Report of the Science-Policy Dialogue for South-East Asia and North-East Asia on the IPBES Asia-Pacific Regional Assessment

Anantara Riverside Bangkok Resort | Bangkok, Thailand | 21-23 October 2019

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Executive Summary

A subregional biodiversity science-policy dialogue workshop for South-East Asia and North-East Asia was held at the Anantara Riverside Bangkok Resort, Bangkok, Thailand from 21-23 October 2019. The workshop formed part of the "Capacity Building Project for the Implementation of IPBES Asia-Pacific Regional Assessment", funded by the Japan Biodiversity Fund through the Secretariat of the Convention on Biological Diversity (CBD), and operated by the Institute for Global Environmental Strategies (IGES). The dialogue was supported by the Office of Natural Resources and Environmental Policy and Planning (ONEP), Ministry of Natural Resources and Environment, Thailand.

The three-day dialogue was attended by Government representatives, scientists and other experts from the subregions of South-East Asia and North-East Asia. They gathered to discuss how the IPBES Regional Assessment for Asia and the Pacific (AP) can support policymaking in the subregions, and to highlight how the rich biodiversity and ecosystem services of the subregions offer vital support systems for human wellbeing.

The dialogue featured presentations on key challenges indicated in the Assessment Report's Summary for Policymakers (SPM), with a focus on challenges in Indonesia on "collaborative, participatory and adaptive governance in biodiversity conservation"; challenges in Japan on "climate change and associated extreme events"; and challenges in Thailand on "waste and pollution". In-depth facilitated group discussions were carried out on relevant issues based on the three examples of challenges presented. The discussions identified the main challenges faced by countries of the subregions, and possible solutions, applying the key messages from the SPM.

The technical support unit for the IPBES Asia-Pacific Regional Assessment presented on how to use the Assessment Report, and highlighted four key areas of (1) capacity building, (2) uptake and impacts, (3) national ecosystem assessments, and (4) national platforms and networks. At the break-out sessions, delegates were asked about challenges to uptake the IPBES AP into country policies and possible solutions to it. The discussions resulted in the need of producing the IPBES outreach materials in more accessible languages for the wider majority, which can lead to the multi-stakeholder engagement, mainstreaming of biodiversity into policies and increase in the public awareness.

1. Concept

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) was established in 2012, to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, to facilitate long-term human wellbeing and sustainable development1. The "Capacity Building Project for the Implementation of IPBES Asia-Pacific Regional Assessment" aims to strengthen science–policy interface through building up capacities for the implementation of the regional assessment and enhancing the use of outputs of the IPBES deliverables in decision-making for the national policies on conservation and sustainable use of biodiversity and ecosystem services in Asia Pacific region. The project is funded by the Japan Biodiversity Fund through the Secretariat of the Convention on Biological Diversity (CBD).

The project's third component involves organising a science-policy dialogue in each sub-region of Asia and the Pacific, to relay knowledge generated and policy support tools developed by the Assessment and other implementation of IPBES Work Programme, for the benefit of the decision makers and other stakeholders in the Asia-Pacific region.

Previously, the Institute for Global Environmental Strategies (IGES) and the Asia-Pacific Network for Global Change Research (APN), with support from the IPBES technical support unit (TSU) for the Asia-Pacific Regional Assessment, organized two subregional science-policy dialogues: for South Asia and Western Asia in February 2019; and for Oceania in May 2019. IGES convened the third dialogue, for South-East and North-East Asia, in collaboration with the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), and the University of Tokyo Institute for Future Initiatives (UT-IFI) on 21 to 23 October 2019 in Bangkok, Thailand. UT-IFI took charge of session 2 and UNEP-WCMC session 3. After their sessions, IGES took their part of this project from session 4 to 6.

The primary audience for the third dialogue was national policymakers from South-East and North-East Asia. The countries that attended were Cambodia, China, Indonesia, Japan, Republic of Korea, Malaysia, Myanmar, Philippines, Thailand, Timor Leste and Vietnam. It was also attended by a co-chair, lead authors, and TSU of the Assessment, as well as experts from other relevant organizations (see Annex 7.3 Participant's List).

Components of the dialogues:

- Information sessions in which Assessment authors and others overviewed the findings of the Assessment
- Discussions focused on how science can be integrated into national policies
- Collective problem-solving with the guidance of facilitators and with reference to the Assessment Report
- Discussions on contemporary examples of the challenges faced
- Discussions on the uptake and use of the Assessment Report and further needs

[1] IPBES. (n.d.). About What is IPBES?. Retrieved March 20, 2019, from https://ipbes.net/about

Among these components, the main focus was put on discussions on “contemporary examples of challenges faced” and “the uptake and use of the Assessment Report and further needs”.

2. Opening (Session 1)

The moderator, Mr. Yasuo Takahashi, a Research Manager at IGES, introduced and welcomed all honorable speakers of the first session to take their place on the dais.

2.1 Opening Remarks:

Jittinun Ruengverayudh, Director of the Biodiversity Management Division, Office of Natural Resources and Environmental Policy and Planning (ONEP), Ministry of Natural Resources and the Environment of the Kingdom of Thailand

Dr. Ruengverayudh, as the representative of the host country, welcomed all the delegates to Thailand. She articulated how critical the issue of biodiversity is becoming and the urgent need to take actions towards remedying it. She concluded by wishing all delegates a pleasant stay in Thailand, and best wishes for a successful event.

Kazuhiko Takeuchi, President, Institute for Global Environmental Strategies (IGES)/ Project Professor, the University of Tokyo Institute for Future Initiatives/Senior Visiting Professor, United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)

Prof. Takeuchi introduced IGES and IGES's work. He emphasized the need for science-based actions for advancing transformative change processes, and the need to strengthen communication at the science-policy interface. He said that he expected the dialogue to provide a venue to discuss directions and methods toward that end.

Makiko Yashiro, Programme Officer, Ecosystems Division, Asia and the Pacific Office, UN Environment

Ms. Yashiro introduced the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and the aim of a project that they are conducting to support national biodiversity assessments. She expressed the importance of this event where policy makers from the subregions can discuss common issues together.

Wataru Suzuki, Global Coordinator, Japan Biodiversity Fund, Secretariat of the Convention on Biological Diversity (CBD)

Mr. Suzuki, introduced the "Capacity Building Project for the Implementation of IPBES Asia-Pacific Regional Assessment" as the overseer of the fund for this project. He also addressed the importance of organizing such dialogue to provide opportunity for the policy makers in the subregions to understand the IPBES Assessment reports to apply the major outcomes to the development of the national policy for the implementation of the CBD.

André Mader, Advisor, IPBES Technical Support Unit for the Asia-Pacific Regional Assessment / Programme Director, IGES

Mr. Mader introduced the aim of the dialogue. He explained the structure, and the day-by-day flow and contents of each section in the dialogue.

3. Dialogue (Session 4 to 6)

This section describes the contents of the dialogue in session 4 to 6 which this project took charge of.

3.1 The IPBES Regional Assessment for Asia & the Pacific: Introduction (Session 4)

Session 4 introduced the IPBES Regional Assessment Report for Asia and the Pacific and the key messages presented in its SPM.

Dr. Sonali Senaratna Sellamuttu, a co-chair of Assessment, introduced the Assessment summarized its key messages. She focused on biodiversity issues in North-East and South-East Asia, the status of biodiversity and ecosystem services in these subregions, the underlying causes of change, and scenarios for 2050.

Responding to a question about how the assessment report can be useful for national policies, she explained that the assessment reviewed academic and grey literature from across the five subregions. Consequently, the messages from the assessment are quite generic, but lay the foundation for steps toward national assessment and, thereby, national policymaking. This could begin by translating the Regional Assessment into national languages; then organising a national forum in each country, and then conducting a national assessment.

Zara Phang, lead author of chapter 6 of the Assessment, presented "Options for governance and decision-making from the IPBES Asia Pacific Assessment". She introduced six key policy options for halting and reversing declines in biodiversity and ecosystem services:

- Engaging in collaborative, participatory and adaptive governance of biodiversity (key message (KM) 18)
- Mainstreaming biodiversity into development policies, plans and programmes (KM 19)
- Utilising ecosystem-based approaches (KM 20)
- Cooperating in transboundary management of environment, including important land and seascapes (KM 21)
- Engaging in innovative partnerships with private sector, individuals and NGOs to meet gaps in funding (KM 22)
- Encouraging sustainable production, consumption and waste management (KM 23)

3.2 The IPBES Regional Assessment for Asia & the Pacific: Challenges reflected in key messages (Session 5)

In this session, participants shared challenges faced by their countries, and discussed potential solutions with some help from the key messages of the Assessment. Seven key messages (Table 1) from the Regional Assessment SPM, covering region-wide challenges, were shared through a pre-dialogue online survey to determine the applicability of the messages to "real-life" situations and its relevance to the country-specific needs of policymakers. Respondents identified country-specific challenges. Information gathered

through the survey was used to shape an agenda with a focus on representative case studies or challenges relevant at national and subregional levels.

Table 1. Identified key messages on challenges from the IPBES AP Regional Assessment

Key Message (KM)	Description
KM 6	The population of large wild mammals and birds has declined across the region
KM 7	Invasive alien species have increased in number and abundance, and constitute one of the most serious drivers of biodiversity loss across the Asia-Pacific region
KM 8	Protected area coverage in the Asia-Pacific region has increased substantially but does not effectively target areas of important biodiversity, and progress is needed towards better overall management effectiveness
KM 9	Traditional biodiversity is in decline, along with its associated indigenous and local knowledge, due to a shift toward intensification of agriculture with a small number of improved crop species and varieties
KM 10	People in the Asia-Pacific region depend heavily on fisheries for food, with aquaculture growing by nearly 7% annually, but the capture fisheries sector is threatened
KM 11	Coral reefs are of critical ecological, cultural and economic, importance, supporting the livelihoods of hundreds of millions of people in the Asia-Pacific region and beyond through vital and valuable ecosystem services, such as food security or coastal protection, and are under serious threat.
KM 12	Climate change and associated extreme events are impacting species distribution, population sizes and the timing of production or migration; increased frequency of pest and disease outbreaks resulting from these changes may have additional adverse effects on agricultural production and human wellbeing
KM 13	The increase of waste and pollution in the Asia-Pacific region is impacting ecosystems and threatening the current and future health of nature and people.

Themes

Key themes for the dialogue were considered following a pre-dialogue survey (see Appendix 7.6 Pre-Dialogue Survey) and distributed among delegates. Presentations were delivered by Indonesia, Japan and Thailand, on the following specific challenges:

1. Collaborative, participatory and adaptive governance in biodiversity conservation
2. Climate change and associated extreme events
3. Waste and pollution

Challenges

Summary of presentation

Theme 1. Collaborative, participatory and adaptive governance in biodiversity conservation (Challenge in Indonesia on "How to build interconnection among ministries on promoting conservation and utilizing biodiversity")

The first challenge was presented by Ms. Eka Fatmawati Tihurua, researcher from the Research Center for Biology, Indonesian Institute of Sciences (LIPI). She said that the most challenging biodiversity issue in the country is how to build interconnection among different ministries on promoting conservation, utilizing biodiversity and synchronizing development plans that have an impact on biodiversity and economy. She added that many policies among ministries tend to contradict and hamper the achievement of biodiversity-related goals. There is a strong need for efforts to coordinate all action programs among different ministries. In addition, interconnections between the national government and regional governments also needs to be strengthened to share the same goals and targets. It is also important to improve understanding and enhance awareness among policymakers about the value of biodiversity.

Theme 2: Climate change and associated extreme events (Challenge in Japan on "Impacts of climate change on the species distributions and ecosystems")

The challenges in Japan on this theme were shared by Mr. Keisuke Takahashi, Director of Tokyo Sustainability Forum, IGES. Mr. Takahashi explained that, in Japan, the major drivers of biodiversity loss are defined as: 1) development, direct use, and water pollution; 2) reduction in management of human-influenced landscape; 3) invasive alien species and chemical substances; and 4) global climate change. Especially, regarding the second point, the population has started to decline in earnest, and Japan is taking action to deal with the impact of population decline on biodiversity. With respect to the fourth point, the impacts of climate change on species distributions and ecosystems are considered to be of great concern, and are predicted to continue to increase.

There are a number of negative impacts of climate change detected in Japan, which include lowering quality of agricultural crops, increased incidence of heat stroke, expansion of vector habitat area, increase in frequency and volume of natural disasters, intensification of coral bleaching, etc. These issues impact directly or indirectly on species distribution and ecosystems. Therefore, mitigation of these impacts, as well as adaptation to the changes, are urgently needed.

Theme 3: Waste and pollution (Challenge in Thailand on "Waste and pollution that impact marine ecosystems and threaten marine animals")

Dr. Bencharmaporn Wattanatongchai, Chief of Biodiversity Focal Point Section, ONEP, Thailand, introduced theme 3. He said that, among several issues facing biodiversity management in Thailand, the most critical issue is the increasing waste and pollution that impacts on marine ecosystem and threatens marine animals. Thailand is ranked sixth in the world for generating marine waste. Evidence shows that marine animals such as dugong, whale and turtle die as a result of contact with marine debris, especially plastic waste. Although the Thai Government has established the national agenda on

waste management and has undertaken actions to improve the existing relevant laws and develop additional regulation measures to solve these problems, the impact from marine debris on marine animals has not substantially decreased yet. It is the challenge of the country to engage general public in reducing the mortality rate of marine animal from plastic waste as it is put in their strategies in Thailand's Master Plan for Integrated Biodiversity Management 2015-2021 as well as National Biodiversity Management Action Plans (NBMAS) 2017 - 2021. The Roadmap on Plastic Waste Management between 2018 and 2030 has also been generated with strategic plans and targets. For example, Thailand aims to use 100% recycled plastic by 2027. The Thai Government also committed to reducing marine debris, at the recent ASEAN Summit, by signing the "Bangkok Declaration".

Summary of Group Discussions

Based on the three themes, all of the participants including the national delegates, IPBES experts and other experts from relevant organizations, were split into three groups and discussed in depth an allocated theme, based on the following questions:

- Do you have examples of challenges in your country or area that are similar to the challenge presented? If so, please share them briefly with the group
- What are the causes (drivers) of the challenges that you have just explained?
- Which measures may be able to address these challenges, and which obstacles are preventing these measures from being implemented?

Each group discussion was summarized by the facilitator or rapporteur and reported. The summary of each theme is as follows:

Theme I: Collaborative, participatory and adaptive governance in biodiversity conservation

Challenges:

On the challenge of collaboration:

- Factor 1: Weak cooperation with other countries
  - Driver: The lack of power of Environment Minister as the final decision-making authority; negative impact on neighbouring countries as there is competition on natural resources among countries
- Factor 2: Poor coordination among Ministries and sectors throughout the region
  - Driver: The lack of information and knowledge sharing among key actors

On the challenge of participation,

- Factor 1: The time-consuming nature and the difficulty of satisfying all the stakeholders
  - Driver: Political change and high staff turnover in the Government; the lack of consistent processes; lack of financial resources for capacity building.
- Factor 2: Conflict in promoting collaboration and participation
  - Driver: Different priorities among different sectors; undervaluation of issues related to biodiversity and ecosystem services

On the challenge of adaptive governance,

- Factor 1: Issues on the nature of time-consuming processes
  - Driver: The long timeframe of biodiversity conservation; weak law enforcement; lack of money for biodiversity and conflicts; weak penalties for violating rules and regulations; sometimes inappropriate laws and regulations in certain contexts; and democracy which is the core value for promoting adaptive governance but at the same time, it is also problematic as it is the source of time-consuming processes

The most critical challenge recognized by the participants were that participation takes time and it is difficult to satisfy all stakeholders; and conflicts among sectoral priorities.

Suggested solutions:

- In dealing with participatory processes:
  Provision of incentives for participation; the establishment of legal requirements for participation such as FPIC; considering different scales and methods of participation; and the improvement of the accessibility to the information particularly in local language
- To address the issue on the conflict among sectoral priorities:
  Development of platforms where people can get together to ensure participatory processes; the establishment of pro-environmental top leadership; designing actions based on synergies; interdependency between the various SDGs; landscape approach; developing projects across ministries; and institutionalising ecosystem services when designing programmes.

Theme II: Impacts of climate change on the species distributions and ecosystems

Challenges:

Two main challenges, extreme weather and land-use, were identified. Methodologies, and issues related to stakeholders, were also identified as problems that affect species distributions and ecosystems.

- Extreme weather: Heavy rain, flooding, drought, forest fire which also cause haze and shifting the period of season
  - Indirect drivers: Economic drivers and land use change
  - Direct drivers: Overuse of underground water, deforestation, overconsumption of materials, crops and meat

- Land-use: Degradation of forest areas, deforestation, loss of vegetation, and urbanization
  - Indirect drivers: Inadequate governance, economy-oriented development,
  - Direct drivers: Increasing population, unsustainable farming, human pressure on land and water

- Methodologies: Lack of scientific data, difficulty to monitor changes
  - Indirect/direct driver: Political will and public interest

- Issues related to stakeholders: The need of more determined national policies and consideration of people who have already been affected
  - Indirect/direct drivers: Political will, economic interests

Suggested solutions:

- Extreme weather: Nature-based approaches (KM20), sustainable production and consumption (KM23), multi-ministerial management and cross-sectoral cooperation (KM18)
- Land use change: Mainstreaming biodiversity (KM19), collaboration with local communities (KM18), encouraging sustainable production and consumption (KM23), and partnership with private sector (KM22)
- Methodological challenges: Mainstreaming of biodiversity into development policies (KM19), innovative partnerships with the private sector as they could invest in monitoring on climate change (KM22)
- Issues related to stakeholders: Innovative partnership (such as those with private sector) (KM22), fully considering right-holders including indigenous peoples, local communities and high-level stakeholder collaboration in decision making (KM18), and taking account of contribution of indigenous peoples and local communities (IPLC) in Nationally Determined Contributions (NDCs)

Theme III: Waste and pollution
Challenges:

- Chemical pollution from agriculture and mining which pollute freshwater and soils affecting biodiversity and human health
  - Driver: Lack of knowledge, regulations and market incentives

- Marine plastics, including plastic wastes and micro-plastics
  - Driver: Consumption behaviour and public awareness

- Air pollution and micro-dust, including PM2.5 and haze
  - Driver: Economy-oriented development

- Construction waste dumping in the sea, affecting marine ecosystem and tourism
  - Driver: the lack of waste management capacity and awareness

Suggested solutions:

- Chemical pollution from agriculture and mining: Mainstreaming of biodiversity into development policies, plans, and programmes (KM19) and sustainable production, consumption and waste management policies (KM23)
- Marine plastics, including plastic wastes and micro-plastics: Innovative partnership particularly with the private sector. Need adaptive governance
- Air pollution and micro-dust: Mainstreaming of biodiversity into development policies, plans, and programmes (KM19). Haze reduction requires transboundary cooperation. Micro-dust reduction requires partnership with private sector
- Construction waste dumping in the sea: Tighten the regulation on waste management

3.3 The IPBES Regional Assessment for Asia & the Pacific: Spreading the word (Session 6)

This session aimed to discuss how to improve biodiversity outreach, including a focus on increasing awareness of the IPBES Regional Assessment.

