An Overview IPBES Global Assessment on Biodiversity and Ecosystems

Eduardo S. Brondizio,
Department of Anthropology,
Indiana University Bloomington

Co-Chair, IPBES Global Assessment

7th IPSI Global Conference
UNU-IASS
Ministry of Environment of Japan
Ishikawa Prefectural Government

www.ipbes.net
Outline:

- Introduce the **Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)**
- Overview of the **global assessment on ecosystems and biodiversity**
- Brief comments on the importance of **social-ecological production landscapes and seascapes for the next decade of global biodiversity targets**
Intergovernmental Platform on Biodiversity and Ecosystem Services

- Overall objective: To provide policy relevant knowledge on biodiversity and ecosystem services to inform decision making
- Established in April 2012, Panama
- 130 member countries
- Collaborative partnership agreement with FAO, UNDP, UNEP, UNESCO
- Secretariat hosted in Bonn, Germany
- Implementing its first Work Programme (2014-2018)
The Regional assessments of biodiversity and ecosystem services

- Africa,
- The Americas
- Asia-Pacific
- Europe and Central Asia

Land degradation and restoration assessment
The global assessment will critically assess the state of knowledge on past, present and possible future trends in multi-scale interactions between people and nature, taking into consideration different world views and knowledge systems.

Geographic area includes land, inland waters, coastal zones and oceans.

Timeframe:
- Status and trends: back as far as 50 years up to 2020.
- Plausible future projections and possible pathways: between 2020 and 2050
Vision of the Strategic Plan **2050**

**IPBES - GLOBAL ASSESSMENT**
- Contribute to 2020 Global Biodiversity Outlook
- Assess progress to Aichi 2020
- Contribution to 2030 SDGs
- Prospects to achieve 2050 Vision
- Scientific basis for updated strategic plan to 2030

**2010** Adoption of the Strategic Plan for Biodiversity

**2020** Aichi Biodiversity Targets

**2030** SDGs
<table>
<thead>
<tr>
<th>Chap.</th>
<th>What are we assessing? The GA Scoping Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chap. 1</td>
<td>Scope, conceptual and analytical foundations, chapter organization, main themes</td>
</tr>
<tr>
<td>Chap. 2</td>
<td>What is the status of and trends in nature, nature’s benefits to people and indirect and direct drivers of change?</td>
</tr>
<tr>
<td>Chap. 3</td>
<td>How do nature and its benefits to people contribute to the implementation of the Sustainable Development Goals? What is the evidence base that can be used for assessing progress towards the achievement of the Aichi Biodiversity Targets?</td>
</tr>
<tr>
<td>Chap. 4</td>
<td>What are the plausible futures for nature, nature’s benefits to people and their contribution to a good quality of life between now and 2050?</td>
</tr>
<tr>
<td>Chap. 5</td>
<td>What pathways and policy intervention scenarios relating to nature, nature’s benefit to people and their contributions to good quality of life can lead to sustainable futures?</td>
</tr>
<tr>
<td>Chap. 6</td>
<td>What are the opportunities and challenges, as well as options available to decision makers, at all levels relating to nature, nature’s benefit to people and their contributions to good quality of life?</td>
</tr>
</tbody>
</table>
The team working on it

• 150 Experts from 51 Countries
• 52.7% (79) Natural sciences, 47.3% (71) social sciences, interdisciplinary
• 17 Review Editors
  ▪ 16 Fellows; 6 Chapter Scientists
  ▪ 252 Contributing Authors
  ▪ 14 Management Committee Members (MEP & Bureau)
  ▪ TSUs: Global, Indigenous and local Knowledge, Scenarios, Values, Knowledge & Data, Capacity Building

Third Author Meeting, July/August 2018, Frankfurt Germany
The process of doing the Assessment

Chapter Meetings:
- Ch 1: Argentina
- SPM: Norway

Cross-chapter Meetings:
- ILK authors: Hungary
- Values: Hungary
- SES Indicators: S. Korea

