

# COP28 ENACT HIGHLIGHTS

Roadmap to the State of NbS Report



INTERNATIONAL UNION FOR CONSERVATION OF NATURE



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# INTRODUCTION ROLL

#### The ENACT Partnership

This decade represents a critical window for jointly tackling the linked biodiversity, land degradation and climate crises. The scientific evidence of the recent assessment reports of the Intergovernmental Panel on Climate Change (IPCC) and Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) makes this clear. Further, the <u>AR6</u> <u>Synthesis Report</u> marks a shifted consensus by treating biodiversity loss and climate change as inseparable issues for the first time ever. What is vital now, is that these crises are addressed together through an integrated approach that prioritizes human well-being<sup>1</sup>.



Figure 1: Baldwin-Cantello et al. (2023)

<u>The ENACT Partnership</u> - Enhancing Nature-based Solutions for Accelerated Climate Transformation - works to accelerate collective global efforts to address these triple global crises with an integrated approach. It is an ambitious partnership and a global coalition of state and non-state actors to strengthen coherence and collaboration for integrated and wide-scale NbS

<sup>1</sup> IPCC defines human well-being is defined as: A state of existence that fulfils various human needs, including material living conditions and quality of life, as well as the ability to pursue one's goals, to thrive, and feel satisfied with one's life (Cissé, 2022).

implementation. NbS involve working with and for, rather than against nature, which is critical to deliver the climate, biodiversity, and land restoration action necessary to steward human wellbeing for all.

While the potential of NbS is clear and widely recognized, to date, global efforts across sectors have been mainly uncoordinated and disconnected. At the global level, government expenditure on actions that degrade nature is 3-7 times higher than combined public and private investment in NbS (UNEP 2022). Even as worldwide interest in NbS grows, there is still an inconsistent understanding across sectors about what qualifies as NbS and which taxonomy is best applied to verify this, as well as related challenges of insufficient financial investment into NbS and limited communication of the actually-implemented NbS and their impacts.

With the vision of addressing these challenges, ENACT was launched at the Sharm el-Sheikh 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP27) in December 2022 by the Egyptian COP Presidency in collaboration with the Government of Germany and the International Union for Conservation of Nature (IUCN). Since its launch, the ENACT Partnership has focused on strengthening a collective global voice for evidence-based implementation of NbS. The Partnership's annual State of NbS Report will serve as the bedrock for this vision. In its inaugural year, ENACT Partners collaborated on the opening report of this series of annual reports: The Roadmap to the State of NbS Report.

The Roadmap Report will set the foundation for the necessary course of action to achieve ENACT's three Goals by 2030:

- 1. Climate Change Adaptation Enhanced protection and resilience of at least 1 billion vulnerable people (including at least 500 million women and girls).
- Climate Change Mitigation Significantly increased global mitigation efforts through protecting, conserving, and restoring carbon-rich terrestrial, freshwater, and marine ecosystems.
- 3. Enhancing Biodiversity Up to 2.4 billion hectares of healthy natural ecosystems secured through protection of 45 million ha, sustainable management of 2 billion ha, and restoration of 350 million ha.

These goals were designed and agreed to support fostering links across the Rio Conventions. They were adopted through a consultation process across ENACT founding partners - Canada, Egypt, Germany, Malawi, Norway, South Korea & Slovenia - and potential members. The ENACT Partnership works to accelerate progress towards existing global targets including the UN Decade on Restoration, the Kunming-Montreal Global Biodiversity Framework (GBF) adopted under the Convention for Biological Diversity (CBD), the Paris Agreement under the UN Framework Convention on Climate Change (UNFCCC), and the G20 Global Initiative on Land Degradation under the UN Convention to Combat Desertification (UNCCD).

# NbS for Integrated Action on Climate Change, Biodiversity Loss, and Land Degradation

In March 2022, the United Nations Environment Assembly (UNEA) achieved a crucial milestone by formally defining Nature-based Solutions (NbS), marking a pivotal moment in environmental policy and action. The Assembly resolved to adopt the <u>UNEP/EA.5/Res.5</u>. The ENACT Partnership works in close alignment with this resolution, and has also adopted the UNEA definition of NbS, which states that NbS are:

Actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits.

