

Robust sustainable tourism and agriculture sectors in Niue supported by biodiversity mainstreaming and sustainable land management

Part I: Project Information

GEF ID
10769

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
CBIT No
NGI No

Project Title
Robust sustainable tourism and agriculture sectors in Niue supported by biodiversity mainstreaming and sustainable land management

Countries
Niue

Agency(ies)
UNEP

Other Executing Partner(s)
Department of Environment

Executing Partner Type
Government

GEF Focal Area

Multi Focal Area

Taxonomy

Focal Areas, Biodiversity, Protected Areas and Landscapes, Terrestrial Protected Areas, Productive Landscapes, Species, Threatened Species, Mainstreaming, Certification -National Standards, Tourism, Agriculture and agrobiodiversity, Climate Change Mitigation, Climate Change, Agriculture, Forestry, and Other Land Use, Land Degradation, Sustainable Land Management, Community-Based Natural Resource Management, Ecosystem Approach, Sustainable Livelihoods, Income Generating Activities, Improved Soil and Water Management Techniques, Sustainable Agriculture, Integrated and Cross-sectoral approach, Sustainable Forest, Restoration and Rehabilitation of Degraded Lands, Influencing models, Demonstrate innovative approach, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Deploy innovative financial instruments, Stakeholders, Type of Engagement, Consultation, Partnership, Participation, Information Dissemination, Private Sector, Individuals/Entrepreneurs, SMEs, Beneficiaries, Local Communities, Gender Equality, Gender Mainstreaming, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Access and control over natural resources, Capacity, Knowledge and Research, Learning, Adaptive management, Indicators to measure change, Theory of change, Capacity Development, Knowledge Exchange, Innovation, Land Degradation Neutrality, Land Productivity

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 1

Climate Change Adaptation

Climate Change Adaptation 0

Duration

60 In Months

Agency Fee(\$)

332,782.00

Submission Date

3/17/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-1-1	GET	2,224,635.00	13,140,509.00
LD-1-1	GET	1,078,333.00	5,075,658.00
LD-2-5	GET	200,000.00	2,000,000.00
Total Project Cost (\$)		3,502,968.00	20,216,167.00

B. Indicative Project description summary

Project Objective

To enhance biodiversity conservation and sustainable land management in Niue through the development of sustainable and biodiversity-friendly tourism and agriculture sectors.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 1: A national governance context that ensures biodiversity and land degradation concerns are adequately recognized and taken into consideration in tourism and agriculture development.	Technical Assistance	<p>1.1 Strengthened and harmonized policies and procedures are in place and ensure biodiversity concerns and ecosystem services are fully considered in tourism and agriculture development, as indicated by:</p> <ul style="list-style-type: none"> - Tourism and agriculture sectoral planning internalizing findings and lessons learned from COVID-19 pandemic; - Improved institutional capacity for planning, management and monitoring tourism and agriculture sector operations evidenced by 20 % increase in GEF Capacity Development Scorecard. <p>Targets and indicators to be confirmed during PPG.</p>	<p>1.1.1 Social, economic and environmental impact of COVID-19 pandemic on Niuean tourism and agriculture sectors assessed to identify opportunities and threats, and guide long-term policy development for environmental sustainability;</p> <p>1.1.2 Biodiversity and Sustainable Land Management and Land Degradation Neutrality mainstreamed into the revised Niue's Sustainable Tourism Strategy and Tourism Action Plan developed and implemented to avoid detrimental effects of tourism on terrestrial and marine ecosystems;</p> <p>1.1.3 Cross-sectoral committee operationalized/ strengthened to mainstream biodiversity</p>	GET	392,188.00	2,502,954.00

conservation and sustainable land management (SLM) across tourism and agriculture sectors, supported by improved national coordination and strengthened regulatory framework;

1.1.4 Integrated National Voluntary LDN Targets and monitoring framework designed for Niue closely aligned with cross-sectoral committee

1.1.5 Operational policies on financing solutions developed and approved to create incentives for the tourism and agriculture sectors to invest in the conservation of biodiversity and sustainable land management;

1.1.6 Guidelines on environment impact assessment (EIA) developed for tourism and agriculture sector operations, and capacity and know-how enhanced in government agencies and relevant stakeholders to conduct/review EIA to support decision-making, monitoring and enforcement.

(BD 392,188 : 2,502,954)

"	Technical Assistance	"	" (LD 391,178 : 1,347,744)	GET	391,178.00	1,347,744.00
Component 2: Integrated model for mainstreaming biodiversity and ecosystem services into tourism and agriculture	Technical Assistance	<p>2.1 Sustainable biodiversity-friendly management and operation of tourism and agriculture across ecologically important landscape and seascape, as indicated by:</p> <ul style="list-style-type: none"> - Tourism development and impact monitoring program supported by the National Tourism Strategy and Action Plan; - Sustainable BD conservation and SLM practices widely adopted across a globally significant terrestrial landscape (5,300 ha). - 10% Increase in PA METT score (particularly for revenue, visitor management, and community engagement) of the Huvalu Forest Conservation Area; -Reduced pressures from unsustainable tourism and agriculture, e.g. reduced habitat degradation and land use conversion, improved waste 	<p>2.1.1 Population assessment of key species, comprehensive land use and vegetation cover survey and economic valuation of ecosystem services carried out to establish baseline data and indicators;</p> <p>2.1.2 Training and capacity development for tourism officers, local governments, community-based tourism enterprises and local tourism operators provided to identify, monitor and manage tourism impacts;</p> <p>2.1.3 Smallholder farmers supported to implement innovative practices of sustainable land/forest management to promote regenerative agriculture and agroforestry, improve soil fertility, phase out toxic chemical herbicides, and move towards environmentally sound production;</p> <p>2.1.4 Nature-friendly tourism and agricultural products and practices co-designed with local communities and piloted in project sites to raise</p>	GET	1,432,371.00	8,134,601.00

management, no reduction in population size of key species;	engagement in biodiversity conservation and sustainable land management, reduce waste and generate livelihood benefits;
- 30 % increase of existing and all new agriculture and tourism operations that are environmentally certified/green labelled.	2.1.5 Environmental certification system and other financing solutions for tourism and agriculture sectors demonstrated to promote nature-based solutions and ready for upscaling;
- Increased revenue generation for biodiversity conservation through tourism user fees/ charges.	2.1.6 Farmers and small business capacitated and supported in the development of business plans and revenue generation models to access and test sustainable financing solutions;
- 20% Increase of local households deriving income from sustainable agriculture and ecotourism;	2.1.7 Local capacity to conduct environmental impact assessments and monitoring developed/strengthened to assess the impacts of projects interventions, support the certification system and to evaluate wider permit applications.
- All developments with a major defined environmental impact during the scoping stage undergo an environmental impact assessment.	
Targets and indicators to be confirmed during PPG.	(BD 1,432,371 : 8,134,601)

"	Technical Assistance	"	" (LD 667,899 : 4,380,169)	GET	667,899.00	4,380,169.00
Component 3: Knowledge management, awareness, gender mainstreaming and M&E	Technical Assistance	<p>3.1 Improved awareness, education and knowledge management supporting upscaling to halt biodiversity loss and land degradation, as indicated by:</p> <ul style="list-style-type: none"> - Improved attitudes and awareness of tourism industry, communities, and tourists (domestic and international) for the importance of biodiversity to tourism, measured by Knowledge, Attitudes and Practices survey; -At least 10 best practices and lessons learned used in upscaling, including on how gender considerations are being integrated in the shift to more sustainable use of resources that support tourism and agriculture, and socio-cultural benefits of tourism documented for future use. 	<p>3.1.1 Lessons learned, guidance and tools systematized for the scaling-up the linkages between sustainable tourism and sustainable agriculture and the biodiversity, productive soil and ecosystems that the sectors depend on;</p> <p>3.1.2 Targeted awareness and education campaign on biodiversity, ecosystem services and waste reduction delivered to tourism industry, CSOs, farmers, and tourists;</p> <p>3.1.3 Participatory system of communities and citizens established to monitor compliance with environmental regulations in tourism and agriculture;</p> <p>3.1.4 M&E system incorporating gender mainstreaming and safeguards adopted and implemented.</p> <p>(BD 294,141 : 1,877,216)</p>	GET	294,141.00	1,877,216.00
"	Technical Assistance	"	" (LD 158,383 : 1,010,808)	GET	158,383.00	1,010,808.00

Sub Total (\$)		3,336,160.00	19,253,492.00
Project Management Cost (PMC)			
GET		166,808.00	962,675.00
Sub Total(\$)		166,808.00	962,675.00
Total Project Cost(\$)		3,502,968.00	20,216,167.00

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Government of Niue	In-kind	Recurrent expenditures	3,000,000.00
Donor Agency	European Union	Grant	Investment mobilized	900,000.00
Donor Agency	NZ Agency for International Development ("Toaga project")	Grant	Investment mobilized	3,000,000.00
Donor Agency	Australia Aid ("Waste project")	Grant	Investment mobilized	3,000,000.00
Donor Agency	NZ Agency for International Development ("Airport project", 10%)	Grant	Investment mobilized	2,500,000.00
Donor Agency	Green Climate Fund (project "FP147")	Grant	Investment mobilized	7,816,167.00
Total Project Cost(\$)				20,216,167.00

Describe how any "Investment Mobilized" was identified

The co-financing contributions under "investment mobilized" are confirmed grants that support the objective of the proposed project and which will be operating during the expected lifetime of the proposed project. They exclude any recurrent expenditures. Further investment will be identified during the PPG.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Niue	Biodiversity	BD STAR Allocation	2,224,635	211,340	2,435,975.00
UNEP	GET	Niue	Land Degradation	LD STAR Allocation	1,278,333	121,442	1,399,775.00
Total GEF Resources(\$)					3,502,968.00	332,782.00	3,835,750.00

E. Project Preparation Grant (PPG)
PPG Required **true**

PPG Amount (\$)				PPG Agency Fee (\$)			
150,000				14,250			
Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Niue	Biodiversity	BD STAR Allocation	95,000	9,025	104,025.00
UNEP	GET	Niue	Land Degradation	LD STAR Allocation	55,000	5,225	60,225.00
Total Project Costs(\$)					150,000.00	14,250.00	164,250.00

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2,500.00	0.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
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Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
2,500.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Huvalu Forest CA	61918	Protected Landscape/Seascape	2,500.00						



Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.3 Area of natural grass and shrublands restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2800.00	0.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2,800.00			

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted
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Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)

Expected metric tons of CO ₂ e (direct)	476098	0	0	0
Expected metric tons of CO ₂ e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	476,098			
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting	2023			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)				
Expected metric tons of CO ₂ e (indirect)				

Anticipated start year of accounting
Duration of accounting

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	888			
Male	831			

Total	1719	0	0	0
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Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Biodiversity-friendly agricultural products and tourism experiences will be developed in cooperation with the local communities and private sector across 5,300 hectares (including 2,800 hectares of agricultural land and 2,500 of sustainably maintained forest (in the Huvalu Forest Conservation Area). This translates to 2,500 hectares of terrestrial protected area under improved management. Support will be provided to landowners and farmers to pilot sustainable land management practices across 2,800 hectares to rehabilitate degraded farmland and restore soil fertility. This is captured under area of landscape under improved practices (excluding protected areas). Regarding the beneficiaries, 40% (688 persons) of the people will be involved in the tourism sector (owners of/workers in the tourism enterprises, government officials) and 60% (1,031 persons) from the agricultural sector (farmers/land owners, farm workers, government officials and association members and leadership). The project will contribute to Aichi Targets 1, 2, 4, 5, 8, 11 and 15. The people of Niue working in the agriculture and tourism sector will at the end of the project be aware of the values of biodiversity and the steps they can take to conserve and use biodiversity sustainably (relates to Aichi Target (ABT) 1). Biodiversity values in Niue will be incorporated into the Niue's Tourism Strategy and Tourism Action Plan (relating to ABT 2). Landowners and stakeholders in the Huvalu Forest Conservation Area and buffer zone will use, at the end of project, use natural resources sustainably in line with ABT 4. The current rate of loss of forest in the project site will be reduced during the project (relates to ABT 5), and the application of herbicides in the area will be reduced leading to a support under ABT 8. The management of the Huvalu Forest Conservation Area will be improved relating to ABT 11, and support to ABT 15 under the project is envisaged as the restoration of 2,800 hectares of agricultural land in line with combating land degradation.

Part II. Project Justification

1a. Project Description

1) Global environmental problems, root causes and barriers to be addressed

Niue is a small nation consisting of one single island – the world’s largest uplifted coral atoll – situated in the South Pacific between Tonga, Samoa and Cook Islands. Its land area is 260 square kilometers and its population is around 1,700. Niue is self-governing in “free association” with New Zealand. The GDP of Niue in 2018 was US\$ 28.6 million. Niue’s prosperity as a nation as well as its very existence are highly dependent on the natural environment. Tourism accounts for 41% of GDP and income from nature-based tourism has been growing, bringing 10,875 visitors in 2019, as air services have doubled to two flights a week and more accommodation and other infrastructure is built.[1] Agriculture, forestry and fisheries also play an important role in the economy, particularly for household subsistence and local market, contributing to 18% of the GDP.[2] The export of agricultural products is limited with a revenue of US\$ 270,000 in 2019. Niue imports food to supplement its fishing and agriculture production.

Niue, similar to other island micro-states, faces specific socio, economic and environmental challenges to achieving sustainable development due primarily to its remoteness, small landmass, small population, narrow economic base, environmental fragility and climate vulnerability.[3] Niue’s efforts to promote sustainable growth in the tourism and agriculture sectors are reflected in its aspirations of becoming a leading global destination for ecotourism[4] and the world’s first “organic nation”.[5]

Biodiversity

Niue is located at the south-western edge of the Polynesia-Micronesia Hotspot that covers most of the South Pacific Ocean.

Niue has two terrestrial protected areas, among which the **Huvalu Forest Conservation Area** (IUCN Category VI; established in 1992) has an area of 54 square kilometers and covers 23% of Niue’s island. It is Niue’s only Key Biodiversity Area and contains most of the remaining old growth forest in the country. The conservation area is divided into three sub-areas according to local traditional practices: a core sacred area, a primary forest and a buffer zone. The core of the area (around 100 hectares in size) is tapu (taboo), a most sacred site where hunting, logging and even research is prohibited. A surrounding area of about 2,500 ha of primary forest provides some protection to the core, but is used for hunting and other activities under the management of land-owning families and the two village councils. Outside this is a buffer zone of approximately 2,800 ha of agricultural land.

The terrestrial ecosystems of Niue do not show particularly high species diversity and has low endemism, due to its relatively young age and small size. Among the terrestrial flora and fauna that have been recorded there are 32 bird species, nine species of lizards, over 376 species of insects, one native mammal (the Tongan flying fox, *Pteropus tonganus*; IUCN Red List Category: LC[6]), eight species of land crabs and 175 native vascular plant species. Niue’s single-country endemic species, i.e. species that are only found in Niue, include two subspecies of birds – the Niuean Polynesian triller (*Lalage maculosa whitmeei*; NE) and Polynesian starling (*Aplonis tabuensis brunnescens*; NE) – and the flat-tail sea krait (*Laticauda schistorhynchus*; VU). The Tongan flying fox (or fruit bat), which is unfortunately regarded as a local delicacy among many Niueans and also suffers from deforestation, is the only species to pollinate some native trees and so is vital for their survival and the regeneration of the forest via dispersal of fruits/seeds.[7] Other species of concern

include the coconut crab (*Birgus latro*; VU) and the Pacific pigeon (*Ducula pacifica*; LC) – both regarded as prized foods and, as a result, overharvested – the olive small-scaled skink (*Emoia lawesi*, EN), as well as 56 endemic plant species. Other endemic species probably exist among invertebrates but have not been fully surveyed.

