revised mandate:

- (a) To motivate ICID National Committees in various countries to set up their National Working Groups,
- (b) To provide guidance to compile, publish, update and/or translate documents on adaptive flood management;
- (c) To promote inter-disciplinary exchange of information, knowledge and experience, as well as networking on the topic for proper understanding of the technological developments in the subject;
- (d) To organize seminars at ICID Congresses and meeting to enhance deeper understanding of adaptation to floods and coping with floods including community participation with focus on impact of floods on agriculture water management;
- (e) To prepare a paper on “Adaptive Flood Management” for publication in Irrigation and Drainage (IRD);
- (f) To finalize a book on “Adaptive Flood Management”.

26. The Committee recommended and subsequently IEC approved the mandate and setting up of the new WG-AFM.

PCTA Minutes Item 6.7: Synthesis Report by Co-Theme Leaders of ST Basin [VP Dr. Charlotte de Fraiture (The Netherlands) & VP Er. Naoki Hayashida (Japan)]

27. The Co-Theme Leaders presented their report which was noted by the Committee with satisfaction.

PCTA Minutes Item 7: Review of reports of the activities of Workbodies under the Strategy Theme – Knowledge (ST.K)

PCTA Minutes Item 7.1: Working Group on Capacity Development, Training and Education (WG-CDTE)

28. In the absence of Chair Prof. Dr. Abdelhafid Debbarah (Morocco), Vice-Chair Dr. Young D. Kim (Korea), Pr. El Houssine Bartali from Morocco presented the report of the WG. The Committee noted and appreciated the proposal of the KCID/KRC to organize an international training programmes for young professionals (YPs) at RC-IEEC in April 2019 and proposal of ANAFIDE to organize YP training programme from Africa Region prior to 5th African Regional Conference (5AfRC) on Irrigation and Drainage in March 2020 at Rabat, Morocco. Committee also appreciated efforts of ENCID in organising the First African Young Water Professional's Forum (Af-YPF) during 1st Cairo Water Week from 14-18 October at Cairo, Egypt.

29. The Committee noted that ICID CO has developed a new knowledge management strategy. The Committee recommended that ICD CO should invite the WG members as well as NCs to participate actively in the Knowledge Management cycle. The Committee noted that the Knowledge Portal is anticipated to be launched during the World Irrigation Forum at Bali, Indonesia in September 2019.

30. The Chair also presented the Knowledge Management Strategy (KMS) for PCTA's consideration and the Committee recommended that the KMS as proposed may be accepted.

PCTA Minutes Item 7.2: Working Group on History of Irrigation, Drainage and Flood Control (WG-HIST)

31. In the absence of WG Chair Dr. Kamran Emami, Dr. N. Hatcho presented the report. WG proposed a Workshop on "Historical Management of Water" at Bali in September 2019. The Committee was provided with an update on the publication "Historical Water Sustainability" brought out by the WG.

32. The Chair also presented the revised scheme of World Heritage Irrigation Structures (WHIS) for PCTA's consideration and the Committee recommended that the same be approved by the Council.

PCTA Minutes Item 7.3: ICID Journal Editorial Board (EB-JOUR)

33. PH Prof. Dr. Bart Schultz, Chair of the EB-JOUR presented the report of the activities of the Editorial Board of the Journal. He informed that Dr. Takanori Nagano (Japan) had been accepted as an Associate Editor of the ICID Journal.

