TECHNICAL BRIEF

Promoting Synergies Between Climate Change Adaptation and **Biodiversity**

Through the National Adaptation Plan and National Biodiversity Strategy and **Action Plan Processes**

Biodiversity and Climate Change Adaptation Expert Group under the Nairobi Work Programme on Impacts, Vulnerability and Adaptation to climate change in collaboration with the Least Developed Countries Expert Group













Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH UN @



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Executive Summary

Climate change greatly impacts ecosystems and, together with land-use change, is among the main drivers of biodiversity loss. In turn, biodiversity and its sustainable use can help people and communities mitigate and adapt to climate change by increasing ecosystem resilience. The high degree of interdependence requires critical consideration of the interlinkages between climate and biodiversity in policy-making. However, national-level response measures responding to these challenges have often been siloed and separated. This fragmented approach jeopardises countries' ability to address the intertwined causes and impacts of climate change and biodiversity loss.

While decision-makers and negotiators at relevant forums, including the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity, acknowledge the necessity of integrated approaches, there are not yet enough practical examples to show how to make the best use of the synergies and avoid the trade-offs with respect to both policy design and implementation.

Strengthening domestic policy coherence between effective climate change adaptation and biodiversity actions provides many opportunities to increase integration, reduce duplication, and make the best use of limited resources for planning, implementation, monitoring, and finance. This technical brief reviews the interconnections between biodiversity and climate change adaptation and explores the potential to foster synergies between the processes to formulate and implement National Adaptation Plans (NAPs) and National Biodiversity Strategy and Action Plans (NBSAPs). It provides an overview of the two processes' common elements—(a) assessment of needs and priorities; (b) planning; (c) implementation and financing; and (d) monitoring, evaluation, and learning—along with specific opportunities for promoting synergies between the two processes.

This is followed by highlighting practical entry points and lessons learned from four country case studies on effective coordination and joint implementation of climate change adaptation and biodiversity policies at the national level. The case studies illustrate important lessons learned and good practices that could be applied to and inspire the revision, formulation, and implementation of the NAPs and NBSAPs to promote synergy and efficient allocation of resources. To further strengthen the synergistic implementation of climate change adaptation and biodiversity policies and strategies, the technical brief also points to feasible next steps for countries to consider, including the promotion of coordination processes, active mapping of synergies between existing government policies, joint analyses of financial requirements, and enhancement of joint multistakeholder engagement and multi-governance processes.

This technical brief is a joint collaboration with the Nairobi work programme expert group on biodiversity and climate change adaptation and has been published as a supplement to the NAP technical guidelines. It targets country-level Convention on Biological Diversity and United Nations Framework Convention on Climate Change focal points and technical staff of ministries who are engaged in the planning and implementation of NAPs and NBSAPs.

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List of Acronyms

CBD	Convention on Biological Diversity				
EbA	Ecosystem-based adaptation				
FONERWA	National Fund for Environment: Rwanda Green Fund				
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit				
IISD	International Institute for Sustainable Development				
IPCC	International Panel on Climate Change				
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services				
IPPCC	Indigenous Peoples Platform for Climate Change				
MEL	Monitoring, evaluation, and learning				
NbS	Nature-based solutions				
NAP	National Adaptation Plan				
NAPA	National Adaptation Programmes of Action				
NBSAP	National Biodiversity Strategy and Action Plan				
NWP	Nairobi Work Programme				
PEBACC	Pacific Ecosystem-based Adaptation to Climate Change project				
UNFCCC	United Nations Framework Convention on Climate Change				

Introduction

Countries around the world are grappling with the far-reaching and sometimes irreversible impacts of climate change and biodiversity loss. However, national-level response measures responding to these challenges have often been siloed and separated. This fragmented approach jeopardises countries' ability to address the related causes and impacts of climate change and biodiversity loss. Exploring and building synergies between climate and biodiversity strategies at the domestic level will be pivotal for the achievement of the United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement, and the Convention on Biological Diversity (CBD), as well as the Sustainable Development Goals.

Strengthening the synergies between effective climate change adaptation and biodiversity actions provides many opportunities to increase integration and coherence, reduce duplication, and make the best use of limited resources for planning, implementation, monitoring, and finance. Realising these synergies helps countries and local communities reduce vulnerabilities to the impacts of climate change by building adaptive capacity and resilience through biodiversity actions; facilitates the integration of climate change adaptation concerns into biodiversity policies, programmes, and activities, and vice versa; and reduces duplication and redundancy of work.

A good strategy for realising these synergies is the integrated implementation of both the UNFCCC and the CBD parties' commitments at the national level. This requires domestic policy coherence and joint action across the design, financing, implementation, and review of (and reporting on) National Adaptation Plans (NAPs) and National Biodiversity Strategy and Action Plans (NBSAPs). At this point, most countries are still in the process of formulating their NAPs; at the same time, countries are revising or updating their NBSAPs in accordance with the new post-2020 Global Biodiversity Framework. There are clear opportunities to leverage the two processes to integrate adaptation and biodiversity actions' planning and implementation. However, more knowledge is needed to facilitate clear entry points for the consideration of effective synergies and trade-offs of integrated climate adaptation and biodiversity actions (UNFCCC, 2021). Promoting synergies between the two processes provides a pivotal opportunity for national policy-makers to consider how they can best coordinate their efforts so that climate adaptation and biodiversity actions become mutually reinforcing.

The following technical brief reviews the interconnections between biodiversity and climate change adaptation and explores the potential to foster synergies between the processes to formulate and implement NAPs and NBSAPs. This will be underpinned by highlighting practical entry points and lessons learned from case study examples on effective coordination and joint implementation of climate change adaptation and biodiversity actions at the national level. This technical brief, which has been published as a supplement to the NAP technical guidelines, targets country-level CBD and UNFCCC focal points and technical staff of ministries who are engaged in the planning and implementation of NAPs and NBSAPs. In many countries, these two groups work within the same ministries or departments.

Box 1

About the Nairobi Work Programme

The Nairobi work programme (NWP), a UNFCCC knowledge-to-action hub for adaptation and resilience, closes knowledge gaps in order to facilitate the scaling up of adaptation action in countries. The actions under the NWP support the achievement of the goals of the Paris Agreement. The NWP works in collaboration with the constituted bodies and over 450 partner organisations representing a diversity of knowledge and expertise, coalitions, and existing networks working in different thematic areas, sectors, regions, and countries.