The most significant marine protected area is the **Moana Mahu Marine Protected Area**, which was formally established by the Niue parliament in April 2020 as a Large Scale Marine Protected Area (LSMPA) covering an area of 127,000 square kilometers and encompassing 40 percent of Niue's exclusive economic zone. The size of the protected area, relative to the country's total area, makes it the second largest marine protected area in the world, after Palau's. Commercial fishing activities will be banned throughout the LSMPA and artisanal fishing will be permitted in limited areas. The creation of the protected area will help Niue safeguard its natural asset, build ecological resilience and allow the island to pursue more sustainable economic, social and environmental opportunities including achieving greater local food security and foster more blue tourism. Within the Moana Mahu LSMPA, the Beveridge Reef is an uninhabited and semi-submerged atoll, which is known for its biodiversity richness and the largest density of grey reef sharks in the world, as well as for its cultural significance to the people of Niue.

Much of Niue's marine environment has not been extensively studied due to its remoteness and lack of a safe harbor but the existing biodiversity studies and surveys show that Niue's marine ecosystems are very rich in biodiversity with 43 of the 70 known coral genera in the Pacific Islands recorded in Niue, as well as over 240 fish species, invertebrates comprising around 20 species of crabs and crayfish/lobsters, two species of giant clams, five species of beche-de-mer and others. Humpback whales (*Megaptera novaeangliae*; LC) are the most common whales in Niuean waters, while minke whales (*Balaenoptera acutorostrata*; LC) and pilot whales are also present. Three species of turtles – hawksbill (*Eretmochelys imbricata*; CR), green (*Chelonia mydas*; EN) and loggerhead (*Caretta caretta*; VU) – and one species of spinner dolphin (*Stenella longirostris*; LC) are present. Marine mammals and turtles are protected in Niue. Several species of shark, including oceanic whitetip (*Carcharhinus longimanus*; CR) and grey reef shark (*Carcharhinus amblyrhynchos*; EN), are present in abundance in Niue's waters. A recent and first-ever comprehensive biodiversity survey of Niue's marine ecosystem revealed that densities of grey reef sharks at Beveridge Reef are an order of magnitude higher than recorded elsewhere around the world.^[8]

Niue's terrestrial biodiversity is threatened by agriculture through the conversion of forests into arable land; by overharvesting of resources such as flying foxes, coconut crabs, imperial pigeon and reef fish; by the growing tourism sector through infrastructure development, introduction of invasive alien species, waste production and pollution, as well as by climate change and natural disasters, including through cyclones, coral bleaching due to rising water temperatures and sea level rise caused by climate change. Niue's marine ecosystems are also highly vulnerable to both human and natural impacts, including fishing activity, storm events, and climate change. Therefore, local natural resources require careful management and effective enforcement to provide food security and livelihood for the people of Niue into the future.

Tourism

Niue offers a number of unique nature-driven experiences to visitors including some of the clearest ocean water in the world, providing for excellent snorkeling, diving and fishing, as well as beautiful forest and scenic walks and many small coves providing safe swimming. Diving and snorkeling on the various reef systems along Niue's coast line are thought to be "spectacular" due to the richness of marine life with visibility rated "amongst the best in the world".^[9]

The value for Niue's uniqueness and unspoiled environment is being realized – it has been named in the top ten fastest growing tourism destinations for 2017 by the UN World Tourism Organisation with visitor numbers increasing by 25.4 percent in that year. The increase in the number of visitors is driven primarily by non-Niueans tourists (78% in 2019) in search of the country's unspoiled nature.

In spite of being a potential catalyst for development in SIDS,[10] a boom in tourism, if not properly planned and implemented, can result in diminished natural resources, pollution and waste problem, habitat destruction and loss of biodiversity and ecosystem services.[11] On the other hand, in biodiversity rich landscapes, sustainable tourism can be a major source of revenue and employment for local communities, providing them with a strong incentive to protect biodiversity. Tourism can thus be both an opportunity or a threat to biodiversity and, ultimately, to local livelihoods.

The impact of Niue's growing tourism sector on the environment has not yet been quantified but, because of its size, it is likely to be small and reversible. However, if left unchecked, the pursuit of short-term economic gain will lead to destruction and degradation of Niue's valuable natural assets. Recognizing that natural resources are its single most valuable asset towards sustainability, Niue is faced with the challenge of how to develop tourism in such a way that is not detrimental to its environment, but rather a catalyst for biodiversity conservation. To achieve this goal, the government aims to realize tourism's potential by mainstreaming biodiversity across the tourism sector and promote participation of communities in the planning and management of tourism activities. Accordingly, Niue Tourism's mission statement is "to generate prosperity for Niue through responsible and sustainable tourism development", where the vision is "to operate tourism in a transparent, accountable, effective and efficient manner, embracing the unique *Niuean Taoga*[12] with integrity and innovation".

Agriculture

Eighty percent of households in Niue actively partake in agricultural activities, including subsistence farming and selling surplus at local markets, and the important cultural tradition of gift-giving to family and friends is reliant on agriculture. While subsistence agriculture is still predominant, in recent years there has been an increase in the production of crops for export, including taro (*Colocasia esculenta*), vanilla (*Vanilla sp.*) and nonu (*Morinda citrifolia*) but revenue from exporting agricultural products is highly variable from year to year.[13] The public sector drives and supports most of the commercial agricultural activity by providing guidance, incentivizing agricultural products and servicing farms.

Agricultural development during the last decades has had a negative impact on Niue's biodiversity in a number of ways. The main root cause is a shift from traditional farming techniques, which promoted conservation and management, towards unsustainable high-input farming combined with lack of awareness among farmers of the consequences of current farming practices on biodiversity and ecosystem services. This shift is characterized by (i) the adoption of intensive farming practices, such as the use of monocultures and shorter fallow periods, leading to loss of soil fertility and pushing farmers to access new fertile soils by converting forests into arable land; (ii) the replacement of traditional cultivars with higher-yielding crops; and (iii) the use of agrochemicals (herbicides, pesticides and fertilizers) with adverse impacts to the fauna and flora, including soil microbiota.

Forest clearance for farming purposes reduced the overall forest cover from an estimated 86% in the 1980s to 64% of the island in 1994, and was the main cause of habitat loss and degradation resulting in reduced resilience to natural disasters, such as cyclones and wildfires, and higher susceptibility to invasions by weeds and other pests.[14] The rate of deforestation slowed down after 1999 when a government incentive that increased the affordability of land clearing for agriculture was discontinued, coupled to a steep population exodus. Nevertheless, the most recent vegetation cover survey shows that forest clearing still outpaces reforestation in most of the country (Figure 1). Because of the long period of human habitation and the modifications made during shifting agriculture, and, in more recent times by a timber industry, most of the mature forest has now been removed and replaced by secondary forest.

Traditionally, agricultural land was left fallow for over ten years after cropping and this sustained the soil, however, more recent practices have changed and the land has been left fallow for much shorter periods. Clearance by repeated burning, the use of bulldozers or herbicides, combined with a program of disc-ploughing in the 1960s along with the increased use of fertilizers, have all combined to reduce the organic matter in the soil, altering its chemical balance and reducing its ability to retain water. In some areas, the soil can now support little more than ferns, resulting in further clearing of primary forest. In

addition, the use of agrochemicals to increase production levels saw further reduction in fallow period to 3-5 years increasing the pressure on the already fragile soils, leading to further soil depletion and increased dependence on synthetic agrochemicals,[15] including the widespread use of Paraquat,[16] a herbicide that is highly toxic to mammals and birds.

Due to limited access to sustainable agricultural practices combined with the promise of immediate returns offered by unsustainable practices and lack of understanding of the consequences to soil fertility and human health, many farmers regard adopting nature-based solutions and investing in more sustainable choices as time-consuming and uneconomic. As a result, Niuean farmers often find themselves in a cycle of land degradation that is characterized by the loss of soil fertility and erosion coupled with shifting agriculture. The challenge in improving or maintaining crop production is how to maintain levels of nutrients in the soil. Unless SLM practices are promoted, Niuean farmers will continue to face land degradation.[17] The implementation of successful participatory conservation models is the best, if not the only, way to achieving a balance between soil and biodiversity conservation against the demands of production, improve farmers' health and improve sustainable livelihoods.

Recently, organic farming practices for nonu (*Morinda citrifolia*) have drawn increased interest of farmers who wish to capture the high-value international market for organic produce. Biodiversity-friendly management practices to promote organic farming in Niue include the use of western honey bees (*Apis mellifera*) for supporting pollination and an organic-waste collection system to produce compost for use as organic fertilizer.[18] The government is also supporting the production of fruits and vegetables through provision of seeds, planting materials and technical advice, as well as the use of nitrogen fixing crops as green manure/mulch to improve soil quality.

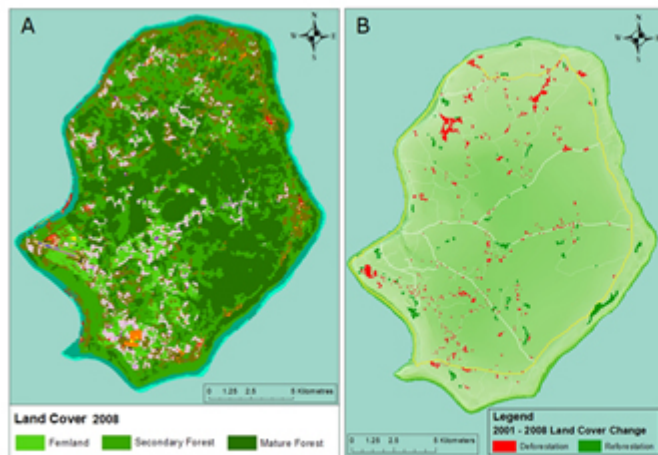


Figure 1. Niue's land cover (A) in 2008 and land cover change (B) from 2001 to 2008 showing that deforestation (red) has outpaced reforestation (dark green) (source: SPREP country profile).

COVID-19 pandemic

Until beginning of 2020, tourism was arguably the development sector that offered Niue the best opportunities to overcome barriers and constraints and to grow into a leading industry. However, the COVID-19 pandemic has led to a complete collapse of Niue's tourism industry and exposed the fragility of a narrow-based economy where one single sector contributes to much of the GDP. At the time of writing, Niue had not registered any positive COVID-19 case in within its territory but, although comprehensive studies of the actual impact of COVID-19 are not available, the socio-economic impact of the pandemic is substantial and potentially long-lasting. Niue's tourism revenue has dropped nearly 100% as a result of COVID-19 and, in October 2020, 82% of business reported a significant decline in revenue, and 41% of business have either temporarily or permanently closed.

In terms of agriculture, given that farming systems in Niue are essentially controlled by households themselves, the pandemic has not had any discernible direct negative impact on Niue's capacity to produce food. In fact, the opposite is observed, in Niue and other PICs, with an increase in small agricultural activities by people who have lost their jobs in tourism have turned to agriculture to meet their needs for food and cash. The current interest in subsistence and cash crops is allegedly leading to increased land conversion in Niue and other PICs.[19] While agriculture is providing the much needed immediate food security and economic relief to families by the economic downturn, this type of agriculture, which is unplanned and done with little know-how or technological input, does not offer a sustainable path to long-term development and puts environmentally sensitive areas at increased risk.

Climate Change and Climate Variability

The country has two distinct seasons – a warm wet season from November to April and a cooler dry season from May to October. The average annual rainfall is approximately 2,180 mm, but it can vary from 810 to 3,300 mm. The bulk of rainfall is concentrated in the hot season often delivered in torrential downpours, which account for 68% of the total annual rainfall. The annual rainfall pattern is however erratic, with very dry or very wet months possible at any time of the year[1]. Severe droughts have occurred in Niue and tropical cyclones affect Niue between November and April. Climate projections done by the International Climate Change Adaptation Initiative[2] states:

- Surface air temperature and sea-surface temperature are projected to continue to increase over the course of the 21st century. There is very high confidence in this direction of change because warming is physical consistent with rising greenhouse gas concentrations.
- Rainfall: Annual mean and wet season rainfall are projected to increase, consistent with a projected likely increase in the intensity of the South Pacific Convergence Zone. There is moderate confidence in this projection due to the wide model range.
- Tropical Cyclones: While change in tropical cyclones are not known with high confidence, there is some evidence from that tropical cyclone frequency in the South Pacific will decrease, but that the proportion of very intense cyclones will increase.
- Mean Sea Level and Ocean Acidification are projected to continue to rise over the course of the 21st century with a very high confidence.

The dominant cause of interannual climate variability in the Pacific is El Nino – Southern Oscillation (ENSO). ENSO is a natural climate cycle with two extreme phases: El Nino and La Nina. The extent and timing of the ENSO varies between countries and affects the year-to-year risk of droughts, floods, tropical cyclones, extreme sea levels and coral bleaching. El Nino and La Nina events have distinct impacts on rainfall and can cause large-scale shifts in rainfall patterns due to changes in sea-surface temperature and winds[3]. The impacts of El Nino in Niue is drought and more frequent and intense cyclones, and La Nina is increase in rainfall, leading to floods. The frequency of extreme El Nino events is projected to double to one event every 10 years under global warming in the period 1991 – 2090[4].

The possible impacts of the climate change include:

- Niue's agriculture is sensitive to drought and cyclones. Climate change is adversely impacting agriculture. Interannual climate variability has a large influence on agricultural production, and droughts have a high impact. Tropical cyclones can cause significant losses in agricultural production. Droughts and more frequent and intense cyclones are associated with the El Nino events in Niue.
- The key impacts of rising sea-surface temperatures currently being observed and projected to continue include coral bleaching, shifts in the ranges and population abundances of fish and other marine species[5]. Coral death and bleaching threaten marine biodiversity; diminish the attractiveness of reefs to tourists; reduce fish supplies; and affect the ranges of pelagic fish.

Climate change can impact the tourism industry “by changing the attractiveness of the climate of tourism destinations by reducing the value of attractions at destinations, and by altering the relative climate of the home countries of tourists”.[6] Climate change can also directly impact on environmental resources that serve as tourist attractions[7]. Widespread resource degradation such as beach erosion and coral bleaching is likely to negatively affect the perception of destination attractiveness. A study commissioned by the Asian Development Bank predicted that global warming will lessen the Pacific Island region as a tourism attraction and reduce tourism revenues by around 30% for the Pacific region as a whole, under all climate scenarios.[8]

Land-based activities and impacts on the coral reefs

The modernisation of traditional villages via transition from semi-subsistence to commercial-oriented activities is often associated with the increased and unregulated use of pesticides and other farming chemicals, such as fertilisers, along with land clearing, changes in land use, introduced trees, and infrastructure construction, which increase sediment and nutrient runoff into coastal waters thereby causing coral reef decline. Agriculture runoff threatens approximately 25% of the global reef area with further increases projected for the coming decades.[9] Increased sedimentation can negatively affect corals through direct burial, which depletes oxygen and leaves corals in darkness, abrasion and by reducing light penetration, which is essential for photosynthesis by zooxanthellae. This results in reduced skeletal growth rates, species diversity, and recruitment, and reproductive impairment. Increased sediment runoff may also expose corals to a variety of other contaminants, such as nutrients and heavy metals, which interfere with coral fertilisation, larvae development and cause coral bleaching. Poor agricultural land-use practices have resulted in serious erosion of topsoil in many agricultural areas, leading to increased sedimentation in coral reef areas.

The factors damaging coral reefs in Niue include pollution and sedimentation from land-based sources, inadequate waste management and contamination of water sources with agricultural chemicals. There are accounts of poor agricultural activities, damage from the use of heavy machinery, poor use of herbicides and pesticides, impacts from the construction of “bush roads”, loss of soils and land clearing and deforestation, that can lead/could have led to increased sedimentation and pollution of adjacent waters. Pollution and contamination of some water sources from inadequate septic tanks and piggeries have also been reported. Additionally, concerns have also been raised about the disposal of municipal waste with inadequate landfills and the potential for coastal fills to contaminate coastal waters.[10]

Land Tenure:

There are two land categories in Niue – Nuiean Land (comprising 95% by area) and Crown Land (of which 1% is Government Land and 4% is held under lease in perpetuity by the Crown). For all land in Niue, custom prevails and land cannot be bought or sold, except by the government for public purposes, and then only subject to the consent of the titleholders. Multiple ownership is derived through the principle of *magafaoa*[11] descent group, derived from a *tupuna* (known ancestor) or the original source of the land. All relatives and family branches have a claim, therefore any piece of land might be ‘owned’ by up to hundreds of people representing one or more descent groups. Absentee landowners cause considerable tension in some families[12]. The land tenure system does promote subsistence farming due to the constraining effects it has on commercial farming, due to investment cost.

