

# 12<sup>th</sup> APBON Workshop

## Background and objectives

January 22, 2021



### APBON Co-chairs

Hiroyuki Muraoka (Gifu University, Japan)

Yongyut Trisurat (Kasetsart University, Thailand)

Runi Anak Sylvester Pungga (Forest Department Sarawak, Malaysia)

### Advisory Board

Tetsukazu Yahara (Kyusyu Open University, Japan)

Sheila Vergara (ASEAN Centre for Biodiversity)

Eun-Shik Kim (Kookmin University, Republic of Korea)



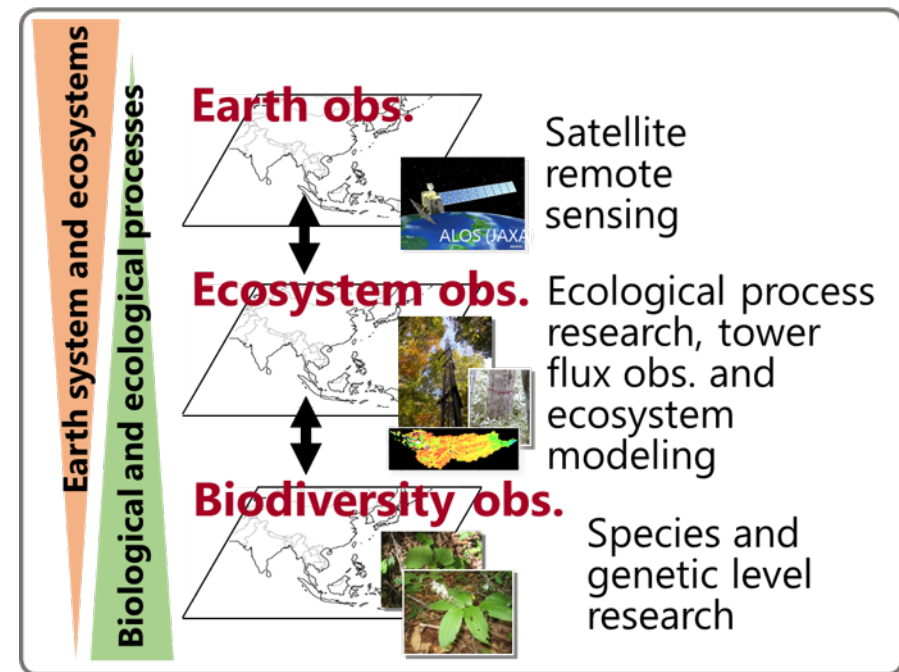
# APBON established in 2009

## Mission

1. Contribution to sound decision making related to biodiversity conservation based on scientific information
2. Facilitation of the utilization of existing biodiversity data
3. Coordination of a regional network

## Activities

1. Monitoring changes of biodiversity
  - ✓ Biodiversity mapping
  - ✓ Identification of key drivers
    - Land use change, Climate change
2. Networking of the observation networks
  - ✓ Sharing information through the networks
3. Capacity building



(Muraoka et al. 2012 in APBON book)

# History of APBON and other network activities

Year	GEO/GEOSS Symposia	GEO BON	AP BON Meetings	National BONs	CBD COPs	IPBES
2009	3rd GEOSS AP (Kyoto, February)		1st AP BON (July, Japan) 2nd AP BON (December, Japan)	Japan BON (May)		
2010	4th GEOSS AP (a session, Bali, March)	GEO BON Meeting (February, USA)	3rd AP BON (CBD COP10 Preconference, March, Japan)		COP10 (Japan, Side-event)	
2011			4th AP BON (December, Japan)			
2012	5th GEOSS AP (Tokyo, April)	GEO BON Meeting (December, USA)	WCC of IUCN (September, Korea)	Korea BON, Nepal BON, Bangladesh BON	COP11 (India, Side-event)	
2013	6th GEOSS AP (Ahmedabad, February)		5th AP BON (November, ACB, Philippines)	Philippines BON		Plenary-1
2014	7th GEOSS AP (Tokyo, May)	IC and AB (June, Germany)	6th AP BON (October, NIBR Korea)		COP12 (Korea, Side-event)	Plenary-2
2015	8th GEOSS AP (Beijing, September)	IC and AB (June, Germany)		Sino BON, Indonesia BON		Plenary-3
2016	2016-2025 A New GEO Strategy Plan Initiated	All-Hands Meeting (July, Germany)	7th AP BON (ACB, Thailand) 8th AP BON (Taipei, Taiwan)	WCC of IUCN (September, USA)	COP13 (Mexico)	Plenary-4
2017	9th GEOSS AP (Tokyo, January), 10th GEOSS AP (Hanoi, September)	IC and AB (July, Germany)				Plenary-5
2018	11th GEOSS AP (October, Kyoto)	All-Hands Meeting (July, Beijing)	9th AP BON (Bangkok, February), 10th AP BON (Kuching, July)		COP14 (Egypt)	Plenary-6
2019	12th AOGEO (November, Canberra)		11 <sup>th</sup> AP BON (KL, Malaysia)			Plenary-7
2020		Open Science Conference & All Hand Meeting			COP15 (China) (postponed)	Plenary-8 (tbc)
2021	13 <sup>th</sup> AOGEO (March, Online)		12 <sup>th</sup> APBON (Online)		COP15 (China) (tbc)	Plenary-8 (June)