In a scoping paper published in 2021 (UNFCCC, 2021), the NWP expert group on biodiversity and climate change adaptation curated knowledge about how forest and grassland biodiversity can strengthen countries' resilience to the effects of climate change (UNFCCC, n.d.). The paper compiles case studies, good practices, and guidance related to ecosystems and their services. It includes suggestions for governments to address knowledge gaps that hinder the scaling up of climate adaptation plans to increase resilience.

The NWP expert group on biodiversity is preparing a policy brief on the interconnections between biodiversity and climate change adaptation and explores the potential to foster synergies between the process to formulate and implement NAPs and the process to prepare the NBSAP. The technical brief seeks to close a knowledge gap identified in the scoping paper.

Join the UNFCCC Knowledge-to-Action Hub for Climate Adaptation and Resilience to scale adaptation actions

Biodiversity and Climate Change Adaptation

Biodiversity and Climate Change Adaptation

Biodiversity loss and climate change are increasingly recognised by the scientific community as two highly interlinked environmental challenges. These interlinkages are detailed in a joint analysis by the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in 2021 (Pörtner et al., 2021):

- **Biodiversity loss and climate change share the same drivers.** Land use and land-use change, resource exploitation such as unsustainable fishing practices, energy production, and pollution often exacerbate the impacts of climate change and lead to ecosystem degradation or loss. Hence, the complex feedback loops between climate change and biodiversity loss are mutually reinforcing, and addressing them requires coherence in policies and actions.
- **Climate change alters ecosystems and biodiversity.** Anthropogenic climate change threatens the health of terrestrial and aquatic ecosystems due to disruptions in the natural feedback loops and loss of habitat for a variety of fauna and flora (IPCC, 2022). These climate impacts on ecosystems and biodiversity also undermine their ability to deliver ecosystem services, thereby harming human lives and livelihoods, as well as efforts to eradicate poverty and hunger and provide safe water for billions of people (IPCC, 2022; IPBES, 2019).
- **Biodiversity and ecosystems underpin climate change adaptation.** Biodiversity and ecosystems play a major role in regulating climate and buffering from climate extremes, thereby enhancing societal adaptation and resilience to climate change. Their role as carbon sinks is an essential contribution to the Paris Agreement's "Greenhouse Gas neutrality" goal (Article 4.1) (Institute for Sustainable Development and International Relations, 2021). At the same time, biodiversity and ecosystem health underpin efforts to adapt to climate change. Biodiversity and ecosystems provide communities around the world with valuable natural resources and ecosystem services that support lives and livelihoods and help address the growing climate risks and vulnerabilities (IPBES, 2019). Increasing biodiversity loss, including the degradation of ecosystems and the services they provide, threatens existing adaptation efforts, intensifies natural disasters, limits prospective adaptation options, and undermines sustainable development, poverty alleviation, and resilience building for the most vulnerable communities (Pettorelli et al., 2021).

Biodiversity and healthy and resilient ecosystems are important components of societal adaptation to climate change. Thus, it is important to consider how climate change will affect biodiversity and ecosystems. If protected and managed in a way that allows ecosystems themselves to adapt, their services can play a vital role in helping people to adapt to climate change. They can mitigate the impacts of natural hazards and make a valuable contribution to human resilience (International Institute for Sustainable Development, 2003; Masundire et al., 2006). This creates the foundation for more synergistic cooperation in the planning, design, and implementation of strategies in response to both biodiversity loss and climate change adaptation to ensure mutually supportive outcomes and avoid counterproductive policies and actions (IPCC, 2022).

Nature-based solutions (NbS) to address climate change, which include ecosystem-based adaptation (EbA) and ecosystem disaster risk reduction, contribute to the conservation, restoration, and sustainable use of biodiversity and ecosystems (CBD Secretariat, 2019). Examples include watershed and forest protection and coastal ecosystem conservation and restoration to help countries mitigate disaster risks and adapt to the impacts of climate change. NbS can safeguard local biodiversity and endangered species, preserve soil fertility, increase natural resource availability, and build healthy, resilient, and sustainable communities (Terton & Greenwalt, 2021). Exploring the synergies between biodiversity and climate adaptation policies and actions through NbS allows countries to avoid duplication of work and enable a better, more effective, and more efficient allocation of resources. A well-coordinated approach could facilitate countries' efforts to achieve multiple commitments domestically and internationally.

Box 2

Nature-based Solutions Definition

In March 2022, the United Nations Environment Assembly (UNEA) 5.2 adopted an international definition for NbS as follows:

Nature-based solutions 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 and resilience and biodiversity benefits.

(United Nations Environment Assembly of the United Nations Environment Programme, 2022. In March 2022, the United Nations Environment Assembly [UNEA] 5.2 adopted within its resolution 5/5. Nature-based solutions for supporting sustainable development an international definition for NbS as follows.)

Rationale for Linking Adaptation and Biodiversity at the National Level



Rationale for Linking Adaptation and Biodiversity at the National Level

At the international level, building bridges between the Rio Conventions, including the UNFCCC and the CBD, is crucial for exploring synergies and achieving their respective mandates. However, synergistic cooperation at the international level is only the beginning. As both climate change adaptation and biodiversity goals rely on effective local implementation, efforts must be oriented toward improving domestic actions and practical synergistic delivery on the ground and finding ways to improve the alignment of these issues at the national and sub-national levels (CBD Secretariat, 2013).

Different policy processes and strategies have emerged in response to international agendas such as the Paris Agreement and the CBD for countries to elaborate on how national commitments will be achieved. Under the UNFCCC, the process of formulating and implementing NAPs is a means for parties to identify medium- and long-term adaptation needs and develop and implement strategies and programmes to address those needs. Established under Decision 5/CP.17, the process to formulate and implement NAPs involves analysing current and future climate impacts and identifying vulnerabilities and adaptation gaps (UNFCCC, 2011). This provides a basis for identifying adaptation options and planning the implementation of these actions, as well as for tracking the progress and results. Similarly, under the CBD, the NBSAP process allows countries to formulate and outline their strategies for protecting biodiversity and ecosystems to achieve the CBD objectives, its 2050 Vision for Biodiversity, and, in the future, the post-2020 global biodiversity framework. A country's NBSAP provides a snapshot of the risks and vulnerabilities faced by its ecosystems and presents its plans to address these challenges. The NBSAP forms a crucial part of countries' CBD obligations and represents their commitment to protecting biodiversity and ecosystems.