34. PCTA noted that in the year 2018, a total of 832 copies have been distributed to the members' i.e. 565 'online only' subscriptions, 155 subscriptions as 'online + print' and 112 as 'print-only' subscriptions. PCTA further noted that a new agreement between ICID & M/s. Wiley-Blackwell (2019-2025) has been signed. The highlights of the new agreement were –

- (a) A renewal of contract for calendar year 2019 and a publishing scenario for a seven-year period (2019-2025), based on an annual price increase of 1% for the online subscriptions and 3% for the printed versions;
- (b) ICID shall remain the sole and exclusive owner of the Journal, including the copyright, name (and any new name or title agreed by the parties);
- (c) M/s Wiley will provide approximately 800 copies per volume to ICID members eligible to receive access to the Journal from Volume 68 (2019) onwards, of which a maximum of 300 members may receive the Journal in both print and online versions;
- (d) In addition, ICID will get a greater flexibility in choosing how many individuals can access the Journal online, and incentives for greater uptake and online usage of the journal by National Committees and their members, based on a fixed fee for online only access to the Journal to as many members as ICID may wish, in addition to continuing the current arrangement for print member subscriptions charged per subscription;
- (e) A prize of US\$ 500 per annum to the best paper award winner;

- (f) M/s Wiley's global sales penetration and marketing expertise will ensure an increasing and stable return in subscription revenues for IRD.

35. The Chair informed the Committee about the new "Privacy Policy" of Irrigation and Drainage Journal which was presented during the Editorial Board meeting. The Committee recommended that the privacy policy data as recommended by the Editorial Board be approved.

PCTA Minutes Item 7.4: Task Force for Updating and Maintenance of Multilingual Technical Dictionary (TF-MTD)

36. VPH Dr. Ding Kunlun, Chair of the TF presented its report. An updation of relevant terms of MTD with the support of the relevant WGs was proposed to be undertaken by the Task Force. A list of keywords will be selected from the most frequently appearing terms from the papers presented at World Irrigation Forum (WIF) / Conferences of ICID, as part of the process. The Chair informed that 223 such keywords had been selected and provided by Dr. Sahdev Singh of ICID Central Office. TF suggested that these keywords could be considered as part of the updation process, and the Central Office may request NCs to provide the definition of these keywords. It was suggested that WebEx meeting of the TF be organized sometime in June/ July 2019.

PCTA Minutes Item 7.5: Task Force to Guide ICID Inputs to World Water Forum 8 (TF-WWF8)

37. PH Dr. Chandra Madramootoo, Chair, TF-WWF8 presented the report. President Felix Reinders provided a detailed report on ICID involvement during the 8th World Water Forum (WWF8) in Brasilia in March 2018. He indicated that there was an excellent turnout of Ministers and international dignitaries at the Forum, with over 8000 delegates. With active participation and representation of ICID during WWF8 in March 2018, the Committee noted that the TF has completed its mandate and hence may be closed with immediate effect.

38. The Committee agreed with the TF recommendation that the ICID CO may finalize the nominations and seek any additional nominations, if required, prior to the launch of the Task Force to Guide ICID Inputs to World Water Forum 9 (TF-WWF9) at Bali, Indonesia during 70th IEC meetings. It was also agreed that ICID will collaborate and partner with FAO to organize joint sessions during WWF9. The Committee requested PH Dr. Chandra Madramootoo to continue as the Chair of TF-WWF9.

39. The Committee suggested that TF may oversee the WSH Program that will be organized during the WWF9 in 2021 at Dakar, Senegal.

PCTA Minutes Item 7.6: Working Group on Value Engineering (WG-VE)

40. In absence of Chair Dr. Kamran Emami (Iran) and Vice-Chair Mrs. Remziye Yildiz Gulagaci (Turkey), Ir. Nor Hisham M. Ghazali (Malaysia), Secretary of the WG presented the report. The Committee recommended and IEC approved to investigate the need for the establishment of the WG on Value Engineering (WG-VE) subject to completion of output of TF-VE and resubmission of the revised scoping document for getting support of at least 10 National Committees to nominate experts from their countries to the activities of the respective WG.

