

PLATFORMS **ON** **WATER RESILIENCE AND DISASTERS** **FOR** **SOCIAL SUSTAINABILITY**

Noriyuki MORI

International Centre for Water Hazard and Risk Management (ICHARM),
Public Works Research Institute (PWRI) -Japan



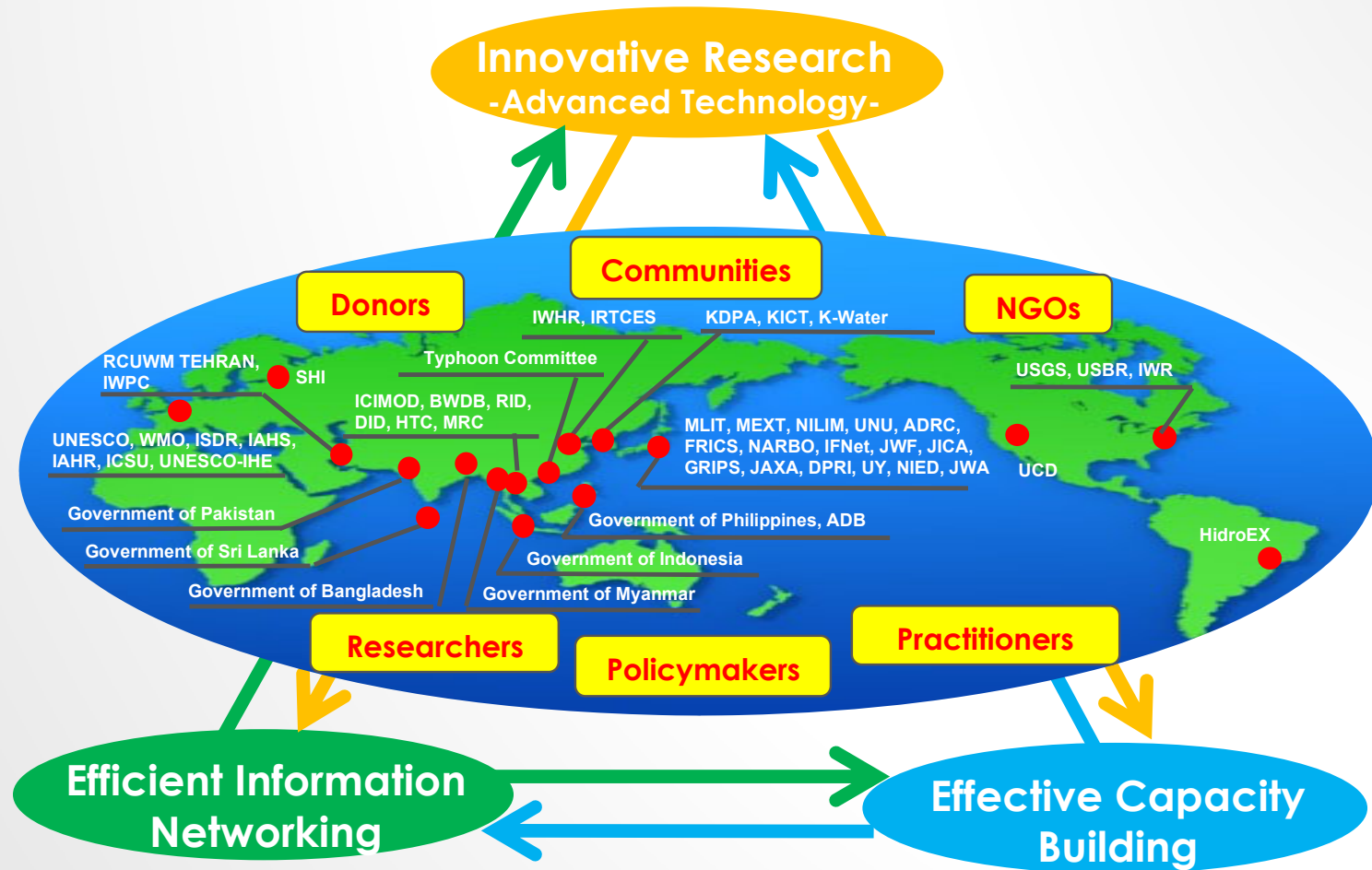
Public Works Research Institute,
National Research and Development
Agency, Japan



International Centre for Water
Hazard and Risk Management
under the auspices of UNESCO

