





United Nations Development Programme Country: NAURU PROJECT DOCUMENT¹

Project Title: Implementing a "Ridge to Reef" approach to protect biodiversity and ecosystem functions in Nauru (R2R Nauru).

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 Environment and Sustainable Development Primary 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).

Expected UNDAF Outcome(s): Nauru's draft 2013-2017 UNDAF: National and local capacities ably respond to climate change and natural disasters, and sustainably manage and coordinate water resources. UNDP Sub-Regional Programme Document for Pacific Island Countries 2013-2017: Environmental management, climate change and disaster risk management.

Implementing Partner: Environment Division, Department of Commerce, Industry & Environment (DCIE).

Responsible Parties: Nauru Fisheries & Marine Resources Authority (NFMRA); and Environment Division, Department of Commerce, Industry & Environment (DCIE).

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

Brief Description (1/2 page)

The Nauru Ridge to Reef (R2R) GEF Project has been designed to develop, establish and implement a government and community partnership approach to increase knowledge for better management of natural resources and ecosystem services for the entire Island of Nauru (South Pacific) through innovative integrated land, water, biodiversity, coastal and marine management approaches thereby protecting and increasing livelihoods opportunities, food security, and enhancing climate resilience. These goals will be achieved by building Nauru's capacity to implement a comprehensive cross sectorial regime for sustainable land, freshwater water, solid waste, coastal and marine area management and ensuring the initiatives are mainstreamed and established into all levels of decision making including government policy, laws and regulations and community plans.

The project is part of the broader Pacific Regional Program on "Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods". This program is designed to build stronger linkages between sustainable development and management of freshwater ecosystems (e.g. ground water systems for Nauru) and coastal/marine areas and promotes the implementation of holistic, integrated management of natural resources.

The goals of this Nauru R2R Project will be achieved through four specific project level outcomes interventions that are directly interconnected at national and site based community (district) levels. These include (i) Improved management effectiveness of new marine conservation areas, (ii) Integrated landscape management practices adopted by local communities living within the 'bottom-side' and applicable 'ridge', and 'topside' areas not covered by mining, (iii) Biodiversity conservation and Sustainable Land Management (SLM) mainstreamed in policy and regulatory frameworks, and (iv) Knowledge Management.

To achieve integrated management of terrestrial and marine systems in Nauru the project will build upon the participatory process facilitated in the development of the R2R Program Framework Document (PFD) which included extensive stakeholder dialogues in the development, and will implement innovative and creative project activities to address critical knowledge gaps in environmental and ecosystem services. This project proposes a long-term solution by implementing a ridge-to-reef approach that combines functional, representative and sustainable national system of coastal and marine managed areas that are integrated with the adoption of appropriate SLM practices in adjoining / upstream watersheds. By also improving government capacity, the proposed project will effectively reduce land degradation and enhance protection for marine and coastal biodiversity and habitats, whilst improving coastal livelihoods and creating lasting management of Nauru's natural resources.

The total project cost of the Nauru R2R Project is US\$11,051,358 and consists of a GEF contribution of **US\$2,644,358** and Co-financing of **US\$ 8,407,000**. The GEF funding component is derived from three focal areas including Biodiversity (BD -2) US\$1,789,829, Land Degradation (LD-3) US\$699,429 and International Waters (IW-3) US\$155,100 with the corresponding co financing for each focal area including (BD-2), US\$2,128,000, (LD-3) US\$2,067,000 and (IW-3) US\$4,212,000, respectively.

 Programme Period:
 2013 -2017

 Atlas Award ID:
 00084678

 Project ID:
 00092583

 PIMS #
 5218

 Start date:
 1 Feb 2015

 End Date
 31 Jan 2019

Management Arrangements: NIM

PAC Meeting Date: 19 November 2014

Total resources required US\$11,051,358 (total project funds)

Total allocated resources:

UNDP: U\$\$40,000
 GEF: U\$\$2,644,358
 Government (DCIE): U\$\$6,253,000
 Government (NFMRA): U\$\$2,114,000
 Total U\$\$ 11,051,358

Agreed by (Government):	
	Date/Month/Year
Agreed by (Executing Entity/Implementing Partner):	
	Date/Month/Year
Agreed by (UNDP):	
	Date/Month/Year

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List of Acronyms

AusAID Australian Agency for International Development

BD Biodiversity

BIORAP Rapid Biodiversity Assessment
CCD Convention to Combat Desertification
CBD Convention on Biological Diversity
CBMMA Community Based Managed Marine Area

CBO Community Based Organisation
DCC District Community Council
CPUE Catch Per Unit Effort
CSO Civil Society Organisation
DoA Division of Agriculture

DCIE Department of Commerce, Industry and Environment

EA Executive Agency

EEZ Exclusive Economic Zone

ESSP Environment & Social Screening Procedure

EU European Union

FAD Fish Aggregaing Device

FAO Food and Agricultural Organisation

FCCC Framework Convention on Climate Change

FSM Federated States of Micronesia

GCCA: PSIS Global Climate Change Alliance: Pacific Small Island Sates

GEF Global Environment Facility
GIS Global Information System
HDI Human Development Index

Ha Hectares

ICM Integrated Coastal Management IIB Integrated Island Biodiversity

IW International Waters

IWM Integrated Watershed Management

IWRM Integrated Water Resources Management
 IPPC The International Plant Protection Convention
 IUCN International Union for the Conservation of Nature
 JICA Japanese International Cooperation Agency

KAPB's Knowledge levels, Attitudes, Practices and Behaviours

Km Kilometres

Km² Kilometres squared LD Land Degradation

LMMA Locally Managed Marine Area

M & E Monitoring & Evaluation

MDG Millennium Development Goals

MoH Ministry of Health

MOU Memorandum of Understanding

NAP National Action Programme To Combat Desertification/Land Degradation and To

Mitigate Against Drought.

NACRDFS Nauru Australian Cooperation Rehabilitation and Development Feasibility Study.

NBSAP National Biodiversity Strategy and Action Plan

NCC Nauru Community Council

NECC National Environmental Coordinating Committee

NFMRA National Fisheries and Marine Resources Authority

NGO Non-Governmental Organization
NIANGO Nauru Island Association of NGOs
NPC Nauru Phosphate Commission
NRC Nauru Rehabilitation Corporation

NSDS National Sustainable Development Strategy NWSHP National Water, Sanitation & Hygiene Policy

PAD Planning & Aid Division

PCC Project Coordinating Committee PFD Program Framework Document

PICs Pacific Island Countries

PICAP Pacific Island Coastal Community Adaptation Project

PIF Project Identification Form

PNG Papua New Guinea
PPG Project Preparatory Grant

PROC Fish Pacific Regional Oceanic and Coastal Fisheries Development Programme

PRF Project Results Framework
PSA Public Service Announcements
RMI Republic of the Marshall Islands.

SG Strategic Goals

SIDS Small Island Development States
SLM Sustainable Land Management
SPC Secretariat of the Pacific Community

SPREP Secretariat of the Pacific Regional Environment Programme

SRF Strategic Results Framework

STAR System for Transparent Allocation of Resources

Tbd To be determined TOR Terms of Reference R2R Ridge to Reef

UNCLOS United Nations Convention on the Law of the Sea UNDAF United Nations Development Assistance Framework

UNDP United Nations Development Programme

UNDP- MCO UNDP Multi-Country Office, Fiji

UNEP United Nations Environment Programme.

1 Background and situation analysis

1.1 Introduction

- 1. The project is developed in line with the goal of the Pacific Islands National Priorities Multi-Focal Area 'Ridge-to-Reef' (R2R) Program 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 contributes to poverty reduction, sustainable livelihoods and climate resilience".
- 2. To achieve the overall goal, each of the Pacific Islands countries is adopting specific elements of the R2R approach to address national priorities and development needs while delivering global environmental benefits in line with Global Environment Facility (GEF) focal area strategies. The Pacific Islands R2R program has been designed by the Pacific Island countries with assistance from UNDP, FAO and UNEP to strategically use their GEF System to support the Transparent Allocation of Resources (STAR) allocations from the fifth GEF replenishment to meet both their national priorities and adhere to relevant GEF focal area objectives, outcomes, indicators and outputs.
- 3. Under the Pacific Islands R2R Program framework, Nauru will undertake this multi-sectorial R2R project that builds on existing government and community systems and initiatives by addressing specific key interventions that provide direct positive support and capacity building skills to enable outcomes to be achieved. The goals of the Nauru R2R will be achieved through four specific project level outcomes that are directly interconnected at national and community (district) levels. These include (i) Improved management effectiveness of new Marine Conservation Areas, (ii) Integrated landscape management practices adopted by local communities living within the 'bottom-side' and applicable 'ridge', and 'topside' areas not covered by mining, (iii) Biodiversity conservation and sustainable land management mainstreamed in policy and regulatory frameworks, and (iv) Knowledge management.
- 4. This project is designed to build stronger linkages between sustainable development and management of freshwater ecosystems (e.g. ground water systems for Nauru) and coastal/marine areas to promote the implementation of a holistic, integrated management of the nation's natural resources.

1.2 Environmental and Developmental Context

- 5. The Micronesian small island state of Nauru (Figure 1) is located in the dry belt of the equatorial oceanic zone and is bounded by the Republic of Kiribati in the east, the Republic of the Marshall Islands (RMI) in the northeast (700km), the Federated States of Micronesia (FSM) in the northwest (700km), Papua New Guinea (PNG) in the west (1600 km), the Solomon Island in the southwest (1200 km), Vanuatu in the south (1300 km) and Fiji (2600 km) to the southeast.
- 6. Nauru is a raised coral limestone island and is one of the smallest independent nations in the world. It is composed of only one island which is 21 km² in area, roughly 6 km by 4 km in length and width respectively, has a coastline of 30 km, possesses an Exclusive Economic Zone (EEZ) of 309,888km² and is located 41 km south of the equator (0°32'02.5 South and 166°55'57.8 East) and is divided up into 14 districts of varying sizes and number of inhabitants.

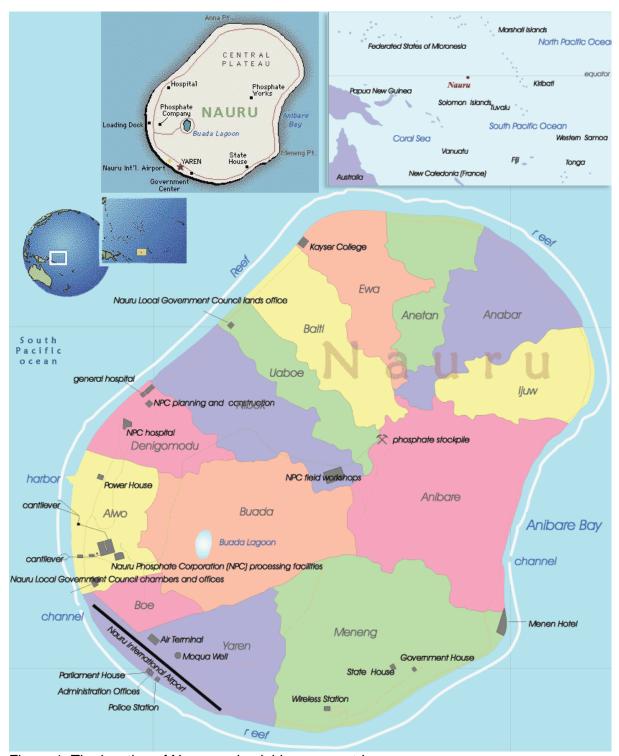


Figure 1. The location of Nauru and neighbours countries.

7. Nauru is surrounded by a fringing coral reef ranging from 120m to 300m wide, which drops away sharply on the seaward edge to a depth of approximately 4,000m. The coastal plain is a zone of sandy or rocky beach on the seaward edge, and a beach ridge or fore-dune, behind which is either relatively flat ground or, in some places, low-lying depressions or small lagoons filled by brackish water (e.g. Buada lagoon) where the surface level is below the water table (freshwater lens). The raised

central plateau (Topside) generally lies between 20-45 meters above sea level with occasional elevations of up to 50-70m. The central plateau comprises a matrix of coral-limestone pinnacles and limestone outcrops, between which lie extensive deposits of soil and high-grade phosphate rock covering approximately 1600 ha (over 70% of the island). This area has been extensively mined with the ecosystem drastically altered (SPC, 2005 and Fenner, 2013).

