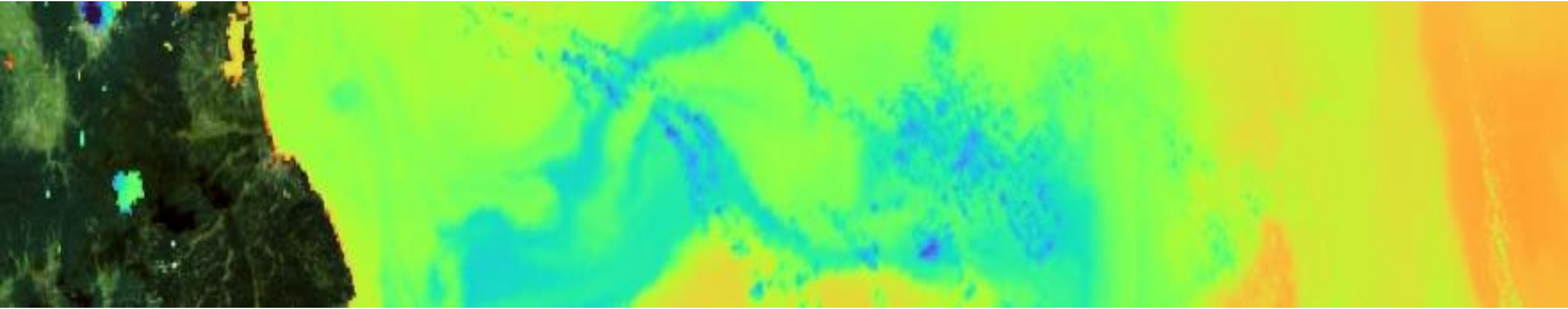


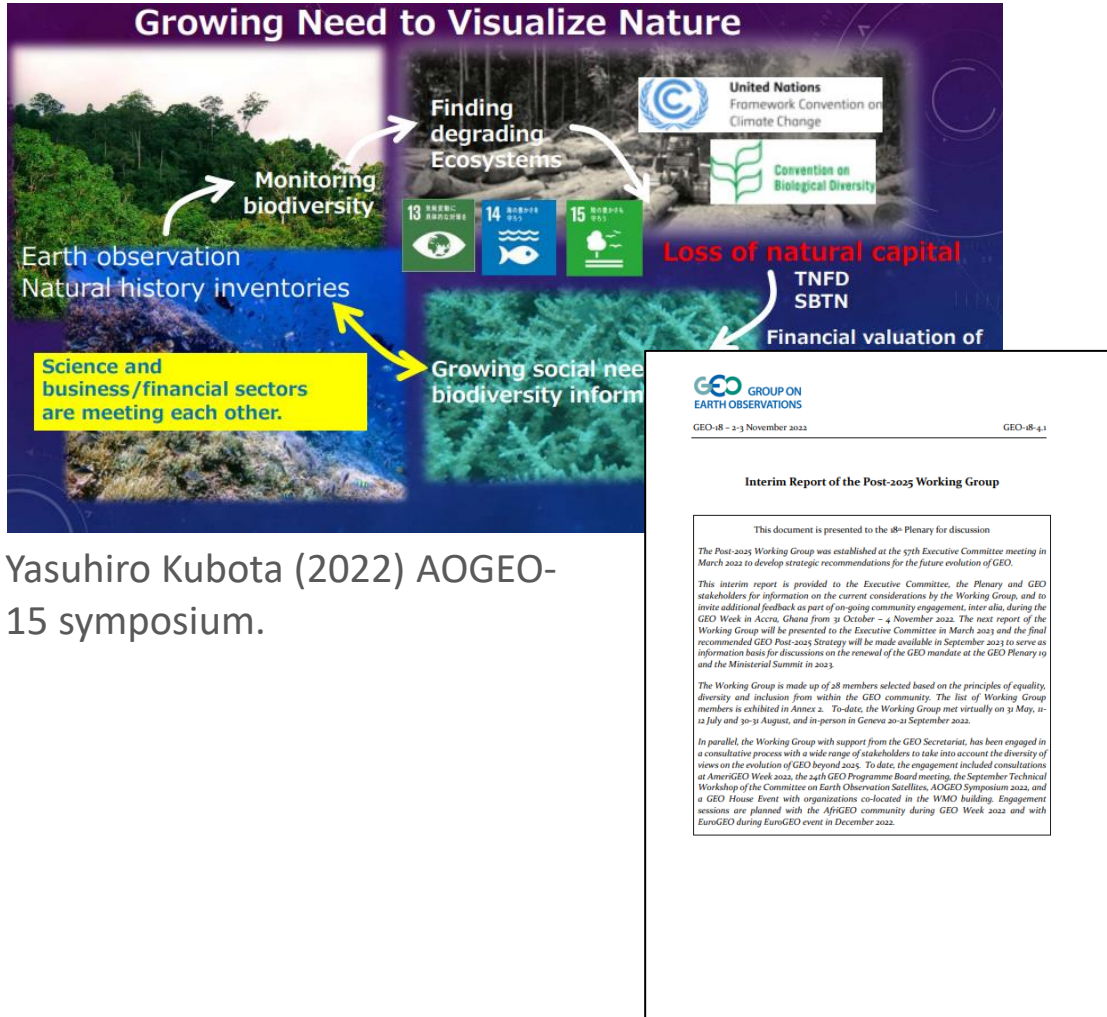
# Capacity Development Platform for Biodiversity Observations in AO region