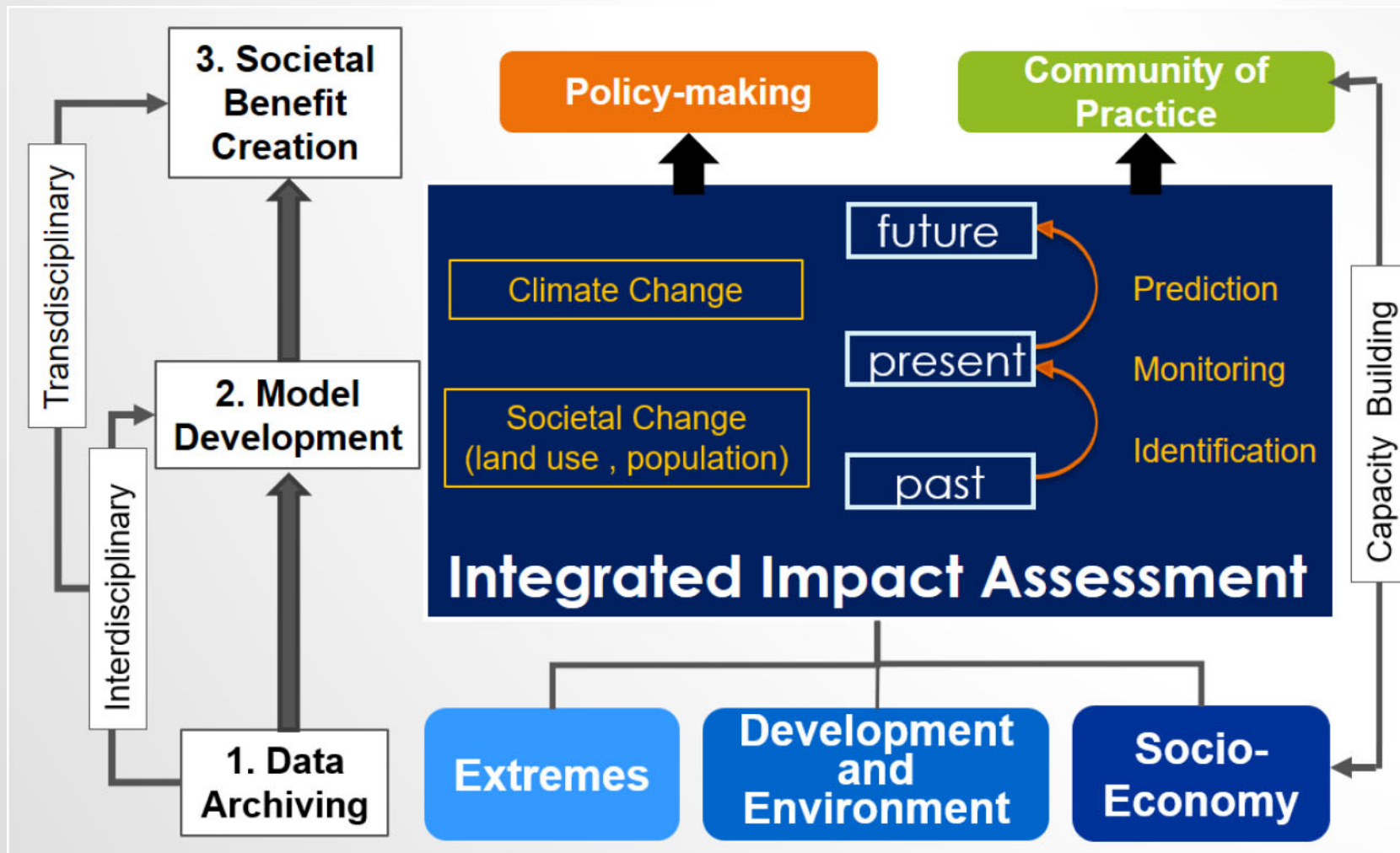


ICHARM 3 missions



Implementing projects by practicing localism through Online Synthesis System for Sustainability and Resilience (**OSS-SR**)