[1] https://www.preventionweb.net/files/28164_niuepacc.pdf

[2] https://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/8_PCCSP_Poster_Niue.pdf

[3] CSIRO, Australian Bureau of Meteorology and SPREP, 2015. Climate in the Pacific. A regional summary of new science and management tools.

- [4] <https://www.greenclimate.fund/sites/default/files/document/fp147-unep-multiple-countries.pdf>
- [5] NOAA, 2015. Climate Change Issue Profile: Sea surface temperature.
- [6] ADB, 2013. The Economics of Climate Change in the Pacific.
- [7] Wong, et al., 2014. Climate Change 2014: Impacts Adaptation and Vulnerability Part A: Global and Sectoral Aspects. Low-Lying Areas.
- [8] ADB, 2013. The Economics of Climate Change in the Pacific.
- [9] <https://ro.uow.edu.au/cgi/viewcontent.cgi?article=1430&context=scipapers>
- [10] Chin, A., Lison De Loma, T., Reytar, K., Planes, S., Gerhardt, K., Clua, E. and Burke, L., L, Wilkinson, C. (2011) Status of Coral Reefs of the Pacific and Outlook: 2011. Publishers Global Reef Monitoring Network 260p.
- [11] The term *magafaoa* has many connotations, including co-resident descent group as well as that of common descendants of an important ancestor (*tupuna*). A *magafaoa* evolves over time, dividing and forking into expanding genealogical trees with 'splinter' *magafaoa*.
- [12] http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/2335/Boydell_Levi_-_absentee_land_owners.pdf?sequence=1

Barriers to be addressed

Despite the significant government response to the identified threats, the following barriers remain and prevent the achievement of Niue's vision for sustainable development, placing its biodiversity and ecosystem services at risk.

Ø Lack of policy coherence, limited mainstreaming of biodiversity and SLM into tourism and agriculture, and weak cross-sectoral implementation planning

The transformative changes that are needed to achieve Niue's vision of sustainability require effective mainstreaming of biodiversity and ecosystem services across the tourism and agriculture sectors. The management of environmental issues is disjoint from sectoral development with responsibilities spread across several government agencies. There is a lack of a coordinating body and insufficient capacity of trained staff to address issues in a systematic and coordinated manner.

Gaps in legislation and capacity needs still exist which prevent adequate implementation, monitoring and enforcement of relevant regulations. There is thus a need to mainstream biodiversity and sustainable land management into relevant legislation and policies to ensure coherent planning of tourism and agriculture sectors, as well as to strengthen institutional capacity to prevent further degradation of natural assets and encourage a market transformation.

The institutional framework is currently inadequate to provide oversight and enforcement of tourism and agricultural operations due to a lack of oversight, coordination and capacity to evaluate and monitor impacts. Niue's legislation foresees the need for assessing environmental impacts prior to decision making, but there are no impact assessors or monitoring specialists within the government or in the private sector (e.g. national consultants) who can support decision making and enforcement to ensure that developments in the tourism and agriculture sectors do not cause adverse impacts on the environment and society.

Attempts to promote the agriculture and tourism sectors have been pursued mostly separately and policy and institutions have not been geared toward fostering positive linkages. The challenge in adjusting this approach to create linkages and synergies through coherent policy and implementation and the potential rewards for doing so are not well understood. Furthermore, examples of positive linkages and approaches being used in the regional context to

promote these linkages have not been well documented and are poorly understood.

Presently, the coordination of the sustainable vision objectives and strategies to the policies, strategies and work programs of other relevant government entities are inadequate. As a result, sectoral plans have not effectively internalized the multiple benefits achievable through an integrated approach natural resource management. Biodiversity conservation, agriculture and tourism fall under the sole responsibility of Department of Environment, Department of Agriculture, Forests and Fisheries and Tourism Authority, respectively. The multiple benefits of integrated natural resource management have not been maximized through policies and participatory implementation plans that mainstream biodiversity conservation and aim at integrated approaches to landscape and seascape management.

The Government of Niue has promoted tourism and commercial agriculture for the past decades, but only tourism has received consistent and predictable support and, as a result, sustained progress. There is a lack of policies for enabling actions that would motivate interest in developing and sustaining the country's agriculture sector, and in particular policies regarding the development of financial/fiscal incentives that would encourage private sector capital in agriculture projects in the country. The few economic incentives in place are not enough to attract people to agriculture, enable landowners to overcome the burden to restore degraded land, engage on SLM practices and move towards sustainable agricultural production.

Niue's Environment Act 2015 and Environment Regulations 2017 contain extensive provisions relating to the need for EIAs prior to decision making and consent regarding any developments that may negatively impact the environment. However, due to lack of capacity, in and outside the government, the regulations are poorly implemented. Moreover, there is limited capacity among government agencies to monitor operations in the tourism and agriculture sectors with a view to enabling a transition to sustainable practices and preventing negative impacts to biodiversity and ecosystem services.

Ø Limited knowledge of and incentives for upscaling conservation and SLM practices and difficult access to technologies to increase or maintain soil fertility and improve crop production

Resources and information materials prepared specifically for Niue's local conditions are very limited, and the few available materials are often written in non-native languages and not easily accessible. Government-led extension services are limited and mostly ineffective in convincing farmers to switch to sustainable land and environment management practices as a means to reduce pollution and improve their health and income.

The only farmers' association, the Niue Island Organic Farming Association, is promoting organic vanilla and nonu farming for export as a viable economic alternative to other farming that uses agrochemicals. Even though the Association plays a key role in outreach and capacity development and has made remarkable progress on introducing sustainable agricultural practices, substantial knowledge and other capacity gaps remain that effectively prevent their upscaling. Experience with other aspects of SLM is entirely missing and experience with land restoration is lacking.

New pressures from an increasingly cash-based economy led to traditional knowledge of nature, farming and conservation being replaced by more modern and unsustainable practices.

According to Niue's Food and Nutrition Security Policy (2015-2019),^[20] research needs to be undertaken to determine alternative ways of improving soil condition while at the same time protecting the fragile environment and improving agricultural production. Introducing innovative sustainable land management techniques combined with traditional knowledge and revitalizing traditional cultivars (e.g. taro, Polynesian tomato, etc.) will improve local food security and livelihoods, support biodiversity conservation and ecosystem services.

The weak private sector in Niue is not able to support linkages between sustainable tourism and sustainable land management. For instance, agrotourism and food tourism are not being fully exploited as opportunities to enhance the overall tourism experience. For example, bringing visitors to the Huvalu Conservation Area offers an excellent opportunity to promote Niue's tourism experience and, at the same time, provide benefits to community conservation

by promoting the forest and traditional agriculture as well as bringing economic value to the local communities. Although the government has tried to promote the Huvalu Conservation Area as a way to up-scale the co-benefits from tourism and agriculture, the resources in that area are under-utilized for tourism purposes.^[21] Credit is a barrier to landowners/farmers wanting to start enterprises or invest in new technologies in Niue due to land tenure system as land cannot be used as collateral. Appropriate financing solutions and economic incentive to support sustainable agricultural and tourism development is needed to attract private sector investment.

Further, you cannot manage what you do not measure, and in this context, monitoring the impacts of agriculture and tourism is hampered by the lack of reliable quantitative baseline data. Only a small number of the plant and animal species present in Niue has been properly assessed and the number of species that are, or may be, affected by tourism and agriculture is likely to be underestimated. A population assessment of key terrestrial species at risk and a comprehensive land use and vegetation cover survey will be carried out across the country to establish baseline data and indicators to enable monitoring of the impacts of tourism and agriculture, as well as updating of the list of globally threatened and endangered terrestrial species that are present in Niue. Furthermore, an economic assessment of the value of Niue's biodiversity and ecosystem services will support planning of sustainable tourism and agriculture activities.

Ø Limited opportunities and knowledge to enable scaling-up linkages between tourism and agriculture as a means to improve biodiversity and ecosystem services, diversify the economy, improve food security and build resilience to downturns and shocks

Knowledge and best lessons on how linkages between sustainable tourism and sustainable agriculture were established and upscaled in comparable contexts are not readily available or properly disseminated. Tourism operators, civil society organizations, farmers and visitors have limited awareness of how their actions impact biodiversity and ecosystem services. Moreover, village communities, who have a major role to play in conserving biodiversity and managing the land, do not fully recognize the benefits of conservation actions on their lives and livelihoods. Marine and coastal areas, in particular, have received less attention from participatory conservation efforts. Additionally, biodiversity and cultural values are not well documented, gender-sensitive livelihood strategies linking tourism and agriculture are lacking, and gender dynamics are not fully accounted for in a way that promotes holistic and integrated management of biodiversity and ecosystem services.

2) Baseline scenario and any associated projects

A number of government and donor-funded initiatives define the baseline. Baseline projects on biodiversity, sustainable land management, agriculture, or associated thematic fields include:

The estimated resources allocated from the government's budget to **environment related activities total US\$ 1.5 million**, the majority of which is allocated annually through the Department of Environment, the Department of Agriculture, Forests and Fisheries (DAFF), with some funds being channeled through the Department of Community Affairs and Public Works. Most of this budget is spent on recurrent expenditures, such as salaries, while a significant amount of the investment mobilized is received in development project funds from international and bilateral donors. The Government of Niue has also initiated a mid-term review of the Niue Integrated Strategic Plan (2016-2026) to ensure of its alignment with sector plans and to identify which areas require additional support

During the project period, the Department of Environment will have parallel projects being implemented both directly and indirectly in support of the project. This is through strengthening Environment Governance by building capacity, improving processes and ensuring a robust development consent process for/from Environmental Impact Assessment (EIA) applications. Other areas include emphasis on waste management processes and operations in an overall programme to improving waste management on Niue, ensuring tourism and waste does not become a problem. Invasive species management, eradication and research will also be implemented during the period as Invasive plants are encroaching into Conservation Areas and Invasive organisms are affecting wide areas of coral reefs on Niue.

The Department of Agriculture, Forestry & Fisheries (DAFF) will continue to support and provide technical support to local farmers on Niue, working with the Niue Growers Association (NGA) and all the affiliate groups to the Association. They will also provide technical support and experience for fisheries related matters and coastal management. The Government of Niue, through DAFF also supports exporters in agriculture based products who have had to supplement income due to the impacts of Covid-19 on the tourism industry. With the uncertainties in border restrictions, and direct/indirect impacts long-term, Niuean households have returned back to the land and sea as food security and subsistence farming crucial to ongoing social safety net.

The Tourism Authority Board will continue to support tourism related businesses and continue to promote Niue. With different stakeholders involved to put in place necessary systems to ensure sustainability of the Tourism sector long-term. The Niue Tourism Authority continues to support the industry through different support packages during the period that the border restrictions are in place including with implementation of the Sustainable Tourism sector plan.

Since 2009 there has been a concerted effort by the Government of Niue to support tourism development. For the 2015-2016 period the total aid for Niue from New Zealand was \$22.5 million, with \$1 million going towards tourist destination marketing, and further aid contributing to the expansion of the Matavai Resort, the only resort in Niue. The Tourism Authority on its own and with support from the New Zealand Agency for International Development (NZAID) is implementing the **“Taoga – Cultural Initiative Project”** (US\$ 3,000,000) and the development and promotion of cultural and nature tourism. The incremental activities of this project will complement these plans, and support their implementation.

The government has been supporting annual bird counting to measure their population. Furthermore, the government has also closed some marine areas from fishing, such as the Beveridge submerged reef, and is also promoting management and development of pelagic fisheries (tuna and associated species) guided by the **“Niue Pelagic Management and Development Plan”**. The overall thrust of the plan is to take an Ecosystem-based Approach to Fisheries Management (EAFM) that has a broader focus than simply that on the sustainability of target species and takes into consideration the interactions that the fishery has on other sectors and the wider ecosystem. Some reef monitoring activities are also undertaken. Under business-as usual scenario, the funding available under this baseline program will not be sufficient to expand the protected area estate and as such no integration of existing PAs and tapus into a single and continuous terrestrial conservation area will take place.

In the planning process to create a Marine Management Plan that will define a EEZ-wide network of resource use zones, the government of Niue, in partnership with Oceans 5, the local nonprofit Tofia Niue, National Geographic Pristine Seas, and the Pacific Community, carried out the **Niue Ocean Wide (NOW) project** to conserve and sustainably manage Niue’s waters. Through the NOW project this partnership conducted, in 2016, the first-ever comprehensive baseline survey of Niue’s largely unknown marine ecosystems. As a concerted effort, the **Moana Mahu Large-Scale Marine Protected Area** was created in 2020, exceeding Niue’s Aichi Target of protecting 10% of coastal and marine areas and placing it second only to Palau in total percent

of EEZ protected. The creation of this large protected area (> 100,000 km²) has put Niue in an elite group and has elevated its status as a global leader in marine conservation^[22] (more details under Project Areas and Coordinates). This development milestone represents the culmination of a 4-year collaboration between the main donors and partners of the Ministry of Natural Resources (MNR), Department of Agriculture, Forestry and Fisheries (DAFF), and the non-governmental Tofia Niue, and the primary donor and partners Oceans 5 and National Geographic Pristine Seas, together with the Niue Ridge to Reef (Niue R2R) Project (see below).

The GEF-funded project **“Application of the Ridge to Reef Concept for Biodiversity Conservation and for the Enhancement of Ecosystem Services and Cultural Heritage in Niue”** (“Niue R2R”; GEF US\$ 4,194,862 and co-financing US\$ 11,068,600; 2016 – 2021) was designed to engineer a paradigm shift in the management of terrestrial, coastal and marine protected sites from a site-centric approach to a holistic “ridge to reef” comprehensive approach to effectively enhance Niue’s capacity to effectively create and manage protected areas for biodiversity conservation, sustainable use of natural resources, and safeguarding of ecosystem services. Through this approach, activities in the immediate production landscapes adjacent to marine and terrestrial protected areas are being managed to reduce threats to biodiversity and ecosystem services stemming from key production activities (e.g. tourism and agriculture). The project focuses on the expansion of its protected estate on land and on its marine areas through a combination of community conservation areas and government-led protected areas. Additionally, the project also introduced the concept of connectivity between landscape and seascape in Niue. Terrestrial protected areas include a landscape that links strictly protected community areas (tapu) to each other to enhance their integrity and to form a functional ecological corridor between them. Similarly, the creation of a Marine Protected Area at Beveridge Reef in 2020 supports the integrated and holistic approach promoted by the project by recognizing the link that is thought to exist between the Reef and mainland Niue through which the former serves as a source of recruitment for clams and other marine species that make up Niue’s coral reefs. The project is being implemented by UNDP in partnership with Niue’s Ministry Natural Resources.

The regional GEF-funded project **“Strengthening National and Regional Capacities to Reduce the Impact of Invasive Alien Species on Globally Significant Biodiversity in the Pacific”** (GEF 9410; US\$ 6,252,489 from GEFTF and US\$ 22,177,157 in co-financing; 2020 – 2024) aims at reducing the threats from invasive alien species (IAS) to terrestrial, freshwater and marine biodiversity in the Pacific by developing and implementing comprehensive national and regional IAS management frameworks. The project is being executed by SPREP in partnership with the governments of Marshall Islands, Niue, Tonga and Tuvalu. The project established a regional support service (PRISMSS) in partnership with key stakeholders (BirdLife, Island Conservation, Manaaki Whenua - Landcare Research, NZ Department of Conservation) to define and tailor service to each country’s needs. The implementation of the IAS project will overlap with the current proposed project. Preliminary discussions on the complementarity between the two projects have taken place to ensure maximum cooperation and will resume during the PPG phase. Possible areas of cooperation include community and stakeholder consultations; mitigating threats to Protected Natural Areas (e.g. Huvalu Conservation Area) including IAS; shared learning materials and lessons learned; biodiversity surveys, etc.