Since issues related to biodiversity and climate change are inherently interlinked, the processes of formulating and implementing NAPs and NBSAPs present opportunities for alignment of the global agendas of CBD and UNFCCC, ensuring that actions under both plans are mutually supportive and not undertaken in isolation from one another. Countries are asked to develop their NBSAPs with cross-sectoral and intersectional considerations in mind, such as addressing the linkages between biodiversity loss and gender, sustainable development, poverty reduction, traditional practices, public health, and climate change (CBD Secretariat, 2021). Much like that of the NBSAPs, the process to formulate and implement NAPs emphasises the importance of a holistic approach to adaptation planning (UNFCCC, 2012). Adaptation strategies like protecting or restoring mangrove forests enable these ecosystems to act as buffers from floods or storm surges, provide habitat for coastal species, and enhance ecosystem resilience. Further, ecosystem protection measures like reforestation with native species in appropriate areas can yield additional benefits of disaster risk reduction and carbon storage.

Box 3

Opportunities to enhance coherence between NAPs and NBSAPs

The processes to formulate and implement NAPs and NBSAPs can be complementary. Opportunities to enhance coherence include ensuring the following:

- Both plans are **iterative in nature**, which creates an opening to increase integration. The NAP may be updated based on priorities identified in the NBSAP or vice versa.
- The plans are often coordinated by the same ministry; this can facilitate enhanced coordination and knowledge sharing.
- Consideration of identified vulnerabilities and risks via the process to formulate and implement the NAP can ensure biodiversity policy decisions are "climate smart", i.e., that climate impacts on ecosystems and biodiversity are taken into account.
- Close coordination, which can ensure that biodiversity, ecosystem services, and biodiversitybased livelihoods are reflected in the objectives of the NAP and selected actions are not detrimental to biodiversity.
- Enhanced coordination between the two planning processes, which provides a better understanding of the linkages between climate change and biodiversity among numerous stakeholders and helps to identify and address potential costs associated with action, inaction, and risks in the early stages of policy-making.
- Integration of NAPs and NBSAPs, which may result in the more efficient use of nationally allocated climate and biodiversity finance and opportunities to leverage additional resources for joint implementation.
- Linkages between sectoral and sub-national actors, who may benefit in terms of reduced duplication of efforts, streamlined coordination and allocation of resources, and opportunities for learning exchanges across sectors. Linkages may also provide opportunities for mainstreaming adaptation and biodiversity considerations into sub-national development planning and financing to achieve vertical policy coherence.
- Encouraging both planning processes to be gender responsive, inclusive, participatory, and transparent, and ensuring the NAP process emphasises consideration of vulnerable groups, communities, and ecosystems. Such considerations create fertile ground for cross-sectoral and interdisciplinary exchanges and enhance the likelihood of synergistic or integrated outcomes.



A Framework for Promoting Synergies Between Climate Adaptation and Biodiversity Through the NAP and NBSAP Processes

A Framework for Promoting Synergies Between Climate Adaptation and Biodiversity Through the NAP and NBSAP Processes

Given the opportunities, countries could reflect on the status and timelines of both processes to determine where the most feasible entry points exist for pursuing synergies between the NAPs and NBSAPs to maximise adaptation and biodiversity benefits. Figure 1 aims to illustrate potential opportunities and interactions during the formulation and implementation of the NAP and NBSAP that offer openings for promoting synergies and co-benefits. The framework is simplified for illustrative purposes, and additional details exist.

The opportunities and challenges associated with promoting synergies between climate change adaptation and biodiversity actions through the NAP and NBSAP processes are context dependent. A crucial factor is the timing of when different policy processes are initiated, as this provides a key opportunity to pursue strategic synergies. Equally important are high-level buy-in, established institutional mechanisms, resources, and capacities available to enable coordination, national priorities, as well as power dynamics within the government.

The planning processes for both NAPs and NBSAPs often fall under the responsibility of the environment ministry but may be led by different teams and have differing levels of political buy-in and engagement across government ministries. The process of formulating and implementing NAPs is often owned by the bodies responsible for climate change, who may lack an understanding of how biodiversity relates to adaptation or how the synergies between climate adaptation and biodiversity actions may be operationalised.

Similarly, those leading the NBSAP process may not be considering linkages to the process of formulating and implementing NAPs or have not yet fully recognised the role of ecosystems in climate change adaptation. Additionally, due to differing timelines and progress under both the UNFCCC and CBD, many countries may already have an NBSAP in place but have only recently initiated their NAP process. Depending on the country context, this could have led to synergies as well as conflicting priorities among the different processes, requiring adjustment toward the best results. **Figure 1.** Framework for promoting synergies between climate adaptation and biodiversity actions through the planning processes for the NAP and NBSAP



Figure 1. Framework for promoting synergies between climate adaptation and biodiversity actions through the planning processes for the NAP and NBSAP

ELEMENT 3 Implementation and financing	Implementing strategies (e.g., prioritising climate change in national policy frameworks, financing, and budgeting; en- hancing capacity; and promoting coordination)	 Prioritise and pool financial resources (e.g., cost-sharing agreements) for actions that address priority ecosystem services that mitigate identified climate risks, are highly vulnerable to climate change, and meet the objectives of both strategies. Identify and build technical capacity at sub-national levels to implement effective EbA solutions. Ensure that customary rights are recognised and upheld and that costs and benefits are distributed equitably, when designing and implementing identified solutions under the NBSAPs and NAPs. Coordinate and collaborate between both the NAP and NBSAP teams and common stakeholders to identify joint areas for mainstreaming climate change adaptation and biodiversity into planning and financing processes across sectors and levels of governance. 	<i>Implementation</i> (e.g., undertaking specific projects, revising legisla- tion, securing financing, re- searching, and mainstreaming)
ELEMENT 4 Monitoring, evaluation, and learning (MEL)	Reporting, monitoring, and review (e.g., monitoring implementation and progress, it- eratively updating NAP, and reporting on progress)	 Co-design and cross-reference indicators to capture observed impacts on vulnerable ecosystems and ecosystem services. Integrate climate change impacts into national biodiversity targets and indicators based on the new post-2020 Global Biodiver- sity Framework. During the development of a MEL framework, consider the other process's reporting re- quirements to identify information that could be used for both. Build and develop capacities to undertake a systematic collection of ecological data at regular intervals and over time. Facilitate learning and broader knowledge sharing through communication and dissem- ination of findings, guidance, best practices, and lessons learned from the adaptive man- agement and implementation of integrated projects and policies. 	<i>Monitoring,</i> <i>evaluation,</i> <i>and reporting</i> (e.g., establish- ing a monitoring framework, measuring the effectiveness of actions, and reporting on progress and results)

