

**MINUTES OF THE INFORMAL MEETING OF THE  
WORKING GROUP ON HISTORY OF IRRIGATION, DRAINAGE AND  
FLOOD CONTROL (WG-HIST)**

05 September 2024, 14:00-15:30 hours (Session I) and 16:00-17:30 hours (Session II)  
Sydney, Australia

**Strategy Theme: Sustainable Development**

**Members present:** (1) Mr. Gao Lihui - Young Professional (China); (2) Dr. Sinite Yu (Chinese Taipei Committee); (3) Dr. Tsu-Chuan Lee (Chinese Taipei Committee) represented by CTCID; (4) Dr. Cheh-Shyh Ting (Chinese Taipei Committee) represented by CTCID; (5) Dr. Masaomi Kimura (Japan); (6) Dr. Yutaka Matsuno (Japan); (7) VPH Chaiwat Prechawit (Thailand).

**New members:** (i) Dr. Ya-Wen Chiueh (Chinese Taipei Committee); (ii) Dr. Yu-Chuan Chang (Chinese Taipei Committee), (iii) Ir. Sv Kalaiselvam Velayudan (Malaysia).

**Office Bearer:** Vice President Dr. Sylvester Mpandeli (South Africa).

**Website:** <https://icid-ciid.org/wbody/WG-HIST>

**WG-HIST Minutes Item 1: A brief report on the restructuring of WG by the Chair**

1. In the absence of VPH Dr. Kamran Emami, Prof. Matsuno, and VP Prof. Sylvester Mpandeli briefly provided information on the reorganized structure of the new WGs approved by the IEC in its 74<sup>th</sup> meeting in Vizag, India. Among the existing 18 working groups, 9 working groups completed their mandate in November 2023. The remaining working groups have been structured into 11 new working groups under four themes: (1) Irrigation and Drainage; (2) Natural Resources; (3) Climate Change and Impacts; and (4) Sustainable Development. In accordance with the structure approved by IEC, a new group – Working Group on History of Irrigation Drainage, and Flood Control (WG-HIST) has been formed and included in theme 4 (Sustainable Development).

**WG-HIST Minutes Item 2: Discussion on the Scoping Document for new WG**

2. During the meeting, the group reviewed the nominations received for the membership of the new WG and accepted Dr. (Ms.) Ya-wen Chiueh (Chinese Taipei Committee), Dr. Yu-Chuan Chang (Chinese Taipei Committee), and Mr. SV Kalaiselvam Velayudan (Malaysia) as members as they attended the meeting while Dr. Watchara Suiadee (Thailand) as Provisional Member due to non-attendance.

3. During the meeting, the group members reviewed the draft Scoping Document (**Annex 1**) shared by VPH Dr. Kamran Emami to establish a new WG-HIST and agreed to update the same in the next online meeting.

**WG-HIST Minutes Item 3: Election of Chair, Vice Chair, and Secretary of restructured new WG**

4. After discussion, WG members selected Prof. Yutaka Matsuno (Japan) as a provisional Chair, Mr. Gao Lihui (China) as a provisional Vice Chair, and Dr. Sinite Yu (Chinese Taipei Committee) as a provisional Secretary. The participants agreed to this tentative selection, which will be officially approved during the next online meeting. Membership status is given in **Annex 3 (page 27)**.

**WG-HIST Minutes Item 4: Road Map to ICID Vision 2030 - Status of activities on history of irrigation, drainage, and flood control**

5. The working group members discussed the Road Map to ICID Vision 2030 (**Annex 2**) and after discussion, it was proposed that the provisional chair will update and finalize the Road Map to ICID Vision 2030 in the next online meeting.

**WG-HIST Minutes Item 5: Review of World Historical Irrigation Structures (WHIS) and WSH Program**

6. The Chair provided brief updates on the selection of WHIS this year and encouraged members to apply for the WHIS scheme.

**WG-HIST Minutes Item 6: Publication of erstwhile WG-HIST - Historical Water Sustainability**

7. The Chair provided brief updates on the publication of Historical Water Sustainability. Chair encouraged members to give ideas for the next phase of publications from WG, which can be the next volume of Historical Water Sustainability or the publication on a different subject in line with the scope of WG-HIST.

