PPIN
Promoting Pacific Islands Nature-based Solutions

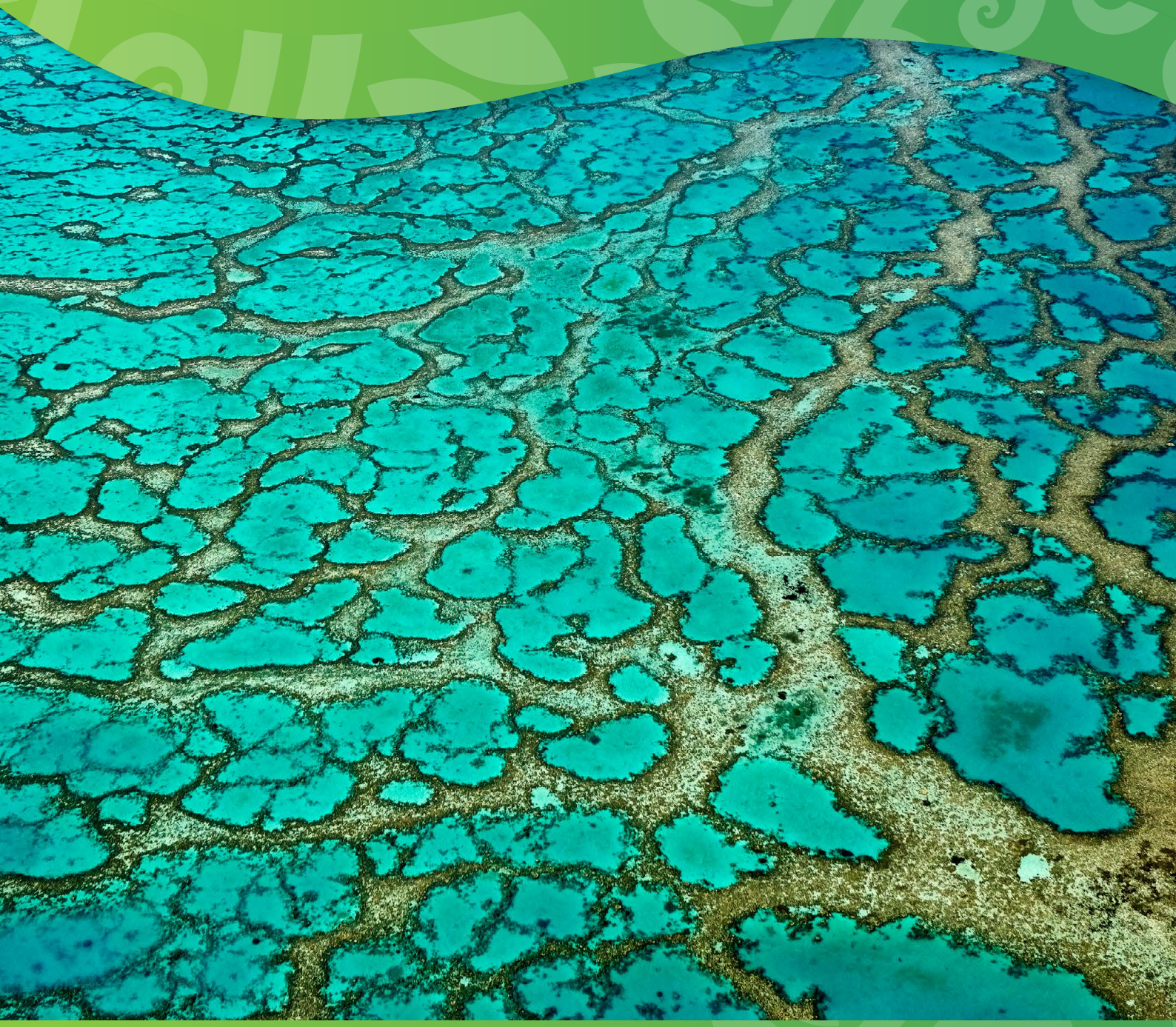
IUCN

Global Green Growth Institute

SPREP
Secretariat of the Pacific Regional Environment Programme

Global Green Growth Institute

NEW ZEALAND FOREIGN AFFAIRS & TRADE
Manatū Aorere



Guideline for the Integration of Nature-based Solutions into the Vanuatu National Adaptation Plan: Coastal Resilience and Forestry Sector

April 2026

SPREP Library Cataloguing-in-Publication Data

Guideline for the integration of nature-based solutions into the Vanuatu national adaptation plan: coastal resilience and forestry sector. Apia, Samoa : SPREP, 2026.

44 p. 29 cm.

ISBN: 978-982-04-1535-5 (print)
978-982-04-1536-2 (e-copy)

1. Natural resources – Management – Vanuatu.
2. Conservation of natural resources – Vanuatu.
3. Coastal zone management – Vanuatu
4. Forests and forestry – Government policy - Vanuatu
I. Pacific Regional Environment Programme (SPREP). II. Title.

333.7209595

Citation
Alluvium International Pty Ltd. (2026). Guideline for the Integration of Nature-based Solutions into the Vanuatu National Adaptation Plan: Coastal Resilience and Forestry Sector. Suva: SPREP.

Images
Front cover: Coral Reef Lagoon, Stuart Chape
All photos: Unless otherwise acknowledged, all photographs taken by Alluvium International Pty Ltd.

Disclaimer
This report was prepared by Alluvium International Pty Ltd for SPREP under the contract titled 'Mainstreaming of Nature-based Solutions in national policy frameworks' for the SPREP component of the PPIN Project

Acronyms

AFD	Agence Française de Développement
CCA	Climate Change Adaptation
CBFM	Community-Based Fisheries Management
CSO	Civil Society Organisation
DARD	Department of Agriculture and Rural Development (Vanuatu)
DEPC	Department of Environmental Protection and Conservation (Vanuatu)
DLA	Department of Local Authorities (Vanuatu)
DoCC	Department of Climate Change (Vanuatu)
DoF	Department of Forestry (Vanuatu)
DoWR	Department of Water Resources (Vanuatu)
DRR	Disaster Risk Reduction
DUAP	Department of Urban Affairs and Planning (Vanuatu)
EbA	Ecosystem-based Adaptation
EU	European Union
FAO	Food and Agriculture Organisation
FPIC	Free, Prior, and Informed Consent
GCF	Green Climate Fund
GEF	Global Environment Facility
GBF	Global Biodiversity Framework
GEDSI	Gender Equity, Disability and Social Inclusion
GIS	Geographic Information Systems
IWRM	Integrated Water Resources Management
IUCN	International Union for Conservation of Nature
LMMA	Locally Managed Marine Area
MEL	Monitoring, Evaluation, and Learning
MFAT	Ministry of Foreign Affairs and Trade (New Zealand)
MFEM	Ministry of Finance and Economic Management (Vanuatu)
NAP	National Adaptation Plan
NBSAP	National Biodiversity Strategy and Action Plan
NbS	Nature-based Solutions
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organisation
NUV	National University of Vanuatu
ODA	Official Development Assistance
PES	Payment for Ecosystem Services
PICTs	Pacific Island Countries and Territories
RESCCUE	Resilience to cope with Climate Change in Urban areas
SDG	Sustainable Development Goal
SPC	South Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Programme
TEK	Traditional Ecological Knowledge
UNFCCC	United Nations Framework Convention on Climate Change
VCM	Voluntary Carbon Market
VFD	Vanuatu Fisheries Department
WISH+	Watershed Interventions for Systems Health Plus
WWF	World Wide Fund for Nature

Contents

1.Introduction

1.1. Project rationale and context

The objective of this document is to produce practical, context-specific guidance that draws on global and regional best practices, while offering actionable recommendations tailored to Vanuatu's ecological, institutional, and cultural realities. This forms part of Vanuatu's broader effort to develop its first National Adaptation Plan (NAP), with a specific focus on integrating Nature-based Solutions (NbS) into the planning process.

This document contributes to two broader projects:

- The Promoting Pacific Islands Nature-based Solutions (PPIN) project, led by the International Union for Conservation of Nature (IUCN) in partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP), The Pacific Community (SPC) and the Global Green Growth Institute (GGGI), and supported by New Zealand's Ministry of Foreign Affairs and Trade through the Resilient Ecosystems for Climate Change Adaptation (RECCA) programme. Currently applying to Fiji, Tonga and Vanuatu, PPIN is a regional initiative aimed at strengthening policy, capacity, and cooperation around the use of NbS for climate adaptation across Pacific Island Countries and Territories.
- The development of Vanuatu's first NAP, led by the GGGI. PPIN seeks to embed NbS into national planning frameworks and directly supports this goal by developing a practical, context-specific guideline to inform the integration of NbS into Vanuatu's forthcoming NAP.

NbS are increasingly recognised as effective, sustainable approaches to climate adaptation. They involve the protection, restoration, and sustainable management of ecosystems to address societal challenges—such as climate resilience, disaster risk reduction, and food security—while delivering co-benefits for biodiversity and livelihoods. For example, mangrove restoration can reduce coastal erosion and storm surge impacts, while also supporting fisheries and carbon sequestration. These approaches are gaining traction globally as cost-effective, inclusive, and scalable solutions to climate risk. Importantly, NbS must provide a mix of environmental, social and economic benefits.

The IUCN defines NbS as "actions to address societal challenges through the protection, sustainable management and restoration of ecosystems, benefiting both biodiversity and human well-being" (IUCN 2026), providing benefits to society and the environment.

NAPs, developed under the UNFCCC[1] framework, are strategic instruments that help countries identify and address their medium- and long-term adaptation needs. They are designed to reduce vulnerability and build resilience across key sectors such as infrastructure, agriculture, natural resources and water management. Importantly, NAPs also serve as a mechanism for mobilising climate finance and coordinating adaptation efforts across government and society

For Small Island Developing States (SIDS) like Vanuatu, the NAP process is particularly urgent. SIDS face disproportionate risks from climate change, including sea-level rise, saltwater intrusion, coastal erosion, and increasingly severe tropical cyclones. These impacts threaten not only ecosystems and infrastructure but also food systems, water security, and cultural heritage. The integration of NbS into Vanuatu's NAP offers a pathway to address these challenges in a way that is locally grounded, ecologically sound, and socially inclusive.

This guidance document will complement the NAP development process by providing a clear, evidence-based roadmap for embedding NbS into the national adaptation framework. This includes identifying enabling conditions, institutional mechanisms, and sector-specific opportunities—particularly in areas such as coastal resilience and infrastructure. The document must be not only technically robust but also practical, accessible, and grounded in the realities of Vanuatu's governance systems, ecosystems, and communities.

[1] United Nations Framework Convention on Climate Change

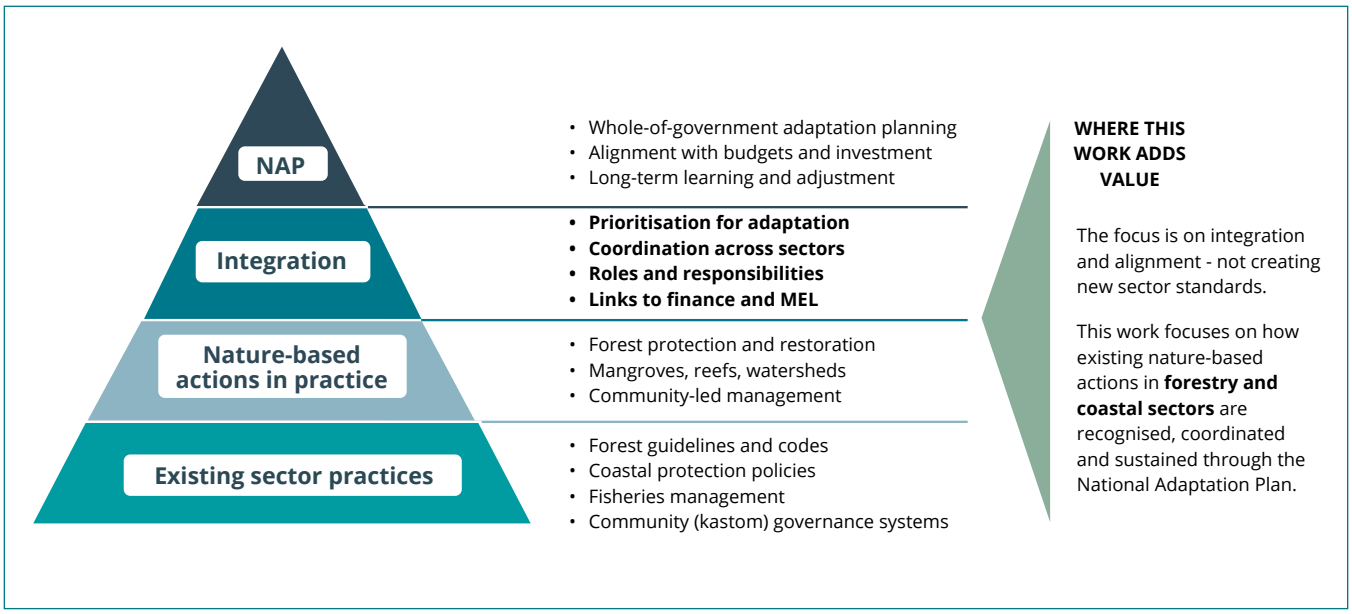


Figure 1. Where this project sits in the NAP process

This document focuses on the forestry and coastal resilience sectors, with the Agriculture, Water Resources and Urban sectors out of scope, noting cross-sector linkages.

