

Nature Based Solutions (NBS)



What are NBS?

Nature-based solutions harness the power of nature to boost natural ecosystems, biodiversity and human well-being to address major societal issues, including climate change

Working with Nature to create solutions to modern-day societal problems

Where can NBS be applied?

NBS can, theoretically, be applied to any sector and to any environment that has been impacted by human activities, such as:

Climate change mitigation and adaptation

Helping people and nature adapt to a warming world by reducing existing climate hazards and strengthening resilience to future risks. Examples:



Restore Forests to increase CO₂ capture, improve soil properties and promote biodiversity



Coastal Wetlands restoration to improve water quality, sustaining coastal fisheries and mitigating floods



Energy transition to use of sustainable and less polluting energy sources in substitution of fossil fuels

Disaster Risk Reduction

Some of the most important systemic risks faced by humankind today are environment-related: extreme weather, biodiversity loss, natural hazards, and human-made environmental disasters.

NBSs aim to reduce this risks by providing more sustainable, cost-efficient, and long-lasting solutions, substituting conventional approaches. Examples:



Re-naturalisation of river margins to better manage flooding and drought events



Creation of Artificial Reefs to promote biodiversity, water purification and coastal protection



Green roofs and walls to mitigate city warming and clean polluted air

Human Health

Benefiting mental and physical well-being and reducing the transfer of diseases caused by the destruction of habitats or the consumption and commercialization of wildlife. Examples:



Promotion of urban green spaces to improve air quality and overall life quality



Natural barriers for noise cancelling and cooling effects



Promotion of habitat restoration to prevent disease spread

Food and Water Security

Ensuring people have access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Examples:



Promote AgroBiodiversity: Increase productivity, food security, and economic returns



Rain-feed agricultural systems: lower the impacts on freshwater resources



Promote Restorative Agriculture Practices to nourish people and the earth

Environmental degradation and biodiversity loss

Ecosystem restoration, conservation, and management (of tropical forests, dry forests, mangrove forests, watersheds) to ensure ecosystem services and economical activities Examples:



Community-based forest management practices to restore or conserve ecosystem services



Restoration of drainage basins to increase their ability to filter pollutants, absorb floodwaters, and withstand droughts



Landscape re-design to value natural elements, to promote habitats connectivity and so biodiversity