Initial Concept Proposal



# Context

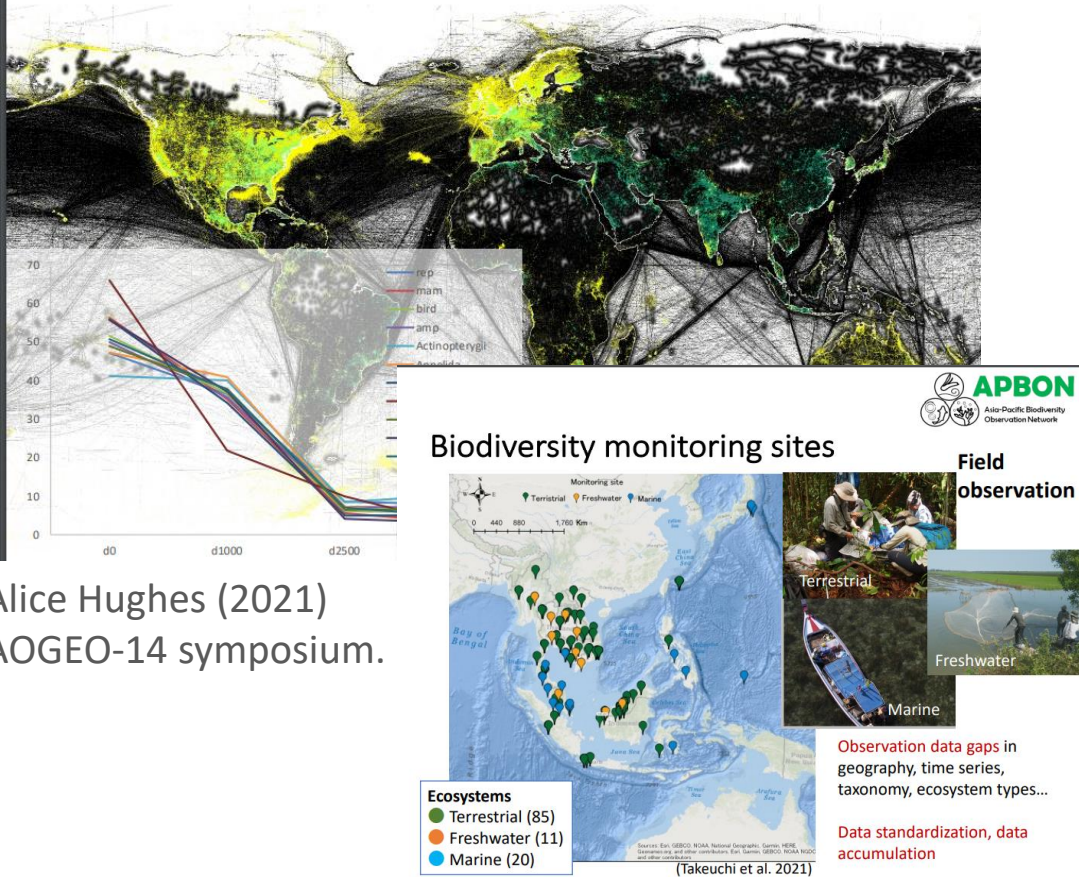


Yasuhiro Kubota (2022) AOGEO-15 symposium.