To launch the group discussions, Mr. André Mader presented a "Background on outreach for the IPBES Asia-Pacific Regional Assessment". He presented on how to use and uptake the Regional Assessment, and highlighted four key areas: (1) capacity building; (2) uptake and impacts; (3) national ecosystem assessments; and (4) national platforms and networks. Examples of IPBES outreach in Japan were presented by Mr. Keisuke Takahashi. These included the translation of IPBES SPMs into Japanese, media briefing to share IPBES meeting outcomes, organizing symposia on the IPBES Regional Assessment for Asia and the Pacific and the IPBES Global Assessment, and holding liaison meetings among the researchers and the relevant Government ministries.

Summary of Group Discussions

The participants were split into three groups. Discussion was based on the following questions:

- Have you communicated the key messages and information of the IPBES Asia-Pacific Assessment Report and other IPBES deliverables to relevant ministries and stakeholders in your country? What are the challenges/obstacles?
- Will the key messages and information of IPBES deliverables be reflected in your country's policy documents or projects? (e.g. national policies or strategies, national reports…etc.) What is needed to ensure that this happens?

The results of discussions were summarized under challenges and solutions, as follows:

Challenges:

- Translation into local languages, which requires a long time and cross-ministry collaboration
- Translation in countries where multiple languages are used
- A large number of international reports and the need to enhance national-level understanding of the importance of IPBES
- Resource limitations
- Lack of stakeholder engagement
- Lack of media coverage
- Difficulty in encouraging researchers to download and cite the Assessment Report
- Lack of public attention

Solutions:

- Contextualising messages to local contexts, and for business
- National assessments could provide a starting point
- Need of locally relevant scales but still the key messages of the IPBES AP regional assessment can represent country circumstances and provide starting point
- Highlight ecosystem services in national acts and plans, announcement and advertisement through media
- Strengthen public opinion so that policies take into account the IPBES key messages.

- Mainstreaming multi-stakeholder involvement -government, NGOs and private sector
- Need for cross-ministry cooperation
- Need of the support from the national government to sub-national government
- Translation into national/local languages can focus on SPM or key messages
- Illustrate IPBES Assessment key messages with concrete local examples
- Customised presentation on the IPBES key messages, according to local (national) preferences
- Access to IPBES materials: many researchers, as well as policy makers and media, may not be aware of the IPBES reports
- Awareness-raising through game apps,
- Collaboration with local people through citizen science or rapid ecosystem assessment
- Downscaling the IPBES assessments and their key messages.

4. Feedback and Closing (Session 7)

Feedback

Dr. Sonali Senaratna Sellamuttu presented feedback on the entire dialogue with support from session moderators as follows:

- Group discussions addressed major relevant research and its contributions to policy making, relationship between scientists, policymakers and other stakeholders in policymaking processes, and challenges and opportunities for strengthening science-policy interface
- Common challenges were identified, such as lack of data and information to enable informed decision making
- There may be a need for IPBES-like assessments at the national level; and for a platform where policymakers, scientists and other stakeholders can come together at the national level
- National assessment was a recurring theme throughout the workshop. Some countries have started the process already. They were encouraged to share their experiences
- Some countries already have mechanisms to deal with biodiversity issues. There is a need to continue efforts, including through cross-ministerial cooperation and implementing national assessment, and to make them accessible to policymakers.
- It was also highlighted that, within the SPM, we can focus on the abbreviated key messages in communicating with busy policymakers, and link them to substantial text in SPM and the assessment chapters where appropriate. Report back from the groups
- Regarding outreach, common themes throughout the discussion included messaging, links across ministries and levels of government, need for key messages in local languages, and inclusion of different groups of people such as IPLC, academia, policymakers, private sector, and especially young people

Dr. Senaratna Sellamuttu then asked participants about their impressions of the dialogue, through the following questions

Are you now more likely to start the process of conducting a national assessment?

- Mongolia: we'll start national assessment towards 2020
- Myanmar: forest department has a plan
- Thailand: GEF-6 natural capital accounting will be starting soon
- Republic of Korea: Yes. Became confident about the usefulness of national assessment, which can be put forward as a policy priority. Wish to keep in touch with dialogue organizers for further experience and insights
- China: Started national assessments referring to the IPBES concepts. Challenges include stakeholder involvement and work across ministries. Wish to have guidance to overcome these challenges

- Cambodia: now conducting national ecosystem assessment, and in the process of producing the scoping report through consultations with different stakeholders. We have national biodiversity working group that involves 19 ministries and various stakeholders

How do we include different stakeholders in the assessment process?

- Mongolia: public awareness for stakeholder involvement, including mining companies for example as part of their corporate social responsibility; send a big delegation to CBD meetings including private sector; make private sector contribute to national commitments. Suggest that organisers invite the private sector to such events - need to involve everybody
- Myanmar: forest department holds the contacts of all necessary parties
- Timor-Leste: learnt critical importance to collaborate across sectors, and work with the climate-change community

How useful do you think the IPBES Regional Assessment will be, especially to inform policy?

- Myanmar: Yes, useful to inform policy making
- Vietnam: We will review IPBES messages
- Timor-Leste: First time to be exposed to IPBES outcomes. This was crucial and beneficial for implementing some laws in our country. Will make efforts to use messages from IPBES for awareness raising and capacity building
- Thailand: We have the opportunity to provide information obtained through the workshop to higher officials
- Malaysia: Very useful, but currently not well recognised. This will provide a benchmark for undertaking such an assessment at the national level. Policymakers need to identify balance between environment and economy. Policy involves various and long process, including upper/lower house. If we have national assessment, we believe that we can influence national policies and also involve more researchers
- Indonesia: Currently making efforts to familiarise people with the IPBES assessments. With the new cabinet, we'll articulate what was done in the previous cabinet
- China: Difficulties in downscaling information, but still will be helpful for policymakers
- Cambodia: Provides a model, and approaches, that can be used for national ecosystem assessment

Was this workshop helpful in cross-country collaboration?

- Myanmar: All information was useful, and Myanmar is now thinking of IPBES-like assessment
- Vietnam: Learnt from IPBES and other countries. Great idea to accelerate cross-country cooperation. Will contact other countries for possible collaboration
- Thailand: Potential to learn from and work with other countries

- Cambodia: WS provided precious opportunity to have conversation with other countries that have already conducted, or are conducting, a national ecosystem assessment

Closing remarks

Mr. Keisuke Takahashi, IGES, provided closing remarks. He thanked all speakers for their excellent presentations, and all moderators, facilitators and rapporteurs for their excellent contribution in each session, and thanked attendees for their active participation and contribution to the dialogue. He said he hoped that the participants would use the workshop as an opportunity to enhance activities in their respective countries relating to IPBES, and to enhance cooperation.

Particularly, Mr. Takahashi expressed his sincere gratitude to Office of Natural Resources and Environmental Policy and Planning (ONEP), Ministry of Natural Resources and the Environment of the Kingdom of Thailand, for hosting the dialogue, and providing very warm hospitality, as well as to the Secretariat of the CBD and Ministry of the Environment of Japan for their financial support of the dialogue.

Dr. Claire Brown, Principal Technical Specialist, UNEP-WCMC which presented session 2 of this dialogue, expressed her gratitude to all the participants and her wishes to keep in touch with all of the policy makers for the guidance document to be shared.

Mr. Wataru Suzuki, CBD, expressed his sincere gratitude to the host, all the participants and the organizers. He stated that when he was previously engaged with the preparations of the IPBES AP regional assessment report as a part of the technical support unit, he realized there would be significant capacity gaps as well as strong need for the opportunities for learning and dialogue among experts, policy makers and stakeholders for the use of the IPBES assessment outcomes in the region. In this regard, he was so happy to see the progress and developments during this dialogue. He also hopes such dialogue will be continued among them in the future.

5. Analysis of Main Outcomes

5.1 Challenges and Solutions

Challenges

The following is a summary of challenges raised during the group discussions, with some complementary additions. To make clear what type of challenges exist, and what type of solutions are needed, the type of challenges are separated into 1) Physical or direct environmental challenge and 2) Governance or institutional challenges.

Theme I: Collaborative, participatory and adaptive governance in biodiversity conservation

1. Physical or direct environmental challenges:
   Long-timeframe of biodiversity changes; unpredictability of biodiversity and environmental changes; difficulty to understand the environmental problems for those who are not affected; different values of nature for different stakeholders
2. Governance or institutional challenges:
   Weak cooperation among countries; conflict between sectoral priorities; political change and high staff turnover; weak law enforcement; taking a long time for participatory process but short time frame required for results

Theme II: Climate change and associated extreme events

1. Physical or direct environmental challenges:
   Extreme weather (heavy rain, flooding, drought, forest fire which also cause haze and shifting the period of season); land-use (degradation of forest areas, deforestation, loss of vegetation, and urbanization); methodologies (lack of scientific data, difficulty to monitor changes); and issues related to stakeholders (the need of more determined national policies and consideration of people who have already been affected)
2. Governance or institutional challenges:
   Lack of environmental regulations and awareness by governments; economy-oriented development, lack of interests among politicians and citizens (political unwillingness)

Theme III: Waste and pollution

1. Physical or direct environmental challenges:
   Chemical pollution from agriculture and mining; marine plastics, plastic wastes and micro-plastic; air pollution and micro-dust (PM2.5 and haze); construction waste
2. Governance or institutional challenges:
   Lack of regulations; market incentives-oriented; lack of public awareness; consumption behaviour; economy-oriented development; lack of waste management capacity

Solutions

Many countries in South-East and North-East Asia have experienced rapid economic development. On one hand, it has increased the income and education level among the public. On the other hand, the income gap between the "haves and have-nots" has increased, and land development in rural areas has caused environmental exploitation

including habitat degradation, and pollution, thus leading to the loss of biodiversity. In addition, such rapid social and technological changes are making it difficult for people to adapt their lifestyles with consideration for the environment. Most governments are facing these conflicting challenges of economic development and environmental conservation. Engagement and inclusion of various sectors is considered a key solution.

Many solutions are aligned with the key messages (KM) clarified in the SPM of the assessment:

- [KM 18] Collaboration between local communities and higher-level stakeholders in decision-making processes (collaborative, participatory and decentralized governance)
  - Ensure multi-stakeholder governance
  - Clearly understand the impact of environmental issues including extreme weather, pollution, land development, etc. on societies through raising the voices of the affected area and scientists
  - Capacity building and human resources on sustainable development

- [KM 19] Mainstreaming biodiversity into development policies, plans, and programme (integrating biodiversity conservation into broader areas, including poverty alleviation, climate adaptation and degraded land rehabilitation programmes, etc.)
  - Integrate science into the political governance in both central and provincial levels

- [KM 22] Partnership with the private sector, individuals and non-governmental organizations
  - Encourage the private sector more to contribute to the environment rather than solely economy

- [KM 23] Sustainable production, consumption and waste management policies
  - Improve environmental education and awareness among policy makers, the private sector and the public
  - Strict regulations by the governments
  - Capacity building and human resources
  - Integrate science and Sustainable Development Goals (SDGs) into governance

5.2 IPBES Uptake and Future Assessments

Information on the use and uptake of the regional assessment was shared among delegates. They discussed important elements at the national level in their respective countries that are reflected in the regional assessment. The talks resulted in recommendations for future IPBES outreach.

Uptake: Challenges

Challenges for the uptake of IPBES reports into policymaking were broadly classified into the following two points:

- Language barrier
  - Difficulty of translation
  - Some countries speak multiple languages
  - Lack of human resources

- Lack of understanding or knowledge about IPBES among policy makers, private sector, media, scientists and the public
  - Lack of, stakeholder engagement, media dissemination and reference to the IPBES assessment by scientists, was included here since it is highly caused due to their lack of understanding or knowledge

Uptake: Recommendations

Recommendations for the uptake of IPBES materials including the regional assessment were as follows:

- On the challenge of language barriers
  - IPBES reports can produce reports which were translated into more accessible language for non-scientific people. It will increase its dissemination more widely and enhance people's awareness
  - More accessible language can be more easily translated into many other languages

- On the challenge of lack of understanding or knowledge about IPBES among policy makers, private sector, media and the public
  - This challenge could be eased by solving the language barrier mentioned above
  - If the IPBES outreach materials were easily readable, accessible and enjoyable for the majority of people, it can be more easily recognized by the multi-stakeholders and the public attention is raised.
  - The higher attention the public has, the more policy makers, the private sector, media and scientists pay attention to biodiversity

In conclusion, it is important to make the IPBES materials accessible to as broad an audience as possible. Even if their materials are translated into a familiar language, understanding can be thwarted by jargon and complex concepts. This can be overcome by using the assessment report as the basis for more easily readable material. In this way, the media and the public may be more likely to embrace the topic and deepen their understanding of it. This can also help to mainstream biodiversity into policy and society.

6. Acknowledgements

IGES, UNEP-WCMC and IFI of the University of Tokyo are highly appreciative of the active participation of government delegates, scientists, researchers, experts, relevant organizations, and others who participated in the event.

Primarily, IGES, UNEP-WCMC and IFI extend their sincere gratitude to Office of Natural Resources and Environmental Policy and Planning (ONEP) of the Ministry of Natural Resources and Environment as the official host of the dialogue, and for providing unwavering support and hospitality in the beautiful country of Thailand. The undertaking and success of the three-day science-policy dialogue would have been impossible without the full support and engagement of the Ministry of the Environment of Japan and the Secretariat of the Convention on Biological Diversity, who provided funding and management support for the project; and the IPBES Secretariat and the IPBES Technical Support Unit (TSU) for the Asia-Pacific Regional Assessment and Invasive Alien Species who shared their extensive knowledge and expertise.

7. Appendices

7.1 Programme

Programme

Science-Policy Dialogues on the Assessment of Biodiversity and Ecosystem services: Southeast Asia & Northeast Asia

Bangkok, Thailand • 21-23 October 2019

Day One – Monday, 21 October

08:20-08:50	REGISTRATION Delegates are kindly asked to register and receive their badges and conference bags at the registration desk and be seated by **08:50**.

Session 1: Opening

09:00-09:10	Opening remarks by the host country ***Jittinun Ruengverayudh*** *(Director of Biodiversity Management Division, Office of Natural Resources and Environmental Policy and Planning (ONEP), Ministry of Natural Resources and the Environment of the Kingdom of Thailand)*
09:10-09:20	Opening remarks by organizer ***Kazuhiko Takeuchi*** *(President, Institute for Global Environmental Strategies (IGES)/ Project Professor, the University of Tokyo Institute for Future Initiatives/Senior Visiting Professor, United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS))*
09:20-09:30	Opening remarks by organizer ***Makiko Yashiro*** *(Programme Officer, Ecosystems Division, Asia and the Pacific Office, UN Environment)*
09:30-09:45	Opening remarks by Secretariat of the CBD ***Wataru Suzuki*** *(Global Coordinator, Japan Biodiversity Fund, Secretariat of the Convention on Biological Diversity (CBD))*
09:45-10:00	Structure of the meeting ahead ***André Mader*** *(Advisor, IPBES Technical Support Unit for the Asia-Pacific Regional Assessment / Programme Director, IGES)*
10:00-10:20	Coffee break

Session 2: Predicting and Assessing Natural Capital & Ecosystem Services (PANCES)

10:20-10:30	Introduction to the session ***Yasuo Takahashi*** *(Research Manager, IGES)*
10:30-10:45	Scenarios and modelling ***Osamu Saito*** *(Academic Director & Programme Officer, UNU-IAS/Principal researcher, IGES)*
10:45-11:00	Local-level planning: use of indigenous and local knowledge ***Takehito Yoshida*** *(Associate Professor, Graduate School of Arts and Sciences, the University of Tokyo)*
11:00-11:15	Cross-sector initiatives: food and biodiversity ***Ryo Kohsaka*** *(Professor, Graduate School of Environmental Studies, Nagoya University)*
11:15-11:30	Q&A
11:30-12:35	Break-out group discussion on science-policy interface in Northeast and Southeast Asia
12:35-12:50	Report back from the groups
12:50-13:50	Lunch

Session 3: National assessments of biodiversity and ecosystem services at the national scale following the IPBES approach

13:50-14:30	Introduction to the IPBES assessment approach, the IPBES conceptual framework and links to the CBD ***Claire Brown*** *(Principal Technical Specialist, United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC))*
14:30-15:00	Discussion in plenary to share experiences using IPBES' products
15:00-15:20	Purpose and framing of national assessments on biodiversity and ecosystem services (policy questions and utility) ***Claire Brown***
15:20-15:35	Q&A
15:35-15:55	Coffee break
15:55-17:25	Break-out group discussion to share experiences and needs for national assessments on biodiversity and ecosystem services
18:00-20:00	Networking dinner

Day Two – Tuesday, 22 October

Session 3: National assessments of biodiversity and ecosystem services at the national scale following the IPBES approach (cont.)