Meeting MEP: Bonn
Meeting Governments: Bonn

ILK / IPLC Dialogues
- UNPFII, April 2019, UN-NYC
- Int’l Ethnobiology, Aug. 2018, Belem+30, Brazil
- Arctic Council, June 2018, Helsinki, Finland
- Community Conservation May 2018, Halifax, Canada
- UNPFII, April 2018, UN-NYC, USA
- IIFB/CBD 8j, SBSTTA Dec. 2017, Montreal, Canada
- Int’l Ethnobiology May 2017, Montreal, Canada
- *UNPFII, April 2017, - Dialogue on Human rights Conservation, UN-NYC, USA April 2017, Mt. Elgon, Kenya

*UNPFII passed as resolution in support of the Global Assessment
CHAPTER and CROSS-CHAPTER MEETINGS 2017
Building upon previous efforts...

... the GA is the first assessment to systematically examine and incorporate indigenous and local knowledge and issues concerning indigenous peoples and local communities at a global scale.

Indigenous Peoples: manage or have tenure rights over at least ~38 million km² in 87 countries (~25% land surface)

40% Protected areas and + intact nature
The IPBES Global Assessment: A Strategy dedicated to Indigenous and Local Knowledge and Issues concerning Indigenous Peoples and Local Communities

| Ch 1 | Introduction |
| Ch 2 | Status & Trends: last 50 years |
| Ch 3 | Progress on internationally-agreed goals |
| Ch 4 | Looking into plausible future 20/30 yrs |
| Ch 5 | Looking into desirable sustainable futures and possible pathways 30/50 yrs |
| Ch 6 | Evaluation of policy instruments |

→ ILK-IPLC SYSTEMATIC COVERAGE ACROSS CHAPTERS:
- 3 Guiding Questions
- 36 Chapter specific questions

→ SYSTEMATIC LITERATURE REVIEW

→ ONLINE and FACE TO FACE CONSULTATIONS
Evidence indicates that Indigenous & Local Knowledge and Practices:

Locally based, regionally manifested, globally relevant

1. What have been the contributions of ILKPs/IPLCs to the sustainable use, management and conservation of nature and Nature’s Contributions to People at regional and global scales?
Evidence indicates that Indigenous & Local Knowledge and Practices:

Confronting pressures, conflicts, and facing fast rates of change

2. What are the most important features, pressures and factors related to and/or enabling these contributions, as well as impacting present and future relationship to nature and quality of life of IPLCs?
3. What policy responses, measures, and processes can contribute to strengthen and improve the institutions and governance of nature and its contributions with regard to ILKP/IPLCs?
Consultations, dialogues, and call for contributions on Indigenous and Local Knowledge
Chapter Goals:

1-Scoping Document
   .Question
   .Specific domains
   .Timeframe

2-Build on each other’s evidence

3-Ovearchring themes, issues, threads across chapters
Ch 1: Introduction
- Scope of the Global Assessment
- Genealogy of the GA
- Conceptual framework
- Analytical basis: values, NCP, units, drivers, scenarios
- Strategy for ILK/IPLC

Ch 2: Nature
Status & Trends: last 50 years

Ch 3: ABT/SDG
Drivers
Assess Aichi Biodiversity Targets and SDGs

Ch 4: Plausible Futures
Plausible future 10/20/30 years

Ch 5: Sustainable Pathways
Desirable futures and possible pathways

Ch 6: Options
Opportunities, challenges and options for decision makers
Ch 1: Introduction
-Scope of the Global Assessment

Ch 2: Drivers
-Status & Trends: last 50 years

Ch 3: ABT/SDG Drivers
-Assess Aichi Biodiversity Targets and SDGs

Ch 4: Plausible Futures
-Plausible future 10/20/30 years

Ch 5: Sustainable Pathways
-Desirable futures and possible pathways

Ch 6: Options
-Opportunities, challenges and options for decision makers
Ch 1: Introduction
- Scope of the Global Assessment

