



**Press Brief** 

## Climate Change and Biodiversity

## Why is this important?

Climate change due to greenhouse-gas emissions is becoming increasingly important as a driver of biodiversity loss and the degradation of ecosystem services.

The continued increase in greenhouse gases not only has profound implications for average temperatures, but also for precipitation, sea-level rise, ocean acidification and the frequency and magnitude of extreme events such as floods, droughts and wildfires. Future climatic perturbations will inevitably have major consequences for natural and human systems, severely affecting biodiversity and incurring very high socio-economic costs. Least developed countries and small island developing States are among the most vulnerable.

Climate change poses a range of threats to biodiversity and ecosystem services, greatly increasing the risk of species extinctions and affecting vital ecosystem services, such as air and water purification, pollination, food production, and global nutrient and carbon cycles.

Biodiversity can, however, also help reduce the effects of climate change. Intact ecosystems are usually better able to provide ecosystem services to support adaptation, and the conservation of such ecosystems and the restoration of degraded ecosystems is an important element of ecosystem-based adaptation and mitigation. Ecosystems also play an important role in protecting infrastructure and enhancing human security, especially from the negative impacts of extreme climatic events. For example, the conservation and restoration of coastal habitats such as mangroves can be a particularly effective measure against storm-surges and coastal erosion, and the diversity of crops and their wild relatives can help farmers to adapt to climate change by switching to drought or flood resistant varieties.

The conservation of habitats such as forests can reduce the amount of carbon dioxide released into the atmosphere. If we act now to mitigate greenhouse gas emissions and identify ecosystems-based adaptation priorities, we can reduce the risk of biodiversity loss and limit damage to ecosystems. We can preserve intact habitats, especially those sensitive to climate change, improve our understanding of the climate change-biodiversity relationship, and view biodiversity as a solution to climate change.











## What news to expect in Hyderabad?

At COP 11, Parties will discuss three different issues related to biodiversity and climate change:

- Advice on the application of relevant safeguards for biodiversity with regard to REDD+;
- Climate-related geoengineering;
- Other matters related to biodiversity and climate change (scientific knowledge, case studies, analyses and knowledge gaps on issues related to biodiversity-climate change links).

Parties will consider proposals on advice on the application of relevant REDD+ safeguards for biodiversity and on possible indicators and potential mechanisms to assess impacts of REDD+ measures on biodiversity. Parties will discuss ways and means to promote the contribution of REDD+ activities towards achieving the objectives of the Convention on Biological Diversity (CBD), and provide benefits for biodiversity and to indigenous and local communities. To achieve this, collaboration with other organizations such as the United Nations Framework Convention on Climate Change and other members of the Collaborative Partnership on Forests, as well as with the REDD+ Partnership, will be essential.

Parties will also review recommendations on technical and regulatory matters on geoengineering in relation to the CBD. Given that there remain significant gaps in the understanding of the impacts of geoengineering on biodiversity and that there is currently no comprehensive science-based, global, transparent and effective framework for geoengineering, Parties will discuss the potential need for updated information on the impacts of geoengineering on biodiversity, and on the regulatory framework of geoengineering relevant to the CBD, while noting the relevance of other treaties and organizations for filling such gaps.

Finally, building on the decisions at the last meeting of the COP, Parties will seek to advance efforts on integrating biodiversity considerations into climate-change-related activities, including addressing gaps in knowledge and information and encouraging research to strengthen knowledge on how the impacts of climate change on biodiversity affect the delivery of ecosystem services. Parties are also expected to take note of the progress report on biodiversity and climate change activities in response to decision X/33. In the same progress report, Parties will note progress on activities related to the biodiversity of dry and sub-humid lands.