



United Nations Development Programme
Country: NIUE

PROJECT DOCUMENT¹

Project Title: Application of Ridge to Reef Concept for Biodiversity Conservation and for the Enhancement of Ecosystem Services and Cultural Heritage in Niue

UNDAF Outcome(s): UNDAF for the Pacific Sub-region 2013-2017 – Outcome Area 1: Environmental management, climate change and disaster risk management

UNDP Strategic Plan Outcome:

Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation (Output 2.5).

UNDP Strategic Plan Outputs: -

Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste (Output 1.3)

Executing Entity/ Implementing Partner : Ministry of Natural Resources

Executing Agency/Implementing Partner: Ministry of Natural Resources

Responsible Partner:

Department of Education, Taoga Niue, Department of Public Works (Water), Office of the Premier, Treasury Department and UNDP

¹ For UNDP supported GEF funded projects as this includes GEF-specific requirements

Brief Description

This project will enhance Niue's capacity to effectively create and manage protected areas for biodiversity conservation, sustainable use of natural resources, and safeguarding of ecosystem services. It 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. In Community Conservation Areas, both strict protection and sustainable use zones will be identified and planned carefully, using innovative protection tools recognizing that tenure over most land areas is vested in local communities. This project has been 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. Through this approach, activities in the immediate production landscapes adjacent to marine and terrestrial protected areas will be managed to reduce threats to biodiversity and ecosystem services stemming from key production activities (e.g. tourism and agriculture). Additionally, the project also introduces the concept of connectivity between landscape and seascape in Niue. Terrestrial protected areas will 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 also satisfies 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.

Programme Period:	60 months
Atlas Award ID:	00078842
Project ID:	00088927
PIMS #	5258
Start date:	November 2015
End Date	October 2020
Management Arrangements	NIM
PAC Meeting Date	10 July 2015

Total resources required	USD 15,263,462
Total allocated resources:	USD 15,263,462
○ GEF	USD 4,194,862
○ Government (in kind)	USD 10,868,600
○ UNDP (in kind)	USD 200,000

Agreed by Government:

Date/Month/Year

Agreed by Executing Agency/Implementing Partner:

Date/Month/Year

Agreed by UNDP:

Date/Month/Year

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ACRONYMS AND ABBREVIATIONS

AFO	Administration and Finance Officer
AusAID	Australian Agency for International Development
BRH	Bangkok Regional Hub (of UNDP)
CBD	Convention on Biological Diversity
CC	Climate Change
DAFF	Department of Agriculture, Forests and Fisheries
DoE	Department of Environment
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EIMS	Environmental Information Management System
EMS	Environmental Monitoring System
EU	European Union
FAO	Food & Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Global Information System
GPS	Global Positioning System
ha	Hectare
IUCN	International Union for the Conservation of Nature
IAS	Invasive Alien Species
IW	International Waters
IWRM	Integrated Water Resources Management
LogFrame	Logical Framework Matrix
MCO	Multi-Country Office (of UNDP)
M&E	Monitoring and Evaluation
METT	Management Effectiveness Tracking Tool
MNR	Ministry of Natural Resources
MPA	Marine Protected Area
NBSAP	National Biodiversity Strategy and Action Plan
NIM	National Implementation Modality
NISP	Niue Integrated Strategic Plan
NNSP	Niue National Strategic Plan
NPD	National Project Director
NZD	New Zealand Dollar
PA	Protected Area
PAC	Project appraisal Committee
PAS	Pacific Alliance for Sustainability (GEF Programme)
PEB	Project Executive Board
PIF	Project Identification Form
PIR	Project Implementation Review
PIU	R2R Project Implementation Unit
PWD	Public Works Department
R2RAC	Project Advisory Committee
R2R PM	R2R Project Manager
RCU	Regional Coordination Unit (of UNDP)
RTA	Regional Technical Advisor
SLM	Sustainable Land Management
SOPAC	Pacific Islands Applied GeoScience Commission
SPC	Secretariat of the Pacific Community
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USD	United States Dollar
VC	Village Council

1 SITUATION ANALYSIS

1.1 Introduction

Niue is an upraised coral atoll island lying 480 km east of Tonga, 550 km southeast of Samoa and 2,500 km north of New Zealand. At 259 km² in area - the largest island of its type - it consists of a former lagoon surrounded by the remains of a reef rising to about 68 m above sea level, surrounded by an outer terrace at approximately 28 m above sea level. The outer terrace ends in steep cliffs which descend on to a narrow fringing reef.

Niue is dependent on its natural environment and ecosystem services for its quality of life and its economic viability. The natural environment, in all its forms, is a valuable economic asset as it provides the attraction for visitors and tourists which are the mainstay of the Niuean economy. The environment also provides food and other necessities for residents of Niue. The Fifth National Report to the CBD² states that biodiversity is very important to the economy of Niue with about a fifth of its GDP coming from the agriculture, fishery, forestry and hunting sectors. It is also the basis for subsistence lifestyles and has cultural significance. 70% of the country retains a cover of forest and 23% of it is in conservation areas, primarily the Huvalu Conservation Area.

According to the Fourth National Report to the CBD³, “*The forest is the critical habitat for three prized food species – fruit bats, wood pigeons and coconut crabs. The forest also yields edible ferns, medicinal plants and minor wood products.*” In addition, the environment provides and protects the groundwater aquifers which are the main source of drinking water for the entire population of residents and visitors.

This project will strengthen conservation and sustainable use of land, water and marine areas and their biodiversity by building on Niuean cultural heritage values through integrated national and community actions. In particular, it will consolidate and expand marine and terrestrial protected areas (PAs); promote sustainable management practices; and build a legal and institutional framework to support the conservation and sustainable use of natural resources.

A distinguishing feature of this intervention is combination of community conservation areas and government-led PAs, as well as the full and equal participation with the Government of Village Councils and communities in recognition that tenure over most land areas in Niue is vested in local communities.

This project has been designed to engineer a paradigm shift in the management of marine and terrestrial PAs from a site-centric approach to a holistic “ridge to reef” approach, in the management and protection of natural resources. This approach will range across the entire island and the surrounding reefs, in recognition of the value and vulnerability of the groundwater aquifer which extends right across the entire island. It also recognizes that in a small island such as Niue, the ecosystem is a single continuum and that impacts on the environment and ecosystem services are very difficult, if not impossible, to contain in one location. All land use decisions must consider the potential impacts on the entire environment and while some areas will be selected because of their unique or high value (ecological, social, cultural, economic) for special protection, the project introduces the concept of ecological connectivity on a landscape and seascape basis in Niue. The project also covers the creation of a marine protected area at Beveridge Reef which, while distant from Niue Island, is expected to be confirmed as a source of recruitment of various marine species for Niue’s coral reefs and coastal environment through favourable ocean currents.

² Department of Environment and David Butler (2014) Fifth National Report to the Convention on Biological Diversity – Niue. Government of Niue.

³ Tongatule, Sauni and Judy Nemaia (undated) *Fourth National Report to the Convention on Biological Diversity*. Government of Niue.

The project reflects the new National Strategic Plan (2014-2019), whose objective is to “build a sustainable future that meets our economic and social needs while preserving environmental integrity, social stability, and the Niue culture”. The 5th Pillar of the Plan is “sustainable use and management of Niue’s natural resources and environment for present and future generations”.

This project has also been developed in accordance with the goals and scope of the UNDP-GEF Regional Ridge-to-Reef Programme "Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods”.

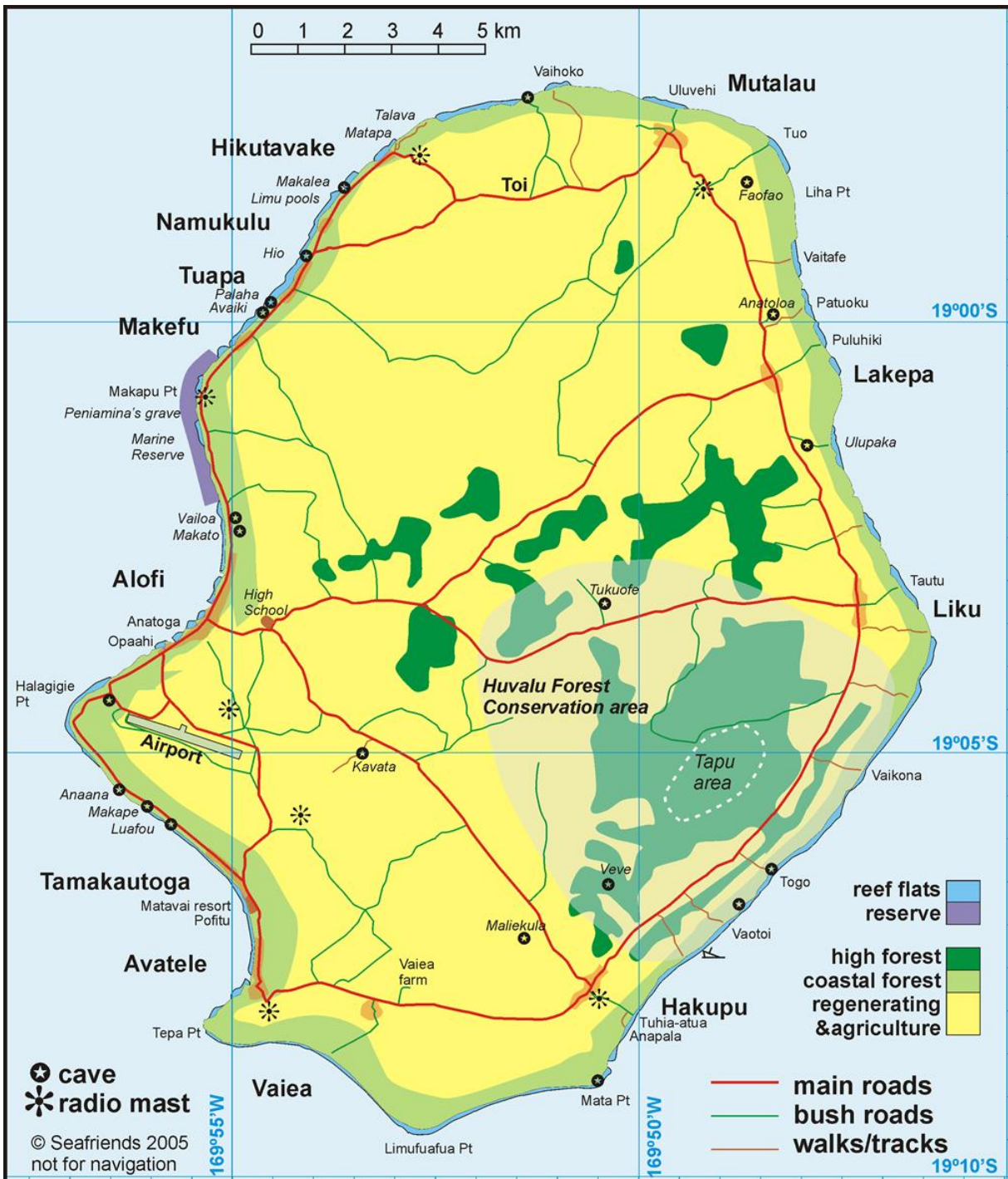


Figure 1. Simple map of Niue

1.2 The Niue environment

1.2.1 The physical environment

Niue is the world's largest single raised coral atoll⁴, an uplifted coral limestone plateau perched on top of a submerged volcano with the surrounding ocean depths reaching over 4,000 m at the edge of the Tonga Trench. It is located in the South Pacific Ocean (Lat 169°55'W, Lon 19°02'S), has a total land area of 259 km² and an Exclusive Economic Zone (EEZ)⁵ of about 340,000 km². It is described by the NBSAP⁶ as comprising a central plateau of gentle undulating relief, slightly dished in shape with the rim at about 68 m above mean sea level, dropping to about 30 m in the centre suggesting it was once a lagoon. A narrow lower terrace 100 m to 200 m wide at about 28 m above sea level surrounds this central plateau. The coastline is rugged, and consists of precipitous cliffs which drop straight into the sea, except for the west coast where there is a wave-cut rock platform 20 m to 80 m wide and then a very steep drop-off to the ocean floor. The distinct shelving suggests that the island was uplifted in at least two tectonic episodes.

The island's natural geology is pure limestone of three types – reef rock, beach conglomerate and cemented or loose coral sand. A characteristic, typical of limestone environments, is the large number of caves and caverns many with distinctive stalactites and stalagmites and other evidence of the dissolving forces of water such as natural arches and chasms.

There are no permanent streams or rivers on the island. A freshwater lens, located approximately 60 m below the rim of the central plateau that is replenished by rainwater filtering down the soil and rocks, is the main source of freshwater on the island. The daily abstraction rate from the PWD public water supply wells is well below sustainable levels of the freshwater yield⁷.

The ground surface is often jagged with exposed sharp rock outcrops and boulders, with pockets of shallow topsoil between them. According to FAO⁸ there are four types of soil in Niue, namely –

- (1) Hikutavake: outer fringe of the island
- (2) Hakupu: coconut/pasture soil
- (3) Fonuakula: pasture soil, and
- (4) Palai: forestry soil, root crops.

FAO also observes that *“The soils of Niue in general are well supplied with phosphorus and potassium, but there are a few areas that are deprived of these nutrients for plant growth which makes crop production difficult. Some soils also lack nitrogen as can be seen by the yellowing of leaves on some vegetation. Burning of some areas for cropping is common and this may be the reason why some areas are deprived of nitrogen. The supply of calcium, magnesium and many of the trace elements seems adequate for plant growth in most areas.”* Wright & van Westerndorp also observed that the soil of Niue is *probably derived from volcanic ash*.⁹

The Niuean coastal reef platform is comparatively narrow overlaid with a thin layer of coral and plunges down to depths of 30-40 m before the drop off into deep water. Niue's coastal water quality

⁴ Kruger, J (2008) Niue Technical Report – High Resolution Bathymetry Survey. EU EDF-SOPAC Project Report 49 Reducing Vulnerability of Pacific SPC States

⁵ There are various figures given for the area of EEZ of Niue. See for example <http://www.spc.int/climate-change/fisheries/assessment/chapters/summary/12-niue.pdf>, <http://www.searoundus.org/eez/570.aspx> and <http://www.searoundus.org/eez/570.aspx> and the figure given in this text is an approximate median.

⁶ Richmond-Rex, Phyllis, Tagaloa Cooper, Judy Nemaia and David Butler (editors) (2001) *Niue National Biodiversity Strategy and Action Plan*. Compiled by a Project Team assisted by staff of the Environment Unit, Department of Community Affairs. Government of Niue.

⁷ SOPAC (2007) Sustainable Integrated Water Resources and Wastewater Management in Pacific Island Countries. National Integrated Water Resources Management Diagnostic Report. SOPAC Miscellaneous Report 641.

⁸ <http://www.fao.org/ag/agp/AGPC/doc/Counprof/southpacific/niue.htm>

⁹ Wright, A C S and F J van Westerndorp (1965) Soils and Agriculture of Niue Island. *New Zealand Soil Bureau Bulletin*, 17, 46-48.

is impacted by the effluent of land activities (e.g. septic tank and storm water discharge) which threatens the coastal fishery environment¹⁰.

The current climate of Niue comprises two distinct seasons – a warm wet season from November to April and a cooler dry season from May to October. Niue’s wet season is affected by the movement of the South Pacific Convergence Zone. This band of heavy rainfall is caused by air rising over warm water where winds converge, resulting in thunderstorm activity. It extends across the South Pacific Ocean from the Solomon Islands to the Cook Islands. Niue’s climate is also influenced by sub-tropical high pressure systems and the trade winds, which blow mainly from the south-east. Niue’s climate varies considerably from year to year due to the El Niño-Southern Oscillation.¹¹

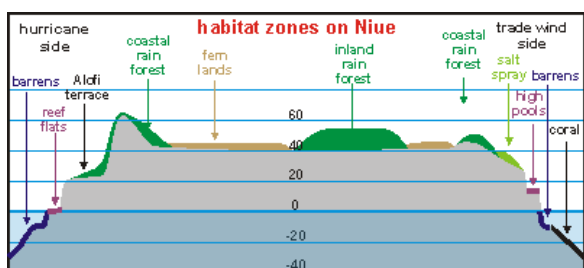
Precipitation averages 2,000 mm/year, but according to NDMCC (*op. cit.*), in the wettest years it can be almost four times the rainfall in the driest years. Severe droughts have occurred in Niue, most recently in 1983, 1991 and 1998.” However, a SOPAC report¹² concluded that the groundwater levels response to storm event recharge was observed within 1-2 days and that recharge to the lens can be exceptionally rapid. SOPAC also argued that while the future groundwater demand from the additional production and irrigation boreholes remains to be determined, it appears the existing groundwater abstraction from the PWD public water supply wells of typically 2000 m³/d represents less than 2% of the freshwater lens yield and therefore is safely within its sustainability capacity.

The average daytime temperature is 27°C from May to October and 30°C from November to April. December to March is the tropical cyclone season.

According to Anthoni¹³, “Niue is located on the cool edge of the warm tropics but its waters are much cooler than those of Indonesia for instance there exists no official record of the sea temperatures for Niue the average sea temperature is quoted as anywhere between 24.7 and 26°C.”

1.2.2 Ecosystems and biodiversity

In spite of its small size and uniform geology and geomorphology, Niue has a modest range of ecosystems and habitats and these are summarized in the following figure. They can be considered as comprising two clusters – terrestrial and marine and each of these is described below.



From <http://www.seafriends.org.nz/niue/biodiv.htm>

Figure 2. Niue habitat zones

¹⁰ Mosley, L and L Carpenter (2005) Coastal Water Quality and Groundwater Assessment. SOPAC Technical Report 372.

¹¹ Niue Department of Meteorology and Climate Change, Australian Bureau of Meteorology, and Commonwealth Scientific and Industrial Research Organisation (CSIRO) (2011) *Current and Future Climate of Niue*. Pacific Climate Change Science Program.

¹² GWP Consultants, UK (2008) *Niue Technical Report - Groundwater resources investigations on Niue Island*. EU EDF 9 – SOPAC Project Report 61 - Reducing Vulnerability of Pacific ACP States

¹³ See <http://www.seafriends.org.nz/niue/ecology.htm>

1.2.2.1 Terrestrial ecosystems

Niue's terrestrial ecosystems consist of forests, agro-ecosystems, settlements, and a rugged and rocky coastline of steep cliffs, caves, chasms and blow holes. Many caves host brackish and freshwater pools. Much of Niue's land can be considered karst ecosystem. The island's vegetation consists of fern land, littoral shrub land, littoral forest, coastal forest, matured forest and secondary forest¹⁴.

Available information suggests that Niue's plant diversity includes 175 native vascular plants, and 26 potentially invasive introduced species¹⁵. Niue's forested area covers 26,103 ha and comprises mature dense forest (5,566 ha), regenerating medium dense forest (13,191 ha) with higher biodiversity than the mature forest, and littoral forest, fern-land and non-forested areas classified as 'other' forest areas (7,346 ha) in the Forestry Management Plan (*op. cit.*). The forests are well-stocked with a range of size classes, showing that they regenerate very well after natural disturbance by cyclones. The mature forest occurs largely in the central east of the island, a close canopy that is dominated by native species with Kolivao (*Syzygium richii*) and Kafika (*S. inophylloides*) making up over half of the forest canopy. According to the Forestry Management Plan, other major species occurring in lower numbers include Moota (*Dysoxylum forsteri*), Kanumea (*Planchonella torricellensis*), Tava (*Pometia pinnata*), Le (*Macaranga seemanii*), Kieto (*Diospyros samoensis*), Ai (*Canarium harveyi*). A local screwpine *Pandanus niueensis* has been described from Niue. Most if not all of the major species have traditional uses such as canoe building and earth oven baking. Some invasive species significant to Niue as a source of food and timber include Mango (*Mangifera indica*), Vi (*Spondias dulcis*) and Pomea (*Adenantha pavonia*).

Among the fauna that have been recorded there are 32 bird species, (six sea birds, 11 shore birds and 15 land birds), nine lizard species (four geckos and five skinks), over 376 insect species, one native mammal (*Pteropus tonganus*), and eight land crab species of which the coconut crab (*Birgus latro*) is the largest, according to the NBSAP. There are also a number of introduced mammals including two rat species, the house mouse, pigs, dogs and cats.

Invertebrates restricted to Niue include a recently described butterfly, the Niue Blue (*Nacaduba niueensis*). Other endemic invertebrates include a rattlebox moth *Utetheisa maddisoni*, a leafhopper *Empoasca clodia*, a planthopper *Macrovanua* (or *Vanua*) *angusta*, a weevil *Elytrurus niuei*, a scale insect *Paracoccus niuensis*, a land snail *Vatusila niueana*, a crab *Orcovita gracilipes*, a cave-dwelling crustacean *Pugiodactylus agarthus*, an ostracod crustacean *Dantya ferox*, and a periwinkle *Cenchrites* (or *Tectarius*) *niuensis*. Niue is also home to some regionally endemic butterfly species such as *Belanois java schmeltzi* (found also in Samoa and Tonga), *Jamides argentina* (found also in Samoa), and *Euploea lewinii perryi* (also in Cook Is)¹⁶.

Two endemic bird species have also been described from Niue¹⁷, the Polynesian Triller (*Lalage maculosa whitmeei*), and the Polynesian Starling (*Aplonis tabuensis brunnescens*).

From a global perspective, Niue has some important terrestrial species include the Endangered Olive Small-scaled Skink, and the globally vulnerable Bristle-thighed Curlew that is an occasional visitor. Several globally vulnerable seabirds have been recorded at least once in Niuean waters but none breed on the island. Niue is listed in WWF's globally important Ecoregions¹⁸ under Tropical and

¹⁴ Government of Niue (2013) *Forestry Management Plan for Niue*.

¹⁵ Richmond-Rex, Phyllis, Tagaloa Cooper, Judy Nemaia and David Butler (editors) (2001) *Niue National Biodiversity Strategy and Action Plan*. Compiled by a Project Team assisted by staff of the Environment Unit, Department of Community Affairs. Government of Niue.

¹⁶ http://www.conservation.org%2FDocuments%2FCI_CEPF_Biodiversity_Conservation_Lessons-3-Samoa-Butterfly.pdf

¹⁷ <http://Intreasures.com/niue.html>

¹⁸ Olson, D M and Dinerstein, E (2002) *The Global 200: Priority ecoregions for global conservation*. Annals of the Missouri Botanical Garden 89(2):199-224.

Subtropical Moist Broadleaf Forests under South Pacific Islands Forests. Niue also falls within the Micronesia-Polynesia Hotspot as delineated by Conservation International.

1.2.2.2 Marine ecosystems

Niue's marine ecosystems include the narrow fringing reef around the island, seamounts (notably Endeavour Seamount, and Lachlan Seamount), submerged atolls (e.g. Beveridge Reef and Antiope Reef), and open ocean. The total area of reef flat and sub-tidal reef has been estimated at 620 ha and an Exclusive Economic zone (EEZ) of 340,000 km². According to the NBSAP and Fisk¹⁹, marine biodiversity comprises 34 coral genera, over 240 fish species, invertebrates comprising around 20 species of crabs and crayfish/lobsters, two giant clams, five species of beche-de-mer and others.

Niue's marine ecosystems host a number of globally important species, including the endangered Fin Whale (*Balaenoptera physalus*), Humphead Wrasse, and Green Turtle, and the vulnerable Green Humphead Parrotfish, Whitetip Oceanic Shark, Queensland Groper, Flat-tail Sea Snake, Whale Shark, Bigeye Tuna, Blacksaddled Coral Grouper, Sperm Whale, and Blue Marlin. Many globally vulnerable coral species are also found in Niue's extensive EEZ. These include *Acropora globiceps*, *Acropora horrida*, *Acropora retusa*, *Acropora speciosa*, *Acropora striata*, *Acropora vaughani*, *Alveopora allingi*, *Alveopora verrilliana*, *Astreopora cucullata*, *Heliopora coerulea* (Blue Coral), *Leptoseris incrustans*, *Montipora angulate*, *Montipora australiensis*, *Montipora calcarea*, *Montipora caliculata*, *Montipora lobulata*, *Pavona bipartite*, *Pavona cactus*, *Pavona decussata* (Cactus Coral), *Pocillopora elegans*, *Porites nigrescens*, *Turbinaria mesenterina*, and *Turbinaria reniformis*. Anecdotal reports indicate occurrence of the invasive crown-of-thorns starfish (*Acanthaster planci*) in low numbers. One endemic marine fish has also been described from Niue – the Combtooth Blenny (*Ecsenius niue*). The Niuean Flat-tailed Sea Snake (*Pseudolaticauda* or *Laticauda schistorhynchus*) is also sometimes considered to be endemic.

Indicator species are recommended by Fisk²⁰ to monitor trends in reef communities and the effectiveness of management strategies. The indicator species on the reef flat include target species such as the vermetid tube worm *Serpulorbis colubrinus* and the purple jewel box oyster *Chama isostoma*. *Holothurian* species are also good indicators for reef flat health due to their detrital feeding behaviour. Depletion of *Holothurian* abundance may indicate a polluted shoreline. Indicators on the reef slopes include coral cover, algal cover, and the abundance of corallivore species such as the crown-of-thorns starfish (*Acanthaster planci*) and the mollusc *Drupella* spp. Coral disease brought about by coral bleaching, coral predation and overfishing of herbivorous fish can lead to increased algal cover.

The structure of coral communities on reef slopes resists wave action and creates shelter and refuge for many reef species. Shallow pools along the exposed reef flats provide refuge for mobile invertebrates. There are also deep pools and crevices along the reef flat with greater tidal flow and wave flushing creating a more suitable environment for a greater diversity of reef communities.

1.2.3 Tradition, culture and heritage

Niue's first settlers who were predominantly from Samoa, Tonga and Pukapuka are responsible for shaping Niue's traditional and customary structure. The elements or characteristics of the land, earth, sky, heavens and sea were the basis for the formation of traditional and customary values. These values have evolved and modified over the years, more so with the introduction of Christianity which most, if not all, Niue traditions and customs are linked to.

Recognising the importance and the need to preserve its culture and heritage, the Government of Niue established the Tāoga Niue Department in 2004/05. Tāoga Niue means the treasures or

¹⁹ Fisk, D (2007) Niue Sustainable Coastal Fisheries Pilot Project: Literature Review and Pilot Baseline Survey. IWP-Pacific Technical Report (International Waters Project), 38: 55

²⁰ Fisk, D (2007) Niue Sustainable Coastal Fisheries Pilot Project: Marine Baseline Survey. IWP-Pacific Technical Report (International Waters Project), 39:78

precious possessions of Niue and these are also featured as one of the key pillars in the Niue National Integrated Strategic Plan 2014-2019.

The Tāoga Niue website²¹ refers to Niue's culture, based on spirituality, language, heritage and social values, and aims for it to thrive and be celebrated. It also notes the precious heritage treasures into which a Niuean is born, and goes on to say that these are treasures which are fostered and handed down by the tau tupuna from generation to generation. These heritage treasures are represented by:

- Language
- Customs and traditions
- Arts and Crafts
- History
- Environment

Language

The Niuean language (ko e vagahau Niue) is a Polynesian language, belonging to the Malayo-Polynesian subgroup of the Austronesian languages. It is most closely related to Tongan and slightly more distantly to other Polynesian languages such as Māori, Sāmoan, and Hawaiian. Māori. Together, Tongan and Niuean form the Tongic subgroup of the Polynesian languages. Niuean also has a number of influences from Samoan and Eastern Polynesian languages

The language originated as a blend of languages of the first settlers. In early times when the North (*Motu*) and South (*Tafiti*) were in conflict, the pronunciation and subsequently the spelling of words became distinct between the two regions. The arrival of Christianity introduced the English language which has now become an important language for communication in schools and business limiting the use of the Niuean language to family and village life²². Locals alternate between the two languages in everyday conversations.