1.2. Document objectives

- Provides actionable recommendations for Vanuatu's NAP, specifically addressing how NbS can enhance the resilience of coastal communities and environments and Forestry
- Be informed by regional and global best practice and Vanuatu stakeholder engagement
- Focus on coastal resilience and forestry sectors

1.3. How to use this guidance document

This document commences (Chapter 2) with a review of global and regional best practice which includes key documents, relevant NAPs and case studies. This chapter, and the following chapter (Chapter 3) discussing stakeholder engagement insights, provides the reader with a robust breadth and depth of background information.

Chapter 4 then synthesises all of this background information and insights to identify gaps and opportunities for the two sectors of interest: forestry and coastal resilience.

Project recommendations begin in Chapter 5, with a seven-point implementation pathway proposed. This stepped pathway provides clear guidance for both the recognition of existing NbS and the integration of new NbS initiatives into Vanuatu's NAP.

Chapter 6 provides four over-arching recommendations to provide the best of success for the pathway. These recommendations are themselves broken down into a series of actionable steps.

Refer to Chapter 7 for some final considerations on ensure that the implementation pathway and recommendations lead to effective, long-term outcomes.

2. Global and regional best practice

2.1. Nature-based Solutions

A number of documents were reviewed with a global or regional/Pacific focus, and these insights are documented here.

The SPC 2025 publication "**Promoting Nature-based Solutions in the Pacific: Key Insights and Recommendations**" explains that most Pacific NbS has a coastal, marine or forestry theme, which aligns well to the desire to prioritise the coastal and forestry sectors for this project. It should be noted that, while NbS in urban environments does not appear to be prevalent yet across the Pacific, NbS in this context may increase as the broad benefits of NbS continue to be promoted and understood.

Based on SPC 2025, key NbS recommendations are:

- Reflect ecological, social, economic and cultural characteristics and benefits
- Preserve core NbS criteria but allow for flexibility to tailor Vanuatu context
- Integrate scientific and indigenous knowledge
- Understand the role that "grey" elements can play as part of (hybrid) NbS solutions
- Support and promote regional knowledge sharing, find balance between aligning to global frameworks and regional/country-specific realities and nuances.

SPC 2025 – Key Points:

- NbS has the three pillars of social, ecological and cultural (if it is just nature/ecological it is not NbS),
- NbS needs to find balance between bigger picture (science, theory, global frameworks) and local/country context (indigenous knowledge, cultural considerations, locals know their own environment) with focus on participatory, community-led action to create locally-specific NbS supported by local capacity building – there is an "urgent need to equip local communities with the knowledge and skills to lead, implement, and manage NbS initiatives themselves". (SPC 2025 p9). Capacity building could take the form of a train the trainer program or participatory workshops on NbS including restoration techniques, principles and governance framework
- In-house proposal writing capacity could also be invested in
- There is potentially a place for "grey" elements as part of (and to help enable and/or boost the success of) NbS
- NbS may not always be the right solution
- Ecosystems are inherently linked
- Important to mainstream NbS into policies and institutional capacity – policy and institutional reform are enablers. Also need to ensure national policies are understood and accepted at lower levels of governance.

- It is critical to have a funding strategy and to demonstrate the investment potential of NbS to lock in funding and attract more – show investor returns and community benefits. Long-term financial security
- Blended finance (across philanthropy, public and private) enables access to broader funding options. Funding mechanisms include grants, philanthropy, loans, bonds and PES and other market-based approaches. The KIWA initiative is an example of a multi-donor approach. Official Development Assistance (ODA) is still the main source of funding
- Take a longer-term view of NbS and work towards longer funding timeframes so NbS can be fully implemented and monitored
- Need to reframe NbS from being a nice idea to being a fundamental climate adaptation solution
- Where possible, take a cross-sector approach to NbS implementation, with government agencies working together amongst themselves and with donors, funders and implementing organisations.
- There is potential for voluntary carbon and biodiversity markets, but it is largely untapped. Blue bonds (blue carbon) are also emerging, with Fiji as an example
- Important to address complex land tenure arrangements (seen as a key consideration for the recent SPREP MACBLUE project)
- Monitor NbS post-implementation and use data to tell a story - don't just approach monitoring and evaluation (M&E) as a tick box – link M&E to participatory approach. "M&E is the backbone of accountability and learning for NbS in the Pacific" (SPC p13)

The SPREP Pacific NAP Guidelines (2022) provide a regional blueprint. It emphasises three priorities that directly inform this strategy:

1. Strengthening institutional arrangements for vertical and horisontal integration
2. Enabling transformational adaptation that addresses root vulnerabilities
3. Securing predictable climate finance through bankable project pipelines

Furthermore, the 2050 Strategy for the Blue Pacific Continent (Pacific Islands Forum, 2022) articulates a vision of "a resilient Pacific Region of peace, harmony, security, social inclusion and prosperity."(p.6) NbS directly contributes to this vision by enhancing ecological security—the foundation of Pacific prosperity.

Youngs et al. (2022) highlight that the Kiwa Initiative and the Promoting Pacific Island Nature-based Solutions (PPIN) programme are currently the most influential regional mechanisms shaping both the application of, and investment in, NbS across the Pacific (p. 4). The authors identify several defining characteristics of Pacific NbS, including the region's high vulnerability to climate change, its identity as "large ocean states" with strong dependence on marine environments, the centrality of community governance systems, traditional knowledge and community-based management approaches, unique customary land and resource tenure arrangements, geographic remoteness, and generally limited government capacity (p. 4). Community-based approaches and traditional knowledge are emphasised as critical success factors for NbS and must be embedded from the project design phase, particularly for effective adaptation outcomes (p. 4). However, the paper also notes persistent funding and implementation barriers, including donor risk aversion, short funding timeframes that are incompatible with community-based management, insufficient resources for meaningful community engagement and incorporation of traditional knowledge, capacity constraints among government agencies and technical specialists, high logistical costs of operating in remote areas, and weak coordination between donors and governments (p.11). In terms of implementation experience, Youngs et al. reference regional initiatives such as the IUCN MACBIO project (2013–2018) (p. 18), note that mangrove and coral reef restoration and forest replanting are among the most common NbS interventions (p. 18), and highlight good practice examples including the RESCCUE project's development of a community monitoring toolkit (p. 22) and the Vanua Tai coral gardening initiative, which applies a locally managed marine area (LMMA) model (p. 24).

Effective NbS in the Pacific depends on strong community management arrangements, while also recognising that customary land tenure remains a significant challenge for implementation and scaling (p. 27). Although NbS inherently focus on natural systems, equal attention must be given to the social, political, economic and physical dimensions that shape outcomes in Pacific Island contexts (p. 27).

UNFCCC (2025b) explains that National Adaptation Plans should look across all sectors of society, not just the environment, but also the economy, health and social wellbeing, which fits well with the idea behind nature-based solutions of delivering multiple benefits at the same time (p. 27). It encourages countries to move faster in using ecosystem-based adaptation and nature-based solutions as practical ways to respond to climate change impacts (p. 36). In simple terms, this means identifying the ecosystems that people rely on most—such as forests, rivers, wetlands, reefs and mangroves—for services like flood protection, clean water and coastal protection, and then making these ecosystems a core part of adaptation planning in sectors such as agriculture, water, urban development and coastal management (p. 66). To work well, NbS need to be aligned with existing biodiversity and land-use policies, supported by climate finance, and tracked using simple indicators that show how ecosystems are improving and how this helps communities adapt over time (p. 66).

UNFCCC (2025b) finds that although nature-based solutions (NbS) and ecosystem-based adaptation (EbA) are increasingly recognised in National Adaptation Plans, only 68% of published NAPs mention them and just 48% clearly identify specific NbS actions, showing a gap between policy intent and implementation (p. 10). The report stresses that successful NbS depend on local and traditional knowledge, community acceptance, and the active role of communities and NGOs (pp. 12, 43, 64). Key NbS themes relevant to forestry and coastal resilience include forested watersheds for stormwater management, coastal ecosystems such as mangroves, reefs and seagrass for flood and storm-surge protection, and riparian and floodplain vegetation to reduce river flooding (p. 26). Case studies from Morondava in Madagascar, and Honiara in the Solomon Islands demonstrate how mangrove restoration and tree planting can reduce storm surge, saltwater intrusion, flooding and landslides, even where these actions are not formally embedded in NAPs (pp. 28–29). NbS are shown to deliver strong economic benefits, as they do not depreciate like grey infrastructure, are around 50% more cost- effective, and generate 28% more added value, making them attractive for NAP financing and private sector investment if benefits are clearly articulated (pp. 30, 59, 62). However, the report cautions that NbS have limitations and can be constrained by weak government coordination, tenure issues and fragmented governance, which hinder integration into planning processes (pp. 31–32). To address this, UNFCCC highlights pathways such as strengthening institutional capacity, improving vertical integration so locally implemented NbS are recognised at national NAP level, adopting a multi-hazard and multi-sector approach, clearly defining NbS actions for prioritisation, mobilising adequate finance, recognising co-benefits, and embedding monitoring systems to track effectiveness and avoid maladaptation (pp. 35–36, 41, 52, 55, 57, 64). Finally, it emphasises that showcasing proven NbS—particularly those reducing vulnerability in informal and high-risk communities—can support scaling up across regions and significantly strengthen national resilience outcomes (p. 67).

SPREP (2022) identifies three priority areas for strengthening climate adaptation planning in the Pacific: improving institutional arrangements to address coordination and capacity challenges, promoting transformational adaptation that goes beyond small, incremental actions, and securing sustainable climate finance from a wide range of sources, including national governments, regional institutions, and international public and private finance (p.3). The report emphasises that a well-designed and well-implemented National Adaptation Plan can play a critical role in attracting increased climate finance by clearly demonstrating priorities, readiness and long-term adaptation pathways (p. 3).

Vanuatu's efforts to integrate Nature-based Solutions into national adaptation planning are aligned with several global frameworks and international agreements that promote ecosystems-based approaches to climate resilience, biodiversity conservation and sustainable development. These are namely:

- The Convention on Biological Diversity (CBD)
- The Sendai Framework for Disaster Risk Reduction 2015-2030
- The Paris Agreement

- The 2030 Agenda for Sustainable Development
- The 2016 IUCN World Conservation Congress
- The NbS for Climate Manifesto
- The Global Assessment Report on Biodiversity and Ecosystem Services (IPBES, 2019)
- Kunming-Montreal Global Biodiversity Framework
- The IUCN Global Standard for NbS.

Collectively, these frameworks provide the global policy foundation supporting the integration of Nature-based solutions into national adaptation planning, ecosystem management and climate resilience strategies in Vanuatu.