- 8. Due to the long history of phosphate mining the "Top side" of the island, at least 70 percent of the island is deemed uninhabitable and unsuitable for any kind of livelihood. The majority of Nauru's population is concentrated along the coast with many settlements along the coastline resulting in a population density of over 1,500 persons per km² (Nauru Bureau of Statistics, 2013). This has considerable implications and consequences for sustainable land and water management, in terms of the availability and suitability of land and water for future settlement, health and safety, biodiversity conservation (including marine ecosystem) and the possible effects of climate change. The long term management of the islands remaining terrestrial resources, the rehabilitation of previous degraded land scapes especially those associated with mining and sustainable use of coastal resources are paramount to improvements in quality of life of Nauran's.
- 9. Nauruans had lived a sustainable lifestyle and in tune with the island environment for some three thousand years until the nineteenth century when European contact was made and subsequently, the island and distinct culture became seriously exploited and degraded. Coconut monoculture of the island during the colonial period, followed by widespread destruction and displacement of people during World War II, and almost a century of open-cast phosphate mining has now made Nauru one of the most environmentally degraded areas on earth. There is now serious breakdown of the Nauru physical environment as well as the socio-economic wellbeing of its people (Viviani, 1970 and Thaman et. al., 2008).
- 10. In 2011 the population of Nauru was 10,084 (5,105 males and 4,979 females) (Bureau of Statistics, 2013), with an average annual growth rate of 1.8. It is however noted in the census summary, that the current population growth rate is higher than reflected as the Nauru fertility rate is increasing and should therefore result in the nation's growth rate of around 2.8 percent a year translating to an increase of 300 individuals a year. Between the years of 2007 2010 350 births were recorded each year. This was a considerable increase on the rate recorded for the years 2002-2004 when the island was in an economic crisis.
- 11. Life expectancies for Nauruan males and females are 57.5 and 63.2 years respectively this is roughly twenty year less than New Zealand and Australia. Life style diseases resulting in poor health are significant factors dictating these figures. Literacy levels for both genders are high with just under 92 percent of all Nauruan older than 15 years old possessing a secondary education. However, roughly 23 percent of the adult population were categorised as unemployed with 21% and 26% respectively for males and females and a high youth unemployment rate of 70% for 15-19 year old and 36% for 20-24 year olds (Bureau of Statistics, 2013).
- 12. Economic data for Nauru is not current however it is estimated that in 2011 the Gross Domestic product (GPD) was US\$72 million with a GDP per capita of US\$6,954 and GDP growth for 2010-2011 was 14 percent. The GDP for the main sectors of the economy in 2009 includes 33% Industry (mining), 6.1 % for Agriculture and 60.8% for services with combined exports earning in 2012 55.7 million and imports of 29 million.
- 13. Nauru has had mixed results in achieving the Millennium Development Goal (MDG's) targets, with poor performance indicators recorded for environmental sustainability and management (MGD 7) (Pacific Island Forum Secretariat, 2013). The government sectors need to do more to integrate environmental concerns into their planning including realistic monitoring and awareness to ensure objectives can be met. A summary of MDG targets are provided in Table 1 below;

Table 1. A summary of Nauru MDG target ratings for 2013²

Millennium	Status	Comment
Development Goal		
MDG 1a - Poverty Reduction	Not on track	Constrained due to nation's low economic growth, job opportunities, and rising living costs. Recent improvements due to renewed mining and economic partnership with Australia – Asylum Seekers.
MDG 1b – Employment	Not on track	Yet to attain full and productive employment for adults.
MDG 1c - Malnutrition	Mixed progress	Malnutrition and underweight mixed results however over weight and obesity more of an issue with children and adults alike.
MDG 2 – Primary Education	On track	Large improvement over the past several years.
MDG 3 – Gender Parity Education	On track	Equal number of genders educated at all levels. Nauru follows regional low trends with regards to empowerment of women, women in parliament (none in 2011), and levels of domestic violence.
MDG 4 – Reducing Child Mortality.	Mixed progress	Teenage pregnancies, education, and access to clean water and proper sanitation remain issues.
MDG 5a – Maternal Health	Mixed progress	High level of birth attendance
MDG 5b – Reproductive Health	Mixed progress	Low level of reproductive health and education especially in the young.
MDG 6a - HIV	Not Applicable	No reported cases of HIV.
MDG 6b – HIV Treatment	Not Applicable	
MDG 6c - Malaria	Not Applicable	No reported cases of malaria.
MDG 6d – Tuberculosis	On track	Low number of reported cases, treatment working.
MDG 7a & b– Environmental Sustainability	Not on Track	Poor performance linked to adverse environmental impact on resource extraction (mining) resulting in large areas of degraded landscape.
MDG 7c – Drinking Water & sanitation	Mixed progress	Improvement over past decade in water quality however yet to reach suitable global standards. Sanitation levels need to be improved.
MDG 7d – Informal Settlement	Not Applicable	No information available.

1.3 Sectoral, institutional, and policy context

1.3.1 Institutional setting

- 14. The Department of Commerce, Industries and Environment (DCIE) is the lead agency in the planning and administration related to agriculture, livestock development, tourism and environment. In addition, it is indirectly responsible for the affairs of the Nauru Phosphate Commission (NPC) through its mandate in the general planning and development of all new (non-phosphate-related) and alternative industries. It is also responsible for the initial formulation of the Nauru Rehabilitation Authority under the Nauru Australian Cooperation Rehabilitation and Development Feasibility Study (NACRDFS).
- 15. To strengthen its environmental capabilities, DCIE established an Environment Division in 1995. This Division is responsible for coordinating environmental management for the public and

² Data sourced from Pacific Island Forum Secretariat, 2013

private sectors and is the point of contact for international activities and programmes for the environmental sector.

- 16. The Nauru Fisheries and Marine Resources Authority (NFMRA) is responsible for ensuring sustainable fisheries towards aquatic food security to ensure that Nauruan's are able to catch or grow sufficient fish to maintain healthy nutrition. NFMRA is also responsible for maximizing economic return to Nauru from commercial fishing in Nauru's EEZ. NFMRA is an Authority and has legislation to guide and enforce the protection of Nauru's marine resources.
- 17. The Planning and Aid Division (PAD) was established under the Finance Department to mainstream and harmonize development projects and planning in all sectors of government. The PAD overseas the implementation of the *National Sustainable Development Strategy to 2025* (NSDS) and coordinates all donor funded projects contributing to the NSDS and links bilateral partners and government entities to harmonize development projects.
- 18. The *National Environmental Coordinating Committee* (NECC) has been established to endorse and guide national environment projects to ensure that they are coordinated and completed on time. The project will strengthen this committee.
- 19. The *Nauru Community Council* (NCC) has been active over the last several years as each 14 districts have representatives on the NCC. In addition, each of the 14 districts have their own District community council that represents the members of each community. The district councils are organized and active as important national issues are often dealt with in the 14 councils, which include meetings of council leaders to meet and discuss important national issues. The Government of Nauru works in partnership with the NCC to implement development projects requiring community buy-in and ownership. The NCC is a major stakeholder in the R2R project, particularly the CCs associated with the five project pilot districts and will play a key role in the delivery of the project outcomes, activities and community awareness.
- 20. Non-Government Organisations (NGOs) play an important role in development in Nauru. The Nauru Island Association of Non-Government Organization (NIANGO) is the peak body for NGOs comprising Church Groups, Women's Group, Youth Groups, Life Skills Groups (i.e. fishing), and cultural groups.

1.3.2 International setting

21. Nauru is signatory to a number (Table 2) of international conventions, treaties, agreements and Memorandum of Understanding (MOU's) that relate to terrestrial, coastal and marine species, habitats and environmental issues which signify the interest in the protection of global and Pacific environments for the benefit of future generations. Three of the most relevant environmental conventions directly related to the Nauru R2R project include Nauru's signatory to the United Nations Convention on Biological Diversity (CBD) in 1993, Framework Convention on Climate Change (FCCC) in 1992 and the Convention to Combat Desertification (CCD) in 1998.

Convention/Agreement	Ratified
The International Plant Protection Convention (IPPC)	1951
Treaty on the Non-Proliferation of Nuclear Weapons	1970
Convention on the Prevention of Marine Pollution by dumping of Waste and other	1972
Matter.	
South Pacific Forum Fisheries Agency Convention	1979
Party to the Nauru Agreement	1982
Palau Arrangement	1992
United Nations Framework Convention on Climate Change (FCCC)	1992
United Nations Convention on Biological Diversity (CBD)	1993

Convention/Agreement	Ratified
FSM Arrangement	1994
Kyoto Protocol to the United Nations Framework Convention on Climate Change	2001
United Nations Convention to Combat Desertification (UNCCD)	1998
United Nations Convention on the Law of the Sea (UNCLOS)	1996
Agreement on Straddling Fish Stocks and Highly Migratory Species	1997
Convention of the Protection of Natural Resources and Environment of the South Pacific Region and related Protocols.	1995
Convention for the Prohibition of fishing with long driftnets in the South Pacific (Wellington Convention).	1992
Convention on Hazardous and Toxic Wastes (Waigani Convention)	Signed 1995, but not ratified
UNESCO member	1996
United Nations Charter	1999
Cartagena Protocol on Biosafety to the Convention on Biological Diversity	2001
Convention to Wetlands of International Importance especially as Waterfowl habitats (RAMSAR)	Not signed
Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)	Not signed
Conservation on Migratory Species (CMS) of Wild Animals	Not signed
The Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal	2001 accession
Stockholm Convention for the Persistent Organic Pollutants (POPs)	2002
Vienna Convention for the protection of the Ozone Layer, Vienna, 22 March 1985	2001
Montreal Protocol on Substance that Deplete the Ozone Layer, Montreal, 16 September 1987.	2001
London Amendment to the Montreal Protocol, London, 29 June 1990.	2004
Copenhagen Amendment to the Montreal Protocol, Copenhagen, 25 November, 1992	2004
Beijing Amendment to The Montreal Protocol, Beijing 3 December 1999	2007

Table 2: A summary of the international conventions, treaties, agreements, and MOU's Nauru is a signatory related to biodiversity and resource management.

1.3.3 Legislative setting

- 22. National policies and regulations with relevant provisions to biodiversity conservation and protection were developed as early as the 1930s. These include recent environmental policies for climate, water, sustainable land management, renewable energy and biodiversity with both direct and indirect relevance to conservation and sustainable use of biodiversity, and also a host of legislations to compliment and enforce such polices. Figure 1 provides a synopsis of some of the key legislations and their relevance to biodiversity management in the country. Figure 2 lists other related national legislations as well as the key international agreements Nauru has ratified which have relevant conservation provisions.
- 23. The Wild Birds Preservation Ordinance, 1937, prohibits the taking of frigate-birds without permission, effectively provides a year-round closed season for "magpies, snipe, quail, white noddies and etsirer (Nauru canary)", and a closed season from 1 August to 31 October for the black noddies. The Lands Act of 1976 makes provision for "the leasing of land for the purposes of the phosphate industry and other public purposes, and for the removal of trees, crops, soil and sand and the payment of compensation and other moneys". Section 8, paragraph 3 states that "The Corporation shall be liable to rehabilitate any land from which phosphate is mined... if required by the cabinet by notice in writing to rehabilitate such land". Compensation is also prescribed when certain culturally important trees and vegetation are removed. The Marine Resources Act of 1978 is designed to regulate the fishing industry, both inshore and within the 200-mile EEZ.

24. The Fisheries regulations of the Marine Resources Act 1978 prohibits some fishing methods such as spear-fishing and driftnet fishing, the use of scuba and the taking of marine mammals. The regulation also stipulates minimum sizes for rock lobster and octopus, minimum length for turban shells, blue-tail mullet, topsail drummer and rainbow runner, and minimum size for the coconut crab. The *Litter Prohibition Act* of 1983 allows for fines of up to \$300 for the offence of littering.

Legislation	Relevant Purpose	Relevance to Biodiversity	Regulating Agency
Nauruan Antiquities Ordinance, 1935	Preservation of items and materials of ethnological, anthropological, historical or scientific value	Management of Nauru's biogenetic resources	Department of Justice.
Wild Birds Preservation Ordinance, 1937	Prohibitions and seasonal catching seabirds and protection of land birds.	Bird species conservation and management	Department of Justice.
Public Health Ordinance, 1925, Ammended1967	The promotion of environmental health.	Promotion of healthy environments and control of pollution of the environment.	Department of Health and Medical Services
Land Act 1976	Rehabilitation of mined lands and restoration of natural vegetation	Protection and restoration of terrestrial habitats.	Department of Lands
Marine Resource Act 1978	Regulation of inshore and offshore fishing and limits to fish & shellfish catches.	Conservation and sustainable use of marine species and habitats	Fisheries & Marine Resources Authority
Animals Act 1982	Regulation for dogs and the prohibition of live animal imports.	Prevention of animal invasive species introductions and impacts	Department of Customs & Police Department
Litter Prohibition Act 1983	Regulation prohibitions and penalties against illegal littering	Prevention of waste and pollution disposal into natural habitats	Police Department

Figure 2: National legislation with provisions for biodiversity management (Source: Government of Nauru, NBSAP 2013)

Nauru Legislations	International Agreements Nauru has ratified
1) Aerodrome(Acquisition	1) The International Plant Protection Convention, 1951
of Land)Ordinance	2) Treaty on the Non-Proliferation of Nuclear Weapons, 1970
2) Clearing of Lands	3) Convention on the Prevention of Marine Pollution by dumping of Waste and other
Amendment Ordinance	Matter, 1972
3) Dog Importation	4) South Pacific Forum Fisheries Agency Convention, 1979
Prohibition Ordinance	5) United Nations Convention on the Law of the Sea, 1982
4) Nauru Royalties Trust	6) Convention for the Protection of the Ozone Layer, 1985
Ordinance	7) South Pacific Nuclear Free Zone Treaty, 1985
5) Nauru Phosphate	8) Convention for the Protection of the Natural Resources and Environment of the South
Agreement Ordinance	Pacific
6) Roads Maintenance	Region, 1987
Ordinance	9) Protocol for the Prevention of Pollution of the South Pacific Region by Dumping, 1986
7) Sale and Purchase of	10) Protocol Concerning Cooperation in Combating Pollution Emergencies in the South
Copra Ordinance	Pacific Region, 1987
8) Salvage of Derelict	11) Convention for the Prohibition of Fishing and Long Driftnets in the South Pacific, 1989
Wreck Act	12) United Nations Framework Convention on Climate Change, 1992
9) Sanitation Inspectors	13) Convention on Conservation of Biological Diversity, 1992
Ordinance	14) Convention to Ban the Importation into Forum Island Countries of Hazardous and
	Radioactive Wastes and to control the Trans boundary Movement and Management of
	Hazardous Wastes in the South Pacific Region, 1995

Figure 3: Other Relevant National Environmental Legislations & International Agreements for Biodiversity work in Nauru. (Source: Government of Nauru, NBSAP 2013)

1.3.4 Resources of Nauru

1.3.4.1 Marine Resources of Nauru

- 25. Nauru has an open marine tenure system that allows anyone to fish the inshore waters (high water mark to 12 nautical miles offshore) and is subsequently managed by the national government. Historically and currently, communities claim some authority (varies between districts) over adjacent community marine and coastal areas in relation to resource extraction.
- 26. Nauru's main fisheries zones include: the fresh to brackish water ponds including Buada Lagoon and the systems of sinkholes found inland from the coast; the shallow fringing coastal reef or intertidal zone; the sub-tidal areas and reef slope including fissures or canyons in the reef slope (to about 25m depth); the deep reef and near-shore deepwater areas below 25m; and the open ocean or pelagic fishery. These areas are critically important for subsistence and for a limited level of local commercial operations. The first four zones are usually considered to be part of the inshore fishery and the open ocean referred to as the offshore fishery. Commercial tuna fishing (foreign fishing licences targeting pelagic resources) is permitted between 12 nautical miles from the coast to the nation's EEZ boundaries some 200 nautical miles out from the shore line. The waters associated with the intertidal reef flat out to the 12 nautical miles are used only by the communities of Nauru under the management of the NFMRA.

