## An Informal Pre-Plenary Scientific International Workshop on Assessment and the IPBES (Intergovernmental Platform on Biodiversity and Ecosystem Services)

## **Executive Summary**

Our biosphere has been fundamentally transformed and impaired in its capacity to meet the resource demands of a growing human population. In short, our very life support system is under threat.

There has been an enormous wave of new knowledge accumulated in recent years that is key to understanding the complexities we face. This knowledge, in conjunction with knowledge that we have not used effectively in the past, has to be assessed and integrated in a manner to provide guidance for the future policy makers' responses as well as generation of knowledge. This is one of the prime challenges for IPBES.

We know that knowledge on what is happening to the biosphere and Earth is scattered, fragmented and insufficient. We need information on the social drivers of change in order to better understand the choices we make to achieve more desirable outcomes. An assessment is one effective way of providing a synthesis of the available information in a coherent and useful format for policymaking. But the complexity of the biodiversity, ecosystem services and human well-being nexus requires an assessment process that has its scope, nature, and key components clearly spelt out drawing from the scientific and other relevant knowledge systems.

IPBES will provide periodic and regular updates on key biodiversity and ecosystem services critical for human well-being in support of relevant multilateral agreements and other policy processes. IPBES will achieve this through regular, harmonized and coordinated multi-scales assessments at the sub-regional, regional and global levels. This multi-scale element, which is a specificity of IPBES, needs to the captured in a unified conceptual framework. This will facilitate horizontal and vertical comparative analysis of the findings from the various assessments.

A common conceptual framework also provides the basis for developing a shared data system and a set of collective indicators that cut across all scales. This will allow easier inter-assessment horizontal and vertical comparative studies providing policymakers deeper insights in lessons learnt from across different sub-regional and regional assessments.

Much of the knowledge on biodiversity and ecosystem services operates at the local level with much of the knowledge being experiential and tacit. The assessment process must therefore be trans-disciplinary to capture this "informal" information as well as the traditional scientifically based information. Equally challenging will be to gain better understanding of how system changes at one scale impacts on systems operating at other scales.

IPBES needs to be relatively nimble and flexible to accommodate immediate needs of policymakers. Thematic assessments would address either drivers or impacts of biodiversity and/or ecosystem services change that might occur at different scales. These assessments would focus on the biodiversity or ecosystem services change associated with a particular feature of the social systems, the global environment, or the interaction between the two. Similarly, preliminary assessments of issues new to science would address biodiversity and/or ecosystem services change that have been identified by scientists as having potentially significant implications for policy but for which data are not sufficient to support a full assessment. These assessments bring the issue to the attention of the policy community, which will decide if a more detailed assessment is necessary.

Understanding how future projections of biodiversity and/or ecosystem services can change under differing policy options is key for the design of future responses to reduce the impact of biodiversity and ecosystem services change. Scenarios provide such knowledge and IPBES must provide the incentives and resources to establish a network of scenario modeling centers of excellence. Equally important is to develop a system of dealing with uncertainty in a clear and transparent manner.

Critical for the efficient, effective and equitable design, implementation and dissemination of results in all assessments are the underlying principles. Among the many principles, the following six are key for IPBES: saliency; scientific independence; scientific credibility; inclusiveness; legitimacy; and self-learning/capacity to adapt.

Based on a workshop co-hosted by the government of Japan, the government of South Africa and UNU (25-20 July 2011, Tokyo, Japan), the scientific community is submitting

the following items for consideration by the first plenary of IPBES to ensure the establishment of a responsive, efficient and swift but thorough source of assessments, of different scope (global, thematic, new topical) and at different integrated scales, in the field of biodiversity, ecosystem services and human well-being, as tasked by the IPBES governing structures.

## Skeletal Outline

- 1. Preamble
- 2. Assessment landscape
- 3. How will IPBES assessments add value to the existing assessment landscape?
- 4. How will IPBES advance its ability to provide regular and periodic updates?
- 5. How will IPBES respond to policy needs and new and emergent problems?
- 6. How will IPBES address local to global change in biodiversity, ecosystem, and human well-being?
- 7. How will IPBES assess future policy choices for biodiversity, ecosystem, and human well-being?
- 8. How many working groups are recommended for implementing IPBES assessments?
- 9. How will the other work components of IPBES contribute to assessments?
- 10. What guiding principles would IPBES need to effectively, efficiently, and equitably, deliver policy relevant knowledge?