

**Minutes of the 9th Meeting of the
WORKING GROUP ON WATER MANAGEMENT IN WATER
STRESSED REGIONS (WG-DROUGHT)**

10 November 2016: 09:00-10:30 hours (Session-I)

10 November 2016: 11:00-12:30 hours (Session-II)

Chiang Mai, Thailand

Strategy Theme: Basin

Presented by the Chairman

Year of Establishment: 2008

Completion of the Mandate: 2016

Mandate: (i) Drought Management Strategies: To capture field experiences of the implementation of drought risk management strategies; (ii) Coping with water scarcity: (a) Computations based on climate data as a tool to be used in coping with water scarcity; (b) Approaches and strategies for incorporating economic justification when deciding on the amount of water to be allocated for agricultural production; (c) Design, operation and maintenance of sand dams – Under-ground water reservoirs; and; (iii) Rainfall management for sustainable agriculture: Innovation and implementation of smart rainfall management technologies.

Members present: (1) VPH Mr. Franklin E. Dimick (USA), Chairman; (2) Mr. V.C. Ballard (Australia), Secretary; (3) Prof. Chang-Chi Cheng (Chinese Taipei); (4) Mr. Sudhakar (India), Direct Member, JISL represented by Dr. Sanjay Belsare; (5) Dr. Takanori Nagano (Japan); (6) VPH Ragab Ragab (UK); and (7) Mrs Jianxin Mu (China).

Observers: (i) VP Mohamed Abd-El-Moneim Wahba (Egypt); (ii) Ir. Kathleen Heuvel (Australia); (iii) Dr. Jan Ming-Young (Chinese Taipei); (iv) Ir. Zeinab Behairy (Egypt); (v) Ir. Eliyas Abdi (Ethiopia); (vi) Dr. Sándor Szalai (Hungary); (vii) Dr. P. Soman (India); (viii) Dr. Ismail Widadi (Indonesia); (ix) Ir. Mohd Anwar Musardar Yusoff (Malaysia); (x) Mr. Abdullahi Hassan Hussein (Somalia); (xi) Ir. N.G.R. Ariyaratne (Sri Lanka); (xii) Ir. G.M.R.A. Perera (Sri Lanka); (xiii) Ir. Jan Potgieter (South Africa); (xiv) Ir. Poekrat Panomkwan (Thailand); (xv) Ir. Bharadee Soontronrojna (Thailand); (xvi) Ir. Chawakorn Rewtragulpaibl (Thailand); (xvii) Dr. Shukhrat Mukhamedjanov (Uzbekistan); and (xviii); and (xix) Eng. Thubelihle A. Thebe (Zimbabwe).

Website: http://www.icid.org/wg_drought.html

WG-DROUGHT Minutes Item 1: Action taken report by Chair

1. VPH Franklin E. Dimick, Chairman of the WG apprised members of the actions taken as per decision in the last meeting of the Group at Montpellier in 2015. Chair informed the members that this is a final meeting of the Working Group on Water Management in Water Stressed Regions (WG-DROUGHT). It is proposed to establish a new but related WG which will concentrate not only on drought (which is a temporary period of water shortage due to natural climatic variation), but more on permanent shortages caused by such factors as climate change, movement of water from agriculture to urban / industrial use, and increased use of water for environmental purposes. During the meeting, the Group suggested a new name of WG as Working Group on Managing Water Scarcity under Conflicting Demands.

WG-DROUGHT Minutes Item 2: ICID Action Plan 2030: Activities on Drought

2. The WG discussed the need to complete the Action Plan but decided to defer discussion on this item since existing WG is completing its term and this was the final meeting of the WG. WG agreed that draft Action Plan 2030 of the WG will be prepared for the new Working Group in the first meeting of the new WG to be held in Mexico City, Mexico in 2017.