Customs and tradition

The pre-Christian era was a time of warfare and intense rivalry between the north and south, "*motu*" and "*tafiti*" respectively. Land, resources and sacred objects were amongst entities fought over. The arrival of Christianity in the mid-1800s brought peace and order leading to the formation of communities and consequently the establishment of the hierarchy system whereby elders were elected as church leaders. The elders had the responsibility to allocate land to each family who respected and accepted what was given to them. From this time within each family, there has been a preference for patrilineal inheritance of real property such as land and an emphasis on primogeniture. Women had some rights but these were not as strong as those of males. The general perception was that women, once married, would benefit from their husband's inherited land and resources.

With the New Zealand administration in 1901 came the New Zealand court system which introduced land entitlement. No other aspect of Niuean customs and tradition is more strongly observed than land tenure and property²³. Land is inalienable and cannot be sold or deeded permanently to non-Niueans and the Land Court is probably the most important and contentious aspect of the judicial system. Major political struggles revolve around the dilemma posed by absentee landowners which can cause considerable tension in some families.

Traditional knowledge can be categorised into three levels: the family, village and the national level. Within families, it is rarely shared for conservation purposes. This is perhaps the obstacle for many environmental managers who wish to incorporate traditional practices into conservation management plans. The interpretation of traditional knowledge by each generation can be different which may improve, evolve or dilute the knowledge. Many Niuean families establish tapu areas which, in most

²¹ http://www.taoganiue.nu/?page_id=2

²² <http://www.anthemculture.com/explore/niue/>

²³ <http://www.everyculture.com/Ma-Ni/Niue.html#ixzz3E0MVmrq9>

cases, are not known to the public. As a result, the integrity of the tapu can be jeopardised, whether the purpose of the establishment is spiritual or conservation.

At the village level, the establishment of tapu areas has generally been for conservation purposes. The only other allowance for restriction is for an area of sea where a death of a person has occurred. A community-based management approach is more commonly applied to marine resources and habitats perhaps because the marine environment is not privately owned, lacking the element of disputes typically experienced with land. The process of establishing a protected area by villages is not usually brought about by recommendations from the Government but rather from concerns raised by village members. Usually a meeting is called and management actions are discussed and agreed upon by all members of the village – the action is usually the closing of an area to fishing. It is common practice for villages to establish restrictions for the marine environment without informing or following Government procedures.

Traditionally, native species of flora and fauna have not only provided food security but have been linked to communal activities and relations connected to traditional practices. Taro, yam, demersal and pelagic fish as well as wild local vegetables have traditionally been the main diet for Sunday lunch and national gatherings such as haircutting, ear piercing and New Year ceremonies. Other traditional species are those used in making costumes for cultural dances, musical instruments, and traditional sports.

Traditional Niuean fishing is symbolised by the vaka (traditional canoe) as this provides the means to feed the family and community, and nowadays obtain supplementary income. Building a vaka has a lot of significant traditional values starting from the choice of a suitable tree, onto the construction and then the use for catching fish. This process takes time, skill and patience to complete and it provides rewards such as satisfaction, pride and the promise of a good catch. A vaka building project is currently underway in the village of Avatele. It is a cultural activity for young people of Niue, in that it provides knowledge and practice that will enable them to maintain traditional and cultural ways. This will also encourage communal participation with knowledge sharing and skills that are passed on to the next generation.

At the national level, Niuean culture and traditions are increasingly gaining recognition and relevance in environmental management plans and tourism development. The establishment of Tāoga Niue by the Government is to ensure that the use of Niue's tāoga motu is done in a way that strengthens and protects its value. Tāoga Niue defines its main task of documenting traditional knowledge as the most challenging due to lack of resources and cooperation by those who possess the traditional knowledge. Documenting our culture and traditions they say protects the expressions of our culture and strengthens our appreciation and value of the Niuean heritage. The Tāoga Niue Act, among other goals, seeks to ensure Niue's traditional knowledge is not exploited commercially. Niue is party to the World Intellectual Properties Convention which can help Niue protect its traditionally significant resources such as taro. One of Niue's taro species is a high value product successfully grown and marketed as "Talo Niue" by other countries in the region with no direct benefits to Niue. Tāoga Niue endorses the adoption of customary practices through legislation so as to ensure their implementation and longevity.

Arts and crafts

Songs and dance serve as a way of expressing opinion or views towards the country's structure, whether it is political, social, economic or environmental. They are significant to each village and performed in cultural and traditional ceremonies. Costumes and musical instruments (drums and ukulele) are made from local plants. Handcrafts and woodcrafts are also constructed from local materials. As with the Niuean language, Niuean art is similar in many ways to other Polynesian countries.

There has been a recent revival of several handicrafts, such as the building of canoes by hand and the making of hiapo (tapa) cloth from mulberry bark.



Figure 3. A modern hiapo design by Niue artist Charles Jessop²⁴

History

Unlike some other Polynesian cultures, Niueans have not had a strong tradition of preserving historical artifacts, oral storytelling or the recitation of genealogies.

According to the Niue website²⁵, Niue's history falls into four defined periods: pre-Christianity, Christianity, the Colonial era and self-government. The documentation of Niue's history was primarily oral and passed down through the generations. It has only been since the period of New Zealand governance that a great deal of literature has been compiled on Niue's history.

Niue is believed to have been inhabited for over a thousand years. Oral tradition and legends speak of the first settlement by Huanaki and Fao, together with the Fire Gods from Fonuagalo, the Hidden Land. Some authorities believe that the island was settled during two principal migrations, one from Samoa and one from Tonga with a smaller migration from Pukapuka in the Cook Islands. In 1774, the English navigator Captain James Cook sighted Niue but was refused landing by the locals on three different attempts. He then named Niue 'Savage Island'. Missionaries from the London Missionary Society established Christianity in 1846. Niue chiefs gained British Protectorate status in 1900, and in 1901 Niue was annexed to New Zealand. In 1974 Niue gained self-government in free association with New Zealand and government to this day has followed a Westminster-style rule with a 20 member assembly. The Premier is selected by the House and the Premier then selects three other members for Cabinet posts.

1.2.4 The socio-political environment

Government

Following a plea from British missionaries and island leaders, the island became a British Protectorate at the turn of the 20th century. Shortly thereafter, in an agreement with the British government, New Zealand took over responsibility for Niue in 1901 and it remained a territory of New Zealand until October 1974 when a referendum took place regarding Niue's Constitutional future. The result supported the change to internal self-government in free association with New Zealand. The Niuean translation of Self Government is Pule Fakamotu, meaning for Niueans to lead, make decisions and do their own thing. Under the constitution New Zealand is responsible for Niue's defence, external affairs and for providing administrative assistance²⁶.

Niue's system of government is based on the Westminster system. The Niue Assembly consists of 20 members, 14 of whom are elected by village constituencies and 6 from the common roll. The 20

²⁴ From <http://internetniue.nu/fascinating-niue/a-living-heritage/2010/11/>

²⁵ <http://www.niueisland.com/content/history>

²⁶ Following self-rule, Niueans retained their New Zealand citizenship, a contributing factor for the large presence of Niueans in Auckland.

members elect a Premier and the Premier selects three cabinet ministers from the 19. Members elect a Speaker from outside their ranks. A general election is held every three years.

From 2003 to 2013, the Government of Niue has been driven by one vision, a prosperous Niue, '*Niue ke Monuina*'. This vision inspired the Niue Integrated Strategic Plan (NISP) for 2003 to 2008, and then the Niue National Strategic Plan (NNSP) for the following 5 years (2009-2013). The new Strategic Plan for 2014 to 2019 has a new pillar of environmental protection and management. The overall objective and aspirations as reflected in previous Strategic Plans remain - to build a sustainable future that meets the economic and social needs of the country while preserving environmental integrity, social stability, and the Niue culture.

In December 2013, the Niue Public Service Commission established three Ministries (Natural Resources, Social Services, and Infrastructure) and one Central Agency (comprising Crown Law, Finance and Planning (Treasury), Cabinet and Parliamentary Services and Police) as an overall transformation of the Niue Public Service. The groupings for the entities were drawn from the development pillars of the NNSP. The new structure is envisioned to improve the implementation and the achievement of outcomes under the NNSP.

The Ministry of Natural Resources is comprised of the three key departments; Department of Agriculture, Forestry and Fisheries; Department of Environment; and the Department of Meteorological Services. The Ministry of Social Services comprise of Department of Education, Health, Taoga Niue, and Justice, Lands and Surveys; and the Ministry of Infrastructure is comprised of the Department of Transport (Civil Aviation and Public Works Department), the Department of Communications (the technical component of the Broadcasting Corporation of Niue and Telecom Niue), and the Department of Utilities (Niue Power).

Village Councils

There are 14 Villages in Niue each with a Village Council (see Figure 4 below). Village Councils, which provide a degree of local administration, are made up of five volunteers from within the village. From the five, a chairperson, secretary and treasurer are elected. This roster is renewed every three years or remains the same subject to agreement by all village members. Each member of the Village Council is responsible for a portfolio which covers areas such as village show days, marine days, youth activities, facility maintenance, government projects etc. Village Councils meet at least once a month at the village function building or whenever there is an urgent matter to discuss. It is important to note that Village Councils only manage activities which are not church-related as the church has its own committee which manages its activities. Village Councils are granted NZD10,000 (around USD8,000) per term by the central government and these funds are used to achieve the outcomes proposed for each portfolio. Village Councils also hold fundraising activities throughout the year to help achieve some of their goals. An important responsibility of Village Councils is the preparation of a Village Management and Development Plan. However, only two villages to date have developed a plan. These villages are the larger and more populated ones on the Island.

Demographics

The 2011 census recorded a total population of 1,607, 795 males and 812 females. Niue's highest recorded population came in 1969 with 5,296 residents but there has been a steady decline since then. The 2011 census described Alofi North and Alofi South villages as the urban areas of Niue and the rest of the villages are considered rural. It was estimated that one third (37%) of the total population of Niue resided in the urban area of Alofi and the remaining two thirds are in rural areas. Children under the age of 15 make up 26% of the population while those 65 years and over account for 12%. The crude birth rate is around 20 per 1,000 population and crude death rate is 7.8 per 1,000 population.

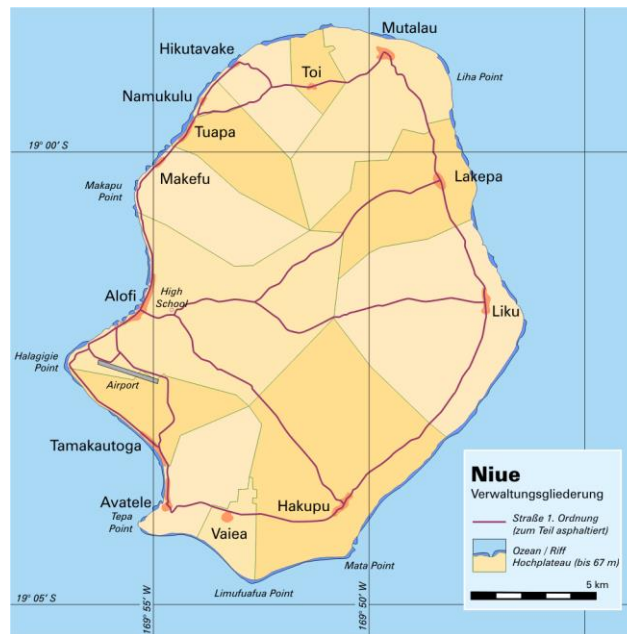


Figure 4. Map of Niue showing the 14 villages (Alofi North and Alofi South are shown as one village)

It has been reported that in 2006 the Niuean population in New Zealand was the fourth largest Pacific Island ethnic group. The population of 22,473 Niueans was a 12% increase between 2001 and 2006. About 16,275 Niueans are born in New Zealand which is 74% of the total Niuean New Zealand population. Around 25% of this total is able to converse in Niuean. Statistics New Zealand reported that 78% of the Niuean community resided in Auckland in 2001. The Niuean New Zealand community have continued to practice Niuean traditions in formal ceremonies and hold village sports competitions throughout the year. There are established Niuean churches which the majority of Niueans attend and where women's and youth groups exist for activities such as handcrafting and singing. There are also Niuean language classes and Niuean early childhood centres to teach the Niuean language from a very early stage.

Employment

According to the 2011 Census, 740 residents were employed in the labour force. This comprised 413 males and 327 females, 38.5% and 30.5% respectively. About 653 (86.5%) of the total number employed were working for pay and 67 (8.9%) were engaged in unpaid work. Of the former, 20% earned less than \$10,000 a year. About 45% earned between \$10,000 and \$20,000 a year and one in three earned more than \$20,000 a year.

Government constitutes the highest percentage employer with 60% followed by self-employed at 18% and then by private sector at 17%. Among males, these percentages are 61, 19 and 16 respectively. Among females these percentages are 59, 18 and 19 respectively.

Education

Education is compulsory and free from the age of five to 16. As a result of the low population, there is one Primary School with 243 pupils and one High School which has 168 pupils. The Niue Primary School also provides Early Childhood Education which prepares 4-year olds for Primary School in the following year. As outlined in the NNSP, Niue's Education framework is that of the New Zealand Curriculum which is adjusted to reflect the Niue context. The NNSP states Niue's education shall *"provide and maintain quality and relevant education services to enable and inspire all, as life-long learners to become responsible citizens responsive to change and make appropriate moral choices contributing to the human and skills needs aligned to national aspirations."* The strategies provided in

the NNSP include “*enhancing the quality of education to raise the achievement of learners*” and “*increasing the effectiveness of governance and management of the Education system.*” The 2011 Census reiterated the importance of education for the development of the country and the quality of life.

A new, purpose-built primary school and early childhood centre, funded through Australian Government aid, has been designed and construction is due to start soon to replace the existing school, which was severely damaged by Cyclone Heta in 2004. The school will significantly improve the quality of education in Niue, and will also function as a shelter for the local community in extreme weather events. The Government of New Zealand has agreed to manage the construction of the school on Australia’s behalf through a delegated cooperation arrangement²⁷.

Health

The Niue Fook Hospital situated in the main town of Alofi provides the majority of health services specifically primary and secondary medical care. Among these services are included general practice medicine, emergency and after-hours medical support and pharmacy. Patients requiring tertiary care are transferred to New Zealand. The hospital also runs the Public Health, Environmental Health, Maternal Health, and other programmes. The Health Strategic Plan which was developed for the period of 2011 to 2021 envisions “*a healthy population well supported by quality health services.*” Its primary goals are to ensure its objectives such as improving the health of Niuean residents and the quality and efficiency of health services are achieved.

1.2.5 Land use and management

Almost 99% of land in Niue is owned by families under customary land ownership based on traditional rights of families and their descendant groups. Such traditional lands belonging to traditional Niuean families are managed by a trustee (called “*leveki magafaoa*”) on their behalf. Total land percentage belonging to the State is registered as 1% with an additional 4% from leases of traditional lands.

Land use data sources are not consistent but this could be because they are reflecting different years. Probably the latest available statistics²⁸ are as in the following table.

Table 1. Land classification in Niue

LAND CLASSIFICATION	PERCENTAGE	ACTUAL HECTARES
arable land - land cultivated for crops like taro, banana, and vegetables that are replanted after each harvest	15.38%	4,000 ha
permanent crops - land cultivated for crops like vanilla, noni, papaya, that are not replanted after each harvest	11.54%	3,000 ha
other - any land not arable or under permanent crops; includes forests and woodlands, built-up areas, airport, roads, barren land, etc	73.08%	19,000 ha

Agriculture

The Agriculture census (2009) estimated from the 466 households surveyed, that 422 (91%) were active in agriculture and 44 (9%) were not. Of the agriculture households, 64% were subsistence farmers and 23% were engaged in both subsistence and cash activities. An estimated 764 ha of land was used in agriculture at the time of the census. About 90% of parcels of land were between 0.2 ha and 2 ha in size. There were 429 agricultural holdings and 1,267 parcels. The agriculture sector accounts for 23.5% of GDP²⁹.

²⁷ https://www.dfat.gov.au/geo/niue/niue_brief.html

²⁸ <http://geography.about.com/library/cia/blcniue.htm>

²⁹ <http://www.eoearth.org/view/article/172316/>

The Department of Agriculture Forestry and Fisheries (DAFF) since 2010 has been implementing a Sustainable Land Management Project which is a very effective demonstration of sustainable use of land for farming of essential resources. This project is located in Mutalau. It has agroforestry areas, Mucuna trial areas, a composting area and a vegetable garden including a plantain banana area. The project serves to educate communities on sustainable use of land. One of its objectives has been to implement and improve soil rejuvenation systems through large scale composting methods and organic farming practices. A few farmers have successfully utilised Mucuna legume to rejuvenate the soil. It has the ability to suppress weeds and fix nitrogen. DAFF's main farm facilitates the trial of small and medium scale composting and other organic methods of improving crop growth whilst reducing negative impacts on the soil and underground features. DAFF has also facilitated in the setting up of village based vegetation blocks which provides a space for communities to grow their own vegetables.

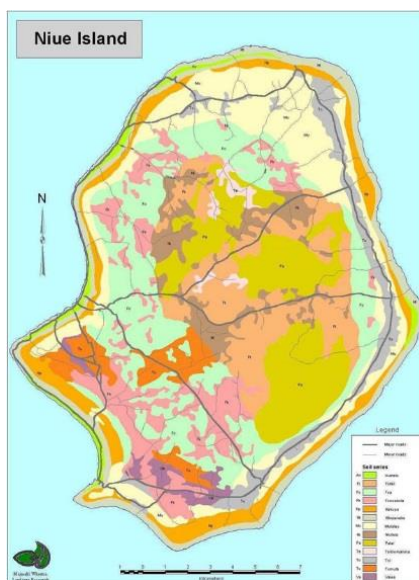


Figure 5. Soil map of Niue from Eroarome Martin Aregheore and Tom Misikea³⁰

Forestry

Under the system of land ownership in Niue there are no formal public forest reserves. However, there are 160 ha of mature forest declared by the landowners as *tapu* areas for the conservation of wildlife habitat and cultural sites. The Huvalu Forest Conservation Area is the largest area specifically managed for conservation and sustainable resource use. It comprises an area of 5,400 ha, consisting of 100 ha of *tapu* where hunting, logging and research are prohibited. This is surrounded by 2,500 ha of primary forest in which some hunting and other activities are permitted. Beyond this area is a buffer zone of 2,800 ha of agricultural land that is subject to controlled, shifting cultivation (arable land).

The Code of Harvesting Practice for the Indigenous Forests of Niue (2004) provides practical and rational guidelines to all those involved in forest harvesting, aiming at reducing forest damage and improving forest yields. The Code provides sets of best practice covering both environmental and operational matters and also specifies uniform safety standards and prescriptions, which must be adhered to in any forest harvesting operation. The protection of flora and fauna in forest areas is important. Conservation measures for this purpose include retaining strips of unharvested forest to maintain habitat diversity, with such strips connecting to larger patches of forest that will not be harvested. The protection of rare and endangered species and communities in harvested areas by modifying harvesting prescriptions or leaving patches of uncut forest is also a conservation measure for animals and plants. Some of the management practices include minimising disturbance to residual

³⁰ Aregheore, Eroarome Martin and Tom Misikea (2009) *Country Pasture/Forage Resource Profiles – Niue*. FAO Publications

trees and soil areas to avoid damaging the productive and regenerative capacity of the forest. Harvesting operations are required to avoid disturbance to protected areas and their buffer zones. Recommendations are also made on equipment characteristics such as using narrow blades no wider than the tracks of the machine so as to reduce damage to remaining trees.

1.2.6 Ecosystems functions and services in Niue

Forests and reefs are two predominant ecosystem types on Niue. Forests are considered as one of Niue’s primary natural resources offering a range of functions and services often determined by the dominant tree species within the forest. Forests harbour a wide range of plant and fauna species, stabilize soils, sequester carbon and protect water resources. Reefs constitute an important feature of the Niuean environment and they provide a vast array of ecosystem services ranging from food production to tourism earnings. The impact of forests and reefs on biodiversity, carbon and nutrient storage, water quality and quantity, soil conservation, forage production, and in addition to their recreational importance cannot be underestimated.

According to TEEB,³¹ ecosystem services are the direct and indirect contributions of ecosystems to human well-being supporting human survival and quality of life. Ecosystem services from the Niuean terrestrial, coastal and marine environment are summarized in the following Figure.

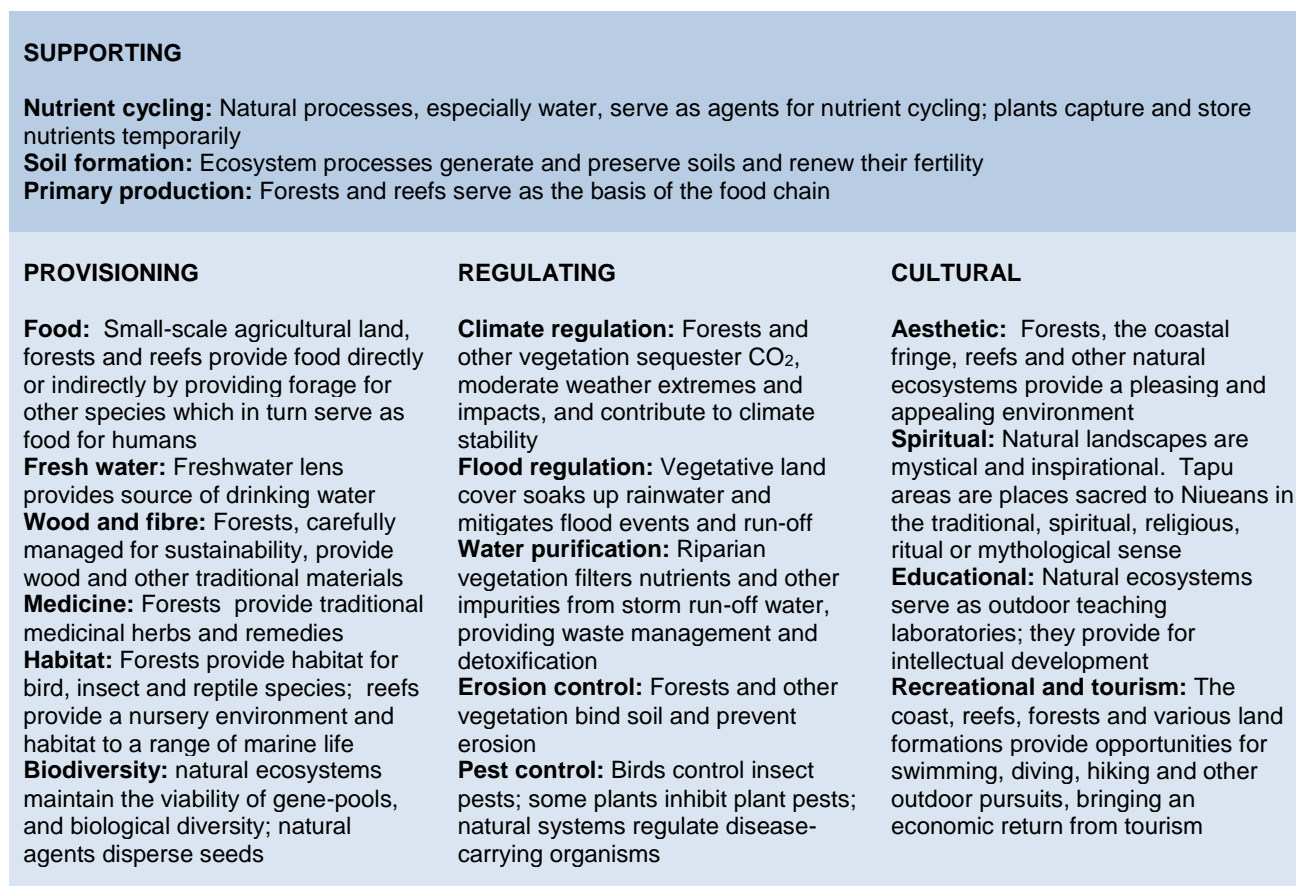


Figure 6. Ecosystem services on Niue Island and surrounding marine areas

³¹ The Economics of Ecosystems and Biodiversity (TEEB). See <http://www.teebweb.org/resources/ecosystem-services/>

1.3 The threat of environmental degradation

The unique Niue environment, its biodiversity and its ecosystem services on which life on the Island depends is under threat from both natural as well as anthropogenic impacts. The small size of Niue Island and the small population create a natural instability, common to many small island environments. Natural disasters such as cyclones can devastate a very high proportion of the land area, and introduced animals or plants may rapidly become pests in an environment of relatively few native species, which cannot provide a counter-balance.

In Niue, the ownership of land and understanding of the land tenure system must be foremost in any efforts to protect and manage the environment, and this has created difficulties in the past particularly as a result of many absentee owners residing in New Zealand and Australia. Traditional mores and customary principles of shared ownership need to be respected and this has created barriers in some instances.

There is a perception among Niueans that traditional forms of conservation can address environmental concerns. However, this does not always work. Outside influences and economic pressures have led to an over-exploitation of some resources and the targets of high tourist numbers can exacerbate these pressures if not carefully controlled.

Although Niue has been more fortunate than many countries in that it has lost few species and retains large areas of relatively pristine natural habitats, the threats are there and the impacts are likely to increase if nothing is done. Notable among these are examples of land degradation, the degradation of habitats and the over-exploitation of desirable species.

Systematic management of natural resources is not well developed and there are few mechanisms to prevent over-use. The legal framework and procedures are mainly in place but implementation and enforcement are weak due to a shortage of human resources. Capacity, in terms of know-how, is available, although graduates need to be lured back to maintain the level of expertise. However, the small number of people means that the “catchment” is small.

These threats to environmental values of national and global importance will have dire consequences if not adequately addressed. Prominent among these are: reduced tourism earnings, pollution of groundwater, erosion and loss of scarce topsoil, reduced ecosystem services and loss of productive land. In turn, these consequences will give rise to long term impacts such as economic downturn, loss of biodiversity, reduced incomes and depressed welfare and livelihoods. It is obvious that the threats need to be addressed.

1.4 The Government’s response

In the face of the above threats and in recognition of their potentially serious consequences and long-term impacts, the government has taken a number of mitigation steps, often with the support of external donor agencies.

1.4.1 The policy and regulatory response

Niue’s overall annual government budget for the past few years has averaged approximately around USD21 million. Of this annual budget, the investment in environment, agriculture, forestry and fisheries constitutes around USD1 million, allocated annually through the Department of Environment (DoE) and the Department of Agriculture, Forests and Fisheries (DAFF). Furthermore, some additional funds spent on environment related activities are channelled through local development (Department of Community Affairs) as well as through Public Works (on water resources management). As a result, the estimated resources allocated from the government budget to environment related activities total USD1.5 million implemented through various government agencies. Under the baseline scenario, most of the budget is spent on recurrent budget lines such as

salaries. However, to this needs to be added a significant amount which is received in development project funds.

The government of Niue has been supporting agriculture development, and promoting sustainable land and water management through its DAFF. It has developed a Forest Management Plan, Fisheries Management Plan, as well as Integrated Water Resources Management Plan. Furthermore, actions have also been undertaken to effectively manage waste in order to avoid contamination of the groundwater lens on which all residents depend for their drinking water supply.

Key activities under the baseline that are relevant to ridge to reef management include:

Biodiversity monitoring, conservation and sustainable use

Niue has created two terrestrial protected areas, namely Huvalu Conservation Area (IUCN Category VI) and Hakupu Heritage and Cultural Park (IUCN Category III). The Huvalu Conservation Area was established in 1992 through assistance from the South Pacific Biodiversity Conservation Program (SBPCP) and SPREP. The land area is approximately 54 km² on the eastern side of the island. It includes an area of reef flat about 15 to 20 m from high tide mark. Huvalu consists of a sacred Tapu area, a primary forest and a buffer zone. The Hakupu Heritage and Cultural Park extends south from the Tuhia Access Track that was initiated by members of the family owning the land. Its primary objective is to inventory and protect areas of historical and ecological significance, including caves used traditionally for burials and others where women of the village traditionally undertook weaving, as well as fortress sites identified as ancestral dwellings, as well as a peka sanctuary.

