Climate Change and Biodiversity

Around the world, people, ecosystems and species are suffering from the effects of climate change, whether through super storms and hurricanes, severe prolonged droughts, sea-level rise, or record-breaking temperatures. Even in the most optimistic scenarios, all current national emissions reduction commitments and pledges would translate to an increase in mean planet temperature by at least 2.6 - 3.1°C until the year 2100 compared to pre-industrial levels¹.

At the time we need it most to help mitigate and adapt to climate change, biodiversity is facing its own crisis, where it is being lost at up to 1,000 times the natural rate due to multiple drivers and stressors. Terrestrial and aquatic ecosystems and their biodiversity - which underpin economic growth, sustainable development and human wellbeing - are exposed simultaneously to several stressors such as climate change, water scarcity and pollution. Ecosystem degradation and biodiversity loss reduce the resilience of communities, and society, and increases their vulnerability to the impacts of climate change.

Natural climate solutions such as ecosystem-based approaches, including ecosystem protection and restoration, are regarded as vanguard strategies for increasing the provision of ecosystem services, reversing biodiversity loss and increasing the resilience of ecosystems and human livelihoods to the impacts of climate change. Biodiversity conservation and ecosystem restoration can also make significant contributions to climate change mitigation by reducing emissions from deforestation and other land-use change, and by enhancing carbon sinks.

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. Since then, the COP adopted several decisions related to minimizing the impacts of climate change on biodiversity, as well as promoting the role of conservation and restoration of ecosystems for climate change mitigation and adaptation.
Climate Change at the UN Biodiversity Conference

Further to decision XIII/4, the Secretariat prepared voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction. The voluntary guidelines contain principles and safeguards, overarching considerations, and guidance on implementation across different sectors and in policies and strategies addressing climate change, disaster risk reduction and sustainable development. The voluntary guidelines were considered by the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) at its twenty-second meeting which resulted in recommendation CBD/SBSTTA/22/7 and will be considered for adoption at the UN Biodiversity Conference.

Parties will also be invited to consider a recommendation calling for a coherent, integrated and co-beneficial implementation of actions under related international agreements such as the Paris Agreement and the 2030 Agenda for Sustainable Development. The same recommendation encourages Parties to integrate ecosystem-based approaches when updating their nationally determined contributions, where appropriate, and pursuing domestic climate action under the Paris Agreement.

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Important links

• Climate Change and Biodiversity: www.cbd.int/climate

• Recommendation adopted by the Subsidiary Body On Scientific, Technical And Technological Advice (CBD/SBSTTA/REC/22/07): www.cbd.int/recommendations/sbstta/?m=sbstta-22

• CBD/SBSTTA/22/INF/1 (Voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction): www.cbd.int/doc/c/3f7a/4589/5cc1b7058bf52427fa9bae84/sbstta-22-inf-01-en.pdf


2 Fourteenth meeting of the Conference of the Parties to the Convention on Biological Diversity. Ninth meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety. Third meeting of the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol on Access and Benefit-sharing; 17-29 November 2018