The UNEA definition builds on IUCN's own formal definition of NbS adopted at the 2016 World Conservation Congress and Member's assembly (WCC-2016-Res-069), which, for the first time, defined the use of nature to include the simultaneous provision of benefits to biodiversity and human well-being. This definition together with the NbS principles (Cohen-Shacham,2019) were the cornerstone for guiding the development of the IUCN Global Standard for Nature-based SolutionsTM. The Global Standard is a facilitative framework of 8 Criteria and 28 Indicators for the verification, design and scaling up of NbS (IUCN, 2020).

As an integrated approach, NbS are not single-issue actions, they are "placed-based partnerships between people and nature" (Seddon, et al., 2021).



TRODUCTION



While NbS can be developed to address one or more societal challenge - water security, food security, human health, disaster risk reduction, climate change - the ENACT Partnership's approach to NbS emphasizes that climate change should be an overarching consideration in the use of NbS, in the same way that biodiversity benefits are centralized. This would include adding the dimension of climate change risk accounting and benefits as an overall component of IUCN's NbS figure, as well as to the outcomes under the UNEA 5/5 definition.

Within the context of climate change, NbS is an umbrella term for a wide range of approaches, actions and interventions that involve enhancing and working with and for nature to help both climate change mitigation and adaptation. NbS are designed to yield benefits at the intersection of society and ecosystems through context-specific approaches.

Further, achieving the 1.5°C target necessitates rapid reductions in fossil fuel use, a critical step to ensure the sustained provision and effectiveness of NbS benefits (IUCN's COP28 Position Paper, 2023). UNEA 5/5 resolution also recognizes that nature-based solutions may contribute significantly to climate action and acknowledges that they do not replace the need for rapid, deep and sustained reductions in greenhouse gas emissions, but can improve action for adaptation and resilience to and mitigation of climate change and its impact.

One of the primary misconceptions is that actions designed exclusively for climate change mitigation, such as monoculture forest plantations, count as NbS. These actions, which reduce ecosystem integrity as well as social wellbeing, do not meet the NbS definition provided by the UNEA 5/5 resolution, nor the criteria of IUCN's Global Standard for NbS. The work of the ENACT Partnership aims to increase coherence and assurance regarding which actions qualify as NbS at a global level to guide scaled up implementation of NbS worldwide that can benefit nature and people while minimizing and reducing negative trade-offs. The inaugural Roadmap Report and annual State of NbS Reports will be central to this goal.

# Scope, Purpose & Methodology of the Report

The inaugural Roadmap Report is composed of 3 core sections:

**Synthesis** - State of Knowledge on ENACT NbS Goals: Section one provides a broad synthesis of the current state of knowledge on the themes of the ENACT Goals: climate change adaptation, mitigation, and biodiversity. It relies on data from recent IPCC and IPBES reports, as well as sector-specific review articles such as those published by <u>Oxford University's NbS Initiative</u>. It further provides an analysis of the key funding and financing status for NbS and presents a case study for how to address funding and financing challenges in relation to the ENACT NbS Goals.

**Measuring Impact** – Building Baselines: Section two seeks to increase clarity on the status of monitoring NbS implementation in relation to climate change adaptation, mitigation, and biodiversity. The inaugural Roadmap Report focuses on the ENACT NbS Goals and discusses the current capacity to track their achievement. This information will inform the formulation of baselines to be established in the 2024 report. This work is developed in collaboration with the <u>IUCN Contributions for Nature Platform</u> and leverages the platforms' current capacity to track IUCN member contributions to carbon sequestration and biodiversity net gain. Ambitions are set on extending both the field of those who can contribute to include all ENACT Partners in 2024,

as well as building capacity to measure climate change adaptation through NbS and assure the baseline data are a result of a verified NbS.

