

**AGENDA FOR THE 1ST MEETING OF THE
WORKING GROUP ON HISTORY OF IRRIGATION, DRAINAGE AND
FLOOD CONTROL (WG-HIST)**

15 August 2018, 13.30-15.00 hours (Session I) and 15.30-17.00 hours (Session II)
Saskatoon, Saskatchewan, Canada

Strategy Theme: Knowledge

Presented by the Chairman

Year of Establishment: 2017

Extended the completion of the Mandate: 2023

Mandate: (a) To motivate ICID National Committees in various countries to set up their National Working Groups on History; (b) To provide guidance to compile, publish, update and/or translate documents on history of irrigation, drainage, and flood management; (c) To promote inter—disciplinary 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 on the subject; (d) To organize seminars at ICID Congresses to enhance awareness of Water history; (e) To prepare a paper on “Historical Water Sustainability” for publication in *Irrigation and Drainage (IRD) Journal*; (f) To finalize a book on “Historical Water Sustainability”; and (g) To encourage member countries to produce documentaries on Water History.

Website: <http://wg-hist.icidonline.org/>

WG-HIST Agenda Item 1: Introduction by the Chair¹

1. The Chair will present the report on the actions taken on the decisions and proposals of the working group at its last meeting held at Mexico in October 2017.

2. ICID CO, vide e-mail dated 8 December 2017 to all Chairs/ Vice Chairs/ Secretaries, advised the work bodies to make full use of web-ex platform for virtual meetings so as to ensure regular contribution from the WG members as well as to discuss and initiate follow-up actions emerging from the minutes of the previous WG meeting and review the progress of the action points. No virtual meeting of the WG could be organised since last meeting of the WG in Mexico in October 2017. In this connection PCTA in its meeting in Mexico in October 2017 accepted the recommendation of the Sub-committee to investigate the structure, scheduling of meetings and membership of working groups (SC-SSMWG) and advised the WG Chairs to make the WG meetings technically more attractive by taking preparatory steps through virtual meetings of the WGs before preparing the agenda for the meetings.

3. The ICID Central Office has invited nominations from the National Committees for the membership of the working group in the months of January, March, and May 2018. In response, the Sudanese National Committee (SNCID) has nominated Dr Ahmed Adam Ibrahim while Egyptian National Committee (ENCID) has nominated VPH Prof. Dr. Dia El Din Ahmed El Quosy for the membership of the WG. However, CV of Dr. Ibrahim is yet to be received. The Chinese Taipei Committee (CTCID) has nominated Dr. Sinite Yu while Japanese National Committee (JNCID) has once again reconfirmed the nomination of Prof. Dr. Nobumasa Hatcho to continue his membership of the working group. 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.

WG-HIST Agenda Item 2: Road Map to ICID Vision 2030 - Activities on history of irrigation, drainage and flood control

4. At Mexico meeting (2017), the group reviewed the Action Plan for WG-HIST keeping in view the mandate and availability of resources for achieving various activities (refer **Annex 2**). During the Mexico meeting, the 68th International Executive Council (IEC) encouraged WGs to monitor the progress of ‘Activities identified under Various Strategies for Action Plan 2017-21’ appended to ‘A Road Map to ICID Vision 2030’ and report to their respective Permanent Committees. ICID CO has followed-up with the members and requested them to take actions to achieve milestones decided by the WG in the action plan. WG was also requested to consult with other working groups so as to avoid duplication of the activities and getting their support to achieve intended outcome/ outputs of the WG. WG Chair and members will provide updates on actions initiated to achieve milestones as per

¹ This will also include details of membership of WG as **Annex**

agreed Action Plan during the meeting. During the Mexico meeting, the group proposed to organize a workshop on historical water sustainability (see Item 6) during the Canada events in 2018 as part of the Action Plan.

5. As per decision of 68th IEC, the Central Office requested the Chairs of the Work bodies in January 2018 to monitor the progress of achieving milestones as indicated in the Action Plan and report status to the Permanent Committee for Technical Activities (PCTA) to enable the Theme Leaders to take stock of the progress of the Work body in achieving the Action Plan in their synthesis report. Chair will provide further updates at the meeting.

