





Even if all greenhouse gas emissions were to be stopped tomorrow, negative impacts of climate change on nature and human society are already unavoidable. Adaptation to the impacts of climate change is therefore increasingly important. Extreme weather events such as flooding, hurricanes, droughts or heatwaves often tend to affect those countries and populations who are much less capable of dealing with these disasters. Healthy ecosystems help to lessen these impacts and protect human society from the consequences of climate change.



Using mangrove forests to protect coastlines is significantly less expensive than technical solutions, such as constructing embankment dams

One approach - many solutions

Ecosystem-based adaptation (EbA) pursues the goal of increasing the adaptability of human society and the natural world to the impacts of climate change. Human-centred, EbA is an approach that treats natural resources as supplementing or substituting for other kinds of adaptation measures. EbA measures strengthen the resilience of human society and ecosystems as they face up to current and future changes in climate. This focus on adaptability means that EbA differs from the conventional approaches taken to the management of natural resources and biodiversity.

Advantages of ecosystem-based adaptation

EbA measures are effective in many areas. Aside from their immediate adaptation benefits, they also offer many other advantages in terms of income, security of supply and wellbeing for the people hardest hit by the consequences of climate change. Often, EbA is also a very cost-effective option: the resources needed for the restoration of ecosystems – and long-term follow-up costs in particular – are often lower than the expenditure required for comparable technical solutions capable of increasing adaptability by the same degree. As one example, intact mangrove swamps improve the resilience of coastal communities against the effects of storms and sea level rise. These wetlands also promote biodiversity and serve as a spawning ground for fish – which also provides income opportunities for the local

population. Using mangrove forests to protect coastlines is also significantly less expensive than technical solutions, such as constructing embankment dams. Coral reefs are a comparable example.

In the field, EbA measures should be part of an overall adaptation strategy and also integrated proactively into existing planning processes.

EbA plays a key role in the adaptation funding area

Since the launch of the International Climate Initiative (IKI) in 2008, EbA has been given the highest priority in the funding area of adaptation to climate change. With over 60 projects worldwide and a funding volume of more than EUR 350 million, the IKI has since pursued the goal of achieving the comprehensive and wide-ranging deployment of EbA by means of pilot projects and capacity building. The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the numerous partners involved in IKI projects apply the insights gained to international processes, thereby decisively elevating the role of this strategy in negotiations in the context of the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD).

Networks as a basis

Tackling the challenges that lie ahead of us will require strong partnerships between civil society, politics, research and the private sector. The IKI will therefore continue to promote and support networking and the sharing of knowledge and experience on a long-term basis. IKI partners have an essential role to play in ensuring EbA remains a principle. Examples include networks such as the Friends of EbA (FEBA), the EbA Community of Practice and the EbA Knowledge Day, as well as knowledge platforms and tools such as the EbA Navigator, the EbA Support Facility or the PANORAMA Solutions Platform.

The setup of the <u>Global EbA Fund</u>, which closes financing gaps and promotes innovative EbA approaches, is another milestone in this respect.

Ecosystem-based adaptation on the northern central coast of Vietnam: restoration and co-management of degraded dunes and mangroves

BMU grant: €1,879,538.95, duration: 04/2018 to 03/2022 >> Read more

Global EbA Fund – Support for the implementation and upscaling of ecosystem-based adaptation

BMU grant: €30,000,000.00, duration: 12/2019 to 06/2026 >> Read more

Outlook

EbA will continue to form a key point of focus for the IKI funding area of adaptation to the impacts of climate change. To ensure a more wide-ranging dissemination of EbA as a concept, while also enabling cross-sectoral integration, important steps such as integration with National Adaptation Plans and private sector involvement represent the fundamental challenges that the IKI will be addressing in the future. Alongside reliable figures on the cost-effectiveness of EbA as a model, the improvement and application of harmonised monitoring and evaluation processes will also be required.

With longer durations and higher volumes of funding, many new IKI projects are now pursuing the goal of implementing the EbA approach on a larger scale, and adopting it for the specific purposes of strategic planning and policy decision-making. This allows the funded projects to apply their results more effectively and for a longer period of time, while expanding their cooperation with political partners. Another point of focus for the future will be to further amplify the synergies between EbA, greenhouse gas mitigation and the conservation of biodiversity, and to assign these a more prominent role.



Coral reefs protect coastal areas from more powerful storms as well as the consequences of sea level rise

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