



UNITED NATIONS ENVIRONMENT PROGRAMME

Programme des Nations Unies pour l'environnement Programa de las Naciones Unidas para el Medio Ambiente

Программа Организации Объединенных Наций по окружающей среде برنامج الأمم المتحدة للبيئة

联合国环境规划署



## **How Best to Put ‘Nature-Based Assets’ at the Top of the International Political Agenda Focus of Malaysia Meeting**

### **Countries Debate Pros and Cons of an Intergovernmental Scientific Body for Biodiversity and Ecosystem Services**

**Putrajaya/Nairobi, 10 November 2008**--Finding a decisive international response to the loss of biodiversity, ecosystems and the multi-trillion dollar goods and services they generate will take centre stage at a conference opening in Malaysia today.

Here governments and delegates from around the world will discuss the merits of establishing an authoritative scientific Intergovernmental Platform or Panel on Biodiversity and Ecosystem Services (IPBES) alongside its potential for putting the state of the natural world high on the political radar.

The proposed body in some ways mirrors the Intergovernmental Panel on Climate Change (IPCC) established by the UN Environment Programme (UNEP) and the UN’s World Meteorological Organization.

The IPCC has validated the science of climate change; the likely impacts; the economics of action versus inaction and the options policy-makers can pursue in order to combat the phenomena.

In doing so, the IPCC has catalyzed a global international response to the global warming challenge via the establishment of the UN Framework Convention on Climate Change, the Kyoto Protocol and its ‘flexible mechanisms’ including carbon trading.

A similar bridge between the scientific and political worlds may be the solution to the decline of the planet’s natural assets and the embedding of transformational policy options that really address and reverse their slide, supporters contend.

Unraveling the precise role of animals, plants, insects and even microbes within ecosystems and their functions in terms of the services generated—from water purification to soil fertility--could also be a major thrust.

Some experts are convinced that many scientific discoveries, from the identification of new lower life forms to the fast disappearance of others, can often remain within the corridors of research institutes and universities for many years before they reach the wider world.

By that time it may be too late to act to either conserve or protect the species concerned whereas early warning might have put the species on the political radar giving it a better chance.

Meanwhile controversial issues can often be discussed in research papers for several decades before hitting the headlines.

Some kind of scientifically credible body, able to give an authoritative and peer reviewed early warning of such issues, could catalyze debate and an improved policy response long before such developments become polarized in terms of public opinion.

Achim Steiner, UN Under-Secretary General and UNEP Executive Director, said: “We are facing a serious ‘nature crunch’ and a natural asset crisis. Global GDP has more than doubled in the past quarter century. In contrast 60% of the world's ecosystems have been degraded or are being used in an unsustainable manner”.

“Meanwhile new challenges are emerging, from ‘dead zones’ in the world’s seas and oceans to the huge economic costs of alien invasive species and the over-arching impacts of climate change on natural systems,” he said.

Mr Steiner said the threats to biodiversity and ecosystems—ranging from forests to fisheries and soils to river systems—was being documented in every greater detail and with ever greater precision.

He cited reports such as the landmark UN-backed Millennium Ecosystem Assessment of 2005 to UNEP’s own Global Environment Outlook-4 published in 2007. (See notes to editors.)

These kinds of figures contrast with economic valuations of ecosystem services which are only now emerging (also see notes to editors).

For example the value of services generated by the world’s 100,000 protected areas is estimated to be worth over \$5 trillion annually-- according to The Economics of Ecosystems and Biodiversity report published in May this year and supported by the European Commission and the German Government.

The international community has over several decades rolled out a multilateral environmental response to the challenges.

There are treaties from the Convention on Biological Diversity and the Convention on Migratory Species to the Convention on the International Trade in Endangered Species and the RAMSAR convention on Wetlands.

But magnitude of that response has failed to match the pace of degradation and decline said Mr Steiner: “There is clearly a mismatch between the reality in terms of the science and the economics and the actual global international response which is plainly failing to

make a sustained and transformational difference. One option on the table here in Malaysia is the IPBES”.

“So we looked forward to the outcome of these three days of intensive talks with recommendations likely to be presented in February 2009 at the annual, global gathering of environment ministers taking place at UNEP’s headquarters in Nairobi,” he added.

### **Notes to Editors**

- In 1987, around 15 per cent of global fish stocks were classed as collapsed. GEO-4 says this has roughly doubled to 30 per cent.
- 20 years ago around a fifth of fish stocks were deemed over-exploited; this has now risen to about 40 per cent.
- Land use intensity, with links to land degradation, soil erosion, water scarcity, nutrient depletion and pollution, has increased. In 1987, a hectare of cropland yielded 1.8 tonnes. Now the figure is 2.5 tonnes.
- In Latin America and the Caribbean, desertification—caused by deforestation, over grazing and inadequate irrigation—affects a quarter of the region.
- Ecuador’s Antisan glacier retreated eight times faster than in the 1990s than in earlier decades and Bolivia’s Chacaltava glacier has lost over half its entire area since 1990.
- Available freshwater resources are declining; by 2025, close to two billion people are likely to live with ‘absolute’ water scarcity.
- In West Asia, freshwater availability per person per year has fallen from 1,700 cubic metres in the 1980s to around 907 cubic metres—it is expected to decline to 420 cubic metres by 2050.
- Populations of freshwater vertebrates have declined on average by nearly 50 per cent since 1987 as compared with an around 30 per cent decline for terrestrial and marine species.
- In the Caribbean, over 60 per cent of coral reefs are threatened by sediments, pollution and over-fishing.
- Meanwhile alien invasive species are emerging as among the leading threats to ecosystems and a huge economic cost in terms of impacts and combating them.
- No firm global figures exist but one assessment in the United States puts the economic damage from an array of alien invasive species at close to \$140 billion a year.