- Growing needs for biodiversity conservation and ongoing initiatives.
- More focus on EO data, especially for the In-situ data.

# Target

Setting targets-do we have the data?



Alice Hughes (2021)  
AOGEO-14 symposium.

Yayoi Takeuchi (2022) AOGEO-15 symposium.

- We need to collate better and more representative data to understand where species are.
- We need more experts who are capable of biodiversity monitoring.
- Bridging the gap by constructing the online platform for capacity development through the DIAS.

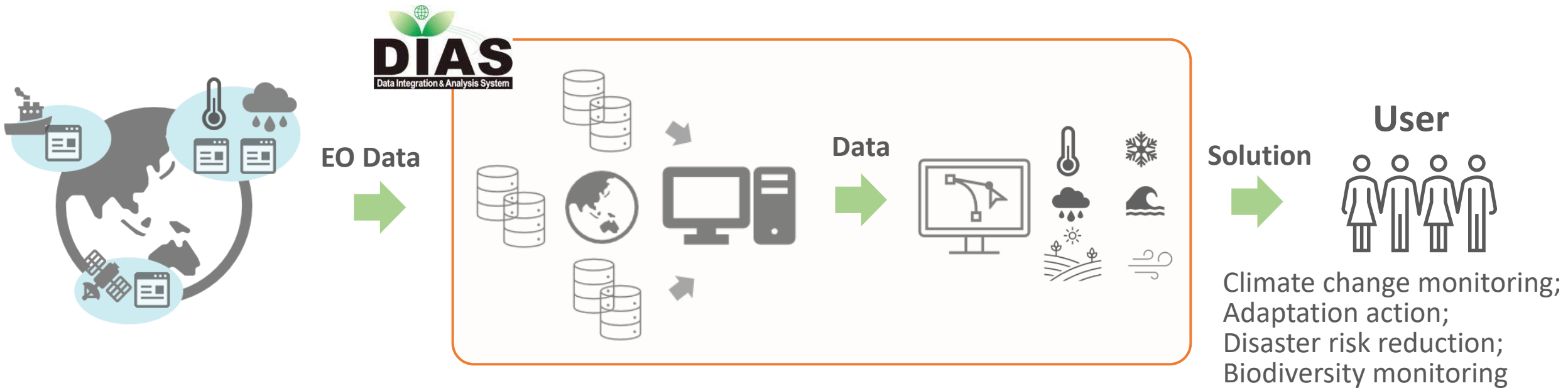
# DIAS?



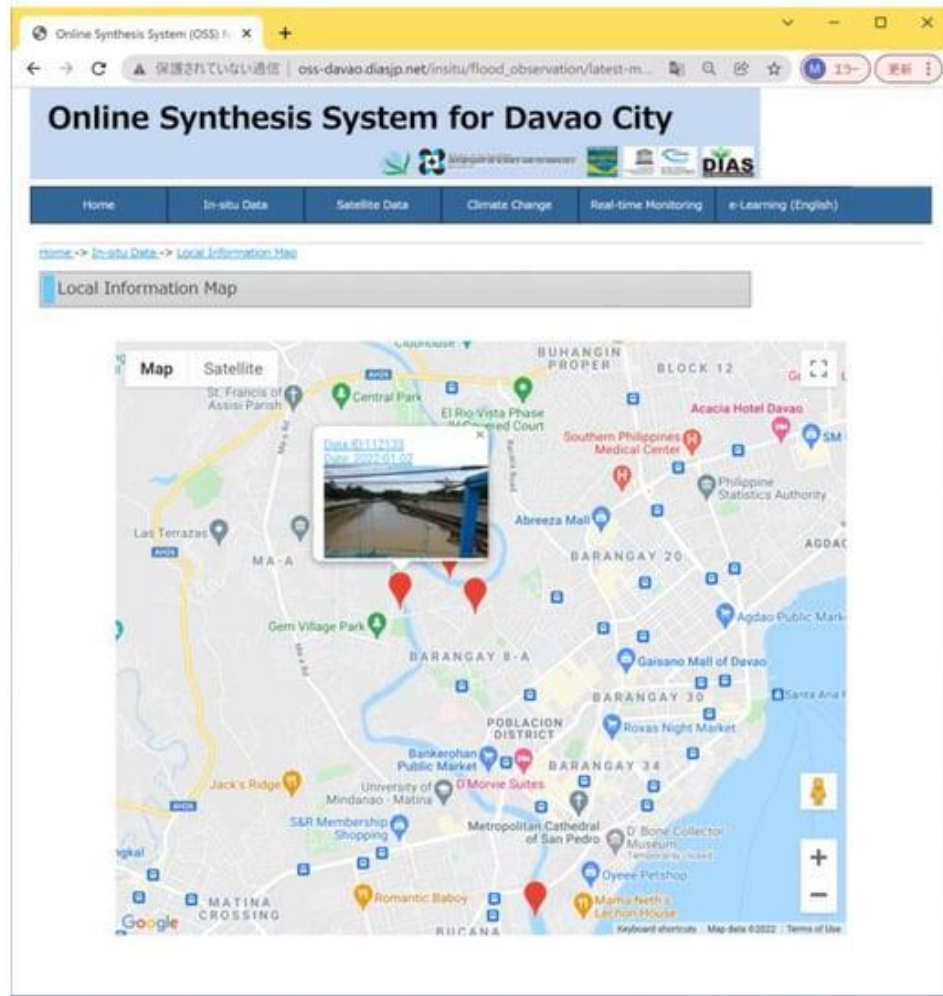
- DIAS provides,
  - Multiple EO datasets
  - Climate change prediction data
  - Applicationsthrough its online platform