WG-DROUGHT Minutes Item 3: Presentations by Theme Leaders and other members

3. No presentations were made by the members during the meeting.

WG-DROUGHT Minutes Item 4: Publications of the Working Group

WG-DROUGHT Minutes Item 4.1: Technical Report of the WG-DROUGHT

4. WG established three work teams and identified three theme leaders associated with these themes to bring out technical report of the WG to fully cover its mandate, which are as follows: (i) Theme Leader 1 : Prof. Chanag-Chai Cheng (Chinese Taipei) - "Drought Management Strategies in Water Stressed / Scarce Regions"; (ii) Theme Leader 2: Mr. Mohammad Sadegh Jafari (Iran) - "Coping with Water Scarcity"; and (iii) Theme Leader 3:

Dr. Clarke Ballard (Australia) - "Rainfall Harvesting and Management for Sustainable Agriculture in Water Stressed /Scarce Regions". Status of preparation of report is as given below.

5. Final draft papers of Themes 1 and 3 were circulated to WG members prior to the meeting in Chiang Mai. No comments were received either prior to or during the meeting. Therefore, theme 1 and 3 documents will be finalized. Theme 2 document will be compiled by Prof. Dr Jan Ming-Young of Chinese Taipei based on the data gathered by Theme 2 Leader, Mr. Mohammad Sadegh Jafari (Iran) and the draft document will be made available for comments by March 2017. The final document is expected to be sent to the ICID Central Office by June of 2017.

WG-DROUGHT Minutes Item 4.2: Publication on Design Guidelines for Flood Based Farming Systems

6. Dr. Abraham Mehrari Haile (The Netherlands) was not present at the WG meeting to discuss the status of this publication. Since there is no updates from Dr Haile on the draft publication presented two years ago in Korea when the WG agreed to support it, so WG decided to drop this publication and no further action will be taken in the matter.

WG-DROUGHT Minutes Item 5: Updating Multilingual Technical Dictionary (MTD)

7. There were no volunteers for helping to update the MTD. Since the term of existing WG is coming to end and new Working Group "Managing Water Scarcity under Conflicting Demands" is proposed to be set up, WG agreed that a person for updating MTD will be nominated by the new WG in its first meeting at Mexico City in 2017.

WG-DROUGHT Minutes Item 6: Closure report and Scoping Document for reconstitution of the Working Group

8. A closure report of the WG-DROUGHT was presented by the WG Chair and accepted by the members of the group after discussion. WG discussed the scoping document for the new WG prepared by the WG Chair which also include three year plan of activities. After deliberation, members agreed that the new WG be named as 'Working Group on Managing Water Scarcity under Conflicting Demands (WG-MWSCD)' which is necessary to make a distinction that the new WG is not just involved with natural caused droughts but is also working with managing the scarcity of water when conflicting man-made demands are involved. WG also recommended following mandate (**Annex**) for the new WG:

9. **Mandate** : Collect information, knowledge and, where available, case histories on actions taken to manage water systems to accommodate a change in priority of water use or due to conflicting demands.

- (a) Information will be collected on three levels of water management; (1) National, (2) area or basin; and (3) local;
- (b) review and analyze information to determine any commonality;
- (c) prepare and present reports and/or case studies on recent development in the countries that are represented in the WG
- (d) organize international workshop on the topic;
- (e) prepare an overview paper on the topic for publication.

10. PCTA accepted in principle with the suggestion of setting up of new WG with the revised madate and suggested to take further action as per procedure approved by the IEC for setting up of the new WGs, Accordingly, scoping document (SD) finalised by the WG will be circulated to all NCs by ICID CO to ascertain their interest in the activities of the WG and their suggestions/comments as well as for nominating members for the WG. The SD will be further discussed and finalized during the next meeting at Mexico City in 2017 for its approval by PCTA/IEC.

WG-DROUGHT Minutes Item 7: Dissemination of activities of WG - Website of the Group

11. WG requested Central Office to create a new webpage of the new working group for the activity. WG also requested members to provide information, papers, presentation made on topics related to scope of work of the WG to the ICID Central Office for uploading on the web site of the WG.