NAURU DOMESTIC CATCH ESTIMATES 2011					
MONTHS		TOTAL			
MONTHS	SKJ	YFT	BET	ОТН	TOTAL
JANUARY	442	869.5	0	0	1311.5
FEBRUARY	0	0	0	0	0
MARCH	70.5	433	0	0	503.5
APRIL	290	602	0	0	892
MAY	1451.4	360.6	0	109.8	1921.8
JUNE	1269	114	0	3	1386
JULY	1144.5	348	0	0	1492.5
AUGUST	199	877	0	0	1076
SEPTEMBER	296	696.4	0	0	992.4
OCTOBER	0	0	0	0	0
NOVEMBER	0	0	0	0	0
DECEMBER	0	0	0	0	0
TOTAL	5162.4	4300.5	0	112.8	9575.7

Figure 4: Annual tuna catch (aggregated in kg) estimates for the Nauru Artisanal fleet, for the WCPFC Convention Area, 2011. (Source: Western and Central Pacific Fisheries Commission. 2012. Annual Report to the Comission. Part 1: Information on Fisheries, Research and Statistics.)

- 27. Nauru's marine systems, especially the first three zones (intertidal and sub tidal, and inshore reef areas) have been heavily exploited over many hundreds of years for subsistence and small scale artisanal livelihood activities. Currently deeper water slope benthic fisheries are becoming increasingly targeted. These activities have used a wide range of traditional and modernised fishing gear and techniques targeting a wide range of resources. The potential for an increase in subsistence and/or artisanal fish catches is therefore to be gained from pelagic species (mainly tuna) in close proximity to the coast. Nauru Tuna Fishery Report³ (2004) indicates that tuna catches in the Nauru EEZ are abundant all year around, however, heavily influenced by the El Nino Southern Oscillation events. Total purse seine catch from 1999 to 2002 have been reported to range between 48,307 kg per year in 1999 to 106,923 kg per year in 2002. Skipjack is by far the most important tuna resource in the purse seine fishery in Nauru where the yellowfin a distant second and bigeye and other species being less significant in terms of quantity.
- 28. For domestic catch, artisanal fishery vessels, consisting mainly of canoes and skiffs operated by local fishers, fish within the 12-mile zone mainly for submistence or small scale commercial purposes. The domestic catch estimates from 2011 below illustrates the significant difference between international purse seiner operations and the very little impact to domestic catch to the overall sustainability and biodiversity of deep-water fish stock.

Marine biodiversity

- 29. The Rapid Biodiversity Assessment of the Republic of Nauru Project (BIORAP) was supported by Secretariat of the Pacific Regional Environmental Programme (SPREP) in 2013. This is one of the few detailed surveys of biodiversity ever conducted in Nauru. Key findings in related to the marine environment are outlined below (para 29-33):
- 30. **Reefs -** Nauru has reefs that have coral cover that is among the highest on the planet, at a time in which most reefs are in decline, indicating they are exceptionally healthy, including no sign of bleaching. The reefs contain globally significant species threatened with extinction including coral, white-tip shark, fish and sea turtles. A coral species was found, which was previously only known from one site in Madagascar which is listed as "Endangered" by the IUCN Red List, and as one of the top 50 "EDGE" (Evolutionarily Distinct & Globally Endangered) coral species in the world.
- 31. **Marine invertebrates** -The reefs of Nauru have relatively low number of marine invertebrates. Soft corals were documented for the first time in Nauru. Two giant clam species, known locally as "earinbawo", were found during this study, which are listed on the IUCN Red List as vulnerablevulnerable to extinction. These clams were previously thought to be locally extinct, as they have not been recorded since the 1980s. Strong indications of over harvesting due to low counts of sea cucumber, no Trochus species found, and declining numbers of TurbanTurban Snals (Turbo species) despite habitat availability.
- 32. **Fish including targeted and commercial species** The survey indicates that more than 400 fish species can be expected to occur within Nauru reefs. Although the abundance of the reef fish fauna within Nauruan reefs is relatively high, there were significant signs of overfishing, including a lack of large sized fishes like large Groupers and Snappers. Fish communities' structure was unbalanced with a high rate of herbivore species and a very low rate of carnivorous predator species.
- 33. The lack of early life stages for the majority of reef fish suggests that Nauruan reefs may be isolated from source habitats, meaning only receiving sporadic new reef fish larvae. This will diminish the resilience of the reef fish community to any disturbance events.

³ Jacob Peter (2007). Nauru Fisheries and Marine Resources Aughority. Nauru tuna Fishery Report. http://www.spc.int/DigitalLibrary/Doc/FAME/Meetings/SCTB/17/nfr_nauru.pdf

34. *Intertidal reef flats - Marine flora* - The reef flats of Nauru are generally uniform throughout, with limited habitat diversity. Plants such as seagrass and mangroves are absent from the coastal areas, with only a few mangrove plants reported in land-locked ponds in the Anabar district. The dominant flora on the reef flats are algae. The turf algal communities that grow on the intertidal zone play a critical role in the overall health of Nauru's marine ecosystem. They are the backbone of the fishery of the island, providing food to economically important fish species.

Additional information on marine systems

- 35. Inshore fisheries provide a wide and diverse range of marine resources available for sustainable harvest. The resilience of these resources is evidenced by the fact that, despite many years of daily reef gleaning, communities still glean daily protein needs from the intertidal zone and fringing reef areas. There is increasing scarcity of marine invertebrate and vertebrate organisms (e.g. turtles, gastropod snails, sea cucumbers, and predator reef fin fish). This situation underpins the need for protective action and sustainable harvesting, and management policies and plans.
- 36. SPC (2005) undertook an extensive assessment of fin fish, invertebrates and the socio-economics of the fisheries of Nauru. This valuable study provides information on fishers and fisheries and the long term management systems that need to be developed. Surveys indicated 97% of households are engaged in some form of fishing (both genders). Female fishers are normally associated with the collection of invertebrates within the inshore reef systems and reef flats, while males undertake this type of fishing as well as target fin fish beyond the intertidal reef systems. Fish and marine resources play a significant role in the local diet with an estimated 47 kg and 15 kg of fresh and canned fish respectively consumed per capita annually. Fish is obviously economically very important, however plays a minor role in the nation's reported household income. The assessment estimated 590 tonnes of fin fish were consumed annually with the majority caught for subsistence purposes.
- 37. The SPC survey found a total of 18 families, 49 genera, 129 species, and 45,000 individual fish were recorded in 50 sites around the island associated with the reef crest, edge, and slope. Acanthuridae and Balistidae families (genera including *Acanthurus*, *Ctenochaetus*, *Naso*, *Zebrasoma*, *Melichthys*, *Balistapus* and *Sufflamen*) dominated the fin fish identified during the assessment. Low to very low populations numbers of the larger food fish families such as Lethrinids, Lutjanids, Serranids and Scarids were recorded which the authors recorded this population structure clearly indicates intense fishing pressure targeting these families has occurred for an extended period of time.
- 38. Invertebrate assessments indicated heavy fishing pressure on all groups and species that have some form of dietary or customary/handicraft use, resulting in very low population of these resources. No giant clams (*Tridacna sp.*), Trochus (*Trochus sp.*) nor Pearl Oysters (*Pinctada sp.*) were located, although suitable habitats were available. Low densities of six species of sea cucumber were recorded and the authors indicated that several species of lobsters were locally available and are harvested for the local restaurant trade. The sustainability of this small extractive fishery was questioned.
- 39. The assessment provided a number of recommendations to ensure long term sustainability of the marine resources which in essence includes developing appropriate policy and legislation to sustainably manage these fisheries through management plans that preserve and control resource extraction. The endorsed recommendations have been integrated into the R2R project.
- 40. Two species of turtles have been recorded for Nauru, the green (*Chelonia mydas*) and hawksbill (*Eretmochelys imbricata*) both of which are seen rarely foraging on the reefs today (Backlin and Fisher, 2013). Anecdotal information gathered during the assessment indicates that the green turtle has been seen on the beaches, presumable to be nesting, however this event is rare. Harvesting of turtles in the past and degradation of shoreline and suitable nesting habitat has severely depleted nesting stock resulting in very low numbers in Nauru.

- 41. There is limited information available on the coral reefs systems and resources of Nauru especially on structure, distribution, and temporal changes quantifying coral coverage and mortality rates. Changes to the morphology and species dominance of Nauru reefs were reported after a bleaching event in 2004 resulted in high mortality rates for branching Acropora species resulting in encrusting and massive forms dominated the reefs systems (Lovell et al, 2004).
- 42. Fenner (2013) reported a total of 51 species in 18 genera of stony corals (including 46 species in 13 genera of zooxanthellate Scleractinina) in Nauru and highlighted the dominance and abundance of *Porites rus*, and documented that this species "completely dominates almost all reef slope sites assessed". Other hard coral species reported to be dominate in Nauru include in decreasing abundance *Pocillopora eydouxi*, *Distichopora violacea*, *Heliopora coerulea*, and *Montipora grisea*. The author summarised that the coral reef slopes of Nauru revealed a number of features that can be interpreted as indicator of a healthy reef system, including very high coral cover, healthy corals, no macroalgae other than *Halimeda*, high cover of coralline algae in areas not covered by coral, very limited sea grass areas and very high calcifying cover. However, he concluded that Nauru reefs show very low diversity for their geographic location, with much higher diversity in surrounding archipelagos.

1.3.4.2 Terrestrial Resources of Nauru

- 43. Nauru is located in the dry belt of the equatorial oceanic zone resulting in almost constant mean daily temperatures of 26 to 32° Celsius (°C) and extremely variable and unpredictable rainfall that averages 1500 mm per year and a highly variable range of 300 to 4572 mm. Nauru is subjected to harsh and prolonged droughts that severely stress even the most hardy coastal strand species, leading to the death of non-coastal exotics (such as breadfruit), and severely restricting the production of even coconut palms (Catala 1957 and Whistler & Thaman, 2013).
- 44. Land is owned by individuals and/or families and subsequently can be leased but not sold to non Nauruan's. The government has acquired small parcels of land for its own but in general all government infrastructures are located on leased land. Land leased for mining is the largest income generation source for the nation.
- 45. Agriculture, since the introduction of mining in Nauru, has played a minor role in the nation's subsistence and cash income economy, with the community reliant on imported goods. This trend has changed over the past decade, due mainly to the economic crisis in the early 2000s when mining ceased greatly reducing incomes to the populations and an insurgence and local awareness of the social and environmental benefits of productive environmental crop and livestock systems. Small family based livestock production units mainly pigs and chickens and individual home gardens including both root crops and trees are being replanted, however local knowledge and technical skills are limited. In general, Nauru has had one of the lowest per capita rates of subsistence production for own consumption in the Pacific region.
- 46. The island has no surface freshwater resources (e.g. rivers, streams, lakes) however possess several small brackish anchialine ponds in the north west, the largest brackish water pond is the Buada Lagoon, and an underground lake in Moqua Cave in the southeast (Viviani 1970). The only significant permanent freshwater resource is the islands groundwater, replenished only from rainfall. Freshwater is in the form of a lens of often slightly brackish freshwater hydrostatically "floating" on higher density saltwater beneath it (Thaman et al. 2008).
- 47. The coastal soils of Nauru are among the poorest in the world. They comprise a shallow (only about 25 cm deep), alkaline, coarse-textured layer of organic matter, coral sand, and limestone fragments that overlay a limestone platform. They contain more coral gravel than sand in the lower horizons. Fertility is, therefore, highly dependent on organic matter for the concentration and recycling of plant nutrients, lowering soil pH, and for soil water retention in the excessively well-drained soils. Although levels of organic matter can be relatively high in undisturbed soils under natural vegetation,

it can decrease dramatically as a result of clearance by fire or replacement by coconuts and other introduced plants (Morrison 1994).