**Implementation** – Launching the ENACT Workstreams: Section three presents the current state of knowledge on NbS across the ENACT Workstreams. These sub-sections are compiled by a group of sector leaders. Analysis for the Roadmap Report will initiate ENACT Workstream working groups, a formal call for which will be made in early 2024, and chart the path to enhanced implementation. This section includes case studies of good practices which have undergone the IUCN Global Standard Self-Assessment and are featured on the <u>PANORAMA Platform</u>.

The Roadmap Report lays the foundation for the State of NbS Report series, which will track annual progress on achieving the ENACT NbS Goals. This highlight of the Roadmap Report aims to facilitate a discussion of the key messages around the way forward toward the launch of the series in 2024.



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# SYNTHESIS State of Knowledge on ENACT NbS Goals

## The Science of NbS and Climate Change Adaptation, Mitigation and Enhancing Biodiversity

What do we know about the role of NbS in addressing climate change adaptation, mitigation, and biodiversity loss?

## **CLIMATE CHANGE ADAPTATION**

#### **OVERVIEW**

NbS can provide climate adaptation advantages by increasing the linked resilience of humans and the ecosystems upon which they depend. NbS have several advantages over engineered approaches, including lower long-term maintenance costs. As Seddon (2022) explains, building climate resilience through NbS is particularly significant in lower-income nations "where dependency on natural ecosystems is high and finance for technology is limited." Although there is a need for more robust scientific data on the impact of NbS for adaptation, certain practices provide well-evidenced capacity to reduce climate change impact. Such practices include (Seddon 2022): restoring native ecosystems, especially coastal habitats such as mangroves, to reduce risk from hydrological shifts (floods, droughts); Green and blue infrastructure in urban areas to reduce the effects of temperature extremes and other extreme weather events; agroforestry to enhance crop resilience and ensure livelihoods of climate-effected people.

#### **KEY FACTS**

- Although adaptation cannot be measured through a single, universal metric, the gap in necessary climate adaptation is known to be significant and growing. As measured by necessary finance, the current adaptation gap is estimated at US \$194-366 billion per year (UNEP 2023). As discussed in Seddon (2022), the gap is most pronounced in low-income countries where international climate finance and adaptation costs are 5-10 times as high as the current flows of public funding. NbS offer an important means to address the adaptation gap.
- The recent IPCC Working Group II (WGII) report emphasizes the risks of climate change to ecosystems and biodiversity in addition to human societies and mentions NbS 457 times as a means to reduce climate risks (IPCC, 2022)

A recent synthesis of 386 reports on NbS for adaptation outcomes concludes that in most cases they are "as effective or more so than alternative interventions for addressing climate impacts" while revealing a higher rate of synergies than trade-offs in reducing the impact of climate change and providing for broader ecological and social resilience (Chausson, et al 2020).

#### CONSIDERATIONS

As compared to engineered solutions, NbS are slow to establish and have a wide-ranging efficiency depending on the specific ecosystem and climate threat, which means they should be considered in an integrated fashion and designed in relation to specific climate risk contexts. As reviewed in Seddon (2022), "there are indications that nature-based solutions are more cost effective than engineered approaches in lower-intensity hazards, especially for flood mitigation along coasts." There is still a need for additional studies on the financial comparison between NbS and engineered approaches, and such studies should include consideration of the broader range of benefits provided by an NbS, including green-gray solutions. Overall, despite the need to broaden the solutions used to build resilience to climate change, the default remains engineered solutions.

# **CLIMATE CHANGE MITIGATION**

#### **OVERVIEW**

The biosphere has served to buffer the impact of global emissions, currently acting as a sink for 56% of anthropogenic CO2 emissions (IPCC 2021). The global distribution of this sink has shifted in the recent decade with the northern hemisphere increasing absorption in comparison to the southern hemisphere (Ciais et al. 2019). This is partially a result of land-cover change and the saturation of the Amazon rainforest carbon sink (Hubau et al. 2020). The agriculture, forest, and land use sector currently account for 22% of annual GHG emissions (IPCC 2022). NbS practices are important in reducing the impact of these sectors. NbS prevent further degradation of ecosystems and thus the release of stored carbon, as well as enhancing the carbon sequestration and storage capacity of ecosystems. Specific NbS actions with this capacity include (European Commission, 2020): improving management of working lands, restoring native vegetation in rural landscapes, and rewetting peatlands, enhancing vegetation and habitat in urban areas, protecting intact ecosystems, especially forests, grasslands and wetlands.