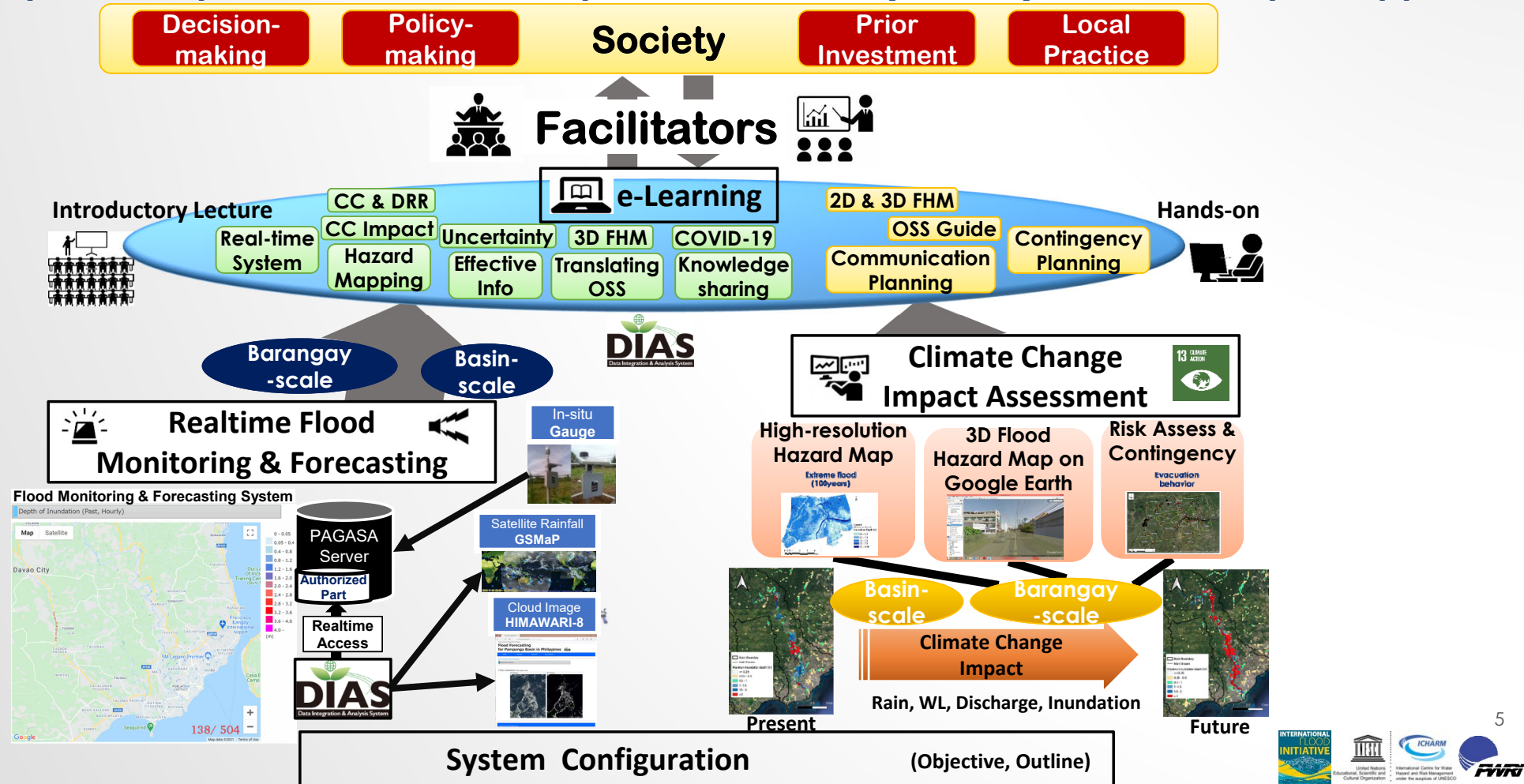
OSS-SR FUNCTIONS



PLATFORM IN **THE PHILIPPINES**

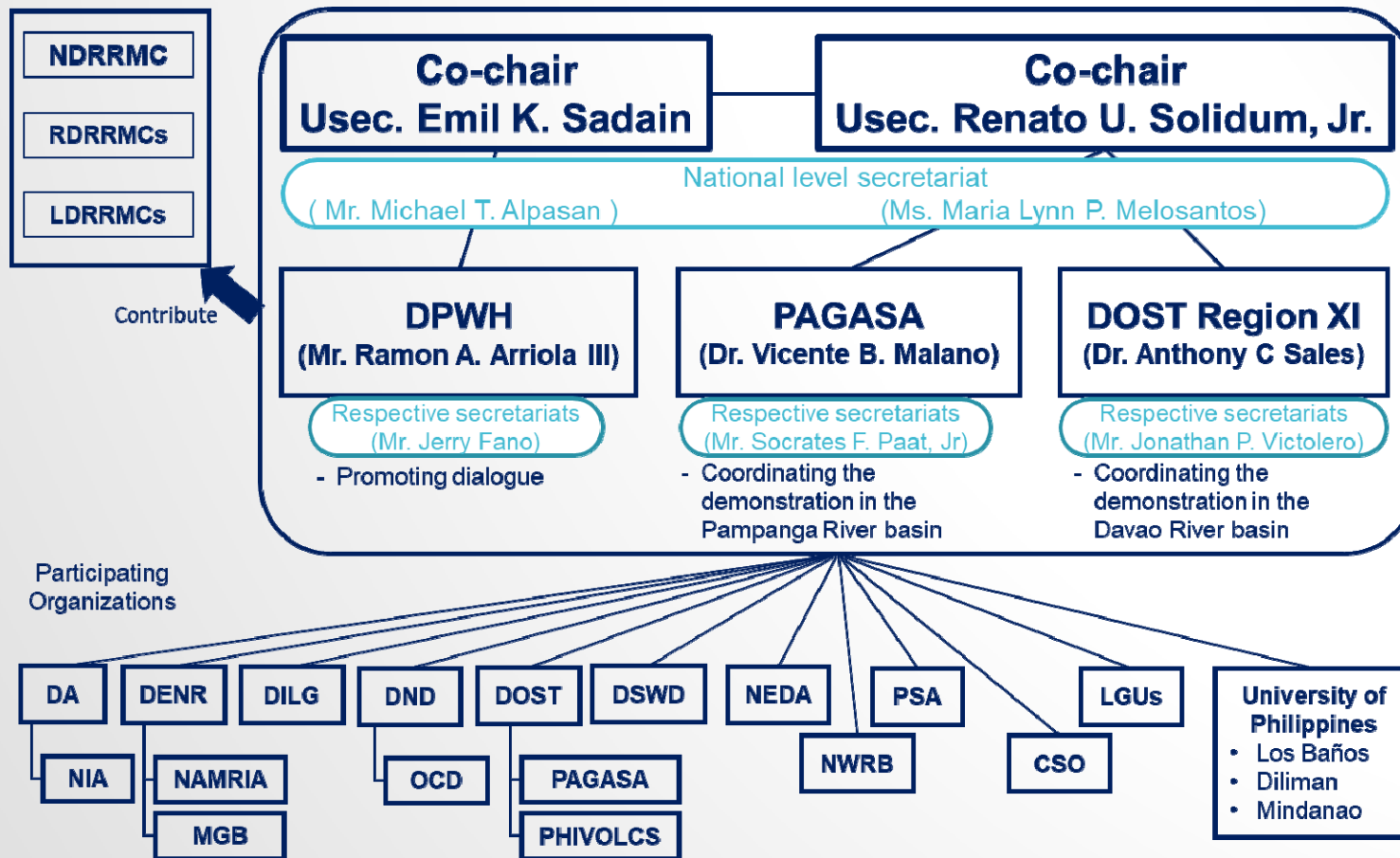
PLATFORM IN THE PHILIPPINES

Online Synthesis System for Sustainability and Resilience (OSS-SR) in Davao City, Philippines

