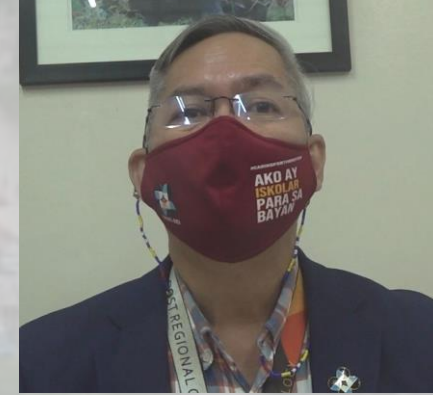




United Nations
Educational, Scientific and
Cultural Organization



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



**AWCI Session for the 15th AOGEO Symposium
September 21, 2022**

Country Report on the Platforms on Water Resilience and Disasters PHILIPPINES

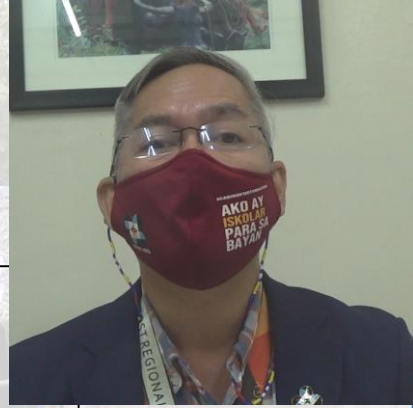


Dr. Anthony C. Sales, CESO III
Regional Director, DOST XI



Dr. Della Grace Bacaltos
Professor, Davao del Sur State College

PLATFORM on Water Resilience and Disasters



National

Data
Integration

Early
Warning

Climate Change
Assessment

Region

Davao (Davao
River Basin)

