



## SUMMARY REPORT 2021

### ASEAN Hydroinformatics Data Centre (AHC)

March 2022

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#### INTRODUCTION

ASEAN Hydroinformatics Data Centre (AHC), proposed by Hydro - Informatics Institute (HII), Thailand, is the centre under ASEAN Committee on Science, Technology, and Innovation (ASEAN COSTI) and report to Sub-Committee on Microelectronics and Information Technology (SCMIT).

The AHC project is a platform to support data connectivity from ASEAN's water, weather, and disaster related agencies. ASEAN member states can also share their knowledge and technology that could support AHC in data sharing toward its future operation and implementation. AHC is aimed to be an integrated platform for regional knowledge sharing, technology matching, and capacity building on the implementation of Science and Technology to tackle climate change and water/weather-related disaster risk reduction.

The AHC activity in 2021 was participated by delegates from 9 countries, including Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic, Malaysia, the Republic of the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand and the Socialist Republic of Viet Nam. There were three activities and one future plan for the AHC as follows:

#### Summary of AHC Activity in 2021

##### 1. AHC Formal Meeting

1.1 In 2021, AHC Thailand was the host to organize 3 AHC official virtual meetings through Webex meeting as follows:

- The 3<sup>rd</sup> AHC Meeting on 14 January 2021, attended by 30 delegates from 9 countries.
- The 4<sup>th</sup> AHC Meeting on 15 June 2021, attended by 22 delegates from 8 countries except the representatives from Lao People's Democratic Republic.
- The 5<sup>th</sup> AHC Meeting on 20 December 2021, attended by 24 delegates from 8 countries except the representatives from Lao People's Democratic Republic.

##### 2. Highlighted activities:

2.1 Climate-Resilient Agriculture for Disaster Risk Reduction (CRADR) project funded by Asi@Connect project

- The Asi@Connect project is the research project supporting by the European Commission (EC) through the Trans-Eurasia Information Network\* Cooperation Centre (TEIN\*CC) and issued yearly funding for potential Asia-Pacific projects related to technology development or its application
- Hydro – Informatics Institute (HII), representative from AHC Thailand, was granted the “Climate-Resilient Agriculture for Disaster Risk Reduction (CRADR)” in the Asi@Connect 4th Call for Proposals under the collaboration with Asia Pacific Advanced Network’s Agriculture Working Group and Disaster Mitigation Working Group targeted to expand the knowledge to ASEAN through AHC
- The CRADR project aimed to link between international excellence and local expertise to overcome climate-related agricultural disasters at all levels. The project identified the source of necessary information, the meteorological parameters impacted agricultural production, and the affordable and effective tool/ equipment for local people to prepare for this uncertainty.
- All project activities including workshops, knowledge sharing, and relevant learning were participated and shared to AHC members with an intention to scale up the outcome from national (Thailand) to regional (ASEAN) level starting with S&T implementation for small-scale agricultural sector as a prototype.

## 2.2 Sharing of information “AHC Website (www.aseanwater.net)”

- AHC Secretariat, Thailand, has developed AHC Website to provide AHC-related information and acting as the main formal platform and communication channel. In the AHC website, the “Information” page is updated with shared hydro-meteorological information and real-time monitoring data contributed by Thailand, Vietnam, and Singapore. Moreover, the information of Cloud Top Temperature using Japan’s Himawari-8 satellite information, as an integration from Hydro-Informatics Institute (HII) Thailand and Japan Aerospace Exploration Agency (JAXA) collaboration, was also visualized in the AHC website.

## 2.3 Hydroinformatics for Disaster Management in ASEAN (HyDM)

- HyDM was a collaboration between ASEAN CIO Association (ACIOA) and AHC to integrate and accelerate the roles of ICT and Hydroinformatics for disaster risk reduction in the region and exchange past experiences on how to prepare-response-action on approaching disaster. During the 5-month period from August to December 2021, participants has shared their disaster-resilient experiences and collaboratively monitor upcoming events and jointly inform each other of the situation via WhatsApp communication platform. The HyDM could be considered as the starting point to explore the possibility of regional collaboration on hydroinformatics application to support disaster management in ASEAN.
- All participants agreed to set the co-monitoring and warning activities via 3 formal communication channels including: 1) AHC Website ([www.aseanwater.net](http://www.aseanwater.net)), 2) WhatsApp mobile application, and 3) Facebook Page “ASEAN Water Hub” contributed by AHC Myanmar representative.
- The report of “Hydroinformatic for Disaster Management in ASEAN (HyDM)” appears in ANNEX 6 as the following [link](#).

## 3. Selection of new Chairman and Vice-Chair

- Regarding to AHC Term or References, AHC Chairman shall rotate every 2 years based on alphabetical order or voluntary basis. The first period of AHC Chairmanship is from 18 March 2019 – 31 December 2021.
- All AHC members agreed to welcome Prof. Law Wing Keung, Adrian, from Nanyang Technological University (NTU), Singapore, as the new AHC Chairman from 1 January 2022 – 31 December 2023. While Associate Prof. Dr. Huynh Thi Lan Huong from Viet Nam Institute of Meteorology, Hydrology and Climate Change (IMHEN), Ministry of Natural Resources and Environment (MONRE), Vietnam, shall serve as Vice-Chair. HII Thailand will still be served as the AHC Secretariat with collaboration from the new Chairman team.
- The Chairman Handover Report was already submitted to the new Chairman at the end of December 2021.

All details and full reports are appeared in ANNEX 1 – 5 in the following [link](#).

#### **4. Collaboration with other networks**

##### 4.1. ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)

- AHC Secretariat participated in the AHA Centre 10<sup>th</sup> Anniversary to acknowledge the next five years (2021-2025) work plan of AHA Centre. The breakout room, “Risk Assessment and Monitoring, and Prevention and Mitigation”, which focused on disaster information network in ASEAN was related to the core work of AHC and could be connected in the future.

##### 4.2. ASEAN Committee on Disaster Management (ACDM)

- AHC Chairman has introduced AHC to the ACDM brainstorm workshop and consultation meeting to discuss potential contributions of relevant ASEAN Centres on strengthening disaster management in the region.

#### **Future Plan**

##### AHC Knowledge Sharing activity

- “AHC Knowledge Sharing” Workshop will be organized in accordance with the 5 AHC Thematic Areas. All activities will be designed in virtual format, and scheduled as a 3-hour session, every 3 months, start from 2022 – 2023. The theme and topic of each workshop will be based on the shared technology and common interest of members. The participants from relevant agencies and other local partners are welcomed. The workshop is planned in the following order:

<b>Workshop</b>	<b>Topics</b>	<b>Date</b>
1.	TA2: Big Data and Data Analytics	Mar 2022
2.	TA4: Modeling	Jun 2022
3.	TA5: Sustainable Water Management	Sep 2022
4.	TA3: Observation Technology	Dec 2022
5.	TA1: HIC Development	Mar 2023