

Asia Pacific Centre for Ecohydrology (APCE) – UNESCO C2C

UNESCO C2C International Symposium in Kuala Lumpur – Malaysia, 15 – 17 May 2024

Prof. Dr. Ignasius D.A. Sutapa, MSc. Executive Director

History of APCE Establishment

Prof. Hery Harjono Prof. Gadis Sri Haryani Dr. Tri Widiyanto

Prof. Peter Hehanusa Prof. Jan Sopahaeluwakan **Prof. Umar Anggara Jenie Prof. Lukam Hakim**

2006

2009

Establishment of the APCE

Chairman of LIPI

Preparatory Committee by the

Formation of APCE at the 35th UNESCO Conference in Paris

Prof. Shahbaz Khan

Dr. Giuseppe Arduino

Prof. Soontak Lee

Prof. Roseli Abidin

Prof. Kaoru Takara

Agreement between the Government of Indonesia and **UNESCO**

2011

Prof. Hidayat pawitan

Prof. Robert Delinom

Dr. Deny Hidayati

Dr. Munasri

Entry into force of APCE

2012

APCE Periodic Review and **Evaluation by UNESCO**

2017

Prof. Iskandar Zulkarnain

Prof. Zainal Arifin

Dr. Tarig Rana

Chairman UNESCO RSC IHP Asia Pacific

Status Renewal Process of APCE

2019

2022

Declaration of Asia Pacific Ecohydrology in Fiji

Shift in the UNESCO Program of Science to Society

1980

2003

The UN Agenda 2030 for SDGs

2030

APCE's Target Achievement

Task & Function of APCE as Category II Centre of UNESCO

- 1. Scientific Research: Create the Research Program & Coordinating the Collaborative Research Projects in the Field of Ecohydrology in the Asia Pacific Region
- 2. Training & Capacity Building: Create and Conduct the Training Program and Public Awareness related Ecohydrology Field in the Asia Pacific Region & International
- **3. Networking:** Participate and Organize the Scientific Community Meetings and Initiating Ecohydrology Field-based Collaborative Works
- 4. Scientific Reference: Publications

UNESCO C2C MANDATES

- SCIENTIFIC RESEARCH
- CAPACITY-BUILDING
 - KNOWLEDGE-SHARING
 - RAISING PUBLIC AWARENESS
- NETWORKING

4 STRATEGIC GOALS

- □ To promote local resources based on ecohydrological research
- ☐ To strengthen local capacity to adopt ecohydrological concepts and approach
- □ To provide easy access to local resources based on ecohydrological information and knowledge
- ☐ To enhance public awareness of local resources based on ecohydrological practices



Recent Activities

Collaboration & Networking

- Different themes of the webinar were organized in collaboration with:
 - Ministry of Health
 - Ministry of Communication and Informatics
 - BSSN
 - Lemhanas
 - Universities
 - RSPAD Gatot Subroto
 - UNESCO
 - HTC-KL, Malaysia
 - RC-IRBM, Abuja Nigeria

Contribution to UNESCO IHP IX

- 1. Vice Chairman of UNESCO IHP IX Working Group on Ecohydrology and Water Quality.
- Leader of Priority Area 4.6. Ecosystem Services
- 3. Core Members of UNESCO HQ Ecohydrology Scientific Advisory Committee

Regional and International Meetings

- The 29th IHP Regional Steering Committee Meeting for Asia and the Pacific (RSC-AP), 21–24 February 2023 in Tsukuba, Japan.
- UNESCO HQ Ecohydrology Scientific Advisory Committee Meeting. Beijing China, 15 September 2023.
- Stakeholders Consultation Meeting of WWF 2024, 11 13 October 2023 in Denpasar Bali, Indonesia.
- The 30th IHP Regional Steering Committee Meeting for Asia and the Pacific (RSC-AP), 8 10 November 2023 in Putrajaya, Malaysia.
- UNESCO National Committees Meeting 7 8 May 2024 in Jakarta Indonesia
- International Symposium of the C2C and Institutes under Auspices of UNESCO 15

 17 May 2024 in Kuala Lumpur Malaysia.
- 10th WWF Bali Indonesia 18 25 May 2024

Contribution to 10th WWF 2024 in Bali - Indonesia

- Chairperson of the Session T2A2: "Water Pollution Dilemma: Accelerating Water Quality Improvement Avoid, Reduce, Recycle, and Reuse to solve the water pollution enigma."
- Speaker of the Session 2A: "Water Quality Improvement"
- Speaker of the Session T2B3:" Evidence for and valuation of waterrelated Nature-based Solutions"
- Speaker of the Session CC06:" The case for water investments that deliver improved local human, societal and nature-based outcomes"
- Speaker of the Session SE44:" Finance applied to water projects"