- 48. The plateau soils of Nauru vary from shallow layers on the tops of limestone pinnacles, composed primarily of organic material and sand or dolomite with very little phosphate, to deep phosphate soils and sandy phosphate rock up to over 2 m deep between the pinnacles. Poorly developed but relatively fertile, wet soils are found around Buada Lagoon and in some poorly drained swampy areas near the base of the escarpment on Nauru (Morrison 1994).
- 49. Thaman et al. (2008) recorded 573 species of plants or cultivars present on Nauru of which 63 (11%) were possibly native species, no endemic species were located and several species were possibly locally extinct. The authors noted that half of the native flora was "severely restricted in distribution, endangered or possibly extinct, due to removal and severe habitat modification or limitation."
- 50. Whistler and Thaman (2013) reported that there are several plant communities that can be distinguished on Nauru, but since the landscape has been so severely disturbed by mining (and earlier by human occupation), only remnants of this remain. The plant communities they recognized as occurring on the island include: littoral strand; limestone forest and woodland; mangrove forest; freshwater marsh; managed land vegetation; secondary scrub; and secondary forest. In addition small stands of health mangroves forests are present, however subsistence use and clearing for development has reduced these forests.
- 51. Buden (2008) recorded 34 bird species in Nauru of which 25 were indigenous however only 7 breed on the island, the remainder are migratory sea and shore birds. Only two species of land birds were recorded. This includes the regionally located Micronesian Pigeon (*Ducula oceanica*) and the endemic Nauru reed –warbler (*Acrocephalus rehseil*). The author identified that past and current hunting and habitat degradation and/or removal has greatly decreased the bird populations and bird biodiversity in Nauru. Buden and Tennent (2008) recorded only four species of butterflies in Nauru, none of which are endemic and indicated that the biodiversity and population of butterflies recorded for Nauru is similar to that found on other small, remote, low lying Pacific Islands. Similarly, Edwards (2013) identified 47 species of moths of which 42% are indigenous to Nauru, 13 species of land snails of which 38% are indigenous, 17 species of exotic ants, six species of dragonfly/damselfly of which only 6 % are indigenous and ten families of wasps.
- 52. Backlin and Fisher (2013) recorded a total of eight species of reptiles, which included three species of ground skinks (one of these species was reported to be undescribed and therefore maybe a new species endemic to Nauru), four species of gecko (one of these invasive), and one invasive snake species. Neither amphibians nor native land mammals have been reported for Nauru.
- 53. The vegetation and flora of Nauru, although highly disturbed and outnumbered by introduced exotics, still constitute a critical ecological and cultural resource to the people of Nauru. This is particularly true for the indigenous species, virtually all of which had wide cultural utility within the traditional subsistence economy. The most important ecological functions of Nauru's plant resources include the provision of shade to humans and animals, animal and plant habitats, protection from wind, erosion, flood and saltwater intrusion, land stabilization, protection from the desiccating effects of salt spray, soil improvement and mulching. Similarly many endemic species had a traditional, spiritual and medicinal use for the Nauruan society. All of these functions are seen as critical to the sustainable habitation of Nauru. Preliminary analysis indicates some 174 purposes or use categories for 40 indigenous species, an average of over four uses per species. There are 434 uses for 354 exotic species, an average of 1.2 uses per species. This gives a combined total of 608 use/purpose categories for 394 species (1.5 uses per species). Twenty (20) indigenous and 80 exotic species had no reported uses.

1.4 Threats, Root Causes, and Impacts

- 54. The primary threats to the long term sustainability of Nauru's ecosystems are a direct result of human interventions that will be compounded by climate change impacts. The continued terrestrial habitat alteration, degradation and loss, principally from mining activities, coastal degradation from development and poor waste and pollution management measures, contamination of the freshwater lens through poor sanitation practices and the exploitation of inshore marine and coastal resources are significant threats that need to be addressed.
- 55. The terrestrial, coastal, and marine ecosystems of Nauru are central to the daily lives of all citizens and for the long term development and sustainability of the nation's food security, freshwater resources, livelihoods, and economy. Significant (70%) terrestrial habitat and ecosystem function has been lost due to mining activities resulting in greatly reduced land for cultivation and human habitation, the degradation of the islands biodiversity and equally important freshwater lens. Continued expansion and development along the coast has reduced land available to ensure ecosystem integrity, function and food security, whilst the reliance on imported food and goods has resulted in the general lack of land management and use with invasive species dominating the landscape at the expense of traditional food crops and trees. The only access to freshwater is through the underground lens, which has been greatly altered and is continually negatively impacted through the removal of the top side forests (mining and development), poor human and small scale livestock (e.g. piggeries, chickens) sanitation and waste management systems that discharge directly into the freshwater lens. High levels of marine resource exploitation, including fishing pressure and unsustainable methods (e.g. small size gill nets, spearing on SCUBA and dynamite fishing) have directly decreased resource stocks and the nation's inshore fisheries food security.
- 56. These threats are compounded by rapid population growth and the resulting increase in demand for natural resources, especially protein sources from the marine ecosystem. Further adding to these threats is the current weak and ineffective governance systems that are unable to effectively assist communities in managing their resources in a sustainable manner.
- 57. Climate change projections and their expected impacts will continue to interact with the underlying causes of existing terrestrial, coastal, and marine issues facing Nauru resulting in a significant development challenge. Climate change awareness and adaptation measures need to be included in all development initiatives (Pacific Island Forum Secretariat, 2013b).
- 58. Nauru's loss of biodiversity is evident in all fauna and flora groups studied recently. The start of such declines would have come from the early European introduction of coconut monoculture and the extensive phosphate mining on the island over the past century. A significant impact of the mining operations on biodiversity is the dramatic change in the socio-economic system in Nauru from that of natural resources dependent (subsistence) lifestyle to that of a cash-driven economy. Significant factors in the decline biodiversity include;
- Loss of Ecosystem Diversity: In 1994 only 37 hectares (ha) remained of the original Topside Calophyllum forest, and almost all of that is now lost to mining. Similarly, because of the pressure of residential development, Bottom SideSide sites now contain very little surviving natural vegetation. It is critical that some of the remaining natural areas and their component ecosystems are preserved immediately; to avoid the high cost and uncertainty of future revegetation programs to recreate the original ecosystems and forest types of Nauru. Preservation of examples of original ecosystems could be achieved through some form of conservation zones and these should be taken up as highest priority in the rehabilitation process of Nauru. However, the continuing mining has put rehabilitation of the Topside on hold.

- Loss of Species Diversity: One consequence of the reduction in area of natural vegetation is that some of the less common and abundant species of plants and animals have become very restricted either in distribution or in the numbers of individuals in their remaining populations. As a result, up to 45% of Nauru's indigenous plant species (28 out of 60) and a significant proportion of bird species are considered to be rare or endangered.
- Coral Reef and Marine Resource Degradation: Degradation and overexploitation of the inshore (intertidal reef flat and sub tidal reef slope) and deep water fishery resources have greatly reduced resource populations threatening biodiversity and are major constraints to food security and sustainable development. This has led to the breakdown of the traditional marine tenure systems and resource use systems, including the traditional aquaculture system practiced in the island brackish water ponds.
- Invasive Species, Pest and Disease Infestation: The lack of a quarantine policy, regulations and facilities in Nauru is an issue as currently, invasive species, pests and disease organisms (plant, animal or micro-organism) are introduced unchecked to Nauru through air and sea transport terminals. Several pest species such as a range of aggressive weed species and a number of fruit flies are now present in Nauru, which adds to the increase in population of pests and disease vectors thereby affecting both environment and health of Nauruan's.
- Pollution and Waste Management: The issues of air, noise, oil and water pollution and waste management have always been linked to mining operations that affect both the natural and urban environments, and especially the health of Nauruan's. These issues have been further expanded by the urbanisation of the islands coastal strip and lack of long term management and planning. The islands groundwater is chronically polluted and its use is primarily limited for toilet flushing. Potable water is supplied from desalination facilities and from rainwater greatly restricting development.
- Agriculture and Home Gardens: The past urbanisation and loss of land due to mining has greatly reduced all traditional agricultural and farming practices in Nauru resulting in traditional knowledge and skills lost and valuable farming land being utilised for other purposes and greatly degraded. Food crops and food trees are located in only isolated areas of the island and are greatly reduced from pre mining days. Revitalisation of traditional and new agricultural skills and knowledge applicable to Nauru is required to provide a way forward to increase productive of the remaining land of Nauru and provide family with increased options for food security.
- Population Growth and Urbanization: Population growth and urbanization especially along the coastal strip have placed continued increasing pressure on natural and cultural resources and constitute a major constraint to sustainable development in Nauru. There are already clear signs of land shortage and increasing population pressure on scarce resources, such as water and marine resources. Uncontrolled urbanization has increased population density and declining productivity of the land. Most of Nauru's people now live urban lifestyles. This has led to the loss of traditional knowledge about plants and animals and the environment and the abandonment of subsistence living to that of cash-dependent lifestyles.
- Climate Change and Sea Level Rise: Potentially very serious impacts on biodiversity could result from changes in climate and sea levels associated with global warming. For Nauru, increased temperatures will have devastating effects on its natural ecosystems and affect particular species in the marine sector. Nauru's biological resources will all be affected by climate change, climate variability, and sea level rise (Pacific Island Forum Secretariat, 2013).
- 59. Safeguarding and sustainably managing Nauru's biodiversity for the long term requires conserving and in the case of "topside" rehabilitating the environmental habitats upon which flora and fauna depend. The development of a protected area management system will require a holistic

approach, be fully understood and acknowledged by all communities, captured in policy and legislation, developed to ensure it encompass the full range of geographic ecosystems and species (i.e. ridge to reef) and managed to achieve a balance between maintaining nature and its biodiversity and human prosperity and quality of life. The system must include development and management protocols, scaled to match local capacity and interest and accommodate the variability that will accompany climate change.

60. The long-term solution is to implement a ridge-to-reef approach that combines a functional, representative, and sustainable national system of coastal and marine managed areas integrated with the adoption of appropriate SLM practices in adjoining/upstream watersheds. This will effectively reduce land degradation and enhance protection for marine and coastal biodiversity, habitats, and fisheries. The process involved will include, but not be limited to the following: engaging policy makers and community leaders; identifying the priority pollutants particularly those that degrade coastal ecosystems and coral reefs; identifying effective land management practices which will work to reduce pollution; managing domestic and small scale livestock water effluents; setting targets for pollutant discharge reductions into ground water and coastal waters; develop through extensive stakeholder consultation practical and usable marine management protocols to ensure sustainable fishing practices are supported and monitoring and assessment at the scale of ridge-to-reef.

1.4.1 Barriers to be addressed

61. Currently there are number of barriers that need to be addressed before a long term solution can be achieved. These critical barriers are highlighted below. The R2R project through stakeholder discussion has integrated these barriers into the project to be addressed.

ood governance through the development of policies, legislation (Acts), gulations and their understanding and acceptance is critically important r the development and long term outcomes for biodiversity and source management for Nauru. Biodiversity and resource
anagement is complex requiring skilled technical advice through stensive stakeholder debate to achieve desired results. The ability to evelop and finalise governance requirements in Nauru drawing on sperience from other Small Island Development States (SIDS) and reger regional nations requires external assistance that provides both nowledge and capacity building. Good governance and its inderstanding and acceptance are the basis of all biodiversity and source management in Nauru.
and tenure is the most critical consideration in terms of the practicality implementing biodiversity conservation and sustainable land use. oproximately, 90% of community land is tied up with Government and a mining company. Rehabilitation of 'Topside' has begun but must also clude the option for landowners to reclaim their rehabilitated lands to egin their own conservation and sustainable use and management of odiversity. District communities, as owners of the land, should be impowered to promote the conservation and sustainable use of odiversity at the community level. Training activities in decision making, source management and conflict resolution are required.
auru has made progress in their movement towards SLM as a result of eir exposure to the concepts over the past four years. A dedicated oup of motivated people working within the government with selected ammunities have implemented projects to pilot SLM activities, sourcing

Management (SLM) approaches.	water for productive uses, and improving water conservation and sanitation practices. These should be supported and expanded, with an increased focus on integrating their efforts in a cohesive fashion that will ensure adoption of the draft SLM National Action Plan (NAP) and implementation of priority activities such as the expansion of community gardens, land use planning and improving community housing. However, there is a lack of support from political leaders and from community members. A review of the policy and legislation will assist with meaningful reform and with support from decision makers would ensure success of SLM.
Lack of community support and understanding for integrated land and water management practices.	Local community support is required and is critical for effective integration of land and water management in a Ridge to Reef approach. Without moving the attention of the community away from land tenure reform and the economic value of the land and onto community building, land and water use and physical survival will result in failed opportunities for education and active participation in projects. Furthermore, lack of empowered communities to promote natural resource conservation and sustainable use of biodiversity at the district level means they are less likely to provide acknowledgement and support to national programmes and traditional authorities to enforce and monitor national laws and regulations while providing necessary incentives to improve the standard of living of all citizens.

1.5 Protected Area Coverage and Status

- 62. Traditionally (pre mining) management of resources was undertaken through community and/or chiefly systems that instigated certain control measures over parcels of land and/or areas of coastal waters dictated by custom (e.g. deaths, wedding ceremonies, chief orders), environmental (e.g. seasons, droughts, poor weather) and/or resources themselves (e.g. fin fish species aggregating, plants fruiting). Since mining operations have been undertaken, alterations of the environment have been considerable with the long term management of resources and habitats taking a secondary role to development. It is envisaged that rehabilitation of all mining sites will be undertaken once mining stops.
- 63. Nauru has not formalised a nationwide protected areas system for land, coastal and/or marine ecosystems nor species. However, the government and its partner agencies (e.g. NFMRA) have initiated discussions and drafted papers on the development of national regulations that will provide the legislation to enable the long term sustainable management and protection of the nation's terrestrial and marine ecosystems and resources within. It is this draft legislation and regulations that this R2R project will provide technical assistance to support the government of Nauru to finalise, incorporating measures and actions that integrate both government and community's aspirations.

1.6 Stakeholder mapping and analysis

64. A description of the diverse and considerable number of R2R project stakeholders, including their interests and activities in Nauru, potential/planned roles and relationship to the R2R project is given below (Annex 77). For the purposes of stakeholder mapping and analysis they have been grouped into six broad categories, viz. Nauru Government Ministries and Statutory Boards, Local peoples and associations; NGO/CSO and networks; Private sector; Education, Research & Technical and Regional Organizations; and International Organizations, Donors and Funding Mechanisms. It is emphasized that this list, while reasonably comprehensive, may have missed or left-out minor stakeholders. The primary level stakeholder in the implementation/execution of the R2R project is the will be NICE with leadership from Division of Environment.