With funding from the Governments of Australia and New Zealand, Niue’s new recycling facility will soon become operational, first to process glass bottles and PET plastic bottles, before expanding to other types of materials, including aluminum cans, paper and cardboard, e-waste, used oil, batteries, and scrap metal. Moreover, with funds from the European Union (EU), the **“Pacific-EU Waste Management Programme (“PacWastePlus”;** EUR 16.5 million; 2018 – 2023) will generate improved economic, social, health and environmental benefits by enhancing existing activities and building capacity and sustainability into waste management practices. Priority waste streams that the PacWastePlus program will focus on include hazardous wastes (specifically asbestos, e-waste and healthcare waste), solid wastes (specifically recyclables, organic waste, disaster waste and bulky waste) and water impacted by solid waste (note this is not wastewater or referring to any liquid waste).

The global SIDS GEF-funded program **“Implementing Sustainable Low and Non-Chemical Development in SIDS”** (“ISLANDS”; GEF ID 10185; US\$ 66,000,000 from GEFTF; concept approved) ISLANDS program aims to build a sustainable model for the sound management of chemicals and wastes in order for SIDS to continue to sustainably develop without a build-up of toxic and hazardous substances in their territories. This will be achieved through harmonizing, among other things, procurement practices, standards and labelling and capacity building which can only be accomplished at the global/regional level in the context of SIDS. The program will also create and support long term cooperation among SIDS to achieve this goal.

The **“Global Climate Change Alliance Plus Scaling up Pacific Adaptation”** (GCCA+ SUPA; 2019-2023; EUR 14.89 million) project aims to scale up climate change adaptation measures in specific sectors supported by knowledge management and capacity building in ten countries in the Pacific. The specific objective of the project is to strengthen the implementation of sector-based, but integrated, climate change and disaster risk management strategies and plans. The project is funded by the European Union and implemented by the Pacific Community (SPC) in partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP) and The University of the South Pacific (USP).[\[23\]](#)

Niue is also part of the regional GEF-7 project under the International Waters Focal Area entitled **“Mainstreaming climate change and ecosystem-based approaches into the sustainable management of the living marine resources of the WCPFC”** (GEF 10394; US\$ 10,000,000; concept approved) which objective is to implement the 2019 Strategic Action Programme for the Sustainable Management of Living Oceanic Resources by the Pacific SIDS to address the primary and emerging threats, particularly climate change.

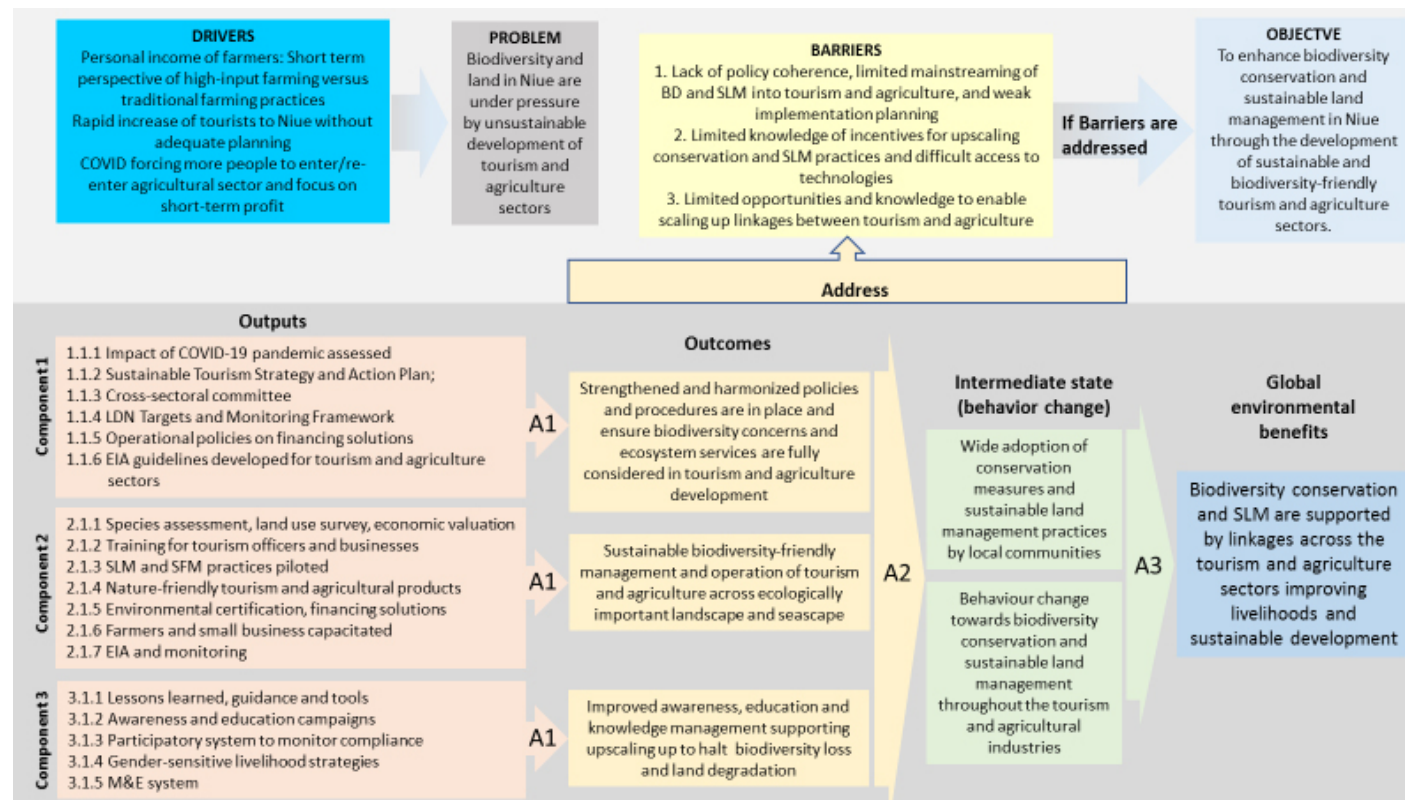
3) Proposed alternative scenario

The Government of Niue has been, and continues to be, focused in green economic development and is committed to becoming an example in the Pacific region, where biodiversity conservation and landscape management are interwoven into the tourism and agriculture sectors. However, the financial and technical resources that are available to Niue will not be enough to guarantee coherent progress and timely achievement of the said goals without additional support from international donors. This project concept follows a holistic approach to the removal of the identified barriers by building on the momentum achieved in the baseline scenario and creating synergies through three interconnected components. It builds on examples demonstrating that greater levels of biodiversity conservation bring greater tourism-related economic revenue, which can feedback to support conservation and sustainable management efforts.[\[24\]](#)

The proposed project assumes that tourism and agriculture, if implemented coherently and sustainably, can provide the most appropriate tools to improve biodiversity conservation and integrated landscape management, diversify the economy and enhance livelihoods, while building Niue’s resilience to future economic shocks, such as natural disasters and global pandemics. The project’s approach is also based on the assumption that mainstreaming biodiversity and ecosystem services into tourism and agriculture policy, planning and operations in Niue will require understanding and acceptance of the positive impacts that healthy ecosystems and productive landscapes provide for livelihoods. The shift in behavior to accepting the role of biodiversity and ecosystem services as the basis for sustainable tourism and food production will happen through promotion of sustainable tourism and sustainable land management to create viable economic opportunities for local communities through community-based ecotourism and agriculture. The resultant livelihood strategies will need to be gender-sensitive, incorporating social sustainability into the project strategy.

Through improved and integrated planning, testing of innovative solutions and knowledge sharing, the proposed project will lay the basis for upscaling sustainable tourism and agriculture as a path to sustainable development.

Figure 2. Theory of change.



Assumptions:

A1: Lessons learnt from COVID experience is integrated into Tourism Strategy and Action Plan; Tourism Action Plan is implemented; Cross-sectoral committee able to result in cross-sector work; Training contains necessary information for sectors to make shift to sustainability; If income is increased through conservation enterprises, then participants will discontinue environmentally unsustainable activities, leading to reductions to threats to the environment, Trainees make changes in practices after capacity enhanced; Incentives and finance solutions sufficient to scale approaches.

A2: Policies and procedures force wider sustainable practices in tourism and agricultural sectors; Biodiversity-friendly tourism and agriculture enterprises are proven profitable and accepted by sectors as the long-term sustainable solutions; Awareness and knowledge of sustainability by trainees is translated to a sector-wide behaviour change.

A3: Tourism and agriculture remain the main economic sectors in Niue.

The project objective is to enhance biodiversity conservation and sustainable land management in Niue through the development of sustainable and biodiversity-friendly tourism and agriculture sectors, and it will be achieved through (i) strengthened and harmonized policies and procedures are in place and ensure biodiversity concerns and ecosystem services are fully considered in tourism and agriculture development; (ii) sustainable biodiversity-friendly management and operation of tourism and agriculture across ecologically important landscapes and seascapes; and (iii) improved awareness, education and knowledge management supporting upscaling actions to halt biodiversity loss and land degradation. The objective of the project will be achieved through the following three components with related outcomes and outputs (see Figure 2).

Component 1: A national governance context that recognizes, facilitates and promotes sustainable development of tourism and agriculture sectors.

Component 1 will operate at the national level to address barriers related to the enabling policy and regulatory framework and mechanisms to encourage and monitor uptake of sustainable and biodiversity-compatible behavior across the tourism and agriculture sectors.

First, the project will complete a comprehensive assessment of the social, economic and environmental impacts, both direct and indirect, of the COVID-19 pandemic on Niue's tourism and agriculture sectors. This will be based on i) an analysis of existing international and regional approaches (e.g. limits of acceptable change, carrying capacity) and best practices, and ii) adaptation of existing methodologies to best suit Niue's tourism and agricultural context and needs. The assessment will identify, and prepare a forward-looking analysis of opportunities and threats to social gains and sustainable development of the tourism and agriculture sectors and, at the same time, guide the development of policies mainstreaming biodiversity and SLM (Output 1.1.1). The assessment and its results will be used to part of the green recovery of Niue related to the impacts of COVID-19.

The project will revise Niue's National Tourism Strategy to provide overall vision and promote sustainable growth, while avoiding detrimental effects of tourism on terrestrial and marine ecosystems. In parallel, a Sustainable Tourism Action Plan will be developed and integrated into the revised Strategy to provide clear policy guidance and direction for how to promote Niue's tourism in a sustainable manner and help identify and phase-out any unsustainable tourism operations (Output 1.1.2). The development of the sustainable tourism plan will be led by a cross-sector working team representing a range of disciplines working together with local communities to identify needs, and outline roles and responsibilities. The strategy and plan will assist in building a more sustainable tourism sector and play a part in the green recovery of Niue post-COVID. Further, during PPG, the possibility of undertaking a future scenario planning exercise of how Niueans want the future Niue to look like and the role that tourism will play in the future Niue will be investigated and, if deemed useful, incorporated within the National Tourism Strategy and Sustainable Tourism Action Plan. A similar exercise was undertaken in Palau and lessons can be drawn from that experience. The strategy and plan will not only have long-term benefits to terrestrial biodiversity, but also to marine biodiversity as many tourist activities e.g. fishing and diving have impacts on biodiversity.

A cross-sector committee for sustainable tourism and agricultural development will be operationalized, with the aim to coordinate resource use planning and management, oversee mainstreaming of biodiversity and ecosystem services across sectors and support decision making processes (Output 1.1.3). These efforts will be supported by the development of memorandums of understanding (MOUs) between relevant agencies (including those involved in land use planning and climate change) and sector partners and improved coordination with Niue's fourteen districts. Representative of the private sector, farmers' association and village council representatives will also participate as appropriate. The committee will have oversight for the implementation of Niue's NBSAP and Sustainable Tourism Action Plan and will identify resilient, diversified nature-based investment opportunities in the tourism and agriculture sectors. As part of the responsibilities of the committee will be development of integrated National Voluntary LDN Targets for Niue and monitoring the implementation and accomplishment of the targets (Output 1.1.4). It will also be responsible for the key interlinkages with other sectors needed to achieve its targets. The cross-sector committee for sustainable tourism and agricultural development may benefit from lessons learned from, and coordination with, the national invasive species committee responsible for the implementation of Niue's National Invasive Species Action Plan. This approach will be confirmed during the PPG based on an assessment of existing committees, membership and mandates.

The project will develop policies and mechanisms to implement financing solutions and economic incentives to support agricultural and tourism development, improve value chains scale-up and build resilience to downturns and shocks, while conserving biological diversity and ecosystem services (Output 1.1.5). Output 1.1.5 will also lead to increase resilience in the agricultural and tourism sectors in the green recovery of Niue post-COVID. The project will build on the results of previous studies into financial instruments and resource mobilization for conservation and several identified opportunities to support the conservation business plan, including a study centered on ideas to generate sustainable financing in ecotourism.[25] Possible options to be developed and adopted include user fees, environmental management charges, credits, subsidies, microloans, certification and tourism and agriculture fund. Mechanisms designed for sustainable financing developed through the GEF-6 “Ridge to Reef” project will also be explored. Mapping of existing initiatives and standards will be completed during the PPG phase to define these opportunities and inform development of project activities. Financing solutions will be demonstrated under Component 2.

The project will develop EIA guidelines to operationalize the Environment Regulations 2017 with respect to the need for EIAs prior to decision making regarding any developments that may negatively impact the environment. The project will also support institutionalizing EIA through a capacity development program for mainstreaming biodiversity conservation and SLM within tourism and agriculture planning, monitoring and surveillance (Output 1.1.6). It will include developing and implementing a training program on EIA to support the approval, licensing and authorization process. The training will target technical staff in government agencies, as well as independent consultants, involved in natural resources and development to build in-country capacity to plan, support and monitor tourism and agriculture developments that respect and promote biodiversity conservation and enhance ecosystem services.

Component 2: Integrated model for mainstreaming biodiversity and ecosystem services into tourism and agriculture

Component 2 of the project relies on the fact that marine resources are the main reason why tourists come to Niue but, once there, visitors also wish to explore nature-based activities on land, including hiking and birdwatching, as well as cultural activities, including visiting local villages, seeing traditional farming methods and experiencing the local food. The Component is based on a participatory model where the community is actively involved in the processes of tourism development to support the local culture, tradition, knowledge and skills that serve to create innovative cultural-tourism products. The approach will evaluate and test options for creating linkages and synergies between tourism and agriculture, piloting financing solutions, improving value chains, engaging communities and the private sector, including farmers, tour operators and hoteliers through seven outputs. Ultimately, the Component will pilot interventions that through upscaling (Component 3) can halt biodiversity and land degradation.

Under Output 2.1.1, a population assessment of key terrestrial species at risk (Bristle-thighed curlew, Niuean Polynesian triller, Polynesian starling, coconut crabs, flying foxes, and Pacific imperial pigeon), and a comprehensive land use and vegetation cover survey will be carried out across the country to establish baseline data and indicators for EIA, monitoring and enforcement. The population assessment will also enable updating of the list of globally threatened and endangered terrestrial species that are present in Niue. Moreover, an economic valuation of ecosystem services across Niue’s terrestrial and marine ecosystems will be carried out to enable the integration of results into national development planning and promote intersectoral planning approaches. The economic valuation of ecosystem services will include a spatially-explicit assessment to identify key ecological assets that may be impacted by tourism and agriculture development, and will inform the development and implementation of sustainable tourism and agriculture standards and impact monitoring.