There are two marine protected areas, the Anono Marine Reserve, formerly known as Namoui (IUCN Category VI) and Alofi North Temporary Closed Area (which has since been reopened). The terrestrial PAs cover 23% of Niue's area, and the marine ones cover a very small area of Niue's EEZ (23.45 ha over 31 million ha). In addition, there are other small areas that have been traditionally defined as strict protection zones (tapu) or subject to seasonal closures. Although still practised, these are in danger of dying due to lack of formal recognition by government.

The government has also closed some marine areas from fishing, such as the Beveridge submerged reef where Regulations³² provide for the protection of the "Beveridge Reef Designated Fishery" such that *no person shall knowingly destroy or damage a reef within the Beveridge Reef Designated Fishery except with and in accordance with the approval of an authorized officer*. In other areas the government is promoting management and development of pelagic fisheries (tuna and associated species) guided by a new "Niue Pelagic Management and Development plan (2012)". 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 the business-as usual scenario, the funding available under this baseline program will not be sufficient to expand the protected area estate and cannot result in the integration of existing PAs and tapu areas into a single and continuous terrestrial conservation area.

The Niue Biodiversity Strategy and Action Plan

The Niue NBSAP³³ was prepared in 2001 with the vision of – "*Niue is an Environment Friendly Nation in which conservation and the sustainable management of biological resources support all the living community.*" It covered terrestrial habitats, terrestrial species, marine biodiversity, governance, waste management and water resources, alien invasive species and public awareness and education and it affirmed that "*Biodiversity incites spirituality in the communities and helps shape our culture because*

³² See http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=083103&database=FAOLEX&search_type=link&table=result&lang=eng&format_name=@ERALL

³³ Richmond-Rex, Phyllis, Tagaloa Cooper, Judy Nemaia and David Butler (2001) *National Biodiversity Strategy and Action Plan of Niue*. Department of Community Affairs, Government of Niue

of our dependence on it for supply of food, for a sense of identity and raw materials for commerce.” It adopted six goals as follows.

Box 1. The Goals of the Biodiversity Strategy

GOALS OF THE NIUE NBSAP 2001

- 1 **Protection of biological diversity** To retain and enhance existing biodiversity, maintaining sufficient remaining habitats and ecosystems to support the population of all species and their genetic diversity.
- 2 **Policy, planning and institutional frameworks** To integrate the conservation and sustainable use of biological diversity into Government development policies and plans.
- 3 **Local communities and customs** To improve village and family understanding about biodiversity and to motivate and support village and family actions to conserve and make sustainable use of our biological resources and to have equitable share from these resources.
- 4 **Institutional strengthening** To strengthen in-country capabilities in planning and implementing sustainable natural resources management programmes.
- 5 **Financial sustainability** Develop local, national, and regional financial mechanisms for conservation and sustainable management of biodiversity resources.
- 6 **Environmental education and awareness** To strengthen environmental education, raise awareness and improve information sharing to enhance the conservation and sustainable use of Niue's biological resources.

At the time of writing (2014/15) a revised NBSAP is in the final stages of development. It affirms that “*The conservation of Niue’s biodiversity is a key to ensuring the country’s sustainable development*”. But it also notes that while Niue has been more fortunate than many other countries in that it has lost few species and still retains large areas of natural habitat, some negative trends such as the degradation of habitats and over-hunting of species are evident.

Other Biodiversity commitments

As discussed in the Fifth Country Report to the CBD (*op. cit.*) Niue has made significant progress towards the 2020 Aichi Biodiversity Targets. It has continued or initiated activities that lead effectively to all the Targets under each of the four Goals. A few of the targets have been reached well ahead of time, and the others are in-hand and ongoing and the expectation is that Niue will meet all the targets by 2020. This project will assist with this effort (see section 2.1 below) especially Targets 5 to 8 under Strategic Goal B, and Targets 11 and 12 under Strategic Goal C.

Niue has also developed an Action Plan for Implementing the Convention on Biological Diversity’s Programme of Work on Protected Areas (PoWPA). However, the version available is incomplete.

Management of waste

The Government of Niue, through the Department of Environment is responsible for Niue’s Waste Management. Solid waste from households is collected twice weekly free of charge by a Contractor. There are a number of designated dumpsites around the Island and the Department of Environment is responsible for ensuring these are managed properly to minimise negative impact. The Department is also responsible for collecting and disposing wastewater from septic tanks. Wastewater is disposed in designated areas to avoid contamination of the underground freshwater. Options to address other types of waste such as health-waste, electronic waste and other scrap metals are reflected in the Niue Waste Management Plan. Work has been restricted by funding constraints.

Water and land management

The government has identified key boreholes in the country and has developed regulations to safeguard water quality. For example, a certain area around each borehole is protected to prevent pollution of these sites. The actual area depends on the purpose of the borehole and the prescribed distances range from a 50 m radius to a full 100 m. The Health Department tests the water quality at residential homes every three months.

In terms of sustainable land use, the government has supported the promotion of organic farming of noni and vanilla to avoid land contamination. Currently, 60 (22 female and 38 male) farmers are involved in certified organic farming covering around 633 ha of land. The government is also supporting the promotion of vegetable and fruit production by farmers through the provision of seeds, planting materials and technical advice. Moreover, the use of soil and water management techniques, such as the use of nitrogen-fixing crops as green manure/ mulch, has also been promoted by the government.

1.4.2 The institutional response

There are direct and indirect institutional responses to the changing environment. As previously mentioned, Niue's NISP for the 2003-2008 period addressed the destruction brought about by Cyclone Heta by focussing on recovery and rebuilding efforts. The following NNSP (2009)³⁴ brought about a development phase which largely concentrated on developing the tourism industry that is envisioned to lead Niue to self-sustainability.

In the current NNSP³⁵ Pillar 5 is Natural Resources, Environment & Climate Change and its vision is – Sustainable Use and Management of Niue's Natural Resources and Environment for Present and Future Generations. All the strategies under this Pillar are of relevance to this project, as follows:

Environment	Administer the Environment Act to ensure the threats to Niue's pristine natural environment, fauna and flora species and natural resources are minimised, preserve and/or conserve.
Agriculture	Ensure the sustainable use and management of the land, soil, and animals and plant genetic resources
Fisheries/Marine Resources	Enhanced sustainable management and conservation of the marine resources
Climate Change ,Disaster Management and Risk Reduction	Ensure the adverse effects of climate change and natural hazards are mitigated and appropriate adaptation programs are implemented to strengthen Niue's resilience.
Solid and Hazardous Water and Pollution	Review and strengthen the implementation of national initiatives in addressing solid and hazardous waste including marine pollution
Biodiversity Conservation	Conserve marine, freshwater and terrestrial biodiversity and ecosystems with the view of establishing or declaring protected or conservation areas to safeguard biodiversity and natural habitats of iconic marine and land species.
Education for Environment and Sustainable Development	Strengthen public awareness on environment, climate change, disaster management and sustainable development principles usage and practices.
Forestry	Protect, manage and conserve the forest

These strategic plans are broad based and underpin all sectors and aspects. Responses directed towards environmental management and development include the enactment of the Environment Act, the Water Act, and the National Coastal Management & Development Plan. The indirect responses include the creation of ministries (bringing together previous departments) and central and commercial agencies, the establishment of the department of Tāoga Niue, and the development of the National Policy for Gender Equality. Each response is elaborated in the following paragraphs.

The **Environment Act** was passed in 2003. Its main purpose is to “allow for the development of environmental policy and law, to establish an Environment Department and to provide enforcement powers to environmental officers.” It gives provision for cabinet to allow for the development of regulations in relation to “planning and natural resource management, waste management and pollution control, regulation of hazardous substances and waste, protection of certain species and habitat, to prescribe rules for the introduction and control of alien or non-native species, protection, preservation and management of historic areas and rehabilitation of any contaminated or polluted land.” The Act binds with the Water Act to “devise issuances of permits and license for pollution control for the protection of the water lens from contamination.”

³⁴ Government of Niue (2009) Niue National Strategic Plan, 2009-2013. *Niue ke Monuina, A Prosperous Niue*

³⁵ Government of Niue (2014) Niue National Strategic Plan 2014-2019. *Niue Ke Monuina, A Prosperous Niue. Draft*

A new **Environment Act**, which is still before Parliament, will replace the 2003 Act. It gives provision to require development consent for activities which may have a significant environmental impact. An environmental impact assessment (EIA) of the activity must be carried out as part of the process of obtaining development consent. Land use and disposing of waste and other matter as well as protection and establishment of tapu areas must satisfy environment standards to commence or continue. Activities for which development consent is always required include among others: extraction of minerals, aggregate stones, shingle, sand, reef mud or beach rock; commercial manufacturing of paper, pulp and dry wood products; operation of a resort, hotel, motel, guesthouse, or other premises for commercial gain; use of land or building, or both, as a golf course; use of land or buildings, or both, as a recreational park; logging operations, removal of primary or secondary forest or primary vegetation; landfills; recycling or collection stations; soil, erosion control activities; mining; reservoir developments; settlements and resettlement projects; sea projects etc. Activities for which development consent is not required include: construction; maintenance; renovation or extension of a private home in a residential area; scrub or bush clearing in relation to a private home if clearing is less than an acre.

The **Environment Regulations** outline the application process and conditions for development consents and also what is involved in the Environmental Impact Assessment Process. The Regulations also outline how the applications are processed by the Director of the Department of Environment.

The **Water Act** was passed by the Niue Assembly in 2012. The objective of the Act is “to provide an administrative and regulatory framework for the sustainable, efficient and coordinated development, extraction, protection, management and use of the water resources of Niue for the benefit of both present and future generations”. Areas guided by the Act include sustainable and efficient management and development of water resources, prevention and control of pollution of water and improving awareness and understanding of water issues. The Act outlines in conjunction with the Environment Act the conditions and process of applying for a water pollution control licence for activities such as food, livestock or agricultural processing; timber milling; waste collection and disposal sites and facilities; sewage treatment and conveyance or disposal operations; tourism operations of more than 10 beds among others.

The **National Coastal Management and Development Plan** is in its final draft stages. Its goals are to improve the productivity of coastal fisheries and to optimise the overall sustainable benefit to Niue. The plan guides the management and development of Niue’s coastal fisheries resources and habitats. It becomes effective from the date approved by cabinet and will be implemented over a period of five years. The plan is an outcome of consultations with key stakeholders such as the Village Councils and the Vaka and Fishing associations. Coastal fisheries are an integral part of Niue life in terms of traditional values, food security, income generation and community wellbeing. A large proportion of the people rely on coastal resources for their livelihoods. The plan thus takes into account the need to balance conserving the resources for future generations and using these resources now for daily needs. Traditional methods and knowledge along with contemporary management approaches will be important management tools to ensure productivity and sustainability of Niue’s coastal resources in the face of increasing modern pressures and extreme climatic events.

At the end of 2013, the Government took a new approach to realising its aspirations by grouping departments with similar objectives into two Agencies and three Ministries. They are the Central and Commercial Agencies and the Ministries of Social Services, Natural Resources, and Infrastructure. This new functional structure was decided on the basis of addressing the small human capacity to fulfil the goals of the strategic plan. It was envisioned that sharing of capacities would ensure results are achieved and operations are run smoothly. One notable improvement of the transformation is that the portfolio of the Secretary to Government is reduced to five sectors whereas previously the role was responsible for seventeen departments. Each of the ministries has a Director General who is responsible for the departments within the ministry. The Central and Commercial Agencies continue to be run by directors who report to the Minister responsible for their portfolios.

The **Tāoga Niue Act** has several purposes which include the establishment of the Department of Tāoga Niue as a department of the Government responsible of coordinating all matters relating to Tāoga Niue. An expert advisory council to the department was also established as a provision of the Act. Other requirements from the Act include control of the export of antiquities and objects of national historical and cultural significance; protection of traditional knowledge and expressions of culture. Niue's cultural and traditional practices and knowledge prior to the establishment of the department were in danger of disappearing due to total reliance on verbal documentation. The department, despite its lack of resources to effectively achieve its objectives, is an adequate mechanism to address the key priorities and protect and maintain the use of the Niue heritage.

The introduction of the **Policy for Gender Equality** is an important milestone for a small island state that is Niue. There is recognition that gender inequality exists at the national and local level and many gender gaps can degrade the functionality of social, economic, political and environmental systems among others. The policy mission is “to strengthen mechanisms and create conditions to eliminate gender inequalities and for addressing the needs of both women and men in all aspects of Niueans’ private and public life.” The policy’s goal is to “strengthen equal rights and equal opportunities for all women and men to use their full potential to participate in the economic, social, political and cultural development of Niue.” The development of this policy indicates Niue has taken a significant step towards realising the improvement of the quality of life in Niue comes from recognising differing roles of men and women in society and in their private homes.

In 1998 Niue carried out a **Land Use Planning** project, funded by AusAID and lasting three years with a budget of around USD318,000. The project results included the development of a GIS database including an aerial photograph montage (primarily using 1960s photographs) geotagged to the cadastral base, satellite imagery overlay (using 1990s Landsat imagery), mapping of bush tracks with GPS, identification of special geological sites (caves, burial grounds, traditional water gathering sites, etc), GPS mapping of infrastructure (including water pipes, telecommunication facilities, power cables, etc). The project also captured a lot of traditional knowledge, digitised this into a database on each village and developed Local Area Plans for all villages. Sustainable Development Guidelines were also produced including proposed energy efficient designs, cyclone sensitive design and planning, traditional and customary sensitive design, etc. Several plans were also produced for development of specific proposals at the time including maps and guidelines for the relocation of the bulk fuel depot, assessment of a proposed tourism development and the location of wind turbines. Wave inundation maps were also produced with both historic and traditional knowledge digitised maps. An important part of this work was considered at the time to be the development of sound economic plans irrespective of land title to help overcome some of the land tenure problems. Town planning was applied to the main “urban” area of Alofi and planning guidelines developed for access to property, etc.

Some of these results have not survived the passage of time and even those that have are completely out of date, particularly as a result of Cyclone Heta. There is a need to rebuild the land use planning capacity.

Land ownership is through the Land Act and involves mainly the titling process carried out through the Justice Department and in addition to building on the results of the Land Use Planning Project described above, the R2R project will work in consultation with the Justice Department centrally and through Village Councils and the Church at community level.

Finally, it is important to acknowledge the 14 Village Councils set up by the Village Councils Ordinance 1967 and which in Niue play an important role in the protection and management of biodiversity and the environment. Village Councils have broad powers, including conducting business enterprises, improving housing standards, promoting agricultural and fisheries enterprises and cooperating with the Government to provide social services. To deliver these functions, Councils are empowered to make by-laws and to levy taxes. These provisions are relevant to the recognition of traditions, culture and traditional authority.

In 2008, Village Councils were given the opportunity to develop Village Plans and two villages, namely Tuapa and Hakupu accepted the challenge and developed plans. The Tuapa Plan³⁶ was produced as part of a UNDP sub-regional programme covering four South Pacific Countries: Cook Islands, Niue, Samoa and Tokelau. The overall objective of the plan is to strengthen the Tuapa community's capacity to drive the planning and implementation of their own sustainable development priorities towards achieving the Millennium Development Goals (MDGs) by 2015, taking into account human rights approaches and gender issues. There is no mention of environment, biodiversity or natural resources in the plan and this is an area where this project will be able to assist villages with the review of existing plans (for Tuapa and Hakupu) or the formulation of new plans (for the rest of the 12 villages).

1.4.3 The baseline

The policy, regulatory and institutional response by the Niue Government described in the above sections comprises the baseline of environmental protection and management in Niue. This baseline is made up of a number of activities addressing the protection and management of biodiversity and ecological resources in Niue. They range from the core functions of some key departments (e.g. DoE, DAFF, Taoga Niue, etc) to special initiatives funded from the national budget and through development assistance. Together they represent an investment of over USD10 million. There are also a number of GEF-supported initiatives estimated to be worth over USD3.7 million. The following table provides a summary of the baseline.

Table 2. Baseline of environmental protection and management in Niue

BASELINE ACTIVITIES	EST. VALUE (in US Dollars)	FUNDS SOURCE
Annual budgetary allocation to DoE and DAFF; also for environment related activities through local development (Department of Community Affairs), Health Dept (water quality testing) and Public Works (on water resources management). Most of the budget spent on recurrent items such as salaries	1,500,000	National Budget
Forest Management Plan	225,000	National budget
Offshore Fisheries Management Plan (Beveridge Reef closed for fishing)	300,000	GEF
National Coastal Management Plan	500,000	National Budget + SPC
Integrated Water Resources Management Planning Project (regulations developed for water quality protection)	500,000	GEF
Huvalu Conservation Area (5,400ha) - establishment, management, monitoring	500,000	GEF/SPREP
Anono Marine Reserve (23.45ha) - establishment, management, monitoring	100,000	National budget
Solid waste management (domestic collection) (other waste e.g. health-waste, electronic waste and scrap metals restricted by funding)	100,000	National budget
Wastewater management (septic tanks effluent collected)	1,000,000	AusAID
Invasive Species Management project	24,000	National budget
Invasive Species Management project	324,000	GEF/UNEP
Forest Protected Area Management project	649,000	GEF/FAO
Pacific Adaptation to Climate Change (PACC)	750,000	GEF/UNDP
	390,000	AusAID
	687,000	EU
Sustainable Land Management (SLM) Project	474,544	UNDP/GEF

³⁶ Government of Niue (2009) *Tuapa Village Plan 2009-2015*. Community-Centred Sustainable Development Programme (CCSDP).

	1,020,339	FAO, EU, SOPAC, UNESCO, SPC
Environment Act passed in 2003 - to "allow for the development of environmental policy and law, to establish an Environment Department and to provide enforcement powers to environmental officers ... planning and natural resource management, waste management and pollution control, regulation of hazardous substances and waste, protection of certain species and habitat, to prescribe rules for the introduction and control of alien or non-native species, protection, preservation and management of historic areas and rehabilitation of any contaminated or polluted land ... permits and license for pollution control for the protection of the water lens from contamination."	40,000	National budget
Environment Bill - before Parliament - will require EIA of development activities	40,000	National budget
Water Act passed in 2012 - "to provide an administrative and regulatory framework for the sustainable, efficient and coordinated development, extraction, protection, management and use of the water resources of Niue for the benefit of both present and future generations"	23,255	National budget
Transformation – setting up of Ministry of natural Resources	95,000	National budget
Tāoga Niue establishment of Department	306,800	NZAID and National budget
Tāoga Niue Act 2012 and Vagahau Niue Act 2012 - control of the export of antiquities and objects of national historical and cultural significance; protection of traditional knowledge and expressions of culture	105,000	UNESCO and National budget
Wastewater management	496,000	EU
NBSAP Review and updating; 5 th National Report to CBD, PoWPA Action Plan	220,000	GEF/UNEP
Land Use Planning project	318,000	AusAID
Many small areas, traditionally defined as tapu zones	???	Private investment
14 Village Councils - crucial role in protection and management of biodiversity and environment. Tuapa and Hakupu developed Village Development Plans, but no mention of environment, biodiversity or natural resources	???	National budget

Total value of the baseline in environmental protection and management in Niue is estimated to be around USD10.6 million.

1.5 Remaining challenges and outstanding gaps

Despite the significant government response to the identified threats, gaps remain and barriers stand in the way of further progress and the achievement of sustainability – these are placing Niue’s biodiversity and environment at risk.

Research and consultations at the concept phase identified six existing impacts and remaining threats to biodiversity and natural resources of national and global significance.

1.5.1 Remaining threats to environment and biodiversity

The six significant remaining threats to environment and biodiversity in Niue have been identified as follows:

Unsustainable harvesting of wild resources: One of the key threats to Niue’s biodiversity is the unsustainable harvesting of wild species. The hunting of flying foxes (*Pteropus tonganus*) and the Pacific pigeon (*Ducula pacifica*) is a Niuean tradition which is managed through the operation of a closed season. However, although hunting is formally disallowed outside the hunting season (typically December-January), shooting is observed and this is thought to be contributing to a decline of these species. Similarly, over-harvesting of the coconut crab (*Birgus latro*) has been noted as a particular concern in the country.

In the marine environment, un-ecological fishing methods, such as using poison, are indiscriminate and lead to the destruction of non-target species and also undersized individuals of the target species. In addition, the death of coral and seaweeds has been reported following the use of such poison³⁷

³⁷ See http://www.sprep.org/att/publication/000544_IWP_PTR38.pdf

although it is also noted that the practice of using poison is considered to be in decline. Local communities have also noted an impact on fisheries and coral damage from the use of non-traditional fishing methods (e.g. use of hammers, axes, and crowbars) when reef gleaning or through the use of small-sized nets for trawling. Reports from local divers suggest that giant clam species are in danger of becoming extinct. Local women who frequently glean or fish on the reef flats are concerned about the rarity of *Caulerpa* spp compared to decades ago. Baseline surveys indicate that non-protected reef flats on the southwestern part of the island showed very low species diversity for both invertebrates and corals compared to a protected area of relatively the same size.

Land Degradation: Over the 30 years since 1966, 22% of the indigenous forest cover has been lost in Niue³⁸ through conversion to agricultural production. Although the soils of Niue tend to be moderately fertile, they are very shallow and only 60% of the island's land area is suitable for agriculture. The potential is further limited by the lack of running water and irrigation facilities, and by the small number of aging farmers in the island. Deforestation has occurred on the more fertile soils and less so on thin soils or soils with a large proportion of coral outcrops as these areas are deemed unsuitable for agriculture. Construction of new roads for logging operations could potentially open up more forest for hunting and agricultural activity which would create a negative impact on the conservation of forest values.

Traditional 'slash and burn' cropping techniques are still practiced, but in recent years this method has been gradually replaced by the use of bulldozers for land clearance. Disc ploughing is considered the largest single contributor to loss of soil structure and fertility decline in the 1950s and 1960s.

On the positive side, garden areas are usually left to fallow for up to 10 years before being cultivated again and composted materials are added to the soil to facilitate rejuvenation.³⁹

The result of all this is that much of the island is now a mosaic of varying stages of regeneration interspersed with cultivated gardens.

Pollution: Increasing household waste, agricultural chemical use (inorganic fertilisers, weed killers) and oil spillage from boats are some of the key pollution sources of land and water in Niue. The study of coastal water quality by SOPAC⁴⁰ in 2003 showed that there was high nitrate and phosphate concentration in some coastal areas through seepage of effluent from domestic septic tanks draining into the groundwater and coastal areas. This is thought to be resulting in toxicity and destruction of fish in such areas. Domestic and all other solid waste is disposed of in an open dump which, while controlled, is not adequately managed and poses a threat to the freshwater aquifer.

Groundwater quality: The groundwater lens is considered highly vulnerable to land activities due to the highly permeable nature of the coral rock with infiltration from surface to groundwater taking place rapidly within 1-2 days. The likelihood of contamination of groundwater is now much higher than it used to be due to the relocation of households and government buildings and the location of piggery and poultry farms in the water catchment and the proximity of onsite treatment systems to groundwater supply bores. As a result of the higher nitrate concentrations around Alofi and the confirmation of the high vulnerability to groundwater contamination⁴¹, there are now calls to relocate supply bores further inland and to employ best practice in waste treatment. Indirect water seepage and direct sewage discharge has also affected coastal water quality and the threat is increasing.

Invasive alien species: The global invasive species database has noted around 60 invasive species in Niue⁴², including 13 tree species, vines/creepers such as *Micania micrantha*, and three different species of rats. Although the impacts of such invasive species on native species and

³⁸ Slash and burn agriculture led to a decline in forest cover from 86% in 1966 to 64% in 1996.

³⁹ While 10 years was the traditional timing, fallow periods are much less these days owing to issues with bulldozer access, etc.

⁴⁰ Mosley, L. and Carpenter, C.R.L. (2005) Niue Coastal Water Quality and Groundwater Resources Assessment. SOPAC Technical Report 372. SOPAC Secretariat, Suva

⁴¹ *Op. cit.*

⁴² See <http://www.issg.org/database/species/search.asp?st=sss&sn=&rn=niue&hci=-1&ei=-1&x=38&y=8>

ecosystems have not been fully documented, they are considered to be negative and significant. The METT carried out under the *PAS: Forestry and Protected Area Management* Project indicated that invasive non-native/alien plants (weeds) and invasive non-native/alien animals comprise medium threats to Niue biodiversity and native ecosystems. The recently completed National Invasive Species Strategy and Action Plan identified the actions needed to address the threats posed by invasive species.

Climate change: Predicted global climate change will have a number of impacts on Niue. These include increases in average temperatures of both the atmosphere and the sea surface, reduction in the amount of dry season rainfall and an increase in the extreme rainfall events in all seasons, and increases in wind speed, particularly in the dry season. The El Niño Southern Oscillations (ENSO) are expected to further compound climate change impacts, since Niue is located under the typical movement of the South Pacific Convergence Zone (SPCZ), which causes droughts during severe El Niño years. There are also predictions that changes in the global climate will result in more frequent and more intense storms and cyclones, which can cause major damage to the country's infrastructure and natural resources (forests and coral reefs). Tropical Cyclone Heta (category 5 storm) in 2004 caused peak wind gusts of 296 km/hour, and waves in excess of 50 meters in height and this caused major damage to Niue, including its forests and coral reefs; it uprooted trees and wildlife were destroyed directly as well as from starvation following the loss of habitats. A survey following Cyclone Heta found that several invasive species already present on the island, exhibited opportunistic behaviour and expanded their range and abundance after the cyclone.

1.5.2 Barriers to overcoming environmental degradation

Research during the project concept phase found that efforts to overcome environmental impacts and threats were hindered by two barriers in particular and that these would stand in the way of any effort to address these impacts and threats. As a result, the project will work towards overcoming the identified two barriers and each of these is discussed in turn below.

Barrier 1: Limited capacities and mechanisms for management on an integrated landscape and seascape scale

The values of biodiversity resources in Niue have not been properly documented. Whilst basic economic values (such as use of wild resources for food, the provision of water, tourism values from nature, etc) are known, they have not been comprehensively documented. Additionally, the analysis of the value of the island's biodiversity or its marine biodiversity has not been updated regularly. Information on biodiversity status and hotspots are currently unavailable. Furthermore, social and cultural values of nature, reflected in traditional knowledge, folklore, and handicraft production related to biodiversity, are being lost. This can be explained by the interrupted transfer of these values from the older generation to younger ones due to emigration.

The lack of analysis and documentation of values is largely due to the limited capacities and involvement of different government departments and communities in ecosystems management. There is an emerging recognition by different sectors (such as education, culture, water resources management, community development) of the relevance of their work for ecosystems management and of ecosystems to their priorities, but limited capacities and awareness on such linkages has hampered effective mainstreaming of environmental issues in their work. This has led to a fragmented sectoral approach to resources management by different sectors without clear cross-agency cooperation and partnerships. This has meant that the desired positive impacts on the environment have not been achieved as the possible synergies that exist between different sectors have not been realized. It should also be noted that the inclusion of communities is important for the realization of an integrated approach as the new terrestrial PA will contain seven Tapu areas. Furthermore, social and cultural values may complement economic values and inclusion will assure a more holistic approach. Moreover, the promotion of sustainable activities in the areas surrounding the continuous conservation area is necessary to reduce the threats from outside.

Another constraint to local capacity to deliver efficient and effective development programmes is the low population of Niue. In this connection it should be noted that smaller populations possibly lead to lower environmental pressures (e.g. unsustainable farming and deforestation) leading to a reduced need for remedial or protective measures. However, the thrust towards tourism would mean increasing the number of island inhabitants from the tourists and the necessary support workers, possibly migrants. As the socioeconomic conditions in Niue further improve, it is also conceivable that Niueans from abroad return to the Island. All these could add pressure on the island's ecosystem.

