



**Press Brief** 

## Climate Change and Biodiversity

## Why is this important?

Biodiversity is both highly vulnerable to climate change and a key means for humanity to address this global challenge. The climate is changing because concentrations of greenhouse gases in the atmosphere are rapidly increasing. This is leading to rising temperatures, glacial melt, changes in precipitation patterns and increases in the frequency and intensity of extreme weather events.

Impacts of these changes include rising sea levels, flooding and drought, the potential spread of vector-borne diseases and habitat change. Some areas may benefit from climate change while others, including least developed countries and small island developing states, may suffer greatly.

Climate change is already forcing organisms to change their habitats or life cycles, or develop new traits. The Millennium Ecosystem Assessment said climate change would become the main direct driver of biodiversity loss by the end of the century.

This will affect vital ecosystem services for all humans, such as air and water purification, pollination, food production, decomposition, and global nutrient and carbon cycles.

Biodiversity can, however, also help reduce the effects of climate change. 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 species extinctions 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 Nagoya?

At COP 10, Parties will discuss proposals on ways to implement 'win-win' activities that have benefits for both biodiversity and efforts to address climate change. Target 15 of the new Strategic Plan will require Parties to enhance the contribution of biodiversity to carbon stocks, through a mix of conservation and restoration (of forests for instance) by 2020.

It also states that Parties should restore at least 15% of degraded ecosystems, thereby contributing to climate-change mitigation and adaptation, by that same year. Target 13 calls on parties to halt the loss of genetic diversity of cultivated plants, livestock and their wild relatives by 2020. This too will be a key step in ensuring that agriculture can adapt to a changing climate.

Under Target 10 of the Strategic Plan, by 2020 at the latest, Parties should minimize pressures on coral reefs and other vulnerable ecosystems that are impacted by climate change or ocean acidification.

Parties will also consider proposals that aim to better integrate biodiversity and traditional or local knowledge within actions for climate-change adaptation and mitigation.

Finally, COP10 will consider a proposal for a joint work programme between it and the UN Framework Convention on Climate Change and the UN Convention to Combat Desertification.

Such a work programme would increase the effectiveness of the three 'Rio Conventions' to address common issues related to biodiversity, climate change and land degradation, in an effort to boost sustainable development ahead of the Earth Summit in 2012.