Output 2.1.2 will focus on training and capacity development for tourism officers, local government, community-based tourism enterprises and local tourism operators to identify, monitor and minimize the negative impacts of tourism on biodiversity and ecosystems (marine and terrestrial), including, but not limited, to increased harvesting of endemic trees for tourist carvings, unsustainable fishing practices to supply resorts and hotels, clearing of forests for the construction of tourist accommodations and nearby housing for staff, and introduction and spread of weeds and invasive alien species into and within the

country due to higher tourist influx and use of trails in biodiversity sensitive areas. Project activities under this output will target both water-based (dive, snorkeling, fishing, whale watching, etc.) and land-based activities (hiking, village visits, cultural experience, etc) and will engage several tourism enterprises and local tourism operators, as well as tourist accommodations and restaurants.[26]

Next, output 2.1.3 of the project will support landowners and farmers to pilot SLM practices to rehabilitate degraded farmland and restore soil fertility in the buffer zone (2,800 hectares) of the Huvalu Forest Conservation Area to improve soil fertility, increase sustainable crop production and avoid clearing of the adjacent forest. In collaboration with farmers and landowners, the project will introduce innovative sustainable land management practices that will be tested and evaluated with a view to moving towards sustainable environmentally sound crop production. The techniques will include, for example, mulching, introduction of nitrogen-fixing intercrops, continuous soil cover using cover crops as natural alternatives to toxic herbicides such as the widely used paraquat, crop rotation, optimization of nutrient use, drip-irrigation, recycling compost and other natural fertilizers for soil enrichment, and bio-intensive integrated weed, disease and integrated pest management (e.g. through natural pest and predator controls). The activities will have a positive effect on the adjacent marine environment, in particular coral reefs as explained earlier in the PIF. The project will also pilot techniques to improve production, for example, through testing of crops resistant to drought, and protection methods to withstand cyclone-force winds. As part of this output, a training for trainers will be undertaken to address the knowledge and capacity gap among government and farmers association staff in order to assist farmers with adopting these SLM practices.

Biodiversity-friendly agricultural products and tourism experiences will be developed in cooperation with the local communities and private sector, and piloted in project sites to raise engagement in biodiversity conservation and sustainable land management and generate livelihood and gender-sensitive benefits (Output 2.1.4). Under this output, gender-sensitive sustainable livelihood strategies will be also be emphasized, developed and implemented to promote sustainable tourism and agriculture. Under this output, gender-sensitive sustainable livelihood strategies will be also be emphasized, developed and implemented to promote sustainable tourism and agriculture.

The project will work with local communities at project sites to identify and develop agricultural and tourism products that support biodiversity and ecosystem services; are community-based and reflect local cultures; strengthen local social enterprises; and help local communities to promote and market their products and experiences. These will include: (i) identification and development of products and experiences that are compatible with conservation efforts, community-based and reflect local cultures (e.g. no impact human-cetacean interaction, locally produced food, cultural immersion); (ii) strengthening of local social enterprises to develop and manage environmentally sustainable tourism and sustainable agricultural practices; (iii) improving waste management practices and systems in connection to agriculture and tourism activities to reduce waste streams on land and in the ocean, including coastal runoff and pollution; (iv) value chain strengthening, promotion and marketing of biodiversity-friendly agricultural products and tourism experiences. Interventions under this output will take place on 5,300 hectares of the Huvalu Forest (including 2,800 hectares of agricultural land and 2,500 hectares of sustainably maintained forest). Outputs 2.1.3 and 2.1.4 will lead to more resilience in the agricultural sector, include livelihood benefits and green jobs, and food security, as part of the green recovery of Niue post-COVID.

Certifications and other financing solutions will be demonstrated under Output 2.1.5 to promote nature-based solutions and green/blue economies, and to integrate biodiversity conservation and sustainable land management into the tourism and agriculture sectors. The standards and certifications will support and strengthen sustainability of tourism and agriculture and create financial incentives for tourism operators and farmers to adopt biodiversity-compatible practices. Possible financing solution options to be explored include user fees, environmental management charges, credits, subsidies, microloans, certification and establishment of a tourism and agriculture fund. Where possible, financing institutions will be involved in the implementation of the financing solution options.

Under output 2.1.6, farmers and small businesses will be capacitated and supported to develop and pilot business plans and revenue generation models to access and test the sustainable financing solutions developed under Component 1. The project will review the extensive work done by USAID on Conservation Enterprise to guide the approach. Lessons learned will be recorded and shared for scaling-up. This will lead to resilience in the sector and form part of the green recovery of Niue post-COVID.

Local capacity to assess and monitor environmental impacts will be developed and strengthened to evaluate the impacts of projects interventions, support the certification system and evaluate wider permit applications for new operations in the tourism and agriculture sectors (Output 2.1.7). EIA guidelines to assess and monitor potential impacts of tourism and agricultural operations will support decision-making, monitoring and enforcement processes. Criteria, service standards and protocols will be developed for the assessment of impacts and drafting of recommendations regarding the evaluation of permit applications in the tourism and agriculture sectors to ensure standardized operations and service offerings that respect and benefit local communities, and follow a standardized approval, licensing and authorization process. By creating in-country capacity to carry out EIA of new permit applications for tourism and agricultural operations will reduce the dependency on external expertise, bring consistency with national policies and strategies, and improved coordination among government agencies and private sectors.

Component 3: Knowledge management, awareness, gender mainstreaming and monitoring & evaluation

A knowledge exchange system will be established through the project for sharing lessons learned, guidance and tools, and for replication and upscaling of best practices across Niue (Output 3.1.1). Project best practices and lessons learned will be identified, documented and disseminated across the Pacific region and with other relevant GEF-financed projects supporting sustainable tourism and land management.

The proposed project will increase public awareness of environment and sustainable development principles through outreach and education campaigns that will target communities, tourism operators, farmers, CSOs, and domestic and international tourists (Output 3.1.2). This effort will seek to raise awareness across the sectors on the importance of considering/respecting/protecting biodiversity (and of practical tools to support this, including those developed by the project) and educate on potential negative impacts of tourism and agriculture and how they can be better informed of these and support practices that do not negatively impact biodiversity, and that can also derive benefits for biodiversity conservation and local communities. The project will also support the implementation of the Forest Protected Area Communication Strategy[27] developed by the Department of Environment to “communicate, educate and provide awareness to people locally and abroad about the importance of conservation and protected areas to their livelihood and the future generations”. Primary and secondary schools will be actively engaged in the project activities, including the development of curricula, and in the planning and implementation of outreach and awareness raising activities, including through student and tourist participation in citizen science and biodiversity monitoring initiatives (e.g. iNaturalist)[28].

Output 3.1.3 will support the development and launching of an integrated ecotourism mobile application for tourists, tourism operators, farmers and communities. The application will provide an e-marketplace for tourists and community-based tourism providers, integrated into platforms such as Booking.com and TripAdvisor, providing more direct market access for communities, and helping international tourists plan activities that minimize the environmental impact of their travel. The application will also support impact through a system of citizen inspectors to support the government efforts in monitoring compliance. The application and its use will be disseminated through awareness and education campaigns under output 3.1.2.

Finally, the project will establish an effective participatory monitoring & evaluation system that adheres to GEF and UNEP requirements, and enables effective evaluation of project progress and impact (Output 3.1.5). The M&E system will incorporate gender mainstreaming and safeguards will be developed and implemented for adaptive project management. During PPG, monitoring and reporting tools which have been developed by Trends Earth to assist countries to fulfil their obligation under UNCCD will be explored for potential use by the project.

4) Alignment with GEF focal areas

The Project is aligned with Objective 1 of the GEF-7 Biodiversity Focal Area (BD 1-1: Mainstreaming biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority areas). The three project components will support integrating and mainstreaming biodiversity into planning and development of the tourism and agriculture sectors. The proposed project is also aligned with Objective 1 of the GEF-7 Land Degradation Focal Area Strategy (LD-1-1: “Support on the ground implementation of SLM to achieve LDN”) and Objective 2 (“Creating an enabling environment to support voluntary LDN target implementation) of the GEF-7 Land Degradation Focal Area Strategy.

The three objectives will be simultaneously supported through the delivery of the following outputs:

(a)

1.1.1. Social, economic and environmental impact of COVID-19 pandemic on Niuean tourism and agriculture sectors assessed to identify opportunities and threats, and guide long-term policy development for environmental sustainability; The social assessment will include a gender analysis.

(b)

1.1.2. Biodiversity and Sustainable Land Management and Land Degradation Neutrality mainstreamed into the revised Niue’s Sustainable Tourism Strategy revised and Tourism Action Plan developed and implemented to avoid detrimental effects of tourism on terrestrial and marine ecosystems;

(c)

1.1.3. Cross-sectoral committee operationalized/ strengthened to mainstream biodiversity conservation and sustainable land management (SLM) across tourism and agriculture sectors, supported by blue/green economy strategy, improved national coordination and strengthened regulatory framework;

(d)

1.1.5. Operational policies on financing solutions developed and approved to create incentives for the tourism and agriculture sectors to invest in the conservation of biodiversity and sustainable land management;

(e)

1.1.6. Guidelines on environment impact assessment (EIA) developed for tourism and agriculture sector operations, and capacity and know-how enhanced in government agencies and relevant stakeholders to conduct/review EIA to support decision-making monitoring and enforcement;

(f)

2.1.1. Comprehensive biodiversity assessment, survey of vegetation cover and soil quality, and economic valuation of ecosystem services carried out in Huvalu Forest Conservation Area to establish baseline data and indicators;

(g)

2.1.4. Nature-friendly tourism and agricultural products and practices co-designed with local communities and piloted in project sites to raise engagement in biodiversity conservation and sustainable land management, reduce waste and generate livelihood benefits;

(h)

2.1.5. Environmental certification system and other financing solutions for tourism and agriculture sectors demonstrated (e.g. user fees, environmental management charges, credits, subsidies, microloans, biodiversity offsets, and tourism development fund) to promote nature-based solutions and green/blue economies and ready for upscaling;

(i) 2.1.6. Farmers and small business capacitated and supported in the development of business plans and revenue generation models to access and test sustainable financing solutions;

(j) 3.1.1. Lessons learned, guidance and tools systematized for the scaling-up the linkages between sustainable tourism and sustainable agriculture and the biodiversity, productive soil and ecosystems that the sectors depend on;

(l) 3.1.4. M&E system incorporating gender mainstreaming and safeguards adopted and implemented.

The following outputs will contribute more specifically to Objective 1 of the Biodiversity Focal Area:

(a) 2.1.2. Training and capacity development for tourism officers, local governments, community-based tourism enterprises and local tourism operators to identify, monitor and manage tourism impacts;

(b) 2.1.7. Local capacity to conduct environmental impact assessments and monitoring developed/strengthened to assess the impacts of projects interventions, support the certification system and to evaluate wider permit applications;

(c) 3.1.2. Targeted awareness and education campaign on biodiversity, ecosystem services and waste reduction delivered to tourism industry, CSOs, farmers, and tourists;

(d) 3.1.3. Participatory system of communities and citizens established to monitor compliance with environmental regulations in tourism and agriculture.

The following output will contribute more specifically to Objective 1 of the Land Degradation Focal Area:

(a) 2.1.3. Smallholder farmers supported to implement innovative practices of sustainable land/forest management to promote regenerative agriculture and agroforestry, improve soil fertility, phase out toxic chemical herbicides, and move towards environmentally sound production;

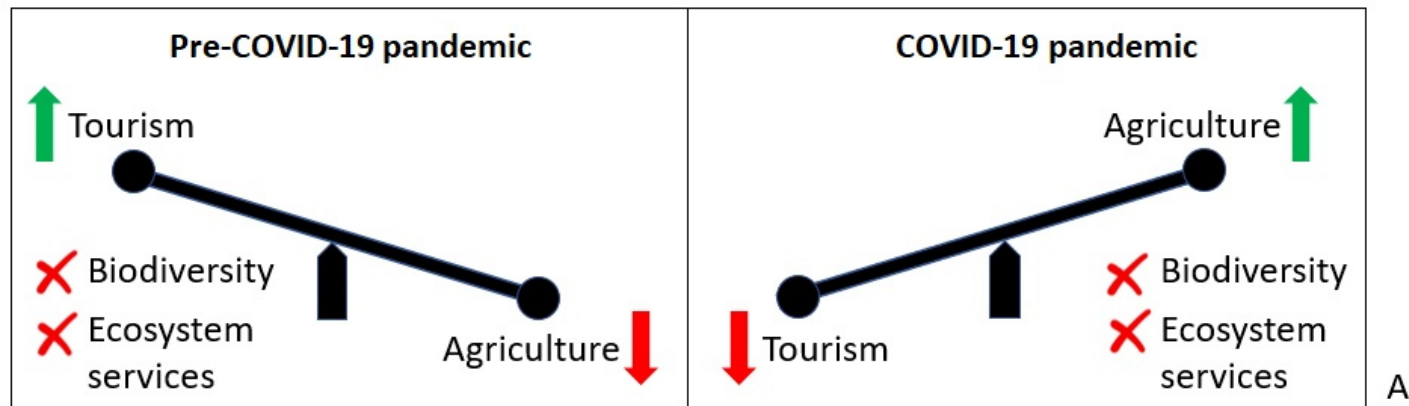
Finally the following output will contribute more specifically to Objective 2 of the Land Degradation Focal Area:

(a) 1.1.4. Integrated National Voluntary LDN Targets and monitoring framework designed for Niue aligned with cross-sectoral committee.

5) Incremental/additional cost reasoning and expected contributions from the baseline

A schematic comparison between the business as usual scenario and the alternative scenario is shown in Figure 3. The incremental cost reasoning, including expected contributions from the baseline, the GEFTF, and co-financing are presented in Table 2 below.

Business as usual: trade-off model



Alternative scenario: synergistic model

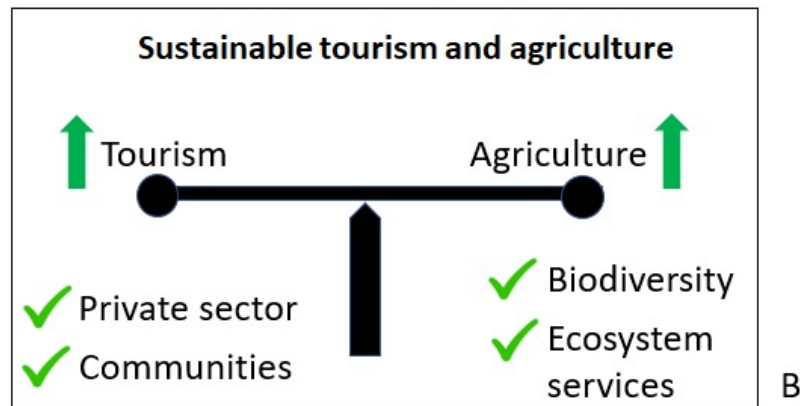


Figure 3. Comparison between (A) the baseline scenario where tourism and agriculture sectors function mostly on the basis of a trade-off model and (B) the alternative scenario where sustainable tourism and agriculture are supported by biodiversity and ecosystem services, as well as by a strong private sector.

Table 2. Baseline, alternative scenario and increment.