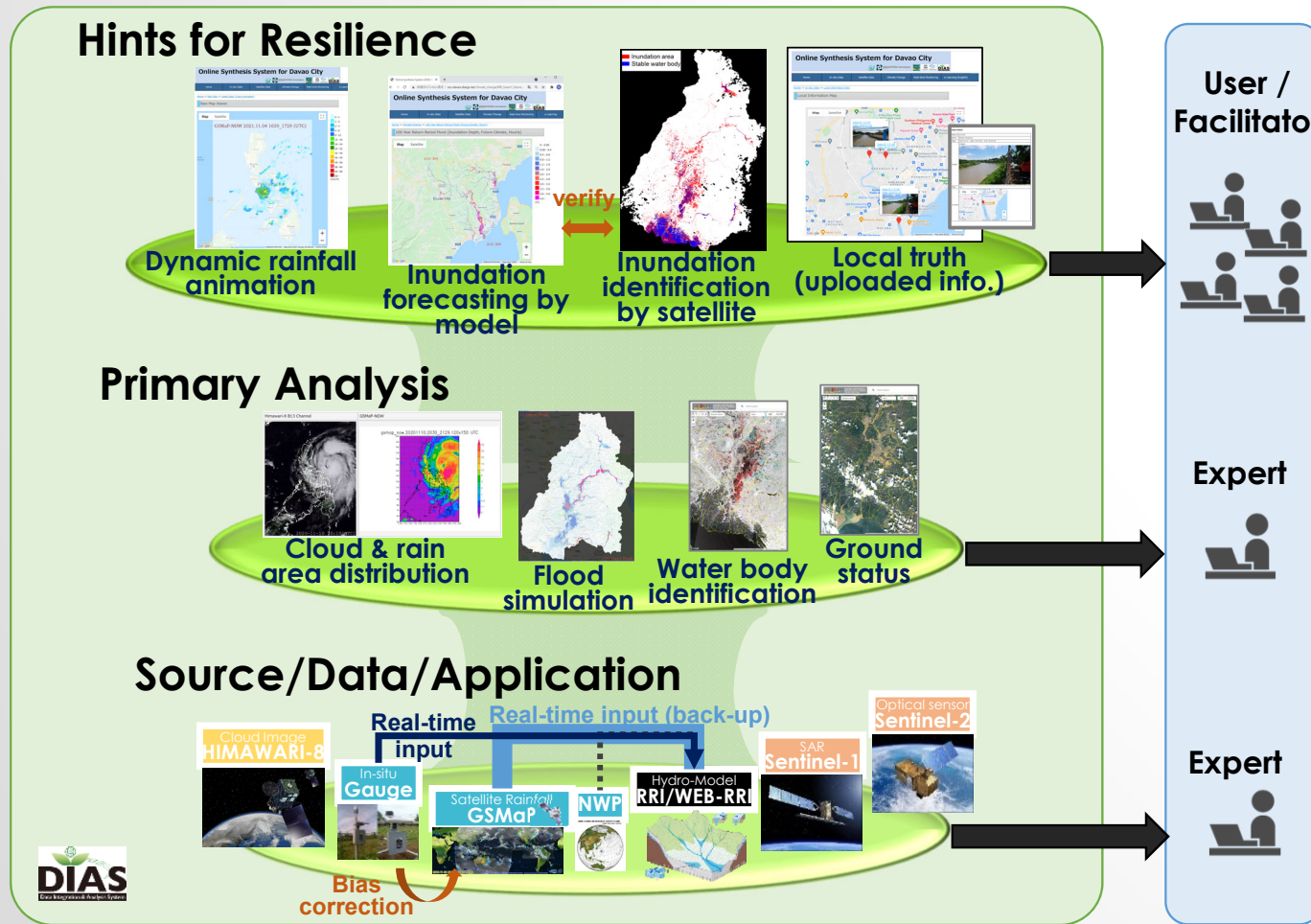


PLATFORM IN THE PHILIPPINES

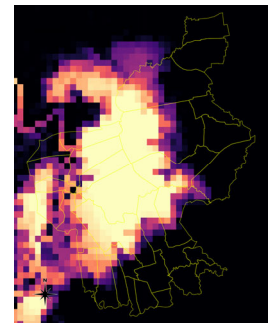
Institutional Platform



PHILIPPINE OSS: FLOOD FORECASTING FOR OPERATIONAL EWS



A robust flood forecasting system by the mobilization of all available data/input has been developed in OSS-SR. The information provision mechanism consists of 3 layers as illustrated in the figure. GSMaP, a satellite-based rainfall, serves as a **backup input** to sustain flood forecasting even if ground gauge rainfall is not available.



Satellite observation (Sentinel-2)

Simulation

Comparison of inundation during Ty. Noru, 2022

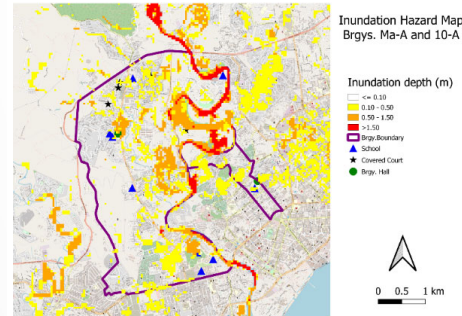
TRAINING WS AND DELIVERABLE

Participants from Different Disciplines

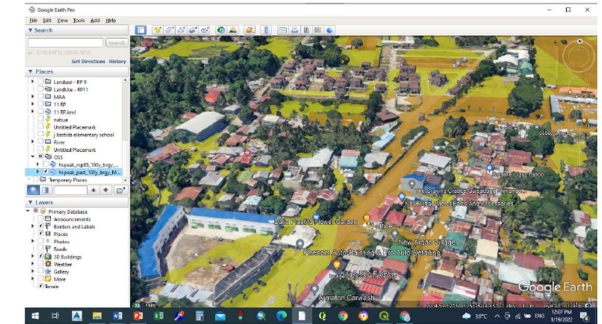
Discipline	1st WS	2nd WS
National Government	11	10
Local Government	2	4
Academe	11	13
Civil Society Organization	1	2
Private Sector	2	1
Media	2	1
TOTAL	29	31