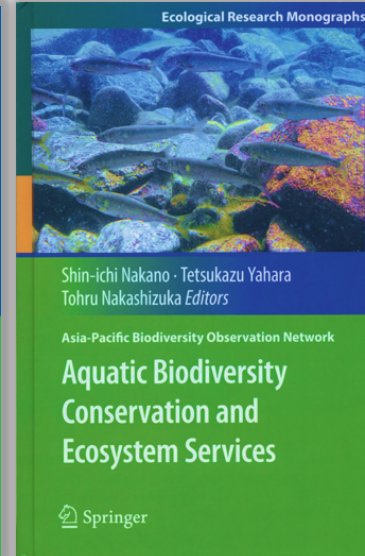
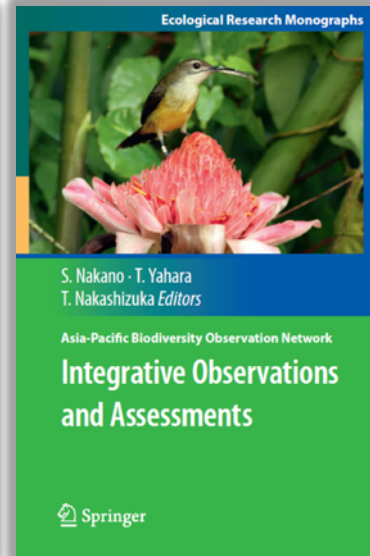
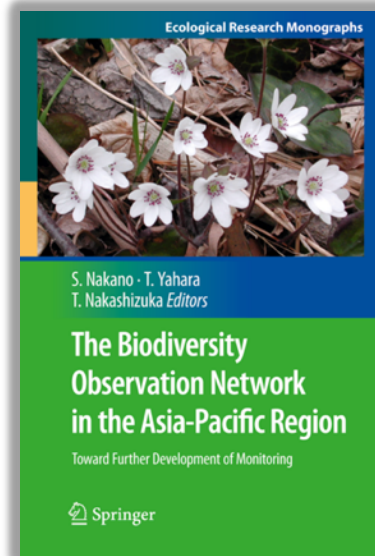




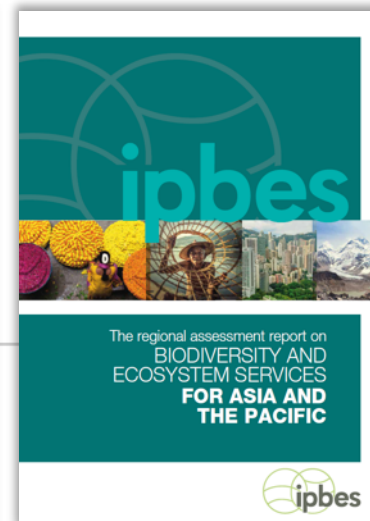
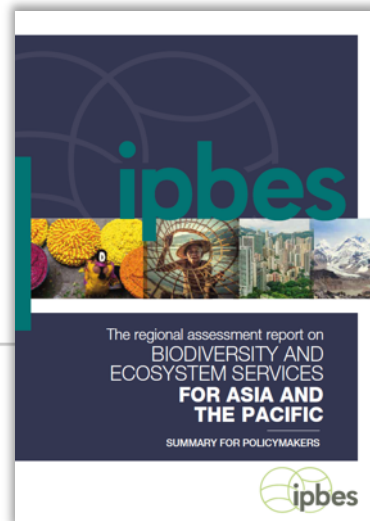
# Key Activities and Achievements 2009 - 2020

- Species recording, mapping Biodiversity
- Detect changes of biodiversity
- Assessing risks on biodiversity
- Working groups: terrestrial, freshwater and marine
- Data and knowledge sharing, publishing together
- Networking sites / people / institutes / data / communities

## “APBON Books” (Springer, 2012, 2014, 2016)



## IPBES Regional Assessment Report (2018)



## “Ecological Research” Data paper (Ecological Society of Japan, Wiley)



# APBON Work Plan update toward 2030

**Earth observations** – increasing the societal demand under climate change

**Needs ...** We need to respond to the global agenda and activities by providing adequate and defensible biodiversity data that help developing policy for conservation and sustainable use of biodiversity

- APBON will strive to supply the scientific evidence to develop sound assessments and facilitate policy-making
- Promoting interdisciplinary research and problem-solving approaches with filling the knowledge gaps
- Strengthening biodiversity observation networks and collaboration with Earth observation communities for societal benefits
- Promoting the data accessibility, deliver our information and knowledge to global platforms such as CBD, IPBES, and KBA.

## Strategy

### 1. Biodiversity research and monitoring

- a. Monitoring states and changes of biodiversity
- b. Filling gaps in data availability
- c. Increasing access to data (**GBIF**, **ABCDNet**, *Ecological Research data paper*, **OBIS**)
- d. Improving knowledge by using cutting-edge technologies

### 2. Networking of networks

- a. Networking of in-situ biodiversity/ecosystem monitoring networks
- b. Science-policy and science-society networks

### 3. Capacity building

- a. Training workshops (students, scientists, users)



# APBON Work Plan toward 2030

2009

## Missions:

- Networking of institutions and research groups
- Promoting collaborative projects and shared information
- Delivering a scientific knowledge for decision makers for the conservation of biodiversity and ecosystems

## Achievements:

- Contribution to IPBES regional assessment
- Data sharing
- Engagement of scientists with national and regional BONs through meetings and projects

2019

2020

CBD  
COP15

## New missions:

- Promoting interdisciplinary research and problem-solving approaches with filling the observational and knowledge gaps
- Promoting data sharing and data accessibility through/by networking of the observation networks
- Delivering our information and knowledge to stakeholders and global platforms

## Key activities:

- Biodiversity research and monitoring: promoting national BONs, improving knowledge using cutting-edge technologies
- Networking of networks: facilitating both science- and policy-relevant society.
- Capacity building: training workshops of monitoring skills for students and practitioners at NGOs