Baseline (a)	Alternative scenario (b)	Increment (b - a)
<p>The business as usual baseline is characterized by development in the tourism and agriculture sectors happening disjointly on the basis of a trade-off model, where development in one sector happens at the detriment of the other. Neither agriculture nor tourism supports biodiversity and ecosystem services in a meaningful way.</p> <p>In the baseline scenario, the society, economy and environment are very vulnerable to external shocks and natural disasters. The risk of relying heavily on a single productive sector (i.e. tourism) was exposed by the Covid-19 pandemic causing the loss of nearly half of the country's GDP.</p> <p>Integrated planning and development of sustainable tourism and agriculture sectors is prevented by lack of coherent policies, and limited mainstreaming of biodiversity and SLM across sectoral implementation plans.</p> <p>Lack of capacity among farmers to adopt SLM approaches, limited access to innovative technologies, and poor financial incentives prevent sustainable development of the agriculture sector, put pressure on the land and lead to degradation and land conversion.</p> <p>Upscaling towards the Niue's sustainability aspirations remains out of reach due to limited public awareness on biodiversity and land degradation, weak private sector, narrow-based economy and lack of long-term financial incentives.</p>	<p>The alternative scenario brought by the GEF intervention will lead to improved biodiversity conservation and sustainable land management supported by linkages across the tourism and agriculture sectors as the means to diversify Niue's economy and achieve sustainable livelihoods and long-term economic development in Niue.</p> <p>In the alternative scenario, through the mainstreaming of biodiversity and SLM, as well as support for a stronger private sector, sustainable tourism and agriculture sectors will develop on the basis of a synergistic model underpinned by long-term planning and coherent policies. In the alternative scenario, the sustainable tourism and sustainable agriculture sectors will be better equipped to absorb shocks and withstand economic downturns caused by, e.g., natural disasters and economic shocks (Figure 3).</p> <p>Through improved and integrated planning, testing of innovative solutions and knowledge sharing, the project will lay the basis for upscaling sustainable tourism and agriculture as means to protect biodiversity and improve ecosystem services.</p> <p>Communities will work together with tourism businesses to decide how to integrate tourism on the land they own, alongside agriculture, hunting and other activities of importance for their livelihoods. This will strengthen linkages and create synergies between tourism and agriculture to help harness the tourist dollar to achieve the objectives of sustained and equitable growth.</p>	<p>Biodiversity conservation and sustainable land management (SLM) will be mainstreamed across the tourism and agriculture sectors.</p> <p>Development of sustainable tourism operations will be guided by the Tourism Action Plan and supported improved coordination among government agencies.</p> <p>Incentives for the tourism and agriculture sectors to invest in the conservation of biodiversity and sustainable land management will be created;</p> <p>Decision-making, monitoring and enforcement will be supported by enhanced capacity and know-how among government agencies and relevant stakeholders.</p> <p>The environmental impacts of tourism will be identified, monitored, avoided and mitigated, while benefiting conservation efforts.</p> <p>Viable SLM technologies will be tested and financial incentive mechanisms to overcome barriers for SLM will be put in place and ready for upscaling.</p> <p>Communities will engage in biodiversity conservation and sustainable land management, waste reduction.</p>
<p>BASELINE COST</p> <p>§ TOTAL: US\$ 7,995,588</p>	<p>ALTERNATIVE COST</p> <p>§ GEF: US\$ 3,502,968</p> <p>§ Co-financing: US\$ 20,216,167</p> <p>§ Baseline: US\$ 7,995,588</p> <p>§ TOTAL: US\$ 31,714,723</p>	<p>INCREMENTAL COST</p> <p>§ GEF: US\$ 3,502,968</p> <p>§ Co-financing: US\$ 20,216,167</p> <p>§ TOTAL: US\$ 23,719,135</p>

6) Global environmental benefits

The project will build on the baseline and use GEF resources to ensure that Niue's global environmental values are enhanced through the implementation of the three project components. Primarily, the project seeks to strengthen conservation and sustainable use of biodiversity and sustainable land management through integrated national and community actions. The proposed project will have an immediate global environmental benefit, albeit on a small scale. The project will employ a comprehensive approach to managing key resources, both on land and at sea, contributing to improving Niue's resilience and sustainable development.

The project will enhance the long term institutional capacity of Niue at both central government and village and community levels, together with the mainstreaming of a sustainability ethic into land, water and reef use. This will lead to the sustainability of natural productivity and conservation of the habitats of a number of plant and animal species and valuable ecosystems. As a result, globally significant biodiversity will be conserved and valuable ecosystem services will be safeguarded.

The Huvalu Forest Conservation Area is classified as an Important Bird and Biodiversity Area^[29] and Niue falls within the WWF's globally important "Ecoregions under Tropical and Subtropical Moist Broadleaf Forests" under the South Pacific Islands Forests, and within the Micronesia-Polynesia Hotspot as delineated by Conservation International.

The project will help preserve the extraordinary value of Niue's natural environment, which is highly vulnerable to both human and natural impacts, including fishing activity, storm events and climate change. The project will help raise Niue's global profile as a pristine ecotourism destination, as will its contribution to global marine conservation.

The direct global environment benefits of the project's actions will include the conservation of the globally threatened species listed in table 3 and their habitats. Additional global benefits will be from reduction of green-house gas emissions, and from reduced loss and degradation of forests and reefs. The restored and rehabilitated productive landscape will result in increased soil fertility that translates to increased crop productivity and therefore less pressure on forested areas, reduced forest degradation and mitigation of the greenhouse gas emissions. The area will also experience less soil erosion and reduced levels of herbicides use, which will mitigate the impact on coral reefs due to reduced levels of runoff.

The project sites cover 5,400 hectares, which is 20.8 per cent of the total terrestrial land area of Niue.

Table 3. Non-exhaustive list of Niue's globally relevant biodiversity.

Common name	Species	IUCN Red List Status	Notes
Mammals			
Tongan flying fox	<i>Pteropus tonganus</i>	LC	Endemic to the Pacific; only species known to pollinate some native Niuean trees
Birds			
Bristle-thighed Curlew	<i>Numenius tahitiensis</i>	EN	

Niuean Polynesian triller	<i>Lalage maculosa whitmeei</i>	NE	Single-country endemic subspecies
Polynesian starling	<i>Aplonis tabuensis brunescens</i>	NE	Single-country endemic subspecies
Pacific Imperial pigeon	<i>Ducula pacifica</i>	LC	Endemic to the Pacific; hunted for food throughout its range
Reptiles			
Hawksbill turtle	<i>Eretmochelys imbricata</i>	CR	
Green turtle	<i>Chelonia mydas</i>	EN	
Olive small-scaled skink	<i>Emoia lawesi</i>	EN	Range limited to Polynesia
Loggerhead turtle	<i>Caretta caretta</i>	VU	
Fish			
Oceanic Whitetip shark	<i>Carcharhinus longimanus</i>	CR	
Grey Reef Shark	<i>Carcharhinus amblyrhynchos</i>	EN	
Flat-tail sea krait	<i>Laticauda schistorhynchus</i>	VU	Single-country endemic
Silky Shark	<i>Carcharhinus falciformis</i>	VU	
Whitetip Reef Shark	<i>Triaenodon obesus</i>	NT	
Yellowfin Tuna	<i>Thunnus albacares</i>	NT	
Striped Marlin	<i>Kajikia audax</i>	NT	
Invertebrates			
Pineapple Sea Cucumber	<i>Thelenota ananas</i>	EN	
Coconut crab	<i>Birgus latro</i>	VU	

Small Giant Clam	<i>Tridacna maxima</i>	NT	
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7) Innovation, sustainability and potential for scaling up

Innovation: The innovative nature of the proposed project lies in the identification and implementation of combined biodiversity and SLM practices within the planning and sustainable development of tourism and agriculture in Niue. The project will introduce and test innovative solutions in financing, sustainable land management, market access and value chain. It will create a participatory environment for the creation of products and experiences that create a strong link between tourism and agriculture sectors, such as culinary tourism experiences and cultural immersion. The project will also pilot the use of open-source mobile apps (e.g. iNaturalist and Spatial Monitoring and Reporting Tool (SMART)[30]) for recording and sharing information about sightings of key species and illegal activities (e.g. harvesting of coral, littering, hunting of coconut crabs, flying fox, and Pacific imperial pigeon, etc), which can in turn be used to direct enforcement and/or awareness raising efforts. The project will also provide the means for different government agencies to work together, which is also expected to contribute to institutional innovation in the country. The experiences of the project will be documented and shared widely within the region.

Sustainability: The project will be designed to engage various stakeholders, with particular emphasis on local communities and the private sector. Improving coordination among different government agencies will also be a priority and will further ensure sustainability. The project will demonstrate the value of healthy biodiversity and landscapes to tourism and food production and the role and positive impact that communities and private sector bring to the equation. As the project builds strongly on community and private sector interest and is focused on building their capacities for long term conservation, the actions proposed are expected to be sustainable.

The long-term success of conservation efforts requires time, patience and a respectful approach to communities – the speed of implementing change, and their sustainability, are largely determined by the interest and willingness of the community itself. The interest of the community will come from both men and women as gender sensitive/responsive projects are more sustainable. Apart from addressing environmental challenges, it also helps to nurture and enhance social/communal/familial stability that will contribute to foster economic prosperity. The project will play an important role in catalyzing change, building capacity and providing resources, but the ownership of the project outcomes needs to rest with local people and be supported by the Government. The project will recognize these issues and focus on actions that will most likely enable longer term changes.

The project will build on lessons learned in the region to ensure that proper consultation and tenure clarification are undertaken. For example, success stories such as the “Wakatu Fiji” campaign, which is based on a concept well understood by local people and uses state of the art social media tools to reach audiences and engages a wide range of government and non-government actors provides a valuable lesson on how to engage customary land owners and the general public for similar projects that are seeking to raise awareness and build networks of support across multiple sectors. The project will be developed on the interests of local communities expressed during the PPG phase.

Potential for scaling up: Aligning project design to the current and potential capacity of stakeholders will help build confidence for upscaling and sustainability after the project concludes. Furthermore, all project outputs will be developed based on their life beyond the project lifespan. This includes a focus on systems, sustainable, long-term involvement of the private sector in sustainable agriculture and tourism, and stimulating access to finance in the future.

Scaling minimal ecological impact will guide future development of the tourism and agriculture sectors. Demonstrating that ecological resources such as intact coral reefs and forests, clear coastal waters and pristine beaches have long-term economic value will help to reinforce the ‘win-win’ relationship between ecological sustainability and sustainable livelihoods.

- [1] Sources: <https://www.mfat.govt.nz/en/countries-and-regions/pacific/niue> and <https://corporate.southpacificislands.travel/wp-content/uploads/2020/05/Pacific-Tourism-Sector-Status-report-Final.pdf>.
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- [3] OECD (2018) Making Development Co-operation Work for Small Island Developing States. Available at: <https://doi.org/10.1787/9789264287648-en>.
- [4] TRC Tourism (2019) Niue Working Towards Being One of the World's Leading Sustainable Tourism Destinations. Available at: <https://www.trctourism.com/niue-working-towards-becoming-one-of-the-worlds-leading-sustainable-tourism-destinations>.
- [5] Niue Agriculture Sector Plan 2015-2019. Available at <https://pafpnet.spc.int/attachments/article/776/Niue-Agriculture-Sector-Plan-2015-19.pdf>.
- [6] IUCN Red List (www.iucnredlist.org) status key: EN – endangered; VU – vulnerable; NT – near-threatened; LC – least concern; DD – data deficient; NE – not evaluated.
- [7] The State of Niue's Biodiversity for Food and Agriculture (<http://www.fao.org/3/CA3506EN/ca3506en.pdf>).
- [8] Friedlander AM et al (2017).
- [9] Source: <https://www.padi.com/diving-in/niue>.
- [10] UN-OHRLLS (2011) Small Island Developing States: Small Islands Big(ger) Stakes. United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), New York.
- [11] Tourism has a negative impact on 15% of all the species present in the Pacific region with coral species (83%) being the most impacted. Tourism is the third major threat, after pollution, to biodiversity in the region. Morrison C (2013) Impacts of tourism on threatened species in the Pacific region: a review. *Pacific Conservation Biology* 18: 227-239.
- [12] *Taoga Niue* is the main Government concept to support and promote the use and preservation of the Niuean culture, language and tradition.
- [13] Government of Niue, Gross Domestic Product 2018-2019 (<https://niue.prism.spc.int/category/economic/national-accounts>).
- [14] Niue National Biodiversity Strategy and Action Plan 2015. Available at: <https://www.cbd.int/doc/world/nu/nu-nbsap-v2-en.pdf>.
- [15] DAFF (2004) National Action Plan Addressing Land Degradation and Drought. Department of Agriculture, Forestry and Fisheries, Ministry of Natural Resources, Government of Niue.
- [16] <https://echa.europa.eu/substance-information/-/substanceinfo/100.016.015>.
- [17] Niue Agriculture Sector Plan 2015-2019. Available at <https://pafpnet.spc.int/attachments/article/776/Niue-Agriculture-Sector-Plan-2015-19.pdf>.
- [18] FAO (2019) State of the World's Biodiversity for Food and Agriculture, Commission for Genetic Resources in Food and Agriculture, FAO, 576 pp.
- [19] Mr. Haden Talagi, Director of Environment, personal communication; Pacific Island Farmers Organization (2020) Covid-19 Overview – Expected Impacts in the Pacific. Available at: <https://pacificfarmers.com/wp-content/uploads/2020/09/COVID-19-Pacific-Overview-Expected-Impacts-In-The-Pacific.pdf>.

[20] <https://niue-data.sprep.org/dataset/niue-food-and-nutrition-security-policy-2015-2019>.

[21] Haas (2002) Sustainability of Small-Scale Ecotourism: The Case of Niue, South Pacific. Available at: https://www.sprep.org/att/IRC/eCOPIES/miscellaneous/Niue_huvalu.pdf.

[22] Friedlander AM et al (2017).

[23] <http://ccprojects.gsd.spc.int/gccasupa>.

[24] For example, in the Caribbean and Pacific Coast of Central America, half of all dives take place in marine protected areas; in the Galápagos, marine-based tourism supports more than one-third of all jobs, bringing nearly US\$178 million per year to the local economy, where the tourism value of a single shark over its lifetime is US\$ 5.4 million, while a dead shark brings fishermen less than US\$ 200; in Palau, live sharks in the water bring in US\$ 1.9 million to Palau's economy through dive tourism. Friedlander AM et al (2017) and references therein.

[25] Niue Chamber of Commerce (2015).

[26] To be determined during the project development phase.

[27] Department of Environment (2014)

[28] www.inaturalist.org.

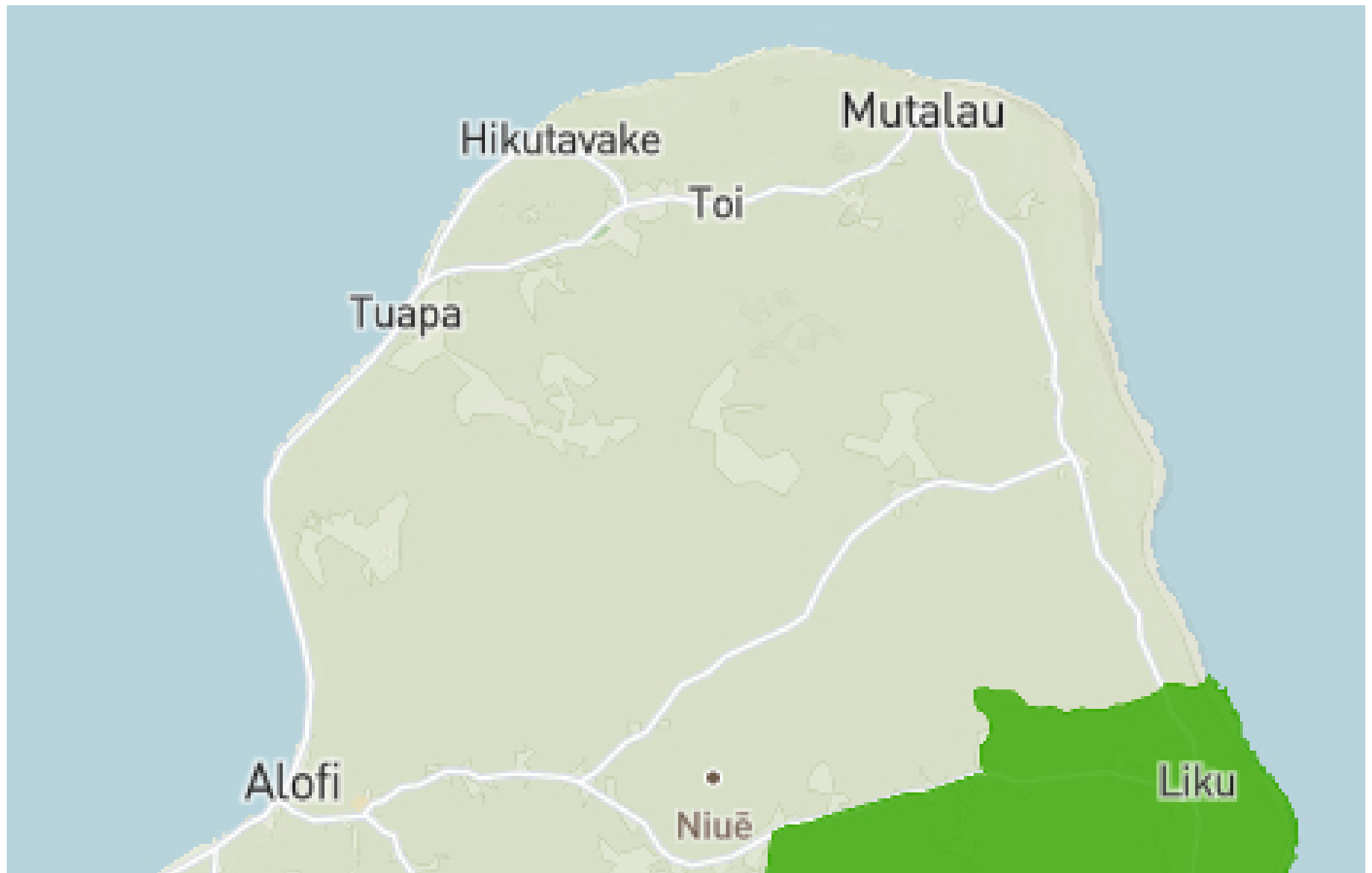
[29] Birdlife International (<https://www.birdlife.org/worldwide/programme-additional-info/important-bird-and-biodiversity-areas-ibas>).