As shown in Figure 1, several opportunities exist to enhance synergies between climate change adaptation and biodiversity throughout all elements of the NAP and NBSAP planning and implementation processes. Of particular importance are shared vulnerability, risk, and ecosystem impact assessments; common stakeholder engagement; shared financing and implementation of NbS, such as EbA, that deliver multiple benefits; and identification of common indicators and reporting structures during the review stage.

The following case studies showcase examples of promoting synergies between climate change adaptation and biodiversity based on the common elements of the NAP and NBSAP planning processes, as identified in Figure 1.

Case Studies Showcasing How Biodiversity and Climate Change Adaptation Are Already Being Integrated at National Levels

Case Studies Showcasing How Biodiversity and Climate Change Adaptation Are Already Being Integrated at National Levels

Peru

Opportunities to Promote Synergies Within Element 1: *Assessment of needs and priorities of stakeholders*

Peru's case study illustrates how a participatory and inclusive approach that involves local communities and Indigenous Peoples ensures the long-term sustainability of synergistic actions. On the understanding that addressing climate change is a precondition for development and that human beings are the main actors in this, Peru approved its <u>National Climate Change Adaptation Plan (NAP) 2021–2030</u> in June 2021 (Ministry of Environment of Peru, 2021a). One of the seven priority areas of the NAP is forests. Forests are viewed not only as carbon sinks but also as resilient ecosystems that can prevent the loss of biodiversity and their ecosystem services, livelihoods, and even lives. They are also perceived not only as natural resources and areas of biodiversity but as a source of the ancestral knowledge of the Indigenous Peoples who act as their guardians, giving and receiving live, contributing to climate change adaptation.

There are clear synergies between biodiversity and climate change adaptation in this context. In the elaboration of the Peruvian <u>Nationally Determined Contributions</u>, 26 measures have been linked to NbS and the thematic area of forests is present and prioritised in both climate change mitigation and adaptation. The links and co-benefits between biodiversity conservation and addressing climate change are explicitly set out in the <u>National Forest and Climate Change Strategy 2030</u> and in the preparatory work for the <u>National Climate Change Strategy 2050</u>, which Peru has been updating (Ministry of Environment of Peru, 2016, 2021b).

Indigenous Peoples are also included in a number of ways. An example is the <u>National Forest</u> <u>Conservation Programme for Climate Change Mitigation</u>, which works directly with Indigenous Peoples to conserve and monitor forest ecosystems in their territories, drawing on their vision, knowledge, and ancestral wisdom (Ministry of Environment of Peru, n.d.). Forest ecosystems and Indigenous Peoples are inextricably connected, and this is reflected in the creation of the <u>Indigenous Peoples Platform for Climate Change (IPPCC, or PPICC in Spanish)</u> in 2020 as a space of coordination and dialogue and key instrument for national adaptation planning (Ministry of Environment of Peru, 2021c). Another example is the participation of the IPPCC in constructing the NAP, providing its inputs and explaining its needs and priorities. In addition, the IPPCC is also currently participating in its implementation.

The IPPCC is an institutionalised space comprising representatives from the seven national organisations representing and recognised by the State of Peru's Indigenous Peoples, plus the Ministry of the Environment—as the technical secretariat—and the Ministry of Culture. The IPPCC's creation is the result of one of the most important commitments made by the Ministry of the Environment in the <u>Prior</u> <u>Consultation Process for the Implementing Regulations of the Framework Law on Climate Change</u> (Ministry of Environment of Peru, 2019). Among its main tasks is to build an Indigenous climate agenda from a gender-inclusive, intercultural, and intergenerational approach in order to develop adaptation and mitigation measures for the benefit of local populations in Peru. It is also responsible for submitting its proposals for adaptation and mitigation measures to <u>the High-Level Commission on Climate</u> <u>Change</u>, as well as recommendations on the incorporation of Indigenous ancestral knowledge and practices (El Peruano, 2020).

In this context, Peru is seeking to ensure that carbon markets guarantee respect for human rights and the rights of Indigenous Peoples. The Peruvian Ministry of the Environment has also been promoting the valorisation/recognition of Indigenous Knowledge systems—ancestral knowledge and practices— as an important part of establishing synergies between biodiversity and climate change adaptation.

Key takeaways

Peru's efforts to grant civil society organisations, Indigenous Peoples, and local communities access to high-level climate action via the <u>National Commission on Climate Change</u> are a critical step toward advancing Indigenous Peoples' rights. Peru's experience offers lessons for other countries on how to bridge climate and biodiversity action with diverse cultures, values, and sources of knowledge of the people it is home to. It is precisely this knowledge and vision that must be fully included in national, sectoral, and local climate and biodiversity strategies.



Eswatini

Opportunities to Promote Synergies Within Element 2: *Planning*

The case study of the Kingdom of Eswatini illustrates how biodiversity and climate change adaptation have been linked in the assessment and planning stage of their environmental actions. Eswatini is a lower-middle-income developing country in southeastern Africa. Facing increasing threats from climate change and other environmental threats, Eswatini has multiple national strategic frameworks guiding its climate and biodiversity policies. It submitted its NBSAP in 2016 (Swaziland Environment Authority, 2016a) and plans to update the strategy in line with its Paris Agreement commitments in the coming years (Kingdom of Eswatini, 2021b). With support from the United Nations Environment Programme and the Green Climate Fund, Eswatini's NAP process is underway and is expected to be completed in 2023 (Kingdom of Eswatini, 2021a).