WG-HIST Agenda Item 3: Publication on “Historical Water Sustainability”

6. At Mexico meeting (2017), Chair provided brief updates on the final version of the WG publication titled *‘Historical Water Sustainability’* and informed that 15 chapters were ready. During the meeting, Chair proposed to consult with PH Peter Lee (UK) for editing the chapters and also proposed that PH Prof. Bart Schultz would prepare a uniform format for the chapters while Chairman would complete the concluding chapter and finalize the book by August 2018 with help from other members in reviewing and e-publishing by ICID Central Office. The ICID Central Office is ready to take desk top publishing viz. formatting, layout etc., once the manuscript is ready and will bring out as e-publication for uploading on ICID website besides make it available at ICID’s Integrated Library Management System (ILMS) for world wide access. Chair will provide further updates at the meeting.

WG-HIST Agenda Item 4: Exchange of information, knowledge & networking – Website

WG-HIST Agenda Item 4.1: Website of the group

7. At Mexico meeting (2017), the group noted that the website of the working group http://www.icid.org/wg_hist.html was updated with new membership list, agenda, minutes, events, etc. Chair encouraged members to provide interesting articles/ papers/ presentations/ documents related to the activities of the group for uploading on the website. Accordingly, the ICID CO has followed-up with the members and requested to provide papers, articles and documents related to the mandate of the group. WG will discuss and evolve better mechanisms for sharing information and its updating on the WG web site.

WG-HIST Agenda Item 4.2: Webinar/ Web based seminar

8. During Mexico meeting (2017), the group discussed and supported the organization of webinar/ web based seminar and encouraged members to provide their suggestions on topics, based on the mandate of the WG along with the name of the relevant experts who could be contacted to develop webinars. Accordingly, the ICID CO has followed-up with the members and requested them to suggest topics for organization of webinars. Chair will provide further updates at the meeting.

WG-HIST Agenda Item 5: Review of Historical Irrigation Structures (HIS) and WSH Program

9. At Mexico meeting (2017), the working group noted the progress of Historical Irrigation Structure (HIS) and development of World Water System Heritage (WSH) Program. In the first edition of the WSH program, an exclusive Award ceremony, jointly organized by ICID and WWC, to recognize three water management systems was organized during the opening ceremony of the 8th World Water Forum on 19 March 2018 at the WWC Pavilion in Brazil. The recognized systems selected by the International Panel of Judges were: (i) The Genbegawa Irrigation Canal System, Japan; (ii) Sekikawa Suikei Land Improvement District, Japan; and (iii) Sheikh-Bahaei Water Allocation Scroll, Iran. A Citation Plaque and Certificate were presented to the representatives by Prof. Benedito Braga, President of WWC and Eng. Felix Reinders, President of ICID. The WSH Program aims at identifying and preserving the people-centred water management systems, organizations, regimes and rules as intangible water heritage considered as outstanding value to humanity and giving them recognition.

10. Besides WSH program, ICID also has Register of Heritage Irrigation Structures (HIS) for recognition of the historical irrigation structures on the lines of World Heritage Sites, launched in 2014. As such the ICID register has 59 structures from around the world listed on the ICID website. Fourteen irrigation structures have been received for inclusion in the ICID Register of HIS in 2018 and the number is growing every year.

11. The Management Board at its first virtual meeting (MB-1/18) held on 03 May 2018 in Kathmandu, Nepal during the 8th Asian Regional Conference, has accepted the proposal of renaming the existing scheme of "Heritage Irrigation Structures (HIS)" as "World Heritage Irrigation Structures (WHIS)", as the Scheme was originally conceptualized for providing a worldwide recognition to historical individual structures forming an irrigation system, irrespective of their location. MB felt that the renaming existing HIS Scheme as WHIS Scheme would not only enhance the level of the awards, but also provide better recognition to the ancient works in the field of irrigation and lessons learnt from their operations over the historical periods, which have universal