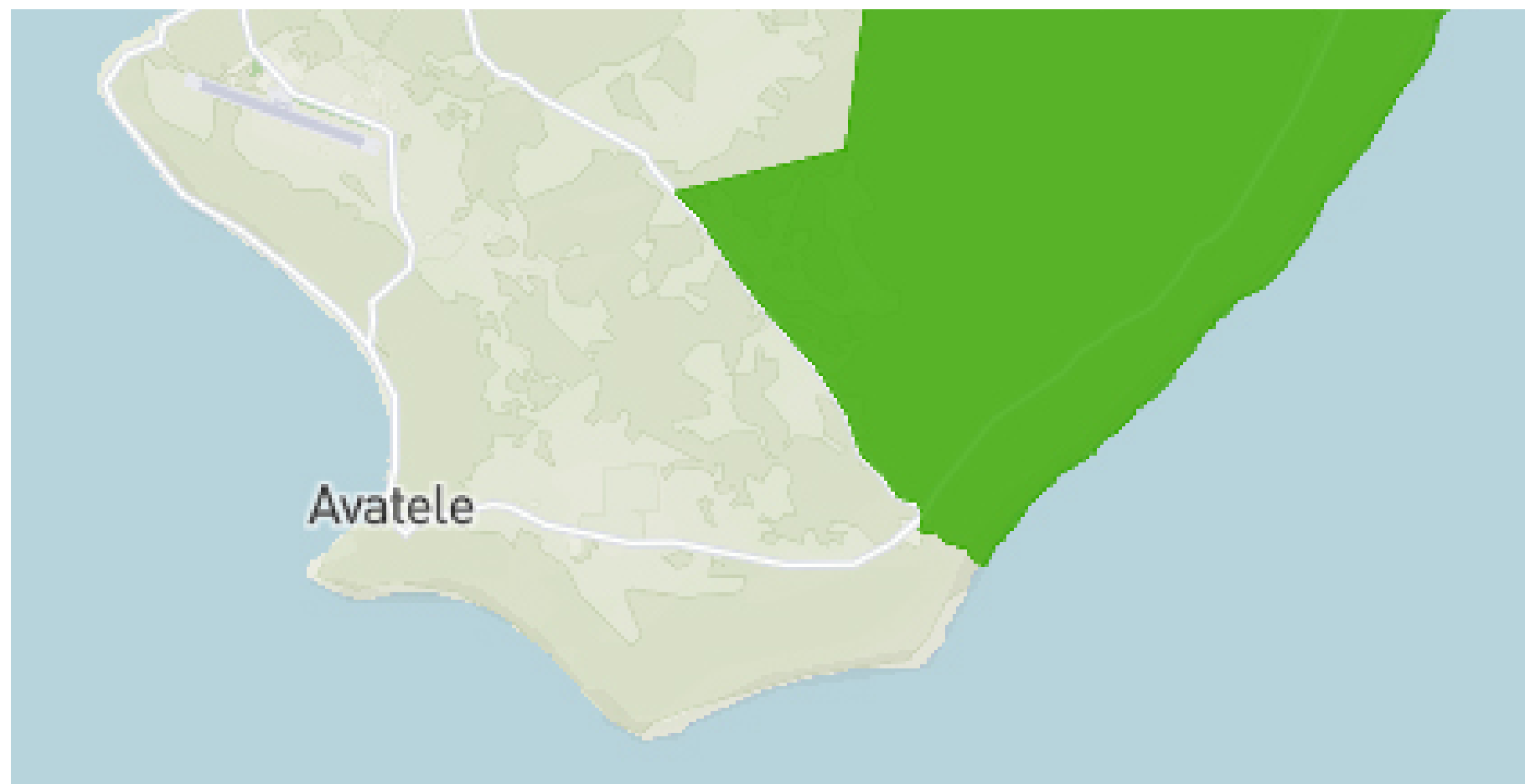
[30] iNaturalist: <https://www.inaturalist.org>; SMART: <https://smartconservationtools.org>.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

Figure 4. The Huvalu Forest Conservation Area (IUCN Category VI; coordinates: 19°4'47"S, -169°49'19"W). *Source:* Protected Planet website (<https://www.protectedplanet.net/61918>; accessed on 6 March 2021).





2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

To support the achievement of its outcomes, the project will adopt a partnership involving government agencies, NGOs, private sector, and research and training organizations in the coordinated delivery of project activities. The main project stakeholders and their expected role in the project are shown in Table 4.

Table 4: Key stakeholders and their role in the project

Stakeholder	Expected role in the project	Means of engagement
National level		
Department of Environment, Ministry for Natural Resources and Environment	<p>The Department of Environment is the lead government agency for biodiversity conservation. It is also responsible for waste and pollution management, as well as issues of biosafety and invasive species. This Department will be the lead agency for the implementation of this project.</p> <p>As Executing Agency, the Department of Environment will provide technical advice on matters pertaining to operationalizing the project. The DoE will be a member of the of the PSC and will house the PMU.</p>	The Department of Environment will be the executing agency of the project and lead project activities, as well as chair the project steering committee.
Department of Agriculture, Forestry and Fisheries	The Department is primarily responsible for developing and implementing policies for agriculture, forestry, fisheries, and agriculture, as well as for plant quarantine and agricultural health. DAFF promotes sustainable land management and forestry, and ensures increasing agricultural productivity through agronomic research and extension as well by supporting livestock rearing activities.	The Department of Agriculture, Forestry and Fisheries will be co-executing partner and will be a member of the project steering committee.

	<p>The Department will be involved in the testing and piloting SLM practices and tourism products (village immersion, hiking trails, birdwatching stations, etc) in the Huvalu Forest.</p>	
Tourism Authority Board	<p>The Niue Tourism Authority Board was established to market and grow tourism in Niue. The board is tasked with marketing, quality control, new developments, airline relations, training, central reservations and advisory services to the public and private sector.</p> <p>The Authority will play a significant role as a project partner in the planning and delivery of outputs aiming at creating opportunities to link the tourism and agriculture sectors. It will also play a significant role in engaging the private sector.</p>	<p>The Tourism Authority Board will be co-executing partner and will be a member of the project steering committee.</p>
Niue Chamber of Commerce	<p>The main function of a Chamber of Commerce is to promote interest in local business possibilities. In the project, the Chamber will participate in the planning and rolling out of the financial incentives.</p>	<p>The Chamber of Commerce will be co-executing partner and will be a member of the project steering committee.</p>
Department of Education & Schools	<p>The Department of Education will provide advice and support to outreach activities, especially those involving schools. The DoE will lead in ensuring that the school curriculum in both primary and secondary schools include modules on biodiversity conservation and sustainable use, sustainable agriculture and sustainable tourism that are tailored for Niuean context to raise awareness and to build environment management as one option for future career development of Niuean students. The DoE will also help engage and mobilize youth in relevant conservation actions.</p>	<p>The Department of Education will be co-executing partner and will be a member of the project steering committee.</p>
Culture and Heritage Department of Taoga	<p>The Culture and Heritage Department will be responsible for ensuring nature related traditional cultural knowledge, traditions and sites are identified and documented. The project will work closely with the Culture and Heritage Office to ensure that conservation activities complement cultural heritage sites management – particularly around identified traditional will</p>	<p>The Culture and Heritage Department will be a member of the project steering committee.</p>

	ement – particularly around identified traditional village areas, which have been abandoned.	
Department of Health in Ministry of Social Services	Non-communicable diseases are a major concern in Niue ^[1] , as in many countries in the region. The department will be involved in and advise on prevention opportunities presented by improved local agriculture.	The department will be consulted and invited to engage in project activities on a regular basis throughout the project implementation.
Ministry for Infrastructure and Finance	The Ministry will be engaged in developing incentives and financing solutions to stimulate uptake of sustainable agricultural and tourism enterprises.	The Ministry will be consulted by project staff on a regular basis.
Treasury	The Treasury will be key in ensuring that project is coordinated with other relevant donor programs in the country as well as to ensure that financial sustainability of the project is ensured beyond project end.	The Treasury will be consulted by project staff on a regular basis.
Crown Law Office	The Crown Law Office is charged with advising the government on legal affairs, representing the government in appellate cases, and overseeing the prosecution of criminal offences before the courts. In the project, the Office will support policy development and enforcement of environmental offences.	The Crown Law Office will be consulted by project staff on a regular basis.
Community Affairs	This department is the key government agency that works on local development through the Village Councils, which are locally elected local development committees. The department will support the development of tourism and agriculture products and experiences at the village level.	The department will be a member of the project steering committee and will be consulted by project staff on a regular basis.
Department of Justice, Lands and Survey	The department will provide GIS capabilities and expertise for the land use and vegetation cover survey.	The department will be consulted by project staff on a regular basis.
Village Councils	The Village Councils are responsible for local development plans and their implementation. They are also legally empowered to make local bylaws. The Councils will support work with the communities to facilitate project implementation at the local level.	The Village Councils will be consulted by project staff on a regular basis.
Farmers, farmer groups and	Farmers, farmer groups and local vendors will actively participate in the development and implementation	The farmers, farmer groups and local vendors are the key partners in the project and

<p>er groups and local food vendors</p>	<p>er groups will participate in the development and implementation of the project. They will be involved in the identification of problems and in the design and delivery of solutions to support the use of SLM practices, establish organic waste collection and composting methods, improve supply of local produce, enhance agro-processing capability and promote market access to local produce.</p>	<p>er groups are the key partners in the project and will be consulted by project staff on a regular basis throughout the project period. They are also the key beneficiaries of the project. Representatives will be part of the project steering committee.</p>
<p>Hotels, airlines, local tour operators, tourist shipping</p>	<p>The tourism sector will be actively targeted during the implementation of the projects to win support for border biosecurity, early detection, awareness raising, and if possible restoration projects.</p>	<p>The tourism sector is key stakeholders in the project and will be consulted by project staff on a regular basis throughout the project duration. Representatives will be part of the project steering committees, and employees/owners will partake in capacity building trainings.</p>
<p>Niue Island United Association of Non Government Organizations (NIUANGO) – including National Women's Council and Youth Council</p>	<p>Niue has a number of NGOs and all are affiliated with NIUANGO. Some of the more active NGOs in Niue include the National Women's Council, which has been actively promoting women's economic empowerment, and the Youth Council has been promoting youth involvement in spiritual and other development. The Association and its members can provide technical support to local communities and for different project activities – including surveys, monitoring and awareness raising.</p>	<p>The Association will be co-executing partner and will be a member of the project steering committee.</p>
<p>Niue Island Organic Farming Association</p>	<p>The Niue Island Organic Farming Association promotes organic farming of vanilla and noni for export as a viable economic alternative to other farming that uses agrochemicals. In the project, the Association will support the identification and piloting of SLM practices. NIOFA will also support piloting of alternatives to replace the herbicide paraquat.</p>	<p>The Association will be co-executing partner and will be a member of the project steering committee.</p>
<p>Financial Institutions</p>	<p>Financial institutions will be involved in the project through providing microloans and credit facilities to stimulate the uptake of sustainable tourism and agricultural enterprises.</p>	<p>Project staff will engage with financial institutions on the development of innovative financing models.</p>

Regional level		
SPREP	SPREP will play a role in knowledge sharing and exchange of lessons learned from previous projects, as well as facilitating cooperation with relevant ongoing projects.	SPREP will be consulted on a regular basis by project staff.
New Zealand Aid Programme	The New Zealand Aid Programme promotes prosperity and stability in the Pacific region and beyond, with a focus on sustainable economic development with neighbouring countries. Private-sector-led growth for sustainable development, particularly in the tourism sector, is one of its strategic priorities of NZ Aid Programme and will be an area of cooperation in the project.	The New Zealand Aid Programme will be consulted on a regular basis by project staff.
Landcare Research NZ Ltd	As a continued partner in biodiversity conservation and forest management, Landcare Research New Zealand – Manaaki Whenua, will continue to work with the Department of Environment in the project to undertake relevant, effective and efficient biodiversity monitoring of the Huvalu Forest.	Landcare Research New Zealand will be consulted on a regular basis by project staff.

The Department of Environment had initial consultations with all the main stakeholders. This includes the agriculture sector as well as the tourism sector. The Department of Agriculture has been part of the development of the concept and a number of meetings were held between the two departments. Joint discussion with the farmers in the target area was held and the proposal shared verbally with the farmer representatives. Further, Department of Environment held detailed discussions with the Niue Tourism Authority and with a few selected hotel owners and managers. Preliminary discussions were held with NIUANGO, and these will be intensified during PPG.

[1] <https://www.spc.int/updates/blog/2019/03/niues-vital-statistics-report-highlights-non-communicable-diseases-as-a-major>

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

According to Niue's population census of 2017, 56.7% of the women in working age, as opposed to 72.5% of men, are involved in paid employment.^[1] Women and men in Niue have both differentiated and overlapping roles in various areas such as agriculture, tourism, biodiversity management and preservation, education and within households. Gender relations play a key role in the access to and use of biological resources, as well as their management within protected areas and in production landscapes. Reflecting the key role played by Niuean women in natural resource use and management, previous experience in Niue has shown that women in project target villages play a more active role in consultations than men.^[2]

The proposed project will adopt participatory processes to facilitate effective participation of all stakeholders at the national and community levels in project activities, with a particular focus on the participation of women. The project will support the engagement of women in an inclusive and adaptable labor market that not only meets the demands of a growing and diversifying private sector but also provides opportunities for better quality of life. The activities of the project will be undertaken under a gender-responsive approach to ensure opportunities are equally available to men and women, paying particular attention to supporting groups that have a key role in bringing income to families and/or whose involvement on particular activities could boost their potential for future work engagements. Women and youth groups will be involved whenever possible into all project activities on capacity building, implementation at project sites, monitoring and evaluation to ensure sustainability of invariable recurrent costs and /or return of investment.

During the project design phase, appropriate funds will be allocated to undertaking an analysis at the local level to determine the roles of women, including most vulnerable women (widows, single mothers) and youth in their communities. Such an analysis will be utilized to determine how best to undertake specific activities to ensure their inclusion and to maximize impact/benefit. Steps will be taken to ensure that women and youth are involved in organizing/owning the project implementation at local level and will receive the necessary training/capacity development required to empower them to act in these roles. The Project Management Unit and relevant stakeholders will be trained on gender mainstreaming in project activities so women, youth and other vulnerable groups are included as much as possible.

During the development of policy documents, the Project Steering Committee will ensure that any TORs for agencies involved recognize gender and youth rights as a requirement. Gender considerations will also be integrated into policy development. It is not expected this will present a major issue because Niue has a strong gender policy and women well placed in senior environment management roles.

Together with the Chamber of Commerce and other stakeholders, the project will create and capitalize on market opportunities that are specifically aimed at women and business growth. At the project management level, gender considerations will also be taken into account in the process of recruitment of project personnel and consultants, trying whenever possible to balance between male and female. Recruitment procedures will strictly comply with Niue's gender equality policy and will ensure that equal opportunities are afforded to men and women. Consultations during the PPG phase with UN Women in Niue will be carried out to identify best practice for gender equality in the Government sectors.

The project will have specific gender indicators included in the project's logframe, as well as indicators that reflect the quality of outputs as it relates to gender. It will also collect disaggregated information with respect to gender in its reporting and ensure that project implementation considers gender equality.

The knowledge management and sharing system put in place through Component 3 will include sex disaggregated data on women and youth participation in project activities and outputs. Finally, to ensure formally recording lessons learned and to provide a qualitative assessment, the monitoring review and terminal evaluation will include specific questions related to gender integration. Lessons learned and recommendations from evaluation reports and other

reporting will be widely disseminated to assist future work in this area.