Under the baseline activities (see section 1.4 below), sectoral plans have not effectively internalized the multiple benefits achievable through an integrated approach to land, water, biodiversity, and seascape management. Ecosystems management is seen as primarily a sectoral priority (of the Environment Department) and the multiple benefits of integrated production landscape management have not been maximized through targeted support to communities to manage landscape and seascape – especially at those areas that have been considered critical from the perspective of global environmental values as well as local values (for cultural, water supply, etc). Therefore, under the baseline, biodiversity conservation in conservation landscapes and seascapes will continue to be impacted by unsustainable land use practices outside them and the ecosystems and cultural values of such areas will also be negatively impacted through community and other sectoral activities.

Barrier 2: Limited integration of terrestrial and marine biodiversity conservation into government and community plans and actions

As noted in the PIF, most of the land resources of Niue are vested in extended families, under the stewardship of the family appointed *Levekis*. Therefore, any creation of protected areas on land needs to be consented by the families and enforced primarily by them. The current approach to developing community sustainable development plans has not included any focus on natural resources management or heritage protection. The traditional practice of setting aside strict protection areas (*Tapu*) or seasonal closures (*Fono*), although still practiced, is in danger of dying out as it has not been formally supported by the government. Such areas, particularly terrestrial *Tapu* areas, are of relatively small size for them to effectively conserve important areas on their own, and if the wider surrounding areas around them are degraded or mismanaged, then the integrity of the *Tapu* areas themselves is likely to be jeopardized. In addition, related to Barrier 1 above, local communities have not recognized fully the benefits of conservation actions on their lives and livelihoods and the threats to both marine and terrestrial biodiversity posed by pollution and unsustainable use. Marine areas, in particular, have received less attention for conservation efforts.

Communities have been setting aside land and reef areas for permanent or periodic closures; but these areas have been of too small a size to effectively conserve important global biodiversity in Niue. This is especially so in the case of the wider surrounding areas which have continued to be degraded or mismanaged, through overharvesting of resources (such as flying foxes and coconut crabs) and land conversion (for agriculture). Such community set-aside areas have also not been given formal legal designation as protected ecosystems. Additionally, current conservation initiatives have not been implemented in a holistic manner (the ridge to reef approach). Whilst basic economic values (such as use of wild resources for food, the provision of water, tourism values from nature, etc) are known, the full values of ecosystems in terms of biodiversity values and cultural values have not been documented, thus the current PAs have not fully incorporated multiple values of the ecosystems in Niue. This issue is particularly relevant to Niue as almost all land areas are owned by local families.

2 STRATEGY

2.1 Project rationale and policy conformity

2.1.1 The GEF Alternative – incremental reasoning

Niue's response to the identified threats and barriers has been significant and totals over USD14 million, including an investment of over USD3.7 million by the GEF. However, the response has left some gaps which can be remedied by the project with the assistance of the increment to be provided by the GEF. The table below, summarizes the remaining gaps, lists project activities and outputs which will address the gaps and records the incremental benefits targeted.

Table 3. Project activities addressing remaining challenges incremental to the baseline

CURRENT SITUATION : REMAINING GAPS	ALTERNATIVE ACTIVITIES PUT IN PLACE BY PROJECT	INCREMENTAL GLOBAL ENVIRONMENTAL BENEFITS
<p>The values of biodiversity resources in Niue have not been methodically documented. Additionally, the analysis of the value of the island's biodiversity or its marine biodiversity has not been updated regularly. Information on biodiversity status and hotspots is unavailable. Furthermore, social and cultural values of nature, reflected in traditional knowledge, folklore, and handicraft production related to biodiversity, are being lost.</p> <p>The lack of analysis and documentation of values is largely due to the limited capacity and awareness for ecosystems management in government departments and at community level. This has hampered effective mainstreaming of environmental issues. There is a fragmented sectoral approach to resources management by different sectors without clear cross-agency cooperation and partnerships and the desired positive impacts on the environment have not been achieved. Communities are not fully engaged and the promotion of sustainable activities in the areas surrounding the conservation areas is necessary to reduce threats from outside.</p> <p>The thrust towards tourism would mean increasing the number of island inhabitants from the tourists and the necessary support workers, possibly migrants. As the socioeconomic conditions in Niue further improve, it is also conceivable that Niueans from abroad return to the Island. All these will add pressure on the island's ecosystem.</p> <p>Under the baseline scenario, sectoral plans have not effectively internalized the multiple benefits achievable through an integrated approach to land, water, biodiversity, and seascape management. Ecosystems management is seen as primarily a sectoral priority (of the Environment Department) and the multiple benefits of integrated production landscape management have not been maximized through targeted support to communities to manage landscape and seascape – especially at those areas that have been considered critical from the perspective of global environmental values. Therefore, biodiversity conservation will continue to be impacted by unsustainable land use practices and the ecosystems and cultural values of such areas will also be negatively impacted through community and other sectoral activities.</p> <p>Any creation of protected/conservation areas needs to be consented by the families and enforced primarily by them. The current approach to village development plans has not included any focus on natural resources management or heritage protection. The traditional practice of setting aside strict protection areas (<i>Tapu</i>) or seasonal closures (<i>Fono</i>), although still practiced, is in danger of dying out as it has not been formally supported by the government. Local communities have not recognized fully the benefits of conservation actions on their lives and livelihoods and the</p>	<p>Outcome 1 : <i>New community conservation and national protected areas established at different levels, thus reducing threats and improving biodiversity status of conservation areas through effective community management</i></p> <ul style="list-style-type: none"> • Review of past surveys and additional surveys to identify natural resources that merit protection. • New protected areas and conservation areas on land, established through the use of various protection mechanisms. • Marine Protected Area at Beveridge Reef established. • Contiguous conservation areas in the coastal reef environment established. • Management Plans developed for the extended protected areas. • Implementation of various interventions at Village and National level, identified as priorities in the management plans. • Environmental monitoring system established. • Environmental information management system to handle, archive, analyse and make available the processed data for use in management of the protected estate and natural resources in general. <p>Outcome 2 : <i>Strengthened community and cross-sectoral involvement of relevant national government departments to promote effective Ridge to Reef management by mainstreaming biodiversity and environmental concerns into plans and actions</i></p> <ul style="list-style-type: none"> • Institutional strengthening, capacity building and other foundational elements at the Village Council and community level. • Institutional strengthening and capacity building among key central government entities. 	<ul style="list-style-type: none"> - National PA system expanded from 5,428 ha to 12,678 ha. - Improved management effectiveness of existing PAs (Huvalu, Anono), covering 5,428 ha. - Extent and quality of globally relevant natural habitats, especially forests, caves, cliffs and reefs, maintained or improved. - Population status of several globally significant species maintained or increased, e.g. Peka, Uga, Lupe. - Improved land and natural resource management by communities inside and adjacent to PAs, resulting in a reduction of land clearance, agricultural chemicals use, degradation of groundwater quality, reef pollution. - Protection and restoration of forest cover, habitat integrity and connectivity across the targeted tapu areas and PAs, and of ecosystem goods and services within and outside PAs, including: non-timber forest products, fish, shellfish stocks and

<p>threats to both marine and terrestrial biodiversity posed by pollution and unsustainable use. Marine areas, in particular, have received less attention for conservation efforts.</p> <p>There is overharvesting of some resources (such as flying foxes and coconut crabs) and while families/communities have set aside areas for protection, they have not been given formal legal designation as protected ecosystems. Additionally, current conservation initiatives have not been implemented in a holistic manner (the ridge to reef approach).</p>	<ul style="list-style-type: none"> • Policy and regulatory reforms at central level but also through by-laws at Village level. • Capacities will be enhanced through the provision of expertise and know-how for land use planning and management, protected area management (including for eco-tourism), species protection and management, sustainability. • Information sharing, awareness raising, learning and outreach. 	<p>fish recruitment zones on reefs, biodiversity habitat, tourism attractions, soil protection, water quality, carbon sequestration.</p>
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The project will build upon and complement the efforts of the Niue Government to conserve and sustain the island’s biodiversity and ecosystem services through integrated land-water-coastal management, while contributing to the implementation of the Pacific Island Multi-focal Area R2R approaches. Building upon the government efforts and with the collaboration of communities and private landowners, the project will provide incremental funding for the provision of technical support to the government and other stakeholders including local communities to create an enabling environment for biodiversity protection and management through integrated environmental planning over the terrestrial and coastal environments, implementing specific protection activities at ecosystem and species level, reducing anthropogenic pressure on land and coastal resources, catalysing sustainable agricultural, water/land use, pollution reduction and habitat conservation. Technical assistance for the application of integrated environment management and awareness communications will catalyze the uptake of ecosystem protection and adaptive resource management methods resulting in a significant improvement of management effectiveness in terrestrial and marine protect areas and governance in managing ecosystem services in Niue.

This project will enhance Niue’s capacity to effectively create and manage protected areas for biodiversity conservation, sustainable use of natural resources, and safeguarding of ecosystem services. It 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. In Community Conservation Areas, both strict protection and sustainable use zones will be identified and planned carefully, using innovative protection tools recognizing that tenure over most land areas is vested in local communities. This project has been 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. Through this approach, activities in the immediate production landscapes adjacent to marine and terrestrial protected areas will be managed to reduce threats to biodiversity and ecosystem services stemming from key production activities (e.g. tourism and agriculture). Additionally, the project also introduces the concept of connectivity between landscape and seascape in Niue. Terrestrial protected areas will 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 also satisfies 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.

2.1.2 Co-financing

This section has a focus on the support that will be made available to the proposed project activities. The following table lists the co-financiers, recognizes the support that will be provided, identifies the Outputs that are to be supported and estimates the value of the support. The total estimated value of this support comprises the co-financing for the project which will be implemented with GEF assistance and which will target the gaps that remain when the baseline is taken into account.

Table 4. Project co-financing

CO-FINANCIER	OUTPUT	ROLE, TYPE OF INVOLVEMENT AND EXTENT	AMOUNT OF CO-FIN
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Department of Environment	1.1, 1.2, 1.3, 1.4, 2.2, 2.3, 2.4	Lead implementing partner – all DoE activities in support of project activities	2,500,000
Education Department	1.4, 2.4	Technical and Policy staff support and advice; Teachers participation in environmental monitoring by senior students	48,000
Community Affairs Department	1.1, 1.2, 1.3, 1.4, 2.1, 2.4	Involvement of 14 Village Councils and community leaders	1,680,000
		Technical and Policy support and advice by Dept staff	48,000
Ministry of Infrastructure	1.3, 2.2	Solid Waste Management, Water Act, and other Pollution Abatement initiatives	1,149,000
		Wastewater Management (EU) project	496,000
		Technical and Policy support and advice by Dept staff	48,000
Department of Agriculture, Forests and Fisheries	1.1, 1.2, 1.3, 1.4, 2.2, 2.3, 2.4	Lead implementing partner – majority of fisheries and forestry work in support of project; part of agriculture work in support of SLM in project	2,500,000
	1.1, 1.2, 1.3	Forest Management Plan	225,000
	1.2	Inshore/Coastal Fisheries Management Plan	600,000
Taoga Niue	1.1, 1.2, 2.2, 2.4	Lead agency for cultural and traditional aspects – Technical and policy staff involvement.	38,400
	1.1, 1.2, 1.3, 2.1, 2.3	Other support for parallel work – Tech staff	38,400
Department of Justice, Lands and Survey	1.1, 1.2, 1.4, 2.2	GIS expertise for Land Use Planning – Technical support and input	28,800
	1.1, 2.2	Legal survey and land use expertise	36,000
Tourism Authority	1.2, 2.2, 2.3	Technical and Policy support and advice by Dept staff	48,000
		Tourism Master Plan and other initiatives	630,000
Niue Public Service Commission	2.3	Policy support and facilitation of capacity building	48,000
Ministry of Natural Resources	Project Management support	Overseeing, support and other governance of project	507,000
UNDP	Project Management support		200,000
Total estimated Government co-financing in kind			10,868,600

The above co-financing is assigned as USD6,204,006 for Outcome 1, USD4,157,594 for Outcome 2 and USD707,000 for Project Management.

2.1.3 Fit with GEF Focal Area Strategy and Objectives

This project is contributing directly to the GEF 5 Biodiversity Focal Area and International Waters Focal Area.

Component 1 is aligned with the GEF's Biodiversity Focal Area Objective 1 - Improve Sustainability of PA Systems, and Outcome 1.1 - Improved management effectiveness of existing and new protected areas. Component 2 is directly contributing to the GEF 5 BD2 Objective - Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascales and Sectors, as the project spearheads the integration of biodiversity considerations into several government sectors (Environment, Agriculture, Forestry and Fisheries, Community Affairs, Culture, Education, Infrastructure) on a landscape basis linking with community conservation initiatives. This fits with Output 2 - National and sub-national land-use plans that incorporate biodiversity and ecosystem services valuation.

As already discussed in section 1.4.1 above, the project will directly support Niue to achieve a number of global Aichi Targets⁴³, especially those under Strategic Goal B - Reduce direct pressures on biodiversity and promote sustainable use:

- Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation are significantly reduced
- Target 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits (Components 1 and 2)
- Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity (Component 2)
- Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity (Component 2)

Furthermore, Component 1 will support the implementation of Strategic Goal C - To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity, particularly:

- Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.
- Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

The project will also directly contribute to the IW Focal Area Objective 1 - Multi-state cooperation on water uses in transboundary surface and ground water, Output 1.3 - Pollution Reduction, improved water efficiency, IWRM through the project's activities under Component 2 on pollution reduction.

2.2 Project Objective, Outcomes and Outputs/Activities

2.2.1 Project Objective

The Project Objective is –

To strengthen conservation and sustainable use of land, water and marine areas and their biodiversity by building on their cultural heritage values through integrated national and community actions

The Objective seeks one ultimate result, namely: ***stronger conservation and sustainable use*** (of land, water, marine areas and their biodiversity). This will be achieved by ***building on cultural values***, through ***integrated national and community actions***.

The project will therefore work towards **identifying cultural values** so it can **build upon them** through an integrated approach at **national and community levels** so as to bring about **stronger conservation and sustainable use** of land, water and marine areas together with their biodiversity.

The above four actions/results will serve as indicators of project process as well as its ultimate success.

⁴³ See <http://www.cbd.int/doc/world/nu/nu-nr-05-en.pdf>

2.2.2 Project Outcomes

In order to achieve the project Objective, address the identified barriers, and strive for the targeted results, the GEF has accepted (through its approval of the PIF) that the project intervention will comprise two components and these have given rise to the following two Outcomes:

Outcome 1 *New community conservation and national protected areas established at different levels, thus reducing threats and improving biodiversity status of conservation areas through effective community management*

The Outcome seeks **new conservation and protected areas at different levels**
so as to **reduce threats and improve biodiversity status**
and this will be done through **effective management by the community**

This Outcome seeks new conservation and protected areas, established through the use of various protection mechanisms. This is meant to reduce threats and improve biodiversity status. Under this Outcome, work will commence with a review of past surveys and additional surveys will be carried out as necessary to identify natural resources that merit protection. The protected estate in Niue will then be extended in the terrestrial environment, offshore at Beveridge Reef and in the coastal reef environment. Management Plans will be prepared for the extended protected areas and the project will make provision for implementation of the plans. The project will also develop an environmental monitoring system. The surveys will generate valuable data and so will the monitoring system, and the project will set up an environmental information management system to handle, archive, analyse and make available the processed data for use in management of the protected estate and natural resources in general.

Outcome 1 identifies communities as the agents of management and monitoring. It comprises the major project interventions on the ground leading to protective measures at different levels and through different instruments thus reducing threats and improving biodiversity status. A large part of the work will be carried out primarily by empowering Village Councils and Communities as owners.

The estimated cost of Outcome 1 is USD6,204,006 from the baseline (co-financing) and USD2,503,562 from GEF, making a total of USD8,707,568.

Outcome 2 *Strengthened community and cross-sectoral involvement of relevant national government departments to promote effective Ridge to Reef management by mainstreaming biodiversity and environmental concerns into plans and actions*

The Outcome seeks **stronger community and government promotion of R2R**
And this will be done by **mainstreaming of biodiversity**

Outcome 2 is focussed primarily upstream at the central and local government levels and it targets institutional strengthening, capacity building and other foundational elements. At the local, Village Council level this Outcome seeks a stronger institutional foundation and enhanced capacities; likewise among central government functionaries. Institutional strengthening will be achieved through policy and regulatory reforms at central level but also through by-laws at Local Level. Capacities will be enhanced through the provision of expertise and know-how for land use planning and management, protected area management (including for eco-tourism), species protection and management, sustainability. Under this Outcome, the project will also make provision for information sharing, awareness raising, learning and outreach.

The estimated cost of Outcome 2 is USD4,157,594 from the baseline (co-financing) and USD1,482,000 from GEF, making a total of USD5,639,594.

In each case, the above analysis of the outcome wording and its focus informs the Indicators that have been selected (see section 2.2.3 below) so as to gauge progress and results by the project.

2.2.3 Project Outputs and Activities

Output 1.1 National conservation and protected area system expanded through - (i) a continuous terrestrial conservation area covering 2,550 ha that links traditionally strict protected sites (tapu) and their surrounding landscapes; (ii) a national marine protected area covering 4,500 ha (Beveridge Reef); and (iii) community conserved reefs covering at least 112 ha. Conservation and protected areas formalized through appropriate instruments

This Output seeks the expansion of the protected estate in Niue at different levels and through different instruments. The work will take place in three different environments as follows:

(i) a continuous terrestrial conservation area covering 2,550 ha that links traditionally strict protected sites (tapu) and their surrounding landscapes; (ii) a national marine protected area covering 4,500 ha (Beveridge Reef); and (iii) community conserved reefs covering at least 112 ha.

The work will be coordinated by the Technical Officer engaged by the project and leading a Working Group of specialists from the Ministry of Natural Resources with input from the Village Councils. Initial investigations will comprise a review of recent ecological survey work on land and reef areas followed by a Rapid Biodiversity Assessment to update information and fill any gaps. This will lead to a land use plan on a District by District basis which spans land as well as reef wherever possible, which recognizes ecosystems, distribution of important species and their habitats, heritage/cultural sites, tourist natural attractions, and ecosystem services particularly those with environmental and strategic importance such as the groundwater lens.

In developing Land Use Plans for each village, the project will build on the results of the past Land Use Planning Project, and work in collaboration with the Justice Department (the Titles Register) on land ownership and titling issues, and through Village Councils and the Church at community level. The initial approaches will be through the recognized leadership and each village will be approached separately. Opportunities for consultation will be advertised widely and portions of land together with their respective names will be recognized. Site visits will be carried out with owners wherever possible.

Following the initial investigations, work will commence on the expansion of the protected estate as follows:

(i) Terrestrial conservation and protected areas. The Output will implement a continuous conservation area of 2,550 ha that links tapu sites with the surrounding landscape. Forest areas such as those in Makefu, Alofi North and Lakepa Districts will be investigated in collaboration with their owners to explore the merits and potential for achieving appropriate levels of protection. The project will also work with the landowners and the communities of Liku and Hakupu to explore what improvements in the level of protection are possible in the Huvalu Conservation Area and the instruments through which this additional protection can be obtained. The project will also be alert to approaches by other landowners who wish to secure their tapu areas through the adoption of buffer zones and similar mechanisms. In recognition of the fact that 99% of the land in Niue is privately owned, the project will investigate the various instruments of protection which are appropriate and relevant to the particular circumstances at the community level. It will also assist owners of protected land to gain recognition at national level thus countering the perceived weakening of the tapu system.

(ii) Marine Protected Area. The Output will propose a Marine Protected Area at Beveridge Reef which lies about 200 km south-east of Niue. The work, which will be coordinated by the Fisheries Division at DAFF, will commence with a survey which will record the existing ecosystem and identify significant/valuable species such as those at risk, endangered, etc, those of commercial interest, trends in species health, etc. It will also identify (scientifically) a few species which could serve as indicators of the health of the reef ecosystem so they can be monitored. The survey will also serve

to assess an expected genetic link between Beveridge and Niue fauna with the former acting as a source of recruitment for the Niuean coastal and reef areas, especially on the western shores. In parallel, the project will assist DAFF to pave the way for a formal declaration of an MPA by the Government. The Secretariat of the Pacific Community (SPC) has been identified as a potential partner in this work.

(iii) Community conserved reefs. The aim of the Output is to achieve a protective management regime on the reef which runs from Hikutuvake in the north to Avatele in the south, a distance of some 20 km on the western shore and an area of around 200 ha. Other reef areas proposed by communities in other parts of the Island will also be considered. The work will be coordinated by the Fisheries Division of the DAFF in close collaboration with the various riparian villages, as main stakeholders of the respective reefs. A number of restorative and protective activities have been nominated by Village Councils in consultation with their communities (the dossier will be made available to the MNR for onward referral to the PIU) and these and other measures will be put in place with the help of the project. The aim is to achieve a level of management and protection (using different tools) for the coastal zone which comprises the reef together with the contiguous land area of the Alofi Terrace. The project will work in harmony with the Niue National Fisheries Coastal Management Development Plan (the Coastal Plan) prepared by DAFF with the participation of the Village Councils and other stakeholders, and which is currently in an advanced draft stage.

Salient activities which will be carried out so as to achieve this Output, include:

SUB-OUTPUTS	ACTIVITIES
1.1.1 Ecological/Cultural survey	Set up Survey Team comprising an expert each on ecosystems/biodiversity, land use planning, cultural resources/heritage/Tāoga. Design survey approach.
	Review available data and information on a District basis and determine relevance, reliability and gaps.
	Conduct surveys on a District basis extending to the edge of the reef and including caves, with the participation of VC nominee/s, focussing specifically on gaps in knowledge
	For each District, assemble a picture of the natural and cultural resources, their comparative values and priorities, their vulnerability and threats
1.1.2 Land Use Plan	Engage a Land Use Planning Consultant to work with nominees of each Village Council (1-2 persons for each Village) and with L&S Department
	Consult with each Village Council and communities, identify the best use of land (including reef) and resources within the District so as to obtain the best benefit, with the minimum impact, on a sustainable basis
	With the full participation of the communities, record the results in a Land Use Plan extending to the edge of the reef, for each District. Include objectives, desired outcomes, constraints, responsibilities for action, governance and management of the process.
	“Publish” the Land Use Plan document, including a GIS-based map, to serve as the basis for decisions on natural resources use, protection and management
	Assist Village Councils to reflect the Land Use Plan with its constraints and opportunities in the respective Village Development Plan
1.1.3 Terrestrial conservation areas	Based on the adopted Land Use Plan for each District, and recognizing the Plans for neighbouring Districts, nominate areas of forest, reef and other land that merit protection as part of the conservation estate.
	Investigate with Village Councils and landowners the possible, innovative mechanisms for achieving protection on a sustainable basis of land and forest areas. It is desirable to consider neighbouring Districts and land/forests on a common boundary, and negotiate agreements so as to achieve a more effective critical mass for effective protection
	Strengthen legal recognition of private tapu areas at national level through legislation review and awareness activities. Provide legal protection while safeguarding the private ownership.
1.1.4 Marine Protected Area at Beveridge Reef	Confirm the Secretariat of the Pacific Community (SPC) as the contractor, in collaboration with DAFF, for the work that needs to be undertaken leading to the declaration of an MPA at Beveridge Reef
	Conduct baseline surveys to record the existing ecosystem, identifying in particular any rare, threatened or endangered species, any that are commercially valuable, and species that may have special cultural or traditional values

	As part of the case for declaring the Reef as a MPA, assess the possible genetic links between species on Beveridge Reef and those on the reefs of Niue Island, and the likelihood that the Reef serves as a source of recruitment.
1.1.5 Community Conservation Reefs	Based on the adopted Land Use Plan for each District, and recognizing the Plans for neighbouring Districts, nominate areas of reef and adjacent land that merit protection as part of the conservation estate
	In collaboration with the respective VCs and landowners, declare as a Community Conservation Reef, the stretch of reef between Hikutavake and Avatele (to be known as the Western Reef) from the seaward edge of the reef and going inland until the road.
	For the greater protection of the Western Reef, provide a lesser level of protection and management (buffer zone level) for the land starting from and including the road and going inland from the road to include the Alofi Terrace.
	Consider the declaration of Community Conservation Reef status on stretches of reef outside the Western Reef, nominated by Village Councils and communities. Assist Village Councils with reefs that merit protection, with the process to declare their reef as a Community Conserved Reef

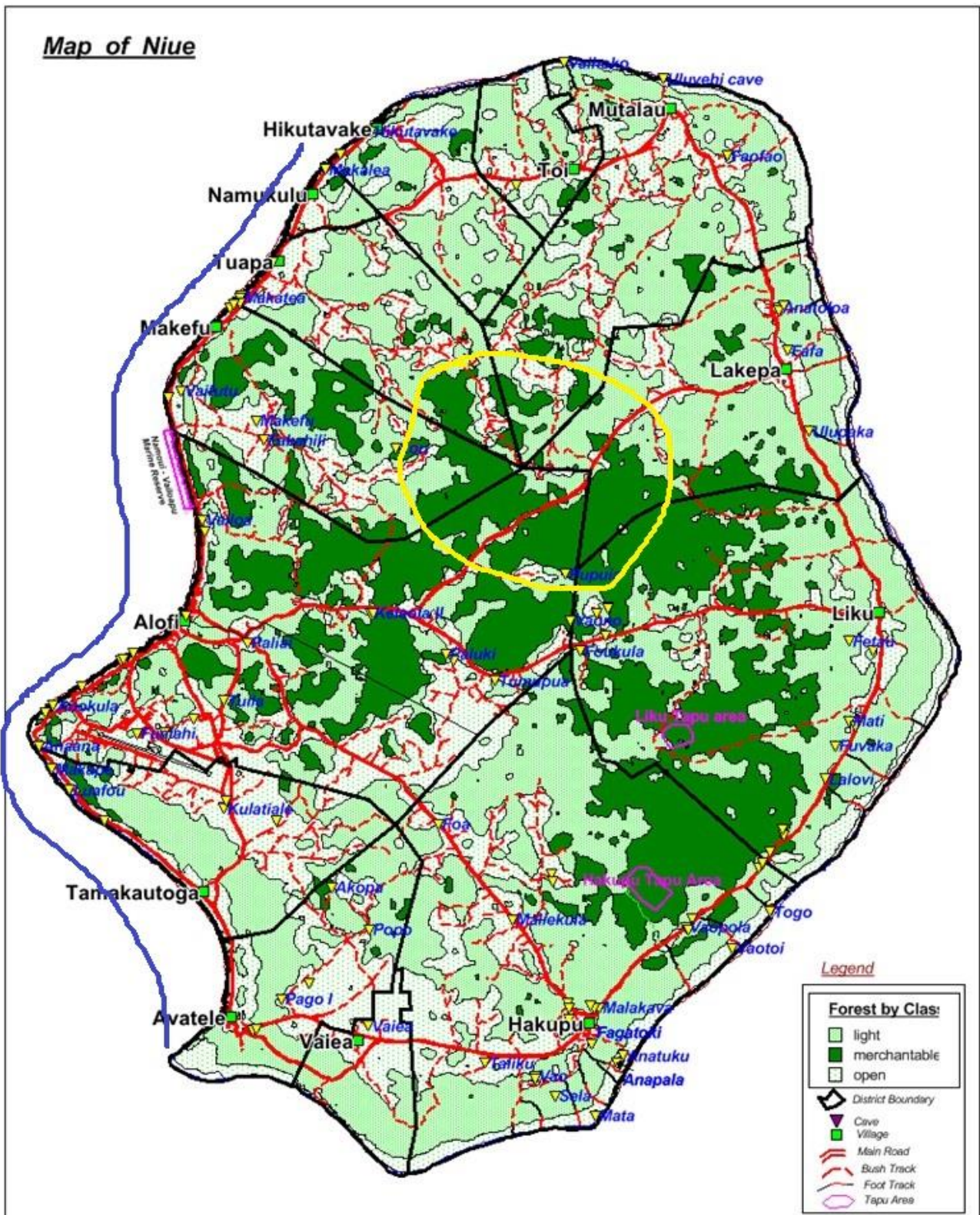


Figure 7. Proposed conservation areas. The yellow line encircles the general area of confluence where five villages come together. It will be investigated for forest conservation area status with the precise boundaries to be established following agreements with respective landowners. The blue line shows the western coast where reefs will form the contiguous Western Conservation Reef Area involving eight villages.