2030



***Broader collaboration and engagement at regional and global scales, by multidisciplinary approach.***

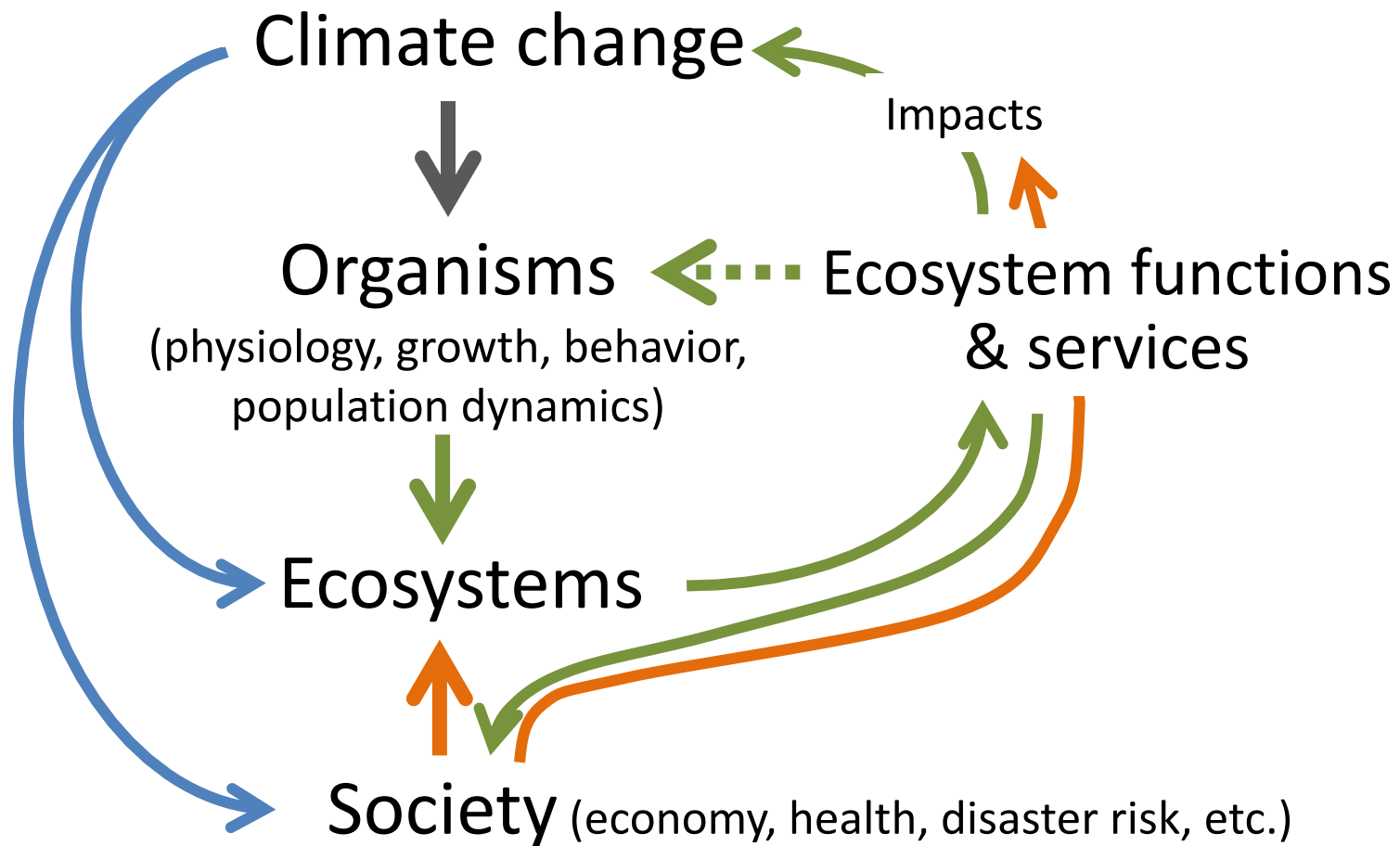
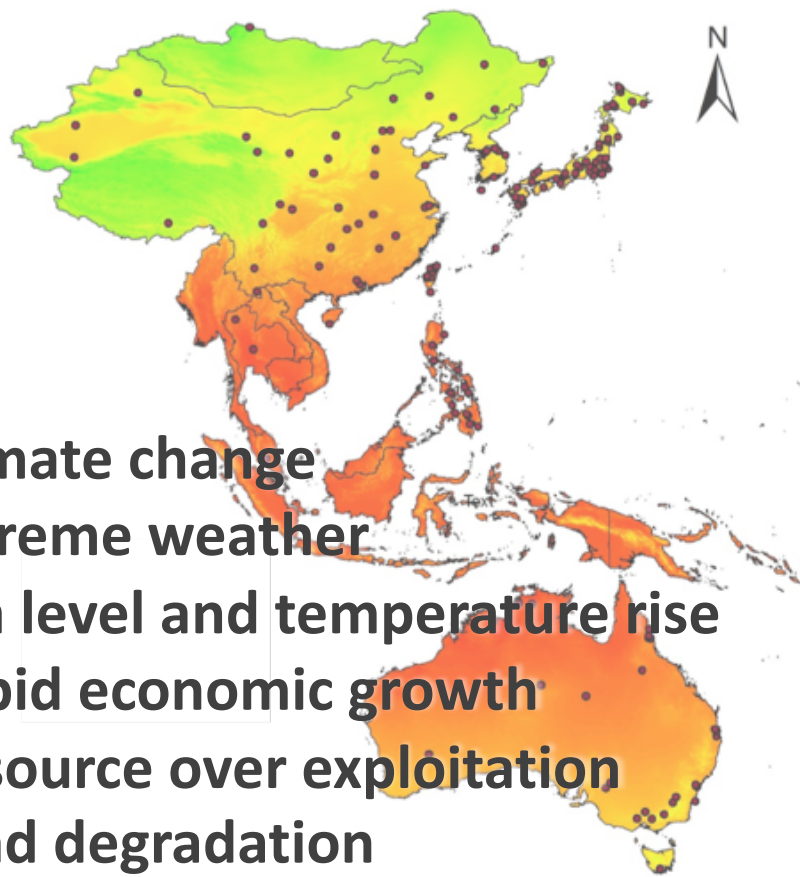


