



Year of Establishment: 1996

Mandate: The general objective of the Asian Regional Working Group (ASRWG) is to focus on common topics and issues and to enhance the transfer of appropriate technology in irrigation and drainage to and from the Asian Region. The mission of ASRWG is to encourage membership and to coordinate activities in the region.

Website: <https://icid-ciid.org/wbody/ASRWG>

Agenda Item 1: Review of the membership

1. **New nominations for the working group:** The ICID Central Office has contacted the National Committees of Kazakhstan, the Philippines, Saudi Arabia, and Tajikistan for membership of the working group. In response, the following nominations for the membership of the working group were received:

- (a) Dr. Bakhrom Gaforzoda, Vice President, ICID (Tajikistan)
- (b) Mr. Sharif Mahmudov (Tajikistan)
- (c) Mr. Yuldoshev Umedjon (Tajikistan)
- (d) Eng. Mohammed Abdullah Al-Samhan (Saudi Arabia)

2. During the 2nd virtual meeting held on 28 May 2025, Mr. Ather Hameed (*in place of Mr. Ahmed Kamal*), nominated by the Pakistan National Committee (PANCID) introduced himself and the group accepted him as a member. Similarly, Vice President Dr. Bakhrom Gaforzoda and Mr. Sharif Mahmudov (Tajikistan) have been regularly attending the past meetings of the WG and hence accepted as members in the 2nd virtual meeting. These memberships will now be placed before PCTA/IEC at KL Meetings for formal approvals.

3. The group may like to consider the nominations of Mr. Yuldoshev Umedjon (Tajikistan), and Eng. Mohammed Abdullah Al-Samhan (Saudi Arabia) during the meeting. If the new nominee is not present during the meeting, the nomination may be accepted as a 'Provisional Member' for one year. The new nominees are expected to contribute to the activities of the working group by actively participating in the WG meetings, by email or video-conferencing during the year, for regularizing the membership of the WG thereafter.

4. **Non-participation/ contribution by the members for two or more years:** The ICID Central Office contacted the following National Committees/ Committee to confirm the continuation of their representatives / members or else send a replacement.

- (a) Dr. Robin Kumar Biswas (Bangladesh),
- (b) Dr. Gwo-Hsing Yu (Chinese Taipei Committee),
- (c) VPH Dr. Karim Shiaty (Iran),
- (d) Mr. Mohamad Radzi Bin Abdul Talib (Malaysia),
- (e) Dr. (Ms.) Mu Mu Than (Myanmar), and
- (f) Engr. W.B. Palugaswewa (Sri Lanka)

5. In response, in June 2025, the Chinese Taipei Committee (CTCID) informed the ICID Central Office that Dr. Gwo-Hsing Yu is interested in continuing his membership in ASRWG. Similarly, Dr. Robin Kumar Biswas (Bangladesh) attended the 2nd virtual meeting of the working group held on 28 May 2025. In absence of response from other members/NCs, their membership may be discontinued.

6. **Country membership:** The ICID Central Office sent invitation letters for joining the membership of ICID to Oman; however, response from them is awaited. In May 2025, Vice President Dr. Fuqiang informed the ICID Central Office that he had contacted Mongolia regarding its membership in ICID and noted that Mongolia lacks a specialized national-level agricultural or irrigation department. The agricultural sector in Mongolia is also relatively underdeveloped, posing structural challenges for immediate formal collaboration. Similarly, Dr. Fuqiang is also in

touch with the Democratic People's Republic of Korea (North Korea) for membership of ICID. Dr. Fuqiang will provide further updates at the meeting.

7. The Chair, in consultation with the Vice Chair, Secretary of the WG, and the Central Office, has updated the membership of the WG as given in **Annex 1** (*refer to the electronic version for the latest list*). New nominations, if any, for the membership received will be dealt with suitably after the meeting.

Agenda Item 2: Action taken report by the Chair

8. The Chair will present the action taken report (happenings through the year) on the various proposals/decisions made during the last working group meeting (2024).

Agenda Item 3: Virtual meetings organized during the year

9. The ASRWG organized the virtual meetings on 10 March, 28 May, 25 July 2025, wherein the Chair discussed various activities being undertaken by the WG as part of the Road Map to ICID Vision 2030, such as membership of the group, Special Session during WIF4, internal workshop of the group etc. Minutes of the virtual meetings are available at a dedicated webpage - https://icid-ciid.org/inner_page/152

Agenda Item 4: Road Map to ICID Vision 2030 – Status

10. During the Sydney meeting (2024), the Chair reviewed the Road Map to ICID Vision 2030 (**Annex 2**) and informed the members that the mandated activities such as (1) International Workshop on '*Agricultural Water Management for Food Security: More than Modernization*' in Cooperation with IACID was successfully organized on 01 September 2024, and (2) the Technical Report on '*Irrigation and Drainage for Food Security in Asia*' was completed as per the mandate and the Road Map.