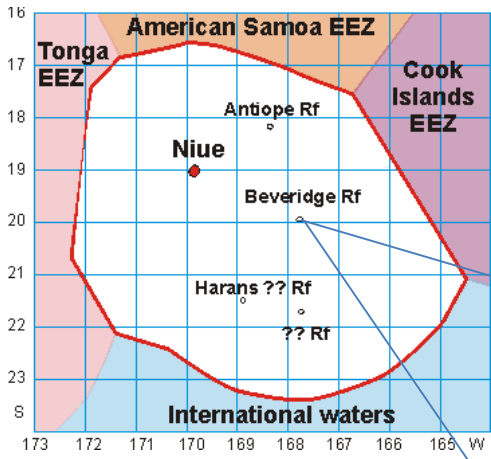


Figure 8. Beveridge Reef



Output 1.2 Management plans developed through participatory approaches for: a) expanded terrestrial conservation areas; b) the national marine protected area; and c) community conserved reefs; management plan adopted through appropriate instruments; management plans mainstreamed in development, sectoral and CC adaptation plans/policies; adequate financing identified from budgetary and other sources for implementation of the plans

The Output will adopt participatory approaches to develop management plans for: a) the expanded terrestrial conservation areas; b) the national marine protected area; and c) community conserved reefs. Management plans will be adopted through appropriate instruments and mainstreamed in development, sectoral and CC adaptation plans/policies. In addition, adequate financing will be identified from budgetary and other sources for implementation of the plans (see 1.3 below).

The emphasis will be on newly declared protected and conservation areas, however, plans will also be drawn up for existing or expanded protected areas. The Plans will be founded on the survey work, including at village level, carried out under 1.1 above. They will include short and long term objectives, targets, actions to be carried out together with roles and responsibilities, timescales, costs and sources of finance, and indicators that can be employed to measure progress and success (see Output 1.4 below). Plans will be developed through participatory approaches and, when finalized and adopted, they will be mainstreamed into similar planning and strategic documents (such as Village Development Plans, the Tourism Strategy Plan and DAFF's Fisheries and Agriculture Plans) so as to achieve full compatibility. Work towards the production of the Plans will be carried out as follows:

a) For the expanded terrestrial conservation areas, the initiative for drawing up Management Plans will lie with individual land owners and communities supported fully by the project financially and through advice and support from the consultant engaged by the project and the Technical Officer (see 1.1 above). It is envisaged that Village Councils will tackle this task or set up Working Groups to do so. Some villages and communities could coordinate their efforts for protected areas that are contiguous across their district boundaries. When finalized and adopted, the Plans will be recognized and observed nationally. They will also be reflected in Village Development Plans.

b) For the Beveridge Reef MPA, formulation of the Management Plan will be one of the packages of responsibilities assigned by DAFF to SPC as the partner who will carry out the initial survey and investigations leading to the declaration of the MPA (see Annex 8). Consultation will be carried out with the fishing industry, the yachting fraternity, and the tourism sector, among others. In recognition of the remoteness of Beveridge Reef, the Plan will outline the means through which compliance can be assured.

c) For community conserved reefs, a draft plan exists already but it has yet to be adopted and become operational. The project will work with DAFF and individual Village Councils to advance and complement the draft Plan and ensure that it is adopted for the stretch of western coast from Hikutuvake to Avatele and distinguishable as the Western Reef Management Plan and other reef areas as decided. The current draft plan has a correct focus on fisheries management, has a good set of regulations to control activities, and it also has objectives. It is an excellent foundation and the project will enhance it by addressing the following –

- a good map of the area targeted, identifying different ecological assemblages, access points, geological features such as caves, swimming holes, tracks, ownership boundaries (if any), etc
- a description of the natural resources that are to be managed and protected (following a good survey)
- an identification of their value for food, handicrafts, tourism attraction, aesthetics, spiritual, traditional, etc
- an identification of their vulnerabilities, bottom lines; status of key species (threatened, endangered, etc)
- identification of indicator species and their current status
- priorities for action
- exactly who will do what

- by when
- at what cost
- how do we know when it is done

While this stretch of coast can be considered as one reef and one ecosystem for management planning purposes, the Plan will also recognize that each village has its own priorities, concerns, aspirations and traditions associated with its reef territory and species. As a result, while the sentiments and management constraints of the Western Reef Management Plan will be mainstreamed into the Village Development Plans, specific reference is expected to be required for relevant components in respective Village Development Plans. Discrete components in the overall Plan which apply to specific village reefs will be the subjects of “sub-plans” formulated by respective Village Councils together with their community and with the advice and support of the Protected Areas Expert engaged by the project.

Salient activities which will be carried out so as to achieve this Output, include:

SUB-OUTPUTS	ACTIVITIES
(i) Management Plans for terrestrial conservation areas	Develop Management Plans for newly identified Pas as well as existing and expanded Huvalu Forest Conservation Area Set up working group consisting of landowners and village members to work with the Protected Areas Expert and relevant government departments to develop management plans in accordance with existing legislation Facilitate inter-village collaboration to develop management measures for protected areas that are contiguous across their district boundaries. These measures will be incorporated into the development plans of the villages affected Declare and gazette the new and expanded terrestrial conservation areas Create awareness using social media or a national event to promote plans and ensure national recognition
(ii) Management plans for Marine Protected Areas	Set up working group consisting of DAFF, DoE and other relevant government departments as well as regional organisations such as SPC to develop a management plan which should include compliance measures Consultation carried out to create awareness amongst stakeholders such as the fishing industry, the yachting fraternity, tourism sector and others Declare and gazette the new Marine Protected Area Create global awareness and recognition through social media
(iii) Management Plans for Community Conserved Reefs	Facilitate DAFF to update Coastal plan to include management measures appropriate for the Western Reef (Hikutavake-Avatele) Strengthen community based management and development measures provided in the DAFF Coastal Plan Review DAFF coastal plan and amend to cater for the proposed protective management regime on the reef which runs from Hikutavake to Avatele
(iv) Mainstreaming management plans	Into Village Development Plans – review the two existing Plans (Tuapa and Hakupu) and assist with the drafting of the other 12 Plans so as to introduce the relevant elements of the terrestrial and reef management plans. To be carried out by Village Councils with assistance from the Protected Areas Expert Into Sectoral Plans – relevant sectoral plans (e.g. tourism, water, various DAFF, cultural affairs, etc) reviewed to reflect the objectives of the PA management plans Into Climate Change Adaptation – in formulating policies and actions, take cognizance of the objectives of the PA management plans

Output 1.3 Management plans implemented for all conservation areas through conservation and management activities (concrete measures) at the village, cross-village and national levels, including improvements in water quality in reef areas, protection of the freshwater lens and necessary support activities (soft measures)

This Output is a logical follow up from the previous two outputs above. The first output established the protected and conservation areas, the second output formulated management plans for the areas,

and through this output, the project will implement and help implement the management plans in its search for better protection of natural resources and biodiversity, sustainability of ecosystem services and safeguarding of traditional and cultural heritage. Work under this Output will be coordinated directly by the PIU and will comprise conservation and management activities (concrete measures) at the village, cross-village and national levels, including improvements in water quality in reef areas, protection of the freshwater lens and necessary support activities.

In many ways, the details of work under this Output will need to await the formulation and adoption of the Management Plans. However, through consultations with various Government Departments and the greater majority of Village Councils, proposals have been received and a number of Activities have been identified. This dossier is presented in Annex 8: Portfolio of proposals arising from consultations during project formulation and will serve to initiate the discussion by the project implementation team for activities under this Output. It is noted that proposals that are not aligned with the project and with GEF guidelines were excluded.

The following list is tentative and subject to priorities which arise from the survey and land use planning investigations under Output 1.1 above and identified in the Management Plans under Output 1.2.

SUB-OUTPUTS	ACTIVITIES
i) Plan implementation at Village level	At protected areas - build tracks(including board walks), signage and interpretation, visitor facilities, information kiosks (see also under Output 2.4)
	Better management of domestic solid waste through creating awareness of environmental impacts of improper waste disposal methods and strengthening existing waste management actions
	Develop Species Recovery Plans, Species Management Plans (at local level, as part of nation-wide initiative) for endangered species
	Improvements in reef water quality (protection from pollution)
	Design mechanisms for sustainable financing
	Capacity building training workshops – sustainable agriculture, land use practice, sustainable fishing methods
	Advice on sustainable financing of protected and conservation areas
ii) Plan implementation at National level	At Beveridge Reef MPA - place permanent moorings, signage, advisory material at key departure points
	Utilization of extra capacity in the hospital wastewater treatment facility to treat septic tank effluent
	Species Recovery Plans and/or Species Management Plans (at local level, as part of nation-wide initiative)
	Assessment of carrying capacity for tourism
	Recording of traditional ways of managing and protecting natural resources
	Capacity building training workshops
	Provide resources for sustainable land use and climate change adaptation, including support for ecosystem-friendly enterprises

Output 1.4 Systematic local and national level ecosystems and species level biodiversity monitoring systems established, with data sharing and joint training and survey activities for terrestrial and marine areas and integrated approaches; monitoring and evaluation results are fed to the R2R program through the regional program support project to facilitate lessons sharing and cross-country fertilization

This Output seeks two main results – a monitoring system established and functioning with data sharing and joint training and survey activities for terrestrial and marine areas and integrated approaches; and effective linkages with the R2R Regional Programme through which to share monitoring and evaluation results and facilitate lessons sharing and cross-country fertilization results and experiences. It is also necessary to design and set up an Environment Information Management System (EIMS).

i) Environment Information Management System (EIMS)

Survey results from Output 1.1 above will form the foundation of the EIMS database which will be developed by a separate Working Group led by an Information Management Specialist recruited by the PIU. In addition to the Information Management Specialist, the Working Group will also comprise representatives of the expected key users of the EIMS. The work will start by confirming the existent databases as in the table below, adding more if any are identified, reviewing them and determining how to achieve compatibility between them.

Table 4. Known databases⁴⁴ of interest to the EIMS

DATABASE	OWNER	USERS	TECHNICAL INFORMATION	MAINTENANCE ARRANGEMENTS	ACCESSIBILITY
Coastal Fisheries Databases					
Artisanal fishing data	DAFF	Data Manager	Contains catch and effort data and Fisher's details	Weekly data cleaning	Database is stored in the Fisheries server and accessible to Data Manager and Head of Fisheries
Baseline reef data	DAFF	Data Manager	Species composition and distribution data	Weekly data cleaning	Database is stored in the Fisheries server and accessible to Data Manager and Head of Fisheries
Coconut crab export data	DAFF	Data Manager	Number of coconut crabs in chilli bins and luggage viewed through x-ray	Weekly data cleaning	Database is stored in the Fisheries server and accessible to Data Manager and Head of Fisheries
Canoe trip data	DAFF	Data Manager	Artisanal Fishing trip data	Weekly data cleaning	Database is stored in the Fisheries server and accessible to Data Manager and Head of Fisheries
Village Marine day data	DAFF	Data Manager	Artisanal Catch and effort data	Weekly data cleaning	Database is stored in the Fisheries server and accessible to Data Manager and Head of Fisheries
Creel and Market surveys database	DAFF	Data Manager	Artisanal Catch, effort, market and fisher's details data	Weekly data cleaning	Database is stored in the Fisheries server and accessible to Data Manager and Head of Fisheries
Quarantine/Biosecurity Databases					
Airport passenger arrival and departure biosecurity data	DAFF	Quarantine staff	Declared goods-food, equipment and other biosecurity risk items	Data Cleaning on request basis by Quarantine division	Accessed only by Quarantine staff
Yacht arrival and departure biosecurity data	DAFF	Quarantine staff	Declared goods-food, equipment and other biosecurity risk items	Data Cleaning on request basis by Quarantine division	Accessed only by Quarantine staff
Sustainable Land Management					
Crop Research Database	DAFF	Head of Crop Research, Data Manager	Daily Farm chores, Plant Nursery data, Pig services, Passionfruit growth and harvest	Monthly data cleaning	Updated by Head of Crop Research Division
Justice Lands and Surveys Databases					
MapInfo database	Justice Lands and Surveys	Surveyors division	National GIS database for Niue's physical environment	Daily Data cleaning	Accessible to senior Surveyors Division staff

⁴⁴ Some other data series are known to be available for Peka and some birds but not stored in databases.

MAP server (non-operational since 2012)	Justice Lands and Surveys	Surveyors division	National GIS database for Niue's physical environment		
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In effect, the EIMS will be a metadatabase which serves as a hub for linkages between existing environmental databases with additional elements as required. It will be developed on a GIS platform. The products of this output will inform the Land Use Plans under Output 1.1, serve as a platform for decision-making, and as a source of up to date knowledge on biodiversity and environmental management in Niue. The Project will lead the discussion on the most appropriate and effective repository for the EIMS. It will also develop the procedures and protocols for inputting, accessing and utilisation of information. In addition to the necessary expertise for both the survey work and the setting up of the databases, the project will provide the necessary IT hardware and software. The results of this Output will inform land use planning activities as already noted as well as the updating of existing management plans and formulation of new ones envisaged under Output 2.2. It will also provide the foundation for the monitoring system to be developed under this Output. Since the EIMS will be available for access (albeit under a managed regime and within appropriate limits) by the public, the project will assist with a nationwide as well as local level publicity campaign to inform about its value, availability and accessibility. As a web-based facility, this outreach is expected to extend also to Niueans resident outside the Island.

ii) Environment Monitoring System (EMS)

The project will work with the Ministry of Natural Resources to set up an Environment Monitoring System (EMS). The EMS will maintain the EIMS (see above) as a relevant and up to date planning and decision-making tool by recording the state of the environment. It will extend into compliance monitoring on the basis laid by the legal clarifications under Output 2.2 below. It will also help identify trends and ensure that any changes in biodiversity-important areas remain within pre-determined, acceptable limits. Indicator species will be among the tools that will be used as appropriate, as will remote sensing through satellite imagery. A very important corollary to the monitoring system will be the identification of remedial measures that will be triggered, if necessary, by the monitoring. The monitoring systems will be designed by a Working Group of technical experts set up by the PIU with the advice of the Ministry of Natural Resources. The approach and methodology to be used, the principles and objectives, and the capacity and know-how requirements will be developed. This will include modalities for involving senior High School students in the collection of samples and data, analysis and interpretation. The students, who will be given appropriate training, will be led by their teachers under the technical guidance of the Ministry of Natural Resources to perform this important function and will gain academic credits in doing so. Working with the relevant authorities, the Working Group will test the EMS at selected pilot localities following training and capacity enhancements of local personnel. After implementing any necessary refinements and adjustments, the Monitoring System, will be handed over to the Ministry of Natural Resources, after any further necessary training and capacity building. In developing the system, the Working Group will explore the use of remote sensing together with on-ground measurements and observations, including indicator species. The Working Group will also assist the Ministry of Natural Resources to develop contingency plans for dealing with any worrying trends and other results of concern which might arise from the monitoring activity. Among the inputs for this Output, the project will assist with the procurement of any necessary monitoring equipment and training for its use (including for the High School)⁴⁵, the implementation and evaluation of the trials at local level, and the contingency planning noted above. The project will also develop a handbook for ecological/biodiversity monitoring, building on the SPC regional marine invertebrates surveying manual and with a focus on the Niue environment. The project will print the handbook and distribute it in hard copy as well as DVD.

iii) Linkages with Regional R2R Programme

As noted above, it is envisaged that the EIMS will be available on a dedicated webpage and through this and other linkage mechanisms, the information generated by the project and beyond, will be able

⁴⁵ The analysis and interpretation of data will be carried out at appropriate laboratory facilities and by competent specialists. However, the project will equip the High School with simple data collection equipment and with laboratory equipment for basic analysis of some parameters.

to be fed to the Regional R2R Programme Support Project for dissemination throughout the Pacific and beyond. These linkages will be facilitated by the Regional Support Project and will enable the sharing of lessons and experiences and cross-country fertilization. Linkages with emerging regional GEF and non-GEF programmes and projects will be implemented.

Salient activities which will be carried out so as to achieve this Output, include:

SUB-OUTPUTS	ACTIVITIES
(i) Environmental Information Management System (EIMS)	Recruit Information Management consultant and set up working group that will set up the metadatabase which links the existing relevant environmental databases and provides new and improved data management tools
	Purchase and install the appropriate IT hardware and software
	Update or strengthen existing environmental databases
	Ensure compatibility of all databases with type of data collected by the EMS
	The metadatabase will be developed on a GIS platform
	Use baseline data for the Land Use Plans under output 1.1
	Develop procedures and protocol for inputting, accessing and utilisation of information
	Create national and global awareness of the contents, value, availability and accessibility of available information using social media
	Use baseline data to update existing management plans and formulation of new ones
	Provide training for use and maintenance of metadatabase
	Produce reports for national and regional obligations
	(ii) Environmental Monitoring System (EMS)
Design follow up/monitoring surveys using indicator species where appropriate	
Monitor habitats	
Monitor performance or progress of community and nationally based work	
Monitor effectiveness of management measures	
Use data from EIMS to identify trends and changes	
Develop contingency plans to deal with unexpected occurrences	
Capacity building workshop for surveying, performance assessments	
Facilitate involvement of High school students in field surveys through training	
Test EMS at pilot localities	
Trial remote sensing	
Develop a handbook for ecological/biodiversity monitoring, print it and distribute it in hard copy as well as DVD	
(iii) Links with Regional R2R Programme	Produce reports for global access
	Link national R2R website to regional website
	Use regional reports to improve national systems

Output 2.1 Community level actions on biodiversity and R2R implemented through: (i) establishment of village committees towards participatory management of terrestrial conservation areas and community-conserved reefs; (ii) training on integrated approaches to planning and management focusing on developing clearly-specified roles; and (iii) formulation of innovative instruments to secure support of landowners affected by the terrestrial conservation area and other interventions prescribed by the land-use plan

Through this Output the project will facilitate and support Village Councils and communities to engage meaningfully in the protection of natural resources through the Ridge-to-Reef approach. It will do this by helping to establish, wherever possible, village committees towards participatory management of terrestrial conservation areas and community-conserved reefs; by providing training on integrated approaches to planning and management focusing on developing clearly-specified roles; and by formulating innovative instruments to secure the support of landowners affected by the terrestrial conservation area and other interventions prescribed by the land-use plan.

The PIU will engage a Specialist in Community Liaison and involvement who will work with each of the 14 Village Councils, and through them, with each community, so they can obtain the maximum benefit from the project. As a first task, the Specialist will advise and assist Village Councils to make provision for natural resources protection and management as a core function of the VC. The project will assist Village Councils (including with setting up of Village Environment Committees if necessary) for participatory management of conservation areas and reefs. These committees will be led and coordinated by an Environment Coordinator in each village. It is desirable that this position is held by a Village Councillor but this is not essential. The project will provide the appointee with training on environmental protection and management principles and methodologies, in particular on the R2R integrated approach to planning and management. In some cases, the project may be able to extend this training to other members of the Village Environment Committee. Committees will be assisted by the project to implement protected areas management plans or similar instruments in an integrated (R2R) manner so as to achieve the maximum benefits with the minimum of impacts. Among other tasks, the Village Environment Committees will be assisted by the Specialist in Community Liaison (engaged by the project) to identify innovative instruments through which to secure the collaboration and support of landowners for achieving sustainable protection and management of natural resources which lie within their private ownership.

The Community Liaison Officer (CLO) is currently being considered to be a shared staff with the Small Grants Program as the National Focal Point. Negotiations are ongoing hence the full cost of the CLO is reflected in this project but will be changed if the implementation and cost-sharing arrangements are finalized.

Salient activities which will be carried out so as to achieve this Output, include:

OUTPUT	ACTIVITIES
Capacity building of Village Councils and communities	Engage Community Liaison Officer to work with each of the 14 Village Councils
	Establish, wherever possible, village committees for participatory management of terrestrial conservation areas and community-conserved reefs
	Providing training on integrated approaches to planning and management focusing on developing clearly-specified roles
	Formulate innovative instruments to secure the support of landowners affected by the terrestrial conservation area and other interventions prescribed by the land-use plan
	Assist community members to develop proposals for eco-friendly development activities, especially for income generation and financial self-sufficiency. Support appropriate activities

Output 2.2 Sector-related legal framework, policies and plans support effective R2R conservation and sustainable use within and outside of conservation areas, embedded in (i) community development plans; (ii) cross-sectoral plans such as climate change and mitigation and adaptation, tourism and the plan for achieving water security; (iii) sector plans such as education, culture, Public Works (particularly on water division and their work on water pollution control affecting the coastal areas and the freshwater lens); and, (iv) increase in sectoral operational budgets by 20% by end of project from baseline.

This Output will strengthen the regulatory and resource foundation for the work of the project and will ensure sustainability beyond the life of the project. It will work at sector level and relate to both within and outside of conservation areas. The aim is to provide the regulatory basis through which conservation and sustainable use can be embedded in community development plans, cross-sectoral plans such as climate change mitigation and adaptation, tourism and the plan for achieving water security, and sector plans such as Education, Culture, Public Works, and Tourism.

The PIU will engage a Legal Expert to lead a Working Group comprising representatives of DoE, DAFF, Crown Law Office and any other relevant agencies. The Working Group will review the existing legal framework, policies, strategies and plans and identify what new legislation or amendments to

existing legislation are necessary so as to achieve mainstreaming of effective R2R conservation and sustainable use in:

- (i) Village development plans
- (ii) cross-sectoral plans e.g. adaptation to climate change, tourism and plan for water security
- (iii) sector plans e.g. education, culture, tourism, Public Works (particularly Water Division)

Attention will also be given to the means through which tapu areas can be recognized in law; the legal definition of ownership of natural resources (terrestrial and coastal), the holding in trust of the resources and ecosystem services on behalf of the nation, the joint responsibility with the state for management and protection, etc.

Niue has a commitment to an increase of 20% in budgetary allocation for R2R activities by project end and this is expected to accrue from increases of 5% annually from year two. The project will work with the Ministry of Natural Resources to carry out an analysis of financial support currently available from the national budget and other sources for R2R activities. It will then help identify sources of potential new support and assist the Ministry to achieve these increases.

The tool that best provides a legal basis for the protection of natural resources is the Environmental Impact Assessment (EIA) Process which is the subject of current government initiatives. The PIU will engage an EIA Expert and in consultation with the Chamber of Commerce and the Tourism Authority, the project will invite an exponent of the private sector who is planning a development, to serve as a pilot case for the application of the EIA Process. While this will remain a real-life development proposal requiring all applications and other permitting requirements, it will be helped by the EIA Expert to satisfy the EIA requirements. The Expert will then also assist the DoE to evaluate the EIA Process and effect any necessary refinements before the Process is enshrined in law. The Expert will also work with DoE to produce a Handbook for the EIA Process both in hardcopy and DVD.

Salient activities which will be carried out so as to achieve this Output, include:

SUB-OUTPUTS	ACTIVITIES
Review and strengthening of legal framework, policies, strategies and plans	Engage a Legal Expert to lead a Working Group
	Review existing legal framework, policies, strategies and plans and identify what new legislation or amendments to existing legislation are necessary
	Review - community development plans; cross-sectoral plans e.g. adaptation to climate change, tourism and plan for water security; and, sector plans e.g. education, culture, tourism, Public Works (particularly Water Division)
	Explore how tapu areas can be recognized in law; the legal definition of ownership of natural resources (terrestrial and coastal), the holding in trust of the resources and ecosystem services on behalf of the nation, the joint responsibility with the state for management and protection, etc
An increase in budgetary allocation for R2R activities of 20% by project end (5% pa from year 2).	Analysis of national budget and other sources of financial support currently allocated to R2R activities
	Identify sources of potential new support for R2R activities
EIA Case Study	Engage an EIA Expert
	Consult with the Chamber of Commerce and the Tourism Authority, and invite an exponent of the private sector who is planning a development, to serve as a pilot case for the application of the EIA Process
	Assist the developer with applications and other permitting procedures, to satisfy the EIA requirements
	Evaluate the experience with the EIA Process and effect any necessary refinements before the Process is enshrined in law
	In collaboration with DoE, produce a Handbook for the EIA Process both in hardcopy and DVD

Output 2.3 Institutional strengthening of the capacity of the Department of Environment, the Department of Agriculture, Forestry and Fisheries and other government agencies for planning and monitoring of PAs and R2R management for linked landscapes for effective environmental management, enforcement and compliance monitoring, including (i) strategic

training activities and application of the professional competency standards for staff (to be developed); and (ii) participation in regional R2R trainings through the regional program support project

This Output seeks the institutional foundation for the work of the project and, together with regulatory provisions achieved under Output 2.2 above, will ensure sustainability of the project benefits beyond the life of the project. It targets in particular the Department of Environment, the Department of Agriculture, Forestry and Fisheries and other government agencies with responsibilities for planning and monitoring of PAs and R2R, the management of linked landscapes for effective environmental management, enforcement and compliance monitoring. The work will include strategic training activities and application of professional competency standards for staff (to be developed) and participation in regional R2R training through the regional programme support project.

The PIU will work closely with the Ministry of Natural Resources to carry out a needs assessment of both the Department of Environment and the Department of Agriculture, Forestry and Fisheries. The departure point for this work will be the Capacity Assessment Scorecards (see Annexes 1a and 1b) which will be updated and refined through the needs assessment. It is also possible that with the advice of the Niue Public Service, the assessment could be extended to other relevant agencies of Government. The aim of the project is to achieve a highly competent level for environmental planning, management and monitoring of natural resources, and in particular the protected estate. It will also extend into enhancing compliance and if necessary carrying out enforcement to apply the protection intended by Government through the regulatory framework created or strengthened under Output 2.2 above. The project will assist stakeholders to avail themselves of opportunities that will be provided for training by the regional program support project. The project will also work with the Niue Public Service to develop professional competency standards in environmental management which will be achieved through strategic training of key personnel, possibly including scholarships for academic training.

Salient activities which will be carried out so as to achieve this Output, include:

SUB-OUTPUTS	ACTIVITIES
Needs assessments	R2R PM carry out needs assessment of DoE, identify gaps and recommend institutional and capacity strengthening PM carry out needs assessment of DAFF, from biodiversity and environmental management perspective, identify gaps and recommend institutional and capacity strengthening PIU to arrange training and capacity building for key personnel in DoE, DAFF and other relevant government agencies to secure effective environmental planning, management and monitoring of natural resources, and in particular the protected estate (this may include study abroad)
Professional competency standards	Work with Niue Public Service to develop competency standards in environment management, which will be recognized in an appropriate manner Assist the Niue Public Service to develop the system for assessing professional competency in environmental management

Output 2.4 Economic, social/cultural and biodiversity lessons documented and communicated regionally, nationally and locally through: (i) targeted campaigns, publications in local language and English, and also available through dedicated website and the media (also targeting involvement of non-resident Niueans); (ii) mainstreaming environment curriculum and activities in schools; (iii) establishment of in-situ learning sites for biodiversity conservation; (iv) information, know-how, and experience made accessible to other Pacific neighbours to be emulated and replicated as applicable.

An important contribution towards ensuring mainstreaming of natural resources protection is empowerment through knowledge and this Output seeks to communicate knowledge and information on the R2R approach to environmental management, natural resources protection and the

sustainability of ecosystem services. It will implement targeted campaigns, produce publications in local language and English (also available through dedicated website and the media to also reach non-resident Niueans), mainstream environment in the curriculum and activities in schools, and establish in-situ learning sites for biodiversity conservation.