#### **KEY FACTS & CONSIDERATIONS**

There are a wide range of estimates on the potential impact of NbS on climate change mitigation; including over 30 published estimates (Seddon 2022). The various factors that effect consistent estimates include: exclusion of ocean, differences of methods, the assumed price of carbon, net climate effects on estimates. With these concerns in mind, Seddon (2022) states:

A conservative potential for nature-based solutions on land globally to contribute to climate change mitigation is around 100 to 200 Gt of CO2 by 2100 or, at most, 11.5Gt of

CO2 equivalents per year up to 2050...This corresponds to ~0.3C reduction in mean global temperature if temperature rise since preindustrial times peaks at 2C toward the end of this century. In other words, though it is important, the contribution of nature-based solutions to global cooling is much smaller than what must also be achieved through drastic cuts in the use of fossil fuels."

This emphasizes the point that NbS implementation can only be additional to decarbonization across all sectors to achieve the necessary climate change mitigation.

## **ENHANCING BIODIVERSITY**

#### **OVERVIEW**

The IPCC report indicates that just 2°C warming by 2100 will put 18% of all plant and animal species at high risk of extinction. Limiting global warming to 1.5°C can lower biodiversity loss by 50% (IPCC, 2022a). But the resilience of biodiversity and ecosystem services depends on effective & equitable conservation of approx. 30-50% of global land freshwater and ocean areas. In addition to their intrinsic value, species play essential roles in ecosystems, which in turn provide a suite of goods and services to humans. Further, new research is emerging that indicates the importance of wild animals, in terrestrial and marine ecosystems, in maintaining the physical, chemical and biological processes that affect the carbon cycle (Schmitz, et al., 2023).

#### **KEY FACTS**

Strategies to enhance biodiversity, whether through ecosystem protection, restoration or improved and sustainable ecosystem management, can provide synergistic benefits over several decades or even hundreds of years depending on the ecosystem. Protection of high-biodiversity and carbon-dense ecosystems (stopping deforestation, for example) is widely recognized as the single most effective nature-based mechanism to provide synergistic benefits for biodiversity and climate change in the short term – i.e., by 2030 (Arneth, et al., 2020). Despite their importance, these ecosystems are poorly represented in global protected areas networks.

#### CONSIDERATIONS

Despite the intent of NbS to deliver multiple benefits, there are still gaps in the scientific understanding of the full capacity for NbS to provide biodiversity benefits alongside those for addressing climate change and human well-being. This gap suggests the need for increased investment in understanding the role of NbS and biodiversity so that their effective implementation can be accelerated. Key et al. (2022) identify three key areas for additional research: (1) ecosystem health outcomes of NbS and climate change; (2) analysis of the extent to which NbS outcomes vary depending on metrics used and ecological context; (3) whether and how NbS reduce the impacts of climate change and support ecosystem health.

### Finance & Funding of NbS

How do we facilitate enhanced implementation based on what we know about the role of NbS in addressing climate change adaptation, mitigation, and biodiversity loss?

The World Economic Forum (WEF) has projected that investment in NbS needs to at least triple by 2030 and increase fourfold by 2050 to meet climate change, biodiversity and land degradation targets. This acceleration would need a cumulative total investment of up to US \$8 trillion and a future annual investment rate of US \$674 billion (UNEP, 2022). A significant challenge in financing the required NbS upscaling is that most of nature's benefits are so far not fully measured and financially factored in. There is also considerable debate about the best way to account for the diverse ways nature is valued without relying only on economic logic. Therefore, caution should be exercised in the face of the potential commodification of nature, as it involves not only economic considerations but also risks compromising the intrinsic ecological, cultural, and aesthetic values that ecosystems hold for present and future generations.

