Ecosystem-based adaptation

AN ECOSYSTEM APPROACH TO CLIMATE CHANGE ADAPTATION

Climate change is changing weather conditions. Worldwide, these changes have serious consequences for vulnerable woodland, coastal zones and arid areas. The supply of clean water to 80 percent of the world's population is already under threat. Ecosystem-based adaptation uses the power of nature to help landscapes adapt to a changing climate. As a consequence, vital ecosystem services - including water supply, food security and climate resilience - can be preserved.

NATURAL SOLUTIONS FOR CLIMATE ADAPTATION

IUCN NL is an active global player in biodiverse landscapes that aims to tackle the negative impact of climate change via ecosystem-based adaptation. We preserve or restore the capacity of ecosystems, above all in areas where climate change represents serious risks of drought, flooding and forest fires, which in turn threaten the local population and nature. Our approach is to encourage sustainable water and land management, for example with integrated water management and sustainable forest management.

To tackle climate risks facing our foreign nature conservation programmes, we commonly work alongside local partners who are in close contact with individual citizens, businesses and government organisations. We exchange knowledge about climate risks and mobilise climate financing for nature-inclusive solutions, including the preservation of biodiversity.

Reforestation by ECOTRUST in Uganda

"To meet the worldwide targets for biodiversity and climate, we must make maximum use of ecosystem-based adaptation in sustainable development at global, national and local levels."
Maxime Eiselin, expert ecosystem-based adaptation at IUCN NL

Example of our work

Community-based forest management reduces drought in Ghana

The Mole National Park is a vital habitat for many animals including the elephant, the hippopotamus and the buffalo. In what is Ghana's largest nature reserve, trees are of crucial importance in reducing drought: their roots help retain the essential water in the soil. Nonetheless, the already scarce trees are being felled for charcoal production. As a result, the savanna landscape is at risk of turning into a desert.

IUCN NL introduced the Restoration Opportunity Assessment Methodology (ROAM), a method that helps restore biodiversity. We supported local partners to work with local communities and government organisations at the periphery of the national park on improving the forest governance in the area. Charcoal is generated from newly planted trees, thereby preserving the original forest and improving the area's climate resilience. To help the local population to increase their income, we also support communities to sustainably produce shea nuts: the oil extracted from the nuts generates valuable additional revenue.

More examples of our work

More on ecosystem-based adaptation

- The residents of the densely populated Kayan delta in Indonesia are increasingly faced with large-scale flooding. IUCN NL assisted partner organisation Sawit Watch to map land use using drones, and to advise the local authorities on natural flood prevention measures. The local government is now able to develop spatial plans that guarantee the presence of sufficient woodland in the river basin area, to guarantee natural water regulation.
- In Bolivia and Paraguay, large-scale logging in biodiverse areas is leading to impoverished soil and eventually desertification. To address this ecosystem threat, we have joined forces with our local partner organisations and local authorities to develop action plans for climate adaptation, that take into account the services that natural ecosystems deliver. The government is taking measures to preserve woodland at regional level and to make land use climate resilient, for example by protecting forests and wetlands as providers of drinking water and for irrigation, and habitat for threatened species.
- The Cagayan de Oro river on the Philippines is part of a large catchment area. Many local people are dependent on the river for water supply, for drinking water and food production. Our partners on the Philippines have helped establish a system of taxes according to which stakeholders together pay for the forest protection of the upper reaches of the catchment area.

COLLABORATING WITH IUCN NL

It is essential that we protect ecosystems to mitigate climate risks. IUCN NL is dedicated to showing policy makers, businesses, groups of citizens and investors how natural solutions can drive climate adaptation. By advising and counselling our local partners in complex, multi-stakeholder processes, we help to bring about those solutions.

Do you want to join IUCN NL in using nature to tackle the consequences of climate change? Visit our **website** for detailed information and more example projects, or contact our expert **Maxime Eiselin**.