WG-DROUGHT Minutes Item 8: Review of membership of the working group

12. Since present WG term will be completing its term and new WG is going to be set up, WG Chair recommended that the members of the present group be automatically considered to be members of the new group and NCs be requested to nominate new members especially form the countries known to have relevant

experience with managing conflicting demands for water. During the meeting number of individual participants expressed their interest in joining the new working group. They were advised to get themselves nominated through their National Committee in the usual way. New nomination of Ms. Jianxin Mu (China) for the membership of WG which has been accepted as a 'provisional member' of the new WG. The membership status is given in **Annex 5 (page 33)**.

WG-DROUGHT Minutes Item 9: Any other business

Webinar/ web-based seminar

13. WG Chair requested members to suggest few topics along with name of the relevant experts who could be contacted to develop webinars for consideration of the ICID CO. WG decided to discuss this matter further during the next meeting.



**WORKING GROUP ON
MANAGING WATER SCARCITY UNDER CONFLICTING DEMANDS (WG-MWSCD)**

DRAFT SCOPING DOCUMENT

1. Introduction

- 1.1 Historically, the use of water for agricultural purposes was generally recognized as a priority. However, as the population and demographics of an area has changed over time, so has the priority for the use of water? In many areas, use of water for agricultural purposes has become of secondary importance to other uses. Demand for Municipal and Industrial water for growing population centers and the demand for clean drinking water in rural areas have taken precedence over agricultural uses. The growth of the environmental movement throughout the world to protect fish and wildlife has placed an additional demand on the limited supplies of water. In many areas of the world this environmental demand has been given priority over the use of water for agricultural purposes. This change of use priority is expected to continue in the future.
- 1.2 The effects of climate change in many areas of the world has also created a permanent shortage of water for agricultural purposes as dwindling water supplies are used first to supply adequate drinking water supplies to the growing population. Climate change is also changing the timing of when water is available. Areas that depended on melting snow in warmer months are now getting rainfall instead of snow. The reverse is also true. Areas that historically depended on rainfall are now getting snow.
- 1.3 These changes in the prioritization of the limited water resource are causing agricultural water users to make management changes to the way they approach the collection, diversion and use of the limited water supply available to them. These management changes are crucial in efforts to assure sustainable food production.

2. Objectives

- 2.1 Relevance of the Working Group
 - 2.1.1 The relevance of the WG can be specified as follows:
 - (a) The topic of Managing Water Scarcity Under Conflicting Demands is relevant to the vision and mission of ICID and of interest for its members in all countries;
 - (b) The WG is expected to contribute to effective implementation of the Strategy Theme Basin and to other strategy themes for that matter;
 - (c) It may be expected that in the future the need for adaptive management will continue to increase.
- 2.2 Relevance of the Working Group to the scope of the Thematic Area
 - 2.2.1 For the relevance of the WG to the scope of the Thematic Area the same argumentation is applicable as shown under the relevance. Most of the activities in irrigation will be related to the manner in which water is managed and how well management schemes adapt to the changes in water priorities. This concerns the technical, institutional and environmental aspects.
- 2.3 Existing gap that the Working Group is expected to fill
 - 2.3.1 Other ICID WGs or Task Forces (TF) that have a related scope of work are: WG-SDTA, WG-CAFM, WG-CLIMATE, WG-M&R, WG-SON-FARM and the new WG-IOA
 - 2.3.2 While WG-IOA is proposed to study the management of irrigation systems, it will focus on the administrative aspects of water management. The WG-MWSCD will focus on the water supply changes that these management entities need to address. Therefore, the two Working Groups will be able to work closely together and complement each other.
 - 2.3.3 The new WG has taken good note of the activities of these Workbodies when preparing this Scoping Document.

