## A Regional Interpretation of the IPBES Conceptual Framework

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### 1. Executive summary

The United Nations University Institute for Sustainability and Peace (UNU-ISP) and Korea Environment Institute (KEI) hosted a workshop entitled "Asia-Pacific Regional Workshop on Regional Interpretation of the IPBES Conceptual Framework and Knowledge Sharing" in Seoul, Republic of Korea, from 2 to 4 September 2013, with joint support from APN and the Ministry of Environment, Republic of Korea.

The main objectives of the symposium-cum-workshop are (1) to discuss regional interpretation of the IPBES (Intergovernmental Platform on Biodiversity and Ecosystem Services) conceptual framework, which is at the final stages of development and is expected to be adopted at the second session of IPBES (IPBES-2), scheduled to be held in Antalya, Turkey, from 9 to 14 December 2013; and (2) to share knowledge and practices, from a regional perspective, on promoting conservation and the sustainable use of biodiversity and ecosystem services for regional assessment.

Outcomes of the workshop, particularly on current practices, challenges and recommendations regarding regional implementation of IPBES will be summarised and submitted to IPBES-2 as an information document, covering the four key functions of IPBES — policy support, assessments, knowledge generation and capacity building. This information document, together with the workshop report, will be widely distributed at various biodiversity related international forums, including IPBES-2, CBD-SBSTTA, GBIF Governing Board meeting.

The workshop outputs are fully in line with the objectives of APN's Biodiversity and Ecosystem Services (B&ES) Framework adopted at the 18<sup>th</sup> IGM/SPG Meeting in 2013, and will contribute to one of the thematic focuses of APN's Third Strategic Phase (2010-2015): ecosystems, biodiversity, and land use.

## 2. Workshop background

The workshop was attended by representatives of international and regional networks on biodiversity, APN Scientific Planning Group members from Temperate East Asia, researchers, governmental experts and representatives from the business sector.

The workshop provides a venue for sharing the advances and good practices related to the assessment of biodiversity and ecosystem services, and exchanging knowledge about the latest development of designing the IPBES conceptual framework. Through a closer look at the draft conceptual framework, participants discussed the practices, challenges and recommendations for implementing the conceptual framework at the regional level, especially for Asia and the Pacific.

#### 2.1 About IPBES

IPBES was established in April 2012 with a vision to strengthen the dialogue between the scientific community, governments and other stakeholders on biodiversity and ecosystem services (B&ES). It is an intergovernmental body open to member countries of the United Nations, and is expected to be the leading intergovernmental body for assessing the state of the planet's biodiversity, its ecosystems and the essential services they provide.

#### 2.2 About the IPBES conceptual framework

The four key functions of IPBES are to provide regular assessments, capacity building, knowledge generation and policy support. At the first session of IPBES held in Bonn, Germany in January 2013, the Multidisciplinary Expert Panel (MEP) is mandated to prepare a common conceptual framework that facilitates and realises these four functions.

The following figure is the conceptual framework prepared before the multidisciplinary expert workshop on the conceptual framework for IPBES that took place in Cape Town, South Africa, from 25– 26 August 2013. The conceptual framework is at the final stage of development after the workshop, and will be submitted to IPBES-2 for consideration and adoption.



## 3. Summary of the workshop

Opening remarks were given by senior officials from the environment ministries of Korea and Japan, a representative from IPBES Interim Secretariat, as well as representatives of the organisers and APN.

Dr. Akio Takemoto, APN Secretariat Director in his opening remark introduced APN's recently adopted Biodiversity and Ecosystem Services Framework and encouraged participants to explore ideas for implementing this framework in collaboration with APN. He mentioned that APN conducts a high percentage of activities related to biodiversity and ecosystem services.

# 3.1 Development in assessment on biodiversity and ecosystem services in Japan

In his keynote speech, Prof. Tohru Nakashizuka, Tohoku University, Japan, gave an introduction to the recent research activities to assess the biodiversity and ecosystem services in Japan. He stressed the importance of integrating geographical information to better quantify and evaluate the services ecosystems provide. By giving examples of the recent work undertaken in various sectors in Japan, he showed that successful assessment requires a comprehensive approach looking at the multiple services provided by ecosystems, taking into consideration trade-offs and synergies of individual services. The experience in Japan is valuable for other countries in the region, but addressing data gaps and coordination between sectors are crucial to the success of such assessments.

# 3.2 Inter-regional interpretation of IPBES framework for Eurasian Ecological Network

Professor Kwi-Gon Kim, Seoul National University, Republic of Korea, gave an introduction to the IPBES conceptual framework and discusses how to reflect the regional characteristics of Asia in the IPBES framework. This leads to his suggestion that a Eurasia Ecological Network be established and that the Korean Demilitarized Zone (DMZ) be included in the International Network of Biodiversity Hotspots to better understand and utilise the biological resources and ecosystem services provided by this "living laboratory."