Flyers of the Sessions in WWF 2024

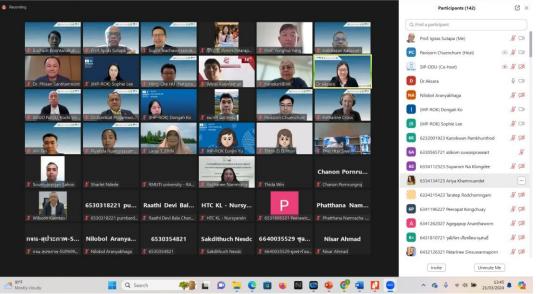




Introducing Ecohydrology in Asia Pacific Region

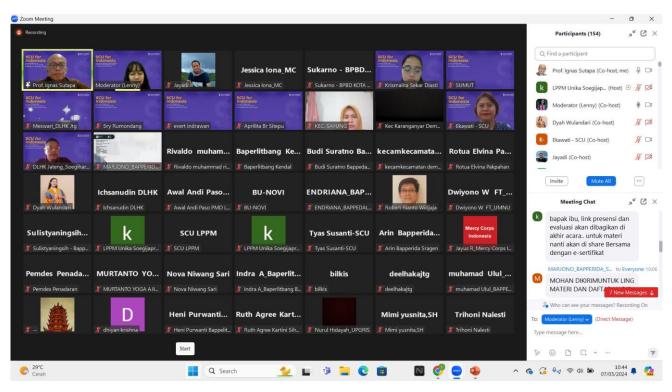
Join Webinar for WWD Celebration, 21 March 2024



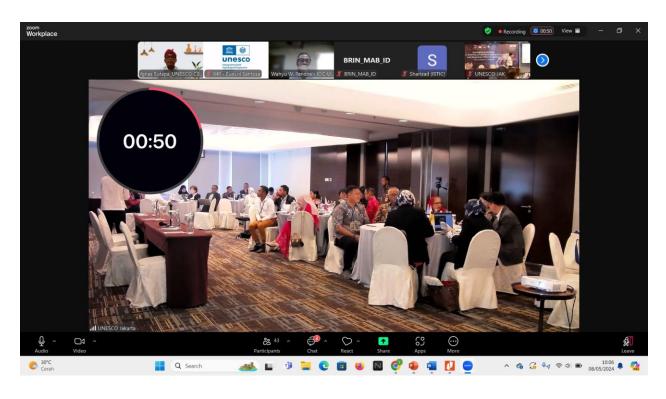


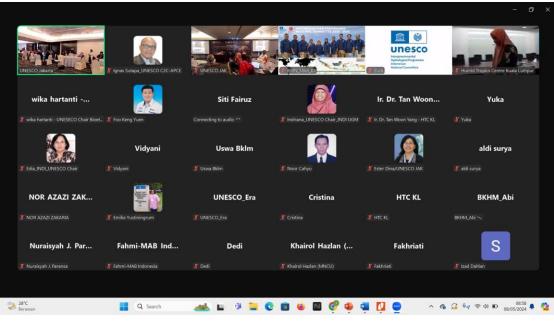
Join Webinar with SCU 7 May 2024





UNESCO National Committee Meeting 7-8, May 2024



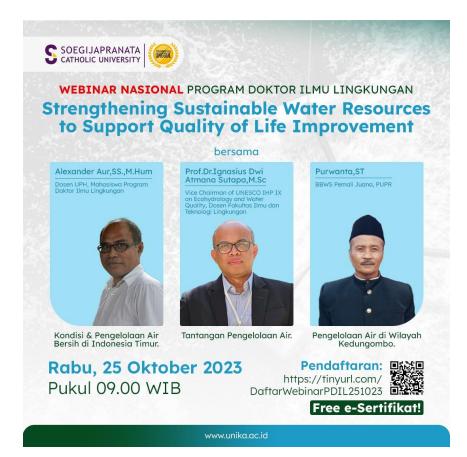


UNESCO RSC IHP for Asia Pacific Region, November 2023





Join the Webinar with SCU 25 October 2023





Recent Activities

Subak Bengkel Tabanan towards UNESCO Ecohydrology Demonstration Site

- Subak is the water management system for the paddy fields and was enlisted as a World Cultural Heritage. One of the unique traditions and cultures still preserved in Bali island.
- Subak, nowadays, has severe challenges:
 - The use of chemicals affecting soil fertility;
 - Tourism activities encouraging land conversion;
 - Upstream development declining water quality;
 - The potential for natural disasters;
 - Climate change triggering rainfall fluctuation.
- Promoting Subak Bengkel Tabanan Bali Province, Indonesia as a New UNESCO Ecohydrology Demonstration Site through:
 - Synergizing different resources inside Subak Bengkel Tabanan in an integrated farming system.
 - Managing land suitability for different plants and times throughout the year.
 - Using technologies for smart agriculture.
 - Replacing gradually the use of chemical fertilizers with eco-friendly and organic fertilizers
 - Integrating Subak management with Edu and ecotourism.