09:00-09:20	Introducing UNEP-WCMC's guidance on national assessment of biodiversity and ecosystem services to support CBD implementation ***Emma Martin*** *(Associate Programme Officer, UNEP-WCMC)*
09:20-10:30	Break-out group discussion on utilizing UNEP-WCMC's guidance in each country
10:30-10:50	Coffee break
10:50-11:45	Break-out group discussion on utilizing UNEP-WCMC's guidance in each country (cont.)
11:45-12:30	Reporting back from the groups and wrap up discussion
12:30-13:30	Lunch

Session 4: The IPBES Regional Assessment for Asia & the Pacific: Introduction

13:30-13:45	Introduction to the IPBES Regional Assessment for Asia and the Pacific, and summary of its key messages (followed by IPBES video (5 min)) ***Sonali Senaratna Sellamuttu*** *(Co-chair, IPBES Asia-Pacific Regional Assessment)*
13:45-13:55	Options for governance and decision-making from the IPBES Asia Pacific Assessment ***Zara Phang*** *(Lead author of Chapter 6, IPBES Asia-Pacific Regional Assessment)*
13:55-14:30	Q&A

Session 5: The IPBES Regional Assessment for Asia & the Pacific: Challenges reflected in key messages

Presentation from country representatives on the challenges for biodiversity conservation

14:30-14:40	How to build interconnection among ministries on promoting conservation and utilizing biodiversity ***Eka Fatmawati Tihurua*** *(Researcher, Research Centre for Biology, Indonesian Institute of Sciences (LIPI))*
14:40-14:50	The impacts of climate change on the species distributions and ecosystems in Japan ***Keisuke Takahashi*** *(Director, Tokyo Sustainability Forum, IGES)*
14:50-15:00	Waste and pollution that impact marine ecosystems and threaten marine animals ***Bencharmaporn Wattanatongchai*** *(Chief of Biodiversity Focal Point, Office of Natural Resources and Environmental Policy (ONEP), Ministry of Natural Resources and Environment, Thailand)*
15:00-15:30	Q&A and input from other countries
15:30-15:50	Coffee break
15:50-17:20	Break-out group discussion utilizing the Regional Assessment to address the challenges

Day Three – Wednesday, 23 October

Session 5: The IPBES Regional Assessment for Asia & the Pacific: Challenges reflected in key messages (cont.)

09:00-09:30	Reporting back from the groups
09:30-10:00	Wrap-up discussion

Session 6: The IPBES Regional Assessment for Asia & the Pacific: Spreading the word

10:00-10:15	Background on outreach for the IPBES Asia-Pacific Regional Assessment ***André Mader***
10:15-10:25	Presentation on outreach in Japan ***Keisuke Takahashi***
10:25-10:45	Q&A
10:45-11:00	Additional examples from the floor
11:00-11:20	Coffee break
11:20-12:20	Break-out group discussion on improving biodiversity outreach, including a focus on increasing awareness of the IPBES Regional Assessment
12:20-13:20	Lunch
13:20-13:50	Reporting back from the groups
13:50-14:20	Wrap-up discussion

Session 7: Feedback & Closing

14:20-14:40	Brief overview of the past three days ***Sonali Senaratna Sellamuttu***
14:40-15:10	Discussion on key outputs of the dialogue
15:10-15:30	Feedback survey. Delegates are invited to complete a feedback survey available online or on paper
15:30-15:40	Closing remarks

7. 2 Participants' List

*IPBES focal point
**CBD focal point
***CBD focal point nominee/alternate

1) Country representatives

Country	Name	Organisation	Position/Title
Cambodia	Nith Chhin	General Secretariat of the National Council for Sustainable Development (GSSD)/MoE	Chief Office of Biodiversity Department and National Ecosystem Assessment Expert
Cambodia	Chandara Phat	Royal University of Phnom Penh	Lecturer and National Ecosystem Assessment Expert
Cambodia	Sothy Roth Sam Oeun***	General Secretariat of the National Council for Sustainable Development (GSSD)/MoE	Chief office of Ex-situ Conservation, Department of Biodiversity, GSSD
China	Wenliu Zhang*	Ministry of Ecology and Environment	Civil Servant
China	Yu Tian	Chinese Research Academy of Environmental Sciences	Researcher
Indonesia	Gono Semiadi*	Research Centre for Biology -Indonesian Institute of Sciences (LIPI)	Researcher - IPBES National Focal Point
Indonesia	Eka Fatmawati Tihurua	Research Centre for Biology -Indonesian Institute of Sciences (LIPI)	Researcher
Indonesia	Sri Ratnaningsih***	Directorate of Biodiversity Conservation, MoEF	Head of Plant Section, Division of Implementation on International Conventions
South Korea	Yuri Kim*/**	Ministry of Environment	Civil Servant

South Korea	Wooyeong Joo*/**	National Institute of Ecology	Researcher
Malaysia	Arief Iskandar Mohamad	Biodiversity and Forestry Management Division, Ministry of Water, Land and Natural Resources	Principal Assistant Secretary
Malaysia	Ahmad Fadzil Abdul Majid	Forestry Department	Director, Silviculture and Forest Biodiversity Conservation Division
Malaysia	Lillian Swee Lian Chua***	Forest Research Institute Malaysia	Director
Mongolia	Ariuntuya Dorjsuren **	Ministry of Environment and Tourism	Senior Officer
Mongolia	Batzaya Nogoya ***	Ministry of Environment and Tourism	Director of Forest, Water and Protected Area Cadastr Division
Myanmar	Phyu Phyu Khaing***	Forest Department, Ministry of Natural Resources and Environmental Conservation	Assistant Director
Myanmar	Nyo Me Htun***	Forest Department, Ministry of Natural Resources and Environmental Conservation	Staff Officer
Thailand	Jittinun Ruengverayudh***	Office of Natural Resources and Environmental Policy and Planning	Director of Biodiversity Management Division
Thailand	Benchamaporn Wattanatongchai***	Office of Natural Resources and Environmental Policy and Planning	Chief of Biodiversity Focal Point/ Biodiversity Management Division
Thailand	Phuttatida Rattana***	Office of Natural Resources and Environmental Policy and Planning	Environmentalist, Practitioner Level
Thailand	Swaros Dumrichob***	Office of Natural Resources and Environmental Policy and Planning	Environmentalist, Professional Level

Thailand	Danai Nakprasert	Department of Agriculture (DOA)	Director of Biotechnology Research and Development Office
Thailand	Kunyaporn Pipithsangchan	Department of Agriculture (DOA)	Director of Genebank Research and Development Group
Thailand	Suwee Ngandee	Biodiversity-based Economy Development Office (BEDO)	Director of Intellectual Property Development Group
Thailand	Uratchwee Unhalekhaka	Biodiversity-based Economy Development Office (BEDO)	Governmental Officer
Thailand	Arveekorn Pokpong	Biodiversity-based Economy Development Office (BEDO)	Governmental Officer
Thailand	Susakul Palakawong Na Ayudthaya	Biodiversity Research Centre (BRC), Thailand Institute of Scientific and Technology Research (TISTR)	Research Officer
Timor Leste	Joao Antalmo Ferreira	Directorate General of Forestry, Ministry of Forestry and Fisheries	National Director of Conservation of Nature
Timor Leste	Rui dos Reis Pires	Directorate General of Environment, Secretariat of State for Environment	National director of Biodiversity
Timor Leste	Marcal Gusmao***	Faculty of Agriculture, National University of East Timor	ABS Focal Point and Lecturer
Vietnam	Thu Thuy Phung	Nature and Biodiversity Conservation Agency	Official
Vietnam	Thi Thu Hien Ngo	Nature and Biodiversity Conservation Agency	Official
Vietnam	Pham Thanh Tu***	Environmental Science Institute	Official

2) IPBES experts

Country	Name	Organisation	Position/Title
Japan	Ryo Kohsaka	Nagoya University	Professor
Malaysia	Zara Phang Yuet Mei	WWF Malaysia	Sustainable Economy and Policy Analyst
Myanmar	Sonali Senaratna	International Water Management Institute (IWMI)	Co-Chair IPEBS Asia and Pacific Regional Assessment
South Korea	Sung Ryong Kang	National Institute of Ecology	General Manager
South Korea	Junhyup Kim	National Institute of Ecology	Researcher

3) Other experts

Country	Name	Organisation	Position/Title
Japan	Kazuhiko Takeuchi	University of Tokyo/Institute for Global Environmental Strategies (IGES)	President at IGES
Japan	Osamu Saito	United Nations University/Institute for Global Environmental Strategies (IGES)	Principal Policy Researcher
Japan	Takehito Yoshida	The University of Tokyo	Associate professor
Japan	Kazuo Matsushita	Institute for Global Environmental Strategies (IGES)	Senior Fellow
Thailand	Makiko Yashiro	Ecosystems Division, Asia & Pacific Office, UN Environment	Programme Officer

Thailand	Jinhua Zhang	Ecosystems Division, Asia & Pacific Office, UN Environment	Regional Coordinator
Thailand	Solene Le Soze	UN ESCAP	Environment Affairs Officer

4) Relevant organization

Country	Name	Organisation	Position/Title
Japan	Wataru Suzuki	Secretariat of the Convention on Biological Diversity (SCBD)	Global Coordinator, Japan Biodiversity Fund
Thailand	Lakpa Nuri Sherpa	Asia Indigenous Peoples Pact (AIPP)	Environment Programme Coordinator

5) IPBES-TSU

Country	Name	Organisation	Position/Title
Japan	André Derek Mader	IPBES Technical Support Unit for the Asia-Pacific Regional Assessment (TSU-APRA) / Institute for Global Environmental Strategies (IGES)	Adviser to the IPBES TSU-APRA / Programme Director;

6) Secretariat

Country	Name	Organisation	Position/Title
Japan	Hiromi Isejima	University of Tokyo	Academic Support Staff
Japan	Hideyuki Kubo	Institute for Global Environmental Strategies (IGES)	Research Manager
Japan	Yasuo Takahashi	Institute for Global Environmental Strategies (IGES)	Research Manager

Japan	Keisuke Takahashi	Institute for Global Environmental Strategies (IGES)	Tokyo Sustainability Forum Director
Japan	Koji Miwa	Institute for Global Environmental Strategies (IGES)	Policy Researcher
Thailand	Chochoe Devaporihartakula	Institute for Global Environmental Strategies (IGES)	Progamme Manager
Thailand	Chommanard Chintakanont	Institute for Global Environmental Strategies (IGES)	Finance and Administrative Assistant
Thailand	Ridronachai Warungkarasami	Institute for Global Environmental Strategies (IGES)	Logistic Manager
U.K	Claire Brown	UN Environment Programme World Conservation Monitoring Centre（UNEP-WCMC)	Principal Technical Specialist
U.K	Emma Martin	UN Environment Programme World Conservation Monitoring Centre（UNEP-WCMC)	Associate Programme Officer
U.K/Thailand	Charlotte Hicks	UN Environment Programme World Conservation Monitoring Centre（UNEP-WCMC)	Senior Technical Officer

7.3 Presentations

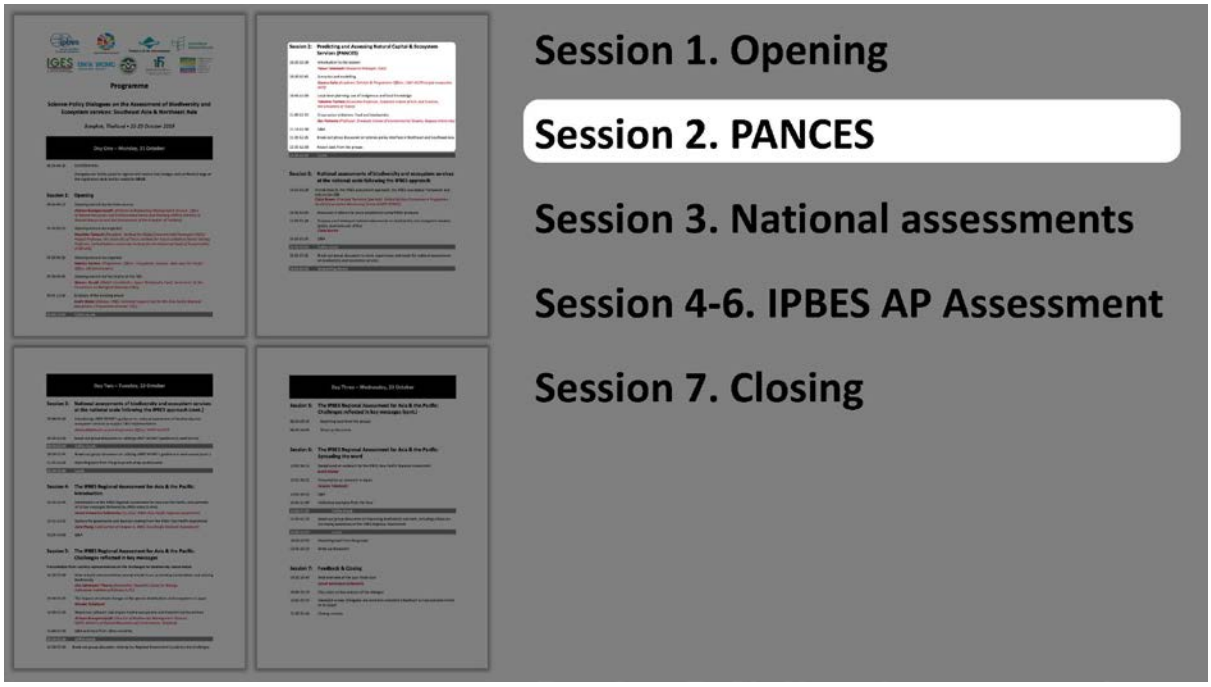
SESSION 1

"Structure of the meeting ahead"

By André Mader (Advisor, IPBES Technical Support Unit for the Asia-Pacific Regional Assessment / Programme Director, IGES)

Structure of the meeting ahead

- Purpose:
  - Better understanding the science/policy interface
  - Guidance on ***conducting national assessments*** and ***using international assessments***
- 3 workshops in one; 3 teams in one
  - PANCES (Predicting and Assessing Natural Capital & Ecosystem Services) (University of Tokyo & IGES)
  - National assessments of biodiversity & ecosystem services (UNEP-WCMC)
  - The IPBES regional assessment for Asia & the Pacific (IGES)



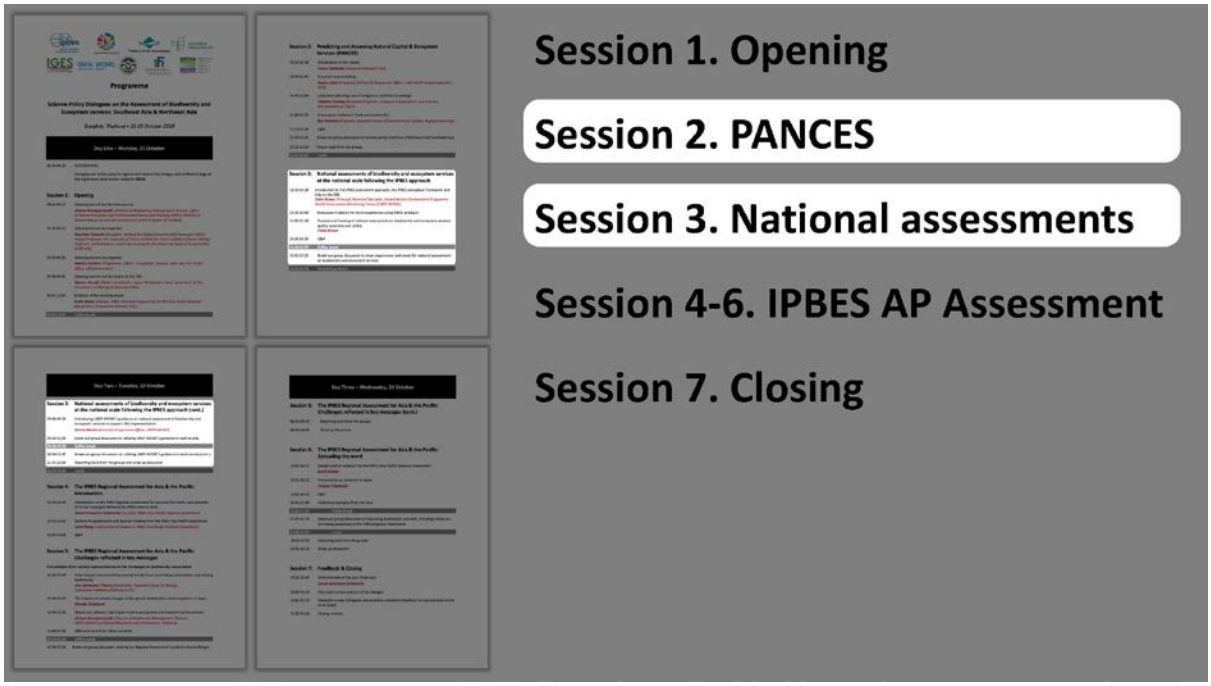
Session 1. Opening

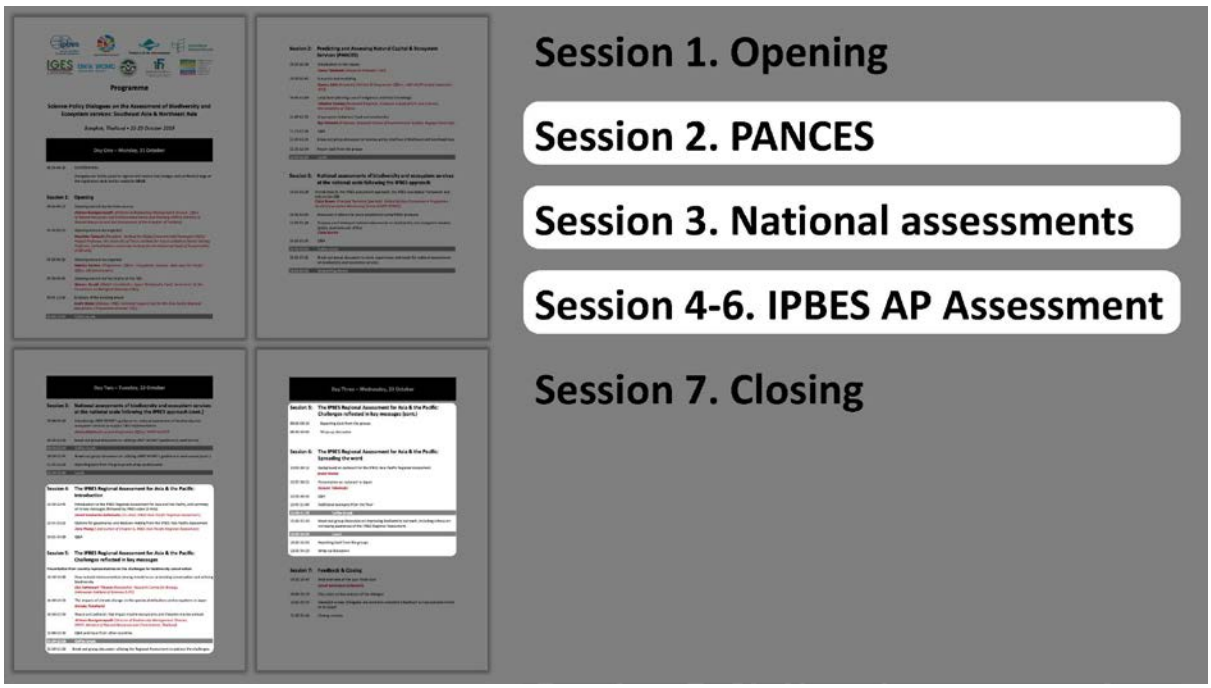
Session 2. PANCES

Session 3. National assessments

Session 4-6. IPBES AP Assessment

Session 7. Closing


Session 1. Opening
Session 2. PANCES
Session 3. National assessments
Session 4-6. IPBES AP Assessment
Session 7. Closing