### 3.3 Sub-regional and national state of knowledge

Speakers representing the four sub-regions of Temperate East Asia, Southeast Asia, South Asia, and the Pacific introduced the state of knowledge and actions related to the assessment of biodiversity and ecosystem services in their region, including threats and challenges that are expected to be addressed under the framework of IPBES. A speaker from the industrial sector also shared how industry leaders play a crucial role in promoting best practices for integrating the conservation of biodiversity and ecosystem services into their daily operations. Key messages generated from this session include:

- Increased demand from a growing population, particularly in Asia and the Pacific, requires an integrative approach to assessment, considering trade-offs and synergies;
- Indigenous and traditional knowledge is important to IPBES implementation, and challenge remains in its collection, compilation and dissemination;
- Capacity building activities are required to ensure the level of implementation and effectiveness of national initiatives related to biodiversity conservation;
- To replicate and upscale best practices across countries in the region, it is important to ensure continuous availability of data and information, including socio-economic and cultural data.

#### 3.4 IPBES conceptual framework: overview and regional interpretation

#### 3.4.1 Overview

Day two of the workshop starts with an overview of the IPBES conceptual framework provided by Dr. Osamu Saito, UNU-ISP. He introduced the rationale of developing a conceptual framework and the work undertaken by the MEP after IPBES-1.

Dr. Saito explained the evolution of the draft conceptual framework and how this concise model came into being, which attempts to capture the interactions between social-ecological components, providing a common vision and shared language across disciplines, knowledge systems and stakeholders. It will be used to guide the implementation of the IPBES work programme towards achieving the key functions of IPBES.

Ms. Michiko Okumura, IPBES Interim Secretariat, provide further information on the history and progress of IPBES conceptual framework development. She noted that the development process is expected to be open, transparent and inclusive, taking into account all the key components as a social-ecological system and their multi-scale/cross-scale impacts. Finally she said that the framework could clarify issues related to trade-offs and synergies, while providing guidance to responding to changes in biodiversity and ecosystems functioning.

#### 3.4.2 Regional interpretation

A presentation was given by Prof. Koji Nakamura, Kanazawa University, Japan, on lessons from sub-global assessment, including key findings from the Japan Satoyama Satoumi Assessment (JSSA), which aims to provide scientifically credible and policy-relevant information on the significance of ecosystem services provided by satoyama and satoumi landscapes, and their contributions to economic and human development for the use of policy-makers.

This was followed by a review of previous assessments in Russian Federation, introduced by Dr. Konstantin Lutaenko, Russian Academy of Sciences, Institute of Marine Biology. Russia is country rich in both terrestrial and marine biodiversity resources, and much effort has been made to evaluate and assess the biodiversity in the country. A challenge, which is shared by many other countries in the region, is the issue of language barrier when it comes to

knowledge sharing across countries, as a large amount of the information collected and compiled, though comprehensive, is not available in English.

Prof. Parikesit Pampang Djukahdi, Universitas Padjadjaran, Indonesia introduced the current situation in Indonesia regarding biodiversity and ecosystem services management. He pointed out that there is a lack of policy to support natural resources conservation with emphasis on local community empowerment and stakeholder engagement, despite that the associated issues are mentioned in the country's biodiversity strategy and action plan. An integrated management system is needed to address the complexity of the issue, and funding support remains a constraint to policy and actions related to biodiversity and ecosystems management.

Dr. Jin-Han Kim, National Institute of Biological Resources, Republic of Korea, introduced the recent initiatives of Korea in data collection, management and dissemination to strengthen the activities related to IPBES implementation. These include the establishment of two new institutes, addressing biodiversity and ecosystem services research respectively.

#### 3.4.3 Group discussion

Participants formed four break-out groups to consider what are the regional-specific issues and challenges when applying the IPBES framework for regional assessments, as well as recommendations to IBPES in order to incorporate these regional considerations to the conceptual framework. Each group will consider one of the four functions of IPBES, namely (1) assessments; (2) knowledge generation; (3) policy support; and (4) capacity building. Results of the group discussion is summarised in Section "3.6 Challenges and recommendations" below.

#### 3.5 Knowledge sharing: status and gaps

Day three of the workshop consisted of presentations by representatives of national, regional and international organizations working on biodiversity and ecosystem services, on their work on knowledge generation and sharing, as well as gaps and challenges in this regards. Speakers are from Korean Development Institute (KDI), United Nations University, the International Union for Conservation of Nature (IUCN), ASEAN Centre for Biodiversity (ACB), the East Asian-Australasian Flyway Partnership (EAAFP), and the International Partnership for the Satoyama Initiative (IPSI).