[1] Niue Household and Population Sensus 2017. Available at: <https://niue.prism.spc.int/census/population-housing>.

[2] Final Evaluation of GEF project "Forestry and Protected Area Management in Fiji, Samoa, Vanuatu and Niue"
<<https://www.sprep.org/attachments/Publications/articles/i8574en.pdf>>. Accessed on 21 February 2021.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources; Yes

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

The proposed project has a strong focus on strengthening Niue's small private sector as a means to diversify its economy and generate co-benefits to biodiversity and ecosystem services. Engagement with the private sector in Niue has the potential to contribute significantly to the wider outcomes during the term of the project and beyond.

The design and implementation of the project will be guided by the seventh pillar of Niue's National Strategic Plan which aims at "building a prosperous and skilled island nation, underpinned by a thriving and entrepreneurial private sector". Strengthening engagement and relationships with the public and private sector will be key to achieving this goal.

The Government of Niue already has experience in engaging the private sector in environmental issues, including biodiversity conservation, sustainable tourism and waste management. For example, this includes engagement with the single airline providing an air service to the country (Air New Zealand) to advocate biosecurity with its in-flight video and flight magazine, the biodiversity assessment of the area around the Beveridge Reef which was carried out by National Geographic Pristine Seas, and its existing cooperation with the tourism sector including the construction of Niue's main resort (Matavai Resort). The project will build and expand on such partnerships to support scaling up and sustainability of results by broadening engagement in mainstreaming biodiversity and land conservation into private sector and ensuring awareness across multiple sectors. The project will identify win-win scenarios where private sector entities are able to achieve financial gains and help advance the project objective.

The project will also support the development of a skilled and responsive labor force through enhancing access to capacity building and technical assistance to enhance the country's entrepreneurial culture. The project will ensure that small and medium enterprises in the tourism and agriculture sectors have an available supply of relevant skills to enable them to operate and expand in a sustainable manner, promoting not only economic but also social and environmental gains. There will be a focus on capacitating women-led or -owned enterprises. This will also aim to ensure a safe and healthy environment for not only visitors to Niue but to the resident population as well. Moreover, the project will build the in-country capacity of service providers to perform EIA and monitoring.

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

The following social and environmental risks that might prevent the project objectives from being achieved or may be resulting from project implementation were identified. These risks and associated mitigation actions will be reassessed and further developed during the project design phase.

Risks	Level	Mitigation measures
Low population and low capacities for project implementation	Medium	<p>Negative population growth as a result of emigration,^[1] particularly to New Zealand, is a particularly serious problem in Niue, which struggles to maintain viable economies and infrastructures with a diminishing labor force. An exception to this are activities associated with tourism, for which Niue has a relative comparative advantage.</p> <p>Therefore, the project will be designed to capitalize on the comparative advantage of the tourism sector in Niue and will be designed such that it uses its existing human resources by involving as many sectors in the Ridge to Reef management, AREAN Project, PACC Projects and other projects which have built the capacity of key personnel.</p>
Drought, cyclones and other climate events	Medium	<p>Cyclones are common in Niue and can have significant impact on biodiversity and infrastructure. Drought is also another key natural disaster event that proper preparedness needs to be implemented.</p> <p>The increased resilience of ecosystems brought by the project's interventions are expected to provide an overall increased level of protection to weather and climate events and speed up recovery time in the aftermath of such events. In addition, the project will promote the use of crops that are resistant to strong winds, prolonged droughts and climate change. It will also introduce techniques to increase the soil's moisture holding capacity to minimize the effects of drought.</p> <p>Based on lessons learned from other projects, the project will also raise awareness of communities on how to improve their resilience and adaptation to natural disasters, for example by not clearing the forests in shore areas, not hunting flying foxes and pigeons, and refraining from harvesting coral reefs, as key to minimizing impact and speeding up recovery.</p>

		<p>Further, extreme climate events, including droughts and cyclones could destroy SLM measures implemented at the project sites. Extreme rainfall during cyclones result in erosion which might negate the efforts of the project on establishing SLM practices. Droughts can cause water stress to plants. During the PPG phase, safeguard measures will be determined to ensure that adverse climate events do not have a major impact on the implementation of the project. Drainage management of agricultural fields, selection of fields on level ground and water harvesting and storage might be potential measures to mitigate the risk.</p> <p>The measures suggested by the project also increase the resilience against climate change. For example, SLM practices increase the organic matter in soils that increase infiltration of water during heavy rainfall resulting in less runoff. SLM measures include erosion prevention approaches, so erosion will already be mitigated by applying SLM techniques. Similarly for drought, with increased soil organic matter and vegetation cover versus conventional farming techniques, water stress on plants will be reduced and effects of drought mitigated (will not be the case in extreme droughts though).</p>
COVID-19 related travel bans extend till after the start of implementation and/or tourists do not come back	Medium	<p>The inception phase of the project will focus on strengthening the enabling environment and laying the basis for interventions on the ground. This will allow some buffer time for tourism to resume after the start of the project.</p> <p>The project will assess the socio, economic and environmental impacts of COVID-19 in Niue to draw lessons which will be disseminated to guide policy development and measures to mitigate the effects of future economic shocks and speed up recovery.</p>
COVID-19 economic impacts lead to diminished contribution of co-financing commitments	Low	<p>The co-financing comes from other projects which are likely to continue even if COVID-19 still has an impact at the start of the project. Nevertheless, PSC meetings will regularly review co-financing contributions and identify priorities in case the government's ability to contribute co-financing diminish.</p>
COVID-19 outbreak's impact on project implementation	Medium	<p>To achieve the objective of the project, the PPG team as well as the project management unit of the project during implementation will apply the necessary measures to adapt to COVID19 restrictions as appropriate. Niue has not had any COVID-19 cases and no deaths have been recorded in the country. With this in mind and following the experience gained since the outbreak of the pandemic, in order to protect human health and also for cost-saving reasons, national stakeholders' meetings will be undertaken if the situation</p>

		<p>on continues but any international expertise on the development or implementation of the project will be provided through written means and/or online meetings via the internet. The scenario will obviously change should any in-country cases be recorded. The project design also incorporates a recognition that resilience is linked to the diversity of land uses and livelihoods and that over-dependence on any one option brings risks (as demonstrated currently in terms of tourism during the pandemic). The project will form an integral part of the 'green recovery' post-COVID and increase the resilience of the island country against future pandemic outbreaks. Should the current restriction of travel in the Pacific region continue for longer than the PP G period, the project will be adapted to focus more on the SLM components and effective management of the Huvalu Forest Conservation Area and possibly the Moana Mahu Marine Protected Area as the tourism sector will not have a major negative impact on the biodiversity in such a scenario. However, this is not anticipated at this stage.</p>
Socio-political risks leading to lack of support proposed policies (e.g. land of interest in formally adopting tourism strategy and action plan)	Low	<p>The project will be presented in a politically neutral way and build upon the emerging interest in Taoga Niue as an example of strong and positive socio-political change. The project's communications strategy will articulate the economic benefits of sustainable tourism over short, medium and long term.</p>
Biodiversity gains offset by growing tourism and agricultural development	Low	<p>Tourism and agriculture, if not implemented in a sustainable manner, can lead to environmental degradation. The project will implement an integrated approach to plan, assess, monitor and enforce that tourism and agriculture operations do not cause any adverse impact on the environment.</p> <p>The project interventions will carry out consultative and participatory processes in ways that enable local communities to choose interventions that best suit their interests and are most likely to achieve a conservation outcome as a key to success. The project will also support the development of coherent policies for sustainable development which capitalize on synergies among the different sectors and minimize trade-offs.</p>

[1] Estimated 20,000 Niueans are living overseas.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

Niue's Department of Environment, as the lead government agency for biodiversity conservation under the Ministry of Natural Resources, will be the Executing Agency for this project in close coordination with the Department of Agriculture, Forestry and Fisheries (DAFF), the Tourism Authority Board and the Chamber of Commerce.

A cross-sector committee for sustainable tourism and agricultural development will be operationalized, with the aim to coordinate resource use planning and management, oversee mainstreaming of biodiversity and ecosystem services across sectors and support decision making processes (output 1.1.3). The project will also rely on a high level of coordination between private sector and communities.

The proposed project will be well coordinated with the ongoing projects funded by the GEF and other donors, as well as with projects implemented by UNEP. During the project development phase opportunities for coordination will be thoroughly explored with a view to maximize the use of resources from the project and avoid duplication of efforts. This may be done, for example, by integrating/coordinating cross-cutting activities such as surveys, community consultations, M&E, audits, etc. with other ongoing projects. The following initiatives and organizations will offer opportunities for coordination and synergies with the proposed project.

The proposed project will analyze the lessons learned and recommendations emerging from the R2R Regional Program and the Niue R2R, in particular on what worked and what did not work in creating synergies across tourism and agriculture. During the design of the proposed project benefit will also be drawn from a thorough analysis of the stakeholder consultations done under the Niue R2R. The proposed interventions will be based on the participatory conservation Management Plan for the Huvalu Forest Conservation Area that was developed under the Niue R2R project.

The design and implementation of the proposed project will also be closely coordinated with the GEF-funded "Pacific I2I Program: Ocean Health for Ocean Wealth - The Voyage to a Blue Economy for the Blue Pacific Continent" in the Pacific to help build synergies, share lessons and good practices on the implementation of a holistic approach to deliver the objective of this project. Relevant interventions that are cross-cutting to the two projects, such as applying green/blue economy principles, building capacity of government agencies and private sector, raising awareness, and promoting participatory conservation are potential areas of coordination.

Moreover, the proposed project will coordinate closely with relevant projects and teams at SPREP to ensure efficient use of resources and maximization of results. In particular, coordination will take place with the GEF 9410 regional project on invasive alien species, which is implemented by UNEP and in which Niue is one of the four participating countries, and opportunities will be evaluated during the project design phase for implementing some activities jointly among the two projects (e.g. surveys, community consultations, biodiversity assessments, joint meetings of the Steering Committee, etc). Coordination will also take place with the PacwastePlus project on relevant activities.

The project will also coordinate with the regional UNEP office, UNCT in Samoa, UN Women, SPC and other regional partners to support the achievement of the project outcomes and avoid duplication of efforts. The project will further coordinate with NZ Aid as one of the major donors and supporters of the tourism and agriculture sectors in Niue.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The tourism and agriculture are major contributors to Niue's economy and regarded as catalysts for economic development. Mainstreaming of biodiversity within the tourism and agricultural sectors is a priority for the Government of Niue and is being promoted vigorously through different initiatives, including promoting ecotourism to target a niche market and organic farming to enhance biodiversity while increasing productivity and employment potential. Niue has national development policies which prioritize both the tourism and agriculture sectors as key productive sectors for economic growth. In Niue, agriculture (inclusive of fishing and forestry) continues to be important for livelihoods and food security. The government plays a leading role in tourism development and the pursuit of tourism aligns with the national vision for a prosperous country.

The **Niue National Strategic Plan 2016-2026** will serve as guiding beacon for the development of the proposed project and will provide the strategic guidance throughout project implementation. The Strategic Plan is a high level roadmap setting out the Niue Government's direction and priorities. It focuses on creating wealth using Niue's rich natural resources through investments in our sovereign assets including tourism and agriculture. The Strategic Plan has a strong focus on sustainability, determining that tourism is one of the key industries which can develop sustainably, utilizing and protecting the pristine environment and aligning with social and cultural values. It also recognizes that subsistence crops are important for food security and will support tourism but at the same time, fauna and flora must be protected so that they sustain us in the long term and therefore they must be managed in a manner that will enable them to thrive just as much as people are allowed to thrive.

Niue regards itself as "an environmentally friendly nation in which conservation and the sustainable management of resources is an integral part of the lifestyle of the people".^[1] Accordingly, Niue has ratified the three Rio Conventions and its commitment to sustain and effectively manage its environment was reflected in the development of the **National Environment Management Strategy** in 1992, the first **National Biodiversity Strategy and Action Plan (NBSAP)** in 2001, and the second NBSAP in 2015 with the goal "to retain and enhance existing biodiversity, maintaining sufficient remaining habitats and ecosystems to support the population of all species and their genetic diversity". This project is consistent with the NBSAP's

Theme 1 - Conservation and sustainable management of terrestrial habitats, which has particularly noted the need for forest conservation, as well as Theme 2 - Conservation of terrestrial species, such as the flying fox, and Theme 3 - Coastal, inshore and marine biodiversity. Furthermore, Niue's **Sixth National Report to the CBD** emphasizes the importance of biodiversity to the economy of Niue, noting that about a fifth of its GDP coming from the agriculture, fishery, forestry and hunting sectors, and as the basis for subsistence lifestyles. The report also emphasizes the cultural significance of biodiversity to Niueans.

The project is aligned to "**Niue's National Action Plan Addressing Land Degradation and the Effects of Drought under the Auspices of the Secretariat of the United Nations Convention to Combat Desertification**" (2004) particularly to the key thematic areas of Soil Rehabilitation (including the following activities: large scale mulching/composting, comparative performance analysis of various green manure crops, improved fallow management), Sustainable Cropping Management Practices (including the following activities: improvement of organic content/microbial activity of soils, active encouragement of organic farming, encouragement of intercropping, assist the development and marketing of indigenous economically viable and agriculturally sustainable crops), Education and Awareness (including the development of new and innovative methods of sharing and disseminating information coordinated by the

Department of Environment) and Capacity Building Requirements (including training of agriculture extension officers and land users/farmers). Further, Niue has committed to set LDN Targets, but has yet to finalise the targets. The proposed project will assist in finalizing the process of setting targets and will establish a monitoring framework for its implementation.

The project is linked to the Niue's Intended Nationally Determined Contributions (INDC, 2015) in that the comprehensive land use and vegetation survey and economic valuation of ecosystem services that the project will undertake for the terrestrial area of Niue will contribute to the action "Advance land use change accounting through acquisition of recent, multi-spectral satellite imagery and relevant processing and verification" mentioned in the INDC.

Niue's **Agriculture Sector Plan 2015-2019** sets out the strategic direction for agricultural development in Niue. The guiding principles of the plan include recognizing food security as an important issue, recognizing that the agriculture sector should be the engine for economic growth, recognizing the importance of the sector to social and cultural values, valuing environmental sustainability, and promoting private sector partnerships to work with the government in advancing agricultural development.

Other national strategies and plans that will provide guidance to the implementation of the proposed project include the National Invasive Species Strategy and Action Plan (under revision by GEF project 9410) and the National Integrated Waste Management Strategy.

[1] Niue National Biodiversity Strategy and Action Plan 2015 (<https://www.cbd.int/doc/world/nu/nu-nbsap-v2-en.pdf>)

8. Knowledge Management

Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The project will generate gender-sensitive knowledge products to support implementation processes and improvement of its performance. These will also be disseminated to inform policy making and South-South and Triangular Cooperation for the sharing of knowledge and cross-fertilization of ideas between Niue and other countries, in particular SIDS. Many of the knowledge products will be generated through Components 2 and 3 which will produce training modules, develop strategy and plans, guidelines and protocols for both the private and public sector on community-based conservation, sustainable tourism and sustainable agriculture.

The documentation of approaches for sustainable use and conservation of biodiversity and sustainable land management will support a variety of stakeholders such as village communities, NGOs and universities in disseminating and replicating best practices and tools in Niue and throughout the Pacific Island Countries. The documentation will also include success stories, and where possible focus on gender integration, for example highlight examples of specific women-owned/-led businesses that have done well after getting support from the project.

Learning products from the project will be documented and disseminated through different media and target a range of stakeholders and project beneficiaries. The knowledge materials to be generated under the project and opportunities to enhance knowledge sharing (e.g. country visits) will be defined during PPG phase.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Please find the annex SRIF.

Supporting Documents

Upload available ESS supporting documents.

Title	Submitted
NIUE-SRIF_FINAL	

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Mr. Haden Talagi	Director of Environment	Ministry of Natural Resources	2/23/2021

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

The Huvalu Forest Conservation Area (IUCN Category VI; coordinates: 19°4'47"S, -169°49'19"W). *Source:* Protected Planet website (<https://www.protectedplanet.net/61918>; accessed on 6 March 2021).