Eswatini's Ministry of Tourism and Environmental Affairs is pursuing an integrated approach to biodiversity and climate action in the planning and implementation stages to maximise synergies between its adaptation efforts and biodiversity actions. Its environmental assessment process identifies climate change and biodiversity loss as related issues that are mutually reinforcing. To address these two interlinked challenges, Eswatini updated its NBSAP to mandate all protected-area plans to incorporate climate adaptation and mitigation strategies between 2015 and 2020. Its Fifth National Report to the CBD also explicitly commits to "increase ecosystem-based approaches and protection-worthy areas into the National Adaptation Plan of Action (NAPA) and climate change strategy" and "fully incorporate ecosystem-based resilience such as establishing carbon sinks and controlling invasive species" to advance climate resilience (Swaziland Environment Authority, 2014, p. 23).

Eswatini's National Climate Change Policy, its new Nationally Determined Contribution, and its Adaptation Communication all reaffirm the importance of holistically addressing vulnerable ecosystems in national adaptation programmes (Swaziland Environment Authority, 2016b; Kingdom of Eswatini, 2021a, 2021b). Its National Climate Change Policy—the national strategic framework for addressing climate change—stated its support for implementing EbA to increase resilience and support the sustainable management of forests, protecting biodiversity and ecosystem integrity (Kingdom of Eswatini, 2021b).

For instance, the Lubombo Biosphere Reserve is a biodiversity-rich ecosystem that is the hub for agriculture, animal husbandry, industry, tourism, and forestry. The Eswatini Water and Agricultural Development Enterprise has been promoting land rehabilitation, ecosystem restoration, climate-smart agriculture, and the sustainable use of water resources to engage local communities while increasing resilience and protecting vulnerable ecosystems and biodiversity (Kingdom of Eswatini, 2021b).

Key takeaways

By focusing on the assessment and mapping of climate impacts, as well as proactively integrating climate change considerations into its conservation, sectoral, and national development plans, Eswatini addresses biodiversity loss and climate risks holistically. This is achieved by cross-referencing its NAP and NBSAP and by also promoting EbA to explore the synergies and the trade-offs between the two portfolios. The strong coordination within the Ministry of Tourism and Environmental Affairs and a general awareness of the interlinkages between biodiversity and climate adaptation has created an enabling environment for Eswatini to link its NBSAP with its climate adaptation programmes. Eswatini also acknowledges that community-level engagement and local and Indigenous Knowledge played a crucial role in advocating for the conservation and sustainable use of natural resources (Kingdom of Eswatini, 2021b).



Fiji

Opportunities to Promote Synergies Within Element 2: Planning

Fiji's case demonstrates how to integrate biodiversity and climate adaptation considerations during the assessment and implementation stages of the policy cycle. Fiji was among the first developing countries to prepare a NAP and update its NBSAP (Government of the Republic of Fiji, 2020; Terton et al., 2021). Fiji places a strong emphasis on implementing synergistic actions tackling the climate-biodiversity-livelihood nexus. It does so by actively linking its NAP with national biodiversity and ecosystem protection goals and by integrating its second NBSAP into its existing climate change strategies and commitments.

Fiji's NAP embraces EbA as one of its four "approaches underpinning the NAP process" (Terton et al., 2021). The NAP places biodiversity at the centre of its vulnerability and risk assessment, and harnesses the power of ecosystems to protect lives, livelihoods, socio-economic development, and biodiversity. Through a focus on EbA actions, the NAP is "recognised as a complementary vehicle which can support the implementation of the National Biodiversity Strategy and Action Plan" and enhance the management and financing of protected areas (Government of the Republic of Fiji, 2018, p. 37). Similarly, Fiji's NBSAP links its goals with its NAP to help "reduce the risk of species extinctions and limit damage to ecosystem functions and services" (Government of the Republic of Fiji, 2020, p. 9). Fiji identifies EbA and ecosystem disaster risk reduction as one of its nine principles underpinning the NBSAP and commits to mainstream climate change into biodiversity actions (Government of the Republic of Fiji, 2020).

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It plans to achieve this by:

- Integrating disaster risk reduction and climate adaptation strategies and actions into NBSAP focal areas.
- Conducting vulnerability assessments and climate impact projections in the resource management planning processes, including integrated coastal, watershed, land-use, forest, and marine management plans.
- Incorporating climate change impact projections into biodiversity plans.
- Implementing best practice adaptation measures based on sound scientific research and lessons learned from experiences of all levels.
- Undertaking research to identify effective adaptation measures to support biodiversity and natural resource sectors.

Key takeaways

Through proactive linkage between biodiversity and climate adaptation planning, Fiji is able to pursue a synergistic approach using EbA. Between 2015 and 2020, Fiji was a part of the Pacific Ecosystem-based Adaptation to Climate Change project (PEBACC) which facilitated capacity building and implementation of EbA projects in the Pacific Small Island Developing States. Fiji follows the PEBACC process to identify and evaluate EbA options to protect ecosystems and adapt to climate impacts (PEBACC, 2020). The iterative PEBACC process first conducted an Ecosystem and Socioeconomic Resilience Analysis and Mapping assessment to identify the ecosystems, ecosystem services, community dependencies, threats, socio-economic and governance factors, and climate risks and vulnerabilities. Based on the Ecosystem and Socioeconomic Resilience Analysis and Mapping assessment, EbA options were identified and evaluated to prioritise cost-effective and synergistic actions. The selected EbA projects are now being implemented and a MEL framework gathers lessons learned and best practices to inform future EbA planning.

Rwanda

Opportunities to Promote Synergies Within Element 3: *Implementation and financing*

Rwanda's case study illustrates how biodiversity and climate adaptation are integrated into environmental policy implementation and financing stages. Rwanda pursues a synergistic approach to implementing the three Rio Conventions (the UNFCCC, CBD, and United Nations Convention to Combat Desertification). Since 2006, the Rwanda Environment Management Authority has been assessing the interlinkages between climate change adaptation and mitigation, biodiversity and ecosystem protection, and desertification prevention, while creating coherent policies to meet its international commitments (Republic of Rwanda, 2020). Rwanda submitted its second NBSAP in 2016, which outlined its targets and action plans for biodiversity conservation (Republic of Rwanda, 2016). Specifically, it commits to mainstreaming biodiversity into sectoral policies, poverty reduction efforts, and climate change actions while enhancing the coordination of biodiversity conservation across ministries and different government entities (Republic of Rwanda, 2016).

