

IPBES: critical questions

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The problem

“We lack information on global and local trends in most biodiversity components at the level of genes, species, and ecosystems, as well as baselines and standards for their assessment. We will certainly miss the CBD’s target for reducing the rate of biodiversity loss by 2010 and also miss the 2015 environmental targets within the UN Millennium Development Goals to improve health and livelihoods for the world’s poorest and most vulnerable people.”

Mooney H. and Mace G. (2010) Biodiversity Policy Challenges, Science 325: 1474.

What need would an IPBES serve?

UNEP/WCMC analysis of the gaps in BES science and policy was asked to address:

- a) The strengths and weaknesses of existing science-policy interfaces and coordination among them at all spatial scales, including the advisory bodies of biodiversity-related Multilateral Environmental Agreements and United Nations bodies;
- b) The potential for strengthening existing science-policy interfaces, as well as the potential added value of a new mechanism complementing existing interfaces and helping to overcome the recognized weaknesses in the current system; and
- c) That mechanisms to improve the science-policy interface could include components of multi-scale assessments, early warning, policy information and capacity development

What need would an IPBES serve?

- Gaps were identified in several areas:
 - a) Use of science and scientists by policy advisory processes
 - b) Assessments of knowledge on biosphere change
 - c) Emerging issues of scientific concern
 - d) Communication of scientific information to policy makers
 - e) Building capacity
- Main issues:
 - a) Fractured science-policy landscape
 - b) Limited understanding of cross scale linkages between biodiversity change and ecosystem services
 - c) Poor communication and long response times
 - d) Limited capacity to undertake assessments

What functions would an IPBES have?

- Science-policy
- Assessment: routine reporting
- Assessment: emerging issues
- Decision-support
- Capacity-building

“There was agreement that a strengthened science-policy interface needed scientific independence (credibility, relevance and legitimacy); knowledge generation (collaboration and coordination for common and shared knowledge bases); knowledge assessments (regular and timely assessments to generate and disseminate policy-relevant but not policy-prescriptive advice with full and equal involvement of experts from all regions of the world); knowledge use (support for policy development and implementation); and capacity-building to enhance the science-policy interface and mainstream biodiversity and ecosystem services for human well-being (e.g., poverty eradication, food, water and energy security)”

Chairman’s summary, 2nd Intergovernmental Conference on IPBES, Nairobi, October 2009.

Science-Policy functions

1. Identifying and prioritizing scientific information needed by policymakers at various spatial scales
1. Which policy makers? Options to be discussed in Busan include governments addressed through:
 - Option 1: the Convention on Biological Diversity;
 - Option 2: the CBD and six named “biodiversity-related” conventions*;
 - Option 3: multilateral environmental agreements related to biodiversity and ecosystem services and United Nations agencies;
 - Option 4: multilateral environmental agreements related to biodiversity and ecosystem services and United Nations agencies and all other stakeholders

Question:

Who should an IPBES respond to? National governments have a strong and legitimate interest in biosphere change, but other stakeholders are important to include?

* Convention on Biological Diversity; the Convention Concerning the Protection of the World Cultural and Natural Heritage; the Convention on International Trade in Endangered Species of Wild Fauna and Flora; the Convention on Migratory Species; the Convention on Wetlands of International Importance Especially as Waterfowl Habitat; the International Treaty on Plant Genetic Resources for Food and Agriculture; and the United Nations Convention to Combat Desertification

Assessment functions

1. Conducting comprehensive global, regional and sub-regional assessments;
2. Undertaking assessments on emerging/thematic issues;
3. Synthesizing and disseminating assessment findings;
4. Facilitating collaboration between assessments while avoiding duplication.

Questions

Assessment of what? Biodiversity change affects all services (provisioning, cultural, regulating, supporting). Production, conservation and security all matter.

Assessment at what scale? Many biodiversity issues are local, but many drivers of biodiversity change (climate, world markets), and many of the consequences of local change are global.

Early warning functions

1. “In addition to supporting and undertaking assessments, IPBES should also have a function of horizon scanning and early warning on policy-relevant biodiversity and ecosystem services science. Whilst this would build on the assessments implemented, it would also provide opportunity for rapid assessment of key emerging issues to be brought to the attention of the IPBES bureau and/or plenary.”

IUCN Information Paper, ENHANCING THE SCIENCE-POLICY INTERFACE ON BIODIVERSITY AND ECOSYSTEM SERVICES, Fourteenth Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA14, 10-21 May 2010, Nairobi, Kenya)

2. This function would be more valuable for countries that do not currently have horizon-scanning or early-warning offices.

Question

Is rapid assessment of emerging international threats a useful function for an IPBES? At what scale?

Decision-support functions

1. Supporting policy formulation and implementation by identifying policy relevant tools and methodologies and meeting the needs of policymakers and other users of scientific information.
2. Assessments should support extension of national income accounting systems to include change in natural capital.

Questions

What sorts of data best support policy? Should an IPBES report the value (opportunity cost) of biosphere changes in addition to biophysical measures?

How should decision models be used? Projections of the consequences of alternative policy or governance options should embody decision models.

Capacity building functions

1. identifying capacity-building needs of scientists, policymakers and other users of scientific information over a range of spatial scales and creating a mechanism (with organizations responsible for capacity-building) to meet identified needs.
2. support for enhancing national capacity, especially in developing countries, including improving access to relevant scientific information and technologies, and providing training programs and opportunities

Question

Capacity building to do what and where? There is clear need for skills in developing countries (technical support, research fellowships, network support, data base support).

But we also need to analyze interactive effects of biodiversity change on production, biosecurity and conservation at many scales, and to develop 'predictive' models of biophysical/social system dynamics.

Strengthening existing mechanisms

1. “The science-policy interface could, at least in part, be improved by strengthening existing mechanisms”;
2. “There was agreement that no intergovernmental mechanism currently existed to meet all the science policy needs of the various multilateral environmental agreements and processes in the field of biodiversity and ecosystem services”

Chairman’s summary, 2nd Intergovernmental Conference on IPBES, Nairobi, October 2009.

What we cannot do by strengthening existing mechanisms:

- **Integrate information on biodiversity change in agriculture, forestry, fisheries, health, biotechnology, wildlife conservation**
- **Track the cross-scale and cross-sector consequences of biodiversity changes recorded by scientists working in particular systems**
- **Project the future impacts of global drivers (climate change, world trade, homogenization of production systems) on biodiversity and ecosystem services at regional and national scales**