Session 1. Opening
Session 2. PANCES
Session 3. National assessments
Session 4-6. IPBES AP Assessment
Session 7. Closing

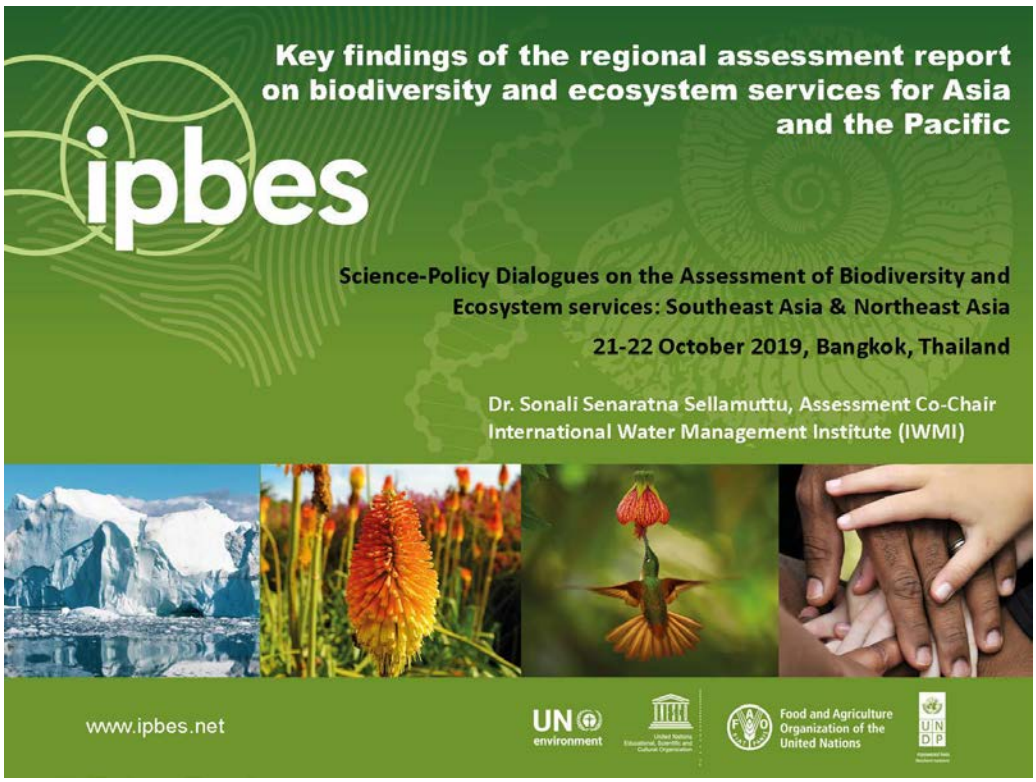
Notes

- Plenary sessions and groupwork sessions
- Please all contribute to discussions
- News will be tweeted
- Materials available on DropBox
- Feedback session at the end

SESSION 4

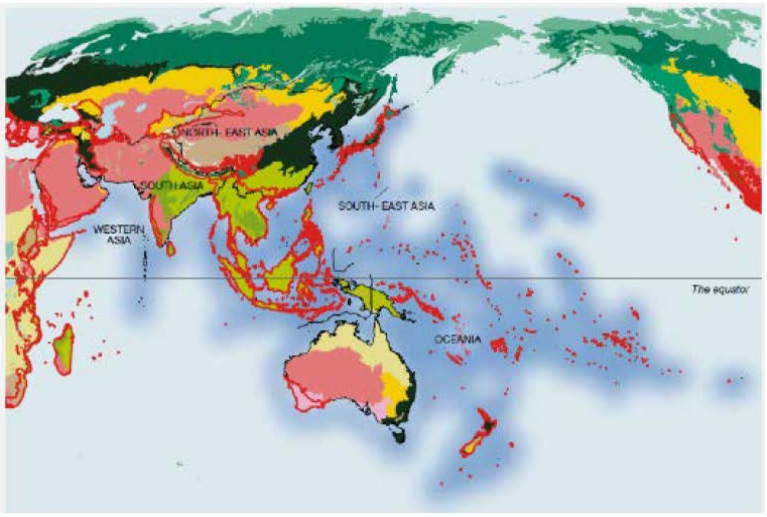
"Introduction to the IPBES Regional Assessment for Asia and the Pacific, and summary of its key messages"

By Sonali Senaratna Sellamuttu (Co-chair, IPBES Asia-Pacific Regional Assessment)



Introduction

- One of the most biodiverse regions from social, cultural, biological, climatic and geomorphological perspectives
- 17 of the 36 global biodiversity hotspots and 7 of the 17 megadiverse countries
- 5 sub regions comprising more than 62 countries and territories



Nature has benefitted the Asia-Pacific, but with consequences

- A region undergoing rapid economic growth and change
  - 4.5 billion people
  - Rapid economic growth (7.6% average in 1990-2010)
  - Among fastest rates of urbanization (2-3% per year)
  - Agriculture lead employer but causing extensive land-use change since 1960s
- High poverty levels in some subregions resulting in high demand for provisioning services
  - More than 400 million poor (52% of global poor earning below $1.90/day)
  - Nearly 200 million people depend directly on the forest for their non-timber forest products, medicine, food, fuel as well as other subsistence needs

Focus on North-East Asia and South-East Asia

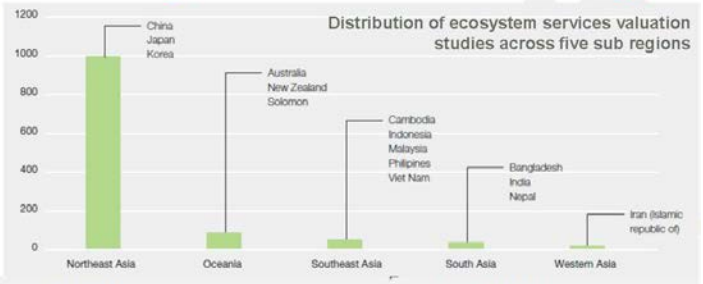
- NE Asia includes the 2nd and 3rd top 10 economies of the world in terms of GDP (China and Japan)
- The extent of poverty is lowest in NE Asia.
- For some countries (e.g., China), urbanization is highly interlinked with other socioeconomic process related to economic liberalisation and globalisation.
- In SE Asia, major economic development in recent decades – but agriculture continues to remain an important sector.
- In SE Asia, the Greater Mekong region faces massive development investment with regard to hydropower. This water control infrastructure can adversely impact fisheries.

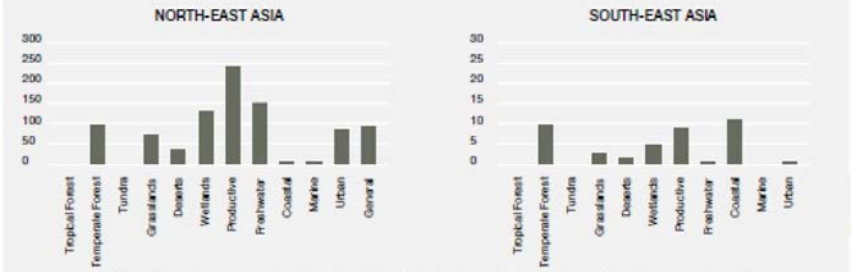
Ecosystem services have a high economic value in the region

Provisioning and regulating services in the region are highly valued

e.g., wetlands: water regulating services ($3,957 per hectare per year for regulating water flows, $6,485 per hectare per year for regulating water quality)

Number of studies is limited and economic valuation dominates



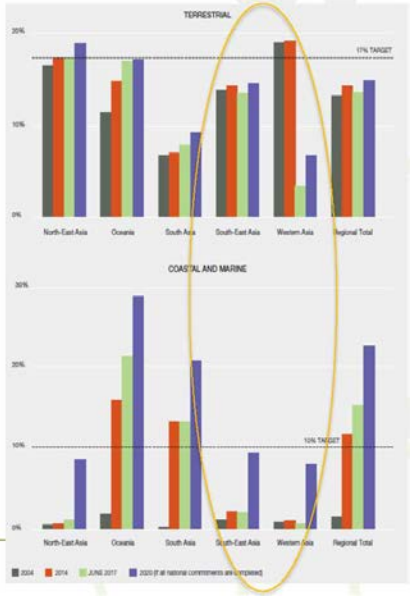


Distribution of ecosystem services valuation studies across eleven ecosystem types

Contrasting trends in the status of biodiversity and ecosystem services

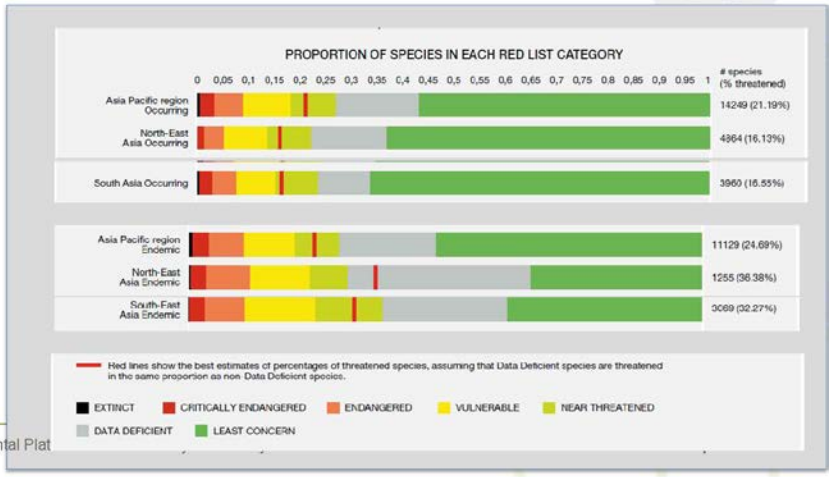
- All major ecosystems are threatened and habitats fragmented/degraded
- Steep decline in key emblematic wildlife
- Declining Crop Genetic Resources
- Growing number and abundance of Invasive Alien Species
- Increase in forest cover (South Asia and North-East Asia) but impact on biodiversity unclear
- Increase in both terrestrial and marine protected areas, but most key biodiversity areas still remain unprotected

Protected Areas in Asia Pacific (2004, 2014, 2017 & 2020)



High rate of special loss and threat status

- 22% of species and 25% of endemic species in the IUCN Red List are either extinct, extinct in the wild, critically endangered, or vulnerable
- Among the endemics, the highest extinction risk is found in NE Asia (36% threatened).
- SE Asia has the latest number of threatened species (1,182 including CR, EN and VU), and threatened endemic species (748).

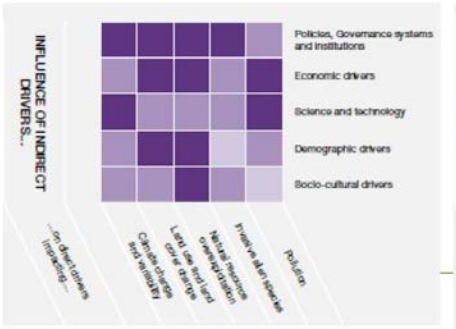


The Intergovernmental Plat

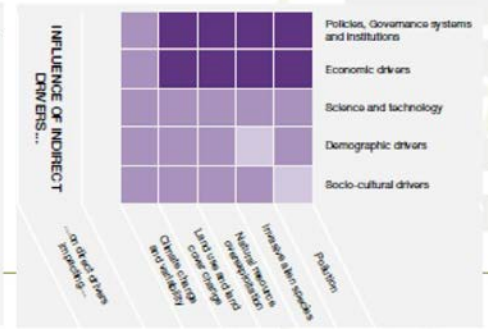
The underlying causes of change

- Direct drivers: Land use change, climate change, invasive alien species, pollution, and unsustainable use
- Indirect drivers: population growth, urbanization, socio-political and cultural pressures
- But relative importance varies across sub-regions

Northeast Asia

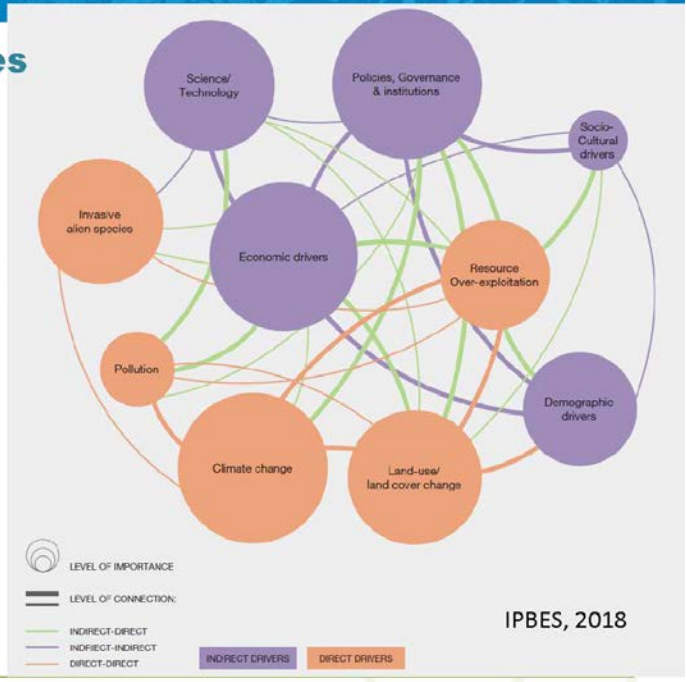


Southeast Asia



Underlying causes of biodiversity loss and change

- Both direct and indirect drivers, and the interactions among them, are exacerbating the loss of biodiversity and ecosystem services
- Indirect drivers are playing an increasingly prominent role.
- These interactions are complex and require interactive and cross-scale analysis

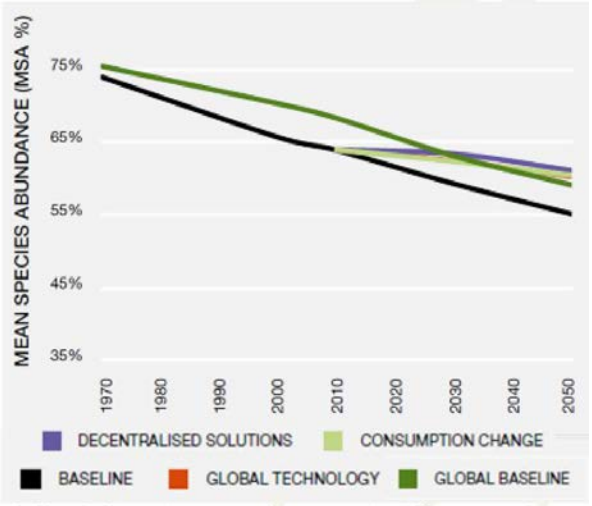


IPBES, 2018

The Intergovernmental Platform on Biodiversity and Ecosystem Services www.ipbes.net

Scenarios for 2050: Implications on SDGs and Aichi biodiversity targets

- Increases in protected area coverage but biodiversity loss continues
- Under business as usual (BAU) scenario by 2050:
  - 45 % anticipated loss of habitats and species
  - Up to 90% severely degraded corals
  - 24% and 29% of mammal and bird species likely to go extinct in lowland forests of Sundaland in South-East Asia in coming decades;
  - Rapid decline in fish stocks



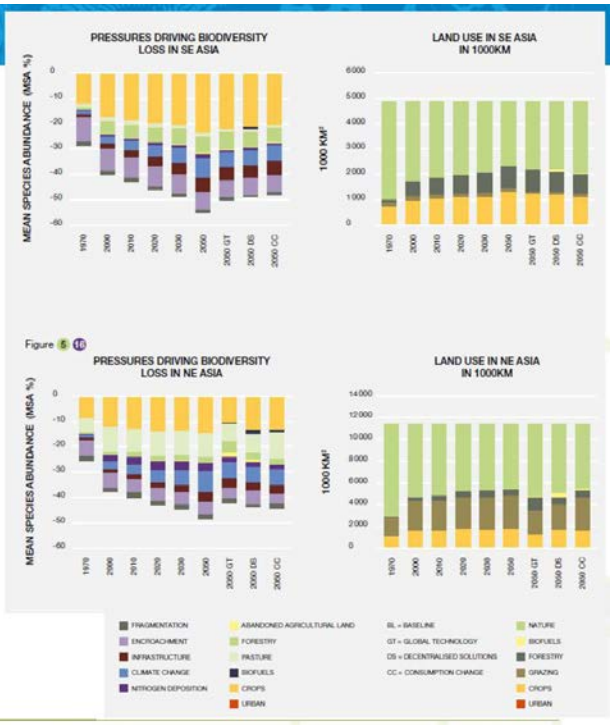
Biodiversity loss in the Asia-Pacific region under different **scenarios**

Scenarios for 2050: pressures in NE Asia and SE Asia

In Southeast Asia and Northeast Asia crop production has the greatest influence on future biodiversity losses

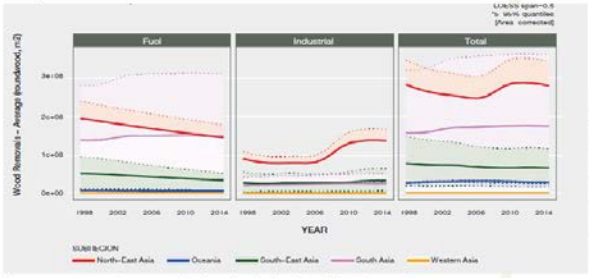
Business as usual is not an option

Future scenarios show that alternative development pathways would produce greater benefits for biodiversity, but there are trade-offs across all scenarios