# DIAS and the EO Value Chain

Earth Observations → Data Integration & Analysis → Evaluation & Visualization → User Case



# Capacity development platform?



- DIAS also provides a localized capacity development platform, “Online Synthesis System for Sustainability and Resilience (OSS-SR)” to empower the local stakeholders to address water hazards.

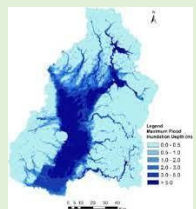
# Capacity development platform?

## Online Synthesis System for Sustainability and Resilience (OSS-SR)

### Localized models & Application



**Realtime Flood Monitoring & Forecasting information**



**High-resolution Hazard Map**



**3D Flood Hazard Map on Google Earth**

### Online e-Learning Platform



Lecture on Climate change & flood DRR

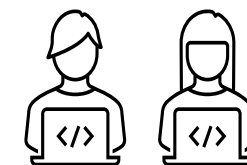
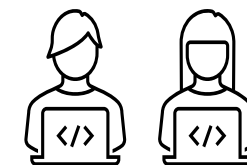
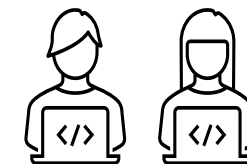
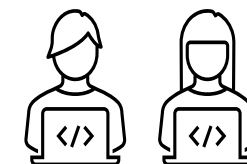
Lecture on hydrological models

Tutorial of flood simulation through the models

Tutorial of Flood hazard mapping

Tutorial of satellite image analysis

### Local Stakeholders



# E-Learning contents

## E-Learning Platform



### Target Audience

### Contents to disseminate/Translate

Local Community

- Cause of flood
- Climate change impact
- Contingency planning for DRR

Government Agency

- Cause of flood
- Flood monitoring/ hazard mapping
- Climate change impact
- Contingency planning for DRR
- DRR planning/ development planning

Private Sector

- Cause of flood
- Climate change impacts

Media

- Cause of flood
- Climate change impacts

NGOs

- Disaster risk management cycle
- Contingency planning for DRR

### Course-1

CC-1	Integrated Approach for Climate Change and Flood Disaster Risk Reduction in Davao
CC-2	Impact Assessment of Climate Change in Davao City
CC-3	Uncertainty in Future Climate Change Scenario
FM-1	Flood Monitoring and Forecasting for the Davao River Basin
FM-2	Flood Hazard Mapping and Contingency Planning for Davao City
FM-3	3D Flood Hazard Mapping for Disaster Risk Reduction
DRR-1	Effective Hazard Information & Public Awareness

### Course-2

DRR-2	Flood Response under COVID-19
DRR-3	Translating OSS knowledge into science communication plan
DRR-4	Sharing knowledge on disaster resilience and sustainability by all