Rwanda has also prioritised EbA as a tool to advance integrated adaptation and resilience-building strategies through its process to formulate and implement the NAP (NAP Global Network, 2019). It has identified EbA measures such as afforestation, soil conservation, integrated pest management, improved forest management, and integrated land-use planning and water resources management as its priority sectors for adaptation, with these approaches also contributing to biodiversity and ecosystem resilience.

Siloed and insufficient financing was identified as a major barrier to implementing both the NBSAP and Rwanda's NAPA. To mobilise sufficient financial resources to implement its biodiversity and climate actions, the Government of Rwanda established an autonomous institution to further scale up resource mobilisation and allocation in 2012—the National Fund for Environment: Rwanda Green Fund (FONER-WA). It is now the largest of its kind in Africa and is recognised as a leader in attracting climate investment and accelerating green growth (FONERWA, n.d.). The FONERWA has mobilised approximately USD 89 million from the Foreign, Commonwealth, and Development Office of the United Kingdom, the German Development Bank (Kreditanstalt für Wiederaufbau, or KfW), the Government of Rwanda, the Least Developed Countries Fund, and the African Development Bank (Republic of Rwanda, 2020). Its main objectives include sustainably mobilising and managing funds and resources to finance activities aiming at protecting and preserving environmental and natural resources, as well as financing climate mitigation and adaptation initiatives (FONERWA, n.d.).



The FONERWA also contributes to the implementation of Rwanda's NBSAP. Among the FONERWA's four funding priorities, conservation and sustainable management of natural resources and environment and climate change mainstreaming are directly linked to Rwanda's NBSAP and other biodiversity and ecosystem-related action plans (Republic of Rwanda, 2020).

Key takeaways

Managed under one structure, this integrated financing mechanism ensures a coherent resource mobilisation strategy for both climate and biodiversity portfolios, and that projects consider both climate and biodiversity objectives to maximise resource efficiency and synergistic implementation. By setting up a single financing mechanism, as well as committing to mainstream biodiversity in climate actions, and vice versa, Rwanda is setting an example of how synergistic implementation and resource mobilisation could be achieved.

Adaptation Good Practice From Case Studies

Adaptation Good Practice From Case Studies

The case studies illustrate some important lessons learned and specific practices showing desirable results that could be applied to—and inspire—the revision, formulation, and implementation of the NAPs and NBSAPs to promote synergy and efficient allocation of resources.

- A synergistic approach requires high-level initiative. Integrating biodiversity and climate adaptation linkages at the national level creates an enabling environment for synergistic actions. Eswatini, Rwanda, Fiji, and Peru emphasised this linkage in their respective national biodiversity and climate strategies, which helped mainstream an integrated approach to system thinking and enhancing ecosystem and social resilience to climate change. Having biodiversity and ecosystem integrity as a principle in climate action strategies, and vice versa, puts this synergy onto decision-makers' and practitioners' radar and raises awareness of the need to prioritise stronger ecosystem safeguards and resilience building.
- **Coherence in national and sub-national synergistic planning is crucial.** Adaptation and ecosystem conservation are inherently local. National-level policies require coherent sub-national implementation and policy coherence in order to successfully realise a synergistic approach. A crucial part of this effort could be achieved by aligning sub-national biodiversity and climate strategies with national development frameworks and empowering local communities and actors to pursue an integrated approach through capacity-building programmes.
- Cross-sectoral engagement with a shared focus on ecosystems ensures a whole-of-society approach. Sectoral plans should also reflect the interconnectedness between biodiversity and climate adaptation. Eswatini achieves this cross-sectoral engagement by integrating EbA into its sectoral strategies, which help key sectors (such as forestry, fisheries, agriculture, natural resources extraction, energy, and transportation) to integrate biodiversity considerations in their climate adaptation plans.

- The meaningful participation of local communities and Indigenous Peoples bolsters an inclusive and participatory approach. Safeguarding the rights of Indigenous Peoples and local communities is important to ensure the equitable distribution of benefits and the long-term social sustainability of the projects. This includes adhering to the principle of free, prior, and informed consent at every stage of the project planning and implementation process, as well as ensuring local and Indigenous leadership and ownership. Peru's IPPCC is an example of how building an Indigenous climate agenda with an inclusive, intercultural, and intergenerational approach adds legitimacy and community coherence to integrated biodiversity–climate adaptation actions.
- Joint financing and resource mobilisation can support effective and timely implementation. The Rwandan Green Fund is a prime example of joint financing for biodiversity and climate actions, where the previously siloed project areas are jointly assessed to identify synergies in implementation and to explore coordinated resource mobilisation opportunities. This increases the cost-effectiveness of the investment while preventing duplication of work and inefficient allocation of funding.
- However, the lack of MEL frameworks as well as standardised reporting structures and comparable indicators continues to be a gap in implementation that requires additional focus and attention. MEL for adaptation and biodiversity actions comes with its challenges. But a robust MEL framework allows for an iterative cycle of assessment, implementation, reflection, and improvement. Learning from previous implementation and local experiences could inform future biodiversity and adaptation planning, thus improving the synergistic planning process, aligning official reporting cycles and enhancing outcomes.

Practical Next Steps







Practical Next Steps

The urgency for action to address climate change and biodiversity loss requires coherent policy approaches that utilise synergies and consider unintended trade-offs. NAPs and NBSAPs, if carefully planned and implemented in a coordinated way, can offer substantial benefits for climate change adaptation and biodiversity conservation at the same time.

As highlighted in the case studies and proposed framework, these synergies need to be addressed strategically and integrated particularly in the planning and implementation of NAPs and NBSAPs. Yet, countries do not need to recreate the process but continue to build on existing efforts (such as applying ecosystem-based approaches for adaptation to climate change) and use existing mechanisms to formulate and implement NAPs and NBSAPs to promote synergies.

