Trondheim expert meeting on capacity building for IPBES, 25-27 May 2011.

The Strategic Plan for Biodiversity 2011-20, Capacity Building and IPBES

David Cooper
CBD Secretariat
Assessment processes for the CBD

- Global Biodiversity Assessment (GBA)
- Oslo Brainstorming meeting ➔
- AHTEGs: Forest; Climate Change
- Millennium Ecosystem Assessment
- Global Biodiversity Outlook
3. THE WAY FORWARD FOR BIODIVERSITY MODELS AND SCENARIOS

MODELS OF THE FUTURE OF BIODIVERSITY AND ECOSYSTEM SERVICES CONTRIBUTE TO OUR SCIENTIFIC UNDERSTANDING AND CAN INFORM POLICY. Quantitative models should not be viewed as capable of predicting the future state of biodiversity and ecosystem services. Large uncertainties in the future trajectories of indirect and direct drivers of biodiversity and ecosystem services exclude the possibility of making multi-decadal predictions. There has, however, been tremendous progress in modeling biodiversity and its relationship with ecosystem services over the last decade, and the scientific community is now poised to use models as tools to: comprehend the mechanisms that have led to current patterns of biodiversity, understand the processes that underlie the response of biodiversity to global change, synthesize a wide range of disparate sources of information, provide insight into the effectiveness of mitigation and adaptation strategies, etc. In particular, quantitative models, when used wisely, are exceptionally good at addressing “what if” questions that decision-makers face and can explore the consequences of biodiversity and ecosystem services to human well-being can be modeled, for instance using economic valuation or links to human health and the TEEB initiative has made great strides in moving towards model-based valuation of ecosystem services. One of the challenges is the frequent spatial disconnect between where services are produced and where people benefit from those services (e.g., people downstream benefit from forest services upstream). Thus, there is the need to develop models that can map the spatial and temporal flows of ecosystem services. A daunting task will be to include a broader range of ecosystem services, especially cultural services that are very different from other ecosystem services and will require new conceptual frameworks to be developed.

MODELS NEED TO INCORPORATE MULTIPLE DRIVERS AFFECTING BIODIVERSITY AND ECOSYSTEM SERVICES AND INTEGRATE INTERACTIONS BETWEEN REALMS. Important drivers that are currently missing or only partially accounted for in models include socioeconomic factors, governance, institutions, and ethics. New approaches are needed to translate knowledge from natural science to policy and practice, such as participatory modeling, engaging the public, and translation of scientific knowledge into policy-relevant outputs.
Subsidiary Body on Scientific, Technical and Technological Advice (Article 25)

Functions:

- provision of scientific advice to the Conference of the Parties and its other subsidiary bodies
- preparation of scientific and technical assessments
- identification and development of technologies, methodologies, and
- provision of advice on scientific programmes and international cooperation in research and development
Reaffirming the need to strengthen the role of SBSTTA in this regard,

1. **Welcomes the outcome of the …… Busan and its conclusion that an IPBES should be established**;

2. Noting 2010 IYB, **encourages the UN General Assembly at its 65th session to consider the establishment of IPBES at the earliest opportunity**;

3. Emphasizes the need for the proposed intergovernmental platform to follow the guidance provided by Governments in the outcome of the Busan meeting and **be responsive to, inter alia, the needs of the Convention**, and to thereby strengthen SBSTTA in the delivery of its mandate;

4. **Requests the Executive Secretary**, in collaboration with the SBSTTA Bureau, **to consider**, once the arrangements and modalities for the intergovernmental platform are decided, **how the Convention could make full and effective use of the platform**, seeking complementarity and avoiding duplication between the work of the Convention, in particular SBSTTA, and the proposed platform, and to report thereon to a SBSTTA meeting **before COP-11**
Needs
The United Nations General Assembly:

Decides, following the invitation of COP-10, to declare 2011-2020 the United Nations Decade on Biodiversity, with a view to contributing to the implementation of the Strategic Plan for Biodiversity 2011-2020, Requests the Secretary-General, in this regard, in consultation with Member States, to lead the coordination of the activities of the Decade on behalf of the UN system, with the support of the CBD secretariat and the secretariats of other biodiversity-related conventions and relevant UN funds, programmes and agencies, and Invites Member States in a position to do so to contribute, on a voluntary basis, to the funding of the activities of the Decade.
Framework for all Conventions and stakeholders.