Positive scenario due to increase in forest and PA cover

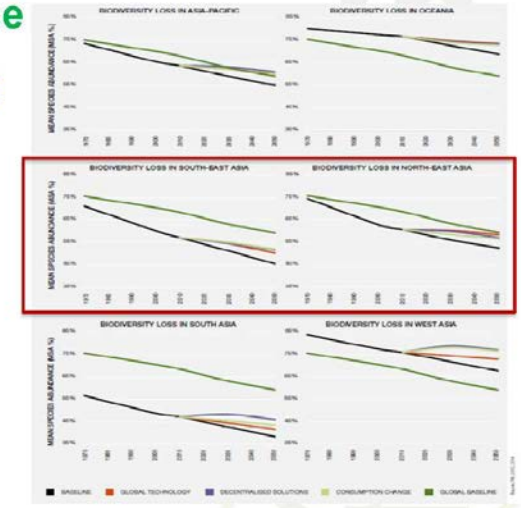
- Progress in forest and protected area expansion increases the probability of meeting Aichi Targets and SDGs
  - The increase in forest and protected area directly help achieve Aichi Biodiversity Target #5
  - Decline in fuel wood extraction reduces pressure on forest
  - However: key biodiversity areas still might not be covered
  - Continued positive scenario under effective forest & PA management



Average wood removals in the Asia-Pacific sub regions

Positive scenarios: enabling policies & participatory and multi-level governance

- Scenario based policy and governance reforms indicates better future
  - **Proactive policies** are found to slowdown and reverse the trend of loss
  - **Collaborative and coherent actions** provide better scenarios to harness multiple values of nature
  - **Effective and participatory governance** may reduce impact of driver interactions



Biodiversity loss in the Asia-Pacific Region in terms of mean species abundance under different scenarios

Key Policy Options

- Involve local communities in biodiversity conservation
- Integrate biodiversity conservation into key development sectors
- Enhance private sector partnerships to leverage finance on biodiversity conservation
- Promote regional collaboration on both land and sea

Way forward - policy options towards achieving Aichi Targets

AICHI BIODIVERSITY TARGETS		PROGRESS					WAY FORWARD
Strategic Goal	Target	West Asia	South Asia	North East Asia	South East Asia	Oceania	
A. Address the underlying causes of biodiversity loss by main-streaming biodiversity across government and society	1. Awareness of biodiversity increased						• Realign incentives by various means, e.g. through integrating agroforestry in REDD+ to achieve carbon and rural livelihood benefits; • Clarify NCP for justifying PES schemes; • Integrate urban ecosystems and NCP into urban planning; • Integrate policies covering positive and negative incentives that engage all relevant stakeholders; and • Strengthen multi-stakeholder partnerships among companies, industry associations, civil society, and governments, to promote sustainable practices.
	2. Biodiversity values integrated						
	3. Incentives reformed						
	4. Sustainable production and consumption						

ON TRACK TO EXCEED TARGET
ON TRACK TO ACHIEVE TARGET
PROGRESS, BUT AT AN INSUFFICIENT RATE
NO SIGNIFICANT OVERALL PROGRESS
MOVING AWAY FROM TARGET

Way forward - policy options towards attaining SDGs

- Synergies and trade-offs between biodiversity related SDGs (14 and 15) and other SDGs
- Policy options to integrated biodiversity and ecosystem services aspects into other SDGs

SDG	Synergies and trade-offs between Biodiversity-related SDGs (14, 15) and other SDGs, and possible policy options to integrate BES aspects into other SDGs
1 NO POVERTY **End poverty in all its forms everywhere**	• Globally and in the Asia-Pacific region, people's income levels tend to be low in biodiversity-rich areas, and where people depend more on BES for income and risk insurance. NCP[1] 9 12 13 14 15 *(well established)* • Without simultaneously conserving BES and ensuring resource access by those dependent on BES, trade-offs occur between BES conservation and poverty eradication. Drivers[3]: LU EC ST *(well established)* • Poverty eradication and BES conservation can be compatible through various intervention options, such as community-based natural resource management (CBNRM), Indigenous Protected Areas (IPA) and community-based ecotourism.

Conclusions

- Overall, the health of biodiversity is poor, sustained supply of ecosystem services is at risk
- Both direct and indirect drivers, and the interactions among them, are exacerbating the loss of biodiversity and ecosystem services
- The Aichi Biodiversity Targets will not be reached if current pathways are maintained
- Some positive scenarios do exist to reduce and reverse the trend
- Menu of feasible options, strategies and approaches for policy makers available

"Options for governance and decision-making from the IPBES Asia Pacific Assessment"

By Zara Phang (Lead author of Chapter 6, IPBES Asia-Pacific Regional Assessment)

Options for governance and decision-making from the IPBES Asia Pacific Assessment

Zara Phang

Lead Author, Chapter 6, The Regional Assessment Report on Biodiversity and Ecosystem Services for Asia and the Pacific

WWF-Malaysia

Context – Recap of Chapters 1-5

- Biodiversity in the Asia-Pacific region is important for providing food, water, energy, and health security, as well as cultural and spiritual fulfilment to 4.5 billion inhabitants. *(Chapter 2)*
- Rapid economic growth in the region has come at a high environmental cost, causing an **accelerated and permanent loss of biodiversity** *(Chapter 3)*
- The **loss of biodiversity threatens nature's contributions to people** in the region, including livelihoods, food security and coastal protection. *(Chapter 3, 5)*
- **However, intervention through strong, participatory environmental governance and targeted policies can alter these trends.** *(Chapter 4, 5)*

Governance challenges to sustaining Biodiversity and Ecosystem Services

- Policies for economic growth can be indirect drivers of declines in Biodiversity and Ecosystem Services (BES)
- Socio-political issues can exacerbate declines in BES
- The value of BES is either not reflected or undervalued in market prices, leading to market failure
- Weak governance engender other problems including issues with property rights/land tenure; a lack of clearly defined roles and responsibilities and of accountability; and elite capture and corruption

Key policy options for halting and reversing declines in Biodiversity and Ecosystem Services:

- Engage in **collaborative, participatory and adaptive governance** of biodiversity
- **Mainstream biodiversity** into development policies, plans and programmes
- Utilise **ecosystem-based approaches**
- Cooperate in **transboundary management** of environment, including important land and seascapes
- Engage in **innovative partnerships** with private sector, individuals and NGOs to meet gaps in funding
- Encourage **sustainable production, consumption and waste management**

Collaborative, participatory and adaptive governance

- The sharing of responsibilities for managing a specified natural resource between the local community and the state
- Widely recognised as one of the primary ways to manage small-scale fisheries.
- Also used in other ecosystems, with several examples in forests in South Asia

Mainstreaming of biodiversity

- Mainstreaming of biodiversity-related goals into
  - national, subnational and local development policies, plans and programmes
  - decision-making and planning processes of government agencies that are not directly responsible for biodiversity policy (e.g., finance and social development ministries)

is needed to address the impacts of underlying drivers on biodiversity and ecosystems

Mainstreaming of biodiversity

- Requires:
  - a willingness by governments to manage nature and nature's contributions to people collaboratively with multiple stakeholders
  - development of sustainability criteria and indicators that capture the interdependencies of nature and livelihoods, food security and quality of life

Utilising Ecosystem-Based Approaches

- There exist high synergy and low trade-offs between biodiversity and sustainable development approaches

Utilising Ecosystem-Based Approaches

- National biodiversity strategies and action plans can be integrated with programmes on:
  - climate change,
  - disaster risk reduction,
  - poverty alleviation,
  - social development and
  - sustainable land management

to help achieve the Aichi Targets, implement the Paris Agreement and attain the Sustainable Development Goals

Transboundary management

- Collaboration between regions and countries to effectively manage environmental issues, including important land and seascapes
- The creation of regional cooperation platforms can address gaps in knowledge and expand transboundary cooperation in conservation as well as addressing emerging challenges caused by climate change.

Transboundary management

- Examples:
- Heart of Borneo and Coral Triangle Initiative in South-East Asia; and
- The North-East Asian Subregional Programme on Environmental Cooperation

Innovative partnerships

- Significantly increased funding is necessary if further and irretrievable biodiversity loss is to be prevented, especially in protected and key biodiversity areas

Innovative partnerships

- Both market and non-market-based mechanisms can better channel private sector finance into conservation
- Partnership with financial institutions, especially multilateral development banks, promotes the transfer of technology, knowledge and capacity for cross-scale and cross-sector conservation and climate change mitigation

Sustainable production, consumption and waste management

- Sustainable production and consumption policies bring about better quality of life, while minimizing the use of natural resources and the creation of wastes and pollution
- Legal and regulatory, economic and financial, and social and cultural good practices serve as policy instruments that support sustainable production and consumption

Sustainable production, consumption and waste management

- Many challenges, such as high costs, limited replicability and a lack of cross-sectoral coordination, limit their application
- A number of approaches such as life-cycle costing, stimulating the market with financial incentives and eco-labelling/certification, as well as regional knowledge and experience sharing, can enhance progress

Summary

- Increasing trends in declining inclusive wealth, declining biodiversity and consequent human well-being impacts.
- Emerging governance options have potential to reverse negative trends and reduce impacts of drivers on BES, which in turn can support the achievement of Aichi Biodiversity Targets and SDGs.
- Many institutional challenges still need to be addressed to enhance the policy mix and participatory governance across scales and sectors.

Summary

Key policy options for halting and reversing declines in BES:

- Engage in **collaborative, participatory and adaptive governance** of biodiversity
- **Mainstream biodiversity** into development policies, plans and programmes
- Utilise **ecosystem-based approaches**
- Cooperate in **transboundary management** of environment, including important land and seascapes
- Engage in **innovative partnerships** with private sector, individuals and NGOs to meet gaps in funding
- Encourage **sustainable production, consumption and waste management**

EXAMPLE: Innovative partnerships

- Example: Pemuteran, Indonesia:
  - The tourism industry worked with fishermen and the community to stop illegal dynamite and cyanide fishing methods through semi-voluntary contracts, and set up a No-Take zone enforced by beach guards.
  - The private sector has been able to exercise marine conservation without marginalising original resource users.

EXAMPLE: Sustainable production, consumption and waste management

- Example: Roundtable on Sustainable Palm Oil (RSPO) as a Voluntary Sustainability Standard (VSS).
- Established to support advancing technology for sustainable production and market analysis of palm oil.
- Adopted by Malaysian state of Sabah alongside wider Malaysian adoption of MSPO (Malaysian Sustainable Palm Oil) standard.

SESSION 5

"How to build interconnection among ministries on promoting conservation and utilizing biodiversity"

By Eka Fatmawati Tihurua (Researcher, Research Centre for Biology, Indonesian Institute of Sciences (LIPI))

How to build interconnection among ministries on in promoting conservation and utilizing biodiversity

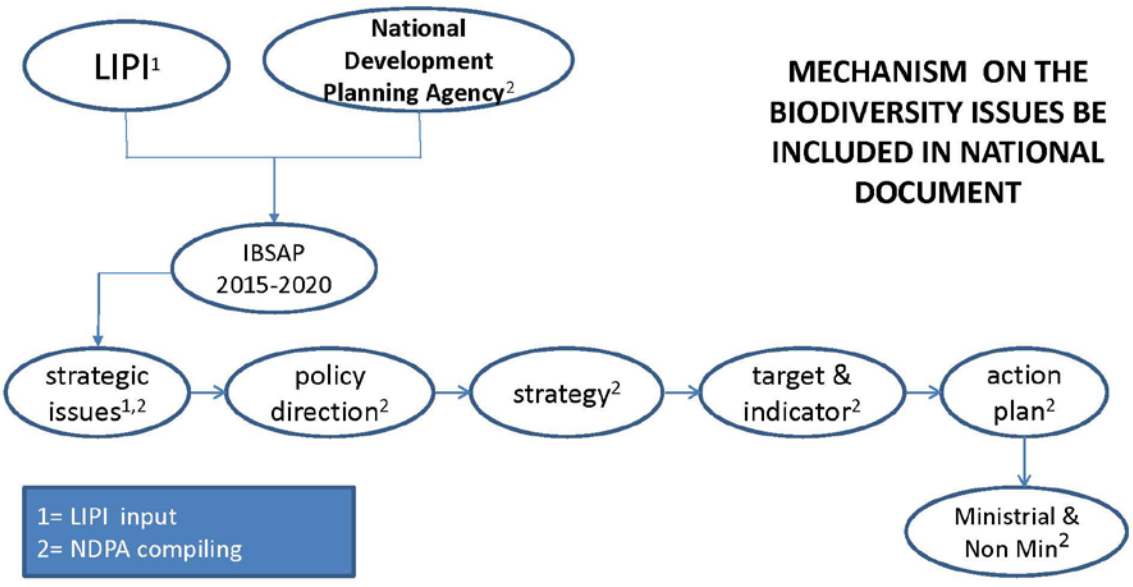
LIPI

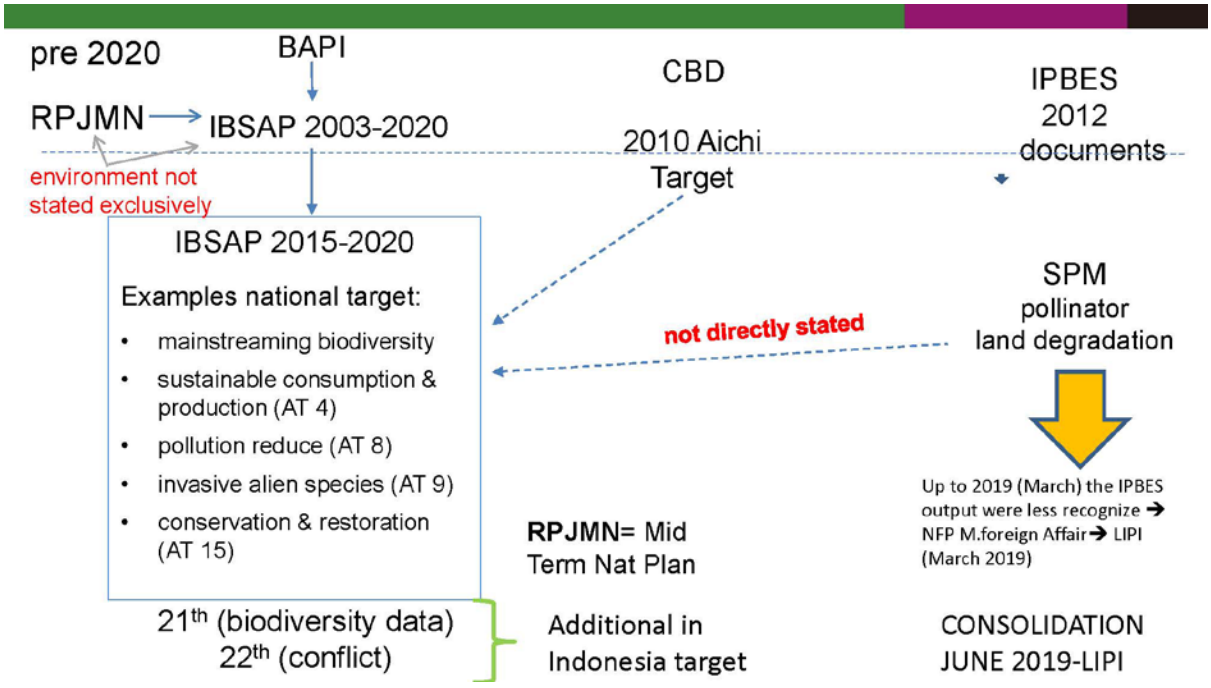
EKA FATMAWATI TIHURUA

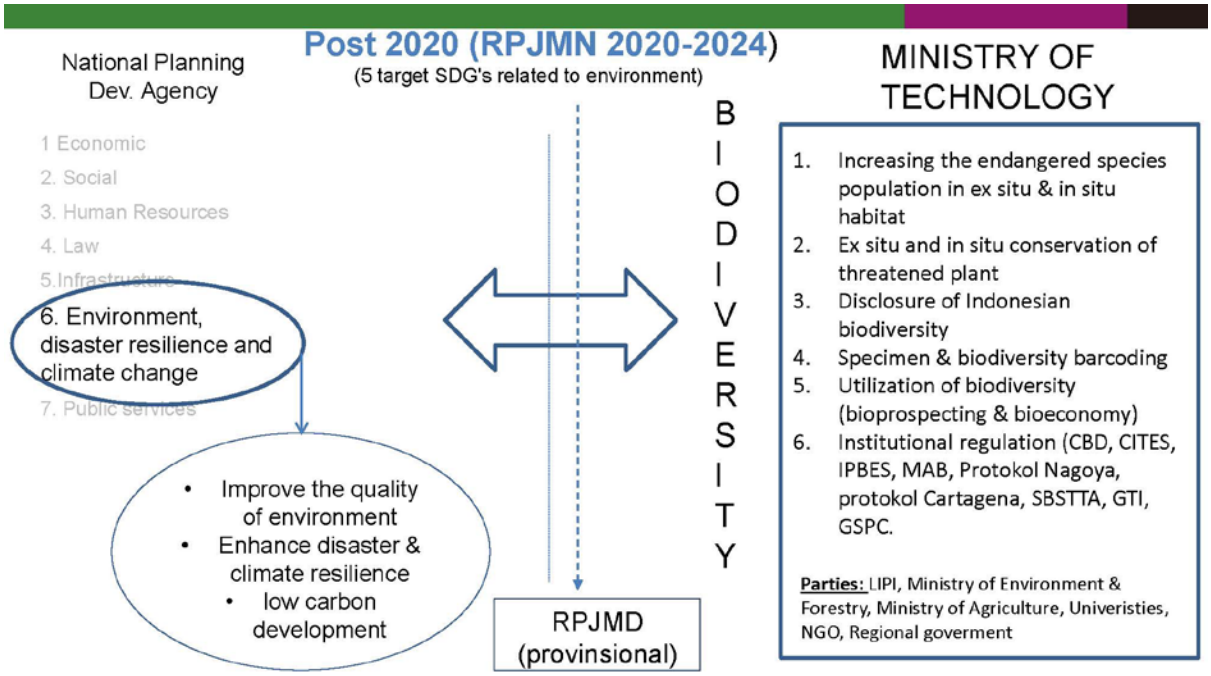
RESEARCH CENTER FOR BIOLOGY,

INDONESIAN INSTITUTE OF SCIENCES

INTRODUCTION




pre 2020
BAPI
RPJMN
IBSAP 2003-2020
environment not stated exclusively
CBD
2010 Aichi Target
IPBES 2012 documents
IBSAP 2015-2020
Examples national target:
• mainstreaming biodiversity
• sustainable consumption & production (AT 4)
• pollution reduce (AT 8)
• invasive alien species (AT 9)
• conservation & restoration (AT 15)
not directly stated
SPM
pollinator
land degradation
Up to 2019 (March) the IPBES output were less recognize → NFP M.foreign Affair → LIPI (March 2019)
RPJMN= Mid Term Nat Plan
21th (biodiversity data)
22th (conflict)
Additional in Indonesia target
CONSOLIDATION JUNE 2019-LIPI


Post 2020 (RPJMN 2020-2024)
(5 target SDG's related to environment)
National Planning Dev. Agency
1 Economic
2. Social
3. Human Resources
4. Law
5 Infrastructure
6. Environment, disaster resilience and climate change
7. Public services
• Improve the quality of environment
• Enhance disaster & climate resilience
• low carbon development
RPJMD (provinsional)
BIODIVERSITY
MINISTRY OF TECHNOLOGY
1. Increasing the endangered species population in ex situ & in situ habitat
2. Ex situ and in situ conservation of threatened plant
3. Disclosure of Indonesian biodiversity
4. Specimen & biodiversity barcoding
5. Utilization of biodiversity (bioprospecting & bioeconomy)
6. Institutional regulation (CBD, CITES, IPBES, MAB, Protokol Nagoya, protokol Cartagena, SBSTTA, GTI, GSPC.
Parties: LIPI, Ministry of Environment & Forestry, Ministry of Agriculture, Univeristies, NGO, Regional goverment

CHALLENGES

1. Harmonization Programs between National Development Planning Agency (executing document concept) & Ministry of Research, Technology & Higher Education (executing ministry, funding)
2. Coordination all actions programs among ministries
3. Delivering programs from national government to the regional governments
4. NEW CABINET, NEW PROGRAMS ???????

