

Decision IX/16 – Climate change

Parties requested to identify:

Appropriate monitoring and evaluation techniques, related technology transfer and capacity-building support within the programmes of work;

Critical knowledge needed to support implementation, including inter alia, **scientific research, availability of data, appropriate measurement and monitoring techniques** technology and traditional knowledge;

Identifying, within their own countries, **vulnerable regions, sub-regions and, where possible, ecosystem types**, including vulnerable components of biodiversity within these areas...

Identifying and adopting, within their own countries, **monitoring and modelling programmes** for regions, sub-regions and ecosystems affected by climate change and promote international cooperation in this area;

Enhancing the methodology and the knowledge needed to integrate biodiversity considerations within climate change response activities, such as **baseline information, scenarios, potential impacts on and risks to biodiversity, and resilience and resistance of ecosystems** and selected species populations and communities/assemblages and encouraging the exchange of such knowledge at the national, regional and international level;

Taking **appropriate actions to address and monitor the impacts of climate change of climate-change** and both the positive and negative impacts of climate change mitigation and adaptation activities on biodiversity;

Decision IX/ 17 – Dry and Sub-humid Lands

Acknowledges the on-going work by the European Space Agency to quantify the change in the rate of biodiversity loss as related to the extent of dry and sub-humid lands, including the prototype map to test the approach, and looks forward to seeing the results that are expected to become available in the second half of 2008, bearing in mind the additional resources required to fill gaps in information and data;

Decision X/ 33 – Climate Change

Identify, monitor and address the impacts of climate change and ocean acidification on biodiversity and ecosystem services, and assess the future risks for biodiversity and the provision of ecosystem services using the latest available vulnerability and impact assessment frameworks and guidelines;

Collaborate with relevant international organizations to expand and refine analyses identifying areas of high potential for the conservation and restoration of carbon

stocks, as well as of ecosystem management measures that make best use of related climate change mitigation opportunities, and make this information openly available, such as to assist with integrated land-use planning;

Decision X/35 – Dry and Sub-humid Lands

Urges Parties and other Governments to establish specific national and regional targets, in accordance with national circumstances and in line with the Strategic Plan for Biodiversity 2011-2020 to assess the implementation of the programme of work on the biodiversity of dry and sub-humid lands under the Convention on Biological Diversity in order to better reflect the particular challenges faced by such ecosystems and the people living in them, particularly indigenous and local communities;

Identify common indicators between the ten-year strategic plan of the United Nations Convention to Combat Desertification and the 2020 biodiversity target and Strategic Plan for Biodiversity 2011-2020 and to transmit the results to the Inter-agency Task Force on Harmonized Reporting;

SBSTTA XVI/9 – Climate Change

Spatially explicit biodiversity data - Freely available biodiversity datasets are growing in number and scope, but there is a great need both for increased access to such data, digitization of existing datasets, and the collection of new data in sampled regions, especially in biodiversity-rich areas;

Build capacity for the calculation of carbon stored in wetlands and soil based on existing scientific information and technical methods while bearing in mind the need for additional research, for example, to fully quantify carbon stored in seagrasses;

SBSTTA XVII/1 – Scientific and Technical Needs for The Strategic Plan

Data and information - The need for more accessible, affordable, comprehensive, reliable and comparable data and information streams through, inter alia, facilitated access to remote sensing, better collection and use of in-situ observations, proxies, citizen science, modelling, biodiversity monitoring networks, better application of data standards and interoperability related to data acquisition and management to produce policy-relevant products, including indicators and scenarios to inform decision-making;

Citizen and community based initiatives have an important and growing role to play in helping deliver in-situ monitoring, while innovative application of remote sensing and other sensor technologies can complement this with measurements at larger scales. Standardization of protocols for both, as well as platforms and mechanisms

for their use and integration, will help make individual efforts more effective and enable aggregation to support needs at larger scales.

There is a need for long-term data series to facilitate the monitoring of change in the status of biodiversity over time, and for the measuring of progress towards 2020 and beyond.

Free and open access to satellite data has enabled greater use of remote sensing data for the monitoring of biodiversity. The salience of remote sensing data is much improved if it can be made available in near-real-time and processed into key products that are useful to decision makers and environmental protection agencies (e.g. land-use maps).

there is a need to develop remote sensing tools, in combination with integrated data management and analysis as well as in-situ observations, that can be applied at fine scales to measure habitat change.

Further guidance is required for classifying and mapping natural habitats and the establishment of baselines to measure progress.

the monitoring framework can use a small number of globally consistent indicators that work across ecosystems to provide an overview; as well as flexible, ecosystem specific indicators that reflect local circumstances and are consistent with national priorities and conditions. However, there is a need to ensure that indicators reflect the area sustainably managed and not just the area certified.

A major gap is the identification of vulnerable ecosystems at the national and regional levels using consistent assessments of relative vulnerability to climate change, other pressures and the effects of multiple pressures

Developing of an indicator to determine achievement of the 15 per cent target, and additional indicators to measure ecosystem resilience, the rate and extent of habitat degradation, as well as efforts to combat desertification;

Improving tools for remotely measuring carbon in terrestrial and aquatic ecosystems