Central Luzon-NCR-
CALABARZON

SATREPS

Davao HELP
Network

Early Warning

CCA

Water-related Disaster

Environment

Agriculture

Economics

**AOGEO
AWCI**

OSS-SR

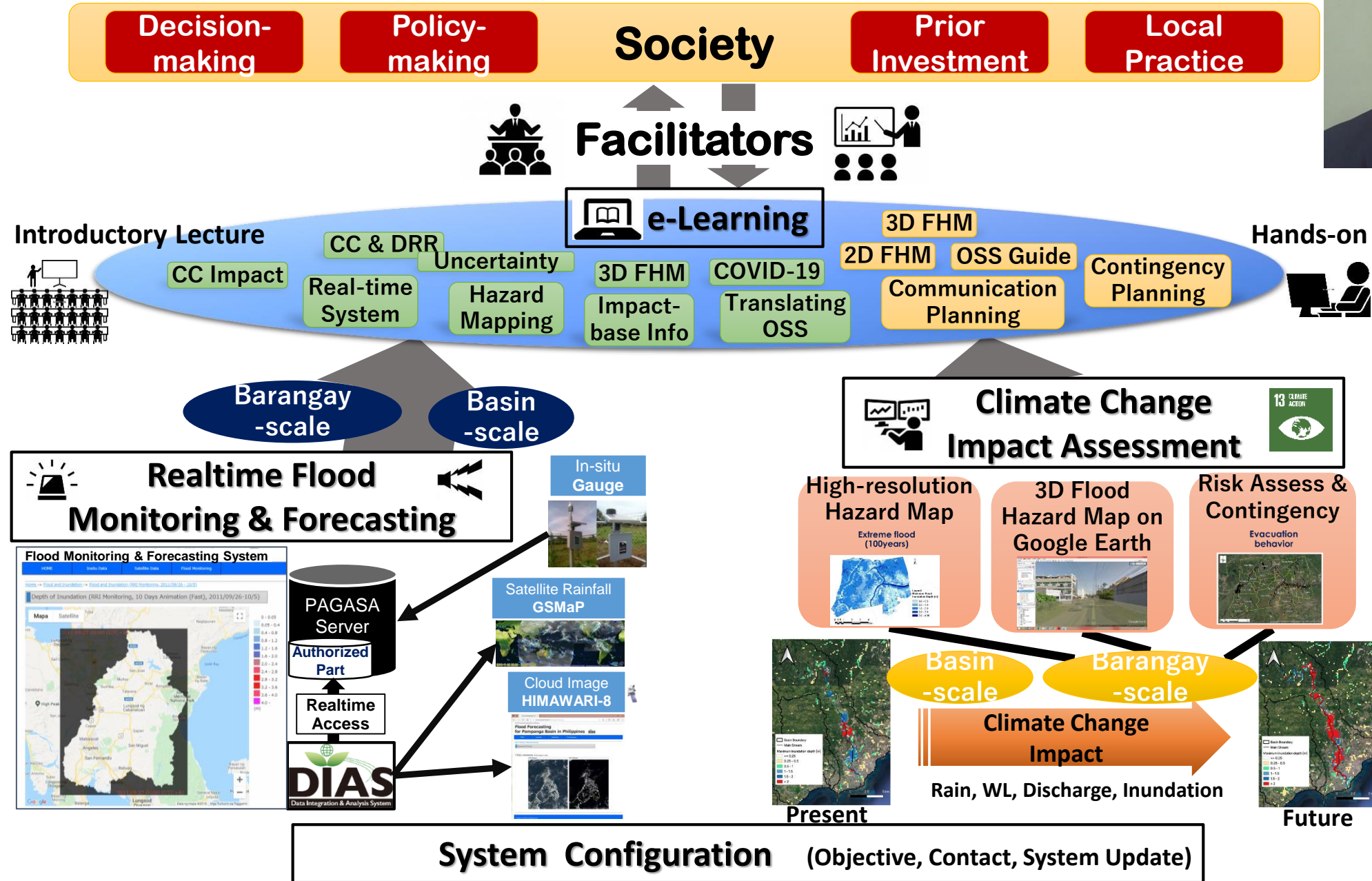
E-Learning for Facilitators

OSS-SR

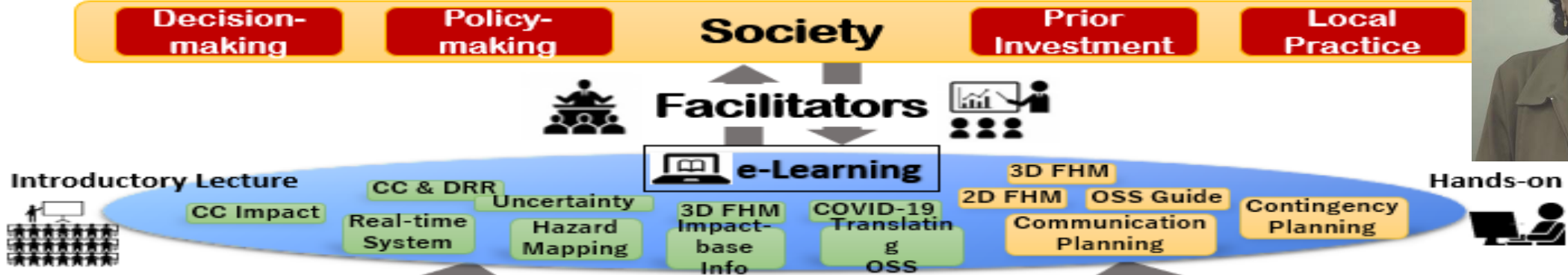
E-Learning

modeling

Online Synthesis System (OSS)



Online Synthesis System (OSS)



Participants in WS

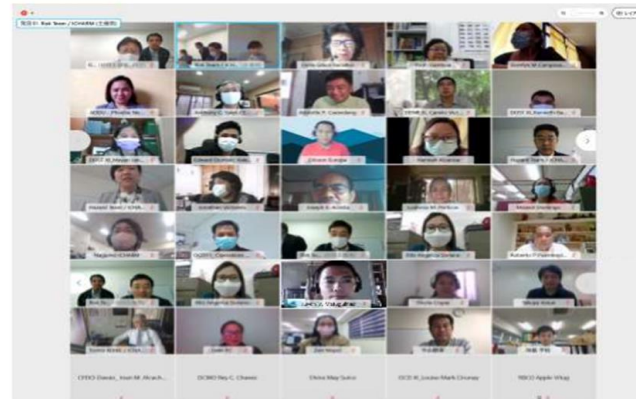
Candidates for the facilitator were invited from different disciplines and sectors of society.

- CRITERIA 1 (Direct disciplines):** Those who have a background in DRRM, CCA, Sustainability, IWRM, RBO management, Flood management, and Climate/meteorology
- CRITERIA 2 (Good mix of sciences):** Natural science, Engineering, Social science including communication, ICT, and Communicator in the mother tongue.
- CRITERIA 3 (Representation from different levels of governance):** Barangay, City/Municipality, National government, Private sector/Industry, Civil society, Academe, Media, and Special representation from DRBMA which is an interregional body.
- CRITERIA 4:** Members of HELP Davao Network



Candidate of Facilitator

National Government	11
Local Government	2
Academe	11
Civil Society Organization	1
Private Sector	2
Media	2
TOTAL	29

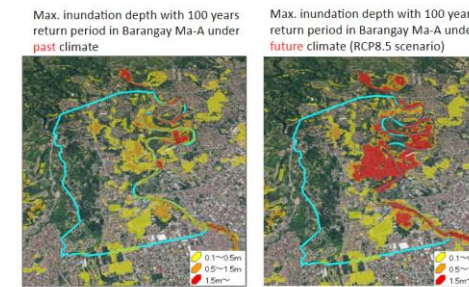


Participants in the Q & A Session

	Title	Lecturer	Outline
2-1	How to Use the OSS	M. Miyamoto K. Takamawa	Understand the overview of OSS. Instruct how to download and use the data of climate change impact assessment, real-time basin-scale inundation, and local barangay-scale inundation.
2-2	Training on 2D & 3D Flood Hazard Mapping	K. Naito N. Nagumo	Learn how to make 2D flood hazard maps and identify flood risk at each Barangay level by using flood simulation results and QGIS software (free GIS software). Learn how to visualize flood risk in 3-dimension(3-D) by google earth and street view function.
2-3	Training on Contingency Planning	M. Ohara	Learn how to develop contingency scenario and plan among related stakeholders by using flood simulation results.
2-4	Communication planning	Della Grace Bacaltos (DSSC)	Create the specific action plan of Science Communication