THANK YOU

"The impacts of climate change on the species distributions and ecosystems in Japan"

By Keisuke Takahashi (Director, Tokyo Sustainability Forum, Institute for Global Environmental Strategies (IGES))

The impacts of climate change on the species distributions and ecosystems in Japan

Keisuke Takahashi
Director,
Tokyo Sustainability Forum, Institute of Global Environment Strategy (IGES)
Japan

Four crises of biodiversity identified in NBSAP

■First crisis

Crisis due to human activities, such as development

■ Second crisis

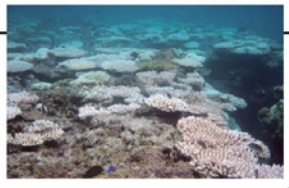
Crisis due to reduced development in nature

■ Third crisis

Crisis due to substances brought by humans

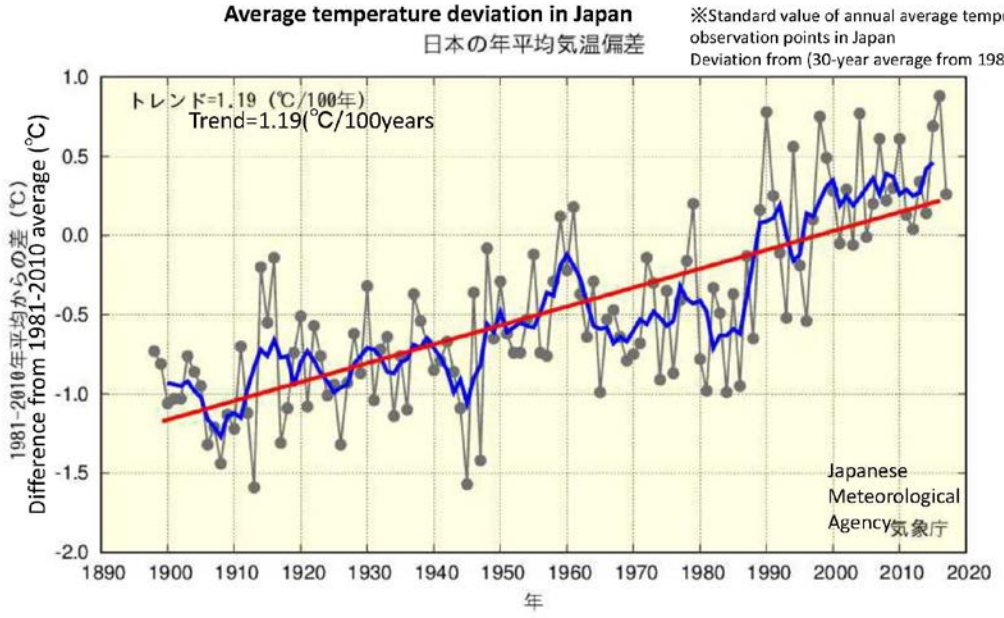
■ Fourth crisis

Crisis due to changes in global environment



25

Annual average temperature is rising at a rate of 1.19 ℃ during the past 100 years



Source: Climate Change Monitoring Report 2017, Japanese Meteorological Agency

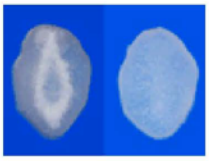
2

The impact of climate change in Japan (1)

Foods

Negative Impact on agricultural crops

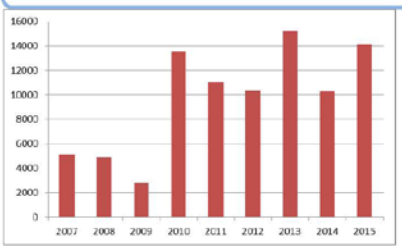
Negative impact on rice quality White immature grains" (left) of rice paddy Section of `` normal grain '' (right)



(Photo: Ministry of Agriculture, Forestry and Fisheries)

Human Health

Increase of Heat stroke



Number of heat stroke patients transported by ambulances
(Source: National Institute for Environmental Studies)

Distribution of some vector is expanding

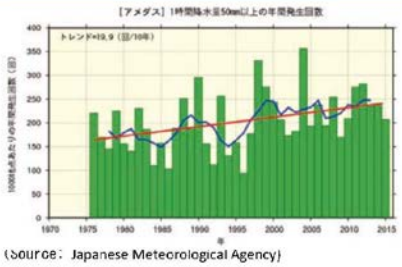
a species of mosquito (Aedes albopictus)
(Photo National Institute of Infectious Diseases)

3

The impact of climate change in Japan (2)

Disaster

Increase the number of short-term heavy rain



(Source: Japanese Meteorological Agency)

Increase the severe flooding

(Photo: Ministry of Land, Infrastructure, Transport and Tourism)

Ecosystem

Increase of Coral bleaching

(Photo: the Ministry of the Environment, Japan)

Habitat Expansion and Increase number of a species of deer

(Photo: Toru Nakashizuka)

4

Mitigation:
Reduction of greenhouse gas emissions that cause global warming

Adaptation:
Adjust the nature and society in response to the effects of climate change

Increase in greenhouse gases
Carbon dioxide emissions from the use of fossil fuels, etc.

→

Climate change
Temperature rise , changes in rainfall pattern, sea level rise

→

Impact of climate change
Impact on life, society, economy and natural environment

Mitigation

-Act on Promotion of Global Warming Countermeasures

-Long-term strategy on climate change

Adaptation

-Climate Change Adaptation Act

-National Adaptation Plan

Adaptation measures for Biodiversity are described in both NBSAP and National Adaptation Plan

5

Challenges

- Silos between Climate Change sector and Biodiversity sector.
- Insufficient monitoring date and Scientific Information on the impact of Climate Change on Biodiversity
- Scenario and Modeling
- Dilemma to introduce species resilient to climate change for adaptation, which may damage original biodiversity in the area.

Disclaimer:
Above are personal opinion of the presenter, not the official statement from Ministry of the Environment, Japan.
All liability for any damage which might be incurred as a result of the opinion above is disclaimed by the presenter, IGES or any other organizations.

7

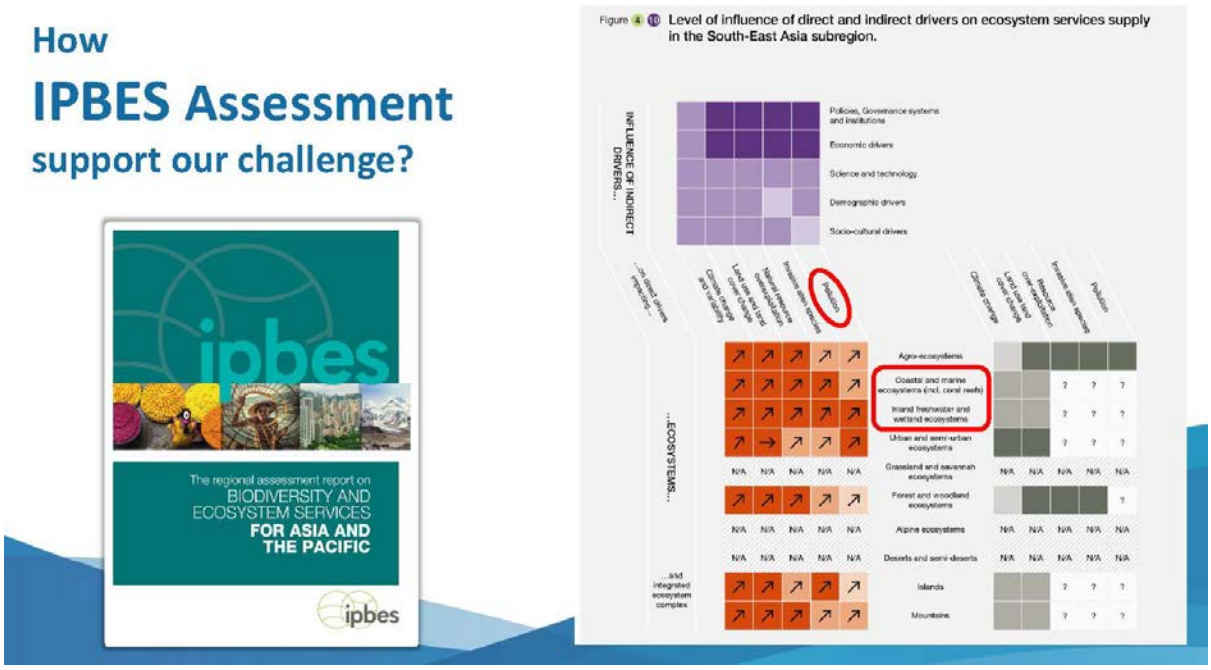
Thank you

ขอบคุณ

(khawp khun)

“Waste and pollution that impact marine ecosystems and threaten marine animals”

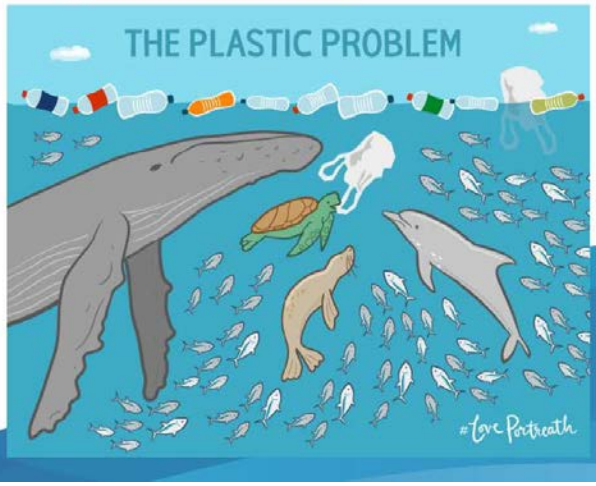
By Bencharmaporn Wattanatongchai (Chief of Biodiversity Focal Point, Office of Natural Resources and Environmental Policy (ONEP), Ministry of Natural Resources and Environment, Thailand)

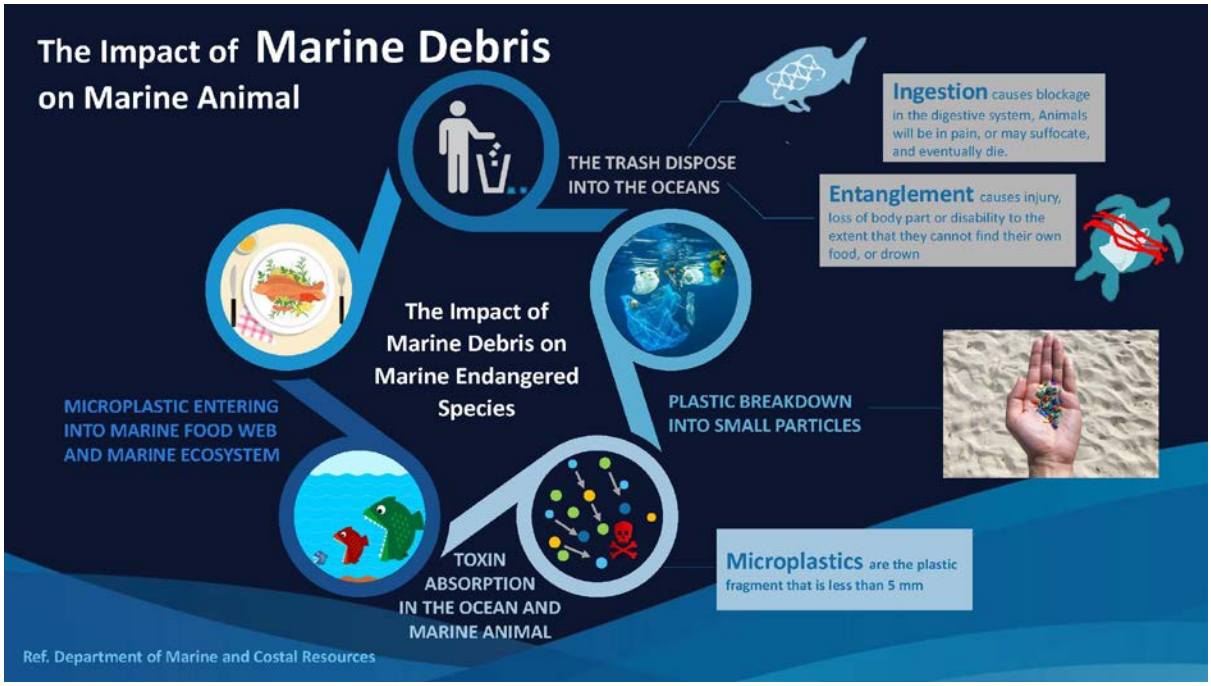


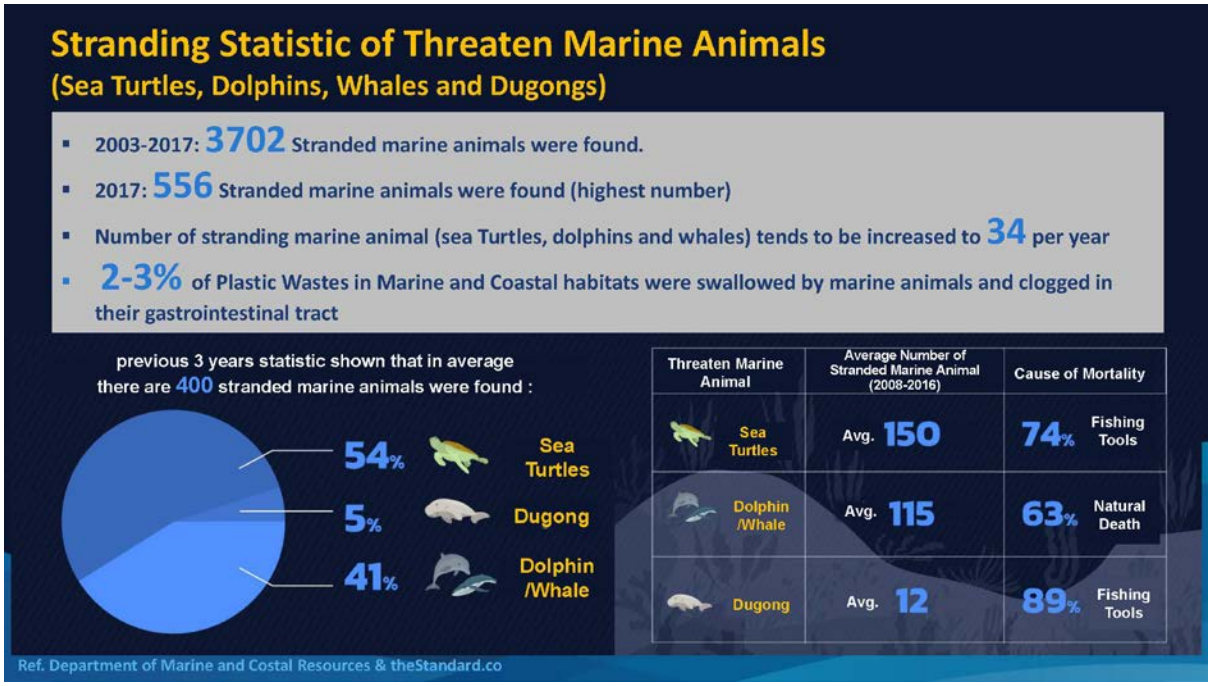
Rank	Country	Waste Generation Rate [kg/ppd]	% of Waste that is Plastic	% Mismanaged Waste	Plastic Waste [MMT/yr]	% Mismanaged Plastic Waste	Marine Debris [MMT/yr]
1	China	1.10	11	76	8.82	27.7	1.32–3.53
2	Indonesia	0.52	11	83	3.22	10.1	0.48–1.29
3	Philippines	0.5	15	83	1.88	5.9	0.28–0.75
4	Vietnam	0.79	13	88	1.83	5.8	0.28–0.73
5	Sri Lanka	5.1	7	84	1.59	5.0	0.24–0.64
6	Thailand	1.2	12	75	1.03	3.2	0.15–0.41
7	Egypt	1.37	13	69	0.97	3.0	0.15–0.39
8	Malaysia	1.52	13	57	0.94	2.9	0.14–0.37
9	Nigeria	0.79	13	83	0.85	2.7	0.13–0.34
10	Bangladesh	0.43	8	89	0.79	2.5	0.12–0.31
11	South Africa	2.0	12	56	0.63	2.0	0.09–0.25
12	India	0.34	3	87	0.60	1.9	0.09–0.24
13	Algeria	1.2	12	60	0.52	1.6	0.08–0.21
14	Turkey	1.77	12	18	0.49	1.5	0.07–0.19
15	Pakistan	0.79	13	88	0.48	1.5	0.07–0.19
16	Brazil	1.03	16	11	0.47	1.5	0.07–0.19
17	Burma	0.44	17	89	0.46	1.4	0.07–0.18
18*	Morocco	1.46	5	68	0.31	1.0	0.05–0.12
19	North Korea	0.6	9	90	0.30	1.0	0.05–0.12
20	United States	2.58	13	2	0.28	0.9	0.04–0.11