PCTA Minutes Item 7.7: Synthesis report of Co-Theme Leaders of ST Knowledge [VP Dr. Abdelhafid Debbarh (Morocco) & VP Waseem Nazir (Pakistan)]

41. The Co-Theme leaders recommended revisiting the role of the theme leaders of strategy themes and the role of theme leaders be of continuous in nature in analyzing and guiding the WBs under their strategy themes. The meeting format of WGs be restricted and the WBs should not be allowed to continue beyond the permitted time limit to complete their mandates. The Committee considered the report of the Co-Theme Leaders and noted with satisfaction.

PCTA Minutes Item 8: Review reports of the activities of Workbodies under the Strategy Theme – On-Farm (ST.OF)

PCTA Minutes Item 8.1 Working Group on Sustainable On-Farm Irrigation System Development (WG-SON-FARM)

42. Dr. A.K. Randev, Chair of the WG presented its report. The Chair informed that the updated table of total sprinkler and micro area is available at <http://www.icid.org/sprinklerandmicro.pdf>. A technical paper titled "Farm Water Program: Using the Water Savings Calculator" authored by C. Norman; C. Walters; M. McFarlane; C. Nicholson; and D. Lawler had been published in the Special Issue of Irrigation and Drainage Journal in May 2018. Dr. Graziano Ghinassi (Italy) agreed to deliver a webinar in the month of October 2018. As per suggestion of the SC-E-THEMES, a Joint Session of WGs under Strategy Theme 'On-Farm' was organized on 15 August 2018. PCTA has noted that the Indian National Committee on Surface Water (INCSW) will organize the 9th International

Micro Irrigation Conference (IMIC) from 16-18 January 2019 at Aurangabad, Maharashtra, India on the theme 'Micro Irrigation in Modern Agriculture'.

PCTA Minutes Item 8.2 Working Group on Water and Crops (WG-WATER & CROP)

43. VPH Dr. Ragab Ragab, Chair of the WG briefly presented the WG report. The Committee was informed that the WG proposed to organize an International Workshop on 'Improving the Water Productivity within the Water Energy Food Nexus' during the 3rd World Irrigation Forum (WIF3) in September 2019 at Bali, Indonesia. The WG introduced new sub-topics such as 'Water use and Productivity' and 'Effective Rainfall', under the WG mandate, to work out water requirements of different crops under greenhouse/field conditions and a Task Team (TT) composed of VP Dr. K. Yella Reddy (India), PH Dr. Saeed Nairizi (Iran), VPH Dr. Ragab (UK), and Dr. Chung-Feng, Ding (Chinese Taipei) has been formalized for this purpose.

PCTA Minutes Item 8.3 Synthesis report of Co-Theme Leaders of ST On-Farm [VP Madhav Belbase (Nepal) & VP Dr. K. Yella Reddy (India)]

44. Co-Theme Leaders presented their report and recommended that the joint meeting of WGs under the theme should not eliminate the half-day individual meetings of the WGs.

PCTA Minutes Item 9: Review of reports of the activities of Workbodies under the Strategy Theme – Schemes (ST.S)

PCTA Minutes Item 9.1: Working Group on Irrigation, Development and Management (WG-IDM)

45. Ms. Mary Jean Gabriel, Chair of the WG presented the report. Two draft documents titled "Norms and standards of irrigation development" and "Condensed overview of existing documents and practical examples on water balance approach" were prepared and submitted for review. PCTA noted that a 3-day conference on Water Accounting will be held in Iran in December 2019, in partnership with the Technical Support Unit of ICID and FAO.

PCTA Minutes Item 9.2: Working Group on Institutional Aspects of Irrigation / Drainage System (WG-IOA)

46. VPH Dr. Hafied A. Gany, Chair of the WG presented the report and informed that a paper titled "Global Review of Institutional Reform in the Irrigation Sector for Sustainable Agriculture Water Management, Including Water Users Associations" is under publication through ICID in the special issue of Irrigation and Drainage Journal by Wiley Publisher. Mr. Kazumi Yamaoka submitted a paper titled "Tropical Perennial Rice farming systems (SALIBU technology) for the 2nd Green Revolution against climate change" which brings out the need for supporting the WG in terms of 'Rice planting technology'. PCTA noted that the WG organized an International Workshop on 12 August 2018 on the theme "Institutional and Organizational Setup of Irrigation and Drainage Management System", with sub-themes focusing on the institutional and organizational (I&O) setup of irrigation and drainage (I&D) management (O&M) schemes with new I&O development, method and approaches wherein 43 persons participated. A workshop on the topic "Participatory Irrigation Management and Management Transfer, Approaches and Condition for Successful PIDM" was proposed to be organized during the 70th IEC meeting in Bali in September 2019.