3. State of knowledge on the topic

3.1 Other International Organizations that are working on the subject

3.1.1 There are several other International Organizations that have programs and activities on this topic. This especially concerns the:

- (a) Food and Agriculture Organization of the United Nations (FAO);
- (b) International Water Management Institute (IWMI)
- (c) International Center for Agriculture Research in Dry Areas (ICARDA);
- (d) International Fund for Agricultural Development (IFAD);
- (e) International Commission on Large Dams (ICOLD);
- (f) World Bank (WB);
- (g) World Water Council (WWC);

3.2 Mandate of the Working Group

3.2.1 Mandate of the Working Group is based on the specific niche that this WG can fill in this area and can be formulated as follows:

- (a) Collect information, knowledge and, where available, case histories on actions taken to manage water systems to accommodate a change in priority of due to conflicting demands.
- (b) Information will be collected on three levels of water management; 1) National, 2) area or basin, and 3) local;
- (c) review and analyze information to determine any commonality;
- (d) prepare and present reports and/or case studies on recent development in the countries that are represented in the WG;
- (e) organize international workshop on the topic;
- (f) prepare an overview paper on the topic for publication.

3.3 How is the Working Group expected to collaborate with the other International Organizations?

3.3.1 International Organizations can contribute to the activities of the WG by nominating Permanent Observers (PO). On the other hand presentations of the work and achievements of the WG can be presented at the occasion of events organized by International Organizations.

4. Work Plan

4.1 Scope

4.1.1 The WG is expected to investigate, analyze, and disseminate information on adaptive management processes and to formulate recommendations with respect to:

- (a) planning and preparation for reduced water supplies due to changing priorities for the use of a finite water supply;
- (b) commonality in processes used by various entities at three separate levels of governance;
 - National
 - area or basin
 - local
- (c) developing and recommending management strategies that could be used in a general setting;

4.1.2 A proposal for the three year rolling plan is shown in **Appendix A**.

4.2 Target audience

4.2.1 The target audience for this working group will be managers of irrigation schemes, researchers, consultants, manufacturers, government officials, farmer's representatives and staff of International Organizations working on the topic.

4.3 Outputs

4.3.1 The following outputs can be expected from this WG:

- (a) although it is an indirect output sharing of knowledge and experience by representatives of NCs, which will also enable them to disseminate this knowledge within their country;
- (b) the WG is expected to organize a workshop at occasion of an international ICID meeting;
- (c) publish an overview paper on management of water scarcity in areas of conflicting demands with recommendations for implementation.

4.4 Timelines

4.4.1 It is recommended that the initial term of this WG will be set at 5 years. The timeline would have to be based on the scope of work and the expected output. Details of the timeline would have to be formulated and refined during the inaugural meeting of the WG.

4.5 Collaborators and dissemination strategy

4.5.1 The WG would have to base its activities on an open attitude with a clear scope for invitation of outsiders that are interested in the topic on a Permanent Observer (PO), or ad hoc basis.

4.5.2 The dissemination strategy would have to be based of reaching those who can apply the findings and recommendations of the WG in their research and especially in policy development, decision making and implementation in practice.



Appendix A [Annex, para 4.1.2]

Three Year Rolling Plan

Item of Mandate	2016			2017			2018			2019			Actor(s)
Scoping document to PCTA													Convenor
Comments on Scoping document from PCTA and informal meeting													Participants informal meeting
Finalizing Scoping Document and detailing of Workplan													Convenor
Invitation to NC for nominations and information													Central Office
Submission of nominations and information													National Committees
1st Meeting Mexico City													Members and Permanent Observers
Exchange of information, knowledge, experience, networking													Members and Permanent Observers
Solicit information and case histories of adaptive management processes													Members and Permanent Observers
2nd Meeting Saskatoon Canada													Members and Permanent Observers
Preparation and presentation of reports and/or case studies													Members and Permanent Observers
Organize international workshop													Some Members
3rd Meeting including Workshop													Members and Permanent Observers