The DEPC (2018) National Biodiversity Strategy and Action Plan (NBSAP) 2018-2030 recognises that Vanuatu's customary land and resource ownership systems are both a strength and a challenge for conservation, requiring careful and respectful engagement with traditional governance structures (p. 14). Mangroves are highlighted as highly valuable ecosystems that deliver multiple co-benefits, including nursery habitat for fisheries, coastal protection, tourism value, sediment trapping, wood resources, and carbon sequestration, similar to seagrass ecosystems (p. 18). The strategy stresses that meaningful consultation with communities is essential, as protected areas can empower communities when they build on local strengths, traditional governance and customary practices (p. 21). It also notes opportunities to better align national commitments, such as linking National Adaptation Plan (NAP) targets with biodiversity goals in the NBSAP, including targets related to the number and coverage of Community Conservation Areas (CCAs) (p. 22). Core principles of the NBSAP include strong community participation and ownership (Principle 1), adoption of ecosystem-based management approaches such as ridge-to-reef and integrated planning that recognises social, economic and cultural values (Principle 5), the role of protected areas (Principle 6), capacity and knowledge building (Principle 7), and ensuring long-term financial sustainability (Principle 8) (pp. 27–28). The NBSAP also promotes measuring success by incorporating ecosystem service values from forests, inland waters and marine systems into government accounting and reporting systems (pp. 68, 71), and notes that biodiversity planning is decentralised through the development of provincial NBSAPs (p. 107).

The Vanuatu National Sustainable Development Plan (NSDP) 2016-2030, also referred to as Vanuatu 2030: People's Plan, developed from extensive nation-wide consultation with government, public and private sectors and local communities, generally outlines the policy direction for the county's development. The Plan prioritises sustainable land, ocean and freshwater resource management, climate resilience and community-based adaptation actions, recognising that ecosystems and people are intrinsically linked in achieving long- term well-being of a nation. The approach taken seeks to shift from siloed planning and towards strategies that pursue environmental protection and preserving traditional knowledge and inclusive development, simultaneously. The three main pillars that support environmental protection, climate resilience and sustainable resource management, as well as strengthening governance and preservation of cultural heritage, are i) Environmental sustainability, ii) economic resilience and iii) social inclusion.

The Vanuatu Climate Change Adaptation Policy (2022-2030) complements the NSDP and is more sector-specific and emphasises intra-government collaboration and active community participation in climate planning and action. In particular, it highlights the importance of integrating traditional knowledge, equitable participation, community-led solutions to climate resilience.

The Environmental Protection and Conservation (EPC) Act (Cap 283) provides the legal foundation for environmental management, conservation and sustainable use of resources in Vanuatu. It also formally recognises community participation and community-led conservation practices through processes for registering Community Conservation Areas (CCA) and regulations for environmental impact assessments.

Lessons learned, challenges and success factors

The SPC (2025) Nature-based Solutions Report highlights that while NbS is gaining traction across the Pacific, significant gaps remain in how it is financed, understood, and operationalised within national planning processes. The report emphasises that funding from multiple sources is vital for NbS, raising an important question about the extent to which financing approaches should be clearly referenced and articulated within National Adaptation Plans (NAPs) to support implementation and sustainability (SPC, 2025, p.113). Across the region, countries continue to face key NbS challenges, including limited and short-term funding, inadequate human and institutional resourcing, weak networking and coordination, and difficulties in aligning global NbS frameworks with local and national contexts (SPC, 2025, p.118). These challenges are compounded by the fact that NAPs are often not well understood by stakeholders at the sub-national level, particularly those responsible for on- ground delivery, which undermines effective implementation (SPC, 2025, p.123).

Although many countries now refer to NbS in their NAPs, the report notes that "very few suggest more concretely how NbS should be featured in implementation," leaving a gap between policy intent and practical action (SPC, 2025, p.124). At the same time, the report points to opportunities to strengthen the case for NbS by demonstrating its investment potential through multiple and 'stacked' benefits, including ecological, social, and economic returns (SPC, 2025, p.137), and stresses that the concept of effectiveness should combine ecological, social and economic considerations, rather than focusing narrowly on environmental outcomes alone (SPC, 2025, p.139). Effective NbS delivery also depends on community-led monitoring, which enhances accountability, learning, and local ownership of outcomes (SPC, 2025, p.141). Overall, the SPC observes that NbS is increasingly being applied across the Pacific, with a strong focus on coastal and marine protection, climate resilience, and community-based conservation initiatives, signaling both growing momentum and the need for clearer guidance, resourcing, and institutional support to embed NbS fully within national systems such as NAPs (SPC, 2025, p.147).

Community Empowerment

Vanuatu's governance frameworks carry community empowerment, both in principle and in practice. The national policies, such as the NSDP, recognise that local indigenous communities, along with their traditional ecological knowledge, are crucial players in environmental stewardship and resilience planning. An example of such a project is the Vanuatu Community based Climate Resilience Project (VCCRP) which is facilitating resilience planning through community engagement workshops.

In September 2024, Vanuatu held a high-level strategic workshop in Port Vila, facilitated by the Secretariat of the Pacific Regional Environment Programme (SPREP), to align Ecosystem-based Adaptation (EbA) and Nature-based Solutions (NbS) approaches. The workshop brought together over 40 representatives from Vanuatu government ministries, NGOs, academic institutions, and regional and international agencies. The goal was to enhance understanding and integration of NbS/EbA into national development and climate resilience planning, ensuring environmental and socio-economic benefits for communities.

2.2. National Adaptation Plans

Insights gained from specific National Adaptation Plans are documented here. The following country National Adaptation Plans were reviewed:

Tonga

There is awareness of the detrimental impact of mangrove loss in the Tonga NAP. Biodiversity conservation is recognised as a particularly difficult challenge however NbS is not explicitly referred to. Objective 4 –4.1.1 -strengthen Tonga Coastal Resilience Project – does not specifically have NbS embedded. Section 4.1.5 – environmentally sensitive flood management responses does not directly spell out NbS. Target 8 – Ecosystem based approach to biodiversity conservation and cultural/historic sites (p.8) outlines management and conservation of nature and more SMAs in section 3.6.5, however NbS is not explicitly mentioned.

Fiji

P6 of Fiji's framework document indicates the promotion of EbA where appropriate (EbA is a subset of NbS) particularly referring to consideration of coastal planting in preference to hard infrastructure. EbA must be applied at landscape scale and integrated with community- based adaptation. Different timescales (presumably the implication is longer) also apply for EbA over social and political timescales. Also, "The relationship between natural resources (e.g. coral reefs and mangroves) and urban resilience needs to be taken into account." (P8). A no regrets options alludes to co-benefits (P9). NbS is not explicitly referred to but EbA is a significant component. Hemlock et al. 2023 stated that "Fiji's NAP is a rare case where NbS is included as a terminology for nature-based approaches to address climate change impacts."

Kiribati

UN-Habitat 2023 (pp.14-15) focuses on EbA for coastal resilience, including mangroves, coral reefs, beaches and agriculture-related with funding options including WB, GEF, GCF, the Adaptation Fund (p.15). The Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management (KJIP) 2019–2028, does not explicitly use the term Nature-based Solutions (NbS); however, a range of ecosystem-based and community-centred approaches are implicitly embedded across its strategies and actions. Sea level rise is identified as the most serious climate risk facing Kiribati, and while NbS is not directly referenced in the KJIP elements aligned with NbS are evident, particularly under Strategy 4, which focuses on "increasing water and food security with integrated and sector-specific approaches and promoting healthy and resilient ecosystems," and Strategy 6, which promotes sound and reliable infrastructure development and land management, although these strategies stop short of clearly articulating NbS as an implementation pathway (KJIP, p.72). The NAP highlights ecosystem-based adaptation for coastal resilience, including mangroves, coral reefs, beaches and agriculture-related systems, recognising their role in reducing coastal vulnerability (UN-Habitat, 2023, pp.14–15). It also identifies funding opportunities through international mechanisms such as the World Bank, the Global Environment Facility, the Green Climate Fund and the Adaptation Fund to support such approaches (UN-Habitat, 2023, p.15). Community-based fisheries management is referenced, particularly in the context of NGO-led initiatives (KJIP, p.106), alongside the importance of traditional knowledge in informing adaptation planning processes (p.120). Specific actions include increasing mangrove populations with community involvement (p.121), implementing community-based fisheries management approaches, including the use of "artificial" reefs and fisheries management plans (p.127), and incorporating community-based fisheries and mangrove management plans into marine spatial planning processes (p.140). The NAP also points to coastal management measures such as the restoration of mangroves and coral reefs (pp.140–141), the design of suitable retrofitting alternatives to strengthen high-risk coastal infrastructure—potentially incorporating NbS considerations—and the implementation of pilot projects for alternative coastal protection measures (pp.137, 143).

PNG

The PNG National Adaptation Plan establishes Ecosystem-based Adaptation (EbA) as a central strategy for managing coastal and terrestrial ecosystems, detailing specific actions for mangrove rehabilitation, coral replanting, and ridge-to-reef programmes aimed at biodiversity and livelihood co-benefits (Cross-cutting Area 5). However, a significant policy gap exists as this strong EbA framework is disconnected from the plan's core infrastructure response to coastal flooding and sea-level rise—the nation's top adaptation priority (p.35)— which instructs only the development of "coastal defense structures" (Strategic Action 2.2, p.39) without integrating the community-based mangrove planting (p.34) or other EbA measures already defined. This could present a critical opportunity to formally adopt the overarching "Nature-based Solutions" (NbS) terminology, PNG can strategically unify these strands, transforming the generic "coastal defense structures" directive into a mandate for hybrid grey-green infrastructure that leverages the country's own EbA expertise. This could therefore, deliver more sustainable, cost-effective, and holistic resilience against its most serious climate threats.

Timor Leste

Timor Leste has a highly progressive and integrated framework where Nature-based Solutions (NbS) are explicitly established as a core national strategy. This is most clearly articulated under Strategy 7, "Promote Ecosystem-Based Adaptation and Nature-Based Solutions," and is operationalised through specific actions like Action 4.3, which explicitly mentions NbS, and other related actions (4.1, 4.2, 4.4, 4.6) (UNDP, 2025a). The plan demonstrates strong progress by systematically integrating NbS and EbA across multiple adaptation priorities, linking them to enhancing ecosystem resilience (Priority 1), implementing concrete measures like peatland restoration and riparian forestry (p.49), and applying them to key economic sectors such as arable farming and animal husbandry—for example, through forest strips to combat erosion (Sector 5, Output 1).

Mongolia

Mongolia's National Adaptation Plan establishes a clear strategic foundation through Strategy 7: Promote Ecosystem-Based Adaptation and Nature-Based Solutions. This high-level commitment is operationalised across multiple adaptation priorities and targets. Specifically, Target 4, particularly Action 4.3, explicitly mentions NbS, supported by related actions 4.1, 4.2, 4.4, and 4.6. The integration of EbA/NbS is further detailed in Adaptation Priority 1 to enhance ecosystem resilience, which refers to Action 7, and extends to other priorities including Priority 2 (Action 10) and Priority 5 (Action 6). Concrete measures are identified, such as peatland restoration, riparian forestry, and agroforestry (p.49), with potential application in resilient cities. Additional sectoral integration is evident in Sector 1 (Ecosystems, Output 2, p87) and Sector 5 (Livestock and pasture, Output 1), while specific actions like 6.10 (Improve water retention capacity through groundwater recharge, soil conservation, and sustainable pasture management), 12.4 (Develop and implement integrated land use planning and management) , and 12.6 (Promote green financing and investment in sustainable environmental management and climate change adaptation) are also flagged as having potential NbS applications. Action 6.10 under the "Water" sector has clear NbS potential because it prescribes interventions like soil conservation and sustainable pasture management, which are foundational NbS approaches. It also mentions NbS for arable farming and animal husbandry and forest strips to combat erosion and enhance soil health.

Vanuatu

Vanuatu possesses a coherent policy foundation for NbS integration:

- The Climate Change and Disaster Risk Reduction Policy (2016-2030) explicitly identifies EbA as a priority area.
- The National Sustainable Development Plan (Vanuatu 2030) under the "Environmental Pillar" promotes sustainable management of natural resources.
- The National Biodiversity Strategy and Action Plan (NBSAP 2018-2030) outlines targets for ecosystem restoration and community-based management.
- The Vanuatu Forest Policy (2013-2023): Emphasises watershed protection and community forestry.
- National Water Policy (2017): Recognises the role of healthy catchments in water security.

Although there are existing policies, the main challenge is policy integration. Each document operates within ministerial silos, with limited mechanisms for coordinated implementation of NbS that inherently cross these boundaries. The proposed strategy specifically addresses this integration challenge.