**APBON**

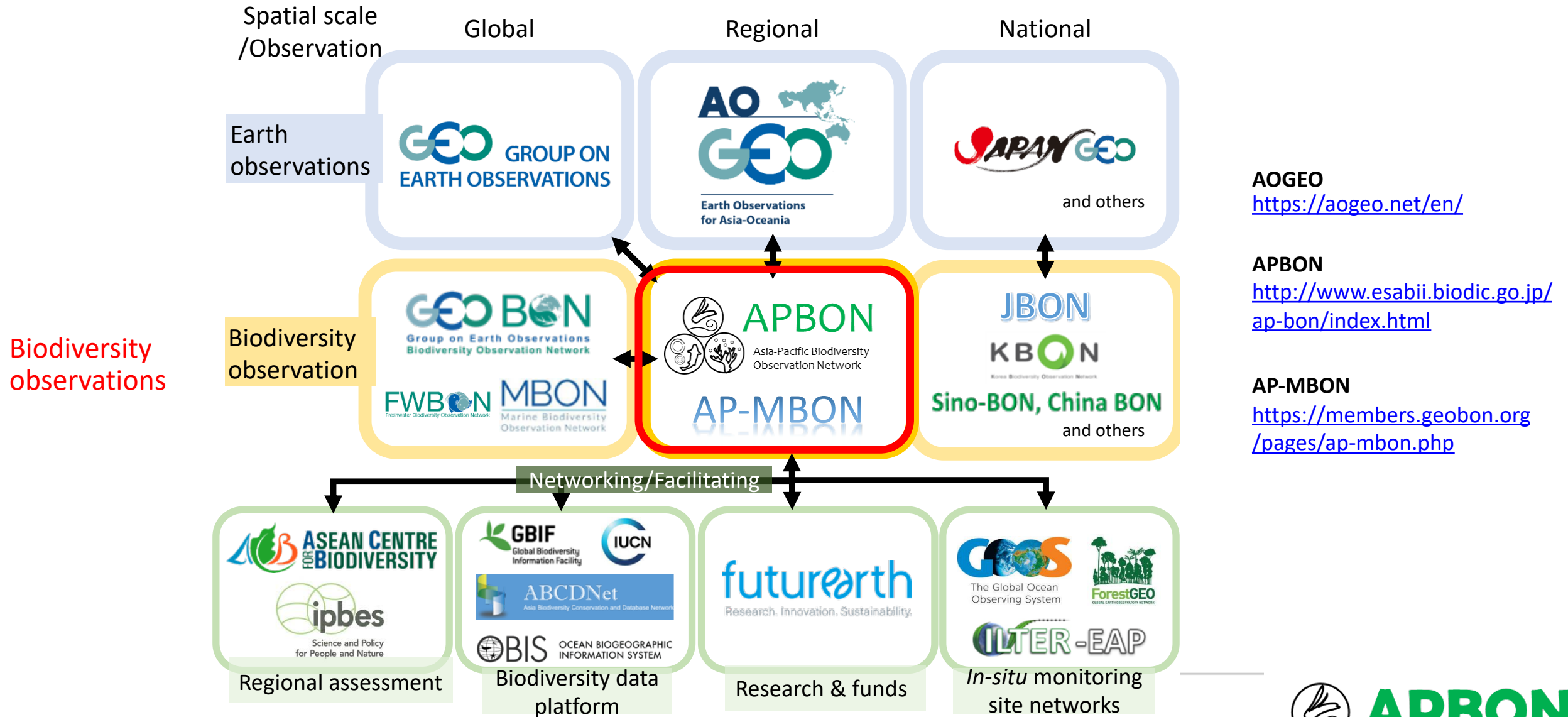
Asia Pacific Biodiversity  
Observation Network