To enhance mutual supportiveness and synergies between climate change adaptation and biodiversity actions, the proposed framework and good practice from the case studies point to practical next steps for countries to consider:

- Promoting coordination processes across government agencies and different sectors, such as inter-ministerial committees and multistakeholder platforms, in collaboration with sub-national authorities is key for meaningful policy coordination, implementation, and financing. Leadership or a high-level mandate can set wheels in motion to mobilise stronger synergies to integrate biodiversity and climate change adaptation.
- Mapping synergies between existing government policies can further help to increase coherence on financing needs and a more efficient allocation of resources. Identifying overlaps between measures early on, including under the NAP and the NBSAP, will prevent unnecessary duplication of efforts across national administrations. Taking stock of what has already been done and included under various national commitments could increase efficiency, help to prioritise synergistic actions, and facilitate monitoring and reporting. For instance, new or updated NBSAPs submitted after 2021 and before 2025 should align with existing NAP strategies.
- Joint analyses of financing requirements and the identification of actions for co-financing can
 promote coherent planning and enable the smart use of limited resources. From a practical point
 of view, this could include prioritising and combining financing for solutions with biodiversity and
 climate change benefits; earmarking climate funding to NbS; and ensuring climate-related initiatives also benefit biodiversity to promote concrete integration of biodiversity and climate issues.
- Wide multistakeholder engagement and multi-governance processes empower communities and local actors in climate and biodiversity processes that affect them directly. Promoting closer relationships between actors from the national to local levels—particularly ministries responsible for economic development, planning, and financing—will help integrate local and sub-national efforts into national adaptation and biodiversity agendas. This will also champion locally driven approaches and enhance the availability of information and knowledge among local actors on integrated solutions to climate change and biodiversity loss.

References

Convention on Biological Diversity Secretariat. (2013). Complementarities and synergies in the implementation of NAPAs, NAPs and NBSAPs: Least Developed Countries Expert Group (LEG) training workshop for Anglophone African Countries. <u>https://unfccc.int/sites/default/files/</u> cbd.pdf

Convention on Biological Diversity Secretariat. (2019). Voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction and supplementary information. <u>https://www.cbd.int/doc/publications/</u> cbd-ts-93-en.pdf

Convention on Biological Diversity Secretariat. (2021). **COP guidance on NBSAPs.** https://www.cbd.int/nbsap/guidance.shtml

El Peruano. (2020). Decreto Supremo que crea la Comisión Multisectorial de carácter permanente denominada "Comisión de Alto Nivel de Cambio Climático (CANCC)." Government of Peru. <u>https://busquedas.elperuano.</u> pe/normaslegales/decreto-supremo-que-crea -la-comision-multisectorial-de-carac-decreto -supremo-no-006-2020-minam-1869809-1/

Government of the Republic of Fiji. (2018). Republic of Fiji National Adaptation Plan: A pathway towards climate resilience.

https://www4.unfccc.int/sites/NAPC/Documents/ Parties/National%20Adaptation%20Plan_Fiji.pdf

Government of the Republic of Fiji. (2020). National biodiversity strategy and action plan for Fiji 2020–2025. Department of Environment. <u>https://</u> www.cbd.int/doc/world/fj/fj-nbsap-v2-en.pdf

Institute for Sustainable Development and International Relations. (2021). Aligning high climate and biodiversity ambitions and action in 2021 and beyond: Why, what, and how? https://www.iddri.org/en/publications-and-events/ study/aligning-high-climate-and-biodiversity -ambitions-and-action-2021-and Intergovernmental Panel on Climate Change. (2019). Summary for policymakers. In P. R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.- O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley ... J. Malley (Eds.), Climate change and land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. https://www.ipcc.ch/srccl/chapter/summary -for-policymakers/

Intergovernmental Panel on Climate Change. (2022). Summary for policymakers. In H.-O. Pörtner, D. C. Roberts, E. S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, & A. Okem (Eds.), Climate change 2022: Impacts, adaptation, and vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press. In Press. <u>https://www.ipcc.ch/</u> report/ar6/wg2/downloads/report/IPCC_AR6_ WGII_SummaryForPolicymakers.pdf

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. (2019). Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. S. Díaz, J. Settele, E. S. Brondízio, H. T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K. A. Brauman, S. H. M. Butchart, K. M. A. Chan, L. A. Garibaldi, K. Ichii, J. Liu, S. M. Subramanian, G. F. Midgley, P. Miloslavich, Z. Molnár, D. Obura ... C. N. Zayas (Eds.). https://doi.org/10.5281/zenodo.3553579 International Institute for Sustainable Development. (2003). Livelihoods and Climate Change: Combining disaster risk reduction, natural resource management and climate change adaptation in a new approach to the reduction of vulnerability and poverty. <u>https://www.iisd.org/</u> system/files/publications/natres_livelihoods_cc.pdf

Kingdom of Eswatini. (2021a). Initial adaptation communication to the United Nations Framework Convention on Climate Change. The Ministry of Tourism and Environmental Affairs. https://unfccc.int/sites/default/files/resource/ eswatini-climate-change-adaptation-plan -unfccc.pdf

Kingdom of Eswatini. (2021b). **Eswatini's revised NDC.** The Ministry of Tourism and Environmental Affairs. <u>https://www4.unfccc.int/sites/ndcstaging/</u> <u>PublishedDocuments/Eswatini%20First/</u> <u>Eswatini%27s%20Revised%20NDC%2012%20</u> <u>Oct%202021.docx</u>

Masundire, H., Rietbergen, S., Rizvi, A. R., & Sudmeier-Rieux, K. (2006). Ecosystems, livelihoods and disasters: an integrated approach to disaster risk management. International Union for Conservation of Nature. https://portals.iucn.org/library/node/8918

Ministry of Environment of Peru. (n.d.). **Programa Nacional de Conservación de Bosques para la Mitigación del Cambio Climático.** Government of Peru. <u>http://www.bosques.gob.pe/</u>

Ministry of Environment of Peru. (2016). Estrategia Nacional sobre Bosques y Cambio Climático. Government of Peru. http://www.bosques.gob.pe/estrategia-nacional

Ministry of Environment of Peru. (2019). Proceso de consulta previa del Reglamento de la Ley Marco sobre Cambio Climático [Youtube video]. Government of Peru. <u>https://www.youtube.com/</u> watch?v=b02IJI1WcM4&t=13s Ministry of Environment of Peru. (2021a). **Resolución Ministerial Nº 096 -2021-MINAM.** Government of Peru. <u>https://cdn.www.gob.pe/</u> uploads/document/file/1936379/RM.%20096 -2021-MINAM%20con%20anexo%20Plan%20 Nacional%20de%20Adaptaci%C3%B3n%20 al%20Cambio%20Clim%C3%A1tico%20del%20 Per%C3%BA.pdf.pdf