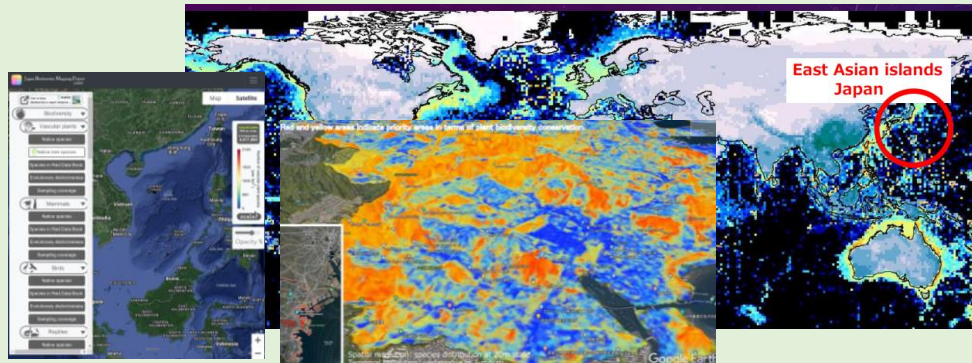
# Achievements

- E-learning **enables local stakeholders to utilize the data system** to send out official water-related early warnings/alerts, analyze risk, and create hazard maps.
- Those experts take on the role of **“facilitator” bridging the science community and the larger society** to support policymaking and public investment by utilizing Earth observation data and scientific knowledge from the OSS-SR to accelerate local climate-adaptation actions.

# Biodiversity next ?

## Online Synthesis System for Nature Positive (OSS-NP)

### AO Region Biodiversity Extent Mapping Tool



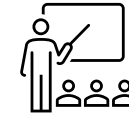
#### Biodiversity Big data

More than 500,000 species of plants and animals on earth (200,000 species in ocean + 300,000 species on terrestrial)

#### Conservation priority rank maps to evaluate the impact on biodiversity

Spatial data of conservation importance based on biodiversity loss risk values provides fundamental information for considering sustainable use of nature capital.

### Online e-Learning Platform



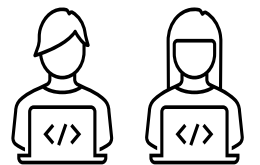
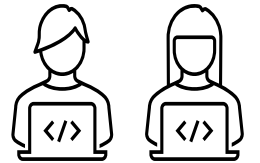
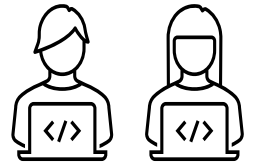
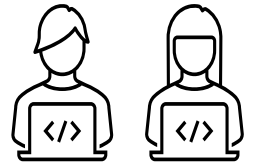
Lecture on sustainability of biodiversity and ecosystems, NbS

Lecture on biodiversity monitoring

Tutorial of biodiversity monitoring

Tutorial of biodiversity loss risk mapping

### Local Stakeholders



# Biodiversity next ?

## E-Learning Platform



Target Audience	Contents to disseminate/Translate
Local Researcher	<ul style="list-style-type: none"> <li>- Biodiversity extent mapping</li> <li>- Conservation priority evaluation</li> <li>- Biodiversity monitoring methodology</li> </ul>
Government Agency	<ul style="list-style-type: none"> <li>- Biodiversity extent mapping</li> <li>- Conservation priority evaluation</li> <li>- Assessment the risks and opportunities</li> </ul>
Private Sector	<ul style="list-style-type: none"> <li>- Conservation priority evaluation</li> <li>- Assessment the risks and opportunities</li> </ul>
Media	<ul style="list-style-type: none"> <li>- Biodiversity extent mapping</li> </ul>
NGOs	<ul style="list-style-type: none"> <li>- Conservation priority evaluation</li> <li>- Biodiversity monitoring methodology</li> </ul>

Course idea	
Lecture	Biodiversity for addressing climate change & disaster risk reduction
Lecture	Nature-based Solutions and sustainable society
Lecture	Biodiversity monitoring methodology
Lecture	Essential Biodiversity Variables (EBVs)
Tutorial	Biodiversity monitoring, on-site training
Tutorial	Collection data reporting, analysis, and management
Tutorial	Evaluating the biodiversity loss risks through the biodiversity extent mapping tool

# Biodiversity next ?

- E-learning **enables local stakeholders to utilize the biodiversity extent maps** for local conservation policy-making and practices as well as urban planning.
- Local stakeholders realize the importance of collating better and more representative data.
- We provide **a series of e-learning courses to empower local stakeholders'** biodiversity monitoring capacity

# We need your support for...

- Providing your feedback on this concept and idea
- Finding the potential collaborator in your network
- Participating in the E-learning content development