Ch 2: Nature
Status & Trends: last 50 years

Ch 2: NCP
Status & Trends: last 50 years

Ch 3: ABT/SDG
Drivers
Assess Aichi Biodiversity Targets and SDGs

Ch 4: Plausible Futures
Plausible future 10/20/30 years

Ch 5: Sustainable Pathways
Desirable futures and possible pathways

Ch 6: Options
Opportunities, challenges and options for decision makers

- Progress evaluation ABT and SDGs
- Links and implications of ABT/SDGs for IPLC
  - Evaluation of major international conventions
  - Cross-cutting synthesis and implications new targets
Evaluation of scenarios - plausible futures for nature in marine, freshwater, terrestrial, NCP and GQL and implications - implications for reaching the ABT and SDGs - uncertainties, feedbacks, tipping points.
Ch 1: Introduction
-Scope of the Global Assessment

Ch 2: Drivers
Status & Trends: last 50 years

Ch 3: ABT/SDG Drivers
Assess Aichi Biodiversity Targets and SDGs

Ch 4: Plausible Futures
Plausible future 10/20/30 years

Ch 5: Sustainable Pathways
Desirable futures and possible pathways

Ch 6: Options Opportunities, challenges and options for decision makers

(5) Frameworks for sustainability transformation, pathways
(6) Transformative governance
(5/6) Nexus approaches to achieve multiple SDGs: sustainable food, freshwater, biodiversity conservation, landscape, oceans, urban, climate goals, infrastructure, energy
(5) Societal levers
(6) Policy options and instruments
On-going work (September – December 2018):

- Chapter revisions and responses to review comments

- Cross-chapter alignments and cross-cutting themes

- Preparation of Executive Summaries and Summary for Policy Makers (SPM)

- For approval at the Plenary of IPBES-7 at UNESCO, Paris, May 7, 2019
Comments on the importance of social-ecological production landscapes and seascapes for the next decade of global biodiversity targets
An urban planet, yet sparsely populated: What implications for governance?

Population density of <1 person/km² (equivalent to most of the Sahara desert:
~ 57% of Asia
~ 81% North America
~ 94% of Australia

Figure 1: World population distribution and density, 2010. Map prepared using data at 1km resolution derived from the Landscan Data Platform of the United States Oak Ridge National Laboratory. http://web.ornl.gov/sci/landscan/

The Global Relevance of Indigenous Peoples and Local Communities to biodiversity and ecosystem conservation and management

Indigenous Peoples manage or have tenure rights over at least ~38 million km² in 87 countries or politically distinct areas on all inhabited continents.

Representing over > ¼ of the world’s land surface.

Fig. 1 | Global map of lands managed and/or controlled by Indigenous Peoples (percentage of each degree square mapped as Indigenous in at least one of 127 source documents; Supplementary Information section 2).

A spatial overview of the global importance of Indigenous lands for conservation
... and to local to global conservation strategies

Areas managed and/or held in tenure rights by Indigenous Peoples intersects about 40% of all terrestrial protected areas and ecologically intact landscapes such as in boreal and tropical primary forests, savannas and marshes.
The urban south and the predicament of global sustainability

Hirini Nagendra*, Xuemei Bai**, Eduardo S. Brondizio* and Shusab Lewasa**
Thanks to all Japanese authors and reviewers and to all of you who are contributing as authors and reviewers of the IPBES Global Assessment!
Thank You! And Congratulations on the many advances of the Satoyama Initiative!

Thanks to the research team of the project: Predicting and Assessing Natural Capital and Ecosystem Services (PANCES)
Thank you!

IPBES Secretariat, UN Campus
Platz der Vereinten Nationen 1, D-53113 Bonn, Germany
secretariat@ipbes.net
The Dilemma: Island of Contrasting Landscape Governance: Connectivity and the limits of level specific governance systems...

... understanding the challenges and opportunities for landscape-level governance, enhancing connectivity and conservation of biodiversity and watersheds across diverse groups of agents.