Vision: *Living in harmony with nature.* By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.”

Mission Take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet’s variety of life, and contributing to human well-being, and poverty eradication

20 Aichi Biodiversity Targets

Implementation mechanisms
VISION
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MISSION
Take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet’s variety of life, and contributing to human well-being, and poverty eradication.

STRATEGIC GOAL A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity

STRATEGIC GOAL B: Reduce the direct pressures on biodiversity and promote sustainable use

STRATEGIC GOAL C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

STRATEGIC GOAL D: Enhance the benefits to all from biodiversity and ecosystem services

STRATEGIC GOAL E. Enhance implementation through participatory planning, knowledge management and capacity-building

SUPPORT MECHANISMS
Aichi Nagoya Targets

Strategic goal A. Address the underlying causes of biodiversity loss

Target 1: By 2020, People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Target 2: By 2020, biodiversity values are integrated into national and local development and poverty reduction strategies and planning processes and national accounts ...

Target 3: By 2020, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed .......

Target 4: By 2020, Governments, business and stakeholders have plans for sustainable production and consumption and keep the impacts resource use within safe ecological limits.

Strategic goal B. Reduce the direct pressures on biodiversity and promote sustainable use

Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Target 6: By 2020 all stocks managed and harvested sustainably, so that overfishing is avoided .......

Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

Strategic goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas are conserved through systems of protected areas .......

Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives is maintained,

Strategic goal D: Enhance the benefits to all from biodiversity and ecosystem services

Target 14: By 2020, ecosystems that provide essential services, including services are restored and safeguarded,

Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems,

Target 16: By 2015, the Nagoya Protocol on Access and Benefits Sharing is in force and operational

Strategic goal E. Enhance implementation through participatory planning, knowledge management and capacity building

Target 17: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated NBSAP.

Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities and their customary use, are respected.

Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

Target 20: By 2020, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, should increase substantially.
STRATEGIC GOAL A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity:
- Awareness & behaviour change
- Values & integration
- Incentives
- Sustainable consumption & production

STRATEGIC GOAL B: Reduce the direct pressures on biodiversity and promote sustainable use
- Land use change
- Overexploitation
- Management of production systems
- Pollution
- Invasive alien species
- Climate change impacts

STRATEGIC GOAL C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
- Protected areas
- Address threatened species
- Protect genetic diversity

STRATEGIC GOAL D: Enhance the benefits to all from biodiversity and ecosystem services
- Services for human well being
- Restoration and adaptation and mitigation of climate change
- ABS

STRATEGIC GOAL E. Enhance implementation through participatory planning, knowledge management and capacity-building
Strategic goal E. Enhance implementation through participatory planning, knowledge management and capacity building

Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.
Mechanisms
The following are key elements to ensure effective implementation of the Strategic Plan:

(a) **Global monitoring of biodiversity**: work is needed to monitor the status and trends of biodiversity, maintain and share data, and develop and use indicators and agreed measures of biodiversity and ecosystem change (1);

(b) **Regular assessment** of the state of biodiversity and ecosystem services, future scenarios and effectiveness of responses: this could be provided through an enhanced role for SBSTTA as well as IPBES (2);

(c) **Ongoing research** on biodiversity and ecosystem function and services and their relationship to human well-being;

(d) The **contributions of knowledge, innovations and practices of indigenous and local communities** relevant to the conservation and sustainable use of biodiversity to all the above;

(e) **Capacity-building** and timely, adequate, predictable and sustainable financial and technical resources.

(1) The GEO-Biodiversity Observation Network, with further development and adequate resourcing, could facilitate this, together with Global Biodiversity Information Facility and the Biodiversity Indicators Partnership.