Deliverables of Training

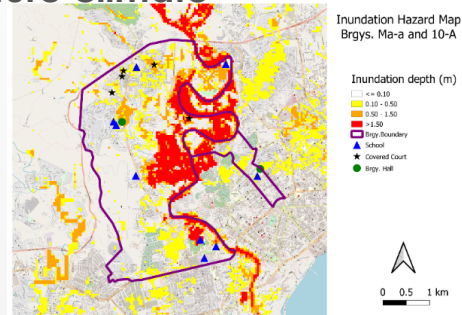
Present climate



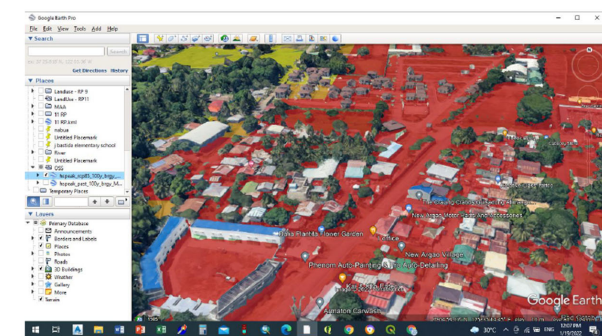
Past 100years



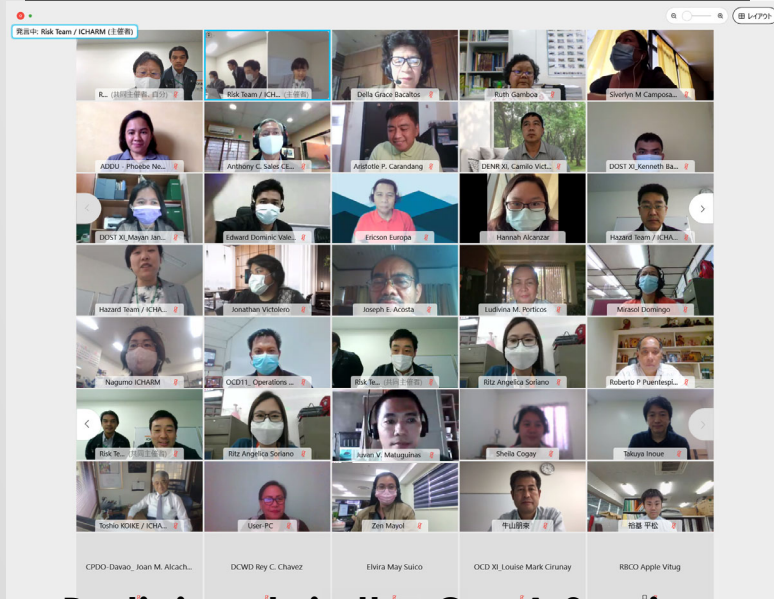
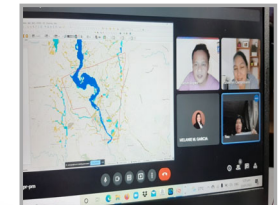
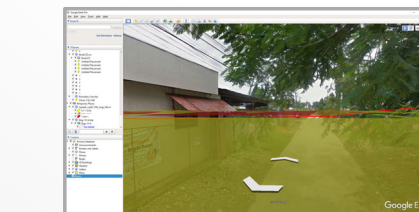
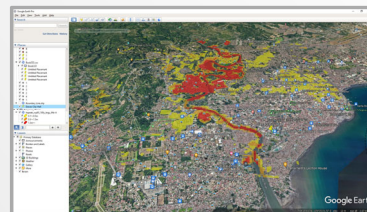
Future climate



RCP85 100 years



Fine Resolution Hazard Map

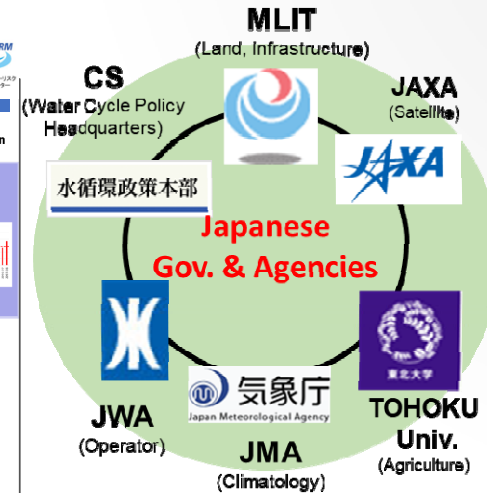
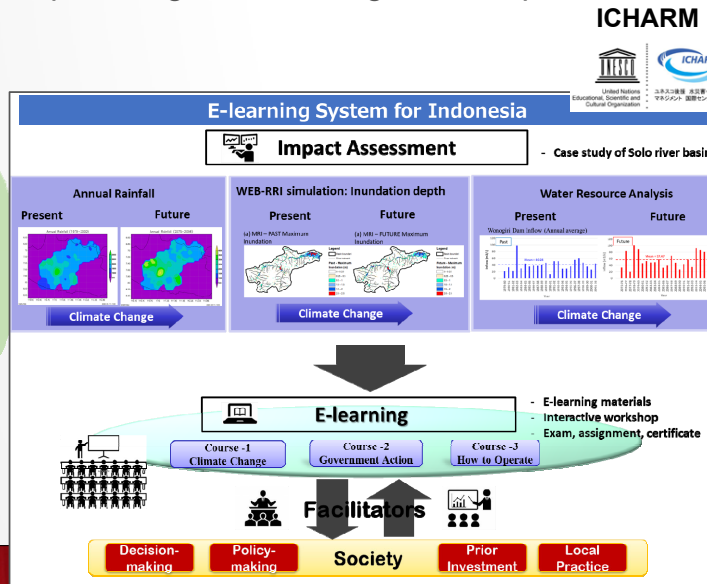
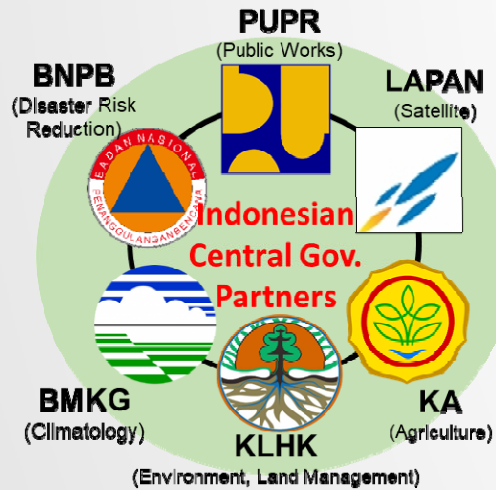