1.7 Baseline Analysis and Gaps

- 65. The combination of intensive mining operations and coastal development has severely impacted on Nauru's environment. This has serious implications for long-term sustainable land and water management, and biodiversity conservation of both land and sea.
- 66. To-date environmental initiatives have been under-funded, have provided limited long-term sustainability, and important biodiversity areas remain unprotected. This has resulted in Nauru falling short in achieving national conservation targets, and ad hoc management of critical terrestrial and marine ecosystems with little consideration of downstream impacts or sustainable livelihood opportunities.
- 67. Climate change will become a growing threat to both biodiversity and people in Nauru. It is vital that both ecosystem and livelihood resilience is built to address the challenge of adaptation to climate change.
- 68. The Rapid Biodiversity Assessment of the Republic of Nauru Project (BIORAP) supported by Secretariat of the Pacific Regional Environmental Programme (SPREP) in 2013 provided a very useful baseline and guidance on action to take forward to address gaps through the establishment of both terrestrial and marine managed areas. This is summarized in Nauru's 5th National Communication to the CBD submitted in March 2014. It provides information on *Recommended Species and Sites for Conservation and Protection of Biodiversity in Nauru* as outlined in an Annex to the report.
- 69. The Government of Nauru through external assistance provides baseline spending in support of the management of the environment and natural resources throughout the country. The Environment Division within DCIE will spend an estimated US\$400,000 from 2014-2018 in coordinating environmental policy, laws and programs, beach profiling, and vegetation surveys.
- 70. The R2R project proposes a long-term solution by addressing the gaps in the lack of a ridge-to-reef approach that combines functional, representative, and sustainable national system of coastal and marine managed areas integrated with the adoption of appropriate Sustainable Land Management (SLM) practices in adjoining/upstream watersheds. Thus, the project will support these approaches by the development and finalization of a number of whole of government policies, acts, and regulations that ensure sustainable management and development practices are incorporated into the nation's laws. This will be achieved by providing professional technical advice and mentoring to improve government knowledge and capacity to delivery of good governance and to promote community awareness and understanding. The holistic approach proposed by the R2R project will effectively reduce land and freshwater degradation, enhance protection for marine and coastal biodiversity and habitats, improve freshwater systems, whilst improving coastal livelihoods and creating lasting management of Nauru's natural resources.
- 71. The marine biodiversity conservation project aims to address the challenge of degradation of the marine environment. It will seek to build resilience of the marine ecosystem and looks to address the impacts of anthropogenic and natural pressure on coral reefs. Work has been done to provide offshore FADs to move fishing effort from the inshore coral reefs to deeper waters away from coral reefs. This support will be provided with co-financing from the Secretariat of the Pacific Community (SPC) and professional assistance from the NFMRA Fisheries Management and Institutional Strengthening Advisor through AusAID funds. Through this project, other alternatives to coral reef fishing will be considered such as the construction of in-land ponds for milkfish farming. The project would also establish a sound institutional basis for coastal and reef fisheries management to ensure that coastal and reef fisheries are appropriately managed and conserved. Knowledge, skills, and practices delivered by the NFMRA advisor will be complemented and greatly expanded through additional specific professional fisheries and marine management technical advice from the R2R

project that will formalize current concepts and actions into government legislation and protocols ensuring long term sustainable management and biodiversity conservation is mainstreamed into coastal and community fisheries practices.

- 72. Land degradation, which occurs in over 70% of the island interior "Topside", is being addressed by the Nauru Rehabilitation Corporation (NRC) through projects involving reforestation with indigenous species as well as the testing of suitable species for beautification and food crops. An initial site, known as Pit 6, had several test plots of tree species planted with considerable success, however due to the relationship with the Australian government the area was cleared to allow for the development of an asylum centre, resulting in all rehabilitation efforts being removed. New sites have been identified and a new approach is being developed on a one hectare (ha) plot with a more accelerated timeline and a more directed, less experimental approach.
- 73. The reality is that the rehabilitation of the mining areas on Nauru will be undertaken once mining operations have ceased with the assumption funds and expertise are made available. The rehabilitation of land areas outside of the mining areas are required and have been initiated through government and bilateral funds.
- 74. The "Agricultural Grow and Green Project" initiated by the Nauru government through the Division of Agriculture (DoA) that cultivates fruit trees and root crops at the government agricultural nursery for distribution to communities. The first initiative unfortunately failed due to an unprecedented drought and has been reintroduced. Local funds are currently limiting the expansion of this project.
- 75. Funding and technical assistance from the Taiwanese government for a horticultural farm has been commissioned through hands on training and capacity development. Short term goals for addressing these needs can be developed and addressed with suitable projects that build human capacity and increase the physical and mental wellbeing of the population.
- 76. The R2R project will support the government's initiative to further develop and expand the production of fruit trees and root crop seedlings at the government nursery and their distribution and training packages to the pilot districts associated with the project. These initiatives will result in the successfully delivery and sustainable expansion of the Division of Agriculture work program and significant improvement in community food security. It is envisaged that when the land from Topside eventually becomes available as living space, knowledge gained and community resilience developed can be directed to SLM and land development on the rehabilitated areas.
- 77. The continued degradation of the nation's underground freshwater lens through poor sanitation practices has had a dramatic effect on the quality of life for Nauruan's and greatly reduces the nation's ability to sustainable development. This water source has been degraded by past mining practices associated with vegetation and soil removal and general mining activities. These impacts have in the more recent past decreased due to better mining practices adopted and reduced land/vegetation removal. Nevertheless, impacts will remain until mining stops and rehabilitation of the land is complete.
- 78. Freshwater contamination from substandard human and animal waste management systems that directly leaches into the freshwater lens has had a significant negative impact on the nation's freshwater supply resulting in water containing high levels of fecal bacteria not fit for human consumption. Nauruan government initiatives as part of the Sustainable Integrated Water and Wastewater management program (IWRM) have been trialed with success to promote and supply alternative community and individual human and animal waste management systems. However, the costs involved in the purchase of environmentally sound waste management units and associated public awareness have been prohibitive to the expansion and acceptance of this new technology. The R2R project will support the government's initiative to further develop and expand the purchase of composting human toilets and animal waste management units to be trialed in each of the projects pilot districts. The trial will be fully supported with a nationwide awareness campaign utilizing

communities groups (e.g. churches) and schools as test locations. The acceptance of alternative waste management systems will directly reduce contamination of the nation's only freshwater system and combined with other R2R and government waste management and water collection initiative will improve sanitation and health of the nation resulting in improvements to the nation's environment.

79. Despite these initiatives, the business-as-usual scenario for marine biodiversity and land management is one where: i) existing initiatives remain under-funded and only minimally managed for the foreseeable future; ii) areas important to protect biodiversity will remain unprotected, and Nauru will remain far short of its national goals for coverage of conservation areas; and iii) management of critical ecosystems in terrestrial and marine areas will continue on an ad-hoc basis with little consideration of downstream impacts or sustainable livelihood opportunities.

1.8 Linkages with other GEF and non-GEF initiatives

- 80. This project builds on the Pacific Island Ridge-to-Reef approach and the conceptual framework outlined in the Program Framework Document (PFD) of the programmatic approach entitled "R2R 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" under GEF support. The project development has also benefited from a number of completed and existing initiatives/processes related to biodiversity conservation and adaptive management.
- 81. In addition, these are a range of other donor funded project that this project will work with. These are outlined below:
- 82. Bilateral donors are providing funding to Nauru throughout the projects lifetime. The European Union (EU) is allocating US\$653,000 for improving Nauru's water catchment systems.
- 83. The Australian government is providing US\$1,200,000 for improving water storage capacity in selected sites. Support will be provided to the Government of Nauru for the construction of 200 reinforced concrete water tanks to supply the most vulnerable households in Nauru. Ensuring a strategic approach to securing access to water in the short-term, the Government's immediate focus has been on augmenting household water storage capacity and improving supply-side constraints. To date, 18 400-liter capacity concrete tanks have been chosen due to their sufficient size as well as their longevity.
- 84. The Government of Japan through (Japanese International Cooperation Agency JICA) is providing US\$4,000,000 for promoting the desalination of seawater for household and other productive uses.
- 85. USAID is supporting the Pacific regional Coastal Community Adaptation Project (C-CAP) and Nauru is one of the focal countries for the provision of a small-scale infrastructure investment. Funding assistance will support three components; including (i) rehabilitating or constructing new, small scale community infrastructures, (ii) building capacity for community engagement for disaster prevention and preparedness and (iii) integrating climate change resilient policies and practices into long term land use plans and building standards. Activities and funds allocated from this project to Nauru are currently being developed.
- 86. The EU funded Global Climate Change Alliance: Pacific Small Island Sates (GCCA: PSIS) project for Nauru focuses on water efficiency and governance programs that reduce vulnerability to climate induced variability in annual and seasonal precipitation regimes. Nauru has chosen to focus on improving rainwater harvesting systems (roofs, gutters and water delivery systems) on at least 200 households. Moreover, support will also be provided to mainstream climate change into national and sector response strategies. This project stems from the endorsed National Water, Sanitation and

Hygiene Policy (NWSHP) which evaluated the current state of the water sector, including the need to increase rainwater storage capacities as well as to expand water catchment and national storage capabilities. The R2R project will support the government's initiative of upgrading and replacing rainwater catchments by providing funds to upgrade rainwater catchment systems in the R2R project districts for households that are unable to be supported by the government. Collectively, significant capacity of the communities to collect and stored safe drinking water will be achieved.

87. UNDP will provide co-financing of \$ 40,000 in-kind co-financing to this project through its ongoing partnership and support to enhancing Nauru's governance and legislative system through the Nauru Legislative Strengthening Preparatory Assistance Project. This will provide short-term assistance to the Parliament of Nauru by conducting a Legislative Needs Assessment (LNA). The LNA will be used to undertake a detailed assessment of the current capacity and thoroughly identify the long-term legislative needs of the Nauru Parliament. Based on the assessment of current capacity issues in Parliament, challenges faced within Parliament and provide guidance to strengthening the national legislative structure in Nauru through the LNA, further support in this area from UNDP will be identified. R2R's policy development and institutional strengthening support in Nauru will build upon, align with, and be integrated with the overall support to the Parliament and the national Legislative strengthening process.

2 Strategy

2.1 Project Rationale and Policy Conformity

- 88. The Nauru R2R project is consistent with the GEF 5 Focal Area Strategies, in particular Objective 2 for the Biodiversity (BD) Strategy, Objective 3 for the Land Degradation (LD) Strategy and Objectives 3 for the International Waters (IW) Strategy. This includes;
 - **BD Objective 2**: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors;
 - LD Objective 3: Reduce Pressures on Natural Resources from Competing Land Uses in the Wider Landscape; and,
 - **IW Objective 3:** Support foundation capacity building, portfolio learning, and targeted research needs for joint, ecosystem-based management of transboundry water systems.
- Biodiversity (BD) Strategy: The Nauru R2R project promotes the conservation and 89. sustainable use of biodiversity and the maintenance of ecosystem goods and services through the improved management of existing and new protected/management areas, sector reforms to conserve and sustainably use biological diversity, and the incorporation of biodiversity conservation and sustainable use into planning frameworks. One of the BD Strategic objectives for GEF 5 is addressed by projects in the program (BD 2). The program is consistent with BD-2: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors in that it will increase and expand sustainably managed landscapes and seascapes that integrate biodiversity conservation while maintaining economic livelihoods that are closely tied to maintenance of healthy ecosystems. Coastal and marine resource management and protection (in particular inshore shallow waters and brackish water ponds), watershed management and protection (particularly ground water lens/aquifers) linked with sustainable terrestrial management for water-related ecosystem services will translate seamlessly to biodiversity conservation along with the incorporation of biodiversity conservation into policies and programs. Inclusive to this initiative will be the projects support to develop the capacity required for both the public and private sectors to finalize the regulative framework that provides the platforms needed to establish and maintain Community Based Marine, Coastal and/or Terrestrial Management Area systems.

Land Degradation (LD) Strategy: The project seeks to contribute to arresting and reversing current trends in land degradation of the 'ridge' areas from the Topside down to the coast, which are aggravated primarily by mining and unsustainable land management practices. In particular, the project addresses objective 3 (LD-3: Integrated Landscapes: *Reduce pressures on natural resources from competing land uses in the wider landscape*) by reducing barriers to cross-sectoral collaboration (through adoption of integrated tools, including land-use plans and hazard area designation from inland terrestrial land activities to coastal areas that receive adverse impacts from the island land degradation practices e.g. phosphate mining). The project fosters the promotion of integrated landscape management practices adopted by local communities building on lessons learned from community-based and participative interventions from the GEF/UNDP/UNEP Pacific IWRM Project. These demonstration initiatives run the gamut from investments in integrated watershed management through terrestrial vegetation rehabilitation and conservation of degraded upland areas as well as conservation and management of coastal ecosystems.

90. **International Waters (IW) Strategy:** The project seeks to test cross-focal area (which means also cross-sector), integrated management of catchments, aquifers, and coastal/marine ecosystems of the Pacific Islands. At the program level, the strategy of testing this R2R integrated management

approach implemented through national multi-focal projects based on national priorities, complemented by a regional multi-focal project (consisting mostly of IW funding) poses serious coordination, cooperation, learning, experience sharing, and administrative costs for the PICs but is the only way to achieve a sustainable future for these vulnerable island states. At the level of national projects under the program, the IW Strategic Objective 3 is of relevance. This project is supportive of focal area strategic objective IW-3 for implementing IWRM where previously introduced (IW-3): Support foundation capacity building, portfolio learning, and targeted research needs for joint, ecosystem-based management of transboundry water systems.