# Climate, biodiversity, ecosystem and societal changes



# Networking with observation and user communities



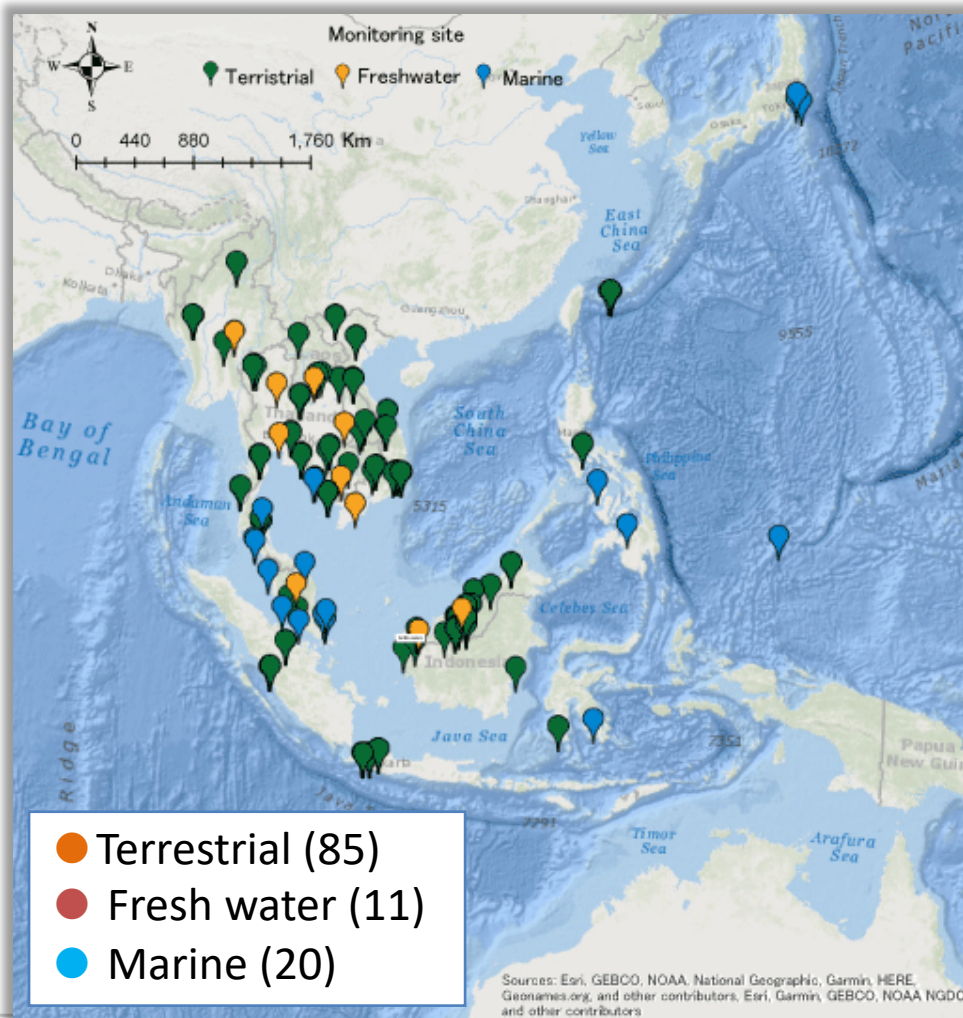
Biodiversity observations



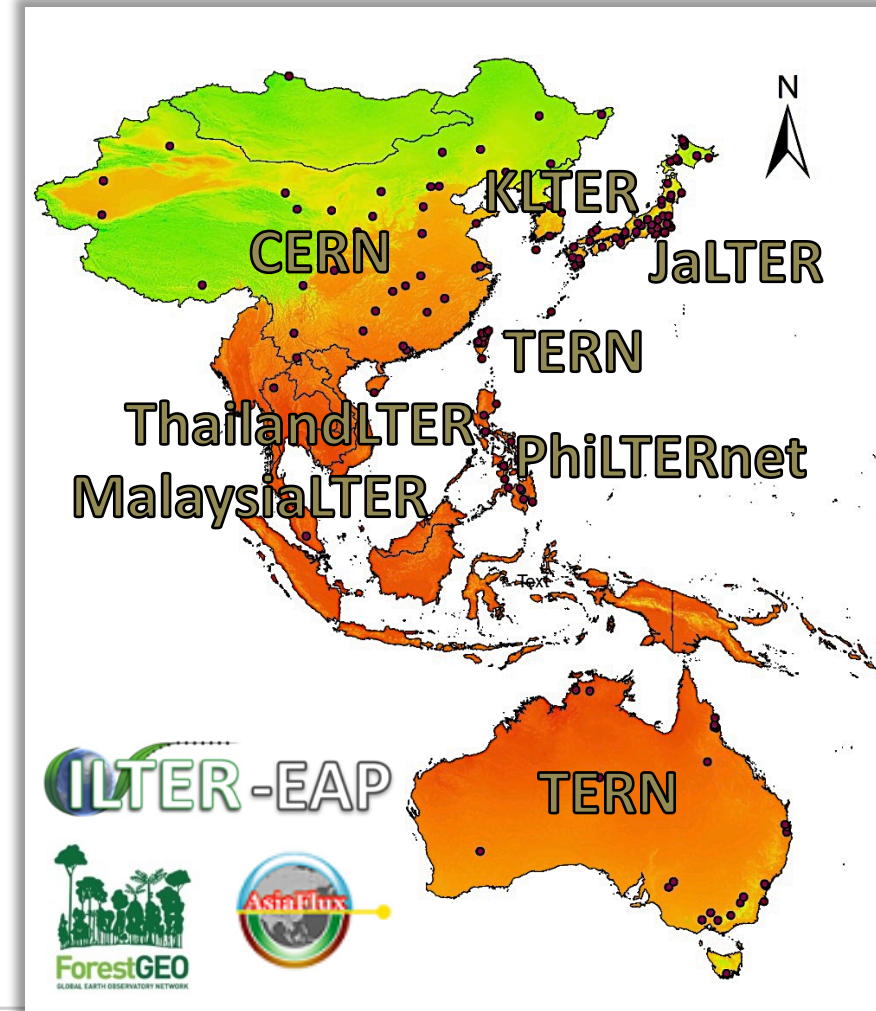


# Biodiversity and ecosystem monitoring sites

## APBON sites



## Ecosystem research sites

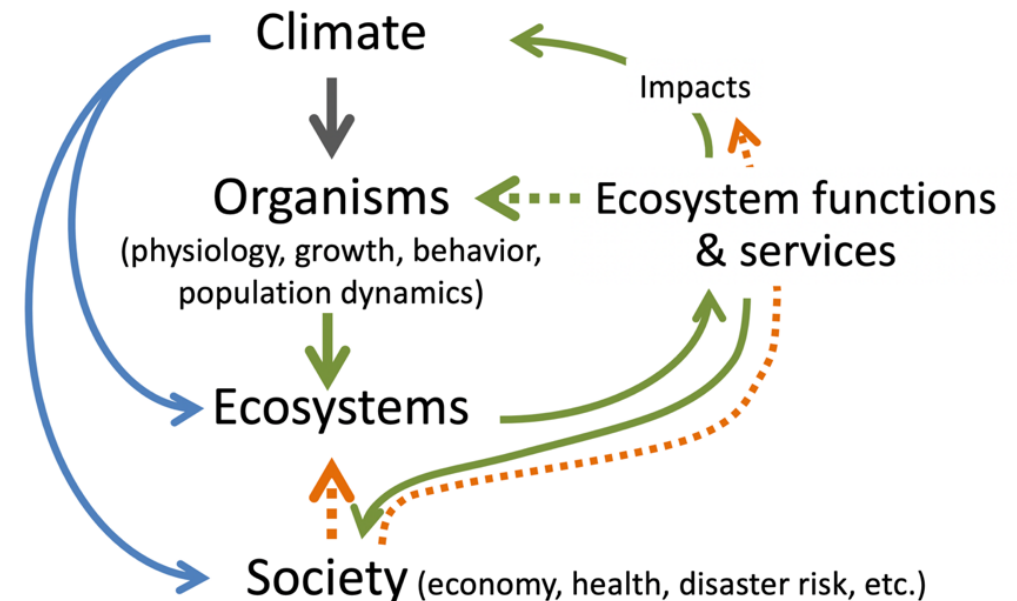


For EAP ILTER sites see:

<https://www.ilter.network/?q=content/ilter-east-asia-and-pacific-regional-network-ilter-eap-website>

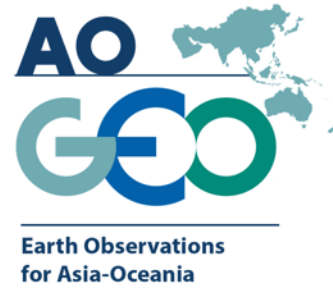
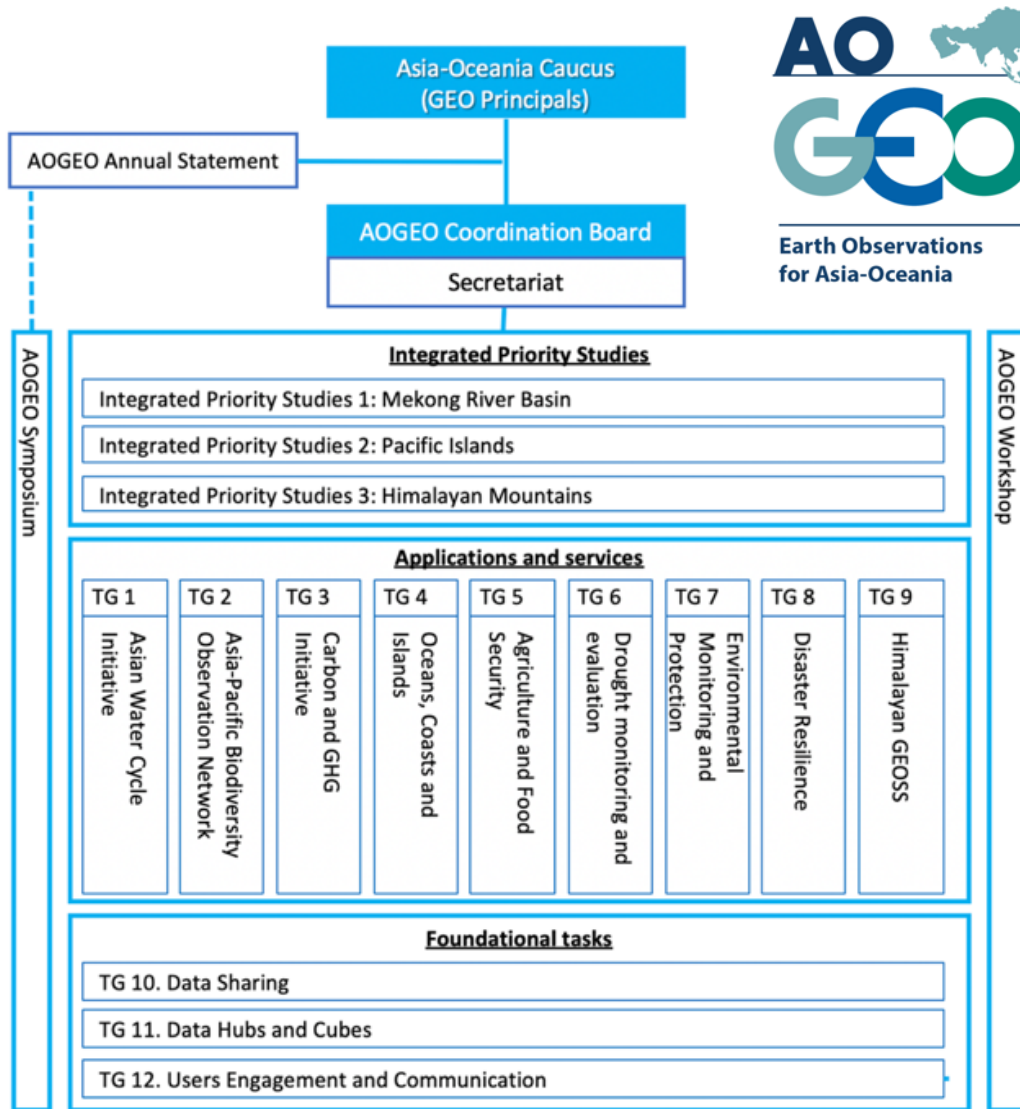
# Questions raised in ILTER-EAP

1. How does the climate change influence differently on the ecological behaviors of ecosystems in the region? (Geographical heterogeneity? Teleconnections? etc.)
2. What are the critical aspects of biodiversity and ecosystems in the region that contribute to the sustainability of Earth systems and global society?
3. How does growing spatial gradient of economic development in the region influence biodiversity, ecosystem functions, and their goods and services, and finally influence the ecosystem resilience to climate change?
4. How do the increasing extreme climatic events and land use change influence ecosystem functions and services?