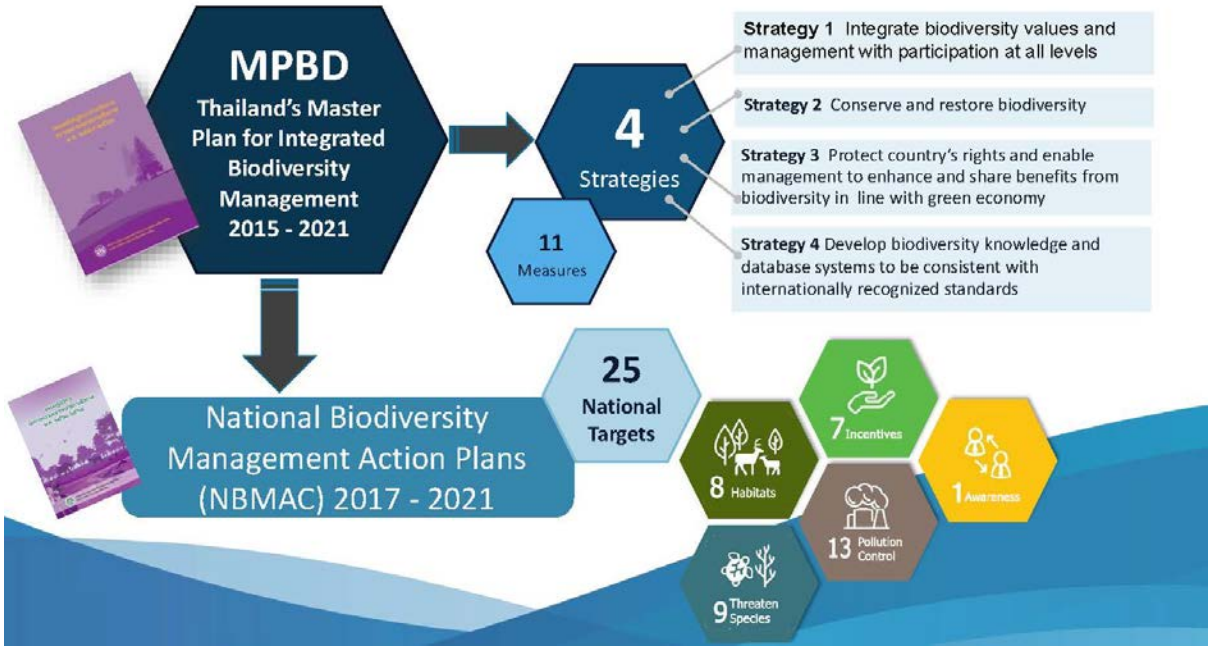
Table: (Jambeck, J. R., et al. "Plastic Waste Inputs from Land into the Ocean." Science, vol. 347, no. 6223, 13 Feb. 2015, pp. 768–771., doi:10.1126/science.1260352). Waste estimates for 2010 for the top 20 countries ranked by mass of mismanaged plastic waste (in units of millions of metric tons per year). Interpretation of characters in the table: Mismanaged waste is the sum of inadequately managed waste plus 2% littering. Total mismanaged plastic waste is calculated for populations within 50 km of the coast in the 192 countries considered. ppd, person per day; MMT, million metric tons. If considered collectively, coastal European Union countries (23 total) would rank eighteenth on the list.

Thailand ranked sixth in the world for generating sea waste






Stranding Statistic of Threaten Marine Animals
(Sea Turtles, Dolphins, Whales and Dugongs)
2003-2017: 3702 Stranded marine animals were found.
2017: 556 Stranded marine animals were found (highest number)
Number of stranding marine animal (sea Turtles, dolphins and whales) tends to be increased to 34 per year
2-3% of Plastic Wastes in Marine and Coastal habitats were swallowed by marine animals and clogged in their gastrointestinal tract
previous 3 years statistic shown that in average there are 400 stranded marine animals were found :
54% Sea Turtles
5% Dugong
41% Dolphin /Whale
Threaten Marine Animal
Average Number of Stranded Marine Animal (2008-2016)
Cause of Mortality
Sea Turtles
Avg. 150
74% Fishing Tools
Dolphin /Whale
Avg. 115
63% Natural Death
Dugong
Avg. 12
89% Fishing Tools
Ref. Department of Marine and Costal Resources & theStandard.co


MPBD
Thailand's Master Plan for Integrated Biodiversity Management 2015 - 2021
4 Strategies
11 Measures
Strategy 1 Integrate biodiversity values and management with participation at all levels
Strategy 2 Conserve and restore biodiversity
Strategy 3 Protect country's rights and enable management to enhance and share benefits from biodiversity in line with green economy
Strategy 4 Develop biodiversity knowledge and database systems to be consistent with internationally recognized standards
National Biodiversity Management Action Plans (NBMAC) 2017 - 2021
25 National Targets
7 Incentives
8 Habitats
1 Awareness
13 Pollution Control
9 Threaten Species

ASEAN ratifies Bangkok Declaration on marine debris

Marine debris is a transboundary issue which requires integrated regional cooperation. In addition to robust national actions to address marine debris strategies for strong collaboration are particularly crucial for the ASEAN region. Without immediate action, marine debris pollution may negatively impact marine biodiversity, environment, health, society and economy.

ASEAN Member States recognize the urgent need to take action and have made notable progress in combating marine debris.

SESSION 6

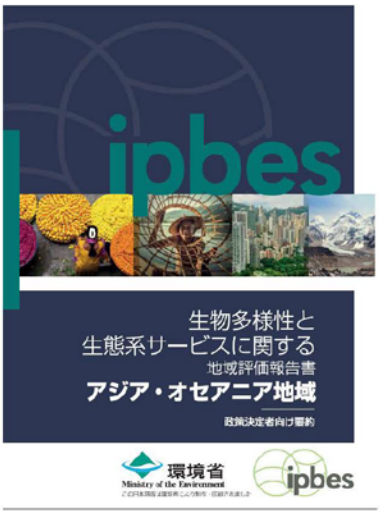
"Presentation on outreach in Japan"

By Keisuke Takahashi

Dissemination and Utilization of IPBES Assessment

Keisuke Takahashi
Director,
Tokyo Sustainability Forum, Institute of Global Environment Strategy (IGES)
Japan

Translation into Japanese



- SPM were translated in Japanese language
  - Regional Assessment Report for Asia and Pacific.
  - Assessment Report on Pollinators, Pollination and Food Production
  - Global Assessment (ongoing)
- published it as booklet
- uploaded on website
- The booklet is distributed to media , relevant ministries and researchers, NGOs, and Citizens

Media Briefing

- Meeting outcomes (Plenary, MEP)
- Assessment reports
- Related Japanese reports

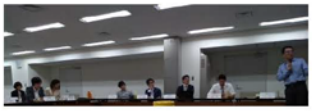
Symposium for the general public

◆ Symposium on AP Regional Assessment (November 2018)

- Explain overview of IPBES assessment report.
- Introduce activities carried out by companies to conserve biodiversity.
- Discuss on collaboration among stakeholders through panel discussions involving researchers, companies, NGOs, and MOEJ.

◆ Symposium on Global Assessment (December 2018)

Liaison Meeting



＜members＞

- ◆ Researchers: MEP members, Report Authors, Task force members, Resource Pearson
- ◆ Relevant ministries: Ministry of the Environment, Ministry of Foreign Affairs, Ministry of Agriculture, Forestry and Fisheries, ,Ministry of Education, Culture, Sports, Science and)

＜Frequency＞

- ◆ Twice a year. Holds before and after the major IPBES meeting such as Plenary.

＜Content＞

- ◆ Share information on the latest trends in IPBES.
- ◆ Information exchange for effective input of scientific knowledge in Japan.

<Mailing List＞

- ◆ Utilize the mailing list for information exchange between the actual meeting

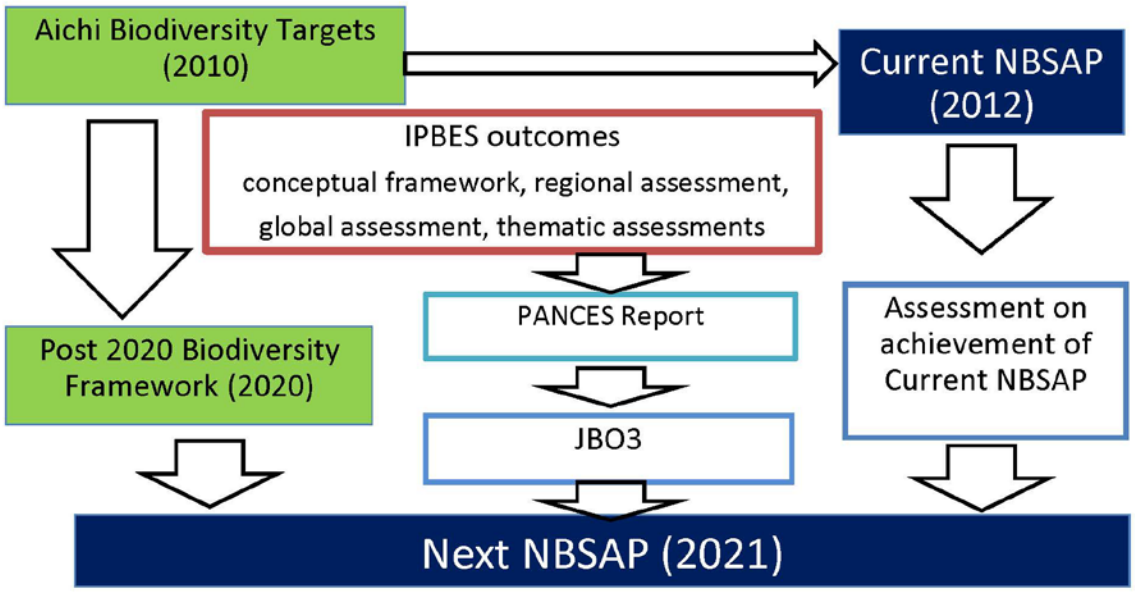
Challenges

- How can we attract attention from many people and stakeholders, and lead to proactive action?

⇒At the end of the symposium and other events, we conduct questionnaire and consider improvements on outreach methods.

- Symposium and workshop based on the results of the Global Assessment Report will be held for the general public this year. We'll increase momentum toward biodiversity conservation in general, and also in order to contribute to the discussion of the post-2020 target.

Input from IPBES outcomes to NBSAP



7.4 Selected Photographs

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Photo Captions:

a. Dr. Jittinun Ruengverayudh, Director of Biodiversity Management Division, Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and the Environment, Thailand

b. Prof. Dr. Kazuhiko Takeuchi, President, Institute for Global Environmental Strategies (IGES)/ Project Professor, the University of Tokyo Institute for Future Initiatives/Senior Visiting Professor, United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)

c. Ms. Makiko Yashiro, Programme Officer, Ecosystems Division, Asia and the Pacific Office, UN Environment

d. Mr. Wataru Suzuki, Global Coordinator, Japan Biodiversity Fund, Secretariat of the Convention on Biological Diversity (SCBD)

e. Mr. André Mader, Advisor, IPBES Technical Support Unit for the Asia-Pacific Regional Assessment / Programme Director, IGES

f. Dr. Sonali Senaratna Sellamuttu, Co-chair, IPBES Asia-Pacific Regional Assessment

g. Mr. Yasuo Takahashi, Research Manager, IGES

h. Plenary meeting

i. Group photo

j. Ms. Eka Fatmawati Tihurua, Researcher, Research Centre for Biology, Indonesian Institute of Sciences (LIPI), Indonesia

k. Breakout Group Discussion

l. Breakout Group Discussion

m. Breakout Group Discussion

n. Group Photo

o. Prof. Dr. Ryo Kohsaka, Coordinating Lead Author of Chapter 1, IPBES Asia-Pacific Regional Assessment / Nagoya University

p. Dr. Claire Brown, Principal Technical Specialist, United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC))

q. Breakout Group Discussion on

r. Breakout Group Discussion on

s. Breakout Group Discussion on

t. Breakout Group Discussion on

u. Group Photo

7.5 Pre-Dialogue Survey

QUESTION 1: *Respondent information*

CAMBODIA
Phat Chandara
Royal University of Phnom Penh

INDONESIA
Eka Fatmawati Tihurua
Indonesian Institute of Sciences

Gono Semiadi
Research Centre for Biology-Indonesian Institute of Sciences

JAPAN
Yosuke Kuramoto
Ministry of the Environment

MALAYSIA
Ahmad Fadzil Bin Abdul Majid
Forestry Department Peninsular Malaysia, Ministry of Water, Land and Natural Resources

Arief Iskandar Mohamad
Ministry of Water, Land and Natural Resources

MYANMAR
Phyu Phyu Khaing
Ministry of Natural Resources and Environmental Conservation

Nyo Me Htun
Forest Department, Ministry of Natural Resources and Environmental Conservation

REPUBLIC OF KOREA
Wooyeong Joo
National Institute of Ecology

THAILAND
Jittinun Ruengverayudh
Office of Natural Resources and Environmental Policy and Planning (ONEP)

VIET NAM
Phung Thu Thuy
Nature and Biodiversity Conservation Agency

QUESTION 2

Please describe ONE key challenge that your country is currently facing, with regard to the management or governance of biodiversity (50-100 words).

CAMBODIA

Biodiversity in Cambodia is being over-exploited and declined significantly, precipitated by over-harvesting as well as habitat loss and environmental degradation. Combination of economic development and an increasing human population is exerting enormous pressure on the region's biodiversity. In the rural areas of Cambodia; especially hotspot locations, illegal logging is highlighted in a top alarming rate and large volumes of timber and shrub are being cleared and burned.

INDONESIA

The problem faced by Indonesia is the handling of invasive alien species. In fact, the Indonesian government has had several regulations regarding invasive alien species and several studies on invasive alien species have been carried out. However, those are still not enough as a basis handling this problem. It is important to increase public awareness of the threats of invasive alien species and enhance collaboration among institutions & stakeholders in effort to prevent and overcome the invasive alien species problems.

The most challenging is how to build interconnection between ministries in promoting conservation and utilizing biodiversity and synchronizing the development plans that have an impact on biodiversity in addition to the economy through the mutual benefit policies between ministries. Several policies among ministries tend to contradict.

Another challenge is related to improvement in understanding (awareness) among policy makers about the value of biodiversity. That loss of e will have an impact not only on the economy but also on public health.

JAPAN

In Japan, the major drivers of biodiversity loss are defined as follows, 1)development, direct use, and water pollution, 2)reduction in management of human-influenced landscape, 3)invasive alien species and chemical substances, and 4)global climate change.

Especially, regarding the second one, the population has started to decline in earnest, and we are taking actions to deal with the impact of the population decline on biodiversity. With respect to the fourth one, the impacts of climate change on the species distributions and ecosystems are assessed to be of great certaint, and they are predicted to increase continuously.

MALAYSIA

Safeguarding the habitats and the existence of biodiversity is a big challenge at the moment. Although we had a comprehensive biodiversity policy and various legislative arms, implementing them thoroughly proof to be an uphill tasks. CEPA and CSR programmes need to be implemented continuously to ensure active public/communities participation in the management of the biodiversity areas. Stringent punishment should also be impose to individuals or companies that destroy or encroach into biodiversity areas.

In general, issues and challenges related to biodiversity management / governance can be categorised as in the following:

The first issue is the low awareness on biodiversity due to the ineffective Communication, Education and Public Awareness (CEPA) efforts.

Secondly, there exists insufficient integration on biodiversity consideration across sectors, which also leads to lack of mainstreaming biodiversity.

The lack of standard framework and coordination mechanism for Protected Areas in Malaysia serves as the third challenge which also lead to resource constraints and limited enforcement.

MYANMAR

Although Myanmar is working to protect and conserve its biodiversity through its protected area network, stakeholder engagement, enforcement of laws and regulations, there is no comprehensive national assessment of the effectiveness in the management of biodiversity. In my opinion, it is very important.
With regard to conserve biodiversity, Myanmar's 30-year Forest Master Plan (2002-2031) established a target for Protected Areas to increase to 10%. Up to June 2019, there are 44 Protected Areas, which extend over 9,783,609 Acres and represent 5.85% of the total land area of 676,577 km2. Indeed, such expansion of protected areas is desirable. However, due to political reason, we have some challenges in endeavoring to reach the national target. On the other hand, we also have no enough capacity yet (financial and human resources) to assess whether we are in the right track to reach the target or not.

REPUBLIC OF KOREA

I think it would be not much to assess and monitor the status and changes in biodiversity and ecosystem services in South Korea because of a few BES studies and little BES data and information.

THAILAND

At the moment, there are several issues facing biodiversity management in Thailand. However, the critical issue is the increasing of waste and pollution that impact to marine ecosystem and threated to marine animals. The evidence shows that marine animals such as dugong, whale and turtle die from marine debris, especially plastic waste. Although, Thai government has established waste management as an item on the national agenda and has undertaken actions to improve the existing relevant laws and develop additional regulation measures to solve these problems, the impact from marine debris to marine animal still occur. It is challenge of the country to engage general public to reduce mortality rate of marine animal from plastic waste. The government put effort to reduce marine debris, at the recent ASEAN Summit, the Bangkok Declaration was signed with an objective to combat marine debris which one purpose is intended to save vulnerable marine animal and protect marine ecosystem.