PCTA Minutes Item 9.3: Working Group on Modernization & Revitalization of Irrigation Schemes (WG- M&R)

47. A brief report of the WG was presented by VP Ian Makin. He informed that the WG members agreed to review the ICID book on the 'Use of geotextiles in irrigation' as and when available which may be later considered for publication by ICID. VP Brian Wahlin (USA) agreed to review the terms of MTD related to canal automation which was accepted by the WG. WG proposed to organize a full-day Workshop on Modernization to promote further exchange of case studies and experiences, and agreed to launch the guidelines during the 3rd World Irrigation Forum (WIF) in September 2019 at Bali.

PCTA Minutes Item 9.4: Working Group on Sustainable Drainage Management (WG-SDRG)

48. Mr. Bernard Vincent, Chair of the WG presented the report and informed that the document titled "Bio-drainage for Management of Waterlogging and Soil Salinity" authored by Dr. Gurbachan Singh (India) is available at http://www.icid.org/report_bmw_n_ss.pdf for download. The National Committee of Georgia had earlier shown their interest for organizing the 14th IDW which is now on hold due on account of local re-organization, as informed by the Russian local representative. WG organized a Workshop on "Dry Drainage and Bioreactors or Green Infrastructures" on 12 August 2018 at Saskatoon, wherein nine papers were presented.

PCTA Minutes Item 9.5: Working Group on Water Saving in Irrigated Areas (WG-WATS)

49. Mr. Mortaza Yazdekhashti presented the report of the WG on behalf of its Chair, Dr. Kamran Emami. ENCID brought out a book on “Water Saving in Irrigated Agriculture in Egypt – case studies and lessons learned” jointly authored by Mohamad Hassan Amer, Seyed Ahmed Abd El-Hafez and Mohamed Bakr Abdel Ghani. Dr. Joe Stevens and VPH Dr. Gerhard Backeberg finalized the draft framework of the paper on Water Saving which was sent to all members for their inputs and contributions before finalizing it for publication in the Journal. The group nominated Prof. (Ms.) Kyung–Sook Choi (Korea) for updating MTD terms related to the WG.

PCTA Minutes Item 9.6: Synthesis Report by Co-Theme Leaders on ST Schemes [VP Ian William Makin (UK), VP Irene Bondarik (Russia) & VP Dr. Brian T. Wahlin (USA)]

50. The Co-Theme Leaders of ST-Schemes presented their synthesis report which was noted with satisfaction by the Committee.

PCTA Minutes Item 10: Newly Proposed Workbodies

51. The Committee reminded itself that a mechanism has been put in place with a view to streamline the process of establishment of a new workbody or extension of an existing workbody on completion of its tenure. The mechanism in the form of Scoping Document approved by 63rd IEC the improvement in the functioning of ICID workbodies (*Annex R2.2 of Resolution IEC-2/63*) and exhorted all to follow the same in letter and spirit for establishment of new workbodies. The Committee emphasized that the Scoping Document should give the objectives, state of knowledge on the topic, work plan etc. of the newly proposed workbodies.

52. During the discussion in 36th PCTA meeting in Chiang Mai, the issue of lack of interest in certain WGs was expressed. It is therefore recommended that unless interest is expressed by at least 10 NCs in supporting the WG, it could at best be established as a Task Team for keeping the interest in the topic live. These TTs should essentially work towards a well-defined objective and predominantly through Web based tools. As the implementation of the Road Map needs partnership, it is important that the WG should actively seek potential collaboration with international partners and take those activities in account while drawing up their plan.