The aim is to raise awareness, interest and sensitivity to the value and vulnerability of Niue's natural resources and while this work will target Niueans living on the Island first and foremost, it will also be extended to visitors to the Island and Niueans living abroad.

This work is dependent on a strong knowledge base and knowledge sharing mechanisms among government decision-makers, professionals, practitioners, Village Councils and communities. The project will therefore engage a Knowledge Management/Awareness Expert (to be recruited by the PIU) to develop a knowledge management and outreach plan during the Inception Phase, and then coordinate its implementation during the project life. The Plan will be based on the following elements:

Environmental Information Management System (EIMS): This web-based portal which will be set up under Output 1.4 above, will be established at national level and serve primarily as a strong platform for decision-making comprising policies, plans, guidelines, and technical documentation. However, it will also be invaluable to those considering the environmental impact of development proposals (EIA). Furthermore, with pages for each Village there will be an opportunity for maximum coordination and sharing of information about the overall application of R2R and the protection and management of natural resources and in effect, the state of the environment in Niue⁴⁶. It is expected that the Niue website will provide a link to the EIMS.

The R2R network: This network for professionals and practitioners (including Village Council members) will be set up by the PIU and managed by it until handed over to an appropriate national agency as part of the project's exit strategy. It will make maximum use of available technology and modern social media to share information. The network will arrange and be supported by a range of activities including: regular e-newsletters, the documentation of indigenous knowledge and Field Demonstrations organised in collaboration with Village Show Days. The Network will provide an opportunity for central Government agencies and villages to demonstrate and share learning experiences in the application of the R2R approach to natural resources protection and management.

Regular Workshops/Seminars: An important mechanism for disseminating information related to R2R for natural resources protection and management is through workshops and seminars which will be a feature of the project with its commitment to a participatory and inclusive approach. The project will design and organize workshops/seminars on important tools and topics related to ecosystem and species protection and management, ecosystem services, sustainable land use, etc. The events will be organized at Village level to share the best practices, encourage private investors in eco-friendly developments, share research findings of central agencies, share the interpretation and analysis of monitoring results, and support participation by key champions.

Awareness raising: In order to raise awareness on biodiversity issues and natural resources sustainability, user-friendly materials in the form of leaflets, brochures, DVDs, videos and fact sheets will be published and disseminated to a wide audience in hard copy as well as digitally. The prime target of these materials will be local communities, with a focus on issues related to natural resources protection and management. These materials will therefore be prepared in both English and Niuean. The project will also work with local media (TV and radio) to disseminate information about the project and the benefits of a R2R approach to the protection and management of natural resources.

R2R in Education: The project will assist the Department of Education to achieve mainstreaming of environment, biodiversity and the R2R approach in the curriculum and activities in the schools. Professional advice will be provided by the project if required to ensure that the school curriculum in both primary and secondary schools includes modules on the ridge to reef concept for conservation

⁴⁶ Raw data will not be made available; but following analysis and interpretation of the data, reports will be made readily available.

and sustainable use tailored for the Niuean context to raise awareness and to build environmental management as one option for future career development of Niuean students. The Department will also work with the project to involve/ mobilize students in relevant conservation actions.

In-situ learning sites for biodiversity conservation: The project will collaborate with Tāoga Niue in an effort to record traditional ways in which natural resources were managed successfully on the Island. The project will sponsor the publication of an appropriate book in hardcopy as well as DVD. In addition, the project will work with Tāoga Niue on the planned new Cultural Centre and Museum. In particular, the project will assist with the establishment of an *in situ* conservation learning area which will be part of the cultural complex and serve to educate and raise awareness.

Lessons shared across the region: Information, know-how, experience gained and lessons arising will be made accessible through the EIMS web-based portal, to other Pacific neighbours to be emulated and replicated as applicable.

Salient activities which will be carried out so as to achieve this Output, include:

SUB-OUTPUTS	ACTIVITIES
R2R Network	Establish a network for professionals and practitioners (including Village Council members) using available technology and modern social media to share information. At project closure, it will be handed over to an appropriate national agency as part of the project's exit strategy.
	Arrange activities including: regular e-newsletters, the documentation of indigenous knowledge and Field Demonstrations in collaboration with Village Show Days
Workshops/seminars	Design and organize regular workshops/seminars at Village level, on important tools and topics related to ecosystem and species protection and management, ecosystem services, sustainable land use, etc.
Awareness raising	Develop, produce and disseminate various leaflets, brochures, DVDs, videos and fact sheets in hard copy as well as digitally in both English and Niuean.
	Work with local media (TV and radio) to disseminate information about the project and the benefits of a R2R approach for the protection and management of natural resources.
R2R in Education	Assist the Department of Education to achieve mainstreaming of environment, biodiversity and the R2R approach in the curriculum and activities in the schools
	Assist with the development of modules on the R2R concept for conservation and sustainable use tailored for the Niuean context to raise awareness and to build environmental management as a career option for Niuean students
	Devise ways through which to involve/ mobilize students in relevant conservation actions.
	Secure the involvement of senior students in environmental monitoring through teacher and student training and the provision of minor equipment.
In-situ learning sites for biodiversity conservation	In collaboration with Tāoga Niue, research and record traditional ways in which natural resources were managed successfully on the Island
	Jointly publish the resulting work in hard copy as well as DVD
	Collaborate with Tāoga Niue on the establishment of an <i>in situ</i> conservation learning area which will be part of the planned new Cultural Centre and Museum, to educate and raise awareness of Niue's biodiversity and ecological resources
	In collaboration with Tuapa VC, establish an <i>in-situ</i> reef conservation learning centre as a focus for the Western Reef Conservation Area

2.3 Risks management

The expanded risks and mitigation measures identified in the PIF are discussed below together with their mitigation measures

Table 5. Risks and mitigation measures

RISK	RATING	MITIGATION MEASURES
Low population and low capacities for project implementation	Moderate	Niue has an extremely small resident population and project design has taken this into account to reduce the severity of this risk. The implementation framework applies the R2R approach (comprehensive and integrated) and uses existing human resources from many sectors – within government, at the Village Councils and communities level, as well as from NGOs and the private sector. This could lead to challenges for effective coordination and timely implementation. The project will ensure that roles and responsibilities of different sectors in the project are clear and unambiguous. It will also reach an understanding that non-delivery will mean that the sector will have to be relieved of its role. In an effort towards the long term remedy of this risk, the project will assign priority to the engagement of Niueans (including those residing abroad), but in the interest of project integrity will seek input from the international market if required. In such an event, international experts will be required to mentor and partner local experts, enhancing their capacity. UNDP will provide support to the government as a responsible party for the project.
Complex land tenure will make declaration of community conservation area difficult	Moderate	Land tenure is vested in families, and as many are non-residents, decision making on land allocation for long term conservation may require time and consultations to ensure that there is support for such actions. The project will ensure that proper consultation (including with absentee owners) and tenure clarification (through review of the regulatory base) is undertaken. Ownership of the Project by the communities will mitigate against this risk.
Significant distance between the island and Beveridge Reef will make it very difficult to ensure it is protected from passing ships / yachts	Moderate	Beveridge Reef is 200 km from Niue and it therefore not possible to manage the MPA as actively as the terrestrial Pas and the community reefs. However, project design has allowed for this and the Management Plan will focus on education and information as well as a code of ethics for boaties. Periodic visits by DAFF staff will monitor the effectiveness of this approach. Partnerships with regional institutions, specifically SPC, will be developed in undertaking the ecological survey of the area. SPC has better capacity in this kind of work. For tourism, in addition to the awareness campaigns, Niue will work with tourism firms to ensure eco-friendly practices.
Climate variability and change – especially natural disasters	Low	Extreme weather events affect Niue and are difficult to predict. However, this is a natural phenomenon which has affected Niue ecosystems and increased their resilience. The project will ensure that actions taken (towards conservation and sustainable use) will lead to rapid recovery of the ecosystems in the aftermath of such events.
Coral bleaching and seawater acidification as a result of climate change	Low	Niue has been fortunate to escape with minor incidents of coral bleaching and seawater acidification in the past, when compared with other localities. However, these phenomena could impact ultimate sustainability and the monitoring system proposed by the project and the formulation and implementation of management plans for reef areas which will arise from the project, will reduce incremental impacts and additional stresses from fishing pressure, pollution, sedimentation and other human activity.

Further consideration of risks will be carried out by the project during the Inception Phase. Furthermore, the UNDP ATLAS base for this project will set up a Risk analysis and assessment system which will be reflected in the relevant section of the annual PIRs for the project.

2.4 Cost effectiveness

The existing approach is based on isolated and discrete interventions addressing specific impacts as they arise. This sectoral approach is not effective in addressing the threats to various sectors or ecosystems (forest, agriculture, coastal/fisheries, water, etc.) which are all interlinked. Especially for small island countries such as Niue, the Ridge-to-Reef approach which is comprehensive, integrated and island-wide is more appropriate and much more cost-effective. The R2R intervention is necessarily an island-wide approach as can be seen in the outputs and activities.

The cost effectiveness of this project will be further ensured by the following elements that have been included in project design.

- The project approach involves the development or refinement of policies, legal mechanisms, approaches, processes and other tools at the upstream level in a participatory approach. These will then be tested at the local level, where land and natural resources are under community ownership, before they are rolled out for adoption nationwide. In this way, wholesale adoption of these tools and approaches will only take place after they have been tried and tested and are therefore both more reliable and more acceptable.
- The project will focus its interventions on localities selected because of identified values or threats of degradation. This will maximize the visible impacts and allow the beneficiary locations to act as models for the protection and management of biodiversity and natural resources nationwide. The project will implement on-the-ground interventions in cohesive and contained localities, rather than in geographically dispersed areas, and this will reduce operational costs significantly.
- The project will place equal emphasis on assisting compliance as well as enforcement which will require less intense and less costly levels of monitoring and prosecution. This will allow the project to work effectively with local communities and stakeholders to share management responsibilities and costs, as well as to develop sustainable economic activities that can benefit these partners and generate revenue streams from wise use of natural resources. This is more cost effective than an exclusionary strategy which is likely to be unacceptable by the majority, costly to enforce and unlikely to be sustainable.
- Close coordination with on-going projects such as those funded by UNDP, the EU and FAO. Some of these projects have only recently closed or are still under implementation and have accumulated practical experiences with aspects of natural resource use which are going to be invaluable for this project. While the focus on a ridge to reef approach is unique to this project, many of the experiences and models developed by these other projects are still relevant.

2.5 Expected global, national and local benefits

The project targets enhanced institutional and personal capacity and other “soft” results as a foundation for sustainability of its products and achievements. However, it invests predominantly in a significant number of tangible benefits and these are summarized in the following table.

Table 6. Results from the project

OUTPUT	KEY IMPACTS/RESULTS/TANGIBLES
Output 1.1	<ul style="list-style-type: none"> • Terrestrial conservation area covering 2,550 ha linking traditionally strict protected sites (tapu) and their surrounding landscapes • Marine protected area covering 4,500 ha (Beveridge Reef) • Community conserved reefs covering at least 112 ha • 14 land use plans, one for each District spanning land as well as reef, recognizing ecosystems, distribution of important species and their habitats, heritage/cultural sites, tourist natural attractions, and ecosystem services particularly those with environmental and strategic importance such as the groundwater lens
Output 1.2	Management plans for: <ul style="list-style-type: none"> • The expanded terrestrial conservation areas • The new national marine protected area at Beveridge Reef • The community conserved reefs
Output 1.3	<ul style="list-style-type: none"> • At terrestrial Protected Areas – tracks (including board walks), signage and interpretation, visitor facilities, information kiosks • Management of domestic solid waste • Species Recovery Plans for endangered species • Species Management Plans for threatened species

	<ul style="list-style-type: none"> • Improvements in reef water quality (protection from pollution) • At Beveridge Reef MPA - permanent moorings, signage, advisory material at key departure points • Protection of aquifer through treatment facilities for septic tank effluent (extra capacity in hospital wastewater treatment facility) • Assessment of carrying capacity for tourism • Recording of traditional ways of managing and protecting natural resources • Sustainable land use and climate change adaptation • Ecosystem-friendly enterprises
Output 1.4	<ul style="list-style-type: none"> • Environment Information Management System (EIMS) • Environment Monitoring System (EMS)
Output 2.4	<ul style="list-style-type: none"> • R2R Network for professionals and practitioners (including Village Council members) • Mainstreaming of environment, biodiversity and the R2R approach in the curriculum in the schools • Environmental monitoring by senior students • An <i>in situ</i> land and forest conservation learning area as part of the planned new Cultural Centre and Museum • An <i>in-situ</i> reef conservation learning centre as a focus for the Western Reef Conservation Area

The majority of the above results and impacts will arise from the four outputs under Outcome 1 which commands around 60% of the project budget (over USD2.5 million).

The project will build upon and complement the efforts of the Niue Government to conserve and sustain the island's biodiversity and ecosystem services through integrated land-water-coastal management, while contributing to the implementation of the Pacific Island Multi-focal Area R2R approaches. This has both global and national dimensions.

The uniqueness of Niue's natural environment has been realized and it is now being marketed as an eco-tourism and adventure tourism destination. The forest is the critical habitat for three prized food species: fruit bat, wood pigeon and the coconut crab. The forest also yields edible ferns, medicinal plants and minor wood products. But, Niue's ecosystems and biodiversity are particularly vulnerable to disturbances because of its small size and isolation.

The GEF investment will build on the baseline and achieve incremental and direct global environment benefits which will include the conservation of globally important habitats and globally threatened species. At the terrestrial level, important habitats that will be protected include the forests and the unique karst limestone environment with its numerous caves, chasm, crevices, arches and pools. These are the habitats of the Endangered Olive Small-scaled Skink, and seven globally Vulnerable bird species - Bristle-thighed Curlew, Parkinson's Petrel, White-necked Petrel, Cook's Petrel, Gould's Petrel, Buller's Shearwater, Chatham Albatross and Campbell Albatross.

Additionally, GEF funds will also lead to global benefits in the marine and coastal environment and will include the conservation of marine ecosystems characterised in Niue by the sheer drops up to 1000 m within 80-100 m from the shore. This environment hosts a number of important species, including the globally endangered Fin Whale (*Balaenoptera physalus*), Humphead Wrasse, and Green Turtle and the Vulnerable Green Humphead Parrotfish, Whitetip Oceanic Shark, Queensland Groper, Flat-tail Sea Snake, Whale Shark, Bigeye Tuna, Blacksaddled Coral Grouper, Sperm Whale, and Blue Marlin. The project will also contribute to the conservation of many globally vulnerable coral species such as *Acropora globiceps*, *Acropora horrida*, *Acropora retusa*, *Acropora speciosa*, *Acropora striata*, *Acropora vaughani*, *Alveopora allingi*, *Alveopora verrilliana*, *Astreopora cucullata*, *Heliopora coerulea* (Blue Coral), *Leptoseris incrustans*, *Montipora angulate*, *Montipora australiensis*, *Montipora calcarea*, *Montipora calculata*, *Montipora lobulata*, *Pavona bipartite*, *Pavona cactus*, *Pavona decussata* (Cactus Coral), *Pocillopora elegans*, *Porites nigrescens*, *Turbinaria mesenterina*, and *Turbinaria reniformis*.

Additional information about the endemic species of global significance that will benefit from the GEF investment is provided in section 1.2.2 on the ecosystem context. It should also be noted that Niue is listed in WWF's globally important Ecoregions under Tropical and Subtropical Moist Broadleaf Forests

under South Pacific Islands Forests. In addition, Niue falls within the Micronesia-Polynesia Hotspot as delineated by Conservation International.

While achieving the above significant global benefits, the project will also have very important national benefits. Foremost among these is the paradigm shift from a fragmented approach to a comprehensive (R2R) approach to environmental management which better reflects the small size of the Island and the consequential impacts that can arise particularly on ecosystem services such as the provision of freshwater. The project will also foster better and more effective collaboration between the national government and Village Councils, as equal partners, for the protection and management of biodiversity and natural resources and this reflects the fact that in Niue, ownership of land and resources is vested in communities.

The project will leave a legacy of stronger institutions and enhanced capacities in the DoE and the DAFF directly, and in Infrastructure, Tāoga Niue, Tourism and Education less directly. However, institutional strengthening and capacity building by the project will also be visible at the Village Council and communities levels.

A further national benefit of the project is the turnaround which is expected through the development and implementation of Species Recovery Plans and Species Management Plans for species which are of high traditional value and which are considered at risk.

2.6 Gender and youth strategy

The project will adopt UNDP’s commitment to gender equality and women’s and youths’ empowerment not only as human rights, but also because they are a pathway to achieving the project’s goals of protecting and managing biodiversity and natural resources on a sustainable basis.

Gender equality and women’s and youths’ empowerment will be mainstreamed into project activities, ensuring that women and youth have a real voice in project governance as well as an active role in implementation. Women and youth will participate equally with men in any dialogue or decision-making initiated by the project and will influence decisions that will determine the success of the project and ultimately the future of their families.

Further to the overall mainstreaming of gender equality measures and the fostering of youth participation into the general conduct of the project, the following table summarizes specific areas for women’s and youths’ participation.

Table 7. The involvement of women and youth in project implementation

PROJECT ACTIVITY	INVOLVEMENT
Under Output 1.1 <i>Expansion of national conservation and protected area system</i>	Surveys to identify natural areas that merit protection will be conducted with awareness of the different needs and different perspectives of the two genders. The views of women and youth will be sought, in particular their use of forest and reef resources and the potential impacts that project activities may bring about
Under Output 1.2 <i>Management plans developed</i>	Women and youth will be consulted so as to obtain their input into the design of management mechanisms and to identify any gender-based potential impacts
Under Output 1.3 <i>Management plans implemented for all conservation and protected areas</i>	Women and youth representatives will form part of working groups which are entrusted to implement the management plans. Women’s and youths’ views will be sought and reflected in project activities in pursuit of improved protection and management of natural resources.
Under Output 1.4 <i>Systematic local and national level ecosystems and species level biodiversity monitoring systems</i>	The project will engage women, men and youth in carrying out its monitoring activities so as to ensure that both genders’ perspectives are contributing to the analysis and diagnosis of the results of monitoring

Under Output 2.1 <i>Community level actions on biodiversity and R2R implemented</i>	Opportunities for involvement will be provided as appropriate, all community consultations will be carried out with a Gender Equity and Social Inclusion lens (GESI)
Under Output 2.2 <i>Legal framework, policies and plans developed for effective R2R conservation and sustainable use</i>	Consideration will be given to women's and youths' different needs when drafting regulatory reforms, policies and strategic plans and impacts of the proposed reforms will be assessed from a gender disaggregated perspective.
Under Output 2.3 <i>Institutional strengthening and capacity building of key government departments</i>	Women and youth will be targeted specifically in the project's capacity building activities and their views will be sought when the enhancement activities are being designed.
Under Output 2.4 <i>Economic, social/cultural and biodiversity lessons documented and communicated regionally, nationally and locally through: (i) targeted campaigns, publications in local language and English, and also available through dedicated website and the media (also targeting involvement of non-resident Niueans); (ii) mainstreaming environment curriculum and activities in schools; (iii) establishment of in-situ learning sites for biodiversity conservation; (iv) information, know-how, and experience made accessible to other Pacific neighbours to be emulated and replicated as applicable.</i>	The outreach programme will be designed to cater for the specific needs and interests of both women and men, in their different roles. Project activities will reflect these different needs so as to achieve the best results.

2.7 Project consistency with National Priorities/Strategies

Niue's National Strategic Plan 2009-2013 has identified "Sustainable use and management of Niue's natural resources and environment for present and future generations" as one of its key goals and as such, this project is fully consistent with the Strategic Plan. Several targets under this Plan are directly relevant to this proposed project, including the following:

- Develop long-term land use policies by 2009 that will result in legislative guidelines (and land registration system) to facilitate improved access to and security of tenure for (i) residential, private and communal, property; (ii) agricultural and recreational use; (iii) economic and private sector development needs; and (iv) biodiversity, sustainable land management and environmental protection.
- Ensure that the principles of the Ecosystem Approach to Fisheries Management are applied in implementing the National Fisheries Management Development Plan and related fisheries and marine resource management plans.
- Develop and implement a National Environment Conservation Plan by 2009
- Increase protected areas (terrestrial, marine and coastal) by 10% by 2013
- Increase number and type of ecosystem species conserved by 5% by 2013
- Promote Environment and Sustainable Development principles into the school curriculums by 2010 through extra-curricular programmes
- Increase the number of public awareness programmes on Environment and Sustainable Development (public seminars, media programmes) conducted by 50% by 2013.
- Enact appropriate legislation and policies to facilitate the Forestry Management Plan by 2010

This project is also consistent with Niue's National Biodiversity Strategy and Action Plan, whose vision is "Niue is an Environmentally Friendly Nation in which conservation and the sustainable management of biological resources support all the living community". The NBSAP goal of protection of biological diversity "to retain and enhance existing biodiversity, maintaining sufficient remaining habitats and ecosystems to support the population of all species and their genetic diversity" is fully in line with the aims of this project. More specifically, 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.

The project is in harmony with the goals and objectives of Tāoga Niue which is a key stakeholder of the project. The Department is concerned with the protection of traditional knowledge and the project aims to highlight the importance of traditional knowledge in conservation of natural resources by incorporating traditional knowledge into management strategies and promoting its value and importance.

The project values gender equality and this is in line with the Niue National Policy for Gender Equality and Plan of Action for 2014 to 2018. The policy has four main outcomes which will be addressed by the project in an environmental context. They are 1) Enabling factors for healthy, safe and harmonious families and gender equality are in place. 2) The full potential of women and men for economic development and food security is developed. 3) Equitable participation of women and men in decision-making bodies and leadership positions in all sectors. 4) Gender-responsive government's policies and programs in all sectors.

The project is also consistent with the Water Act and the draft Environment Bill which highlight the importance of effective waste management for the protection and enhancement of water resources, particularly the freshwater lens.

Finally, through its alignment with the GEF/UNDP's Programme Framework Document for the regional programme "Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods", the project is in harmony with national aims since Niue has endorsed the regional programme.

2.8 Sustainability of project results

The project is testing a new Ridge-to-Reef comprehensive approach to biodiversity and ecosystem services protection and management. This approach is very appropriate for an environment such as that of Niue. Its immediate results are very important since they lay down the conditions for real impact to be achieved, and this will only accrue if the project results are sustainable. The project has therefore been carefully designed to optimize the prospects for sustainability of its products and results and pave the way for replication.

1. Environmental sustainability: This project is about environmental protection (with a focus on biodiversity), and the planned interventions will ensure that impacts and threats on biodiversity are reduced, mitigated and offset as necessary, thus reducing pressures on ecosystem services and valuable natural resources. The project will raise awareness of innovative ways of getting the most benefit from ecological resources with the minimum of impact on a sustainable long-term basis. This will change the way land is used – ensuring the compatibility of production practices with sustainable land management into the future. The sustainability of forests, other terrestrial areas, the coastal reefs and marine ecosystems offshore (namely, Beveridge Reef) will be assured through the mutual gains and benefits that are to be made.

2. Institutional sustainability: The project will influence the policies and operations of a number of government agencies responsible for biodiversity and ecological resources protection, primary production and land use management. The project model will see the regulatory and institutional basis developed upstream and tested at the village level before being refined and adopted nationally for upscaling and wider application. At the same time, capacity will be enhanced to secure the implementation and application of the new R2R approach. Since the new developments will be carried out with the full participation of Village Councils and communities, and the private sector, a deep sense of ownership will be generated.

The project strategy will anchor the policy and regulatory reform process in DoE and DAFF in particular – which between them are responsible for various aspects of wise land use (including coastal reefs) and management including the application of the EIA Process to major developments. While specifically enhancing the capabilities of these key agencies to take sustainability into account in land use planning, management, licensing, etc, the project will also strengthen the capacity of other Government agencies such as Infrastructure, Education, Tourism in view of the influence they are able to have on biodiversity and ecological resources. Such an approach is critical to ensure effective implementation of the new paradigm of holistic biodiversity protection and management (as different from the disparate and fragmented approach applied to date) at the broad land, water and coastal level for the long term and so as to enhance sustainability.

3. Financial sustainability: There are two main thrusts to ensure financial sustainability. Firstly, the project will be making the case for all stakeholders to start seeing biodiversity protection and management as making economic as well as ecological sense. The aim is to obtain recognition of the economic gains that will arise from biodiversity protection such as in attraction to tourists, safeguarding the future of desirable species (such as the peka and the uga) and protection of ecosystem services. The financial gains that are expected from biodiversity protection and management together with the ownership that will be achieved in the project products will lead to a protective stance from land owners and land users, and this will augur well for the sustainability of the project products, services and benefits.

Secondly, the government has a commitment towards an incremental increase in the sectoral operational budgets for the R2R relevant actions. This is expected to be in the region of 20% over the present baseline by the end of the project in five years' time. The increase will comprise both core recurrent budget funding as well as development aid inputs and a continuation of the significant level of co-funded baseline initiatives. Participating partners have confirmed their commitment to sustain the new management measures that will be put in place under the project.

4. Replicability: Replication and upscaling are expected to spread the benefits of the project from the project localities to the entire Island and beyond. This will be achieved through the direct replication of successful project elements and practices and methods to new villages and communities, as well as the scaling up of experiences in the project localities. All this will be made possible by the increase of around 20% noted above for the sectoral operational budgets for R2R relevant actions. Each project output will include the documentation of lessons learnt from implementation of activities under the output, and a collation of the methodologies developed during implementation. The Project Manager will ensure the collation of all the project experiences and information. Through the knowledge management component of the project, information, know-how, and experience will be made accessible to other Pacific neighbours to be emulated and replicated as applicable.

2.9 Environmental and social safeguards

UNDP procedures require projects to provide environmental and social safeguards and associated policies and procedures so as to prevent and mitigate undue harm to people and their environment and strive to develop benefits in the development process. More specifically, safeguard policies and procedures are designed to avoid, mitigate, or minimize adverse environmental and social impacts of projects and strategies, and to implement projects and strategies that produce positive outcomes for people and the environment.

The project has been subjected to the Environmental and Social Screening (ESSP) which concluded that the project has many environmental and social benefits, and possibly some impacts and risks, however, while the benefits are long-term, the negative impacts are predominantly indirect and temporary. The full result of the screening process is in Annex 4.

Protection and management scenarios for natural resources will be developed in both forest and reef environments. They will be enshrined in management plans which will be produced in full partnership with Village Councils and communities. These plans (which will be founded on ecosystem and social surveys) are aimed to have long term benefits at the social and environmental levels and implementation of priority actions will be through empowerment of councils and communities. Long-term social and environmental benefits arising from project activities are expected to be positive and beneficial and foremost among these is the safeguarding of the freshwater lens, the sustainability of non-timber forest products, the recovery and flourishing of species such as Uga, Peka and Lupe, and the reduction of pollution on reefs.

However, there could also be temporary “negative” impacts, for example, on some landowners who might agree to change land use practices so as to obtain sustainability, and on some hunters who may be required to limit their hunting activity. The project will strive to avoid these temporary negative impacts and project design incorporates a scheme which supports ecosystem-friendly enterprises and promotes ecotourism initiatives to mitigate any impacts arising.

Project design has incorporated full consideration of social and environmental issues, ensuring that the limited and temporary negative impacts are outweighed by the positive and long-term benefits. Through meaningful opportunities for community participation in project implementation, socio-economic hurdles such as those posed by land tenure and the relationship between central government and village councils will be overcome and the project’s chances of success will be enhanced.

2.10 Coordination with other relevant GEF financed and other initiatives

In the unique situation in Niue, coordination with other relevant projects is essential and the project will be well coordinated with ongoing GEF financed projects. The Director General of the Ministry of Natural Resources (DG-MNR) has oversight over all projects and activities carried out under DAFF, DOE and MET and this captures all GEF, FAO, FFA, SPC, and similar projects and donor inputs. The DG-MNR is also the GEF Operational Focal Point. More specifically, a monthly scheduled meeting deals with project coordination, collaboration, synergies, etc, and there are also specific meetings around project updates and on-going work, both as scheduled in project work plans and as required by the DG.