Key Aspects of NbS in Vanuatu Legislation and Policy:

- Strengthening Nature-based Agriculture (2023-2025) is a 30-month project which targets improved land management, agroforestry expansion, and the introduction of Payment for Ecosystem Services (PES).
- SPREP Ecosystem-based Adaptation (EbA) notes that NbS in Vanuatu focuses on mangrove restoration, forest management, and agricultural biodiversity to tackle coastal erosion and food insecurity.
- National Forest Policy (2013-2023) encourages community-based forest management and sustainable, agroforestry-based, land-use planning.
- Environmental Protection and Conservation Act [CAP 283] provides legal backing for establishing Community Conservation Areas to protect natural resources.
- NDC Forest Investment Strategy: Outlines specific adaptation and mitigation targets for the forestry and agriculture sectors.
- Vanuatu Agriculture Sector Policy 2015-2030: Focuses on sustainable agriculture, food security, and resilience, promoting integrated approaches to land management.
- These policies are supported by initiatives from the Vanuatu Department of Agriculture and Rural Development (DARD) and other agencies, with a focus on empowering local communities and, particularly, women in farmer groups to scale up sustainable practices.

NbS in Vanuatu is also guided by international frameworks. The Paris Agreement (Article 7) mentions the "role of ecosystems in adaptation," while the Kunming-Montreal Global Biodiversity Framework (GBF) sets the ambitious "30x30" target to conserve 30% of land and sea by 2030. The United Nations Decade on Ecosystem Restoration (2021-2030) provides additional momentum. These frameworks require reporting on nature-positive adaptation actions and the same time providing access to dedicated funding streams, such as the Global Environment Facility's (GEF) Enhanced Direct Access modality that could support community-led NbS.

The critical gaps that have been identified:

1. Regulatory Gap: The Environmental Protection and Conservation Act lacks specific regulations for mangrove protection, creating legal ambiguity for conservation efforts.
2. Institutional Coordination Gap: No formal mechanism exists for the Climate Change, Fisheries, Forestry, Agriculture, and Planning departments to jointly implement ridge-to- reef NbS.
3. Financial Gap: Dependence on short-term (3-5 year) project grants incompatible with ecological recovery timelines (10-20 years for forest maturation).
4. Monitoring Gap: Community initiatives often lack systematic monitoring, making it difficult to demonstrate effectiveness for scaling or replication.
5. Knowledge Integration Gap: Traditional ecological knowledge is acknowledged but not systematically incorporated into project design or national policies and legal frameworks.

Lessons learned, challenges and success factors

Globally, NbS are increasingly recognised within NAPs as cost-effective, multi-benefit adaptation strategies. The SPREP Pacific NAP Guidelines emphasise a "process-based and flexible approach", encouraging integration of ecosystem-based adaptation (EbA) and community-led action. Within the region, Pacific Island Countries are advancing NbS through ridge- to-reef approaches, blue carbon initiatives, and community-based resource management which are all aligning with the Pacific Framework for Nature Conservation and the 2050 Strategy for the Blue Pacific Continent.

The National Adaptation Plan (NAP) process, established under the United Nations Framework Convention on Climate Change (UNFCCC), represents Vanuatu's strategic framework for addressing medium to long-term adaptation needs. However, past reports (SPC, 2025) reveal that while communities across Vanuatu have practiced nature-based approaches for generations—through tabu areas, traditional agroforestry systems, and watershed management —these practices are not systematically captured, supported, or scaled through national planning mechanisms. The SPC Report also highlighted that:

- The vitality of funding from multiple sources raises the question of how explicitly funding strategies should be outlined within National Adaptation Plans (NAPs) (SPC, p. 113).
- Key challenges for implementing Nature-based Solutions (NbS) in the Pacific include securing sustainable funding, adequate resourcing, effective networking, and aligning global frameworks with local contexts (SPC, p. 118).
- There is a gap in stakeholder comprehension, as National Adaptation Plans (NAPs) are often not well understood at the sub-national level (SPC, p. 123).
- While many countries include NbS in their NAPs, the SPC report notes that "very few suggest more concretely how NbS should be featured in implementation" (SPC, p. 124).
- The investment case for NbS can be strengthened by demonstrating their multiple, or "stacked," benefits across different sectors (SPC, p. 137).
- A comprehensive measure of NbS effectiveness must integrate ecological, social, and economic considerations (SPC, p. 139).
- Community-led monitoring is highlighted as a critical component for project sustainability and local ownership (SPC, p. 141).
- The application of NbS is growing, with a predominant emphasis on "coastal and marine protection, climate resilience, and community-based conservation initiatives" (SPC, p. 147).

What Works in the Pacific Context:

- Customary Land ownership is foundational - Successful NbS builds upon, rather than bypasses, customary land and sea tenure. The Kiwa Initiative's approach in Timor-Leste—using customary law to establish LMMAs—is a potential model for PICs.
- Women's Leadership - Across the region, women's groups often drive successful community resource management, for example, seaweed farming initiatives in Solomon Islands.
- Economic Diversification - sustainable livelihoods contribute to the success of NbS, for example eco-tourism in protected areas or non-timber forest product.

Recurring Challenges:

- A donor timeline versus an ecological timeline - Most climate finance operates on political cycles (3-5 years) while ecosystems require decades to recover.
- Technical Capacity Constraints - Limited local expertise in specialised areas like carbon measurement, hydrological modeling, or ecological engineering.
- Tenure Complexity: Overlapping and sometimes contested customary rights can delay or derail projects if not addressed through careful FPIC processes.
- Perception of "Soft" vs. "Hard" Solutions- Communities and decision-makers often perceive concrete infrastructure as more reliable than nature-based approaches, despite evidence of cost-effectiveness.

Lessons Learned:

- NbS works best when co-designed with communities and grounded in traditional knowledge.
- Long-term success depends on secure land tenure, clear governance, and sustained funding.
- Monitoring must be participatory and combine scientific and indigenous metrics. Challenges:
- Short project cycles compete with long ecological timelines.
- There is limited technical capacity for NbS design and monitoring.
- Accessing climate finance for NbS remains complex.

Success Factors:

- Strong community ownership and leadership
- Integration of NbS has been successful into existing sectoral policies (e.g., water, agriculture).
- Use of hybrid solutions where appropriate.

2.3. Case studies

Case studies from the region highlighting NbS Integration are presented below.

Case Study 1: Vanuatu

PEBACC+ and Tagabe River watershed restoration (Port Vila) demonstrates strong community engagement, but long-term monitoring remains under- resourced (SPC, p.102). There are also examples of incorporating traditional ecological knowledge into NbS frameworks for Vanuatu – Tambu (sacred) forests managed with customary tenure.

What was done

Community-led riparian reforestation and watershed rehabilitation in the Tagabe catchment to improve water security and reduce flood and sediment risks.

Why this matters for adaptation

- Reduces flood risk and sedimentation affecting Port Vila
- Improves water quality and reliability for urban water supply
- Demonstrates ridge-to-reef NbS linking forests, rivers and coastal systems

Why this is relevant to Vanuatu's NAP

- Shows how NbS already contribute to adaptation outcomes, even when not labelled as NbS
- Illustrates integration across water, forestry and urban planning
- Highlights the importance of long-term maintenance and monitoring

Lead implementing agencies and community partners:

- SPREP, Dept Forestry, DEPC, Northern Ward Mamas, Tagabe community
- Scale of intervention: 72 ha restored (32ha at Aku's farm, 39 ha of Unelco zone) length of river restored, removal of invasive species, water security

Case Study 2: Kiribati

Focused on water security through rainwater harvesting NbS, highlighting the need for maintenance capacity (Government of Kiribati 2019)

Case Study 3: Marshall Islands

Marshall Islands: Urban NbS in atoll contexts required blending traditional knowledge with engineered solutions (Republic of the Marshall Islands 2023).

Case Study 4: Fiji

Through the KIWA initiative, successfully integrated mangrove restoration and hybrid seawalls into local adaptation plans, though scaling requires longer funding cycles. (SPC 2025, p.91)

Case Study 5: Vanuatu

Reforestation and Coral Reef Restoration (Kiwa Initiative)

What was done

Mangrove restoration and coastal ecosystem management led by communities, supported by the Kiwa Initiative, including women's groups and traditional governance structures.

Why this matters for adaptation

- Mangroves reduce coastal erosion and storm surge impacts
- Support fisheries, livelihoods and food security
- Deliver climate, biodiversity and livelihood co-benefits

Why this is relevant to Vanuatu's NAP

- Illustrates NbS aligned with customary land and resource governance
- Demonstrates the importance of community leadership and FPIC
- Highlights opportunities for linking NbS to climate finance (e.g. blue carbon)

Managed by:
IUCN + Partners - LAMACCA, West Malekula

Training and Capacity Building (ESMS)

Case Study 6: Timor-Leste

NbS explicitly embedded as a national NAP strategy

What was done

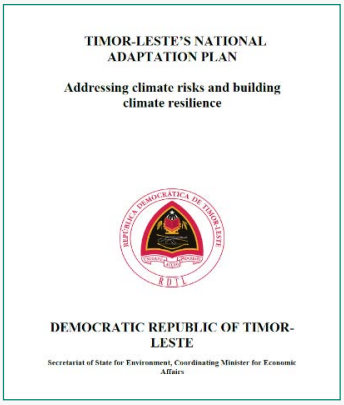
Timor-Leste's NAP explicitly establishes **Nature-based Solutions as a national adaptation strategy**, with concrete actions across forestry, watersheds, agriculture and coastal systems.

Why this matters for adaptation

- NbS is not implicit or optional — it is a **core strategy**
- Actions are linked to institutions, sectors and financing
- NbS framed as long-term resilience, not short-term projects

Why this is relevant to Vanuatu

- Shows what **"good integration"** looks like at policy level
- Useful comparator for where Vanuatu's NAP could land
- Demonstrates clarity that donors and financiers respond to


TIMOR-LESTE'S NATIONAL ADAPTATION PLAN

Addressing climate risks and building climate resilience

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

Secretariat of State for Environment, Coordinating Minister for Economic Affairs

Case Study 7: Fiji

Navua River Catchment and Bega Lagoon

What was done

Integrated Ecosystem Management Plan for the Navua River and Bega Lagoon in Fiji. Mapped socio-ecological resilience of communities in the catchment. Identified core values, threats and nature-based solutions to implement. Mangrove restoration and coral reef based coastal barriers.

Why this matters for adaptation

- NbS supported multiple values including habitat enhancement, coastal protection, economic protection
- Actions are linked to institutions, planning processes and financing
- NbS supports climate adaptation, protection of biodiversity and economic development

Why this is relevant to Vanuatu's NAP

- Illustrates what strong NbS integration looks like at community level
- Shows how NbS can be embedded without rewriting existing sector policies
- Treated NbS as critical infrastructure

Case Study 8: PNG

Community-based forest conservation linked to carbon markets faced challenges with land tenure clarity and benefit-sharing (Climate Change and Development Authority 2023).

Case Study 9: Vanuatu

Efate MACBLUE Local Management Approaches

What was done

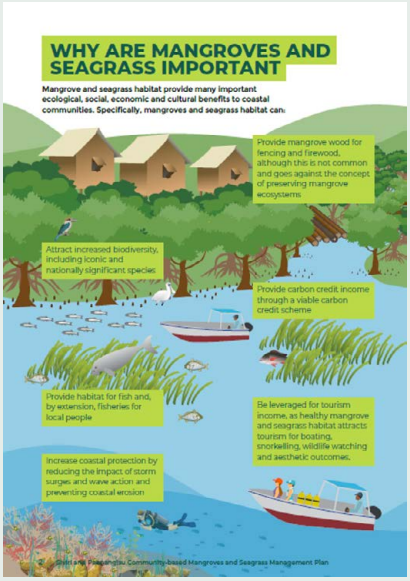
Sought to strengthen coastal biodiversity conservation and management through rehabilitation of mangroves and seagrasses. Required development of community-based mangrove management approaches in Undine Bay, Efate.

Why this matters for adaptation

- NbS supported multiple values including carbon sinks, storm surge protection, protection of fisheries
- Actions are linked to community governance and cultural processes
- NbS supports both climate adaptation, protection of biodiversity and economic development

Why this is relevant to Vanuatu's NAP

- Illustrates what strong NbS integration looks like at community level
- Shows how NbS can be embedded in community planning
- Identifies multiple benefits



Lead implementing agencies and community partners:

SPREP, Depts of Forestry, Fisheries, DEPC, Climate Change, Undine Bay communities

Scale of intervention: Undine Bay from Siviri to Paonangisu

Case Study 10

The NAPs of Australia, Mongolia and Sri Lanka: Show that NbS integration is strengthened by clear policy alignment, dedicated financing, and robust MEL frameworks.

