



Following a mandate from the recently established Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), UNESCO in close cooperation with IHDP, DIVERSITAS, IUCN and UNEP and with the kind financial support of the Ministry of the Environment of Japan and the Gordon and Betty Moore Foundation assembled an informal group of experts, who worked to identify the ingredients of a possible conceptual framework for IPBES. This group of experts envisioned what it might look like, however did not bake the cake fully, waiting for a legitimate decision to be taken about preparation and adoption of a possible conceptual framework for IPBES.

These experts worked through a web-based content management system and met for a workshop from 27 to 29 October 2012 in Paris, France. This paper summarizes their suggestions and views which can be found in the information document IPBES/1/INF/9.

# HOW TO BAKE A CONCEPTUAL FRAMEWORK FOR IPBES?

**An informal expert group proposes views on ingredients and preparation steps**

**Summary of the outcome of an informal expert workshop on main issues relating to the development of a conceptual framework for IPBES (IPBES/1/INF/9)**



# WHAT ARE CONCEPTUAL FRAMEWORKS?



- In the context of biodiversity and ecosystem services, conceptual frameworks are simple representations of relationship between people and nature;
- Conceptual frameworks provide a shared language and a common set of relationships and definitions;
- For complex issues, conceptual frameworks help clarify and focus thinking.

# HOW CAN CONCEPTUAL FRAMEWORKS BE USEFUL TO IPBES?

- Conceptual frameworks can be critical for enabling communication between disciplines, thereby facilitating and strengthening multidisciplinary collaboration.
- Conceptual frameworks can be used to facilitate the inclusion of indigenous and local knowledge systems.
- Conceptual frameworks, if developed in an open and transparent process allowing the involvement of a broad set of stakeholders and knowledge holders, can help to promote consistency and complementarities between the four functions of IPBES.
- Conceptual frameworks can significantly increase policy relevance by addressing user needs, as well as improving adaptation and learning.



# WHAT WOULD BE THE INGREDIENTS OF A CONCEPTUAL FRAMEWORK FOR IPBES?

## **Biodiversity and ecosystem functioning**

Biodiversity and ecosystem functioning play multiple roles in underpinning the quality, quantity and resilience of ecosystem services, in providing the raw material for adapting to change, as well as in providing direct benefits and having particular meanings to people.

## **Ecosystem goods and services**

These are the benefits that flow to people from ecosystems. Their delivery is dependent on biodiversity, ecosystem functioning and other forms of wealth a society possesses.

## **Human well-being**

Human well-being is multi-dimensional and dependent on access to and changes in bundles of goods and services and is context specific with preferences for constituents of human well-being varying across individuals and societies.

## **Decisions and institutions**

Decisions both influence and are influenced by institutions, and can become key indirect and direct drivers of change, thereby affecting interactions among biodiversity, ecosystem functioning, ecosystem services and human well-being.

## **Scales**

A conceptual framework for IPBES might consider the properties and processes that occur at different scales of space, time and governance, as well as the interactions across these scales.



## CONCEPTUAL FRAMEWORKS USED BY OTHER PROCESSES

- The Millennium Ecosystem Assessment
- The Southern African Sub Global Assessment
- An Andean Indigenous worldview
- The Japan Ecosystem Assessment
- The United Kingdom Ecosystem Assessment
- The conceptual framework for the Aichi Targets (2011-2020 Strategic Plan for Biodiversity)

## SUPPLIES

The detailed description of the work undertaken by the informal expert group can be accessed in the information document IPBES/1/INF/9 "Outcome of an informal expert workshop on main issues relating to the development of a conceptual framework for IPBES". The authors of this documents are:

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# HOW DO WE GO ABOUT COMBINING THE INGREDIENTS?



1

A conceptual framework for IPBES might be developed through an open, deliberative and transparent process including scientific experts, indigenous and local knowledge experts, policymakers and other relevant stakeholders.

2

A conceptual framework for IPBES might include the key components of biodiversity, ecological functioning, ecosystem services and human well-being as a Socio-Economic-Ecological System with particular attention to their inter-relationship.

3

The inclusion of institutions and decisions and their role as key indirect and direct drivers of changes in the state of biodiversity, ecosystem functioning, ecosystem services and human well-being within a conceptual framework for IPBES might be considered in order to provide clear strategies for response interventions.