11. Similarly, the working group is organizing a Special Session titled "*Optimizing Water Use in Paddy Irrigation with Advanced Sensing Technologies*" on 10 September 2025 in Kuala Lumpur during the 4th World Irrigation Forum (refer to item 5).

Agenda Item 5: Special Session on "Optimizing Water Use in Paddy Irrigation with Advanced Sensing Technologies", 10 September 2025

12. The Side Event, planned as a Special Session (SS) on "*Optimising Water Use in Paddy Irrigation with Advanced Sensing Technologies*" has been scheduled from 14:00 to 15:30 hours on 10 September 2025.

13. This session is expected to delve into the transformative potential of these technologies in paddy field irrigation, highlighting their applications and benefits. Participants may discuss challenges and explore solutions for improving paddy irrigation management. By gaining access to the latest insights and tools, attendees may be equipped to enhance rice productivity, optimize water management, and contribute to sustainable agricultural practices. **Annex 3** describes the scope and the objectives of the session.

14. Speakers from Thailand, South Korea, Japan, and Tajikistan have been identified besides ADB and IWMI. Dr. Nuchanart Sriwongsitanon (Thailand), the Chair of the Task Team, may provide further updates, if any.

Agenda Item 6: Organization of the Internal Workshop

15. The Internal Workshop will take place during the Session-II of the Annual Meeting on 11 September 2025. Please recall, the ASRWG Technical Report on "*Irrigation and Drainage for Food Security in Asia*", containing 9 country / committee reports besides international perspective from ADB and IWMI, was published in 2024. To enrich this ICID publication, the Vice Chair Dr. Vijay K Labhsetwar (India) requested (13 April 2025) Country Reports from countries who have not contributed so far. In response, Nepal and Uzbekistan have submitted their reports, which have since been reviewed. Therefore, Nepal and Uzbekistan are expected to make their presentations in the Internal Workshop. To enrich the proceedings, ADB and IWMI are further expected to make their presentations on "*Urgent Issues in Irrigation and Drainage in the Asian Region: ASRWG's Immediate Action Plan*".

16. Vice Chair Dr. Vijay Labhsetwar may provide an overview of the workshop structure and updates, if any.

Agenda Item 7: Strengthening linkages among NCs

17. The joint meeting of the National Committees of Iran and Tajikistan was held on 29 September 2024 in Tehran, marking a significant milestone in fostering bilateral and regional cooperation in water management and agriculture. The participation of high-level officials from both countries underscores the importance of this collaboration. The meeting highlighted the mutual interest in leveraging each other's scientific and technical expertise. Representatives' from Iran/Tajikistan may share the outcome of this joint meeting.

18. Members may explore new ways to strengthen the linkages among NCs. The Chair may provide further updates, if any, at the meeting.

Agenda Item 8: Collaboration with the International Society of Paddy and Water Environment Engineering (PAWEES) and International Network of Water Environment and Paddy Fields (INWEPF)

19. The 19th INWEPF Steering Meeting and Symposium was held from 12-14 December 2024 in Chonburi District, Thailand. The Symposium was organized under the theme "*Promoting Innovative Paddy Farming to Achieve Carbon Neutrality*", focusing on the development of innovations and technologies that help reduce environmental impacts while addressing the world's food security needs sustainably. VP Dr. Watchara Suiadee, Chairman of Thai National Networks for Water and Ecosystem in Paddy Fields (INWEPF-THAI), discussed the progress of water management projects in paddy fields, resource conservation, and the development of technologies that address sustainability. Dr. Marco Arcieri, President, ICID, officially opened the meeting, highlighting that rice cultivation in many countries has advanced significantly, not only through the adoption of modern technologies but also with a deep commitment to environmental issues and sustainability. VP Dr. Watchara Suiadee (INWEF-THAI) may share the outcome of this Symposium.

20. The Chair Watanabe (Japan) may provide further updates at the meeting.

Agenda Item 9: ICID Members' Profile Section – Status

21. ICID has provided WG members access to their profile section using their dedicated account. ICID CO vide email dated 9 July 2021 <<https://icid.bmeurl.co/C7D4D2E>> informed all members on how to access their accounts and change their passwords to maintain accuracy of profiles. Members are requested to review and update their information using their credentials and help ICID Central Office to maintain accurate information.