Common themes amongst these case studies are community-based and locally led approaches, respecting traditional knowledge, supported by overarching governance to aid in resourcing, financing and transfer of knowledge. The ability to build in a longer-term monitoring regime remains a challenge.

3.Stakeholder informed insights

3.1. Stakeholder Engagement

Between September 2025 and February 2026, targeted consultations were conducted with representatives from:

- Government: Climate Change Department
- Vanuatu Fisheries Department
- Department of Forestry
- Department of Local Authorities
- Public Works Department*
- Department of Urban Affairs and Planning
- Customary Land Management Office*
- VANGO
- Civil Society: Vanuatu Green Environmental Network, Vanua Tai Environmental Network
- Regional Partners: SPREP, GGGI

Stakeholder insights summary

Department of Climate Change (DoCC): As the designated national authority, DoCC is the logical leader for NbS integration. However, capacity constraints and competing priorities limit their ability to drive cross-sectoral coordination. Recommendation: Establish a dedicated NbS unit within DoCC with mandate for inter-ministerial collaboration.

Vanuatu Fisheries Department: Manages critical coastal ecosystems but operates with limited integration into climate planning. Their community-based fisheries management programs are de facto NbS but not labeled or funded as adaptation measures. Marine Protected Areas are regulated under the Fisheries Act and govern the protection of marine ecosystems. One of the main challenges highlighted is the lack of coordination and coherence among the government departments on projects with similar objectives, resulting in duplication of efforts and fragmented knowledge databases.

Department of Forestry: Holds technical expertise in reforestation and watershed management but lacks resources for large-scale implementation. Their community forestry programs provide an existing platform for scaling NbS. NbS principles are not new and form the backbone of Vanuatu's traditional natural resource management systems. The main component highlighted in NbS that the Forestry sector seeks to support is community participation and strengthening the role of local traditional governance systems and custom ownership. The enabling tool for this is the Kastom Conservation Areas, where traditional owners of resources are supported to take the lead in managing their resources though the application of Kastom principles and by-laws.

Department of Local Authorities: Could play crucial role in connecting national policy to area councils and community governance structures. The DLA are not directly involved in NbS project implementation however, they are the crucial mediators between central government implementing agencies and the local communities at the project site. They provide the necessary tools and human resources for communication and take on the role of overseeing the continuation of the projects, through their local area councils and administration. A key issue identified is the need for more coordination and involvement of the provincial and area councils in management of NbS projects from the early conception stages right through to the end of project funding and beyond.

Traditional Governance (Chiefs, Customary Landowners): The true custodians of Vanuatu's ecosystems. Any NbS strategy must work through, not around, these structures. The Malvatumauri (National Council of Chiefs) should be formally engaged in NAP oversight.

DEPC reports the need for NbS to include livelihood components that seek to maintain or enhance the wellbeing of local communities when designing, developing and implementing NbS projects. A common occurrence during resource conservation projects in communities, is the lack of alternative income sources and incentives for the local communities to sustain livelihoods economically. If not managed well, this can create conflict and imbalance within community structures. Community Conservation Areas (CCAs) are a potential entry point for the integration of NbS and are also covered in the EPC Ac. They are intended to primarily empower local communities to take ownership of the management of their resources and access government support for enforcement and compliance. While there has already been 16 officially declared CCAs, some communities are hesitant to register as CCAs due to misunderstanding of the purpose and objectives of CCAs. There needs to be greater awareness of the purpose, role and process of CCAs and capacity to support communities on the ground is often a challenge. Another entry point for NbS is through EIA regulations under the EPC Act. PEAs undertaken by the government agencies can include an assessment of NbS principles applied or which need to be taken into consideration.

The Foreshore Development Act administered by the DUAP requires ministerial consent for any foreshore development. The processes for decision-making by the minister relies heavily upon the assessment and advice of the respective permitting authorities. This places responsibility on the authorities to strengthen regulations and explicitly mention and integrate NbS into relevant legislation and policy.

Key insights:

- NbS is not new—it is embedded in kastom and traditional practice.
- There needs to be more collaboration and cohesiveness in project implementation between government agencies
- There needs to be a greater involvement of the Provincial and Area councils in the design and implementation of NbS projects
- EPC regulations are currently in the progress of being updated. Mangrove protection is to be explicitly highlighted.
- Women and youth are key agents in NbS implementation but need greater inclusion in planning
- There must be a livelihood component in all NbS initiatives (e.g. alternative source of livelihoods where there are conservation areas and bans on fishing or harvesting)
- Cross sectoral collaboration needs to be strengthened
- Funding for NbS must be secured beyond project timeframes (i.e., for monitoring)
- Incentives must be developed to encourage community participation and sustainability of capacity to manage at community level.
- There is opportunity to strengthen CCA to increase community understanding, avoid confusion and buy-in. Kastom governance principles can be merged or implemented and formalised in EPC Act and regulations.

Stakeholder Validation Workshop

The validation workshop held on the 4th February 2026 in Port Vila gathered insights from various stakeholders on the gaps on the current NbS environment, risks and NAP priorities and coordination.

Figure 2. Stakeholder validation workshop

Figure 3. Stakeholder validation workshop

Overarching Themes:

The overarching themes recurring during stakeholder discussions included:

1. Traditional Knowledge as a Foundational Adaptation theme

NbS is already widely practiced but not labelled as such. Examples provided were marine conservation areas, forest conservation or kastom conservation (taboo areas), traditional calendars such as yam cycles, traditional food preservation systems, and river coastal buffer initiatives. A cross-cutting issue is that of Westernisation and urbanisation which is eroding traditional knowledge and its transfer. Hence the NAP must explicitly recognise customary and Traditional Ecological Knowledge (TEK) as a core asset and not an informal supplement. There is a need for formally recognising Vanuatu customary ownership and guardianship of foreshore areas in national legislation including traditional by-laws.

2. Governance Fragmentation and Policy Misalignment

The stakeholders consistently identified:

- Weak cross sector coordination (such as between climate, forestry, agriculture, land and infrastructure)
- There are many NbS 'guidelines' however objectives are inconsistent
- Policies are not harmonised with actual on-ground practice
- NbS are treated as add-ons rather than mainstreamed in sector budgets
- There are gaps in legal instruments (e.g., Foreshore development oversight)

The constraint is systemic and not technical, and integration failure is mainly institutional.

3. Customary Land Tenure as both asset and constraint

The issues that were raised highlighted that customary land ownership complicates scaling and land disputes often undermine implementation. In some cases, communities may not own the land they manage, the Tragedy of the commons often occur and is a concern and there is inequity in shared benefits. Hence, NbS implementation cannot be technocratic but rather it must be sensitive to land governance systems and may need to be socially negotiated.

4. Limited Technical and Institutional Capacity

The barriers that were identified include Limited NbS literacy at national and provincial levels, and awareness amongst communities is poor. There is also insufficient local data and evidence available, and gaps in capacity and language barriers. This means that guidance alone may not be sufficient but institutional strengthening needs to be embedded in the NAP design.

5. Gaps in Financing and Sustainability

There are often long and complex funding processes, NbS is delivered as short-term projects rather than long term programs and there is lack of funding for maintenance and monitoring. There are limitations in structural funding that are beyond NAP control. NbS must move from being project-based pilots to longer termed programmatic investment streams.

6. Risk Management and Safeguards Gaps

Risks highlighted in the discussions include impacts from and exposure to natural disasters (e.g., cyclones, earthquakes, floods). Duplication of similar NbS initiatives, lack of community-buy in and livelihood trade-offs, and poorly designed NbS are also risks. In order to integrate NbS, EIA alignment, safeguards and conflict-sensitive design must be included.

7. Need for stronger Provincial Council and Area Council Involvement

There is a need for Area Councils and Area Administrators to coordinate more with communities and government or donors. Often NGOs and projects by-pass the local governance structures. Provincial Development Plans need to be aligned and provincial officers can plan an important role as monitoring agents. Vertical integration is strengthened by effective NbS.

Strategic Recommendations

Several strategic recommendations were determined from the workshop feedback.

A. Institutional and Governance Reform

1. **Establish a Clear NbS Coordination Mechanism.** Currently there is none and the National Advisory Board does not play such a specific role. A national NbS coordination lead can be designated within the NAP governance structure. A cross-sector working group can be developed. Sector guidelines can be harmonised
2. **Clarify Roles across Levels.** Coordination with Provincial/ Area Councils is mandatory. Formalise the role of Area Administrator and Area Secretary in planning, monitoring and community consultation. Em bed NbS in development plans.

B. Legal and Policy Alignment

3. **Align NbS with Land and Foreshore governance.** Integrate NbS Criteria into development approvals under the Foreshore Act. Develop advisory mechanisms to assess whether proposed development could use NbS alternatives. Clarify benefit-sharing mechanisms under customary tenure.
4. **Mainstream NbS into Sector Plans and Budgets**
   NbS Screening is required in Forestry Plans, Coastal Resilience Planning, Agriculture strategies and public investment planning processes.

C. Financing Reform

5. **Shift from Project based to Programmatic NbS.** This provides a mechanism for longer and more sustainable funding.
6. **Strengthening Access to Funding.** Efficient pathways for access to funding must be established, clarified for different levels of the community and national and provincial levels, including management and

D. Customary Land and Social Safeguards

7. **Develop a Customary Land Engagement Protocol.** The participation of customary land owners is vital for all NbS design and implementation phases. Traditional protocols must be adhered to and included in project design phases.
8. **Embed Conflict-Sensitive Design.** Land and resource conflicts and risks must be assessed and mitigated.

E. Capacity and Knowledge Systems

9. **Recognise and formalise Traditional Knowledge.** Many of the community Traditional Ecological Knowledge (TEK) and by-laws pertaining to resources management must be properly documented and recognised formally under national legislation and to preserve TEK.
10. **Strengthen Provincial Capacity.** Communications, Planning, Coordination, Implementation, Monitoring and ongoing support must be coordinated through the Province hence capacity must be enhanced.

F. Data and Evidence Strengthening

11. **Build a National NbS Evidence Platform.** Allows NbS data, initiatives, gaps and opportunities, to be collected for the NbS iterative process

G. Risk Management and Safeguards

12. Strengthen EIA and Design Standards

H. Priority Sector Focus

13. Prioritise Forestry and Coastal Resilience

4. Gap and opportunity analysis

Gaps and constraints that have been highlighted include:

- Fragmented data and inconsistent baselines (ecosystem extent/condition, flood/erosion hotspots, sediment sources).
- Limited NbS design standards and O&M protocols for scale-up (e.g., riparian buffers, urban green-blue networks, hybrid coastal works).
- Financing: scarce O&M budgets; limited access paths to climate finance for community-implemented NbS.
- Institutional coordination challenges across environment, forestry, water, infrastructure and planning
- FPIC could be a barrier for some projects due to time and cost required (SPC, p.69)

These insights have been summarised in Table 1.