2.2 Country Ownership: Country Eligibility and Country Drivenness

- 91. The Nauru R2R project is consistent and in line with the five Strategic Goals (SG) associated with the United Nations Convention on Biological Diversity Aichi targets and is relevant in addressing the majority of the strategic goals specific targets. This includes (SG A); 1, 2, 4, (SG -B); 5, 6, 7, 8, 9, 10 (SG-C); 11, 12 (SG-D); 14, 15 and (SG-E); 17, 18, 19 and 20. This will be achieved by;
 - <u>SG-A:</u> promoting awareness of the values of biodiversity as well as initiating steps that can be taken to conserve and use it sustainably; integrating biodiversity into national and local development and poverty reduction strategies and planning processes including reporting systems; implementing plans for sustainable production and consumption and keeping the impacts of use of natural resources well within safe ecological limits.
 - <u>SG-B:</u> considerably reducing the rate of loss, degradation and fragmentation of all natural habitats; ensuring all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably via ecosystem based approaches; promoting the conservation of coastal and marine areas through effectively and equitably managed systems (e.g. protected areas); ensuring conservation of biodiversity in areas utilised for agriculture, forestry and aquaculture; reducing pollution on all environments to levels not detrimental to ecosystem function and human habitation; invasive species introductions and pathways are prevented and invasive species managed effectively preferable eradicated; and climate change impacts especially on vulnerable ecosystems (e.g. coral reefs, wet lands, water sheds) are minimised to ensure long term ecosystem integrity and function.
 - <u>SG-C:</u> Realistic percentages of critical environments and biodiversity (land, coastal and marine) are conserved through effective and equitably managed conservation measures; measures are development and implemented to prevent extinctions of known threatened species and existing population status improved.
 - <u>SG –D</u>: ecosystems that provide essential services (water, health, livelihoods, wellbeing) are restored and safeguarded for future generation taking into account for vulnerable groups and those that are disadvantaged; Ecosystem resilience and biodiversities contribution to carbon stocks have been enhanced through conservation and restoration contribution to climate change mitigation, adaptation, and combating desertification.
 - <u>SG-E:</u> Policies have been developed and implement to ensure biodiversity is mainstreamed
 in government and civil society (e.g. NBSAP); Traditional knowledge customs, innovations
 and practices of local communities are respected and integrated into biodiversity
 management; ensure knowledge and understanding of biodiversity functions, values and
 what will be lost is widely distributed through all society and suitable financial resources are
 contributed to ensure resources are available to effectively manage biodiversity.
- 92. The R2R project also supports the Decision 11/COP.10 of the UNCCD at its 9th Plenary Meeting in October 2011 that "encourages eligible Parties, taking into account the cross-sectoral nature of land degradation, to use existing potential to harness synergies across the Global

Environment Facility (GEF) focal areas in order further to reinforce the importance of sustainable land management for integrating environment and developmental aspirations globally".

- 93. The R2R project will support the goals of various national development policies in Nauru, including the National Sustainable Development Strategy (2005-2025), which regards environmental considerations as an integral cross-cutting link to national development and identifies the need to sustainably use and manage the environment and natural resources for present and future generation. In addition, the draft National Action Programme (NAP, 2012) to support the UN Convention to Combat Desertification (UNCCD) recognizes the need to strengthen Nauru's systems, institutions, and individual capacities to address land degradation in Nauru. The draft NAP proposes a framework that will build human capacity through addressing issues (such as food security, land, and water) that affect Nauru's natural resources and strengthen community resilience. The proposed project also directly supports Nauru's efforts to comply with its commitments related to international environmental conventions.
- 94. The First National Communication to UNFCCC (1999) highlights a number of urgent challenges including:
 - Address the urgent need to begin the rehabilitation of the topside of the Island and revegetation of parts of the topside,
 - Address damage to the environment caused by anthropogenic emissions and the discharge of polluting chemicals into the sea,
 - Address vulnerable areas relating to health, coastal, water resource and agriculture; and,
 - Stop degradation of the coral reefs and coastal erosion surrounding the Island.
- 95. In promoting the conservation and management of the country's biodiversity, the R2R project is consistent with Government of Nauru's priorities as set out in the draft <u>National Biodiversity Strategy and Action Plan (NBSAP, 2010)</u> of which the main aim is to conserve and sustainably use Nauru's endemic species and equally secure the future of other species, native or introduced, that are vital to agriculture, forestry and fisheries. This aim is made in light of the extensive degradation of 70% of Nauru's land due to the past and current phosphate mining.
- 96. The Nauru R2R project is designed to focus on Nauru's five environmental priorities as described in the draft National Biodiversity Strategy & Action Plan (2011), which includes (i) the Conservation and Management of the Islands Biodiversity, (ii) Environmental Education and Awareness, (iii) the Sustainable Use and Management of Marine and Terrestrial Resources with Traditional and Customary Land and Marine Tenure Systems, (iv) to Develop National Policies and Legal Framework to support these initiatives and (v) the Capacity Building of Environmental Management within the nation. The R2R project will provide technical and financial support, resources, and investment on the ground and to the people of Nauru through adaptive management approaches to implement government's strategies through project partners and stakeholders resulting in the development of integrated approaches to ensure long term sustainable resource management is attained. This will result in the development of government policies and regulations developed that would to inform and assist communities to sustainably develop and manage the islands natural resources.
- 97. The R2R project is consistent with and will contribute to Nauru's <u>National Water, Sanitation & Hygiene Policy (NWSHP)</u> and associated implementation plan that seeks to address widespread community concerns about the availability and quality of freshwater on the island, especially during dry seasons and periods of ENSO-related droughts and from pollution of groundwater due to household and small scale animal husbandry sanitation systems.
- 98. Key national policies and plans are also supported by this project, including Nauru's <u>National</u> Fisheries and Marine Resources Authority (NFMRA) Corporate Plan, which envisages the protection

of coastal fisheries through appropriate policy, legislation that is supported by regulations and community awareness and support. Moreover by strengthening the country's ability to manage their coastal and marine ecosystems, this project will build on the findings of the Pacific Regional Oceanic and Coastal Fisheries Development Programme (PROC Fish) managed by Secretariat of the Pacific Community (SPC) and will be a key component of the Government's strategy to establish and implement Community Based (CBMMA) or Local Managed Marine Area (LMMA) that will contribute to the overall long term sustainable management of the nation's resources. The understanding and establishment of marine/coastal managed areas within nations will assist Nauru to meet its obligations under the UN Convention on Biological Diversity to effectively conserve at least 15% of its total coastline by 2020 as a means to contribute to the sustainable livelihoods for its people and to contribute to protection of the world's biodiversity.

2.3 Design Principles and Strategic Considerations

- 99. The R2R project has been designed to strengthen the capacity of the government and communities of Nauru to improve sustainable management of the nation's natural resources and protection of the nation's biodiversity through providing technical advice, mentoring, and skills transfer. The implementation of the proposed R2R project will be carried out in coordination with, and where relevant, building on the on-going GEF funded and other donor/ partners supported projects previously and currently undertaken within the nation. Key on-going projects that have been reviewed and used to develop the R2R project include:
- > This project is part of the program "Pacific Islands Ridge to Reef National Priorities Integrated Water, Land, and Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience, and Sustain Livelihoods." All 14 Pacific Island Countries (PICs) are participating through national R2R projects and/or through a regional program support project. The program support project will provide assistance to this and other national projects under the regional program "Ridge to Reef: Testing the Integration of Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries" that will include coordination, capacity building through various national/regional and formal/informal trainings. The modalities for coordination and support will be determined during the design phase of the national projects as well as the regional support project.
- The regional "Implementing Sustainable Integrated Water and Wastewater Management in Pacific Island Countries (IWRM)" project (2008 2014) in Nauru supported an affordable and user friendly working system for the sustainable integrated water resource and management of wastewater. Main components included: the protection of groundwater resources from pollution through sanitation upgrading; stress reduction of water resources through conservation and improved water management; and capacity building and awareness. This proposed project will build on knowledge management activities carried out by the IWRM project and involve relevant staff in technical working groups and capacity building activities.
- The regional SCCF "Pacific Adaptation to Climate Change (PACC including PACC+)" project was designed to enhance the capacity of Nauru to adapt to climate change, including variability, in selected key development sectors. With the purpose to adopt a system of affordable and user friendly working system for the sustainable integrated water resource and management of wastewater, the project looks at: incorporating climate risks in the water sector plans and programmes in Nauru; providing practical guidance to design and demonstrate a hybrid water supply system to reduce vulnerability to drought events; and establishing a hybrid water supply system (with co-financing support). This proposed project will build on knowledge management

- activities carried out by the PACC project and involve relevant staff in technical working groups and capacity building activities.
- The UNEP-implemented "Integrated Island Biodiversity (IIB)" project places emphasis on the conservation and restoration of priority species and ecosystems, which are at risk in each participating island countries as identified under the island Biodiversity Programme of Work; and to sustainably use island Biodiversity through improved system and processes and to include assessments and monitoring, legislation, information management, capacity and awareness raising. This proposed project will draw information from the IIB project to strengthen the management of marine areas and capacity building activities, feed into biophysical, demographic, and socio-economic assessments, inform the development of an integrated land use plan and regulatory framework, and contribute to improving data information systems and management of knowledge.
- > The main objectives of **NBSAP** EA add-on funds are: to revise the NBSAP document; to develop the 5th National Report to the CBD; and setting National Targets as aligned in the Aichi Targets. This proposed project will build on knowledge management activities carried out by the NBSAP project and involve relevant staff in technical working groups and capacity building activities.
- Some initial scoping has been undertaken on the development of an Integrated Environment Policy for Nauru. The Secretariat for the Pacific Regional Environment Programme (SPREP) will be managing the project. It will integrate all the thematic plans and strategies related to environment and climate change into a single strategic framework document. This proposed project will build on established mechanisms (such as the Steering Committee and Technical Working Group) to improve coordination and consultation in relation to policies and programs.
- 100. The R2R project will focus on building national level government capacity in DCIE and providing direct assistance and support to the national government to build a policy framework supporting long-term approaches to ensure the pilot site projects can be successfully demonstrated, delivered and replicated.
- 101. Simultaneously, a key strategic consideration in the design of the R2R project is to strengthen and support the ongoing efforts of the Government of Nauru to deliver concrete ridge-to-ridge benefits in alignment with priorities identified in related frameworks and ensure concrete activities on the ground to support ridge-to-reef at community levels.
- 102. The R2R project will be built upon existing government and development partner initiatives to ensure that information gathered, processes adopted, and lessons learned in the myriad of current and proposed ridge-to-reef projects are reviewed and adopted, as appropriate, for use by local communities in R2R project sites.
- 103. Capacity building is considered a strategic and critical cross-cutting aspect of this Nauru R2R project design. The project aims to build long-term capacity for the implementation of ridge-to-reef solutions at all levels, with a particular focus on addressing constraints under which communities and local government currently operate.
- 104. In addition, the intervention is strategically designed to respect and build upon of traditional governance systems, while recognising the need to strengthen these systems at community level while also ensuring that all community members including women, youth and children, those with special needs are able to fully participate and benefit from the project.
- 105. Lessons learned and best practice approaches from implementation of R2R project are expected to provide important insight for Government and community-based organizations as they continue to support ridge-to-reef processes and attract financing from international sources. In

particular, the overall lessons from R2R will feed into implementation and evaluation of the regional R2R programme.

2.3.1 Site selection for pilots and demonstrations

- 106. Nauru is a small island state. Thus, all R2R project activities will be supported by engagement with the national level of government, development of supportive frameworks, and targeted national level awareness and communication activities.
- 107. However, it is also recognized that this project has limited funds, there are a number of other donors working in the similar areas with which synergies will be developed and there is a need to focus delivery of activities on the ground. Thus, an approach to the delivery of pilot site demonstrations has been developed and is proposed as outlined below.
- 108. In the implementation of the R2R Nauru Project biodiversity assessments, broader scale landuse planning and policy and legislation approaches will be developed for the entire nation of Nauru. This is a cost-effective approach given the location and remoteness of the islands in terms of the provision of external technical assistance.
- 109. The PPG also recognized the importance of the marine and coastal environments on the eastern side of Nauru and that these form an ecological unit that this under less pressure than the resources on the western side due essentially to climatic factors. The SE monsoon trade winds generate a swell and wave pattern the impacts on the eastern side thus much of the fishing and gleaning pressure is on the western side of the island. Thus a decision was made to consider the eastern side as a separate ecological unit.
- 110. Although the 5 proposed sites outlined in the following selection process have been identified, it is anticipated that these will be expanded to encompass the whole island by the end of the project life. In addition, it is anticipated GEF 6 funds can build upon and strengthen the pilot approaches proposed in this document.
- 111. During the PPG project, there was extensive stakeholder consultations, a review of past and current donor projects, and consultations with the government on the national development priorities and plans for the delivery of targeted donor support that avoided overlap, duplication and provided the opportunity to develop synergies. The evaluation of potential sites included criteria such as (i) district/community cohesion and interest in the R2R project (e.g. Aiwo community showed no support of the R2R project), (ii) current donor assistance project/s operating in each district with the aim to support districts that are not currently involved in other similar and associated donor projects (e.g. USAID Coastal Community Adaptation Project C-CAP), (iii) to ensure duplication of government and/or donor project activities are not undertaken, (iv) support districts that have been "earmarked" for government/donor assistance but funds were not available, (v) environmental connectivity especially associated with the coastal and inshore marine resources (BIORAP), (vi) government support and (vii) community support.
- 112. Based on these approaches five (5) districts were identified for the delivery of pilots and demonstrations of community engagement. The five R2R project site locations districts were endorsed at the PPG workshop by both government and community representatives. The five proposed districts are Ananbar, Anibare, Ijuw, Meneng and Buada (see map below).
- 113. Annex 3 provides a detailed account of each the project sites profiles and Figure 4 provides the location and summary of the R2R project agreed district interventions. Each district includes one community and due to the nature of the R2R project (Ridge to Reef) and the connection between the terrestrial, coastal, and marine ecosystems, the districts themselves will be the pilot sites. The projects pilot initiatives have been designed to maximize community involvement and ensure skills are transferred to build capacity and understanding and the resulting project achievements are can be to

be replicated in other districts within Nauru. Furthermore, initiatives are in line with the regional developed within the R2R project, where knowledge and lessons learned generated from the Nauru R2R project will be useful shared with other Pacific Island countries.