A clear message from the discussion that followed is, while a new institution to address synergy is not necessary, there is a need to strengthen collaboration among institutions collecting and sharing knowledge, including inter-governmental and regional organisations, non-governmental organisations (NGOs), governments, and industry.

In this regard, it is important to build trust between different types of stakeholders, such as governments and NGOs. There is also a need for addressing interoperability of data sets, and differentiating data sets for different purposes, for example, ecological data on the micro level, and data on biodiversity and ecosystem services on the macro level.

Prof. Anantha Kumar Duraiappah, International Human Dimensions Programme on Global Environmental Change (IHDP) suggested that it is IPBES's role to consider how to translate and integrate these available data into the system of national accounts, to offer a measurable and comparable indicator of biodiversity and ecosystem services. A workgroup on data management under IPBES could be an approach to addressing this issue.

#### 3.6 Challenges and recommendations

#### 3.6.1 Assessment

The main challenge at the regional level is related to scale issues and approaches to assessment. Recommendations includes developing more standardised methodologies, developing a clear set of indicators, combining of assessment with capacity building, etc.

Another challenge is the integration of natural and social sciences, including indigenous and local knowledge. To address this issue, it is important to treat biodiversity as beyond providing ecosystem services; and therefore it could be included in the discourse of Sustainable Development Goals. Additionally, disaster risk reduction and climate change impacts should also be considered when looking at biodiversity and ecosystem services.

The third challenge is the diversity of ecological systems and networks in the Asia-Pacific region, and the unique issue of high population and land-use competition. Finally, it's important to understand how to link the value of biodiversity and ecosystem services to the human well-being they provide, including for current and future generations.

#### 3.6.2 Capacity building

There is a need to clearly define and prioritise capacity building needs for assessment. For example, policy-makers, decision makers and the private sector will require different information and approaches for capacity building.

Another challenge closely linked with the above is how to translate raw data and knowledge into information products useful for stakeholders. The language, content and presentation of knowledge products are an important factor in successful capacity building efforts.

A common data repository is needed for data sharing and exchange, and data repatriation should be emphasised for assessments undertaken by foreign researchers. Incentives should be provided to encourage knowledge sharing, especially at the local level. Finally, it is necessary to involve the private sector in building capacity of different stakeholders, and a funding mechanism is needed to support such activities.

#### 3.6.3 Policy support

It is suggested that IPBES affiliate with and link together regional organisations already successfully undertaking related work in the Asia-Pacific region, and by doing so to identify gaps and duplication in data related to B&ES and develop policy tools in response. IPBES could also provide support to different stakeholder levels, especially in communication tools.

The main challenge in promoting policy support include how to clearly communicate the policy intents of IPBES; how to coordinate with regional organisations and create synergy, how to secure scientific, technical and financial support; and how to engage stakeholders throughout all stages of the lifecycle of IPBES assessment processes.

In order to respond to these challenges, an institutional response could be considered, which could either be and Asia-Pacific committee to coordinate high-level participation, or a regional operating unit to encourage direct stake holder engagement.

Another suggestion relates to coordinating the reporting responsibilities of countries to different regional and international organisations, including multilateral environmental agreements (MEAs), to reduce reporting workload and improve effectiveness.

It is recommended that policy support be backed by a strong communication strategy, as well as scientific, technical and financial support.

#### 3.6.4 Knowledge generation

When considering the practices, challenges and recommendations regarding knowledge generation, the process was broken up into four stages: knowledge finding and collection; reporting and verification; stock and maintenance; as well as sharing and distribution. Then each of the four stages were examined by considering different scenarios of knowledge generation from indigenous local knowledge, from the science, policy and industry sectors, as well as from NGOs.

While each types of knowledge generation faces unique challenges at different knowledgegeneration stages, there are some challenges that are common to generating different types of knowledge. These include the availability and standardisation of data and raw information, general applicability of verification tools, continued funding support for data collection and storage, and the general lack of experts and skilled personnel to conduct knowledge generation activities.

### 4. Next steps

The outcome of the workshop provides an Asia-Pacific perspective on the conceptual framework of IPBES, and will be a useful reference for other regions in the world in implementing the IPBES framework. Key messages from the discussion will be summarised into a concise paper to be presented, as an information document, to the second session of IPBES to be held in Antalya, Turkey, from 9 to 14 December 2013.

The workshop report will also be compiled and widely distributed in international events related to biodiversity and ecosystem services, including the upcoming IPBES-2, the meeting of Subsidiary Body on Scientific, Technical and Technological Advice of the Convention on Biological Diversity (CBD-SBSTTA), the Governing Board Meeting of the Global Biodiversity Information Facility (GBIF).