Participants in the Q & A Session

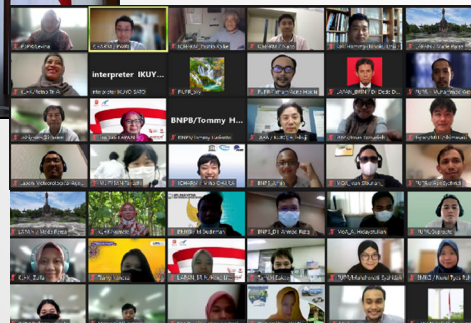
PLATFORM IN **INDONESIA**

E-LEARNING & WORKSHOPS IN INDONESIA

- ✓ In order to strengthening disaster resilience and achieving sustainable development under climate change in Indonesia, ICHARM with Japanese government agencies implemented e-learning & workshops.



-Opening Session-
Video message from the
Minister Basuki, PUPR



Curriculum

- Four (4) lectures on Climate Change (CC)
- Five (5) lectures on Government Action (GOV)
- Four (4) lectures on Operation (OP)

Schedule

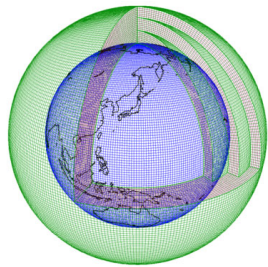
- October 5, Opening Session & CC introduction
- October 12, Workshop Session-1 & GOV introduction
- October 19, Workshop Session-2 & OP introduction
- October 26, Workshop Session-3 & Assignment
- November 5, Closing Session

The one-month e-learning course completed on Nov. 5.
32 experts from 6 organizations successfully got the certificate

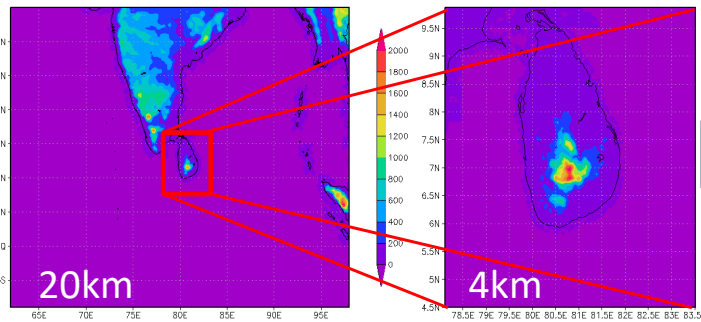
PLATFORM IN SRI LANKA

Sri Lanka OSS: Numerical Model setting

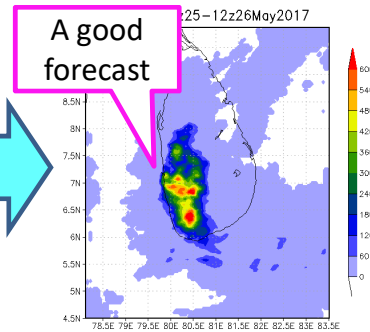
NCEP Global Forecast System (GFS)



Regional NWP model (WRF)