**WG-HIST Minutes Item 7: Any other business (with permission of Chair)**

8. The Chair announced that the “International Seminar on the Conservation and Development of World Heritage Irrigation Structures (WHIS) and Preparatory Meeting of WHIS Association” will be held in Guangzhou, Jiangxi Province (China) from 24-26 October 2024 under the collaboration of National Committees of China and Japan. Chair requested all members to participate in the Seminar.



**Annex 1** [Appendix 22, Item 2]**WORKING GROUP ON HISTORY OF IRRIGATION,  
DRAINAGE AND FLOOD CONTROL (WG-HIST)****UPDATED SCOPING DOCUMENT****1. Introduction**

- 1.1 As dawn breaks on the 21st century, humanity is confronted with three fundamental problems that are interrelated in a complex system: water crisis, sustainability, and flood mitigation. Coping with water-related challenges in the 21st century requires major technical jumps and innovations in all fields.
- 1.2 Knowledge management literature often points out that it is important to distinguish between data, information, knowledge, and wisdom. The generally accepted view sees data as simple facts that become information as data is combined into meaningful structures, which subsequently become knowledge as meaningful information is put into a context and when it can be used to make predictions. This view sees data as a prerequisite for information, information as a prerequisite for knowledge, and knowledge as a prerequisite for wisdom. In Figure 2, data are assumed to be simple isolated facts. When such facts are put into a context, and combined within a structure, information emerges. When information is given meaning by interpreting it, information becomes knowledge. At this point, facts exist within a mental structure that consciousness can process, for example, to predict future consequences, or to make inferences. As the human mind uses this knowledge to choose between alternatives, behavior becomes intelligent. Finally, when values and commitment guide intelligent behavior, behavior may be said to be based on wisdom.
- 1.3 With today's sophistication, the time step for a typical data to wisdom process may be a day or a week, or a month in industrial cases. But in the context of water engineering, the time step may be a year or a decade, or a century. Consequently, the water wisdom of the past which was achieved in a period of hundreds of years can be regarded as a unique and irreplaceable gift from our ancestors to contemporary water engineers. Hopefully, the water wisdom of our ancestors will play a key role in our adaptation to the water-related challenges of the 21st century. It is therefore necessary that we look back at the ancient creation of the fertile human brains that used the synergy of science and art at that moment of time to provide us with abundant food for thought. It should be remembered that the foundation of the future rests on the achievement of the past.
- 1.4 The water engineering is a vital part of the story of civilization. Reservoirs for water supply were undoubtedly among the earliest structures devised by mankind. The role that water management structures have played over the ages is documented in many records of historical lands. These structures have been linked closely to the rise and decline of civilizations, especially to those cultures highly dependent upon irrigation.
- 1.5 The mission of ICID is to stimulate and promote the development and application of the arts, sciences, and techniques of engineering, agriculture, economics, ecological and social sciences in managing water and land resources for irrigation, drainage, flood management, for achieving sustainable agriculture water management and water history can be used for achieving this mission.

**2. Objectives***2.1 Relevance of the Working Group*

- 2.1.1 The relevance of the WG can be specified as follows:
- Water History aims to foster historical understanding of the relationship between water and humankind. Lessons learned from water history can be used to enhance our strategies for sustainable irrigated agriculture.
  - The WG is expected to contribute to the effective implementation of the Strategy Theme Schemes and to other strategy themes;
  - The water engineers are facing great challenges in the coming decades. Water history can be used to inspire them and promote stakeholders' participation, creativity, and innovation.

**3. State of knowledge on the topic***3.1 Other International Organizations that are working on the subject*

- 3.1.1 There are very few other International Organizations that have programs and activities on this topic. This especially concerns the:
- International Water History Association (IWHA)
  - TF-HIS in ICID
  - International Scientific Committee on Water and Heritage (ISCWater) in ICOMOS

### 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) 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 the history of irrigation, drainage, flood management, and river engineering;
- (c) To promote interdisciplinary exchange of information, knowledge, and experience, as well as networking on the topic (agricultural, political, socio-economic, climatologically, and geographical, ... aspects for proper understanding of the technological developments in the subject);
- (d) To organize seminars at ICID Congresses and meetings to enhance awareness of the importance of Water history;
- (e) To prepare a paper on “Historical Water Sustainability” for publication in *Irrigation and Drainage (IRD)*;
- (f) To finalize a book on “Historical Water Sustainability”.
- (g) To encourage member countries to produce documentaries on Water History.