Agenda Item 10: World Irrigation and Drainage Schemes (WI&DS) - updates

22. ICID has taken the initiative to document the development of irrigation and drainage schemes in the world by establishing an online Register on "World Irrigation and Drainage Schemes (WI&DS)". WI&DS will fulfil the need for a much-awaited global repository of information in systematic irrigation and agricultural water management. Irrigation projects having 5000 Hectares and above of Command Area can submit their information for inclusion in the register. The irrigation projects approved by the National Committee/ ICID Central Office for inclusion are entitled to Certification. The members are requested to urge all irrigation and drainage scheme owners, managers, and researchers across the world, and especially in their respective countries, to contribute to the register. The review process and other details are outlined on the portal <https://icid-ciid.org/inner_page/226> in detail.

Agenda Item 11: Any other business (with permission of the Chair)



NOTES FOR CHAIRPERSON:

1. Draft minutes of this meeting to be submitted to ICID Secretariat at Kuala Lumpur after the meeting.
2. Chair to participate and present the WG report to PCSO meeting on 11 September 2025.

A. Membership of the Working Group

Sl. No.	Countries (Year of joining)	Present representatives (Year of Joining)	2023		2024		2025	Remarks
			Virtual meetings - March, April, July, October 2023	74 th IEC, 5 Nov. 2023	Virtual meetings, 26 June 2024	75 th IEC, 4 Sept. 2024	Virtual meetings - March, May 2025	
1.	Japan (1951)	VPH Dr. Tsugihiko Watanabe, Chair, 2020 (2019)	•	• ¹	•	•	•	
2.	India (1950)	Dr. Vijay K Labhsetwar, Vice Chair, 2020 (2018)	•	•	•	•	•	
3.	Turkey (1954)	Dr. Aynur Fayrap, Secretary, 2020 (2012)	•		•		•	
4.	Australia (1952)	Mr. Momir Vranes (2021)	•	•		•		
5.	Australia (1952)	Mr. David John Cameron (2023)	•	•	•	•		
6.	Bangladesh (1973)	Dr. Robin Kumar Biswas (2022)					•	
7.	Bangladesh (1973)	Dr. (Ms.) Nazmun Nahar Karim (2022)	•					
8.	China (1963)	Mr. Dang Ping (2021)		•		# ²		
9.	China (1963)	Ms. Li Ruoxi – Young Professional (2021)	•	•	•	•	•	
10.	Chinese Taipei Committee (1969)	Dr. Ray-Shyan Wu (2018)	•		•	•	•	
11.	Chinese Taipei Committee (1969)	Dr. Gwo-Hsing Yu (2015)						CTCID confirmed his contribution
12.	Chinese Taipei Committee (1969)	Dr. Tony Chih-Sheng Chen (2022)	•	•		•		
13.	India (1950)	Mr. Rajni Kant Agrawal, Direct Member - WAPCOS (2021)	#				•	
14.	India (1950)	Dr. Arvind Kumar - Direct Member, IWF (2023)	•				#	
15.	Indonesia (1950)	VPH Dr. Mochammad Amron (2015)	•	•	•	•	•	
16.	Iran (1955)	VPH Karim Shiati (1997)						No contribution, recommended for discontinuation
17.	Iraq (2006)	Eng. (Ms.) Zainab Saleem – Young Professional (2021)	•	#			•	
18.	Iraq (2006)	Mrs. Shaimaa Shihab Ahmed (2021)		#				
19.	Japan (1951)	Mr. Toru OKUDA (2022)	•	•		•	•	
20.	Japan (1951)	Dr. Masaomi Kimura (2023)	•	•	•	•	•	
21.	Kazakhstan (2006)	Representative from KAZCID						Requested for nomination
22.	Malaysia (1958)	Ir. Syed Abdul Hamid bin Syed Shuib (2013)	#					
23.	Malaysia (1958)	Mr. Mohamad Radzi Bin Abdul Talib (2022)						No contribution, recommended for discontinuation
24.	Myanmar (1962)	Dr. (Ms.) Mu Mu Than (2017)						No contribution, recommended for discontinuation
25.	Nepal (1973)	Mr. Sanjeeb Baral (2024)	#			•	•	