# Mapping analysis of AOGEO Task Groups

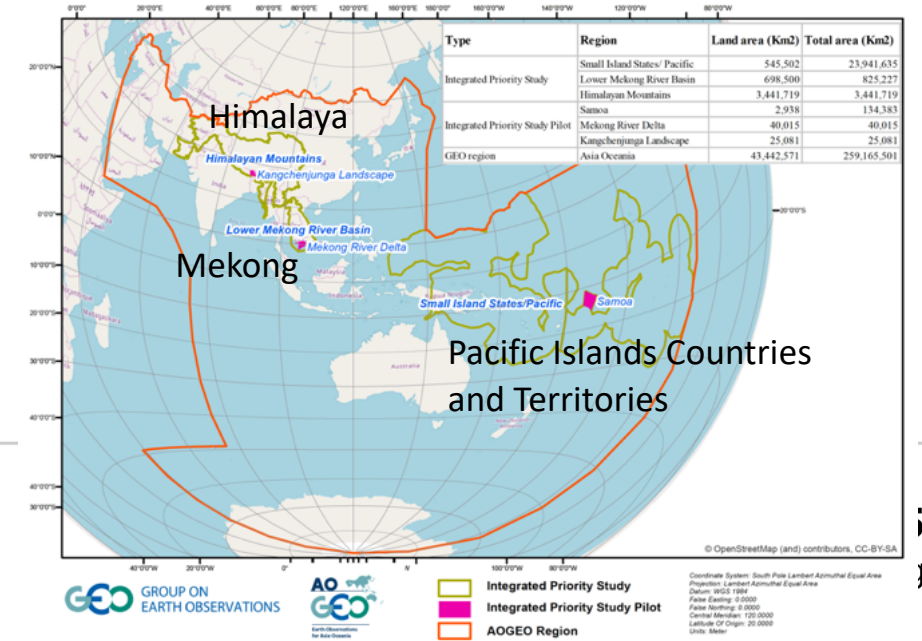
<https://www.earthobservations.org/geoweb19.php?t=aogeo>



GEO Priorities	Cross-Cutting Areas	TG1	TG2	TG3	TG4	TG5	TG6	TG7	TG8	TG9	TG10	TG11	TG12
1. NO POVERTY		1	2	0	0	3	2	0	2	0	1	1	1
2. ZERO HUNGER		3	3	0	0	3	2	0	1	1	1	1	2
3. GOOD HEALTH AND WELL-BEING		1	3	1	1	1	1	1	1	0	1	1	1
4. QUALITY EDUCATION		2	2	2	2	1	0	1	0	0	0	0	1
5. GENDER EQUALITY		2	2	0	1	1	1	1	0	0	1	1	2
6. CLEAN WATER AND SANITATION		3	3	2	1	1	2	2	1	0	2	2	3
7. AFFORDABLE AND CLEAN ENERGY		1	2	2	0	1	1	3	0	0	1	1	1
8. DECENT WORK AND ECONOMIC GROWTH		1	1	1	1	2	2	1	0	0	1	1	1
9. INDUSTRY, INNOVATION AND INFRASTRUCTURE		2	1	1	2	2	0	1	2	0	1	1	1
10. REDUCED INEQUALITIES		1	2	0	2	2	1	0	0	0	1	1	1
11. SUSTAINABLE CITIES AND COMMUNITIES		3	2	2	2	1	2	3	2	0	1	1	3
13. CLIMATE ACTION		3	3	3	3	3	2	3	2	1	1	1	3
14. LIFE BELOW WATER		1	3	2	3	0	1	1	1	0	1	1	1
15. LIFE ON LAND		3	3	2	1	3	3	3	2	2	1	1	2
16. PEACE, JUSTICE AND STRONG INSTITUTIONS		2	2	0	2	0	2	0	0	0	0	0	1
17. PARTNERSHIP FOR THE GOALS		3	3	2	3	3	3	3	2	0	1	1	3
18. Oceans, Coasts and Islands		3	3	1	1	0	1	1	1	0	1	1	2
19. Land & Oceans		3	3	1	1	0	1	1	1	0	1	1	2
20. Capacity Development/Technology Transfer		4	2	2	2	0	1	2	2	2	2	2	3
21. National Reporting/Global Studies		1	1	1	1	0	2	3	1	0	2	2	1
22. Integration		2	2	3	1	0	3	1	0	0	1	1	1
23. Understanding disaster risk		3	3	3	1	1	3	3	1	2	2	2	2
24. Strengthening disaster risk governance to manage disaster risk		3	3	0	1	1	3	1	2	0	1	1	2
25. Improving disaster risk reduction for resilience		3	2	0	1	1	3	1	1	0	2	2	2
26. Enhancing disaster preparedness for effective response, and for "early recovery"		3	2	0	0	0	1	1	2	1	2	2	2
27. Recovery, rehabilitation and reconstruction		1	1	3	3	3	3	3	2	2	3	3	3
<b>Total:</b>		<b>65</b>	<b>60</b>	<b>39</b>	<b>40</b>	<b>38</b>	<b>57</b>	<b>47</b>	<b>36</b>	<b>22</b>	<b>36</b>	<b>36</b>	<b>51</b>