Ministry of Environment of Peru. (2021b). **Estrategia Nacional ante el Cambio Climático al 2050.** Government of Peru. <u>https://www.gob.pe/</u> institucion/minam/campa%C3%B1as/3453 <u>-estrategia-nacional-ante-el-cambio-climatico</u> <u>-al-2050</u>

Ministry of Environment of Peru. (2021c). **Plataforma de los Pueblos Indígenas para enfrentar el Cambio.** Government of Peru. <u>https://www.gob.pe/institucion/minam/</u> <u>campa%C3%B1as/5066-plataforma-de-los-</u> pueblos-indigenas-para-enfrentar-el-cambio

National Adaptation Plan Global Network. (2019). **Rwanda National Adaptation Plan (NAP) approach.** NAP Global Network and International Institute for Sustainable Development. <u>https://napglobalnetwork.org/wp-content/</u> <u>uploads/2018/02/napgn-en-2019-rwanda</u> <u>-nap-process-poster-1.pdf</u>

National Fund for Environment: Rwanda Green Fund. (n.d.). **Who we are.** http://www.fonerwa.org/who-we-are

Pacific Ecosystem-based Adaptation to Climate Change project. (2020). **Strengthening and protecting natural ecosystem services to enhance resilience to climate change.** Pacific Regional Environment Programme. https://www.sprep.org/sites/default/files/ documents/publications/Pacific-Ecosystem -based-adaptation-climate-change.pdf

Pettorelli, N., Graham, N. A., Seddon, N., Maria da Cunha Bustamante, M., Lowton, M. J., Sutherland, W. J., Koldewey, H. J., Prentice, H. C., & Barlow, J. (2021). Time to integrate global climate change and biodiversity science-policy agendas. Journal of Applied Ecology, 58(11), 2384–2393. https://doi.org/10.1111/1365-2664.13985 Pörtner, H. O., Scholes, R. J., Agard, J., Archer, E., Arneth, A., Bai, X., Barnes, D., Burrows, M., Chan, L., Cheung, W. L., Diamond, S., Donatti, C., Duarte, C., Eisenhauer, N., Foden, W., Gasalla, M. A., Handa, C., Hickler, T., Hoegh-Guldberg, O., Ichii, K. ... Ngo, H. T. (2021). **IPBES-IPCC cosponsored workshop report on biodiversity and climate change. Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services and International Panel on Climate Change.** <u>https://doi.org/10.5281/</u> zenodo.4782538

Republic of Rwanda. (2016). **Republic of Rwanda national biodiversity strategy and action plan.** Ministry of Natural Resources. <u>https://www.cbd.int/</u> <u>doc/world/rw/rw-nbsap-v2-en.pdf</u>

Republic of Rwanda. (2020). **Rwanda 6th national report to the Convention on Biological Diversity.** Rwanda Environment Management Authority. https://www.cbd.int/doc/nr/nr-06/rw-nr-06-en.pdf

Swaziland Environment Authority. (2014). Swaziland's Fifth National Report to the Convention on Biological Diversity. The Ministry of Tourism and Environmental Affairs. <u>https://www.cbd.int/</u> doc/world/sz/sz-nr-05-en.pdf

Swaziland Environment Authority. (2016a). Swaziland's Second National Biodiversity Strategy and Action Plan. The Ministry of Tourism and Environmental Affairs. <u>https://www.cbd.int/doc/</u> world/sz/sz-nbsap-v2-en.pdf

Swaziland Environment Authority. (2016b). **The Kingdom of Swaziland National Climate Change Policy, 2016.** The Ministry of Tourism and Environmental Affairs. <u>https://info.undp.org/docs/</u> pdc/Documents/SWZ/Swaziland%20Climate%20 Change%20Policy%202016%20Final.pdf

Terton, A., & Greenwalt, J. (2021). Building resilience with nature: Maximizing ecosystem-based adaptation through National Adaptation Plan processes. International Institute for Sustainable Development. <u>https://napglobalnetwork.org/</u> wp-content/uploads/2021/01/napgn-en-2021guidance-note-building-resilience-with-naturemaximizing-eba-nap.pdf Terton, A., Ledwell, C., & Kumar, S. (2021). How Fiji is using the National Adaptation Plan (NAP) process to scale up ecosystem-based adaptation (EbA). International Institute for Sustainable Development. <u>https://napglobalnetwork.org/</u> wp-content/uploads/2021/06/napgn-en-2021snapshot-fiji-using-nap-to-scale-up-eba.pdf

United Nations Environment Assembly of the United Nations Environment Programme. (2022). **Resolution adopted by the United Nations Environment Assembly on 2 March 2022. 5/5. Nature-based solutions for supporting sustainable development.** https://wedocs.unep.org/ bitstream/handle/20.500.11822/39864/NATURE -BASED SOLUTIONS FOR SUPPORTING SUSTAINABLE DEVELOPMENT. English. pdf?sequence=1&isAllowed=y

United Nations Framework Convention on Climate Change. (n.d.). **Biodiversity.** <u>https://www4.unfccc.int/sites/NWPStaging/</u> <u>Pages/Biodiversity.aspx</u>

United Nations Framework Convention on Climate Change. (2011). **Decision 5/CP.17 National Adaptation Plans.** <u>https://unfccc.int/</u> <u>files/adaptation/cancun_adaptation_framework/</u> <u>national_adaptation_plans/application/pdf/</u> <u>decision_5_cp_17.pdf</u>

United Nations Framework Convention on Climate Change. (2012). National Adaptation Plans: Technical guidelines for the national adaptation plan process. Least Developed Countries Expert Group, United Nations Framework Convention on Climate Change. <u>https://</u> unfccc.int/files/adaptation/cancun_adaptation_ framework/application/pdf/naptechguidelines_ eng_high__res.pdf

United Nations Framework Convention on Climate Change. (2021). A scoping paper on knowledge gaps in integrating forest and grassland biodiversity and ecosystems into adaptation strategies. Nairobi Work Programme, United Nations Framework Convention on Climate Change. <u>https://unfccc.int/documents/309256</u>

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