application. It would also attract the non-member countries to ICID membership, as the renamed Scheme is open to nominations from non-member countries, if the nomination is authenticated by a National Committee or by the concerned Regional Working Group such as ASRWG, AFRWG, etc. depending on the region of origin of nomination. MB also felt that the acronym WHIS (World Heritage Irrigation Structures) does not coincide with any other such acronyms in the recognition of heritage areas. The change proposed does not involve any other impacts on the present formulation of the scheme except for the inclusion criteria for non-member countries. Hence, MB requested that the proposal be taken up by WG-HIST and revise the scheme suitably in accordance with the decision of MB, prior to its presentation at PCTA for its consideration and later approval by the Council in Canada. A revised draft of the proposed WHIS scheme is given at **Annex 3**.

12. In view of the MB's above decision, the Structures selected for recognition under the Scheme for this year, will now be recognized as 'WHIS' during the plenary session of the 69th IEC at Saskatoon, Saskatchewan on 13 August 2018. In this regard, on 21 May 2018, the ICID Central Office has requested the Chair Dr. Kamran Emami to conduct a virtual meeting either by circulation or through web platform in order to provide its immediate suggestions or recommendations, prior to consider the revised WHIS Scheme at the WG-HIST meeting at Canada. In response, Chair Dr. Kamran Emami supported the decision of MB and has informed that he will be circulating the decision to the members for their suggestions and recommendations. Chair will provide further updates at the meeting.

WG-HIST Agenda Item 6: Workshop organized by the working group, August 2018, Canada

13. The WG will be organizing a Workshop on “Historical Water Sustainability” on 12 August 2018 during 09:00 to 12:30 hours. At the start of the 21st century, humankind established itself on a non-sustainable course - a course that, unless corrected, will lead to catastrophes and awesome consequences. In this context, the water wisdom of the past, which was achieved over a period of hundreds of years, can be regarded as a unique and irreplaceable gift from our ancestors to our generation facing the great challenge of ensuring sustainable development. Given above, the sub-topics of the workshop were - (i) Water and Sustainability; (ii) Case studies of Sustainable historical water schemes; and (iii) Water Wisdom of the past and lessons learned. The Chair will provide a ‘Summary Report’ of the workshop at the meeting.

WG-HIST Agenda Item 7: Any other business



NOTES FOR CHAIRPERSON:

1. Draft minutes of this meeting to be submitted to ICID Secretariat at Saskatoon, Canada after the meeting.
2. Chair to participate and present the WG report to PCTA meeting on 16 August 2018.

A. Members and their attendance at 2017 meeting

No.	Members	Member from (Year)	2017		Remarks
			Self	Contributed by mail	
1.	Dr. Kamran Emami, Chairman (Iran)	2017	•	•	
2.	Mrs. Xuming Tan (China)	2017		•	
3.	Eng. Ahmed Awad Hag Abd-Elnabi (Egypt)	2017		•	
4.	VPH Dr. Laszlo Hayde (Hungary)	2017	•		
5.	VPH Dr. A. Hafied A. Gany (Indonesia)	2017			
6.	Mr. Antonio Linoli (Italy)	2017	# ²		
7.	Prof. Dr. N. Hacho (Japan)	2017	•		
8.	Mr. Jong Myong, Kim (Korea, Rep. of)	2017	•		
9.	Dr. José Luis Martínez Ruiz (Mexico)	2017	•		
10.	Engr. Sirika Ahmad Abubakar (Nigeria)	2017	•		
11.	Prof. Dr. Abdul Sattar Shakir (Pakistan)	2017			
12.	Prof. Jaekyoung Noh (Republic of Korea)	2017			
13.	VPH Dr. Gerhard Backeberg (South Africa)	2017	•		
14.	Eng. S.P.C. Sugeeshwara (Sri Lanka)	2017			Admitted as Provisional Member, no contribution, recommended for discontinuation after Canada meeting if no contribution.
15.	VPH Chaiwat Prechawit (Thailand)	2017			
16.	Mr. Charles L. Abernethy (UK)	2017			
17.	Secretary General, ICID				
Permanent Observers					
18.	Dr. Ir. M. Ertsen (IWHA)				
19.	Dr. Ing. Klaus Rottcher (Germany)				
20.	Dr. (Mrs.) B. Dolfing (The Netherlands)				