Subak Irrigation System





Water Inlet





Organic Paddy Field





Established Networking of APCE among Others

Institutions

Host of International Events/Activities

Visibility

- 1. HTC KL Malaysia
- 2. RCURBM Nigeria
- 3. Qanat Centre Iran
- 4. ICHARM Japan
- 5. ICCE Portugal
- 6. UNU Tokyo
- 7. Unesco Chair Wendi Kyoto
- 8. UTM Malaysia
- 9. USM Malaysia
- 10. UNIMOR
- 11. UPR
- 12. UGM
- 13. ULM
- 14. IPB
- 15. Kemenlu
- **16. KNIU**
- 17. Indonesia Power
- 18. Balittra Kementan
- 19. Balai Rawa PUPR
- 20. BRG
- 21. GNRSI



- International Webinar on Water, Food and Energy Security was held on July 2020
- 2. Join International Training on Water Resources Management for Young Professionals, in Laos on May 2019
- 3. International Training and Workshop on Water Quality and Emerging Pollutants was held in Jakarta, Indonesia on December 2018
- 4. International Training Course of Ecohydrology was held in Yogyakarta, Indonesia on August 2018
- 5. The 16th Word Lake Conference The 16th Word Lake Conference was held in Bali, Indonesia on November 2017
- 6. Hosting International Conference on Ecohydrology in conjunction with the 22nd IHP-RSC Meeting on November 11-14, 2014
- 7. International Workshop on New Ecohydrology Demonstration Site Projects. Jakarta, Indonesia, 21 23 March 2011

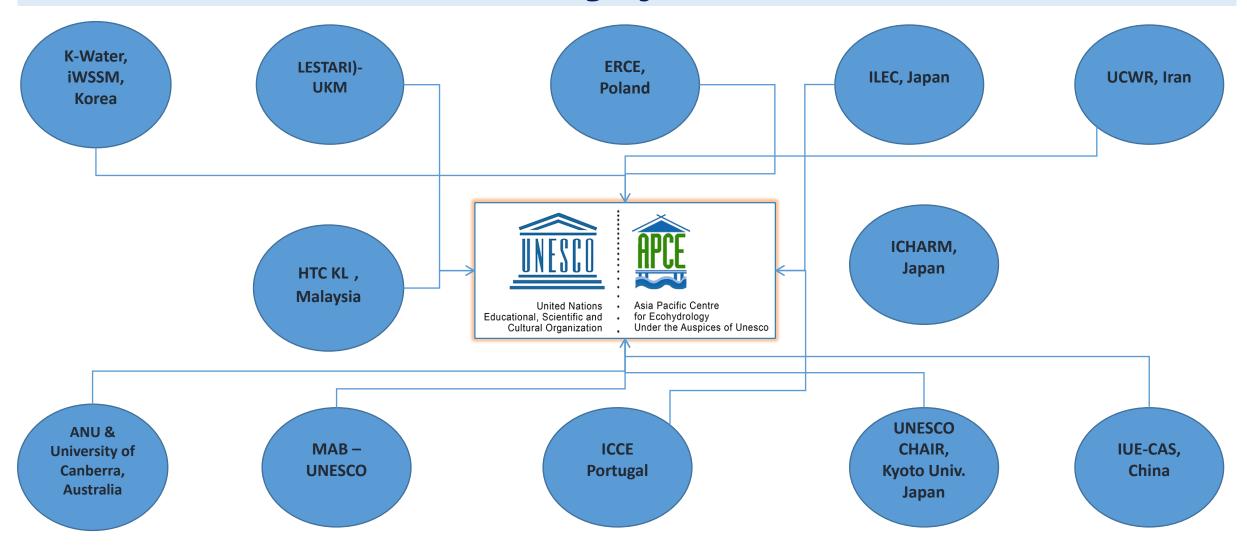


Attend to 39th General Conference of UNESCO in Paris

Attend to Regional Steering Committee IHP Meeting



APCE Collaboration with other Category II Centres and Chairs of UNESCO



Future Plan and Activities

- Facilitate training and capacity building on the ecohydrology concept related to six (6) focus areas: urban, watershed, peatland, traditional irrigation system, small island, arid and semi-arid zone.
- Support and promote establishing an ecohydrology demonstration site in six (6) focus areas.
- Facilitate research and publication activities and collaborations among UNESCO Water Family in the Asia Pacific Region.

Thank You...!