Summary Report

7th AP-BON Workshop

7th AP-BON Workshop was held as a special session of the "ASEAN Conference on Biodiversity 2016" in Bangkok, Thailand as below:

Date: 19-20 February, 2016

Venue: 1) Centara Grand & Bangkok Convention Centre, Lotus Suite 9, 22nd floor (19 February)

 Centara Watergate Pavilion Hotel Bangkok, Grand Pavilion, 9th floor (20 February)

Participants: 27 persons from 11 countries

<Objectives>

The 7th AP-BON workshop will bring together the members of APBON steering committee and representatives of key organizations who have the mandate to conduct biodiversity observations. They will discuss the means to promote data sharing in the region as well as knowledge management products to enhance generation, organization, and sharing of information. Discussions cover:

- 1. Presentations of biodiversity research and assessment activities, country and regional reports
- 2. Results of IPBES regional and global biodiversity assessments
- 3. Status and updates on biodiversity trends in the Asia-Pacific Region
- Review and revision of APBON products including red list, data papers and other proposals
- 5. Data sharing arrangements; and
- 6. Governance of the APBON

< Summary of the Proceedings >

Day 1 (19 Feb.)

AP-BON Co-Chairs and Mr. Ryuji Nakayama, director, Biodiversity Center of Japan, MOE gave the opening speeches, followed by presentation and discussion among the participants.

1. AB-BON Introduction

Dr. Eun-Shik Kim (Kookmin University)

- AP-BON is needed to spread its activities in the ASEAN region. The history of AP-BON recognized the efforts of the MOEJ on the conduct of several AP-BON activities such as COP participation, also other BON connections: JBON, KBON.
- Key Questions for AP-BON:
 - a. What and how is a regional network of national BONs?
 - b. Is there a national BON for each country: how to promote the national BONS in SEA?
 - c. How to strengthen the link of AP-BON and GEO BON?
- AP-BON is now on the turning point:
 - a. IPBSES assessments have started
 - b. A new GEOSS Strategic Plan is being implemented
 - c. GEOBON secretariat established in 2014
 - d. A core project S9 sponsored by MOEJ will end in March 2016
- As an example of national BON: KBON activities has three WGs in charge of monitoring with civil scientists, species distribution modeling, and international joint research.
- Strengthening cooperation of network of national BON is required, and this is directly related to the development of the AP-BON.

2. Biodiversity Research Activities in Thailand

Dr. Dokrak Marod (Kasertsart University)

Dr. Tetsukazu Yahara (Kyusyu University)

- On transects along Thailand at several altitudes of the National Parks, we collected plant specimens and took pictures then identified the specimens using DNA sequences. Species richness increases in higher altitudes. A total of 5,375 specimens have been tabulated and scanned images of each specimen can be shared for identifying species in the Southeast Asia regions, and Picture Guides will be developed.
- In Thailand, we are providing Training program for Training of Trainers (TOTs) especially for youth scientists specializing on plant and wildlife taxonomy. The government emphasizes participation in international activities like IPBES and the use of the IUCN Red List to categorize threat status of species.

(Discussions)

Dr. Freyhof: It is very important to establish a national BON in Thailand. When you take these plant samples and sequence them, there is a big challenge to follow the Access and

- Benefit-Sharing (ABS) regulation. We would like to work together in a fair way.
- Dr. Yahara: Collaboration with ESABII, as they made a lot of effort to train additional researches on taxonomy, should be useful to organize ESABII workshop.
- Dr. Fernando: ESABII has organized training courses on taxonomy in collaboration with ACB and JAIF. We are developing field guides on these and we hope that ESABII can put together a workshop in future.
- Dr. Yahara: At the global level there are some isolated mechanisms. AP-BON should be a platform to integrate all activities at the national level to contribute to these global mechanisms: CBD, GEO BON, IPBES and Future Earth.
- Dr. Sakaguchi: Information data from AP-BON can be used by IPBES regional assessments, especially Chapter 3.