¹ Attended by Self

² Represented by someone

Sl. No.	Countries (Year of joining)	Present representatives (Year of Joining)	2023		2024		2025	Remarks
			Virtual meetings - March, April, July, October 2023	74 th IEC, 5 Nov. 2023	Virtual meetings, 26 June 2024	75 th IEC, 4 Sept. 2024	Virtual meetings - March, May 2025	
26.	Pakistan (1953)	Mr. Ahmed Kamal (2017)	#		•		•	Replaced by Mr. Ather Hameed
27.	Philippines (1956)	Representative from PNC-ICID						Requested for nomination
28.	Saudi Arabia (1977)	Representative from SACID						New nomination received
29.	South Korea (1970)	Prof. (Ms.) Kyung Sook Choi (2015)	•			#	•	
30.	Sri Lanka (1950)	Eng. W.B. Palugaswewa (2016)						No contribution, recommended for discontinuation
31.	Sri Lanka (1950)	Eng. (Ms.) Talatha Janaki Meegastenna (2022)	•		•		•	
32.	Tajikistan (1997)	Representative from TAJCID	#		#	#	#	Nominations received
33.	Thailand (1950)	Mr. Arthon Suttigarn (2012)		#	•		•	
34.	Thailand (1950)	Prof. Dr. (Ms.) Nutchant Nutchanon (2024)				•	•	
35.	Thailand (1950)	Dr. Noppadon Kowsuon (2024)				•	•	
36.	Turkey (1954)	Mr. Egemen Gürsoy (2023)	•		•			
37.	Uzbekistan (1994)	Mr. Ilkhom Juraev (2015)	•					

B. New nominations received from the National Committees

Sl. No.	Name	Country	Remarks
1	Mr. Ather Hameed (<i>in place of Mr. Ahmed Kamal</i>)	Pakistan	Recommended as a member as he attended the virtual meeting on 28 May 2025
2	Eng. Mohammed Abdullah Al-Samhan	Saudi Arabia	Recommended as a member, subject to his presence, else a provisional member
3	Dr. Bakhrom Gaforzoda	Tajikistan	Recommended as a member as he attended the virtual meeting on 10 March 2025
4	Mr. Sharif Mahmudov	Tajikistan	Recommended as a member as he attended the virtual meetings on 28 May and 10 March 2025
5	Mr. Yuldoshev Umedjon	Tajikistan	Recommended as a member, subject to his presence, else a provisional member

Associate Members: Afghanistan, Fiji, Israel, Kyrgyzstan, Syria, Vietnam



ROAD MAP TO ICID VISION 2030 – ACTIVITIES OF WORK BODIES

Goals/ Strategies	Activities	Outcomes/ Outputs	Milestone for 2021	Milestone for 2022	Milestone for 2023	Milestone for 2024	Milestone for 2025
C3. Strategy: Promoting Regional Cooperation	3.5 Enhance Linkages between National Committees for International Cooperation	Technical Report	Enhancement of Linkages between NCs for International Cooperation through Knowledge Sharing and Event organization	Enhancement of Linkages between NCs for International Cooperation through Knowledge Sharing and Event organization	Enhancement of Linkages between NCs for International Cooperation through Knowledge Sharing and Event organization	Enhancement of Linkages between NCs for International Cooperation through Knowledge Sharing and Event organization	Enhancement of Linkages between NCs for International Cooperation through Knowledge Sharing and Event organization
	3.6 Broaden relationship and mutual understanding and cooperation between NCs from developing countries and developed countries	Collaboration/ MoU	Exchange visits/ training between NCs MoU between NCs	Exchange visits/ training between NCs MoU between NCs	Exchange visits/ training between NCs MoU between NCs	Exchange visits/ training between NCs MoU between NCs	Exchange visits/ training between NCs MoU between NCs
C4. Strategy: Compile, Collate and Share Knowledge and Experiences	4.4 Special joint Publication on Agricultural Water Management for Sustainable Rural Development	Side Event with AARDO (African-Asian Rural Development Organization) (held in 2018)	Review of the Process, Organization, and Outcomes of the 8th Asian Regional Conference, May 2018, Nepal	MoU between NCs	Collaborated Preparatory Works for the 9th Asian Regional Conference with IACID	Workshop in 9th Asian Regional Conference, Sep. 2024, Australia.	Special Session "Optimizing Water Use in Paddy Irrigation with Advanced Sensing Technologies", in the 4 th World Irrigation Forum, Sep. 2025, Malaysia
			WG Workshops on Impacts of COVID-19 on Agricultural Water Management in Asia	Participation in 9th World Water Forum(WWF9), March 2022, Senegal			
				Participation in 4th Asia-Pacific Water Summit (APWS4), April 2022, Japan			
4.21 Report on "Contribution of Agricultural Water to the Rural Development in Asia"	Technical Report was published in 2018		Workshop on Irrigation and Drainage for Asian Food Security in Asia, in 73rd IEC, Oct. 2022, Australia	Workshops on Irrigation and Drainage for Asian Food Security in Asia, in 74th IEC, Nov. 2023, India	The formal release of the Report at 9th ARC, Sep. 2024, Australia	The update of the Report "Irrigation and Drainage for Food Security in Asia"	
D3. Strategy: Facilitate Development of Intersectoral Platforms Involving NCs	3.1 Developing inter-sectoral engagement		Collaboration with PAWEES and INWEPF	Collaboration with PAWEES and INWEPF	Collaboration with PAWEES and INWEPF	Collaboration with PAWEES and INWEPF	Collaboration with PAWEES and INWEPF
			Organizing multisectoral events /workshops	Organizing multisectoral events /workshops	Organizing multisectoral events /workshops	Organizing multisectoral events /workshops	Organizing multisectoral events /workshops