B. New Nomination received from the National Committees/ Committee

Sl. No.	Name	Country	Remarks
1.	Dr. Ahmed Adam Ibrahim	Sudan	Recommended as member, subject to his presence else provisional member
2.	VPH Prof. Dr. Dia El Din Ahmed El Quosy	Egypt	Recommended as member, subject to his presence else provisional member
3.	Dr. Sinite Yu	Chinese Taipei	Recommended as member, subject to his presence else provisional member



² Through representation

ROAD MAP TO ICID VISION 2030 – ACTIVITIES OF WORK BODIES

Goals/ Strategies	Activities	Outcomes/ Outputs	Milestone for Year 2017	Milestone for Year 2018	Milestone for Year 2019	Milestone for Year 2020	Milestone for Year 2021
Goal C: Facilitate exchange of information, knowledge and technology							
C1. Strategy: 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		
C3. Strategy: Promoting Regional Cooperation	3.10 International conference/ workshop/ seminar	Workshop Proceedings					
C4. Strategy: Compile, Collate and Share Knowledge and Experiences	4.5 Publication on Historical Water Sustainability	Publication	Finalize the publication on Historical Water Sustainability	Compile lessons learned from HIS/ WSH		Compile lessons learned from HIS/ WSH	
	4.6 Historical Irrigation Structures (HIS)	Register of HIS	Nomination/ evaluation / update register	Nomination/ evaluation /update register	Nomination/ evaluation / update register; Exhibition at WIF3	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	
C5. Strategy: Dissemination of Data, Information, Tools, Knowledge and Know How	5.10 Producing documentary on "Historical Water Wisdom".	Documentary	Tentative gathering of the related documentaries from the member countries	Encouraging the member counties to produce documentaries on water history by presenting the prize on the best documentaries			
	5.11 Updating the WG-HIST website	Online					
	5.12 Producing documentary on "Historical Water Wisdom".						
Goal E: Encourage research and support development of tools to extend innovation into field practices							
E4. Strategy: Research on History of Irrigation and Lessons Learned from the past							
E6. Strategy: 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			

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



**REVISED SCHEME FOR RECOGNITION OF
'WORLD HERITAGE IRRIGATION STRUCTURES (WHIS)'**

1. Background

- 1.1 At the 63rd meeting of International Executive Council (IEC) held at Adelaide, Australia on 28 June 2012, President Gao Zhanyi suggested that a process for recognition of the historical irrigation structures on the lines of World Heritage Sites as recognized by UNESCO shall be initiated. Accordingly, a Task Team comprising of the following members, was set up to work out objectives, guidelines and procedures to select the historical irrigation structures. The Scheme was discussed during the meeting of WG-HIST at 65th IEC meeting. The members suggested changes in the scope of the Scheme, The present Scheme has been revised and updated to include both the old operational irrigation structures as well as structures that have primarily archival value. The Management Board (MB) at its first virtual meeting of 2018 (MB-1/18) held in Kathmandu, Nepal on 03 May 2018 decided to prefix the word 'World' to HIS as the Scheme was originally conceptualized for recognizing the individual structures forming an irrigation system, irrespective of its location.

2. Objective

- 2.1 It is proposed that a historical irrigation and/or drainage structure fulfilling the criterion laid down in this document shall be recognized as "World Heritage Irrigation Structure" (WHIS). The main objectives of recognition as a "World Heritage Irrigation Structures" are:
- (a) Tracing the history of and understanding the evolution of irrigation in the civilizations across the world.
 - (b) To select and collect information on historical irrigation structures from around the world, understand their significant achievements and gather knowledge about the unique features that have sustained the project for such a long period;
 - (c) To learn the philosophy and wisdom on sustainable irrigation from these structures; and
 - (d) To protect/preserve these historical irrigation structures

3. Scope

- 3.1 The type of the structures or facilities to be considered for recognition as World Heritage Irrigation Structures shall fulfil following criterion:
- (a) The structure shall be more than 100 years old;
 - (b) The structures shall fall under one of the following categories:
 - (i) Dams (operational largely for irrigation purpose),
 - (ii) Water storage structures such as tanks for irrigation,
 - (iii) Barrages and other water diversion structures,
 - (iv) Canal Systems,
 - (v) Old waterwheels,
 - (vi) Old shadouf,
 - (vii) Agriculture drainage structures,
 - (viii) Any site or structure functionally related to present or past agricultural water management activity.