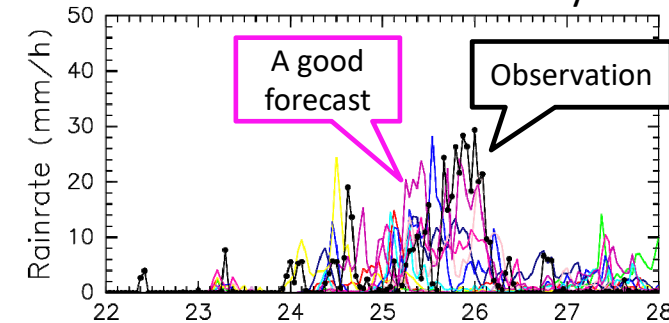
Rainfall distribution



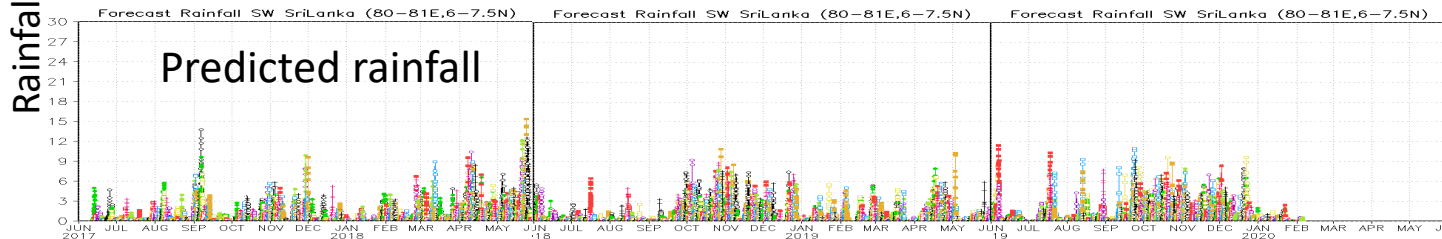
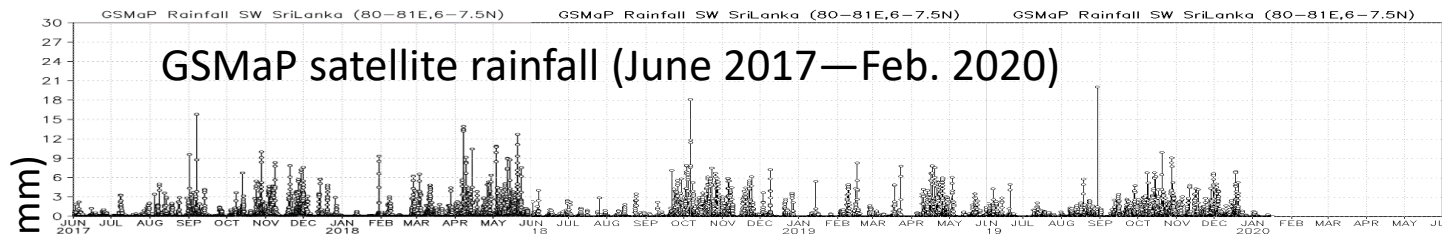
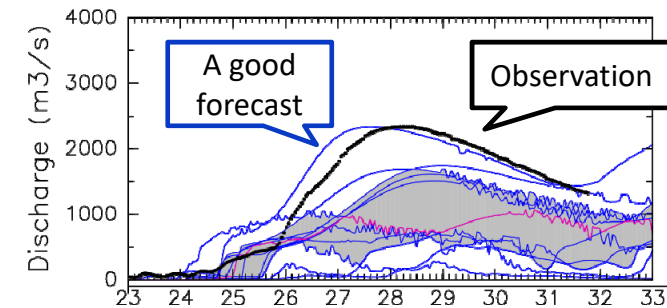
Forecast from 18UTC for 72hours is available at around 01UTC next day.



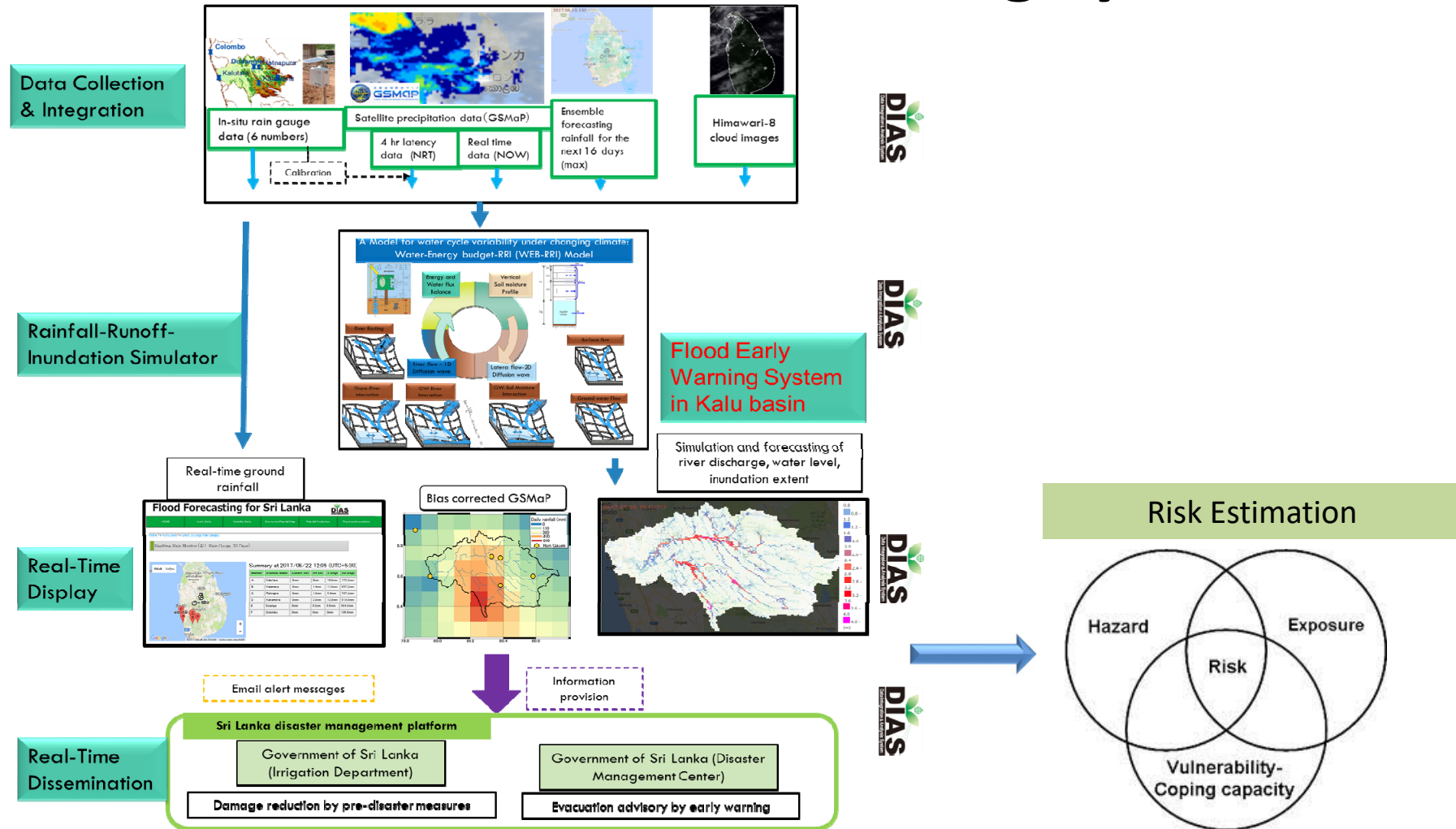
Rainfall Forecast from May 23



Discharge Forecast from May 23, Putu



Sri Lanka OSS: Flood Forecasting System



<http://ff-srilanka.diasjp.net>

PLATFORM IN SRI LANKA



2nd Plenary Session of the Platform on Water Resilience and Disasters under IFI



2nd Plenary Session of the Platform on Water Resilience and Disasters under IFI

Participating Stakeholders

- Irrigation Department
- Disaster Management Center
- Meteorological Department
- National Building Research Organization
- Mahaweli Authority