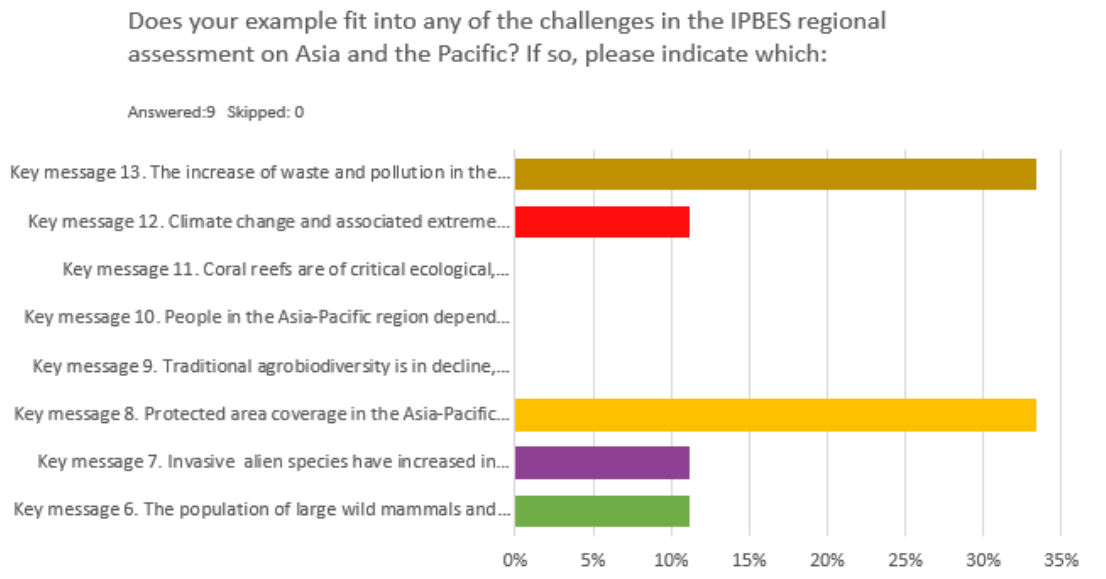
VIET NAM

Biodiversity in Vietnam is currently is facing many threats. Pressure from the increasing human population combined with an increasing level of consumption is resulting in overexploitation of biodiversity resources. Rapid socioeconomic development has also changed the natural landscape.
Land conversion and infrastructure construction has significantly reduced the area of natural habitats, ecosystem fragmentation increased, and degraded the habitats of many species of wild plants and animals. Natural resources, especially biological resources, are undergoing overexploitation and timber, non-timber and aquatic products are particularly vulnerable. In addition, alien species, environment pollution and climate change are all directly impacting on the biodiversity of Vietnam. In addition, the level of effort to manage the biodiversity resources of Vietnam is still insufficient. The system of state management agencies responsible for biodiversity remains fragmented and weak - laws and regulations to protect biodiversity are still unsystematic and lacking in policy conformity; community involvement is yet to be adequately mobilized; planning for national, regional and provincial biodiversity conservation has not been implemented in a systematic manner; and investment in biodiversity conservation and development remains highly limited.

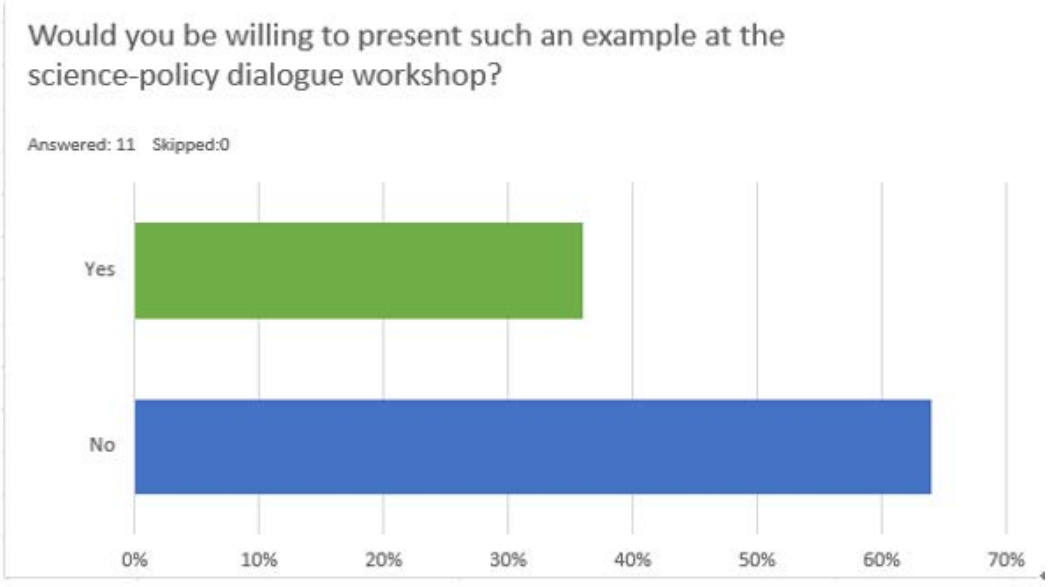
QUESTION 3: *Does your example fit into any of the challenges in the IPBES regional assessment on Asia and the Pacific? If so, please indicate which*:

ANSWER CHOICES		RESPONSES	
▼	Key message 6. The population of large wild mammals and birds has declined across the region.	11%	1
▼	Key message 7. Invasive alien species have increased in number and abundance, and constitute one of the most serious drivers of biodiversity loss across the Asia-Pacific region.	11%	1
▼	Key message 8. Protected area coverage in the Asia-Pacific region has increased substantially but does not effectively target areas of important biodiversity, and progress is needed towards better overall management effectiveness.	33%	3
▼	Key message 9. Traditional agrobiodiversity is in decline, along with its associated indigenous and local knowledge, due to a shift towards intensification of agriculture with a small number of improved crop species and varieties.	0%	0
▼	Key message 10. People in the Asia-Pacific region depend heavily on fisheries of food, with aquaculture growing by nearly 7 per cent annually, but the capture fisheries sector is threatened.	0%	0
▼	Key message 11. Coral reefs are of critical ecological, cultural and economic importance, supporting the livelihoods of hundreds of millions of people in the Asia-Pacific region and beyond through vital and valuable ecosystem services such as food security or coastal protection, and are under serious threat.	0%	0
▼	Key message 12. Climate change and associated extreme events are impacting species distribution, population sizes and the timing of reproduction of migration; Increased frequency of pest and disease outbreaks resulting from these changes may have additional adverse effects on agricultural production and human well-being.	11%	1
▼	Key message 13. The increase of waste and pollution in the Asia-Pacific region is impacting ecosystem and threatening the current and future health of nature and people.	33%	3

CAMBODIA: 8.
INDONESIA: 6, 7.
JAPAN: 12.
MALAYSIA: 8.
MYANMAR: 8.
REPUBLIC OF KOREA: 13.
THAILAND: 13.
VIET NAM: 13.



QUESTION 4:



ANSWER CHOICES		RESPONSES	
▼	Yes	36%	4
▼	No	64%	7
Total Respondents: 11			

QUESTION 5: Do you have any examples of raising awareness about the IPBES Regional Assessment for Asia and the Pacific or any other IPBES products? Please explain briefly (50-100 words).

INDONESIA: IPBES focal point of has socialized the results of plenary session 7 in Paris and IPBES assessments that have been produced (pollinators, pollination & food production; land degradation & restoration; global & regional assessment) to government institutions and universities. Besides that, it has also tried to coordinate several experts in the effort to implement the results of the assessment to be applied in every regulation, introducing to academic and research institutions.
Not at this time, even though there are many policies that are actually in line with IBES Regional Assessment, coming from the Ministry of Environment and Forestry, Marine and Fisheries and Agriculture. The activity that is currently being carried out is to provide an understanding of IPBES and how Indonesia can benefit from it.

JAPAN: We have held the symposium on the theme according to the results of the assessment report on land degradation and restoration and the regional assessment report for Asia and the Pacific last year. By continuing providing information in this way, we will encourage business entities and individual citizens to behave in a way that contributes to the conservation and sustainable use of biodiversity.

MALAYSIA: At the moment, the Forestry Department have conducted various CEPA and CSR programmes involving local communities, NGO, Private Sectors, as well as students from primary schools to higher education institutions/Universities. Amongst others, the programmes involve tree planting, summer

camps, environmental studies as well as other awareness programmes in regeneration and rehabitation of degraded areas.

REPUBLIC OF KOREA: Yes, in South Korea, there are a few attemps to develop the conceptual framework for assessment of ecosystem services at national scale (especially at National Institute of Ecology). In addition, now Ministry of Environment in South Korea are going to put the concept, assessment, planning ecosystem services and Payment for ecosystem services into a law system.

THAILAND

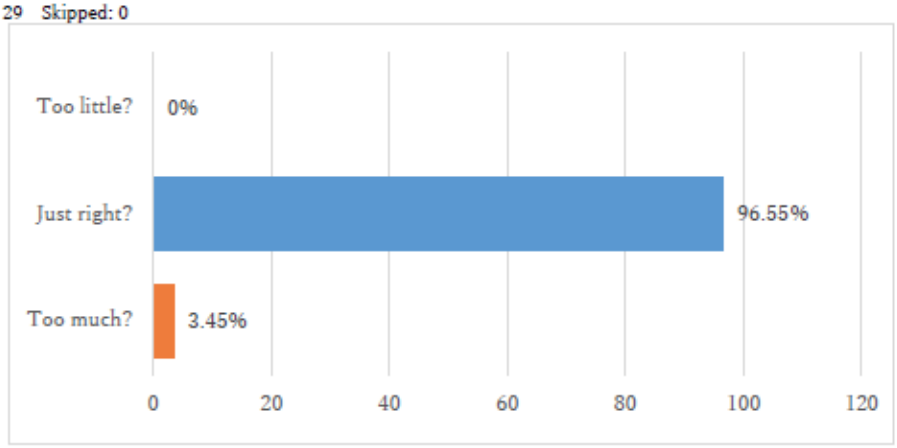
Some activities have been conducted to raise awareness of marine debris and pollution that impact to marine ecosystem such as the 3R (reduce-reuse-recycle) campaign or the planning on banned some type of single – use plastic by 2020.

In addition, while compiling Thailand Nation Report 6, the assessment on the achievement of Aichi Biodiversity Targets in South East Asia region facilitate by IPBES Regional Assessment has been demonstrated, as the baseline data to relate Thailand's situation among South - East Asia region.

7.6 Post-Dialogue Survey

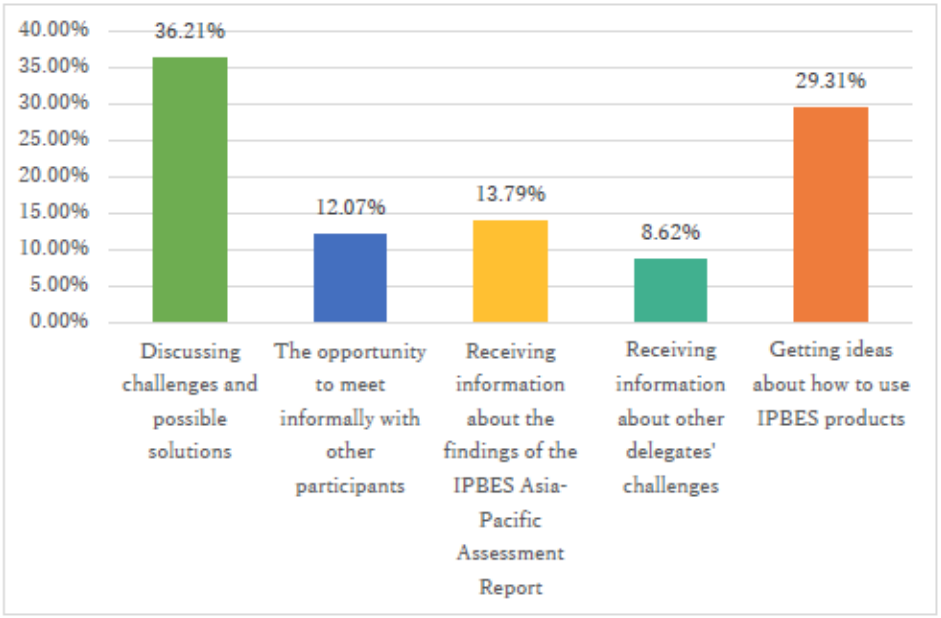
Was the amount of information provided at the Science-Policy Dialogue?

Answered: 29 Skipped: 0



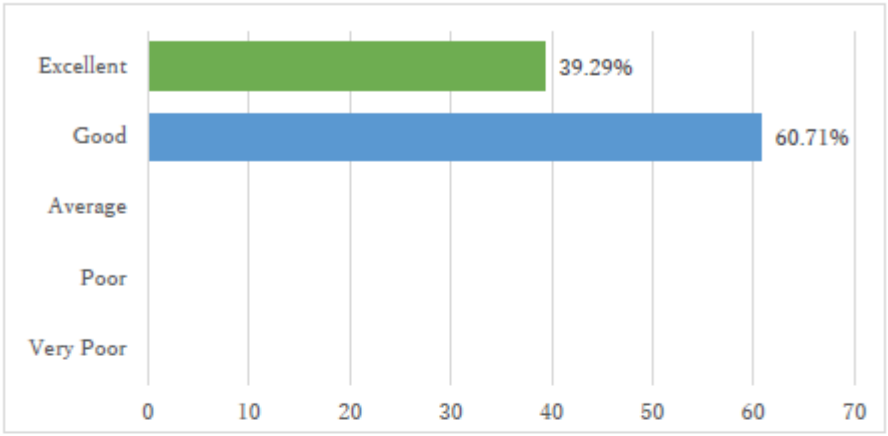
Which were the two most important aspects of the Science-Policy Dialogue?

Answered: 29 Skipped: 0



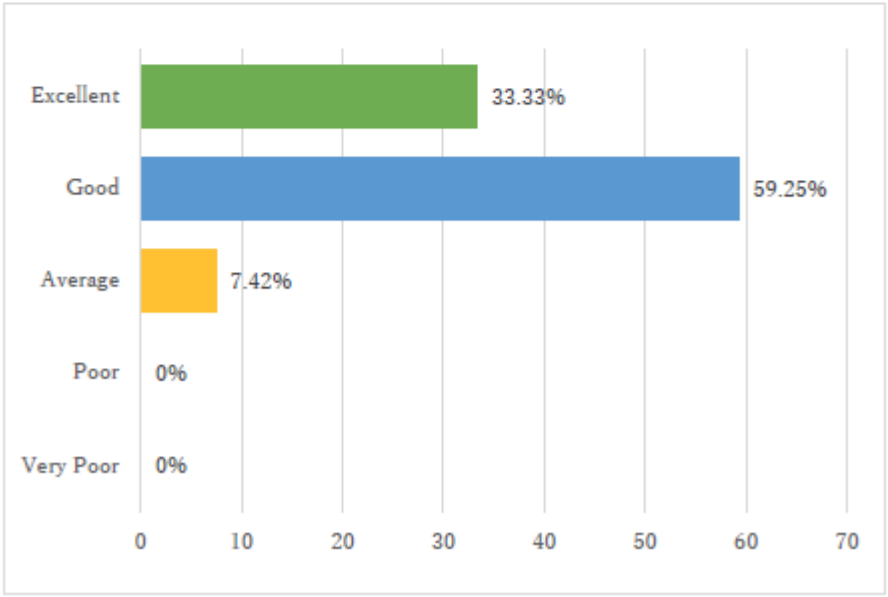
How useful would you rate the structure of the Science-Policy Dialogue?

Answered: 28 Skipped: 1



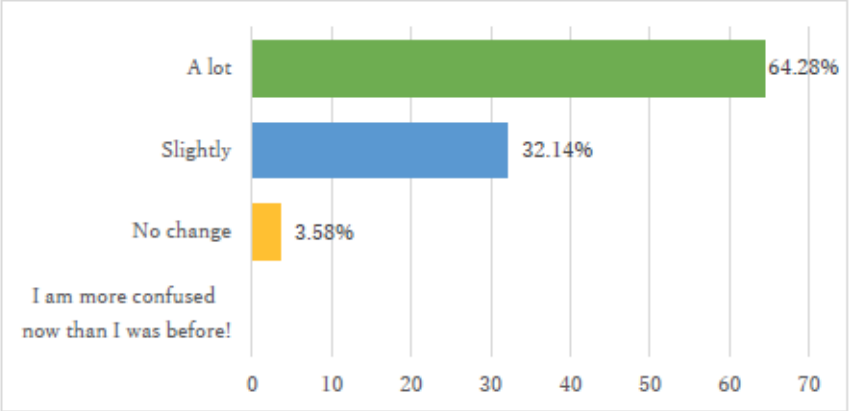
How useful would you rate the content of the Science-Policy Dialogue?

Answered: 28 Skipped: 1



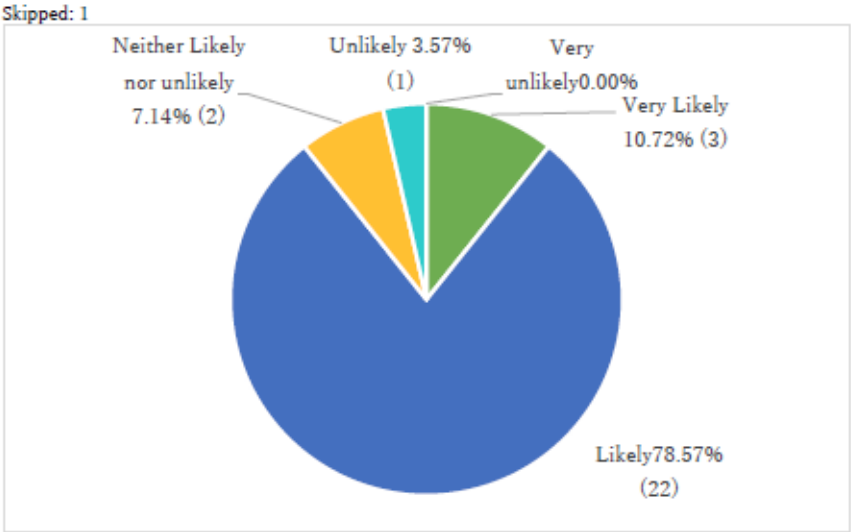
Through this workshop, how much did your understanding of the key messages of the IPBES Asia-Pacific Assessment Report improve?

Answered: 28 Skipped: 1



Do you think that the IPBES regional assessment for Asia and the Pacific will make a difference to policy in your country?

Answered: 28 Skipped: 1



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