3. Biodiversity in Malaysia

Dr. Faridah-Hanum Ibrahim (Universiti Putra Malaysia)

• Malaysia is one of the mega diverse countries in Southeast Asia and has 14 types of rain forests and 2.4 million hectares of tropical peat lands. Its biodiversity cuts across borders. There are several conservation efforts: increasing area of protected area, rehabilitation / reintroduction of wildlife, monitoring, public awareness, etc. Major drivers of change to biodiversity: demand for palm oil, coastal pollution, wood industry sector, building sector especially marble and limestone, ecotourism sector, changes in temperature and precipitation, politician commitment, etc.

(Discussions)

- Dr. Ibrahim: Some state governments are not so easy to convince on conservation. Awareness need to be developed specially for politicians and policy makers. That would be more effective to implement strategic biodiversity plan. Ecosystem monitoring in Malaysia is done by FRIM every 5 years. We have a lot of data but integrating them is the problem.
- Dr. Freyhof: There are discussions at what to monitor at national level in Europe. Countries in mega diverse regions are falling behind on these discussions. National biodiversity monitoring schemes will be one of the topics in the GEO BON this year, and it may be worth investing to attend and inform us what you do.
- Dr. Keping: Most of the national BONs do not know what we should monitor. So AP-BON should take on the activity on promoting what should be flagged.
- Dr. Yahara: Each country has its own monitoring and it is important to continue this system.

 To detect changes, we have to establish a state standardization, and continuation of monitoring these are important.

4. Progress in IPBES global assessment

Dr. Tetsukazu Yahara (Kyushu University)

Dr. Yoshihisa Shirayama (JAMSTEC)

- AP-BON can contribute to IPBES regional assessment specially on Chapter 3. The summary of national red lists, states of conservation areas, and ecosystem trends are needed with impressive and comprehensive figures. Compiling AP-BON Book 4 "States and changes of biodiversity and ecosystems in the Asia-Pacific region" will significantly help on this, so please consider some proposal how such types of data can be included in this book.
- Timeline of global assessment of IPBES is from February 2016 to 2nd Quarter of 2019. Results of this assessment will be the basis of the GBO5 because 2020 is the last year of the Aichi Target implementation.
- · Contents of the assessment:
 - a. What are the prevailing global and trans-regional statuses of and trends in the interactions between people and nature?
 - b. How do biodiversity, ecosystem functioning and ecosystem services contribute to the implementation of the SDGs?
 - c. What progress is being made towards achieving 2020 Aichi Targets and SDGs?

5. Progress in Japanese S9 project to observe and assess biodiversity in Asia

Dr. Tetsukazu Yahara (Kyushu University)

Dr. Reiichiro Ishii (RIHN)

Dr. Yoshihisa Shirayama (JAMSTEC)

- Trends of forests are declining in Southeast Asia except Philippines and Vietnam. Wood production, agricultural expansions and population density have emerged as the major drivers of change. Based on species richness survey, Sarawak emerged as the highest distribution of vascular plant species. We also assessed the effects of forest change on ecosystems services and established several scenarios on how land is used and how it affects honey production, for instance. Remote sensing data was used to detect forest cover change in the Southeast Asia.
- Main drivers on freshwater fish biodiversity in Southeast Asia are land development, alien species, water pollution, oil palm plantation and hydropower dams. The criteria on Ecologically and Biologically Significant Area (EBSA) was used for coastal area in this project, and the research on coverage of representative ecosystems and GAP analysis were done.

(Discussions)

- Dr. Fernando: FAO statistics says Philippines forest is increasing but other data point to the deforestation.
- Dr. Yahara: We used other data in the book, not only FAO data. In Vietnam, forest area is increasing but they also reported increase in forest plantations. There is debate on what type of forests should be included in the assessment among authors of IPBES chapter 3. What is the actual situation of forest cover in China?
- Dr. Keping: We have some debate as to the actual forest cover in china.
- Dr. Freyhof: Forests that have been cut down and replaced by plantation are accepted by CDB?
- Dr. Yahara: Forest plantations are not usually accepted.
- Dr. Fernando: Forest plantations are different structure and functions. They are very different from natural forests.