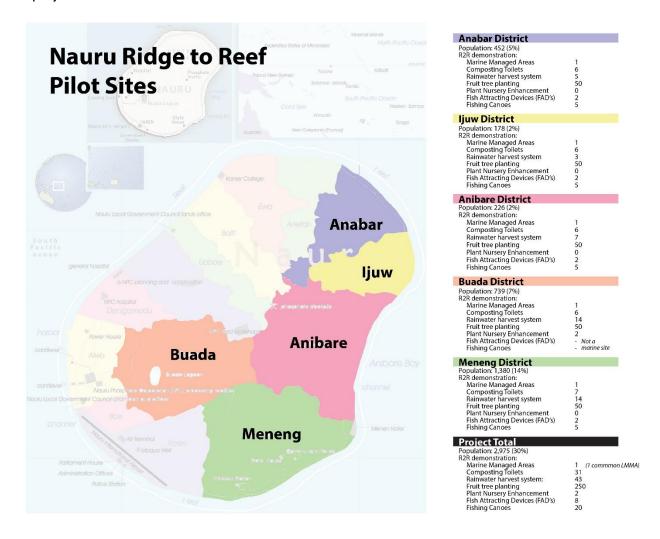


Figure 5: Location of the R2R proposed pilot sites and intervention outputs.

- 114. Baselines have been completed for each community and are outlined in table 3 below. Each district houses only one community with links to the sea. The components will work on different aspects of R2R issues. Component 1 (Conservation of Marine Biodiversity), Component 2 (Sustainable Land and Water Management), Component 3 (Governance & Institutions) and Component 4 (Knowledge Management) and are multi sectoral and project activities undertaken are relevant to the five project districts as well as at the national level.
- 115. Four of the five districts (Ananbar, Anibare, Ijuw, Meneng) include marine and terrestrial environments and were identified by the 2013 Biodiversity Rapid Assessment (SPREP) as potentially significant locations of fish spawning aggregations sites. Buada is a terrestrial site, but possesses a biological unique brackish water "lagoon" that is connected to the ocean. The coastal areas within these districts covers approximately 6 kilometers which is roughly one third of the nation's coast line and the land area covers roughly half of the nation's land mass.

2.3.2 Project beneficiaries

116. The entire population of Nauru will be impacted by the project and will benefit from the approach to be adopted be both direct and indirect beneficiaries. The full population will benefit from stronger and enhanced policy frameworks and systems for marine and inland natural resource management. 30 percent of the nation's population will be directly impacted by the R2R project interventions, which includes just under 3,000 individuals and 498 households in the projects five communities (Nauru Bureau of Statistics, 2013). In total, 11 common LMMA plan contributed by the 4 district management action plans, 31 waste water management systems, 43 rainwater harvest systems, 2 nursery enhancement sites, 250 fruit trees planted, 8 Fish Aggregating Devices (FAD's) and 2020 fishing canoes have been designed under the R2R project. The development of FAD's and the provision for fishing canoes has been designed in conjunction with NFMRA as an inshore coastal fisheries management tool that by providing local fishers access through the canoes to offshore FADs to oceanic pelagic fish stocks a reduction of fishing pressure on inshore ref associated coastal fish stocks will occur whilst maintaining food security and livelihood opportunities. Thus providing a management tool to assist in inshore fish stocks recovery. Table 3 presents the R2R project intervention for each of the 5 districts.

	Anabar	ljuw	Anibare	Buada	Meneng	Total
Population	452	178	226	739	1,380	2975
Marine Managed Areas	1 com	1 common Locally Managed Marine Protected Area				1
Composting Toilets	6	6	6	6	7	31
Rain Water Harvest Systems	5	3	7	14	14	43
Fruit Tree/Root Crop Panting	50	50	50	50	50	250
Plant Nursery Enhancement	0	0	0	2	0	2
Fish Attracting Devices (FAD's)	2	2	2	Not a	2	8
				marine site		

Table 3. Summary of the key R2R project interventions in each of the 5 project district sites.

2.3.3 Gender and social inclusion considerations

- 117. Protecting biodiversity, resource management and climate change are significant sustainable development issues that both require inputs from all stakeholders and have impacts on the different social, gender and age groups and the nation's economy and socio-economic development. Global experience has showed that for environmental including climate change, social and development challenges serve to accentuate and accelerate risks to the most vulnerable and least empowered social groups in society including women, children, older people and persons with disabilities.
- 118. The Nauru R2R project, as identified in the Project Identification Form (PIF) has fully considered gender and social issues in the project designed, which has been fully incorporated within the PPG phase for the full project document development. Furthermore, the project fully acknowledges that gender accountability is a cross cutting multi sectorial issue at both the project and component level which will be mainstreamed and has been safeguarded through proactive measures and activities within the R2R project. These project activities are an integral component of the projects Monitoring and Evaluation (M & E) and gender-disaggregated data will be tracked especially for those interventions that include capacity building activities and where social economic indicators are available. Furthermore, as many of the activities of R2R will develop alternative livelihood measures for communities relying on the land and sea, a social-economic analysis, including potential differentiated impacts on gender and vulnerable groups, will be analysed and inform the design and

roll-out of the implementation. Project interventions and specific capacity building components have been developed to ensure that men and women benefit equally whilst fully acknowledging cultural beliefs and practices.

- 119. Women in Nauru, like most Pacific Island nations, face a range of socio-cultural and political disadvantages arising from access to limited economic assets and exclusion in decision- making processes. This traditional trend is changing with women actively involved with District Community councils and middle level government roles, however women are highly underrepresented in high levels of government and senior political roles (e.g. ministerial level). As such, it is imperative that women's and men's specific needs and priorities are collectively identified and addressed throughout the project cycle, including the requirement that women be actively involved in activity planning, implementation, and monitoring.
- 120. Through extensive government, key stakeholder and community workshops and face to face interviews during the PIF and the PPG resource management, sanitation, freshwater access and condition and biodiversity issues were discussed where key considerations that are particular to the shared and differentiated roles that men and women play in the access, management, and utilization of these resources were highlighted and reviewed. Resultant findings derived from these exchanges for both genders were included in the R2R project.
- 121. Of the twenty seven (27) Project Preparatory Grant (PPG) Formal National Workshop participants approximately 35% were women. All participants actively participated in group discussions and presentations of group discussions. Approximately 33% of Nauruan households are headed by women and are reliant on local natural resources to a varying degree for their family's nutrition, health and livelihood, especially marine and coastal resources. This results in many of these women bearing an enormous burden in finding creative ways of sustaining their families. Combined with the rapidly increasing populations, increased competition for resources and the continued degradation and contamination of the island freshwater supply are making access to basic services harder for women and families to attain life style aspiration. Both genders are involved in fishing with women in general harvesting resources along the coastal strip and intertidal regions, targeting invertebrates and fin fish whist men partake in these activities as well as fish offshore resulting in the capture principally of fin fish. Gardening, although considerably reduced since mining is undertaken by both genders however partitioning of labor and house hold activities is more household structured rather than cultural or custom.

2.3.4 Comparative Advantage of UNDP

- 122. The proposed project Nauru's United Nations Development Assistance Framework, UNDAF (2013-2017). Nauru's 2013-2017 UNDAF country results matrix has four priority outcomes of which one is 'National and local capacities ably respond to climate change and natural disasters, and sustainably manage and coordinate water resources'. The current document outlying UNDP's national level support to Nauru is the *UNDP Sub-Regional Programme Document for Pacific Island Countries* 2013-2017. One of four programme areas is 'Environmental management, climate change and disaster risk management'.
- 123. The proposed project also falls under UNDP's 2012-2020 Biodiversity and Ecosystems Global Framework which seeks to harness the positive opportunities provided by biodiversity and natural ecosystems. With forty years of experience in the biodiversity and ecosystems field, working at the national level, UNDP is well placed to work with developing countries and countries in transition to achieve the Aichi Targets by 2020. The Framework seeks to leverage the organization's status as a trusted partner of governments and its unique ability to link work on biodiversity and ecosystems with that on poverty reduction, governance, and crisis prevention through integrated programming. UNDP-GEF's capacity in Ecosystems and Biodiversity is demonstrated through on-going work with over 146

countries to support the current implementation of 274 projects with a value of USD 3.4 billion that achieve multiple development benefits.

- 124. UNDP's Water and Ocean Governance Programme draws on a wide range of staff expertise in water resources management, water supply and sanitation, fisheries and marine/coastal resources management to manage its global portfolio. This project will be directly supported by an experienced UNDP Regional Technical Advisor based in the Asia-Pacific Regional Center and by the UNDP Principal Technical Advisor at UNDP Headquarters with responsibility for global oversight of the UNDP Water & Ocean Governance programme.
- 125. The UNDP Fiji MCO's support to the Government of Nauru addresses the thematic areas of democratic governance, poverty reduction and sustainable environmental management. At the center of Fiji MCO's work in Nauru is the improvement of livelihoods and gender empowerment. The UNDP Multi-country Office (MCO) based in Suva, Fiji, will be responsible for the proposed project. This project will under the management of the Sustainable Development Pathways Unit which has 7 professional staff.
- 126. In 2010, the UNDP's Fiji MCO supported the establishment of UN Joint Presence Office in Nauru. Through the UN Joint Presence Office UNDP, UNICEF, UNFPA and other agencies are closely collaborating to assist the Government of Nauru in attainment of MDGs, strengthening institutions of democratic governance, promoting gender equality and empowering women. The UN Joint Presence in Nauru is a gateway for the Nauruan Government, connecting the country to the UN's resources for technical assistance and policy advice. The Fiji MCO works with the UN Joint Presence to achieve the national development objectives through connecting the country to the vast network of knowledge and expertise.
- 127. The Fiji MCO has substantial GEF implementation experience for both national and regional projects. Fiji MCO is pleased to continue with its support to reducing biodiversity loss through the R2R projects.
- 128. In 2012, the Fiji MCO supported the Government with the preparation and launch of its first MDG report covering the period 1990-2011. In 2014, the Fiji MCO is supporting the government to undertake a Legislative Needs Analysis (LNA) to undertake a detailed assessment of the current capacity and identify the long-term legislative needs of the Nauru Parliament. Findings of the LNA report will feed into a bigger Legislative Strengthening Assistance Project, which will help establish systems deemed necessary for the approval of bills that will be drafted through the R2R project.
- 129. The UNDP Fiji MCO has built a very good relationship with government through the years of partnership and continues to work closely to strengthen capacities in the three thematic areas of democratic governance, poverty reduction and sustainable environmental management.

2.4 Project Objective, Outcomes and Outputs/Activities

- 130. The overall objective of the project is to preserve biodiversity, ecosystem services, improve climate resilience and sustain livelihoods in Nauru using a ridge-to-reef approach that combines functional, representative and sustainable national system of coastal and marine managed areas that are integrated with the adoption of appropriate SLM practices in adjoining / upstream watersheds. By also improving government capacity, the proposed project will effectively reduce land degradation and enhance protection for marine and coastal biodiversity and habitats, whilst improving coastal livelihoods and creating lasting management of Nauru's natural resources.
- 131. The project will achieve this objective through the following set of outcomes. The activities to achieve each of these four outcomes are outlined in the following section.

Component 1: Conservation of marine biodiversity

Outcome 1.1: Improved management effectiveness of new marine conservation areas

Component 2: Sustainable land and water management

Outcome 2.1: Integrated landscape management practices adopted by local communities living within the 'bottom-side', and applicable 'ridge', and 'topside' areas not covered by mining

Component 3: Governance and institutions

Outcome 3.1: Biodiversity conservation and SLM mainstreamed in policy and regulatory frameworks

Component 4: Knowledge management

Outcome 4.1: Improved data and information systems on biodiversity and land management best practices

Component 1: Conservation of Marine Biodiversity:

Co-financing amounts for Component 1:

GoN - NFMRA (AusAID) US\$ 864,000 GoN - NFMRA US\$ 625,000

Estimated Total co-financing: US\$1,489,000 Project grant requested: US\$1,312,525

- 132. Component 1 will focus on improving the state ecosystem health and marine biodiversity in nearshore coastal waters. This will be achieved through the establishment of coastal and marine management partnerships between the government and communities at the District level.
- 133. The outcome of Component 1 will be improving the effectiveness of management of the nation's inshore marine resources through the creation a network of Community Based MMA and to initially cover at least 33% of Nauru's total coastline. One comprehensive community managed area comprising "LMMAs" including the marine bidoveristy-rich eastern side of the island will be developed, which will be managed and monitored by each of the R2R project districts that have a coastline (4 of the 5). This approach is designed to be able to be replicated in the remainder of Nauru during and after project impelmentation. The project will strengthen LMMA management through the development and implementation of participatory management plans.
- 134. The development of the LMMA concept will be led by the NFMRA in close collaboration with the DCIE and district stakeholders (e.g. District Community Council (DCC), CBO-s NGO, fishers) and will incorporate findings from site specific biological marine assessment work to be undertaken, previous studies (e.g. BIORAP) and information collated through community consultation. The project will highlight the linkages to livelihoods and economic activities through an effective and inclusive multistakeholder consultation process and in doing so, secure buy-in from communities and government officials to anchor the LMMA into a national policy supported by legislation.
- 135. Specific measures and interventions to enhance ecosystem resilience in the nearshore coastal coral reefs includes:
 - Development of understanding of ecosystem health and coral reef resillince to provide a basis for the development of site mangement plans
 - Developpment of understanding of marine resources (i.e. fish catch data)
 - Development of community based LMMA mangement plans supported by appropriate regulatory frameworks
 - Installation and deployment of Fish Aggregating Devices (FAD's) in areas of deeper water beyond the inner coral reef to relocate fishing pressure from nearshore reefs to deeper

- offshore waters. Local fishers will be able to access FAD fishing for oceanic pelgic species thus maintaining food security and livelihood opportunities.
- Community support incentives for communities to undertake specific measures to enhance resillience of nearshore coastal waters providing a management tools to assist in inshore fish stocks recovery.
- Implementation of effective marine-based alternative livelihood measures such as fish, clams, seaweed farming

OUTCOME 1.1: Improved management effectiveness of Locally Managed Marine Areas (LMMAs)

- 136. This outcome will build the framework for the establishment of the national system of LMMAs by supporting the design and implementation of the regulatory framework including the legislation to support the long term sustainable management of Nauru's marine biodiversity and marine resource usage. The legislation will allow for a system for government and community partnership to enable the management and protection of Nauru's marine inshore resources.
- 137. This activity will be co-financed by the Australian Government which is providing US\$864,000 to the NFMRA through the Nauru Fisheries Management and Institutional Strengthening project. Combined with government's in-kind support of US\$625,000 through NFMRA, co-financing from both sources will help maintain the operations and capacity required to fulfill NFMRA's broad mandate of the protection of Nauru's marine biodiversity. The NFMRA will be instrumental in finalizing Nauru's marine and fisheries law upon which national policies and regulations will be based. NFMRA will be a key partner to implement the activities relating to community managed marine areas and re-enforce the notion of mainstreaming biodiversity conservation into fisheries practices.
- 138. Once the law is developed, agreements will be reached with communities on the establishment of LMMA covering at least at least 33% of Nauru's total coastline (approximately 10 km). In addition, coral reef monitoring and evaluation will be undertaken to contribute to the management planning of the sites. The implementation of the community agreed management plans will be the main tool for supporting effective management of the LMMAs.