Furthermore, and in an effort to achieve a high level of coordination, project steering committees across MNR projects and across government, include high level participation/representation by key relevant departments and stakeholders to ensure there is cross-sectoral collaboration and cooperation. This is linked to efficiency targets and to maximising outcomes from project investments.

Finally, there are two high level coordination processes. The first involves the Secretary of Government and Directors General who meet to consider these matters, with cooperation, collaboration and synergies very much as the main focus. The second is the aid coordination unit in the Premier’s Office which is now identified as a key mechanism for coordination of development assistance.

Among the more important initiatives that this project will be coordinated with, are the following:

Pacific Ridge-to-Reef Programme: The project will build on and benefit from close collaboration with the R2R Regional Programme, as well as other R2R national projects being implemented by Niue’s Pacific neighbours. The goal of the Regional Programme as in the conceptual framework outlined in the Program Framework Document (PFD) of the programmatic approach is to “*maintain and enhance Pacific Island countries’ ecosystem goods and services (provisioning, regulating, supporting and cultural) through integrated approaches to land, water, forest, biodiversity and coastal resource management that contribute to poverty reduction, sustainable livelihoods and climate*”

resilience". The project development has also benefited from a number of completed and existing initiatives/processes related to biodiversity conservation and adaptive management.

Biodiversity Enabling Activity: This initiative is supporting the updating of the NBSAP and 5th National Report to the CBD. Funding support is from the GEF and implementation is through UNEP. This proposed GEF/UNDP Ridge to Reef national project will build on the analysis and recommendations emerging from this updating process, whilst the updating of this important document will also benefit from the recommendations and discussions which arose from key stakeholders in the design this R2R project.

GEF-FAO PAS Forestry and Protected Area Management Project (and other FAO projects) aims to enhance the sustainable livelihoods of local communities living in and around protected areas. The project is mainly focused on institutional PA arrangements, capacity development and income generation activities to improve the livelihoods of local communities, terrestrial biodiversity conservation and sustainable land and forest management. The R2R project, which addresses some of these issues but with a much broader and deeper scope, will take advantage of the momentum created by the PAS project and will build on some of its activities, increasing the scale and sustainability of its impact. In particular, the R2R project would, in addition to the activities planned in the PAS project, (i) expand and connect the existing and newly created PAs, (ii) integrate the management of marine PAs and the link between marine and terrestrial PAs, (iii) develop the capacities required to manage the registered PAs and consolidate the conservation steering committees, (iv) guarantee the financial sustainability of the PAs, (v) ensure a fair distribution of benefits to the communities and landowners, (vi) provide additional support for raising public awareness, (vii) complement the educational programmes at primary school (PAS Project) with the integration of environmental education in the curriculum of the secondary school (R2R), and (viii) support the approval of the laws and their effective enforcement. The PAS project commenced in August 2013 and this R2R project will explore the specific scope for collaboration during its inception phase. FAO is also supporting other relatively small agriculture and fisheries projects in addition to this GEF-PAS project.

UNEP-GEF PAS Prevention, Control and Management of Invasive Alien Species in the Pacific Islands: This project is supporting the development of a National Invasive Species Strategy and Action Plan, as well as the development of National guidelines for incorporation of IAS in the policy and legislative framework, harmonised regionally. The project also envisages the creation of a National Invasive Species Multi-stakeholder Committee, which may also serve as the main advisory committee for this R2R project as well. The R2R project has activities dealing with invasive species such as those addressing the problem of feral pigs and the invasive plant species in Huvalu Conservation Area. Collaboration between the two initiatives will lead to mutual gain.

Sustainable Land Management (SLM) Project: This project laid a good foundation for some of the work which will be carried out by the R2R project. Its aim was to enable Niue to address sustainable land management and complement the NAP process and implementation. It aimed to contribute towards the achievement of a long term goal - *sustainable land management of Niue's unique terrestrial resources while at the same time promoting sustainable productive systems contributing to the social well-being of its present and future generations*. It worked through a targeted practical participatory "bottom up" approach having established a productive farm for the Mutalau community based on SLM principles and serving as a training site for all land user stakeholders in SLM practices. According to the Terminal Evaluation Report - A key challenge has been the declining interest on the part of the host community - the result of a declining and aging population. This is probably the most critical among other lessons to be learnt from this project and applicable to the R2R project which aims to build on the experience.

The SSCF-UNDP Pacific Adaptation to Climate Change (PACC) Project and the related **IWRM Project** in Niue were implemented by the Public Works Department (Water Division). The projects worked on mainstreaming Climate Change into national policy and a Climate Change Policy has been endorsed by Cabinet. The projects supported community adaptation plans using a participatory

approach, carried out demonstration measures, e.g. for water harvesting, development of a wastewater management plan for Alofi, identification of dump sites, water quality monitoring and activities on communication, awareness and education. The R2R project will benefit from the lessons that have emerged from the IWRM and PACC projects and will collaborate with the personnel who are still available, in addressing the impacts of waste on the freshwater lens.

Other projects that could be relevant, even if only indirectly, include: a) The Agriculture Sector Plan 2013, which is being assisted by SPC, will provide an overarching plan covering all agriculture initiatives in Niue and takes into account all levels of agricultural development, from subsistence to commercial, with a multistakeholder approach; b) the Soil Management Plan and the Resource Manual, which are at the proposal stage developed by SPC and Landcare New Zealand, will provide supplementary information on soil maps and other related Information; c) the Coastal Management and Development Plan which is in its final stage of drafting, will provide guidance particularly on the protection and sustainable fishing of coastal resources and developing coastal fisheries to maximise benefits for Niue's local communities.

As one of the latest to be implemented, this project will benefit from advice, experiences and lessons arising from the other projects, recently finished or underway. Conversely, this project will be able to influence positively those projects which are at the initial stages and ensure that their specific activities on the ground are in harmony with and complement this project. It may also be possible to achieve economies of scale in areas such as transport, the purchase of goods and services, and in survey and monitoring.

3 PROJECT RESULTS FRAMEWORK

This project will contribute to achieving the UNDAF Outcome for the Pacific Sub-region 2013-2017 – Outcome Area 1: Environmental management, climate change and disaster risk management					
UNDP Strategic Plan Outcome: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded (Outcome 1)					
UNDP Strategic Plan Outputs:					
Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.					
Output 2.5: Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation					
GEF BD Objective 1: Improve Sustainability of PA Systems, and Outcome 1.1 - Improved management effectiveness of existing and new protected areas					
GEF 5 BD2 Objective: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors					
Output 2: National and sub-national land-use plans that incorporate biodiversity and ecosystem services valuation					
GEF Outcome Indicators:					
<i>Indicator 1.1: Protected area management effectiveness score as recorded by Management Effectiveness Tracking Tool</i>					
<i>Indicator 2.1: Landscapes and seascapes certified by internationally or nationally recognized environmental standards that incorporate biodiversity considerations (e.g. FSC, MSC) measured in hectares and recorded by GEF tracking tool</i>					
<i>Indicator 2.2: Policies and regulations governing sectoral activities that integrate biodiversity conservation as recorded by the GEF tracking tool as a score</i>					
	Indicator	Baseline	Targets at End of Project	Source of verification	Assumptions and Risks
Project Objective⁴⁷ <i>To strengthen conservation and sustainable use of land, water and marine areas and their biodiversity by building on their cultural heritage values through integrated national and community actions</i>	Impact 0.1 Incorporation of cultural and traditional values and approaches in natural resources protection and management	Cultural values and constraints are reported as being eroded away	Culturally significant species, habitats and methods of conservation are identified, recorded and being built upon	Publication of Report by Tāoga Niue arising from research and survey work	Assumptions: The Objective assumes that the strengthening of the protected estate can be built on cultural heritage values, and that this can best be done through the integration of national with community level actions. Risks: There is a risk that heritage and traditional values will in fact work against the project Objective if landowners assert their traditional ownership rights. There could be a reluctance at community level to cooperate with the project if this is seen as an abrogation of ownership rights. The project will protect itself from this risk by gaining the confidence
	Impact 0.2 The freshwater lens safeguarded in the long term	Freshwater lens at risk from agricultural chemicals, and septic tank effluent	Biodegradable or certified organic agri- chemicals used exclusively; and at least 80% of septic tank effluent treated, such that risk of contamination of the freshwater lens controlled or removed	Regular monitoring by Ministry of Infrastructure	

⁴⁷ Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR

	Impact 0.3 Terrestrial and reef species are being utilized on a sustainable basis to an increasing number of community members	Some reef species such as <i>Tridacna</i> sp., and <i>Holothuria</i> sp., have been reported as diminished ⁴⁸ . Peka, Lupe and Uga populations have declined ⁴⁹ ; utilization rates to be established during the first year	Access or utilization by communities for food and other uses increased by 25% but on a sustainable basis	Ministry of Natural Resources State of the Environment Report	of communities and their Village Councils through its genuine recognition of ownership rights and its efforts to safeguard them.
Outcome 1⁵⁰ New community conservation and national protected areas established at different levels, thus reducing threats and improving biodiversity status of conservation areas through effective community management	Impact 1.1 Extent of the protected estate in various forms and through different protective mechanisms	Tapu areas are many but not all are known or acknowledged; Huvalu Forest Conservation Area (5,400 ha) and Namoui Marine Reserve (27.67 ha) are the only Protected Areas	Additional 2550 ha of terrestrial ecosystems; additional 4500 ha of marine ecosystem; and, additional 200 ha of reef, protected by various instruments by the end of the project	Ministry of Natural Resources State of Environment Report	Assumptions: That there will be an appreciation of the intrinsic value to Niue of the protected estate, hence the desire to extend the protective/managed status. Likewise there will be an acceptance that Uga and Peka and other species are at risk and that action needs to be taken to ensure their sustainability. It is also assumed that a way will be found to provide legal recognition of Tapu while simultaneously safeguarding the private ownership. Risks: The risk is that the project timescale is somewhat short for some of the project benefits to manifest themselves, resulting in a lack of appreciation. The project will mitigate against this by putting in place a robust information and participatory strategy whereby stakeholders will share the project challenges as well as its benefits. The selected Indicators will serve to record beneficial results from project activities or confirm whether a good enough foundation has been laid for such results.
	Impact 1.2 Efforts in place for the recovery of species at risk	Hega (blue-crowned lory) and the olive small-scaled skink are considered endangered Uga and Peka are currently considered as threatened. Both are being harvested unsustainably.	Species Recovery Plans for Hega and the olive small-scaled skink formulated, adopted and being implemented. Species Management Plans for Uga and Peka formulated, adopted and being implemented.	Ministry of Natural Resources State of Environment Report	
	Impact 1.3 Status of completion and adoption of management plans for various conservation areas	Huvalu Conservation Area and Beveridge Reef – no Management Plan; Reefs covered	Huvalu Conservation Area, Beveridge Reef MPA, Western Reef Conservation Area, and new Confluence Conservation Area, all with management plans adopted and being implemented	Plans adopted and being implemented	

⁴⁸ Tamakautoga main sea track, 2013 survey, mid-tidal area results: *Tridacna* sp = 0 per 0.25m², *Holothuria* sp = 0.08 per 0.25m²

⁴⁹ Experienced hunters of Peka and Lupe suggest a huge decline in numbers. 2014 Uga survey shows breeding population is at risk - only 1.9% and 24.5% of females and males respectively were found to be over the legal harvest limit of 36mm thoracic length. The average size of females and males determined from the 2014 survey were 26mm and 31mm thoracic length respectively. This was a decrease from 27mm and 33mm from the 2008 survey for females and males respectively.

⁵⁰ All outcomes monitored annually in the APR/PIR.

		somewhat by Coastal Management Plan			
	<p>Outputs:</p> <p>Output 1.1 National conservation and protected area system expanded through - (i) a continuous terrestrial conservation area covering 2,550 ha that links traditionally strict protected sites (tapu) and their surrounding landscapes; (ii) a national marine protected area covering 4,500 ha (Beveridge Reef); and (iii) community conserved reefs covering at least 112 ha. Conservation and protected areas formalized through appropriate instruments</p> <p>Output 1.2 Management plans developed through participatory approaches for: a) expanded terrestrial conservation areas: b) the national marine protected area; and c) community conserved reefs; management plan adopted through appropriate instruments; management plans mainstreamed in development, sectoral and CC adaptation plans/policies; adequate financing identified from budgetary and other sources for implementation of the plans</p> <p>Output 1.3 Management plans implemented for all conservation areas through conservation and management activities (concrete measures) at the village, cross-village and national levels, including improvements in water quality in reef areas, protection of the freshwater lens and necessary support activities (soft measures)⁵¹</p> <p>Output 1.4 Systematic local and national level ecosystems and species level biodiversity monitoring systems established, with data sharing and joint training and survey activities for terrestrial and marine areas and integrated approaches; monitoring and evaluation results are fed to the R2R program through the regional program support project to facilitate lessons sharing and cross-country fertilization</p>				
<p>Outcome 2 Strengthened community and cross-sectoral involvement of relevant national government departments to promote effective Ridge to Reef management by mainstreaming biodiversity and environmental concerns into plans and actions</p>	<p>Impact 2.1 Promotion of R2R approach by Village Councils and Government departments</p>	<p>There is currently no comprehensive, holistic approach applied by Village Councils or Government Departments to natural resources management</p>	<p>New Village Development Plans, and reviewed existing ones, showing an explicitly comprehensive (R2R) and integrated approach towards land, water and natural resource management.</p> <p>Corporate Plans, Annual Work Plans and similar key documents, showing an explicitly comprehensive (R2R) and integrated approach towards land, water and natural resource management; together will collaboration across departmental boundaries.</p>	<p>Examination of Village Development Plans</p> <p>Review of relevant documents; annual reporting by Ministry of Natural Resources</p>	<p>Assumptions: The Outcome assumes that stronger community and cross-sectoral involvement will lead to mainstreaming biodiversity and environmental considerations into key plans and actions and that this in turn will lead to effective R2R management.</p> <p>Risks: Unfortunately, the assumption may be only partly correct since mainstreaming could take place on paper and lip service can be paid to biodiversity and environment by hollow references in plans and actions (which is what the first three indicators look for). However, the critical mass of signs of mainstreaming targeted by the project and the public survey that will gauge awareness and understanding, will mitigate against this risk.</p>
	<p>Impact 2.2 The extent to which biodiversity and natural resources are taken into account in central and local planning,</p>	<p>Neither sector plans nor Village Development Plans can be said to have mainstreamed biodiversity considerations</p>	<p>Biodiversity considerations become an explicit element in policies, plans, strategies and similar instruments</p>	<p>Review of relevant documents; annual reporting by Ministry of Natural Resources</p>	

⁵¹ See Annex 8: Portfolio of proposals arising from consultations during project formulation for examples of possible activities. Actual activities will depend on priorities which arise from the survey and land use planning investigations under Output 1.1 and identified in the Management Plans under Output 1.2.

	management and daily life				
	Impact 2.3 Level of awareness, sensitivity and understanding of the value and vulnerability of natural resources	There is a certain level of awareness but it is not deep. The baseline will be established through survey at the Inception Phase	An improvement of 20-50% in awareness and understanding as measured by a repeat survey.	Public survey	
	<p>Outputs:</p> <p>Output 2.1 Community level actions on biodiversity and R2R implemented through: (i) establishment of village committees towards participatory management of terrestrial conservation areas and community-conserved reefs; (ii) training on integrated approaches to planning and management focusing on developing clearly-specified roles; and (iii) formulation of innovative instruments to secure support of landowners affected by the terrestrial conservation area and other interventions prescribed by the land-use plan</p> <p>Output 2.2 Sector-related legal framework, policies and plans support effective R2R conservation and sustainable use within and outside of conservation areas, embedded in (i) community development plans; (ii) cross-sectoral plans such as climate change and mitigation and adaptation, tourism and the plan for achieving water security; (iii) sector plans such as education, culture, Public Works (particularly on water division and their work on water pollution control affecting the coastal areas and the freshwater lens); and, (iv) increase in sectoral operational budgets by 20% by end of project from baseline.</p> <p>Output 2.3 Institutional strengthening of the capacity of the Department of Environment, the Department of Agriculture, Forestry and Fisheries and other government agencies for planning and monitoring of PAs and R2R management for linked landscapes for effective environmental management, enforcement and compliance monitoring, including (i) strategic training activities and application of the professional competency standards for staff (to be developed); and (ii) participation in regional R2R trainings through the regional program support project</p> <p>Output 2.4 Economic, social/cultural and biodiversity lessons documented and communicated regionally, nationally and locally through: (i) targeted campaigns, publications in local language and English, and also available through dedicated website and the media (also targeting involvement of non-resident Niueans); (ii) mainstreaming environment curriculum and activities in schools; (iii) establishment of in-situ learning sites for biodiversity conservation; (iv) information, know-how, and experience made accessible to other Pacific neighbours to be emulated and replicated as applicable.</p>				
Process indicators of effective implementation and mainstreaming of UNDP strategic goals	Process Imp 1 Participation at village level	Opportunities for participation at village level will be maximised according to Table 7 and Table 8.		Village level participants and their role in implementation planned in AWP and recorded in PIRs	
	Process Imp 2 Cost effectiveness	The Government contribution in kind will be utilized to keep costs to a minimum. Likewise, preference will be given to local expertise who will be engaged at a lower cost. These actions will be taken without placing the project's success in jeopardy.		Co-financing will be tracked and recorded and reported. The PM will carry out individual staff performance assessments annually	
	Process Imp 3 Involvement of women and youth	Implementation of the Gender and Youth Strategy as in Section 2.6 with gender considerations mainstreamed and embedded in the project implementation process.		To be measured by the ratio of women and youth participating according to AWP and PIRs	
	Process Imp 4 Human rights	Recognition and respect of land ownership rights, including the rights of absentee owners.		To be measured by survey of Village Councils as representatives of their communities	

	Process Imp 5 Governance	Institutional capacity strengthening at central government and local village level leading to enhanced governance of natural resources management.	This will be covered by the various capacity building activities under the mainstream Outputs and Activities		
UNDP IRRF Outcomes and Outputs Indicators	IRRF Sub-Indicator 1.5 Hectares of land that are managed sustainably under <i>in-situ</i> conservation, sustainable use, and/or Access and Benefits Sharing (ABS) regime	Baseline to be defined at project inception through land use/ ecosystem surveys under Output 1.1	Refer to target for indicator related to Impact 1.1	Sources of verification will be the PIRs and other annual project reports. To be identified more accurately at project inception	
	IRRF Sub-Indicator 2.5.1 Extent to which legal, policy and institutional frameworks are in place for conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems	Refer to baselines for indicators related to Impacts 1.3 and 2.2	Refer to targets for indicators related to Impacts 1.3 and 2.2	Review of relevant documents; annual reporting by Ministry of Natural Resources	
	IRRF Sub-Indicator 2.5.2 Extent to which capacities to implement national and local plans to protect and restore the health, productivity and resilience of oceans and marine ecosystems, have improved	Refer to baseline for indicator related to Impact 2.1	Refer to targets for indicator related to Impact 2.1	Examination of Village Development Plans Review of relevant documents; annual reporting by Ministry of Natural Resources	

4 TOTAL BUDGET AND WORKPLAN

Award ID:	00078842	Project ID(s):	00088927
Award Title:	Application of Ridge to Reef Concept for biodiversity conservation, and for the enhancement of ecosystem service and cultural heritage in Niue		
Business Unit:	WSM10		
Project Title:	Application of Ridge to Reef Concept for biodiversity conservation, and for the enhancement of ecosystem service and cultural heritage in Niue		
PIMS no.	5258		
Implementing Agency	Ministry of Natural Resources (MNR)		

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	See Note
OUTCOME 1: New community conservation and national protected areas established at different levels, thus reducing threats and improving biodiversity status of conservation areas through effective community management	Ministry of Natural Resources	62000	GEF	71200	International Consultants	40,000	60,000	60,000	100,000	0	260,000	1
				71300	Local Consultants	68,000	16,000	10,000	10,000	0	104,000	2
				71400	Cont services Individuals	63,000	63,000	63,000	63,000	65,000	317,000	3
				71600	Travel	4,000	4,000	4,000	4,000	4,000	20,000	4
				72100	Cont Services Company	0	180,000	445,562	400,000	180,000	1,205,562	5
				72200	Equip and Furniture	25,000	30,000	30,000	30,000	6,000	121,000	6
				72300	Materials and goods	5,000	10,000	10,000	10,000	5,000	40,000	7
				72400	Comms, audio-visual	4,000	10,000	14,000	8,000	4,000	40,000	8
				72500	Supplies, stationery	500	1,375	1,375	1,375	1,375	6,000	9
				72800	Info Tech Equip	0	20,000	40,000	15,000	0	75,000	10
				74200	Audio Visual&Print Prod	20,000	40,000	40,000	40,000	20,000	160,000	11
75700	Training + Workshops	20,000	40,000	40,000	35,000	20,000	155,000	12				
					Total Outcome 1	249,500	474,375	757,937	716,375	305,375	2,503,562	
OUTCOME 2: Strengthened community and cross-sectoral involvement of	Ministry of Natural Resources	62000	GEF	71200	International Consultants	0	60,000	40,000	0	0	100,000	13
				71300	Local Consultants	12,000	24,000	16,000	24,000	0	76,000	14
				71400	Cont services Individuals	71,000	71,000	71,000	71,000	72,000	356,000	15
				71600	Travel	4,000	4,000	4,000	4,000	4,000	20,000	16
				72100	Cont Services Company	16,000	16,000	166,000	166,000	16,000	380,000	17

national government departments to promote effective Ridge-to-Reef management by mainstreaming biodiversity and environmental concerns into plans and actions			72200	Equip and Furniture	0	20,000	0	0	0	20,000	18	
			72300	Materials and Goods	0	7,000	6,000	6,000	6,000	25,000	19	
			72400	Comms, audio-visual	16,000	14,000	14,000	14,000	14,000	72,000	20	
			72500	Supplies	0	16,000	16,000	18,000	5,000	55,000	21	
			72800	Info Tech equip	0	21,000	21,000	21,000	0	63,000	22	
			74200	Audio Visual&Print Prod	20,000	40,000	40,000	40,000	20,000	160,000	23	
			75700	Training + Workshops	20,000	40,000	40,000	35,000	20,000	155,000	24	
				Total Outcome 2	159,000	333,000	434,000	399,000	157,000	1,482,000		
PROJECT MANAGEMENT	Ministry of Natural Resources/UN DP	62000	GEF	71200	International Consultants	0	0	20,000	0	24,000	44,000	25
				71400	Cont Services Individuals	19,200	19,200	19,200	19,200	19,200	96,000	26
				72200	Equip and Furniture	6,000	0	0	0	0	6,000	27
				72500	Supplies	1,200	1,200	1,200	1,200	1,200	6,000	28
				72800	Info Tech equip	8,000	0	0	0	0	8,000	29
				74100	Professional Services	6,000	6,000	11,000	6,000	6,000	35,000	30
				74599	UNDP cost recovery charges-Bills	2,860	2,860	2,860	2,860	2,860	14,300	31
				Total Management	43,260	29,260	54,260	29,260	53,260	209,300	32	
PROJECT TOTAL					451,760	836,635	1,246,197	1,144,635	515,635	4,194,862		

NOTES ON BUDGET

1	International Consultancies at 20,000/month including fees, travel expenses and DSA: Sustainable agriculture/SLM Expert 2 months = 40,000; Tourism Carrying Capacity Expert 2 months = 40,000; Species Recovery and Management Experts 3 months = 60,000; Info Management Expert 4 months = 80,000; Environmental Monitoring Expert 2 months = 40,000.
2	Local Consultancies at 4,000/month: Survey team 3 experts 4 months = 48,000; Land Use Planning Expert 5 months = 20,000; Management Planning Experts X2 for 2 months = 16,000; Waste Management Expert 3 months = 12,000; Sustainable Fishing Expert 2 months = 8,000
3	Project Manager 40% = 110,000 over 5 years; Technical Officer 70% = 122,500 over 5 yrs; Community Liaison Officer 30% = 45,000 over 5 years. Plus office facilities @ 2,000 X 3 = 6,000; Half of Regional Technical Advisor including salary contribution and travel costs agreed 33,500 over 5 years .
4	Internal, domestic travel, by rental vehicle @ 55/day. Plus regional travel for extension work, consultations, extension, project outreach – mainly by PM
5	Beveridge Reef survey, management plan drafting, lobbying for MPA - Contract = 150,000; Management Plans implementation at village level – various works = 655,562 (including contracts to Village Councils); Construction of 2X Information kiosks at In-Situ Learning Centres = 150,000; Addressing pollution of Reefs + from Septic Tank Effluent X2 Contracts = 250,000;
6	Vehicle @ 25,000; Visitor facilities at PAs = 36,000; Recycling facilities = 50,000; Species Management equipment = 10,000;

7	Vehicle consumables @ 200/month = 12,000 over 5 years; Various anti-pollution materials = 20,000; Monitoring consumables @ 150/month X 52 months = 8,000
8	Audio-visual displays at 2 PAs Visitor facilities = 20,000. Plus half of Regional Bureau recommendation of 1% of budget for communication.
9	Consumables for EIMS @ 100/month X 60 = 6,000
10	EIMS hardware and software, central installation = 25,000 + 10 remote access stations @ 5,000
11	Printing and distribution of various discussion papers, draft plans for discussion, information brochures and similar material, educational material – under all Outputs as required. Estimated @ 40,000/Output X 4 = 160,000
12	Consultation events est @ 1,000 each; Whole day seminar/training est @ 2,000 each. For Outcome 1 @ 20,000/Output X 4 Outputs = 80,000. For Outcome 2 @ 20,000/Output X 4 Outputs = 80,000
13	International Consultancies at 20,000/month including fees, travel expenses and DSA: EIA Expert 3 months = 60,000; Professional Competency Expert 2 months = 40,000;
14	Local Consultancies at 4,000/month: Legal Expert 3 months = 12,000; Curriculum Development expert 2 months = 8,000; Traditional Knowledge Experts X 2 for 3 months = 24,000; Knowledge Management / Awareness Expert 8 months = 32,000
15	Project Manager 60% = 165,000 over 5 years; Technical Officer 30% = 52,500 over 5 yrs; Community Liaison Officer 70% = 105,000 over 5 years; Half of Regional Technical Advisor including salary contribution and travel costs agreed 33,500 over 5 years.
16	Internal, domestic travel, by rental vehicle @ 55/day. Plus regional travel for extension work, consultations, extension, project outreach – mainly by PM
17	Awareness material in Niuean and English – 80,000; In Situ Conservation Learning Areas 2 Contracts = 300,000
18	Monitoring equipment for student involvement in monitoring
19	Consumables for student involvement (incl teacher capacity building)
20	Audio visual display for various capacity building at central and village level + awareness raising; Plus half of Regional Bureau recommendation of 1% of budget for communication
21	Support for eco-friendly activities – 25 @ 2,000 = 50,000; + set up Professional Network = 5,000
22	IT For various capacity building and awareness at Village level, plus for curriculum development in school
23	Printing and distribution of various discussion papers, draft plans for discussion, information brochures and similar material, educational material – under all Outputs as required. Estimated @ 40,000/Output X 4 = 160,000
24	For various capacity building at village and central level; + for curriculum development in schools; inception workshop and annual project board meetings
25	International Consultants including travel costs and DSA, X 2 for MTR and TE
26	Admin & Finance Officer 100,000 over 5 years
27	Work stations for PM, AFO and visiting consultant/s @ 2,000 X 3 = 6,000
28	Supplies @ 100/month X 60 months = 6,000
29	Hardware and software plus comms equipment = 8,000
30	Audit costs estimated at less than 1% of project budget = 30,000 (\$5,000 per year); includes \$5,000 for second cycle for assessment of government financial procedures in year 3
31	Direct Project Costs – estimated 14,300. This will cover the request of direct project services from IP in area of procurement of goods and services, recruitment of consultant and project staff, payment processing, vendor creation and arrangement of training/workshop. Draft LOA is provided and expected to be finalised and signed with Prodoc
32	Within the GEF contribution limit of 5% of GEF funds (210,000)

Summary of Funds: ⁵²

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total
GEF	451,760	836,635	1,246,197	1,144,635	515,635	4,194,862
Donor 2 UNDP (in kind)	40,000	40,000	40,000	40,000	40,000	200,000
Donor 3 Government (in kind)	2,173,720	2,173,720	2,173,720	2,173,720	2,173,720	10,868,600
TOTAL	2,665,480	3,050,355	3,459,917	3,358,355	2,729,355	15,263,462

⁵² Summary table includes financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...