Despite the growing allocation of funds towards holistic initiatives, there is a pressing need for a paradigm shift in both the amount and models of funding. The current financial contributions, while increasing, are not keeping pace with the escalating climate, biodiversity and land degradation challenges the world faces. A more transformative approach is required, one that not only substantially increases funding but also innovates in the way these funds are allocated and managed.

This shift should aim at more effective, inclusive, and sustainable financing models, ensuring that investments are strategically channelled towards initiatives with the greatest potential for positive environmental and social impact. Such a change is vital to support large-scale and impactful actions. An example of such an effort is the Government of Canada's partnership with IUCN which aims to fully integrate biodiversity and gender considerations into their climate change adaptation portfolio through NbS (Box X).

SYNTHESIS

# **CASE STUDY**

#### INTEGRATED CLIMATE FINANCE NABSA: NATURE-BASED SOLUTIONS FOR CLIMATE ADAPTATION

As part of Canada's doubling of its previous climate commitments, and its objective to leverage the climate action expertise and commitment of organizations in Canada, CAD \$315 million have been allocated to Partnering for Climate (P4C). This allocation will fund projects from civil society, Indigenous Peoples and other organizations in Canada that will support climate change adaptation in Sub-Saharan Africa and other parts of the world.

One of the conditions of Partnering for Climate and other nature-positive projects is the application of the IUCN Global Standard for Nature-based Solutions. To support partner organizations in its application, Global Affairs Canada has entered a 3-year partnership (2023-2026) with the International Union for Conservation of Nature (IUCN) to leverage their tools and expertise on NbS for climate and biodiversity.

Through the "NAture-based Solutions for climate Adaptation: monitoring & impact evaluation (NAbSA)" project, IUCN will provide technical support to Canada's naturepositive programming in Africa while simultaneously developing an overarching framework for gender-responsive NbS for climate adaptation with biodiversity co-benefits that builds on the experience of Canadian organisations and their partners working in this field.



Gambia © UNEP

# MEASURING IMPACT Building the Baselines

Despite progress in validation, there is still a lack of documented interventions that align with a uniform and validated standard of NbS, such as the IUCN Global Standard for NbS.

The ENACT Roadmap Report marks the inception of the ENACT Partnership's work to address this challenge by establishing a roadmap to a baseline for each of the ENACT Goals. While it is not yet possible to establish validated baselines for assessing the NbS Goals, the Roadmap Report will provide an overview of the current capacity for tracking NbS for climate change and biodiversity outcomes. The aim of the report series to follow the inaugural Roadmap is to consolidate the evidence and establish clear and credible claims related to NbS, including through identifying gaps in monitoring and evaluation related to specific interventions. This will be facilitated through drawing on IUCN's Contributions for Nature platform and developing it further.

The Contributions for Nature platform (CfN) allows IUCN constituents to document where they are undertaking (or planning to undertake) conservation and restoration actions. It overlays this



#### Figure 3: The Species Threat Abatement and Restoration (STAR) metric

spatial documentation with global, spatial, high-resolution metrics of biodiversity and for carbon sequestration to report and quantify potential contributions to global environmental goals. Part of the work of maintaining CfN involves weekly monitoring of related platforms and vetting of capacity to monitor in similar or extended ways.

Given the extreme geographic variation of conservation and restoration interventions aimed at enhancing both biodiversity and climate change mitigation, the core of the platform is spatially explicit, and the way that users interact with it is through maps, visualizing locations where constituents are conducting conservation and restoration efforts. Before going through validation, these core spatial data can be complemented by optional information around specific threat abatement conservation and restoration (including forest landscape restoration) actions, financial information, gender, beneficiaries and collaborations that add detail to the quantification of biodiversity conservation potential, which is calculated by the <u>Species Threat Abatement and Restoration (STAR) metric</u> (Mair et al., 2021) and climate change mitigation measured using the IUCN FLR CO2 removal database (Bernal et al., 2017).