Increased Hazard under Climate Change

From Training HT-2

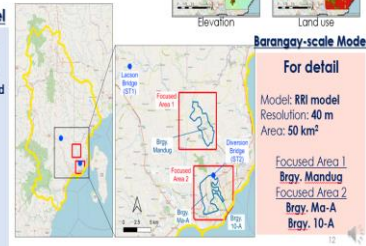


Contents of Davao OSS

4. Climate Change
4-2. Hydrological Model

Basin-scale Model
For perspective

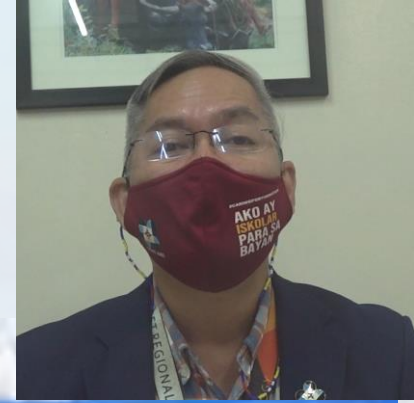
Model: WEB-RRR model	Resolution: 6 arc second	Area: 3,644 km ²
Barangay	583	
Lasing	406	
Burauen	257	
Davao	1,663	
Matina	64	
Talomo	250	
Ugadas	185	
Subuan	234	



Barangay-scale Model

Model: RRR model	Resolution: 40 m	Area: 50 km ²
Barangay	583	
Lasing	406	
Burauen	257	
Davao	1,663	
Matina	64	
Talomo	250	
Ugadas	185	
Subuan	234	

Platform for Water Resilience and Disaster in Davao River Basin, Philippines



DAVAO RIVER MANAGEMENT ALLIANCE

Bukidnon Watershed Protection and Management Council (BWPMC)

Davao City Watershed Management Council (DCWMC)

Davao Gulf Management Council (DGMC)

Policy Formulation
Investment Prioritization
Advocacy

Program coordination
Conflict resolution
APA's Monitoring



REPUBLIC OF THE PHILIPPINES
REGIONAL DEVELOPMENT COUNCIL
DAVAO REGION

RDC XI RESOLUTION NO. 76, SERIES OF 2021

ENJOINING DENR XI AND LGUS IN DAVAO REGION TO SUPPORT THE IMPLEMENTATION AND SUSTAINABILITY OF THE ONLINE SYNTHESIS SYSTEM (OSS)

WHEREAS, the Davao River Basin, one of the eight major water systems in Davao City, that drains to the Davao Gulf is susceptible to the impacts of climate change including hazards such as flooding, earthquake, and landslides;

WHEREAS, the identification of all potential hazards, their sources, possible hazardous events and assessment of the risk exhibited by each is vital in implementing an effective water risk management system;

WHEREAS, to strengthen the prevention and mitigation efforts of water-related disasters, the Department of Science and Technology (DOST) XI, together with the HELP-Davao Network, collaborated with the International Center for Water Hazard and Risk Management (ICWARM - Japan) for the development of the Online Synthesis System (OSS);



#S&TNewsintheRegion
DOST XI COLLABORATES WITH ICWARM JAPAN AND HELP DAVAO NETWORK TO ADOPT THE DAVAO ONLINE SYNTHESIS SYSTEM WATER RESILIENCE AND DISASTER PLATFORM FOR DAVAO RIVER

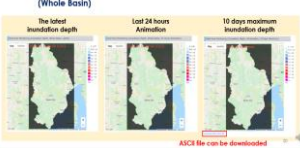
The Department of Science and Technology Region XI (DOST XI) partnered with the International Center for Water Hazard and Risk Management (ICWARM) to develop the Online Synthesis System (OSS) for the Davao River Basin. The OSS is a web-based platform that provides real-time monitoring and assessment of water hazards and risks in the Davao River Basin.

www.dost.gov.ph

DEPARTMENT OF SCIENCE AND TECHNOLOGY

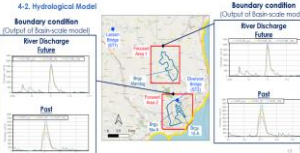
Contents of Davao OSS

5. Real-time Monitoring (Whole Basin)



Contents of Davao OSS

4. Climate Change



https://www.ais-conferences.org/articels/aisconf2016/02/aisconf_R002016_13008.pdf

OSS Deployment and Sustainability

Policy Support/Institutional Commitment/Sustainability of “Facilitators” / Finance and Infrastructure

OSS Facilitators

e-learning sessions/Cascading Sessions

Knowledge and Tools for Decision Making

Data Integration/Early Warning/Economic Assessment/Climate Change (DIAS)/Communication/Contingency Plans



Sustainable, Resilient, and Inclusive **Davao City**