



# Nature-based Solutions

## Harnessing the Synergies Between Climate Action, Biodiversity Conservation and Sustainable Development

### BACKGROUND

**Nature-based solutions** (NbS) are integrated approaches that address biodiversity conservation, climate change mitigation and adaptation as well as sustainable development objectives. They create important synergies between the three Rio Conventions and the Agenda 2030 with its Sustainable Development Goals (SDGs). As an umbrella concept, NbS encompass a diverse range of ecosystem-based and issue-specific approaches that **work with nature for human well-being**. The International Union for Conservation of Nature (IUCN) defines NbS as *“actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.”*

### THE BMZ’S UNDERSTANDING OF NBS

Well-designed and implemented NbS can deliver **multiple benefits for climate change mitigation and adaptation, biodiversity conservation and people**, thereby contributing to the achievement of various SDGs. Benefits include e.g. improving water security, air quality, ocean and soil health, increasing human well-being, reducing forest loss, sequestering greenhouse gas emissions, and providing protection from storms, floods, and heat waves.

Urgent action is required globally to protect, sustainably manage and restore terrestrial, freshwater, marine and coastal ecosystems. Healthy ecosystems are needed to secure or enhance the

ecosystem services that the world’s most vulnerable and poorest people disproportionately rely on. NbS must, therefore, be explicitly designed to provide **tangible benefits for biodiversity and people**.

Despite their significant potential for climate mitigation and adaptation as well as for biodiversity conservation, **NbS are not a substitute for an urgently needed socio-ecological transformation** of the global economy and development patterns: Decarbonisation, the rapid phase-out of fossil fuels and the reduction of negative environmental impacts arising from economic activities are necessary. The 1.5 °C target of the Paris Agreement can only be reached if global climate neutrality is achieved by mid-century. This will require that the remaining greenhouse gas emissions are absorbed. NbS play an essential role to **conserve and enhance natural carbon sinks such as forests, wetlands, oceans, and soil**. The permanent storage function of ecosystems can, however, be volatile, as they may be affected by natural events, such as fires and pests, as well as climate shocks, pollution or land-use change. Furthermore, NbS cannot address all drivers of biodiversity loss and environmental change. Habitat destruction, pollution and over-exploitation are fuelled by drivers linked to economic growth, such as production and consumption patterns and international trade.

**By working with nature and enhancing the role of ecosystems, NbS play a key role in advancing climate adaptation and disaster risk reduction.** NbS can reduce the impacts of both sudden and slow-onset events and offer an effective alternative or addition to grey infrastructure. However, the

current share of climate finance dedicated to NbS, especially for adaptation, remains low and needs to be upscaled significantly.

Sound **governance of NbS requires cooperation and coordination between different sectors, levels of government and stakeholders**, whose resources, values and priorities may not align. Understanding and resolving local and regional conflicts over natural resources is important to achieve just and sustainable outcomes. Strong institutions with clear mandates, coherent policies and strategies, well-established planning structures, processes and instruments are a prerequisite for the effective and accountable implementation of NbS.

**All relevant stakeholders, including Indigenous Peoples and Local Communities (IPLCs), all genders and youth must be engaged** in the design, implementation, management, monitoring and evaluation of NbS to deliver legitimate and equitable outcomes and avoid adverse impacts. To safeguard the cultural and environmental rights and self-determination, as well as sustainable livelihoods of IPLCs, NbS must be implemented with their full and effective engagement, as well as their free, prior, and informed consent.

While **ensuring that appropriate social and environmental safeguards are in place**, the multiple environmental, social and economic outcomes of NbS need to be continuously monitored. Trade-offs must be actively, transparently, and constantly identified and managed in an equitable way to promote synergies and maximise benefits.

**Voluntary markets for carbon offsets** through NbS are rapidly growing and will likely continue to grow. If strict standards for significant emissions reductions and sustainable resource use, as well as accounting rules and implementation safeguards can be ensured, this offers an opportunity to mobilise the **urgently needed private investments for climate and environmental action**.

## THE BMZ'S CONTRIBUTION

The **BMZ supports the use of NbS and aims to further strengthen their deployment across ecosystems and sectors** through its development cooperation. In doing so, the BMZ aims to boost the resilience of individuals, communities and societies to climate and environmental change, especially poor and vulnerable people in developing countries, and secure or enhance the delivery of ecosystem services that sustain livelihoods and well-being and provide diverse sources of income. Besides a large bilateral project portfolio and contributions to multilateral organisations in the field of NbS, the BMZ supports initiatives such as the Legacy Landscapes Fund, the Blue Action Fund, the Global Fund for Coral Reefs, the African Forest Landscape Restoration Initiative (AFR100) and the Development and Climate Alliance.

## THE BMZ'S AIMS FOR NBS AT COP26

The BMZ welcomes the focus on NbS by the UK Presidency of COP26 through the Nature Campaign and invites countries to commit to the Leaders' Pledge for Nature, to join the High Ambition Coalition for Nature and People, and to actively support the international objective of protecting or conserving at least 30 per cent of the planet's land and ocean by 2030.

Countries must **include NbS in their climate plans, including the Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs)**. In addition, they need to mobilise **finance for nature from public and private sources** to be able to scale-up the implementation of NbS for climate change mitigation and adaptation, while delivering co-benefits for biodiversity and people.