6. BON in a Box

Dr. Jorg Freyhof (GEO BON)

- · Short movie about BON in a Box was shown.
- There are three types of BONs: thematic BON which have a global coverage, national BONs which bring national perspectives, and regional BONs which might act as an umbrella for some national BONs. Biodiversity is observed at the national scale very much. Biodiversity is site specific and may be different from other countries, but there may be methodologies in a country which may be applicable in other areas. BON in a BOX will facilitate this type of exchange.

7. Discussions on Notable trends of Biodiversity in the Asia Pacific region, considering contribution to IPBES regional assessments

(Discussions)

- Dr. Vergara: ASEAN Biodiversity Outlook 2 (ABO2) results reviewed national reports of each country.
- Dr. Yahara: Dr. Vergara's presentation on ABO2 is a very good presentation on integration. We need to link science and social aspects. In AP-BON Book 4, we should invite social scientists.
- Dr. Fernando: Our efforts on the Red List should be included in the document. Countries are doing the different things not using the IUCN red list. It should be a concern.
- Dr. Ishii: There is an effort to make compilations of red list of NOWPOP regions. It is one of the good examples on how to collect species.

Day 2 (20 Feb.)

8. Proposal of AP-BON Book 4 on "States and trends of biodiversity in the Asia Pacific region"

- Dr. Tetsukazu Yahara (Kyushu University)
- Aims of publication:
 - a. Providing technical reports and reviews to help IPBES regional assessments.
 - b. Providing new viewpoints: integration, linkage between countries, etc.
 - c. Providing a good framework of observations.
 - d. Providing new summaries for sub-regions, over CDB national reports, etc.
 - e. Providing impressive and comprehensive figures.
- · Parts and Chapters:
 - a. Concepts and frameworks
 - b. States and trends of species and ecosystems
 - c. Human-nature interactions
 - d. Databases and challenges for data sharing

(Discussions)

- Dr. Vergara: We should provide a viewpoint on interaction of all threats and integrated solutions in collaboration with other countries.
- Dr. Ibrahim: There should be references and publications based on scientific data from established organizations like ACB, IUCN. We know there is a lot to be done but there are a lot of collaborators in this effort.
- Dr. Shirayama: We should include the relationship between Indigenous and Local Knowledge (ILK) and science.
- Dr. Kim: It would be good if we could provide a new viewpoint in terms of the complexity of the biodiversity.

9. Biodiversity Observation in Taiwan

Dr. Yu Huang Wang (TaiBIF)

• Dr. Wang introduced what they are doing on data collection with the use of camera traps and acoustic diversity index monitoring in Taiwan.

(Discussions)

- Dr. Park: What is your reason for getting this type of acoustic monitoring?
- Dr. Wang: The purpose is to monitor soundscape changes over time.

Dr. Keping: You should put up a link between species and sound, and set up a reference database. This is a big challenge to establish such database.

Dr. Kim: Taiwan has the best informatics. We would like to create and share this platform.

10. Discussion on Data Sharing

Dr. Yu Huang Wang (TaiBIF)

• Dr. Wang introduced the BIFA for which GBIF provides fund to collect more data in

collaboration with ACB. In July or August of 2016, TaiBIF is organizing a training workshop

with support from GBIF and attendance to this will increase capacity in data paper

publication.

(Discussions)

Dr. Freyhof: GBIF published data standards to accommodate time series data on biodiversity

change.

Dr. Wang: In the training workshop, the GBIF standards are included through the Integrated

Publishing Toolkit (IPT) training.

Dr. Vergara: Motivation for data publication being addressed by GBIF through the BIFA and

IPT for data paper publication.

Dr. Wang: In recent years, data paper is a good incentive to publish data. GBIF also has the

Digital Object Identifier (DOI) that is a data citation index mechanism. The more people

use the data, the more citations can be linked to it. This increases the integrity of the data

and will be a good reward for the owner of data.

Dr. Marod: When we talk about data sharing, the problem is that the data is funded by

different agencies and a few can be shared. I can share my data but I need the support to

hire someone to arrange the dataset.

Dr. Darnaedi: What type of data should we share?

Dr. Yahara: Key Biodiversity Areas (KBAs), EBV, red list, for example.

[End]