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

3.3.1 WG-HIST would promote synergy with all International Organizations active in water history.

## 4. Work Plan

### 4.1 Scope

4.1.1 The WG is expected to investigate, analyse, and disseminate information on different aspects of water history and to formulate recommendations with respect to:

- (a) Ensuring sustainability of irrigation and flood projects;
- (b) Combining old methods and modern technologies for enhanced creativity and innovation;
- (c) Preserving the historical structures.

### 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, and anybody interested in “*A water secure world free of poverty and hunger through sustainable rural development*”.

### 4.3 Outputs

4.3.1 The following outputs can be expected from this WG:

- (a) Proceeding of the seminars and workshops;
- (b) A documentary on the publication of WG-HIST in 2023: “Historical Water Sustainability”;
- (c) Documentaries from National Committees.
- (d) WG website;
- (e) Overview paper on “Historical Water Sustainability” for publication in *Irrigation and Drainage (IRD)*.

### 4.4 Timelines

4.4.1 A five-year tenure is requested for this phase of WG’s activities.



## Annex 2 [Appendix 22, Item 4]

## ROAD MAP TO ICID VISION 2030 – ACTIVITIES OF ERSTWHILE WG-HIST

Goals/ Strategies	Activities	Outcomes/ Outputs	Milestone for 2017	Milestone for 2018	Milestone for 2019	Milestone for 2020	Milestone for 2021	Milestone for 2022	Milestone for 2023	Respon- sibility
<b>GOAL C: FACILITATE EXCHANGE OF INFORMATION, KNOWLEDGE AND TECHNOLOGY</b>										
<b>C1. Strategy:</b> Providing Knowledge-sharing Platform for AWM Professionals	1.2 International conference/workshop/seminar on History	Workshop Proceedings	Workshop/seminar on Historical Water Sustainability		Workshop/seminar (Bali)			Workshop/seminar	Workshop/seminar	
<b>C3. Strategy:</b> Promoting Regional Cooperation	3.10 International conference/workshop/seminar	Workshop Proceedings								
<b>C4. Strategy:</b> Compile, Collate and Share Knowledge and Experiences	4.5 Publication on Historical Water Sustainability	Publication		Compile lessons learned from WHIS/ WSH				Finalize the publication on Historical Water Sustainability		
	4.6 World Historical Irrigation Structures (WHIS)	Register of WHIS	Nomination/evaluation / update register	Nomination/evaluation /update register	Nomination/evaluation / update register; Exhibition at WIF3	Nomination/evaluation /update register	Nomination/evaluation /update register	Nomination/evaluation /update register	Nomination/evaluation /update register	
	4.7 World Water System Heritage (WSH) Program	Register of WSH	Nomination/evaluation / update register	Nomination/evaluation / update register	Nomination/evaluation / update register; Exhibition at WIF3	Nomination/evaluation / update register	Nomination/evaluation / update register	Nomination/evaluation / update register	Nomination/evaluation / update register	
<b>C5. Strategy:</b> Dissemination of Data, Information, Tools, Knowledge and Know How	5.10 Documentaries on Water history	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries	Encouraging the member countries to produce documentaries on water history by presenting the prize on the best documentaries
	5.11 Updating the WG-HIST website	Online	Uploading the relevant documents	Uploading the relevant documents	Uploading the relevant documents	Uploading the relevant documents	Uploading the relevant documents	Uploading the relevant documents		
<b>GOAL E: ENCOURAGE RESEARCH AND SUPPORT DEVELOPMENT OF TOOLS TO EXTEND INNOVATION INTO FIELD PRACTICES</b>										
<b>E4. Strategy:</b> Research on History of Irrigation and Lessons Learned from the past			Preparing the conclusion chapter for the WG publication	Preparing the conclusion chapter for the WG publication	Preparing the conclusion chapter for the WG publication	Preparing the conclusion chapter for the WG publication	Preparing the conclusion chapter for the WG publication	Finalizing the editing process		
<b>E6. Strategy:</b> Dissemination of Useful Research Outputs	6.1 Prepare a paper on combination of old methods and new technologies		Presenting the first paper in the WG workshop and other seminars	Presenting the second paper in the WG workshop and other seminars	Presenting a paper for the journal of Irrigation and drainage			Presenting a paper for the journal of Irrigation and drainage		

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



