

Biodiversity and Climate Change

It is now widely recognized that climate change and biodiversity are interconnected. Biodiversity is affected by climate change, with negative consequences for human well-being. The Fifth Assessment Report of the Intergovernmental Panel on Climate Change's (IPCC) states that recent changes in climate have caused impacts on natural and human systems on all continents and oceans, with climate change impacts being the strongest and most comprehensive for natural systems.

However, biodiversity, through the ecosystem services it supports, also makes an important contribution to addressing climate change. While the priority for dealing with global warming remains urgent and deep cuts in greenhouse gas emissions, better protection, management and restoration of natural and managed ecosystems can make significant contributions to climate mitigation by reducing emissions from deforestation and other land-use change, and by enhancing carbon sinks. Furthermore, ecosystem-based approaches to climate change adaptation and disaster risk reduction can maintain and increase the resilience and reduce the vulnerability of people and the ecosystems they rely upon in the face of the adverse effects of climate change.

Consequently, conserving and sustainably managing biodiversity is critical to addressing climate change.

Work of the Convention on Biological Diversity

The Convention on Biological Diversity first addressed climate change at the fifth meeting of the Conference of the Parties (COP) in 2000, highlighting the risks of climate change, in particular, to coral reefs and forest ecosystems. The COP, at its seventh meeting (2004) adopted climate change as cross-cutting issue and included it in the work of the Convention through decision VII/15.

In 2001, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) established an Ad Hoc Technical Expert Group (AHTEG) to carry out an assessment of the interlinkages between biodiversity and climate change. The report of this expert group is published as Technical Series No. 10. In 2008 the COP, through decision IX/16, established the Second AHTEG on Biodiversity and Climate Change, with a mandate to develop scientific and technical advice on biodiversity and climate change. The final report of the Second AHTEG has been published as Technical Series No. 41.

The COP, has in its different meetings, adopted several decisions relating to minimizing the impacts of climate change on biodiversity and those livelihoods dependent on biodiversity. In that regard, CBD Parties are required to, amongst other things:

- \rightarrow identify regions, ecosystems and components of biodiversity that are vulnerable to climate change; and assess the threats and impacts of climate change;
- \rightarrow integrate climate change concerns into national biodiversity strategies and action Plans (NBSAPs);
- → take appropriate actions to address and reduce the impacts of climate change, and climate change mitigation and adaptation activities, on biodiversity and biodiversity-based livelihoods, including implementation of ecosystem-based approaches to climate change mitigation and adaptation and;
- → monitor the impacts of climate change on biodiversity and biodiversity-based livelihoods.











The Strategic Plan for Biodiversity 2011 – 2020 also addresses the interactions between climate change and biodiversity. Aichi Biodiversity Targets 10 and 15 are particularly relevant:

Aichi Biodiversity 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.

Aichi Biodiversity 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, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Climate change at COP 13

Climate change and biodiversity will be addressed under COP agenda item 10, Strategic actions to enhance implementation of the Strategic Plan for Biodiversity 2011 – 2020. The COP will consider a recommendation from the twentieth meeting of the SBSTTA, which is contained in document UNEP/CBD/COP/13/2/REV1.

The Secretariat, working with a wide range of partners, will host Biodiversity and Climate Change Day at the Rio Conventions Pavilion on Tuesday 6 December 2016. The objectives of the Biodiversity and Climate Change Day are to discuss the links between biodiversity and climate change, including the role of conservation and restoration of ecosystems for climate change mitigation and adaptation; to share knowledge on, and exchange experiences with, ecosystem-based approaches to climate change adaptation and disaster risk reduction; and to provide opportunities to exchange on ways for promoting ecosystem-based approaches in the context of the Paris Agreement and the Sustainable Development Goals. Topics for the day include: (1) biodiversity and climate change scenarios and the role of global management strategies; (2) opportunities for promoting ecosystem-based approaches to climate mitigation and adaptation in light of the Paris Agreement and the Sustainable Development Goals; and (3) ecosystem-based approaches for climate change adaptation and disaster risk reduction.

In decision XII/20, the COP requested the Executive Secretary to compile experiences with ecosystem-based approaches to climate change adaptation and disaster risk reduction. The Secretariat has produced Technical Series 85: Synthesis Report on Experiences with Ecosystem-based Approaches to Climate Change Adaptation and Disaster Risk Reduction. This report will be launched at the Biodiversity and Climate Change Day at the Rio Conventions Pavilion.

In decision X/33, the COP requested the Executive Secretary, in collaboration with relevant international organizations, to identify areas which, through conservation and restoration of carbon stocks and other ecosystem management measures, might have high potential for climate change mitigation and make this information widely available. The Secretariat has produced Technical Series No. 86 Managing Ecosystems in the Context of Climate Change Mitigation: A Review of Current Knowledge and Recommendations to Support Ecosystem-Based Mitigation Actions That Look Beyond Terrestrial Forests. This report will also be launched at the Biodiversity and Climate Change Day at the Rio Conventions Pavilion.

Important links

Convention on Biological Diversity: www.cbd.int

CBD Technical Series No. 10: https://www.cbd.int/doc/publications/cbd-ts-10.pdf

CBD Technical Series No. 41: https://www.cbd.int/doc/publications/cbd-ts-41-en.pdf

CBD Technical Series No. 42: https://www.cbd.int/doc/publications/cbd-ts-42-en.pdf

CBD Technical Series No. 43: https://www.cbd.int/doc/publications/cbd-ts-43-en.pdf

CBD Technical Series No. 85: https://www.cbd.int/doc/publications/cbd-ts-85-en.pdf

CBD Technical Series No. 86: https://www.cbd.int/doc/publications/cbd-ts-86-en.pdf

Aichi Biodiversity Targets: www.cbd.int/sp/targets

Global Biodiversity Outlook 4: www.cbd.int/gbo4

For additional information, please contact: David Ainsworth on +1 514 287 7025 or at david.ainsworth@cbd.int; or Johan Hedlund on +1 514 287 6670 or at johan.hedlund@cbd.int

Secretariat of the Convention on Biological Diversity

413, Saint Jacques Street, suite 800 Montreal, Quebec, H2Y 1N9 Canada Tel.: +1 514 288 2220 Fax: +1 514 288 6588 secretariat@cbd.int www.cbd.int facebook.com/UNBiodiversity



in linkedin.com/company/Secretariat-of-the-Convention-on-Biological-Diversity