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



SPECIAL SESSION
Optimizing Water Use in Paddy Irrigation with Advanced Sensing Technologies

10 September 2025, 14:00-15:30 hours during WIF4, Malaysia

Hosted by

ICID ASIAN REGIONAL WORKING GROUP (ASRWG)

INTRODUCTION

Amid escalating climate variability and intensifying global food demand, the efficient management of agricultural water resources has emerged as a critical priority. Conventional irrigation practices frequently contribute to water inefficiencies and yield instability, particularly in high-consumption systems such as paddy cultivation. Addressing these issues necessitates the adoption of advanced technologies, which are increasingly being integrated into contemporary agricultural systems to revolutionize water resource management.

SCOPE

Water management is a critical challenge in agriculture, particularly in water-intensive sectors such as paddy cultivation. As global water resources diminish and agricultural water demands rise, optimizing water use is essential to ensure food security and promote environmental sustainability. The integration of advanced technologies, including remote sensing, IoT sensors, UAVs (drones), data analytics, and machine learning, is transforming water management by enabling precise monitoring and efficient resource utilization.

This session will delve into the transformative potential of these technologies in paddy field irrigation, highlighting their applications and benefits. Remote sensing, which employs satellite imagery, UAVs, and aerial sensors, collects high-resolution, real-time data on soil moisture, crop health, and water distribution. Such insights enable farmers to make data-driven decisions, such as applying targeted irrigation to avoid overwatering or under watering and adjusting practices to address areas experiencing water stress or excess moisture.

In addition to monitoring soil moisture, remote sensing can track other critical environmental factors, including temperature and humidity. When combined with IoT sensors and UAVs, these systems facilitate continuous observation of large agricultural areas. Machine learning further enhances this capability by analysing collected data to predict future water needs, identify inefficiencies, and optimize irrigation schedules. By correlating environmental data with crop-specific requirements, these technologies allow farmers to adapt irrigation strategies dynamically, conserving water while improving productivity.

This event will showcase cutting-edge sensing technologies and their applications in paddy irrigation. Participants may discuss challenges and explore solutions for improving irrigation management. By gaining access to the latest insights and tools, attendees may be equipped to enhance rice productivity, optimize water management, and contribute to sustainable agricultural practices.

OBJECTIVES

1. **Explore Advanced Technologies**
Discuss the role of remote sensing, IoT sensors, UAVs, data analytics, and machine learning in optimizing water management for rice cultivation.
2. **Enhance Precision Irrigation**
Highlight how real-time monitoring of soil moisture, crop health, and water distribution enables targeted irrigation to prevent overwatering and under watering.
3. **Integrate Data-Driven Decision Making** Demonstrate how environmental data, combined with machine learning, can predict water needs, optimize irrigation schedules, and improve resource efficiency.
4. **Address Challenges in Water Management** Identify issues related to paddy field irrigation and explore innovative solutions to enhance water conservation and productivity.
5. **Promote Sustainable Agriculture**
Equip participants with the latest insights and tools to improve rice production while ensuring environmental sustainability.

Coordinators:

- (1) Dr. Nuchanat Sriwongsitanon, THAICID (E-mail: fengnns@ku.ac.th)
- (2) Dr. Vijay K Labhsetwar, Vice-Chair, ASRWG (E-mail: vijaylabh@gmail.com)