To date, there are 9854 voluntary contributions documented in the platform from IUCN's government and civil society Members (130 individual IUCN constituents have documented contributions), with the majority situated in the Americas (Figure 1). Each contribution is a potential NbS, dependent on verification that it does indeed deliver its climate change and biodiversity benefits, and of course also meet the other NbS criteria.

Through capacity building, the ENACT Partnership will extend the CfN to allow full and robust monitoring of the ENACT NbS Goals and broaden submissions to accommodate ENACT Partners beyond IUCN Members. This work will allow the vital, but currently absent, full accounting of how NbS, as conservation and restoration actions, are contributing towards delivery of global goals related to climate change and biodiversity. It is crucial to collectively document and understand these contributions, where and when they are being implemented, by whom, and value the role that they play in progress towards existing global targets including the UN Decade on Restoration, the Kunming-Montreal Global Biodiversity Framework (GBF) adopted under the Convention for Biological Diversity (CBD), the Paris Agreement under the UN Framework Convention on Climate Change (UNFCCC), and the G20 Global Initiative on Land Degradation under the UN Convention to Combat Desertification (UNCCD). Further, by working in association with these global targets, tracking of NbS can be facilitated by leveraging existing global monitoring data and adding NbS verification.

# IMPLEMENTATION

### Launching ENACT Workstreams

On 6 March 2023, ENACT Co-chairs and IUCN convened a workshop with ENACT Partners and interested parties. Among other things, the workshop sought to identify priority actions for the partnership in 2023. As a component of this, the ENACT workstreams were refined and agreed as the means to direct and achieve implementation of NbS in line with the partnership's NbS Goals.

The ENACT workstreams correspond to the <u>High-Level Champions Sharm-el-Sheikh Adaptation</u> <u>Agenda (SAA)</u> by aligning across systems. The ten ENACT Workstreams cover the following systems: Agriculture, Water, Green-Grey Infrastructure, Human Settlements, Oceans & Coastal, Renewable Energy, Health, Funding & Finance, Human Rights, Decent Work. This achieves the aim of ENACT to build synergies and strengthen collective action for NbS to address the challenges of climate change, biodiversity loss, and land degradation. Workstreams participants currently include representatives from: WHO, Conservation International, ICLEI, UN-Habitat, UNEP, SwedBio, Forest Peoples Programme, IUCN, ILO.



Video - Using the power of nature to fight climate change in Egypt © Green Climate Fund



# CASE STUDY

#### ECOSYSTEM-BASED ADAPTATION ENHANCING CLIMATE CHANGE ADAPTATION IN NORTH COAST AND NILE DELTA IN EGYPT

LOCATION: Kafr El-Sheikh, Port Said, Damietta, Beheira, Dakahlia

**BENEFICIERIES:** The coastal protection measures will directly benefit approximately 768,164 people and indirectly benefit 16.9 million people in urban/ rural communities.

"The "Enhancing Climate Change Adaptation in the North Coast of Egypt" project aims to protect the densely populated low-lying lands in the Nile Delta, the home of 25 percent of the Egyptian population, which have been identified as highly vulnerable to climate change induced sea-level rise. The project is implemented by the Ministry of Water Resources and Irrigation with a total budget of US\$ 31.4 million from Green Climate Fund (GCF) through UNDP as Accredited Agency, over seven years in addition to co-finance from Government of Egypt. The project is coordinated by Ministry of Environment as GCF NDA

Sea-level rise will have a direct and critical impact on Egypt's infrastructure and development along the low coastal lands. Egypt relies on the Nile delta for prime agricultural land, accordingly coastal inundation or saline intrusion will have a direct and critical impact on Egypt's entire economy. The number of extreme weather events inducing casualties and economic losses has increased significantly in Egypt over the last ten years. These extreme events have flooded major cities, destroyed infrastructure and disturbed economic activities. In the countryside it has destroyed homes and agricultural lands, and disrupted development initiatives and the Government of Egypt's work to meet sustainable development goals.