- Combating invasive tree species in South Africa's Cape Floral Kingdom is costing US\$40 million a year.
- The value of coral reefs is estimated at between US\$100,000 to US\$600,000 per square kilometer a year with mangroves priced at more than \$900,000 per square km, says the UNEP report 'In the Front Line: Shoreline Protection and other Ecosystem Services from Mangroves and Coral Reefs'.
- In Indonesia, where tourism is the main use, reefs are estimated to be worth US\$1 million per square kilometer, based on the cost of maintaining sandy beaches.
- Similar values have been obtained for the Caribbean, varying from "\$2,000 to US\$1 million, with the highest values in areas heavily dependent for tourism," says the report.
- Scientists reporting in the journal Science estimate that the annual economic value of pollination services provided by insects such as bees and animals like bats are worth up to \$90 billion annually.
- The Millennium Ecosystem Assessment (MA) estimates that an intact wetland in Canada is worth \$6,000 a hectare versus \$2,000 a hectare for one cleared for intensive agriculture.
- Studies from Algeria, Italy, Portugal, Syria and Tunisia also point to the value of intact forests.
- These estimate that the value of the timber and fuel-wood from a forest is worth less than a third when compared with the value of their services such as watershed protection and recreation to the absorption of pollutants like greenhouse gases.

### **Q1. What is the concept behind an IPBES?**

The core mandate of an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services would be the provisioning of authoritative, independent, credible, inclusive, and internationally peer reviewed policy relevant scientific advice on changes in biodiversity and ecosystem services and their implications for human well-being at multiple scales.

The Platform's overarching goals would be to contribute to more effective and sustainable decision-making that secures human well-being, as well as strengthened scientific linkages among biodiversity and ecosystem-related Multilateral Environmental Agreements.

In doing so, the platform will harness networks of scientific experts as well as the policy communities. IPBES is envisioned to complement, among others, the scientific subsidiary bodies of the biodiversity related conventions with the needed scientifically credible information on emerging issues in the science of biodiversity and ecosystem services change.

## **Q2. Is there a need for IPBES?**

The current science-policy interface for biodiversity and ecosystem services is comprised of a number of national and international mechanisms and processes. However, the contribution of all these processes for policy making at appropriate levels could be further strengthened if they were supported by an intergovernmental science-policy platform, which will ensure the credibility, legitimacy and saliency of emerging scientific findings and recommendations.

Moreover, most of the biodiversity related conventions use a range of different frameworks and methodologies that make it difficult for consolidating, scaling up and extract lessons learnt.

## **Q3. How did the process start?**

In the final meeting of the multi-stakeholder international steering committee for the consultative process initiated by the Government of France on an International Mechanism of Scientific Expertise on Biodiversity (IMoSEB), the international steering group invited the Executive Director of UNEP in collaboration with the government of France, other governments and other partners to convene an intergovernmental and multi-stakeholder meeting to consider an intergovernmental mechanism for biodiversity and ecosystem services.

There was also consensus among the stakeholders overseeing the Global Strategy for the Millennium Ecosystem Assessment (MA) that the IMoSEB process and the MA follow up process should merge. This sowed the seeds for the present IPBES proposal.

## **Q4. What would an IPBES deliver?**

The science-policy platform could generate a range of outcomes, including:

- a) Provision of authoritative, up-to-date and policy-relevant but not policy prescriptive analyses of the state of biodiversity and ecosystem services and their relationship with human well-being to support decision making at appropriate levels and scales with relevant information needed to: (i) improve the understanding of biodiversity and ecosystem services changes and the implications for human well-being; (ii) monitoring and reporting; and (iii) policy development;
- b) Improved communication and knowledge brokering to aid understanding and policy-relevant application of scientific results on biodiversity and ecosystem services;
- c) Improved scientific support based on requests from the subsidiary advisory bodies of MEAs, natural resource management and development-related

international bodies, multilateral banks, regional biodiversity and ecosystem services programs, and national governments, by providing proactive credible scientific advice on existing and emerging threats;

- d) Provide a common scientific platform to strengthen the link among the various biodiversity and ecosystem related MEAs, building on and taking into account existing processes such as the Biodiversity Liaison Group.

#### **Q5. How might IPBES be structured?**

The institutional structure of IPBES should have following criteria:

- i. Be scientifically independent
- ii. Be linked with the various biodiversity related conventions in a manner that will allow IPBES be the default independent scientific body for these conventions and their scientific subsidiary bodies.
- iii. Be cost efficient
- iv. Should not duplicate existing processes and add another layer of governance.

Documents for the meeting, which runs from 10 to 12 November at the Putrajaya International Convention Centre, can be found at <http://www.ipbes.net/en/index.aspx>

UNEP Global Environment Outlook-4 <http://www.unep.org/geo/geo4/media/>

Millennium Ecosystem Assessment <http://www.millenniumassessment.org/en/index.aspx>

UNEP Green Economy Initiative <http://www.unep.org/greeneconomy/>

**For More Information Please Contact Nick Nuttall**, UNEP Spokesperson and Head of Media, on Tel: +41 79 596 57 37 or email [nick.nuttall@unep.org](mailto:nick.nuttall@unep.org)

**Or Anne-France White**, UNEP Associate Information Officer, on Tel: +254 (0)20 762 3088; Mobile in Kenya: +254 (0)728 600 494, or E-mail: [anne-france.white@unep.org](mailto:anne-france.white@unep.org)