4. Criterion

- 4.1 The structure recognized as a World Heritage Irrigation Structure should fulfill one or more of the following criterions.
- (a) The structure should represent a milestone / turning points in development of irrigated agriculture and should bear an exceptional testimony to development of agriculture and increase in food production along with the improvement of economic condition of farmers;

- (b) The structure that was ahead of its times in terms of project formulation, engineering design, construction techniques, dimensions of the structure itself, quantum of water diverted, and size of the command; [any one or more of these]
- (c) Must have made outstanding contribution to enhancing food production, livelihood opportunities, rural prosperity, and poverty alleviation in a region;
- (d) Was innovative in its ideas at the time of its construction;
- (e) Contributed to the evolution of efficient and contemporary engineering theories and practices;
- (f) Is an example of attention to environmental aspects in its design and construction;
- (g) Was an example of engineering marvel or excellence at the time of its construction;
- (h) Was unique in some positive and constructive way;
- (i) Bears the stamp of a cultural tradition or a civilization of past the past;

4.2 The structures fulfilling the above laid criterion will be classified into Lists:

- (a) **List A** would include those structures which are still operational and present an outstanding example of sustainable Operation & Management over a long period of time;
- (b) **List B** would include those structures which essentially have archival value and are no more functional

5. What does listing as an ICID World Heritage Irrigation Structure mean?

5.1 The process of documentation, recognition and appropriate management of the World Heritage Irrigation Structures will benefit the irrigation and drainage fraternity as well as the society in general by providing:

- (a) Understanding of the factors that make the heritage structures sustainable and learn lessons there from;
- (b) Education opportunity for professionals, students and general public; and

5.2 For UNESCO World Heritage Sites, inclusion means maintaining status quo forever. But it would be incorrect to stipulate the same for irrigation structure, as the people have the right to replace older structure with more efficient ones for better water use efficiency. Recognition as an WHIS would be used to draw attention of the concerned governments to provide sufficient resources to maintain the WHISs. ICID may provide small scale technical guidance to the project authority through a team of experts from ICID for its further sustainability, conservation and safe management as long as possible. ICID through various kinds of published material (Coffee table publications, web pages etc) should bring these WHIS into the public knowledge and the role they have played in achieving food security.

6. Procedure

6.1 A historical irrigation and drainage structure fulfilling the criterion laid under section 4, based on the recommendation of the Jury to be constituted following the guidelines, as presented below, will be approved by the International Executive Council to be recognized as World Heritage Irrigation Structure (WHIS) that will be included in an “**ICID Register of World Heritage Irrigation Structures**” and presenting a “**World Heritage Irrigation Structure**” Plaque citing the salient features of the WHIS. The Plaque will be awarded to the National Committees for onward transmission to the authorities responsible for the running and maintenance of the structure for displaying prominently on the body of the structure. The ICID Register of WHIS would be publicized through ICID media channels.

6.2 The National Committee should report the current status of registered WHIS site to ICID, after 5 years of registration.

6.3 Application

6.3.1 Any National Committee/Committee of ICID can nominate or send a proposal for recognizing historical irrigation structures meeting the criteria prescribed below, in the format prescribed at **Annexure**. The NC shall obtain a ‘letter of support’ from the relevant authority (ies).

6.4 Jury

6.4.1 The President shall constitute a Panel of Judges, broadly following the composition below for adjudication with the objective to provide recognition to World Heritage Irrigation Structures:

Chairman, PCSO	- Chairman
Chairman/Ex-Chair, WG-HIST	- Member
Nominees from 3 NCs of ICID	- as Members
Secretary General, ICID	- Member-Secretary

6.5 Call for nomination

6.5.1 The nomination process for recognition of World Heritage Irrigation Structures is open ended and the National Committees desirous of submitting a nomination can fill in the required information in the Nomination Form as prescribed in Annexure A. The nomination forms received by 30th June every year will be processed together and presented to the following Executive Council meeting after due processing.