With GCF funding, the 7-year project (2018 - 2025) will expand the use of low-cost dikes system to prevent the flooding of the low-lying lands from sea surges during extreme weather events. The dike system was first tested under the pilot level under the GEF Special Climate Change Fund (SCCF) project. A reed fence is erected on the top of the dike system to trap windblown sand that converts the dike into a natural sand dune system. The project will also support the development of an Integrated Coastal Zone Management Plan (ICZM) for the North Coast of Egypt, in full coordination with ICZM National Focal Point in Ministry of environment, that links the plan for shore protection from sea-level rise with the national development plan of the coastal zones. The ICZM plan will be associated with the establishment of a systematic observation system to monitor Oceanographic parameters changes under a changing climate as well as the impact of the different shore protection scenarios on the coastal erosion and shore stability." UNDP Adaptation

# WAY FORWARD Key Messages to Meet ENACTs Ambitions

Achieving ENACT's vision requires stronger international collaboration and commitments to the rapid reduction of fossil fuel emissions to limit warming to 1.5°C. Meeting this goal is essential to the continued provision of core benefits for nature and people. In line with the achievement of this condition, the ENACT Partnership Roadmap Report will elaborate on the following key messages:

## **Integrated Approach**

It is essential that the objectives of the Rio Conventions be formally linked in their recognition of NbS as a framework to achieve the global targets across the conventions' frameworks. Recognition of NbS should align with the UNEA 5/5 resolution definition and outcomes of the consultation process.

The interlinked dynamic of the climate change adaptation and mitigation, land degradation and biodiversity crises must be recognized and reflected in policy, investments and technical support and provide pathways for human-rights focused protection, restoration, and sustainable management of the world's ecosystems.

In the context of the UNFCCC COP 28 negotiations, including discussions on the linkages between biodiversity and climate, it is imperative that climate interventions actively contribute to improving biodiversity. This extends to action under the following frameworks: Global Stocktake, the Sharm el-Sheikh Mitigation Ambition and Implementation Work Programme (MWP), and the Glasgow–Sharm el-Sheikh Work Programme on the Global Goal on Adaptation (GlaSSGGA). Actions under these frameworks will demand inclusion of NbS into funding streams in coordination with the need to meet global climate finance agreements of 100 billion dollars per annum.

It is further imperative that this global alignment is matched at national scales. Similar integration of NbS should be promoted in National Biodiversity Action Plans (NBSAPs), National Adaptation Plans (NAPs) and in updated Nationally Determined Contributions (NDCs).

## **Enhanced Investment**

Climate change, environmental degradation, and biodiversity loss are dynamic challenges that require adaptive governance structures and long-term management. It is not only the case that funding for NbS needs to increase, but the design of funding and investment should be developed to accommodate the specific time-scales of NbS. Further, existing funding mechanisms should

be evaluated and adjusted to ensure that funds are directed toward and reward an integrated approach, wherein the objectives address climate change, biodiversity loss, and human wellbeing.

Funding should be further aimed at enhancing the scientific knowledge based of NbS for the continued effective design of good practices. This is necessary to ensure both high-success implementation, but further, that NbS can draw from science that keeps pace with ecosystem shifts amidst current conditions of climate change. To support sharing good practices, knowledge, success stories and coordinated efforts on a global scale, it is also important that support be generated for multi-scaled collaboration. Collaboration enables the pooling of resources, expertise, and innovative ideas from diverse sectors and disciplines across geographies, fostering a more comprehensive and impactful approach.

#### **Inclusive Decision-Making**

The achievement of more equitable and socially just outcomes requires inclusive decisionmaking processes that involve diverse actors and balance power across decision making, including among local communities, and marginalized groups. This approach not only bolsters the effectiveness of NbS but also aligns them with local socio-economic needs, fostering sustainable development and resilience. This requires policies and practices that specifically address the needs and rights of marginalized groups. Such inclusive approaches not only enhance the social impacts but also foster a sense of ownership and stewardship.

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WORLD HEADQUARTERS Rue Mauverney 28 1196 Gland Switzerland Tel +41 22 999 0000 Fax +41 22 999 0002 www.iucn.org www.iucn.org/resources/publications