53. PCTA recommended for the re-establishment of the WG on Value Engineering (WG-VE) and WG on Non-Conventional Water Resources for Irrigation (WG-NCWRI), subject to at least 10 National Committees agreeing to nominate experts from their countries to the activities of the respective WGs. The Committee also recommended that the mandates of WG-NCWRI as given below, be approved by the Council.

- (a) Exchanging knowledge, experience and data as well as networking on the topic in order to be up-to-date with new developments, methods and approaches.
- (b) Preparing comprehensive reviews and prospects with respect to different aspects of NCWR.
- (c) Producing technical manuals, guidelines or standards with respect to all NCWR including waste water, drainage water and saline/brackish water.
- (d) Organizing international workshops, seminars and meetings on the NCWR topic.
- (e) Producing documents on successful case studies with the new developments with respect to NCWR presented by the members from different countries.
- (f) Enlarging the membership of the WG by encouraging more member countries where the use of non-conventional waters is a common practice for irrigation management.
- (g) Finalizing the publication of a Technical Paper pending from the activities of the WG-PQW.

54. The Committee recommended for the establishment of a TF to Guide ICID Inputs to 9th World Water Forum (TF-WWF9) and in-principle approval for establishment of WG-AFM as 9 NCs/direct members have shown interest in its mandate and nominated experts. CO to follow-up with WG-Chair for getting nomination from more NCs. MB to take final decision on establishment of WG-AFM as well as continuation of the WG-Chair.

55. The Committee noted the establishment of a Task Team on Rain Water Harvesting (TT-RWH), at the initiative of Australian NC as this topic was not covered under the mandates of any of the existing workbodies, yet the topic is part of ICID Vision 2030.

PCTA Minutes Item 11: Report of the Sub-Committee on Themes, Topics and Work Plans of future ICID Events (SC-E-THEMES)

56. The Committee recommended for the approval of the Sub-Committee’s recommendations to work out the structure of meetings related to IEC and 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 work bodies with areas of common interest.

57. It was reiterated that there is a strong need for improvement in the quality of papers being submitted to Congress and WIFs.

58. The Committee recommended to the Council for approval of the topics for Theme and Sub-Themes for 4th World Irrigation Forum (WIF4) in 2022 and Theme and Questions for 25th ICID Congress (2023) as given below:

WIF4 (2022)

Theme:	Modernization of Irrigation Schemes
Sub-Theme 1:	Policy and strategy for modernization of irrigation schemes
Sub-Theme 2:	Technology for modernization of irrigation schemes
Sub-Theme 3:	Investment for modernization of irrigation schemes
Sub-Theme 4:	Performance Assessment of Irrigation Schemes

25th Congress (2023)

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?

59. It was pointed out that the coverage of drainage and flood management areas are being sidelined in the organization of events. A large group of participants may also consequently remain away from ICID activities. The Committee felt that the Drainage workshop and events examining flood forecasting techniques need be organised.

PCTA Minutes Item 12: Any other business

60. A presentation to be made on water accounting by Dr. Sahdev Singh, Director (KM) could not be taken up due to paucity of time.

61. A proposal was made for establishment of a Task Team on Transboundary Water Management and Effect on Agriculture Water Management with the following mandate.

- (a) To promote transboundary river water cooperation to address water security
- (b) To mobilize strategies and resources for effective transboundary river water governance to address the challenges of water-food-energy security nexus towards strengthening sustainable livelihoods
- (c) To strategize the process of creating a knowledge hub and facilitate best practices of transboundary cooperation and support other core activities of ICID

62. It was decided to circulate the Scoping Document for establishment of TT and recommended that the Council may provide in-principle approval, considering the suggested mandates for the TT.