5 MANAGEMENT ARRANGEMENTS

5.1 Implementation framework

UNDP is the GEF Implementing Agency (IA) for the project which will be implemented over a period of five years and will have the Ministry of Natural Resources as the Executing Agency / Implementation Partner. Other government and non-government organizations will also play important roles in implementation. The project will be executed in the NIM modality and high level coordination with other initiatives will be carried out through two mechanisms. The first involves the Secretary of Government and Directors General who meet to consider these matters, with cooperation, collaboration and synergies very much as the main focus. The second is the aid coordination unit in the Premier's Office which is now identified as a key mechanism for coordination of development assistance.

Project Executive Board

Project Governance will be through the **Project Executive Board (PEB)** which will be convened jointly by UNDP and the Government and will serve as the project's decision-making body. The PEB will comprise representatives of UNDP, MNR, and beneficiaries. The R2R PM and the Chair of the R2R Advisory Committee (see below) will be in attendance at PEB meetings as required. The PEB will meet as necessary, but not less than once every 12 months, to review project progress, approve Annual Work Plans (including budgets) and approve major project deliverables. The PEB is responsible for ensuring that the project remains on course to deliver products of the required quality to meet the outcomes defined in the project document. The PEB's role will include: (i) overseeing project implementation; (ii) approving all project work plans and budgets, as put forward by the R2R PM, for submission to the UNDP Bangkok Regional Hub and the GEF Unit in New York; (iii) approving any major changes in project plans or programmes; (iv) providing technical input and advice; (v) approving major project deliverables; (vi) ensuring commitment of resources to support project implementation; (vii) arbitrating any conflicts within the project and/or negotiating solutions between the project and any parties beyond the scope of the project; and (viii) overall project evaluation.

National Project Director

The Government will appoint a **National Project Director (NPD)** who will serve as the Government's focal point for the project. He/she will co-chair the Project Executive Board (PEB) and will have ultimate responsibility for making decisions on behalf of the Government. He/she is the approving officer for the project and will be responsible for providing government oversight and guidance for project implementation. The NPD will not be paid from project funds, but will represent part of the government in-kind contribution to the project.

Among the duties and responsibilities of the NPD are the following⁵³:

1. Serves as a focal point for coordination of the project with implementing agencies, UNDP, Government and other partners
2. Ensures that Government inputs for the project are available and that the project activities are in line with national priorities.
3. Leads and coordinates partners in the selection of the R2R Project Manager.
4. Coordinates with the R2R Project Manager and facilitates his/her work and all staff.
5. Ensures that the required project work plan is prepared and updated and distributed to the relevant Government entities.
6. Will represent the Executing Agency at project meetings and annual reviews.
7. Will lead efforts to build partnerships for the support of outcomes indicated in the project document.

⁵³ See UNDP Bureau of Management (2003) Country Office Support For Effective Project Management: Working Paper #3- National Project Directors Manual

8. Will support resource mobilization efforts to increase resources in cases where additional outputs and outcomes are required.

Project Assurance

The UNDP will carry out the **project assurance** role in the project to support the PEB by carrying out objective and independent project oversight and monitoring functions. UNDP will work with PEB, NPD and PM to ensure appropriate project milestones are met and that these are delivered in accordance UNDP programme guidelines and within the allocated budget and AWP

The R2R Advisory Committee (PACRAC)

There will be a **R2R Advisory Committee (R2RAC)** established which will combine the functions of a consultative forum as well as serve as a source of technical advice to the R2R PM and to the PEB. The R2RAC will be made up of representatives of key implementing partners, stakeholders and beneficiaries as well as some individuals and organizations selected in recognition of their particular expertise or interest in the project. Expertise sought will range from institutional, legal, policy development, land use planning, ecosystem services, biodiversity values and vulnerability, community involvement, private sector involvement, capacity building, etc. The R2R PM will attend R2RAC meetings to the extent possible. The R2RAC will meet as required and will regulate its own procedures but it is proposed that the Chair will be selected by consensus and will become an *ex officio* participant at the PEB meetings (see above) to contribute technical advice. In addition to providing advice to the PEB, the R2RAC will also advise the R2R PM, other project personnel and the key Implementing Partners – on request as well as on the R2RAC's own initiative. R2RAC members will not be paid from project funds but their contribution will be recognized as a contribution in-kind.

R2R Project Implementation Unit (PIU)

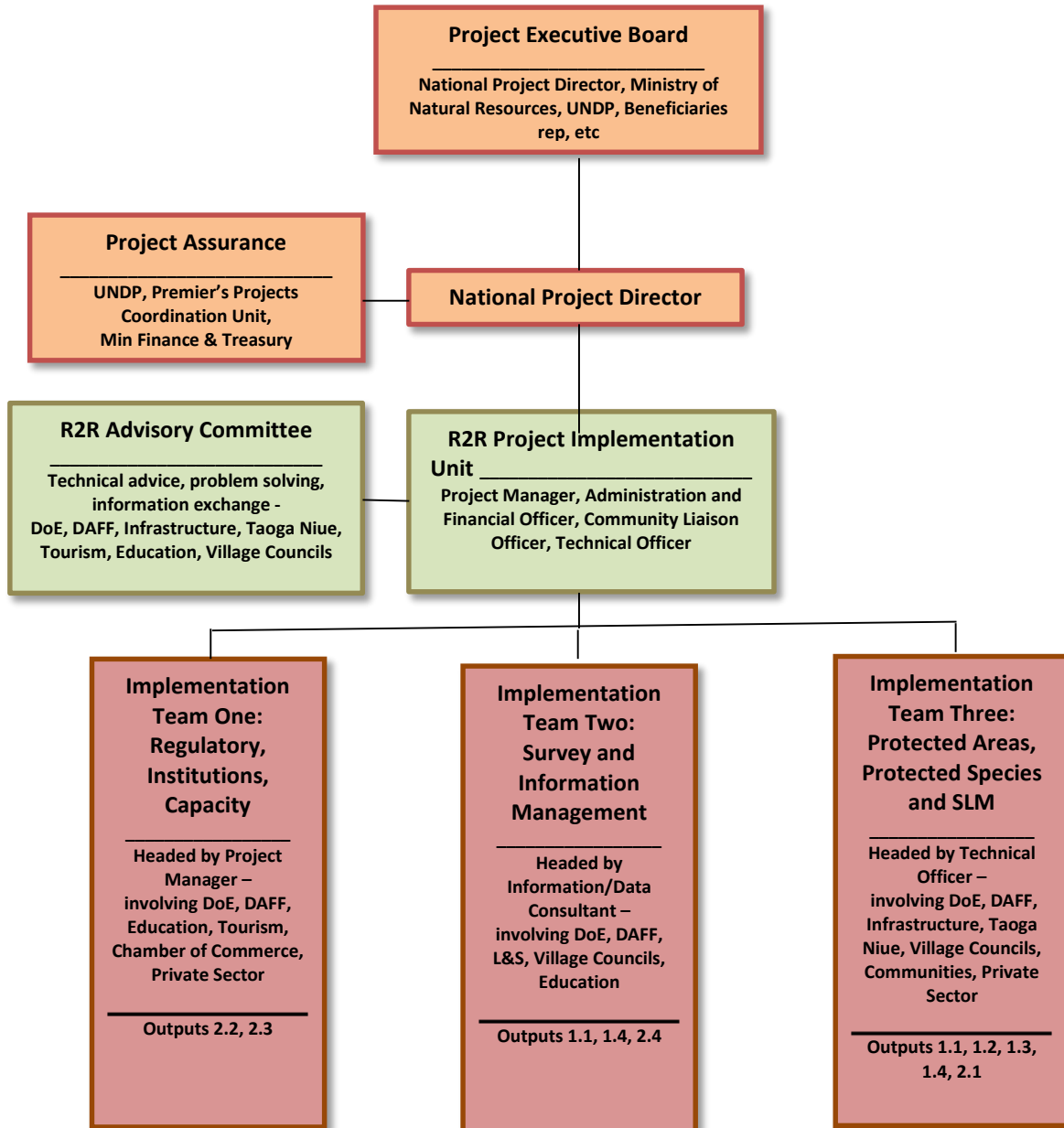
An **R2R Project Implementation Unit (PIU)**⁵⁴ will be set up within the Ministry of Natural Resources and it will be led by the **R2R Project Manager (R2R PM)** who will provide the day-to-day coordination and administration of the project. The R2R PM will be supported by an **Administration and Finance Officer (AFO)**. The PIU will also have a **Community Liaison Officer (CLO)** and one **Technical Officer (TO)** position. All these positions are full time and dedicated positions appointed according to UNDP recruitment procedures but with the full participation of the Government. All other things being equal, and with the ultimate aim of getting the best person for the job, preference may be given to Niuean applicants. Current Public Service employees who are successful in bidding for these positions will need to take leave without pay from their Government position. Project personnel are not seen as employees of the Niue Public Service.

The PIU, while assuming responsibility for the upstream activities, will provide advice, support and coordination for all project activities. The R2R PM will liaise and work closely with all partner institutions to link the project with complementary national programmes and initiatives. The R2R PM is accountable to the PEB for the overall quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The R2R PM will collate the input from the key Implementation Partners and produce Annual Work and Budget Plans to be approved by the PEB at the beginning of each year. These plans will provide the basis for allocating resources to planned activities. The R2R PM will further produce collated quarterly operational reports and Annual Progress Reports (APR/PIR) for submission to the PEB. These reports will summarize the progress made by the project against the expected results, explain any significant variances, detail the necessary adjustments and serve as the main reporting mechanism for monitoring project activities. The R2R PM will be provided with

⁵⁴ The terminology and acronyms used for elements of project implementation arrangements are required to avoid confusion with other bodies in Niue. Terms of Reference for key project personnel are in Annex 2 which also comprises job descriptions for other project personnel

delegated financial responsibility to a level to be determined by the Government in consultation with UNDP.

The PIU will be hosted in premises provided as part of the Government contribution which will comprise office space for four professionals and a Consultants' desk. The PIU will also require access to a meeting/conference room.



The diagram below is a summary of the implementation framework and relationships.

5.2 Stakeholder involvement

Some stakeholders have been associated with the project from very early on and they form the core of implementation partners and their interest has been confirmed through various consultation meetings during project formulation.

As can be seen from the table below, a wide range of stakeholders will be involved in the implementation of the Project. These include relevant departments upstream, as well as Village Councils and local communities at grassroots level. In addition, relevant NGOs, and the private sector will also be involved.

Detailed consultations with the primary stakeholders have been undertaken during the preparation of this Project Document through national and local level consultative meetings. The purpose of these consultations was to evolve consensus on the nature of the project interventions.

In its pursuit of the R2R approach, the project follows a cross-sectoral and participatory approach, requiring the involvement of different stakeholders in implementation at national and local levels. At the Inception Phase of the project, a comprehensive “Stakeholders’ Participation Plan” defining roles and responsibilities of the project partners will be formulated which will include: a mechanism for effective coordination among different stakeholders; a strategy for mobilization and involvement of village councillors, landowners, and other residents, in the preparation and implementation of site-specific activities; a mechanism for involvement of local groups of both men and women for participatory resource assessments and identification of local priorities to inform the surveys and land use planning process; a mechanism for providing technical assistance to land owners and local communities through village councils and contracted NGOs for replication of interventions that have been tested successfully by the project; a system for participatory monitoring and evaluation of natural resources and ecosystem services protection and management practice and the impact of project activities.

The following table comprises stakeholders identified in the PIF stages and augmented during the project formulation phase.

Table 8. Identified stakeholders and their role in project implementation

STAKEHOLDER	ROLE AND/OR RELATIONSHIP WITH THE PROJECT	RELEVANT PROJECT COMPONENT
PRIMARY STAKEHOLDERS		
1) Environment Department (DoE)	The Environment Department was the lead government department for the development of the NBSAP. It also ensures that waste and pollution management are carried out and it also deals with issues of biosafety and invasive species. This department is seen as one of two lead agencies for the implementation of this project.	As a key department of the Ministry of Natural Resources which will serve as Executing Agency, DoE will be involved in work across both Outcomes and particularly under Outputs 1.1, 1.2, 1.4, 2.2, and 2.3
2) Department of Agriculture, Forestry and Fisheries (DAFF)	The department is primarily responsible for ensuring increasing agricultural productivity through agronomic research and extension as well as by supporting livestock rearing activities. Their role also includes promoting sustainable land management and forestry. Its work on marine areas is largely focused on sustainable fisheries, promotion of fish aggregating devices and marine protected areas (MPAs). This department is seen as one of two lead agencies for the implementation of this project.	As a key department of the Ministry of Natural Resources which will serve as Executing Agency, DAFF will be involved in work across both Outcomes and particularly under Outputs 1.1, 1.2, 1.3, 1.4, 2.2 and 2.3
3) Department of 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 is currently supporting the development of sustainable development plans at the village level.	The Department will facilitate the involvement of Village Councils who are key partners at the local level involved in Outputs 1.1, 1.2, 1.3, 1.4, and 2.1
4) Village Councils	The 14 Village Councils are locally elected bodies with a three year term. They are responsible for developing local development plans and their implementation. They are also legally empowered to make local by-laws. They receive a small grant annually from the national government, much of which is spent on beautification of the villages.	

	Normally, each council has five members. The Village Councils are key partners together with DoE and DAFF. The project will empower them to work as equals on project activities and achieve mutual gains.	
5) Tāoga Niue - Culture and Heritage	Tāoga Niue will partner the project so as to ensure that traditional knowledge, cultural traditions and special sites are identified and respected. The project will work closely with Tāoga Niue to ensure that conservation activities complement cultural heritage sites management, particularly around identified traditional village areas, which have been abandoned. The project will work with Tāoga Niue to educate and inform on traditional approaches to natural resources management	In addition to serving as the project's advisor on heritage, tradition and culture, Tāoga Niue will be involved specifically in Outputs 1.1, 1.4, 2.3 and 2.4
6) Education Department/schools	The department will lead in ensuring that the school curriculum in both primary and secondary schools includes modules on the ridge to reef concept for conservation and sustainable use tailored for the Niuean context to raise awareness and to build environmental management as one option for future career development of Niuean students. The Department will also work with the project to involve/ mobilize students in relevant conservation actions such as survey and monitoring	Students will be involved in work under Outputs 1.1 and 1.4, whereas the Department will be involved primarily under Outputs 2.3 and 2.4
7) Ministry of Infrastructure	This Ministry, more specifically The Public Works Department (Water Section) has been involved in promoting integrated water resources management, amongst other activities. Their role in the project will be to ensure that water pollution minimization strategies are put in place and some relevant pollution reduction technologies are demonstrated to reduce pollution of both the underground water lens and marine areas (reefs)	The Ministry will be involved in Outputs 1.3, 1.4, 2.2 and 2.3
8) Justice, Lands & Survey (L&S)	The department plays a critical role to resolve land tenure disputes, and has GIS capabilities and data for mapping, survey, GPS database, etc. These will be important in the creation of protected areas and their effective management. L&S will work with the project in its efforts to set up an Environmental Information Management System.	The main involvement of L&S will be under Outputs 1.1 and 2.2 for land boundaries, and Output 1.4 for data management
9) Niue Tourism Authority	The Tourism Authority is finalizing its Tourism Strategy Plan which aims to increase substantially the number of arrivals over time. The Authority recognizes that the Niue environment (broadly defined) is the drawcard for visitors to the Island and is therefore committed to its protection.	Involved mainly under Outputs 2.2 and 2.3
SECONDARY STAKEHOLDERS		
10) Chamber of Commerce and the private sector	The Niue private sector is somewhat modest in its size, but it is very important in the island's economy. Main components of the private sector include the tourism industry, and the agriculture and fisheries sectors. The project can help the private sector in its efforts to work within the constraints required to maintain the quality of the environment on a sustainable basis. It may be possible to set up initiatives of mutual gain as demonstrations. Working through the Chamber of Commerce and in collaboration with the Tourism Authority, the project will provide capacity building to the private sector particularly for the application of the EIA Process.	Possibly under Output 1.3, but more likely under 2.2
11) Niue Island United Association of Non-Government Organizations (NIUANGO)	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 which 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.	Involvement will be across the spectrum of project scope, but especially under Outputs 1.1, 1.3, 2.1 and 2.4
12) Niue Island Organic Farming Association	The association is promoting organic Vanilla and Noni farming for export as a viable economic alternative to other farming that uses agrochemicals. Their approach could be promoted to additional farmers for sustainable land and environment management to reduce pollution as well as to increase household incomes.	Under Output 1.3
13) University of the South Pacific (USP)	The University of the South Pacific operates a small campus in Niue primarily as a distance learning centre. In addition to its library facilities and mentoring and guidance for students, the campus also has an effective teleconferencing facility. The project may support interested students, including post-graduates, in their research activities.	Under Outputs 2.1 and 2.4

The above table which is the result of extensive discussions and consultations, serves as the draft Stakeholders' Participation Plan. Formal letters of support and cooperation are in Annex 5. The final

Plan will be produced during the Inception Phase by the project team in consultation with stakeholders for approval by the Project Executive Board.

A distinguishing feature of this project is the meaningful involvement of Village Councils and communities in project activities. The following table summarizes such involvement.

Table 9. Involvement of Village Councils and communities in project implementation

INITIATIVES ARISING FROM PROPOSALS BY VILLAGE COUNCILS			
PROPOSAL	VILLAGE/S	OUTPUT	NOTES
Peka Species Recovery Plan	Makefu	1.3	The Plan will be coordinated by DoE, implemented on the ground by the 3 VCs on contracts issued by PIU
	Tuapa		
	Mutalau		
Western Reef Conservation Area	Hikutuvake	1.1 (iii) 1.2 (c) 1.3 2.1 2.4 (iii)	Conservation Area will run the entire length of western reef, inland to road; with buffer zone from road across Alofi Terrace. Activities include survey, land use plan, management plan (with targets and priorities), implementation of protection activities (many as proposed by VCs), interpretation /information, monitoring, etc. Activities will be coordinated by DAFF, in harmony with Coastal Management Plan. Many activities will be carried out by VCs (mostly on contract with PIU)
	Namukulu		
	Tuapa		
	Makefu		
	Alofi North		
	Alofi South		
	Tamakautoga		
Avatele			
Five Villages Conservation Area	Tuapa	1.1 (i) 1.2 (a) 1.3 2.1	Starting from confluence of 5 villages and extending into Village territory as far as requested by VCs. Coordinated by MoE, carried out by Working Groups and experts contracted by PIU, as well as VCs contracted by PIU. Activities include - Survey, land use plan at District level, identify tapu areas, Conservation Area Management Plan. Implementation of various activities (species management, invasives, interpretation /information, tracks, etc) by Departments and VCs. Monitoring.
	Makefu		
	Lakepa		
	Alofi		
	Mutalau		
Huvalu Conservation Area Management	Hakupu	1.2	Review of Management Plan, updating. Activities on Invasive species, tracks, interpretation /information
	Liku	2.4 (iii)	
Agro-biodiversity/Organic farming	Mutalau	1.3	Coordinated by DAFF – noni culture, conservation agriculture, non-tillage, heritage plants e.g. coconuts. Non-timber forest products
	Tuapa		
	Makefu		
INITIATIVES ARISING FROM PROPOSALS BY DEPARTMENTS WITH IMPLICATIONS AT VILLAGE LEVEL			
INITIATIVE	VILLAGE/S	OUTPUT	NOTES
Reef Water Quality improvements	Tamakautoga Avatele Others	1.3	By Infrastructure working with VCs
Uga Species Management Plan	Most villages	1.3	By DAFF
Domestic Wastewater Management	Most villages		By DoE with Infrastructure
Hospital Wastewater Treatment System	Most villages		By Infrastructure with DoH
INITIATIVES INVOLVING ALL VILLAGES			
INITIATIVE	OUTPUT	NOTES	
Comprehensive Ecosystem and Heritage Survey	1.1	PIU through contracts	
Comprehensive Land Use Plan on District basis	1.1	PIU through contracts with collaboration from L&S	
Environmental Information Management System	1.4 (i)	New Unit in Min Nat Res	
Environmental Monitoring System	1.4 (ii)	New Unit in Min Nat Res. Collaboration with Dept of Educ and all VCs	
Mainstreaming Biodiversity and Environment Protection into Village Development Plans	1.2 2.1	PIU will assist each willing VC to either review their existing Village Development Plan, or produce a new one.	

6 PROJECT MONITORING AND EVALUATION

The project will be monitored through the following M&E activities covered by a budget as provided in the table below. However, M&E expenditure is not identified specifically in the budget but covered under various items in project management costs.

Project Inception Workshop

A Project Inception Workshop will be held within the first two months of project start with the participation of those with assigned roles in the project organizational structure, UNDP MCO, Village Councils and community representatives, technical and policy advisors from various government entities, as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first Annual Work Plan.

The Inception Workshop will address a number of key issues including:

- a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP MCO and UNDP-BRH staff *vis à vis* the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.
- b) Based on the project Strategic Results Framework (the Logframe) and the relevant GEF Tracking Tool, finalize the first Annual Work Plan. Review and agree on the Indicators, Baselines, Targets and their means of verification, and recheck Assumptions and Risks.
- c) Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget will be agreed and scheduled.
- d) Discuss financial reporting procedures and obligations, and arrangements for annual audit.
- e) Plan and schedule Project Executive Board meetings. Roles and responsibilities of all project organisational structures will be clarified and meetings planned. The first Project Executive Board meeting will be held within the first 12 months following the Inception Workshop.

The Inception Workshop Report is a key reference document and will be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Quarterly Monitoring

- Progress will be monitored in the UNDP Enhanced Results Based Management Platform.
- Based on the initial risk analysis submitted, the risk log will be regularly updated in ATLAS. Risks become critical when the impact and probability are high. As this is a UNDP GEF project, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical).
- Based on the information recorded in ATLAS, a Project Progress Report (PPR) can be generated in the Executive Snapshot.
- Other ATLAS logs can be used to monitor issues, lessons learned etc... The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

Annual Reviews

Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (year ending 30 June). The APR/PIR combines both UNDP and GEF reporting requirements.

The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative)
- Project outputs delivered per project outcome (annual).
- Lesson learned/good practice.
- AWP and other expenditure reports
- Risk and adaptive management
- ATLAS QPR
- Portfolio level indicators (*i.e.* GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

Periodic Monitoring through site visits

UNDP MCO and the UNDP BRH will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess at first hand project progress. Other members of the Project Executive Board may also join these visits. A Field Visit Report/BTOR will be prepared by the MCO and UNDP BRH and will be circulated no less than one month after the visit to the project team and Project Executive Board members.

The GEF Portfolio Monitoring and Tracking Tool

Tracking tools are an important component of projects submitted to the GEF and are invaluable for monitoring results of GEF operations in the various focal areas, including progress towards achieving the GEF mandate on global environmental benefits. Annex 6 contains the first completed Tracking Tool for this project. As noted below, it will be repeated at the time of the Mid-Term Evaluation and again at the Terminal Evaluation.

Mid-term Review

The project will undergo an independent Mid-Term Review at the mid-point of project implementation (around 30 months since inception). The Mid-Term Review will determine progress being made toward the achievement of outcomes and will identify course corrections if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project. The Terms of Reference for this Mid-Term Review will be prepared by the UNDP MCO based on guidance from the Regional Coordinating Unit and UNDP-GEF. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the [UNDP Evaluation Office Evaluation Resource Center \(ERC\)](#).

As noted above, the Tracking Tool will also be completed during the mid-term review.

Terminal Evaluation

An independent Terminal Evaluation will take place three months prior to the final Project Executive Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP MCO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the [UNDP Evaluation Office Evaluation Resource Center \(ERC\)](#).

As noted above, the Tracking Tool will be completed during the terminal evaluation.

During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results. It is desirable for the Project Terminal Report to be made available to the independent Terminal Evaluation.

Audit Clause

The project will be audited in accordance with UNDP Financial Regulations and Rules and Audit policies.

Learning and knowledge sharing

Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums, in particular the R2R Regional Programme and through the GEF's IW:LEARN portfolio learning programme. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Finally, there will be a two-way flow of information between this project and other projects with a similar focus.

Communications and visibility requirements

Compliance is required with UNDP's Branding Guidelines as applied in Niue. These can be accessed at <http://intra.undp.org/coa/branding.shtml>, and specific guidelines on UNDP logo use can be accessed at: <http://intra.undp.org/branding/useOfLogo.html>. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects need to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo.

The [GEF logo](http://www.thegef.org/gef/GEF_logo) can be accessed at: http://www.thegef.org/gef/GEF_logo. The [UNDP logo](#) can be accessed at <http://intra.undp.org/coa/branding.shtml>.

Compliance is also required with the GEF's Communication and Visibility Guidelines as agreed to be applied in Niue. They can be accessed at: http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.p df. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

M&E Workplan and Budget

The following M&E Plan and Budget will be reviewed during the Inception Workshop, adjusted as necessary and adopted by the Project Executive Board.

Table 10. Preliminary monitoring plan

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Inception Workshop and Report	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP MCO, UNDP GEF 	Indicative cost: 10,000	Within first two months of project start up
Measurement of Means of Verification of project results.	<ul style="list-style-type: none"> ▪ UNDP GEF RTA/R2R PM will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members. 	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required
Measurement of Means of Verification for Project Progress on <i>output and implementation</i>	<ul style="list-style-type: none"> ▪ Oversight by R2R PM ▪ Project team 	To be determined as part of the Annual Work Plan's preparation.	Annually prior to APR/PIR and to the definition of annual work plans
APR/PIR	<ul style="list-style-type: none"> ▪ R2R PM and team ▪ UNDP MCO ▪ UNDP RTA ▪ UNDP EEG 	None	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> ▪ R2R PM and team 	None	Quarterly
Mid-term Review	<ul style="list-style-type: none"> ▪ R2R PM and team ▪ UNDP MCO ▪ UNDP RCU ▪ External Consultants (i.e. evaluation team) 	Indicative cost: 20,000	At the mid-point of project implementation.
Final Evaluation	<ul style="list-style-type: none"> ▪ R2R PM and team, ▪ UNDP MCO ▪ UNDP RCU ▪ External Consultants (i.e. evaluation team) 	Indicative cost : 24,000	At least three months before the end of project implementation
Project Terminal Report	<ul style="list-style-type: none"> ▪ R2R PM and team ▪ UNDP MCO ▪ local consultant 	0	At least three months before the end of the project
Project Audits and HACT Assurance	<ul style="list-style-type: none"> ▪ UNDP MCO ▪ Project Team 	30,000 (Audit) 5,000 (HACT)	Following UNDP finance regulations and rules
Visits to field sites	<ul style="list-style-type: none"> ▪ UNDP MCO ▪ UNDP RCU (as appropriate) ▪ Government representatives 	For GEF supported projects, paid from IA fees and operational budget	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US\$ 89,000	

7 LEGAL CONTEXT

This document together with the Sub-Regional Programme Document (SRPD) signed by the Government and UNDP which is incorporated by reference constitute together the instrument envisaged in the Supplemental Provisions to the Project Document, attached hereto.

Consistent with the above Supplemental Provisions, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

The implementing partner shall:

Put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried out; assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml . This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document.