4

A conceptual framework for IPBES could include the explicit recognition of spatial and temporal scales to allow a deeper understanding of multi-scale and cross-scale impacts of changes to and changes of the various components within Socio-Economic-Ecological Systems.

5

A common conceptual framework for IPBES can help to ensure a coherent and consistent approach across the four functions of IPBES - knowledge generation, assessment, policy support and capacity building – and could clarify linkages and integration between them.

6

A conceptual framework for IPBES could clarify information on synergies and trade-offs across the various components of the Socio-Economic-Ecological Systems and provide guidance for responding to detrimental changes in biodiversity and ecosystem functioning both in the short run through adaptation and in the long run through transformational changes.



# TIPS OF EXPERTS

*“The task of IPBES is to relate biodiversity and ecosystem services to human well-being, sustainability and conservation.”*

Markus FISCHER (Switzerland), Director, Institute of Plant Sciences and Botanical Garden & President, Swiss Forum Biodiversity, University of Bern

*“It is important for IPBES to understand the cultural differences, the different perceptions that underpin the valuation of ecosystem services before we make decisions on how we actually go about assessing and developing policies.”*

Stanley T. ASAH (Cameroon), Assistant Professor, Human Dimensions of Natural Resource Management, School of Environmental and Forest Sciences, College of the Environment, University of Washington

*“The problem we have in the world, in our countries and in our regions is that many decisions are taken regardless the fact that ecosystem services are provided by ecosystems and all the components of biodiversity.”*

Jorge CAILLAUX (Peru), Presidente, Sociedad Peruana de Derecho Ambiental

*“The genetic basis of diversity, general variability of all forms of life built throughout organisms, the populations of organisms, biological communities and functional traits produce some ecosystem processes that are captured by society.”*

Brigitte BAPTISTE (Colombia), General Director, Instituto de Investigación de Recursos Biológicos Alexander Von Humboldt, Colombia

*“The questions around human development are intrinsically connected to the ethical idea of distribution of the benefits and of the burdens of ecosystem service flows.”*

Unai PASCUAL (Spain), Department of Land Economy, University of Cambridge

*“Biodiversity and ecosystem services are really very important at the landscape scale, where indigenous peoples actually manage this biodiversity and have developed knowledge and understanding of the systems over a very long time period.”*

Joji NETTLETON CARINO (Philippines), Director, Tebtebba Foundation, Indigenous Centre for International Policy, Research and Education

*“I think resilience theory can really contribute here. Resilience is the capacity of social and ecological systems to withstand perturbations and to rebuild and renew themselves afterwards without shifting into a qualitative different state.”*

Maria SCHULTZ (Sweden), Director, The Resilience and Development Programme, SwedBio, Stockholm Resilience Centre, Stockholm University

*“While unpacking concepts it is important to keep in mind what appeals to different disciplines – capital is appealing to economists, human well-being to sociologists, and biodiversity to ecologists. We can achieve common understanding by doing so in a group.”*

Georgina MACE (United Kingdom), co-chair of the workshop, Professor of Biodiversity and Ecosystems, Department of Genetics, Evolution and Environment, Faculty of Life Sciences, University College London

*“By fostering bridges between disciplinary, interdisciplinary, and local knowledge about the interdependence of human well-being, biodiversity and ecosystem services, IPBES will spur innovative ways (and research) to tackle problems of local, regional, and global societal relevance. A conceptual framework will be central to this goal.”*

Eduardo BRONDIZIO (Brazil and USA), co-chair of the workshop, Professor, Department of Anthropology, Indiana University Bloomington, USA & Professeur Invité, Université Sorbonne Nouvelle - Paris 3, Institut des Hautes Etudes de l'Amérique Latine, Paris

*“I think we put into practice some of the principles of IPBES – transparency, inclusiveness and openness. In addition, it is human well-being which is essential and for that we need biodiversity and ecosystem services. We need a framework that can address trade-offs and synergies for sustainable well-being not just economic growth and short term gains.”*

Anantha K. DURAIAPPAH (Malaysia), co-chair of the workshop report's drafting group, Executive Director, International Human Dimensions Programme (IHDP), United Nations University

*“IPBES will harness outstanding scientific input, but its purpose is far from academic. Rather, it will support policy and practice in halting our current, disastrous loss of biodiversity and ecosystem services.”*

Thomas BROOKS (USA), Chief Scientist, NatureServe



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