(2) This is facilitated by, *inter alia*, DIVERSITAS, the Programme on Ecosystem Change and Society and other global change research programmes of the International Council for Science (ICSU).
Emerging Science-Policy Interface for Biodiversity

Policy (CBD etc)

Observation (GEO-BON)

Assessment (IPBES)

Research (DIVERSITAS etc)
Science-Policy Interface for Climate Change

- Policy (UNFCCC)
- Observation (GCOS etc)
- Assessment (IPCC)
- Research (WCRP etc)
Emerging Science-Policy Interface for Biodiversity

- **Policy** (CBD etc)
- **Observation** (GEO-BON)
- **Assessment** (IPBES)
- **Research** (DIVERSITAS etc)
Emerging Science-Policy Interface for Biodiversity

Policy (CBD etc)

Observation (GEO-BON)

Assessment (IPBES)

Research (DIVERSITAS etc)

Capacity - Building
As highlighted in Third National Reports:

- Lack of financial, human, technical resources (84%)
- Lack of economic incentive measures (82%)
- Loss of biodiversity and its goods and services not properly documented (76%)
- Lack of public education and awareness at all levels (75%)
- Lack of effective partnerships (74%)
- Lack of cooperation among stakeholders (73%)
- Unsustainable production and consumption patterns (72%)
- Lack of mainstreaming (71%)
- Inadequate capacity to act, Institutional weakness (70%)
- Lack of knowledge & practice on ecosystem-based approaches (70%)
Para 6

Emphasizes the need for capacity building activities and the effective sharing of knowledge, ......... in order to support all countries, especially developing countries, ......., in the implementation of the Strategic Plan for Biodiversity 2011-2020;
Para 23
Collectively those involved in implementing the Convention have a wealth of experience and have developed many useful good practice cases, tools and guidance. There is additional useful information beyond this community. A biodiversity knowledge network will be developed, including a database and network of practitioners, to bring together this knowledge and experience and to make it available through the clearing house mechanism to facilitate and support enhanced implementation of the Convention. National clearing-house mechanism nodes comprising networks of experts with effective websites should be developed and sustained so that in each Party, all have access to the information, expertise and experience required to implement the Convention. National clearing house mechanism nodes should also be linked to the central clearing house mechanism managed by the Convention Secretariat, and information exchange between these should be facilitated.

Para 25:
Partnerships. South-South cooperation ..... will contribute to the implementation of the Strategic Plan
1. ... Parties shall promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity, where necessary, through the appropriate international and national institutions.

2. Each .. Party shall promote technical and scientific cooperation with other .. Parties, in particular developing countries, in implementing this Convention, inter alia, through the development and implementation of national policies. In promoting such cooperation, special attention should be given to the development and strengthening of national capabilities, by means of human resources development and institution building.

3. The Conference of the Parties, at its first meeting, shall determine how to establish a clearing-house mechanism to promote and facilitate technical and scientific cooperation.

4. The ..Parties shall, in accordance with national legislation and policies, encourage and develop methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention. For this purpose, the Contracting Parties shall also promote cooperation in the training of personnel and exchange of experts.

5. The ..Parties shall, subject to mutual agreement, promote the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of this Convention.
Strengthening Technical and Scientific Cooperation

Needs

- Practical support for implementation
- Capacity building workshops
- Online and phone support
- Tools and guidance on website
- Financial support
- Facilitation

“network” of experience and expertise

National centre of excellence

National centre of excellence

National centre of excellence
United Nations Decade on Biodiversity

www.cbd.int/sp/sp
www.cbd.int/nbsap
Challenges

• “adding in discussions about economic and political dynamics, power structures, regulations and dominant ideologies that affect biodiversity, ecosystem services and people’s relation to them would also, and substantially improve their legitimacy by giving a large number of perspectives and communities of people voice within the discourse”

• “Over the long run, the legitimacy of science-policy interfaces ...... depends on the reduction, elimination or equitable mediation of the asymmetrical abilities of the various actors involved in biodiversity governance.”

• Getting to grips with institutional mismatches of science-policy interfaces for biodiversity and ecosystem services governance by Thomas Koetz, Katharine Farrell and Peter Bridgewater (2010, in press)