6.6 Financial

6.6.1 ICID will seek to create a fund to meet the requirements of resources for:

- (a) Processing the applications,
- (b) Providing certain technical support to the WHIS for maintaining the structure in good condition,
- (c) Developing material for dissemination of WHIS, and
- (d) Bringing out publications based on the lessons learnt.

6.7 Contact

6.7.1 The ICID Central Office may be contacted for further information on the Recognition of WHIS,

Secretary General, ICID
48 Nyaya Marg, Chanakyapuri
New Delhi 110021
Tel: +91-11-26116837, 2611 5679, 2467 9532, Fax: +91-11-26115962
E-mail: icid@icid.org, Website: www.icid.org



Annexure to para 6.3.1 of the WHIS Scheme

**NOMINATION FORM FOR INCLUDING IN THE
ICID REGISTER OF WORLD HERITAGE IRRIGATION STRUCTURES (WHIS)**

(Note: The information provided herein can be used by ICID to inform, market and give publicity to the WHIS included in the ICID Register of World Heritage Irrigation Structures through various dissemination mechanism, giving due acknowledgement to the National Committee and the owner organization.)

1. Details of the Irrigation Structure Nominated

(Separate form should be submitted for each nominated structure)

- (a) Name:
- (b) The year of commissioning:
- (c) Area Irrigated/ drained:
- (d) Geographical Coordinates:
- (e) River basin/ sub-basin where located:
- (f) Name of the Nominating National Committee/Committee:

2. Management Details of the WHIS:

- (i) Ownership:
 - (a) Name of organization
 - (b) Address:
- (ii) Name and contact details of Official(s) managing the nominated structure
- (iii) Present source of fund for Operation and Maintenance of the nominated structure (For List A structures)
- (iv) Present source of fund for Maintenance of the nominated structure (For List B structures)

3. Description giving Salient Features of the nominated structure

(Provide in a separate sheet in 500 words. Also provide Maps/ Sketch /Plans, if available showing various components, boundary, jurisdiction of the project area (to be attached)

4. Justification for nomination:

- (a) Criteria which the nominated structure fulfils and how (Please provide a write up of not more than 1000 words one or more criteria that the structure fulfils)
- (b) Statement on the nominated structure's engineering utility as on date vis a vis its designed utility. (For including in List, A)
- (c) Statement on the nominated structure's engineering utility at the time it was functional, and details of the overall project of which it formed an essential part. (For including in List B)

5. Present state of Conservation

(Enumerate and describe factors that are affecting or have affected the utility of the nominated structure in the past e.g. Encroachment, Suitability in present conditions, pollution, natural disaster such as floods, earthquake, visitors/tourism pressure etc.) (Max 500 words)

6. Documents attached

- (a) Support letter (s) from the relevant local/national authorities (Essential)
- (b) Document providing project description,
- (c) Document/ Report enumerating benefits accrued from the project since its inception
- (d) Project photographs old as well as the latest
- (e) Audio visual materials and
- (f) Inventory of project property,
- (g) Bibliography etc.

(In case the documents are too bulky, please provide electronic versions) (Scanned etc.)

7. Certification by the National Committee/Committee

(i) Authentication:

- (a) It is certified that the above information is correct to the best of our knowledge and the relevant institutions/departments have been contacted or informed about this nomination. (Concerned Archeological Department/Agency or maintaining organization in case of LIST B)
- (b) National Committee will undertake the actions required to disseminate the information befitting the listed World Heritage Irrigation Structure.

(ii) No Objection certificate:

We have no objection to ICID using the information provided with this nomination form for marketing and to give publicity to the historical irrigation structure nominated.

- (a) Signatures
Chairman / Secretary of Nominating
National Committee / Committee/Regional Working Group
- (b) Name
- (c) Address
.....
.....
- (d) Seal