## AOGEO IPS



Outcomes of 12<sup>th</sup> APBON WS to be delivered to 13<sup>th</sup> AOGEO Symposium (March 3-5, 2021)



# Objectives of this Workshop

To develop our implementation plans to respond to the following new needs (Workplan 2030) to the biodiversity observations:

- (1) Developing national BONs and networking them in the region to contribute to CBD Aichi Biodiversity Targets and post 2020 Global Biodiversity Framework,
- (2) Filling observational and knowledge gaps for biodiversity status and trends to contribute to IPBES assessments,
- (3) Producing data and knowledge to address the issues particularly related to biodiversity and ecosystem sustainability by coordinated activities with GEO and AOGEO,
- (4) Contributing to achievements of SDGs by providing adequate and defensible biodiversity data that help developing policy for conservation and sustainable use of biodiversity,
- (5) Learning and sharing the challenges of biodiversity issues under - post - beyond COVID-19 and on-going climate change.

<b>10:00 – 10:15</b> <b>JST</b> <b>(UTC +9)</b>	<b>Welcome and opening remarks</b> [Moderator: Mr. Yusuke Saito, MoE Japan] <ul style="list-style-type: none"> <li>• APBON Co-chairs (Hiroyuki Muraoka, Yongyut Trisurat, Runi Anak Sylvester Pungga)</li> <li>• APBON Secretariat Director-General (Mr. Hideaki Matsumoto, MoE Japan)</li> </ul> <b>Reviewing APBON’s Strategic plan to 2030 and objectives of this workshop</b>
<b>10:15 – 12:00</b> <b>JST</b>	<b>I. Development of BON and its contributions to society</b> [Moderators: Yongyut Trisurat, Runi Anak Sylvester Pungga] [20 minutes presentation + 5 minutes Q&A] <ol style="list-style-type: none"> <li>1. GEO BON’s next plans (<u>Prof. Andrew Gonzalez</u>, Co-chair of GEO BON)</li> <li>2. CBD post 2020 Global Biodiversity Framework (<u>Mr. Basile van Havre</u>, Canadian Wildlife Service)</li> <li>3. Progress on Aichi Targets in Hindu Kush Himalaya (<u>Dr. Sunita Chaudhary</u>, ICIMOD)</li> <li>4. Status and challenges in the Pacific (<u>Dr. Yimnang Golbuu</u>, CEO, Palau International Coral Reef Center)</li> </ol>
<b>12:00 – 12:05</b> <b>JST</b>	1 <sup>st</sup> Photo session
<b>12:05 – 12:30</b> <b>JST</b>	Break
<b>12:30 – 13:30</b> <b>JST</b>	<b>II. Updates of BONs in the region</b> [Moderators: Sheila Vergara, Hiroyuki Muraoka] [5 minutes for each] <ol style="list-style-type: none"> <li>1. ASEAN Centre for Biodiversity (Christian Elloran)</li> <li>2. China (Sino BON) (Xiaojuan Feng)</li> <li>3. ICIMOD (Sunita Chaudhary)</li> <li>4. Indonesia (Dedy Darnaedi)</li> <li>5. Japan (JBON) (Yayoi Takeuchi and Hiroya Yamano)</li> <li>6. Korea (KBON) (Chan-Ho Park)</li> <li>7. Malaysia (tbd)</li> <li>8. Nepal (Mangal Man Shakya)</li> <li>9. Philippines (tbd)</li> <li>10. Thailand (Yongyut Trisurat)</li> </ol>
<b>13:30 – 13:45</b> <b>JST</b>	Break

<b>13:45 – 15:30</b> <b>JST</b>	<b>III. Breakout group sessions – terrestrial, freshwater and marine working groups</b> Following points would be considered in the Working groups. <ul style="list-style-type: none"> <li>• Planning observations and data integration (master site concept, on-going/future projects, “Indicators” of SDGs, etc.)</li> <li>• Data base, information platforms (for science community, user community)</li> <li>• Capacity building</li> <li>• Challenges under and post COVID-19 pandemic</li> <li>• Contribution to AOGEO (IPS; cross-cutting theme; knowledge sharing from biodiversity-related issues)</li> <li>• Cooperation with GEO BON</li> </ul>		
	<b>Terrestrial</b> [Moderator: Yayoi Takeuchi]	<b>Freshwater</b> [Moderator: Yuichi Kano]	<b>Marine</b> [Moderator: Masahiro Nakaoka]
<b>15:30 – 16:00</b> <b>JST</b>	Break		
<b>16:00 – 18:00</b> <b>JST</b>	<b>IV. Engagement, networking and actions for 2021</b> [Moderators: Runi, Yongyut, Hiroyuki] <ol style="list-style-type: none"> <li>1. Reporting breakout group session outcomes [10 minutes x 3 groups]</li> <li>2. Key Biodiversity Areas (<u>Dr. Andrew Plumptre</u>, Head, Key Biodiversity Area Secretariat) [20 min presentation + 10 min discussion]</li> <li>3. AOGEO – Integrated Priority Studies, SDGs indicators, collaboration with other Task Groups [30 minutes]</li> <li>4. Wrap-up: Plans for APBON activities in 2021 [30 minutes] <ul style="list-style-type: none"> <li>• APBON’s contribution to IPBES</li> <li>• new APBON book</li> <li>• participation to 13<sup>th</sup> AOGEO symposium (March 3 - 5, 2021)</li> <li>• next APBON Workshop</li> </ul> </li> </ol>		
<b>18:00 – 18:15</b> <b>JST</b>	<b>Closing remarks</b> [APBON Co-chairs] 2 <sup>nd</sup> Photo session		