Table 1. Summary of enabling tools, gaps, barriers and potential entry points for NbS into NAP

Domain / System	Current NbS / EbS Initiatives & Enabling Tools	Primary Focus & Scope	Key Gaps & Constraints Identified	Opportunities & Potential NAP Entry Points
Watersheds & Freshwater	**PACRES – Tagabe Watershed:** Riparian reforestation, nursery expansion, catchment-wide re- habilitation supporting Port Vila water supply; strong community engagement	Ecosystem rehabilitation; water security; flood and sediment risk reduction	• Fragmented baseline data on ecosystem condition and sediment sources • Limited standardised riparian design and O&M protocols • Insufficient long-term O&M financing	• Establish national riparian buffer standards (widths by stream order, native species palettes) • Introduce "no net loss" rules in priority water supply catchments • Pilot Payment for Ecosystems Services (PES) mechanisms with utilities and tourism operators
Ecosystem-based Adaptation (EbA)	**PEBACC / PEBACC+:** Institutionalising EbA; expanding demonstration sites; mainstreaming EbA at national and sub-national levels	Policy integration; local demonstration; capacity building	• Inconsistent base- lines and MEL systems across sites • Limited pathways for scaling EbA beyond pilots • Coordination challenges across sectors	• Use PEBACC+ lessons to define NAP- aligned EbA/ NbS standards • Embed EbA into sectoral planning and investment screening • Develop a national NbS indicator set for MEL
Coastal & Blue Ecosystems	**MACBLUE**: National Blue Carbon Ecosystems Policy; community-based mangrove and seagrass management guidelines; blue carbon inventory, valuation, and capacity building	Coastal resilience; carbon sequestration; livelihoods; policy development	• Limited financing mechanisms for long-term management • Weak linkage between community governance and national MRV systems • Lack of clear guidance for hybrid grey–green solutions	• Establish a national coastal NbS "menu" by site type (reefs, lagoons, estuaries) • Expand community-based mangrove governance with benefit-sharing mechanisms • Link man- grove/seagrass management to blue carbon MRV and climate finance

Domain / System	Current NbS / EbS Initiatives & Enabling Tools	Primary Focus & Scope	Key Gaps & Constraints Identified	Opportunities & Potential NAP Entry Points
Infrastructure & Urban Systems	**Van KIRAP & Vanuatu Road Design Guide:** Climate-informed standards for resilient infrastructure; flood management planning (e.g. Sarakata); early warning systems; climate projections integrated into road engineering	Climate-resilient infrastructure; flood risk management	• NbS not yet fully operationalised within engineering standards • Limited guidance on urban green–blue infrastructure O&M • Institutional silos between infrastructure and environment sectors	• Integrate NbS explicitly into infrastructure design guidance (e.g. riparian buffers, wetlands, vegetated drains) • Develop urban green–blue corridor concepts for Port Vila and Luganville • Use NAP to mandate hybrid grey–green assessments for major works
Cross-cutting: Data, MEL & Knowledge	Existing project-level monitoring systems (PACRES, PEBACC, MAC- BLUE)	Project-based monitoring and learning	• Fragmented data and inconsistent indicators • Limited open-access data platforms	• Develop a national NbS MEL framework (eco- system condition, risk reduction, socio-economic co-benefits) • Establish open data systems linked to NAP reporting
Cross-cutting: Finance	Ad hoc project finance; limited community access to climate finance	Project implementation	• Scarce O&M budgets • Limited access to climate finance for community-led NbS	• Develop a blue carbon readiness package • Prepare a programmatic GCF concept ("Watershed to Reef Resilience") • Explore debt-for- nature swaps and blended finance
Cross-cutting: Capacity & Institutions	Training and capacity building embedded in projects (PEBACC, MAC-BLUE)	Human and institutional capacity	• Lack of standard NbS design tools • Limited professional training pathways	• Develop a national NbS design toolkit • Short courses for engineers, foresters, planners • Embed NbS into CPD and professional standards

4.1. Coastal resilience

SPC (2025) identify climate change, overfishing, pollution, invasive species, coastal erosion and sedimentation, unsustainable tourism, loss/degradation of traditional management systems and unsustainable coastal infrastructure as current threats to coastal ecosystems.

Gaps:

Gaps include addressing land tenure complications, governance coordination, establishment of a reliable funding stream or mechanism, access to technical expertise, Fragmented implementation of mangrove and coral restoration; limited community technical capacity; over-reliance on hard infrastructure.

Grey and Green grey infrastructure

While NbS is the preferred coastal resilience intervention wherever possible, it is recognised that there may sometimes be a case for the use of grey (e.g., hard sea walls) or green-grey (e.g., mangroves alongside breakwaters, reefs constructed from engineered materials) infrastructure options.

These interventions must be considered with caution and consideration of the following points:

- Grey and green-grey infrastructure do provide more immediate benefit but this benefit may not be sustainable in the long-term. For example, a sea wall may provide benefit as soon as constructed but over time the structure may break down, may negatively impact adjacent coastline, and may lose effectiveness over time as sea level rise or storm surge impacts increase.
- Grey and green-grey infrastructure does not provide the range of co-benefits (see Opportunities below) that NbS can provide.

Opportunities:

Coastal resilience opportunities include scaling community-led restoration using Kiwa and GCF funding; developing blue carbon projects and integrating mangroves into official DRR strategies. Examples of NbS projects (SPC 2025) include community led mangrove, reef and seagrass restoration projects, establishment of protected areas (LMMAs, CCAs, MPAs), hybrid coastal protection projects. Integrated coastal zone management and ridge to reef projects are cross sectoral initiatives that could link coastal to Forestry. All of these initiatives could be incorporated into the Vanuatu NAP.

Opportunities exist for integrating traditional governance methods, restoration capacity building, carbon market establishment and empowering communities generally, and specifically involving women and youth. There is considerable potential for mangroves and carbon sequestration, but blue carbon is currently not in the scope of many small island developing states mitigation plans (SPC 2025).

Resultant NbS benefits include enhanced food security through healthier marine ecosystems, biodiversity preservation, enhanced local livelihoods, engaged communities caring for their natural environments, climate adaptation and carbon sequestration (SPC 2025). Coastal carbon sequestration in particular is an emerging consideration for Vanuatu but is yet to gain momentum.

4.2. Forestry

Forestry NbS are intended to address challenges including soil erosion, deforestation, water quality and water access (SPC 2025).

Threats identified by SPC (2025) include climate change, invasive species, urbanisation, expansion of oil-palm, rubber, cocoa and coffee, customary land tenure and limited Technical Capacity and Financing for Scaling Community-Led Forest Restoration Projects.

Gaps:

Gaps to address include - as for coastal resilience - land tenure, governance coordination, funding access and reliability and technical expertise and capacity, as well as the challenge of balancing a long-term restoration outlook with the short-term livelihood needs for expanding agricultural land at the expense of forestry) of communities. Deforestation pressures from agriculture; invasive species; lack of reforestation skills; unclear carbon rights.

Opportunities:

Opportunities include - Agroforestry for food and climate resilience; community forest carbon projects; ridge-to-reef watershed restoration.

Examples of NbS projects include community led reforestation (with focus on ecosystems over timber production) and afforestation projects, forest conservation including protecting forests from logging and invasive species management. Cross sector links with Coastal include ridge to reef and integrated watershed management. Another cross-sectoral opportunity is the restoration of riparian corridors (SPC 2025).

The WISH+ (watershed interventions for systems health) project highlights interconnected sectors, watershed-scale, ridge to reef drainage network, "links between healthy ecosystems, climate resilience, and human well-being" (p.45).

There are opportunities for integrating traditional land management approaches to the forestry sector, setting up for emerging carbon markets and establishing long term income streams such as carbon credits, ecotourism and sustainable timber harvesting.

Benefits of forestry NbS have been identified by SPC (2025) as carbon sequestration, improved soil health, reduced erosion, conservation of biodiversity, flood regulation, enhanced water security and preservation of cultural practices.

Above all, the opportunity exists for mainstreaming of coastal resilience and forestry initiatives through inclusion in the NAP, leading to greater awareness of the importance of the sectors and raising the profile for funding opportunities.

4.3. Policy, institutional and financing landscape

Gaps:

NbS is not explicitly mainstreamed in all sector policies; financing is project-based, not programmatic; weak monitoring, evaluation and learning (MEL) systems.

Opportunities:

Align NbS with Vanuatu's Climate Change Policy; develop an NbS financing strategy; build government capacity in NbS project development. SPC (2025) broadly categorises NbS as protect, restore, create or manage with manage as overarching across the other three (P51). Potentially the REDD+ initiatives could be incorporated into the NAP. There is funding history for coastal resilience to combat SLR (2014-18) – combination of Govt (DEPC and MNLR), UNDP and GEF – LDC Fund. This was a USD$42m project, with 8m granted from GEF LDCF and the rest co-contributed from Vanuatu Govt (11.1m in-kind), Province and communities (2m in-kind), UNDP (2.5m in kind), AusAID (18.4m grant), Japan Aid (300,000 grant) and Vanuatu Association of NGOs (194,000 in-kind) (UNDP (2025b).

Current Vanuatu NbS / EbS-related initiatives and enabling tools include:

1. **PACRES**: Tagabe watershed: The initiative covers the riparian reforestation and nursery expansion across the Tagabe catchment serving Port Vila's water supply and involves community engagement and ecosystem rehabilitation.
2. **PEBACC/PEBACC+:** Involves institutionalising EbA, expanding demonstration sites and mainstreaming at national/local level.
3. **MACBLUE:** Aims to develop the National Blue Carbon Ecosystems Policy and community-based mangrove/seagrass management guidelines using Siviri and Paunagisu as pilot LMA sites. It also aims to build the blue-carbon inventory, valuation and capacity.
4. **Van-KIRAP & Vanuatu Road Design Guide:** This initiative aims to develop climate-informed standards for resilient infrastructure, flood management planning (e.g., Sarakata), early warning systems and climate projections integration into road engineering guidance.

5. Integration framework

Roadmap for integrating NbS into Vanuatu's NAP

This proposed integration framework is centred around five foundational principles that seek to reflect regional best practice and guidelines provided by SPC (SPC, 2025) and Vanuatu's unique context:

1. Kastom-Centered: Traditional knowledge and customary governance are not inputs but the foundation of design and implementation.
2. Ridge-to-Reef Integration: Recognising the hydrological and ecological connectivity from mountain tops to coral reefs, addressing whole systems rather than symptoms.
3. Multiple Benefits Maximisation: Every intervention must deliver across climate adaptation, biodiversity conservation, livelihood enhancement, and cultural preservation.
4. Intergenerational Equity: Designing for long-term ecological recovery and community stewardship beyond project cycles.
5. Inclusive Co-Design: Ensuring women, youth, persons with disabilities, and marginalised groups lead rather than merely participate.

The framework proposes a seven-point implementation pathway (Error! Reference source not found.) that begins with recognising existing NbS actions within current plans, prioritising coastal and forestry sectors for immediate action. It establishes clear institutional leadership, articulates co- benefits, embeds community-led implementation and links to protected area expansion, as well as secures diversified funding. This approach aligns with SPREP's Pacific NAP Guidelines (2022) and leverages successful regional models like the Kiwa Initiative's customary law-based LMMA approach, as carried out in Tanna.

Implementation requires establishing a cross-sectoral NbS Working Group under the National Advisory Board on Climate Change, developing specific regulatory instruments for mangrove protection, creating an investment-ready project pipeline for blue carbon and ecosystem service payments, and building inclusive capacity through programs that integrate Gender Equity, Disability and Social Inclusion (GEDSI) principles with traditional knowledge.

It is important to note that the NbS integration into the NAP is an iterative process as climate risks, ecosystem conditions, institutional capacities and data availability in Vanuatu are continuously evolving, and this requires regular review, learning and adjustment to ensure that NbS remain locally relevant, evidence-based and effectively aligned with national adaptation priorities and community needs.

To ensure NbS is systematically embedded into Vanuatu's NAP, the following implementation pathway is proposed, addressing governance, identification, design, and funding.

1. Identify existing NbS in the NAP

Review current NAP and sectoral plans for actions that are de facto NbS but not labeled as such (e.g., watershed management, community-based fisheries, traditional agroforestry). Formalise these as NbS to enhance visibility, monitoring, and access to NbS-specific funding.

2. Prioritise forestry and coastal NbS initially

Begin with mangrove restoration, ridge-to-reef forest conservation, and agroforestry as these are well-understood, have strong community buy-in, and attract donor interest (e.g., Kiwa Initiative, blue carbon). Use early successes to build momentum for NbS in other sectors (urban, water, agriculture).

3. Identify lead government agencies

For Coastal NbS: Department of Fisheries & Marine Resources, in partnership with Climate Change Department.
For Forestry NbS: Department of Forestry, supported by Department of Agriculture.
Cross-sector coordination: Climate Change Department to chair an inter-ministerial NbS NAP Working Group.

4. Articulate co-benefits for broader appeal

Each NbS initiative should clearly communicate benefits beyond adaptation:

Coastal mangroves: Storm protection + fisheries enhancement + carbon storage.

Forest restoration: Landslide prevention + water security + livelihood diversification.

Align with SDGs, biodiversity targets (GBF), and national development goals.

5. Commit to community-led implementation

Apply Free, Prior, and Informed Consent (FPIC) in all NbS planning.

Integrate traditional ecological knowledge into project design and monitoring.

Build local capacity for long-term stewardship through Train the Trainer programmes.

6. Link protected area expansion to NbS

Align NbS with Vanuatu's commitments under the Global Biodiversity Framework (30x30). Support community-managed protected areas (LMMAs, community forests) as core NbS strategies that deliver adaptation, conservation, and livelihood benefits.

7. Identify dedicated funding options

Short-term: Kiwa Initiative, GCF Readiness, bilateral donors (DFAT, MFAT, AFD, EU).