3rd Plenary Session of the Platform on Water Resilience and Disasters under IFI

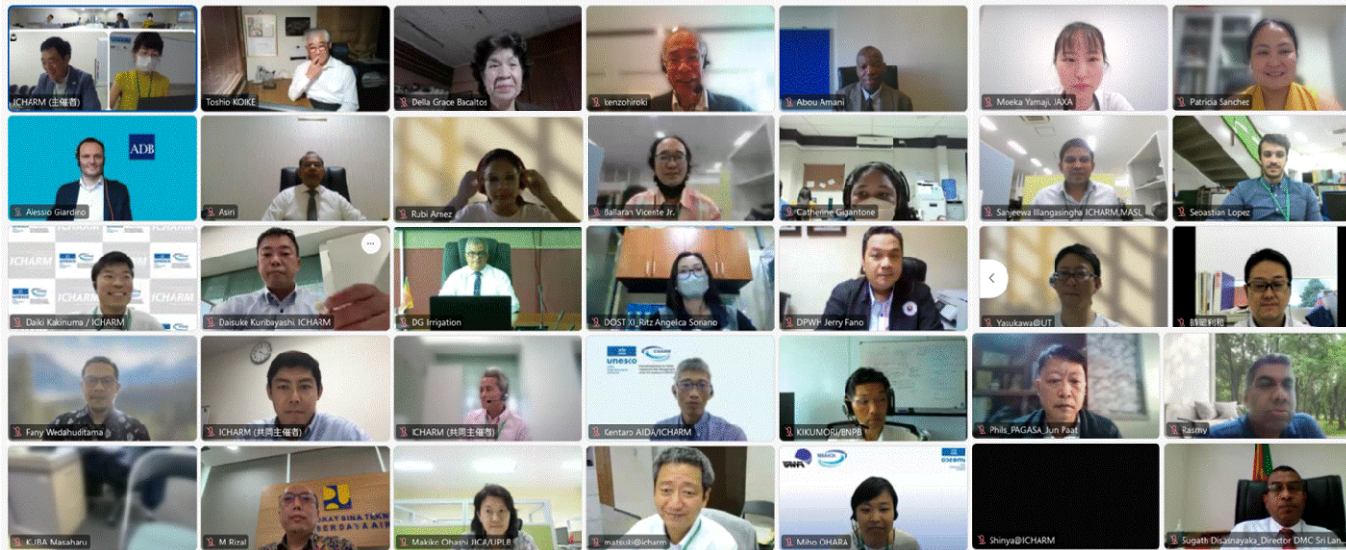


4th Plenary Session of the Platform on Water Resilience and Disasters under IFI

REGIONAL COOPERATION AMONG PLATFORMS

Regional Cooperation through AO GEO (Asia-Oceania Group on Earth Observations)

September 21 2022, ONLINE



October 24-26, 2018,
Kyoto, JAPAN

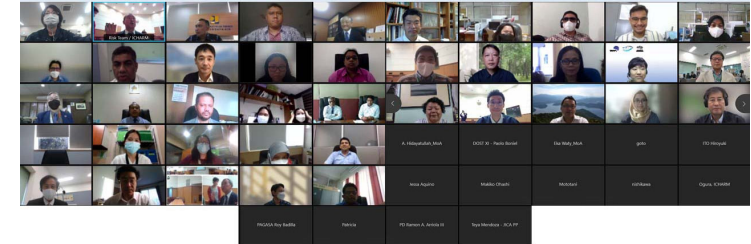
November 3, 2019,
Canberra, Australia



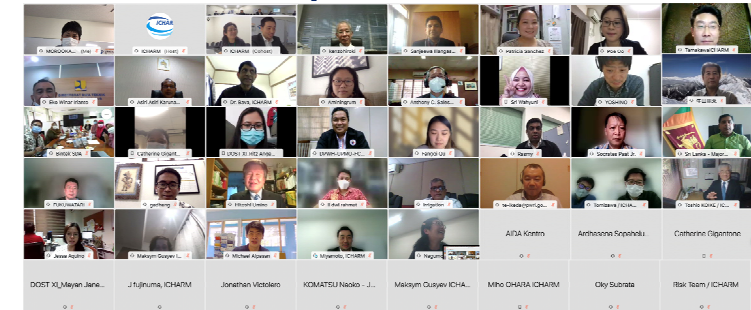
2022 AO GEO Statement (excerpted)

By enhancing the functions of the OSS-SR and the Facilitators and promoting water cycle consilience, Asian Water Cycle Initiative (AWCI) will continue to support the Platforms and their cross-sectoral decision making at local to national levels in order to promote transformation into quality-oriented societies that are resilient, sustainable, and inclusive.

October 29 2021, ONLINE



February 26 2021, ONLINE



An aerial photograph of a densely populated city, likely Davao City in the Philippines, featuring a prominent river winding through the urban landscape. The city is characterized by a high density of buildings with colorful roofs. In the background, a range of mountains is visible under a clear sky. The text 'Thank you so much for your kind attentions!' is overlaid in large white font across the upper portion of the image.

Thank you so much
for your kind attentions!

Davao City, Philippines, 2019