Medium-term: Blue carbon credits, voluntary carbon markets (VCM), payment for ecosystem services (PES).

Long-term: National climate fund allocations, sovereign blue/green bonds.

Implementation Pathway for Coastal Resilience Sector

Integration step	Sector-specific application
1. Identify existing NbS in the NAP	Look for initiatives including community-based fisheries, mangrove and seagrass restoration projects
2. Prioritise forestry and coastal NbS initially	Begin with mangrove restoration where suitable
3. Identify lead government agencies	For Coastal NbS: Department of Fisheries & Marine Resources, in partnership with Climate Change Department
4. Articulate co-benefits for broader appeal	For example, Coastal mangroves: Storm protection + fisheries enhancement + carbon storage
5. Commit to community-led implementation	Apply Free, Prior, and Informed Consent (FPIC) in all NbS planning. Integrate traditional ecological knowledge into project design and monitoring. Build local capacity for long-term stewardship through Train the Trainer programmes
6. Link protected area expansion to NbS	Marine protected areas, locally managed marine areas, community conservation areas
7. Identify dedicated funding options	Short-term: Kiwa Initiative, GCF Readiness, bilateral donors (DFAT, MFAT, AFD, EU). Medium-term: Blue carbon credits, voluntary carbon markets (VCM), payment for ecosystem services (PES). Long-term: National climate fund allocations, sovereign blue/green bonds.

Implementation Pathway for Forestry Sector

Integration step	Sector-specific application
1. Identify existing NbS in the NAP	Look for initiatives including catchment to coast/watershed scale projects and traditional agroforestry.
2. Prioritise forestry and coastal NbS initially	Begin with ridge-to-reef forest conservation, and agroforestry
3. Identify lead government agencies	For Forestry NbS: Department of Forestry, supported by Department of Agriculture
4. Articulate co-benefits for broader appeal	For example, Forest restoration: Landslide prevention + water security + livelihood diversification
5. Commit to community-led implementation	Apply Free, Prior, and Informed Consent (FPIC) in all NbS planning. Integrate traditional ecological knowledge into project design and monitoring. Build local capacity for long-term stewardship through Train the Trainer programmes
6. Link protected area expansion to NbS	Community forests, conservation parks, national parks
7. Identify dedicated funding options	Short-term: Kiwa Initiative, GCF Readiness, bilateral donors (DFAT, MFAT, AFD, EU). Medium-term: forest carbon credits, voluntary carbon markets (VCM), payment for ecosystem services (PES). Long-term: National climate fund allocations, sovereign blue/green bonds.

Table 2. Implementation Pathway

NAP Integration Step	Strategic Objective	Key Action	Method / Approach	Expected Output	Institutional Lead & Support	Co-benefits Highlighted	Relevance to NAP Implementation	Key Funding Options
1. Identify and formalise existing NbS actions	Establish a clear baseline of NbS already contributing to adaptation	Conduct a comprehensive audit of NAP actions, sector plans, and community initiatives	Participatory community mapping combined with national and sector policy analysis	Vanuatu NbS Portfolio data- base linked to the NAP monitoring and tracking system	Lead: Climate Change Department (CCD) Support: SPREP	Increases visibility and alignment with NbS finance	Strengthens NAP coherence by recognising existing NbS, avoiding duplication, and enabling systematic tracking of adaptation actions	GCF, GEF
2. Prioritise coastal and forestry NbS for immediate action	Focus limited re- sources on high-impact NbS adaptation investments	Select 3–5 priority geographies (e.g. Port Vila water-sheds, South Santo coastlines)	Multi-criteria analysis in-corporating climate vulnerability, biodiversity value, community readiness, and economic potential	Prioritised NbS investment pipeline for submission to Kiwa Initiative and GCF	Lead: Inter-ministerial selection committee Support: Community representatives	Coastal protection, food security, carbon sinks	Translates NAP priorities into bankable, place-based NbS in-vestments aligned with national adaptation risks	Kiwa, Blue Carbon
3. Clarify institutional roles and coordination mechanisms	Improve governance and reduce fragmentation in NbS delivery	Establish formal mandates through revised departmental Terms of Reference	Facilitated negotiation process leading to signed MoUs between CCD, Fisheries, Forestry, Agriculture, and Planning	Clear division of roles and a joint ridge-to- reef NbS work-plan	Lead: Office of the Prime Minister	Ensures accountability and cross-government buy-in	Enhances institutional effectiveness and ensures NbS are implemented as integrated NAP actions rather than isolated sector projects	GCF Readiness
4. Articulate and quantify NbS co-benefits	Strengthen the economic and political case for NbS in adaptation planning	Develop a standardised methodology for valuing ecosystem services	Adapt tools (e.g. TESSA, Invest) using local parameters and traditional valuation approaches	NbS Investment Case documenting economic, social, and cultural co-benefits	Lead: Ministry of Finance Support: DoCC, NUV, SPC	Broadens political and donor appeal	Supports NAP financing, decision-making, and strategic communication by demonstrating NbS value beyond climate risk reduction	Multilateral donors, Impact investors

NAP Integration Step	Strategic Objective	Key Action	Method / Approach	Expected Output	Institutional Lead & Support	Co-benefits Highlighted	Relevance to NAP Implementation	Key Funding Options
5. Embed community-led design and implementation	Ensure NbS actions are locally appropriate, equitable, and sustainable	Develop and mandate a Community NbS Protocol based on FPIC principles	Co-design with customary leaders, women's groups, and youth representatives	Government-endorsed Community NbS Protocol required for all public and donor NbS projects	Lead: Malvatumauri Support: DLA	Enhances ownership, sustainability, and cultural relevance	Operationalises NAP principles on inclusive, community-driven adaptation and strengthens local ownership	Community grants, Kiwa
6. Link NbS to protected area expansion and global targets	Align climate adaptation with biodiversity commitments	Align new community conservation areas with climate adaptation priorities	Spatial overlay of climate vulnerability maps and biodiversity priority areas	Climate-Smart Protected Area Network expansion strategy contributing to 30×30 targets	Lead: Biodiversity Department Support: IUCN	Strengthens conservation-climate synergy	Integrates NAP implementation with NBSAP and global biodiversity targets, reinforcing ridge-to-reef resilience	GEF, Bio-diversity credits
7. Secure diversified and sustainable financing	Ensure long- term financing for community-led NbS adaptation	Establish a blended finance facility for NbS	Combine Kiwa grants, concessional loans, and private sector contributions	Vanuatu Community Conservation Fund with a 10-year USD 20 million endowment target	Lead: Ministry of Finance Support: Reserve Bank of Vanuatu, development partners	Unlocks private and results- based finance	Anchors NbS as a sustainable, financeable pillar of NAP implementation rather than short-term project activity	VCM, Blue Bonds, GCF

6. Context specific recommendations

Policy, institutional and financing landscape

It is recommended that Vanuatu adopts a whole-of-government, ridge-to-reef approach to NbS, ensuring cross-ministerial coordination and clear community ownership. Key overarching recommendations are:

Recommendation 1

Strengthen NbS Governance and Policy Alignment (Governance and Policy)

Establish a cross-sectoral NbS Working Group, chaired by the Department of Climate Change, under the National Advisory Board on Climate Change to align NbS with the NAP, NBSAP, and DRR plans. This group should i) Develop formal guidelines for ecosystem-based forest and coastal management ii) Advocate for specific regulatory updates, such as mangrove protections under the EPC Act iii) Run cross-sectoral policy workshops to ensure NbS is embedded in economic, health, and social policies (UNFCCC, 2025b).

NAP linkage: Working group coordinates NbS alignment across government departments

Priority sectors: forestry, marine/coastal, infrastructure, agriculture, tourism, and water management

Lead Agency: DoCC

Other key stakeholders: DoF, DEPC, DUAP, DARD, VFD, DoWR

Timeframe: 6-12 months

Alignment with existing sector policies and frameworks: IUCN Global Standard for NbS, National Biodiversity Strategy and Action Plan (NBSAP), UN SDGs, National Advisory Board on Climate Change

Potential financing sources: government funded working group participation

Metric: working group member representation across government

Step 1: Develop TOR and establish working group membership (short-term)

- DoCC develop TOR
- reach out to other key stakeholders
- schedule first meeting

Step 2: Develop formal guidelines for ecosystem-based forest and coastal management (medium-term)

- using working group expertise, case studies, project insights and further engagement
- review regulations and advocate for regulatory updates in line with NbS priorities

Step 3: Establish a program for cross-sectoral policy workshops (medium term)

- review current sector policies
- revise policies to embed and mainstream NbS, to facilitate better integration into NAP

Recommendation 2

Secure Long-Term NbS Financing & Capacity

Financing

Develop a Vanuatu NbS Finance Strategy to transition from short-term grants to sustainable investment and to access GCF, Kiwa, and blue carbon markets. This could include building a pipeline of profitable projects with strong economic valuation (e.g blue carbon, PES).

Use existing platforms (leveraging on regional platforms such as Kiwa, PEBACC+) for piloting to avoid duplication and apply proven methodologies. Advocate for 10+ year funding commitments from partners to align with ecosystem recovery and community capacity-building cycles.

NAP linkage: more reliable funding for NbS will assist NAP actions to be realised

Priority sectors: forestry, marine/coastal, infrastructure, tourism

Lead Agency: Ministry of Finance and Economic Management (MFEM)

Other key stakeholders: DoF, DEPC, DUAP, DARD, VFD, DoWR

Timeframe: 1-2 years

Alignment with existing sector policies and frameworks: regional platforms including Kiwa, PEBACC+, blue carbon frameworks, GCF

Potential financing sources: international and local NGOs, international government and aid organisation grants

Metric: finance strategy developed, emerging trend of longer-term project funding, economic valuation undertaken on all projects, pilot element built into all projects to demonstrate small-scale effectiveness.

Step 1: Develop TOR and establish working group membership (short-term)

- MFEM leads the development of the Finance Strategy
- Map the current NbS / EbA financing flows, gaps and opportunities
- Identify priority sectors and define investment criteria for NbS projects
- Develop a national pipeline of bankable NbS projects (including economic valuation and climate rationale)
- Engage key stakeholders and partners (government, NGOs and regional platforms)

Step 2: Pilot and Operationalise NbS Financing Mechanisms (medium term)

- Use existing platforms (e.g. PEBACC+, KIWA) to pilot NbS financing approaches
- Package and submit funding proposals to major climate finance sources (e.g. GCF)
- Establish a national financing mechanism
- Develop enabling frameworks for blue carbon ecosystems service payment. This can include benefit sharing arrangements
- Integrate NbS into sector planning and budgeting processes

Step 3: Scale and institutionalise long-term NbS Financing (long-term)

- Secure long-term financing commitments aligned with ecosystem recovery timelines
- Nationally scale successful NbS financing models (carbon markets, PES, blended financing)
- Mainstream NbS into national development planning and public investment systems
- Establish a national system to track NbS finance flows and investment outcomes
- Strengthen national capacity to transition towards government-led and self-sustaining NbS financing systems

Recommendation 3

Invest in robust MEL systems and Capacity Building

Capacity and inclusion

Invest in training for government, NGOs, and communities in NbS design, carbon project development, and participatory MEL. Provide technical assistance for digitalising community conservation (CCA, LMMA and Kastom conservation) registries. Integrate ecological and socio-economic indicators into national MEL systems to track NbS effectiveness and avoid maladaptation (UNFCCC, 2025b). Establish a regional knowledge hub to share scalable case studies. Implementing inclusive capacity programs that integrate GEDSI awareness and train communities in using monitoring toolkits (e.g., RESCUE model) for long-term stewardship.

NAP linkage: aligns to attracting more long-term financing (Recommendation 2) to enable the long-term success of NbS to be realised. Positions NAP for the reality that NbS initiatives take time to reach maturity.

Priority sectors: forestry, fisheries/marine, water management, education

Lead Agency: DEPC

Other key stakeholders: DoCC, VFD, DoF, DLA, Education departments

Timeframe: ongoing

Alignment with existing sector policies and frameworks: NBSAP, NAP MEL Frameworks, Regional EbA/NbS Learning platforms such as PEBACC+

Potential financing sources: donor-funded capacity building programmes, regional initiatives (e.g. SPREP), climate finance readiness support programmes (e.g. GCF)

Metric: MEL template and toolkit for NbS activities is developed, regional knowledge hub established.

Step 1: Develop NbS MEL Framework (short term)

- DEPC lead development of a national NbS MEL Framework, or work with DoCC, DoF and VFD to integrate NbS MEL into existing NAP MEL framework
- Agree on a set of key indicators that can be applied across forestry, fisheries, water and coastal programmes (e.g. ecosystem condition and function, livelihood benefits, climate resilience outcomes, community participation, etc.)
- Tailor and simplify monitoring templates and tools so they can be used by both government and communities
- Deliver specific training on how to incorporate NbS indicators into reporting as well as participatory monitoring approaches such as LMMAs, CCAs, kastom conservation practices
- Identify priority CCAs where monitoring practices can be strengthened and documented)

Step 2: Pilot MEL and strengthen capacity at scale (medium term)

- Apply NbS indicators within ongoing programmes under Forestry, Fisheries, DEPC, DoWR and DoCC and integrate them into regular reporting processes
- Strengthen and standardise community reporting
- Progressively digitise existing records while sharing lessons from platforms such as PEBACC+

Step 3: Institutionalise MEL systems and sustain long-term capacity (long term)

- Embed NbS into National sector systems
- Use data to inform planning and financing
- Strengthen coordination across government agencies
- Build capacity for long-term government to sustain monitoring and NbS implementation

Recommendation 4

Pilot integrated Ridge to Reef Sites as protected areas

Implementation

Links local action to national/global conservation targets (30x30) and ensures vertical integration. There are past and present initiatives and projects that can be used as templates or lessons for further action and improvement of outcomes.

NAP linkage: Links to Recommendations 2 and 3, building in pilots to projects ensures outcomes can be evaluated at small-scale before scaling up. Gives more certainty in NAP that large-scale initiatives are backed by robust assessment.

Priority sectors: Forestry, Fisheries/Marine, agriculture, tourism

Lead Agency: DEPC

Other key stakeholders: VFD, DoF, DUAP, DoCC

Timeframe: 2-5 years

Alignment with existing sector policies and frameworks: NBSAP, NAP, National Oceans Policy, Forestry Policy, Fisheries Act, Convention on Biological Diversity (30X30 targets)

Potential financing sources: Government budget, GCF, Regional Programmes, Donor funded projects and NGOs, blended finance mechanisms

Metric: Number of pilot sites identified, implemented and evaluated

Step 1: Identify and select priority ridge-to-reef sites using existing conservation areas and ongoing programmes (short term)

- align sites with national frameworks (NAP, NBSAP, NSDP targets)
- Engage provincial governments and communities to confirm site boundaries, government arrangements and management objectives

Step 2: Implement ridge-to-reef management across selected sites by coordinating forestry, fisheries, agriculture, and coastal activities (medium term)

- strengthening existing community-based systems (LMMA, CCA, Kastom practices)
- applying NbS approaches while monitoring outcomes using existing MEL systems and sharing lessons through platforms such as PEBACC+

Step 3: Evaluate pilot site outcomes and use lessons learned to scale up ridge-to-reef approaches nationally (long term)

- formally integrate sites into protected area networks and sector planning
- secure long-term support through alignment with national priorities and financing mechanisms

Table 3. Summary of recommendations

Recommendation	Description	Sector impact	Potential barriers	Values/ Benefits / Opportunities	Responsibility	Timeframe
Governance & Policy	Establish NbS Working Group; develop regulations & guidelines. Develop a Vanuatu-specific NbS framework—adapting the IUCN Standard to reflect Pacific values, customary land tenure, and local ecological knowledge. Mainstream NbS into sectoral policies—especially in infrastructure, agriculture, tourism, and water management, with clear guidelines for developers.	Infrastructure, agriculture, tourism, and water management	Poor communication and coordination; lack of clear leadership; conflicting priorities across sectors; limited institutional capacity to implement and enforce policies.	Addresses institutional coordination gap and regulatory weaknesses (e.g., mangrove laws). Improve integrated governance—foster inter-ministerial committees (Climate Change, Agriculture, Lands, Infrastructure) to coordinate NbS implementation.	DoF, DoCC, DEPC, DUAP, DARD, VFD, DoWR	6-12 months
Financing	Develop NbS Finance Strategy & investment pipeline. Secure blended financing—combine climate funds, private sector investment, and donor support (EU, NZ MFAT, Kiwa, etc.) for scalable, long-term NbS projects	Public and Private Sectors	Difficulty in securing long-term blended financing; dependency on short-term donor funds; private sector reluctance to invest in NbS without clear economic returns; challenges in aligning funding priorities across sectors.	Moves beyond short-term grants to leverage economic value and private sector engagement.	MFEM, line ministries	1-2 years

Recommendation	Description	Sector impact	Potential barriers	Values/ Benefits / Opportunities	Responsibility	Timeframe
Capacity & Inclusion	Train trainers in NbS, MEL, GEDSI, and community toolkits.	Communities	Limited capacity for training trainers and ensuring long-term knowledge transfer; low community awareness of NbS benefits; gender and social equity barriers; language and cultural barriers to engaging local communities effectively.	Closes GESI awareness gap and empowers communities with tools for ownership (e.g., RESCCUE toolkit).	SPC, SPREP, USP, NGOs, DoCC, DEPC	Ongoing
Implementation	Pilot integrated ridge-to-reef NbS sites formalised as Protected Areas.	Communities	Resistance from local communities due to lack of awareness or perceived loss of land rights; inadequate monitoring and evaluation (MEL) systems; challenges in enforcing protected area status; competing land-use priorities (e.g., agriculture vs. conservation).	Links local action to national/global conservation targets (30x30) and ensures vertical integration.	Provincial Councils, Council of Chiefs, Forestry, Fisheries	2-5 years

7.Implementation considerations

With these recommendations, some final implementation considerations are:

- Start with pilot projects in priority watersheds (e.g., Tagabe, Port Vila) to demonstrate integrated NbS.
- Use existing platforms (PEBACC, Kiwa) to avoid duplication.
- Ensure gender and social inclusion in all NbS activities.
- Align with SPREP NAP Guidelines for process rigor and stakeholder engagement.
- Plan for 10+ year timelines to match ecosystem recovery.
- Actively monitor, review, adjust and improve actions for relevancy effectiveness and with changing contexts

Implementation requires establishing a cross-sectoral NbS Working Group under the National Advisory Board on Climate Change, developing specific regulatory instruments for mangrove protection, creating an investment-ready project pipeline for blue carbon and ecosystem service payments, and building inclusive capacity through programs that integrate Gender Equity, Disability and Social Inclusion (GEDSI) principles with traditional knowledge.

The ultimate vision is a Vanuatu where NbS transitions from admirable community projects to a fundamental, mainstreamed approach in national development—where protecting mangroves is recognised as critical infrastructure, community forests are valued as water security assets, and traditional knowledge guides climate resilience. This document provides the roadmap to realise that vision through systematic, culturally grounded, and economically sound integration of NbS into Vanuatu's NAP.

8. References

Alluvium Group International (2026), Promoting Pacific Islands Nature-based Solutions (PPIN), *NbS Integration into NAP Workshop Validation Report*, February 04 2026. Port Vila, Vanuatu.

Climate Change and Development Authority (2023) *Papua New Guinea National Adaptation Plan*, Climate Change and Development Authority, Port Moresby, Papua New Guinea.

Democratic Republic of Timor-Leste (2021) *Timor-Leste's National Adaptation Plan: Addressing climate risks and building climate resilience,* Secretariat of State for Environment, Coordinating Minister for Economic Affairs.

Department of Environmental Protection and Conservation. (2018). *Vanuatu National Biodiversity Strategy and Action Plan (NBSAP) 2018-2030*. Convention on Biological Diversity. https://www.cbd.int/doc/world/vu/vu-nbsap-v2-en.pdf

Department of Environmental Protection and Conservation (2011) *Information Booklet on the registration of Community Conservation Areas (CCAs).* https://environment.gov.vu/images/Forms/EMC%20Information%20Booklet%20Final.pdf

Department of Environmental Protection and Conservation (2011), *Community Conservation Area (CCA) Registration and Application Form*, https://environment.gov.vu/images/Forms/CCA Application Form.pdf

Government of Kiribati (2019) *Kiribati Joint Implementation Plan for climate change and disaster risk management (KJIP) 2019-2028*, Government of Kiribati.

Government of the Philippines (2023) *National Adaptation Plan of the Philippines 2023- 2050*, Published by the Climate Change Commission (CCC) and the Department of Environment and Natural Resources (DENR).

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

Government of Tonga (2018), *Joint National Action Plan 2 on Climate Change and Disaster Risk Management* (JNAP 2) 2018-2028, May 2018.

Hemstock, Sarah et al, (2023) Kiwa Initiative, *Literature and Policy Review Supplement to the Capacity Needs Assessment for Implementing Nature-based Solutions for Climate Change Adaptation*, February 2023 Lit-Policy-Review_Mainstreaming_Kiwa-Cap-Needs- Assessment.pdf

IUCN (2026), The global standard for Nature-based Solutions™, INBS |

Kiwa Initiative (2025), *Using customary law for fisheries and marine ecosystem restoration in Timor-Leste*, Using customary law for fisheries and marine ecosystem restoration in Timor- Leste - Kiwa Initiative

Ministry of Climate Change Adaptation, Meteorology and Geo-hazards, Environment, Energy and Disaster Management. (2023). *Republic of Vanuatu State of the Environment Report 2022*. Secretariat of the Pacific Regional Environment Programme. https://library.sprep.org/sites/default/files/2024-11/Vanuatu-SOE-2022.pdf

Ministry of Environment and Climate Change (2025) *National Adaptation Plan to Climate Change Mongolia 2024-2030*, March 2025.

Pacific Islands Forum Secretariat. (2022). Blue Pacific 2050, 2050 *Strategy for the Blue Pacific Continent*, Suva Fiji.

Republic of the Marshall Islands (2023) *The National Adaptation Plan of the Republic of the Marshall Islands,* Prepared and submitted by the World Bank PREP II Project for the Climate Change Directorate, Ministry of the Environment October 10, 2023.

SPC (2025) *Promoting Nature-based Solutions in the Pacific: Key Insights and Recommendations 2025*. Pacific Community (SPC), Noumea, New Caledonia.

SPREP (2022), *Pacific NAP Guideline: A Pacific Guideline for Adaptation Planning Process and Context of National Adaptation Plans (NAPs)*, A Pacific Guideline for Adaptation Planning Process and Content of National Adaptation Plans (NAPs)

Terton, A., Qi, J., & Jang, N. (2024). *Tracking progress on the integration of nature-based solutions and ecosystem-based adaptation in National Adaptation Plan processes*. NAP Global Network synthesis report. International Institute for Sustainable Development. Tracking Progress on the Integration of NbS and EbA in NAPs

United Nations Development Programme (UNDP)(2025a), *What are National Adaptation Plans and why do they matter?*, April 1 2025, What are National Adaptation Plans and why do they matter? | UNDP Climate Promise

UNDP (2025b), *Vanuatu Coastal Adaptation Project (VCAP)*, Vanuatu Coastal Adaptation Project (VCAP) | UNDP Climate Change Adaptation

United Nations Framework Convention on Climate Change (UNFCCC)(2025a), *Submitted NAPs from developing country parties*, NAP Central Home | NAP Central

UNFCCC (2025b), *The NAP Technical Guidelines*, August 2025, LDC Expert Group.

United Nations Human Settlements Programme (UN-Habitat) (2023), *The Critical Role of Nature-based Solutions for Enhancing Climate Resilience in Informal Areas: An Urban Supplement to the UNFCCC Technical Guidelines on National Adaptation Plans*, UN- Habitat.

Youngs K, Johnson J and Basel B (2022) *Review of Nature-based Solutions in the Pacific Region: Focus and Opportunities,* Report prepared for WWF Australia, June 2022.

The Promoting Pacific Island Nature-based Solutions (PPIN) project is funded by New Zealand's Ministry of Foreign Affairs and Trade (MFAT). PPIN seeks to support the development of policy and legislation for Nature-based Solutions (NbS), build regional awareness and capacity, and strengthen regional cooperation amongst Pacific Island countries on NbS. PPIN is managed by IUCN in partnership with the Pacific Community (SPC), the Secretariat of the Pacific Regional Environment Programme (SPREP) and Global Green Growth Institute (GGGI).

PPIN
Promoting Pacific Islands
Nature-based Solutions

ISBN 978-982-04-1535-5