Output 1.1.1: A network of locally managed marine areas (community based (CB) or locally managed marine areas (LMMAs) established through community actions and supporting enabling government actions.

- 139. Nauru has an open marine tenure system managed by the national government allowing anyone to fish the inshore waters (high water mark to 12 nautical miles offshore). Traditionally a system was in place for management of these coastal areas. Currently communities are claiming some authority (varies between districts) over adjacent community marine and coastal areas with respect to resource extraction and more recently the management and conservation of these resources. The long term sustainable management of these valuable resources must be improved through good policies and regulations from the national development of cooperative management arrangements.
- 140. The current fisheries/marine Act of Nauru has under gone considerable change and review over the past several years. The Act however requires an independent review to ensure the content and its associated regulations are in line with the government of Nauru's legal system and policies and frameworks. It is important the sustainable management of inshore marine resources are incorporated, and the finalization of the Act is completed through a multi sector (all of government and community) process (including stakeholder workshop).
- 141. The R2R project will support a review and the further development and finalization of the nation's fisheries legislation (Act). This review will ensure elaboration of the act to include a framework

for the LMMA system to be developed in partnership with government and District Community Councils with technical support from the R2R project (Marine Managed Area Advisor and Legal Specialist).

- 142. Based on these legal instruments, agreements will be developed with between the Government and District Community Councils to establish and operate LMMAs. These agreements will clearly state the roles and responsibilities of each of the partners in the LMMA establishment, define boundaries and seek to outline a system for zoning of the whole system. The development of specific community consultations between NFMRA and communities will be supported by the existing community engagement protocols.
- 143. The agreements will support the operation of ecosystem health surveys with a focus on coral cover, fish and invertebrate abundance to identify larval dispersal and settlement patterns and incorporate data into MPA site management. These studies will contribute to the information base for further elaboration of management plan and actions to enhance management effectiveness as outline in Output 1.1.2. In addition a fishery biologist will be engaged to assess fishing effort (Catch Per Unit Effort (CPUE) data on all inshore resources targeted in the project pilot districts and working in collaboration with the NFMRA staff.

144. Proposed activities to achieve output 1.1.1

Activity 1.1.1.1	Support a review of the proposed marine regulatory framework for community based management of coastal areas and elicit DCC feedback into the process (link to 3.1.1)
Activity 1.1.1.2	Develop agreements between the Government and District Community Councils to establish and operate LMMAs including community consultation and associated processes
Activity 1.1.1.3	Complete an island wide marine ecosystem health surveys with a focus on coral cover, fish and invertebrate abundance and other related.
Activity 1.1.1.4	Based on the marine ecosystem and coral health study, provide recommendation on a national network of LMMAs

Output 1.1.2: LMMAs strengthened through development and implementation of management plans.

- 145. The development of LMMAs will be based on Management Plans to be developed for each site as required by the National Fisheries Act. This will require the ownership and involvement of communities in the day to day and long term management of the LMMAs.
- 146. The management plans will be based on the collection and analysis of resource assessment data and fishing pressure to ensure the aims of both protecting biodiversity and ensuring resources can be sustained to support subsistence and artisanal livelihoods without overexploitation.
- 147. Nauru's inshore fisheries data (e.g. SPC ProcFish) highlights a significant decline in targeted subsistence and artisanal finfish and invertebrate resources. This decline has been attributed to unsustainable fishing pressure and the lack of specific enforceable resource management measures. The decline of these resources has been highlighted by each of the R2R districts. The R2R project will assist and work with the NFMRA and district communities to provide identify actions to enhance both biodiversity conservation and to increase resilience of fishery stocks.
- 148. There are a number of fisheries management measures that can be utilized, each will be evaluated and appropriate measures for each fishery and communities will be developed. Measures can include fishing gear restrictions, gear banning, seasonal closures, MPA's. This information combined with fisheries resource utilization data will assist in the development of district and nationwide marine managed areas.

- 149. The R2R project will support the DCC and NFMRA to review the information and data generated through 1.1.1.3 to inform the management plans for the 4 districts with marine and coastal waters. This management planning process will include activities to develop the specific capacity of communities, government staff and partners to understand more about the needs for coastal and marine management. This will include hands on planning processes and visit to Fiji to review approaches to LMMA management (longest established LMMA system in the Pacific) to discuss similar challenges and issues to identify different management approaches. In addition, options available to manage inshore fishery resources and alternative fishing livelihood options will be explored. Reducing fishing pressure on targeted resources will provide an avenue for natural resource rehabilitation.
- 150. Based on the above process, a Management Plan will be developed for the Locally Managed Marine Areas across the 4 districts. Each district however will have a management action plan that will contribute to the overall LMMA Management plan. This Management Plan will be developed through a participatory process and will incorporate Integrated Coastal Management approaches to address threats, including climate change impacts. Itlt will include guidelines for utilization for elements such as:
 - Identification of "no-take" zones for biodiverstiy conservation and re-sticking of the inshore waters with appropriate demarcation of protected area boundaries
 - Zones of closed seasons that may be protected for particular species for periods of the year
 - Development of community regulations for management of the LMMA
 - Installation and deployment of Fish Aggregating Devices (FAD's) in areas of deeper water beyond the inner coral reef to relocate fishing pressure from nearshore reefs to deeper offshore waters. Local fishers will be able to access FAD fishing for oceanic pelgic species thus maintaining food security and livelihood opportunities.
 - Re-vegetation using fruit tree of coastal areas to prevent erosion and subsequent siltation
 of marine waters
 - Community support incentives for communities to undertake specific measures to enhance resillience of nearshore coastal waters providing a management tools to assist in inshore fish stocks recovery.
 - Implementation of effective marine-based alternative livelihood measures such as fish, clams, seaweed farming
 - Developpment of understanding of marine resources (i.e. fish catch data)
- 151. Once approved by communities and the national Government, the 4 Management Action Plans will then be implemented for each of the districts. The R2R project will support the implementation of the plans and support long term monitoring to inform management effectiveness. The management effectiveness indicators will be incorporated in the management plan. By the end of the project each of the coastal pilot sites will have a 10 percent reduction in inshore fishing pressure resulting from management measures, education and awareness and deployment of FADs and canoe to move fishing pressure to sustainable pelagic fish stocks; and 10 percent increase in subsistence and artisanal alternative livelihoods for project pilot districts.
- 152. A summary of indicative activities is provided below.

Activity 1.1.2.1	> Community consultations on the management issues for each LMMA and
	development of specific key approaches and actions to address the management
	challenges.

Activity 1.1.2.2	Develop Marine Management Plans for each of the 4 Districts for R2R though a participatory process
Activity 1.1.2.3	Implementation of the LMMA Management Plan in collaboration with DCC and NFMRA
Activity 1.1.2.4	 Participatory monitoring and evaluation of the Management Plan with DCCs and NFMRA
Activity 1.1.2.5	Gather data on inshore resource utilisation/catch and compare fishing pressure on resources when FADs are deployed in each of the project pilot communities feeding back into implementation of LMMA Management Plan (link to 4.1.1).
Activity 1.1.2.6	Based on findings from alternative livelihoods assessment (socio-economic analysis including gender), implement effective marine-based alternative livelihood measures such as fish, clams, and/or seaweed farming

Component 2: Sustainable land and water management:

Co-financing amounts for Component 2

GoN - EU	US\$ 653,000	
GoN - AusAID	US\$ 1,200,000	
GoN - Japan	US\$ 4,000,000	
Estimated Total co-financing:	US\$ 5,853,000	
Project grant requested:	US\$ 765,310	

- 153. This component will focus on Nauru's terrestrial landscape and address land, waste, and water-use practices for the five R2R pilot districts through a government and DCC partnership.
- 154. The outcome of Component 2 will be the development and adoption of integrated resource management plans that use best practices that initiate direct community based interventions to improve food security (planting fruit trees), waste management (compositing toilets), ground water quality and household water access (water catchment systems improved).
- 155. This will include the assessment and establishment of Land Use Management plans that integrate spatial and policy frameworks for all relevant economic activities and landuses such as agriculture (pig/poultry/crops, etc), settlements, waste management sites, and forestry, lagoons, etc. Assessments will cover the entire island, while detailed plans will be developed for the 5 pilot districts. Improved water catchments systems by gutter and piping replacements, education and awareness of composting toilets and the planting of fruit trees will be provided by the R2R project to further support and augments current national and community initiates.
- 156. The specific development of the above plans and activities will be led by the DoA (NFMRA will be the joint lead agency for the development of the Buada lagoon Management Plan) in close collaboration with the DCIE and district stakeholders (e.g. District Community Councils (DCC), CBOs, NGO, fishers) and will incorporate findings on the biophysical, demographic and socioeconomic information pertaining to the "bottom side" and applicable "ridge" land sites (Bureau of Statistics, 2013) and information collected by the R2R project following a participatory approach to facilitate the development of these plans.

OUTCOME 2.1: Integrated landscape management practices adopted by local communities living within the 'bottom-side', and applicable 'ridge', and 'topside' areas not covered by mining.

- 157. The focus of this outcome is to develop and implement land use plan to support the long term sustainable management of Nauru's terrestrial biodiversity, rehabilitate ecosystem functions, reduce land degradation and contamination from solid wastes, and improve water access and quality. The development of these plans will support the development of a legislative system that provides for government and community partnerships that enables the management and protection of the nation's terrestrial ecosystems and resources.
- 158. The desired results from this outcome is a system through which national policies and regulations are implemented that support a community enabling environment to which long term sustainable management of the nation's terrestrial resources can be attained. The integration of land use management policies, plans and regulations with coastal and marine management systems are required to attain a holistic approach to the management of Nauru's resources. Community awareness, education, and ownership are integral components of this outcome and the R2R project has allocated assistance to ensure community workshops, awareness and educational programmes are developed and delivered.
- 159. Bilateral and regional arrangements with the EU, AusAID and the Government of Japan will provide co-financing for the realization of this outcome. The EU is allocating US\$653,000 for increasing the rainwater harvesting capacity and improving water security in selected households while AusAID is providing US\$1,200,000 for improving water storage capacity in selected sites. The Government of Japan, through the Pacific Environment Community Fund, is providing US\$4,000,000 the desalination of seawater and other productive uses. While such co-financing activities are commendable and address the immediate needs of prioritized households, the R2R project will address the unmet needs in an integrated fashion through a R2R lens in the review of existing assessments, development of land-use plans, and implementing and replicating demonstration activities.

Output 2.1.1: Biophysical, demographic and socioeconomic assessments conducted and reviewed in the project districts, focusing on the bottom-side and applicable 'ridge' areas and topside not covered by mining.

- 160. The understanding of human activities and their relationships and impacts on the environment and land-use is essential to enable the development of Management Plans and associated actions. Land tenure, ownership and stewardship are directly linked to impacts on the environment. Poor agricultural, household and waste practices can have significant impacts in both land and associated freshwater groundwater systems. Nauru's major environmental degradation from the mining of "topside" Nauru has had a severe negative impact on the islands ecosystems and resources.
- 161. An assessment and review of the 5 Districts biophysical, demographic, and socioeconomic conditions will be undertaken, which will result in increased understanding of land use, ownership patterns and will contribute to the development of recommendations for long term sustainable land use management. This will be undertaken by DoA and DCIE and DCCs stakeholders with support from the R2R project.
- 162. These initial district assessments will play a significant role in providing community awareness, education and develop community relationships with the R2R project. The R2R pilot site management plans will be developed to ensure they are replicable for all districts of Nauru if required. This information will be used to further develop the R2R interventions including land use and waste management plans. This information is critical to ensure the R2R interventions will achieve their intended goals (e.g. Locations within each district that are suitable for the deployment of fruit trees).
- 163. A summary of indicative activities is provided below.

Activity 2.1.1.1	A	parameters in	cluding s	ite specific lan		socioeconomic pattern for the 5
Activity 2.1.1.2	A			rial" profiles bane 5 R2R pilot	dies in	2.1.1.1 and land

Output 2.1.2: Integrated agricultural land-use plans developed for the bottom-side and applicable 'ridge' and topside areas that are not covered by mining through review of the draft land-use plan and patterns of land ownership for the project districts/sites

- 164. The development of an integrated agricultural and land use plan is essential for the identification, planning and monitoring of specific management activities to ensure the long term sustainable use and protection of the terrestrial areas. Similarly, the presence of invasive pests and plants, and their impacts on the natural environment need to be evaluated and impacts addressed. These plans and their recommendations describe specific issues to be addressed. The R2R pilot districts management plans will be developed to ensure they are replicable for all districts of Nauru if required.
- 165. The R2R Project will support DoA and DCIE and community stakeholders to review existing land use management plans for each of the R2R project districts. This review combined with the new district "terrestrial" profiles and community participatory approaches will result in site specific agricultural and land use plans for each of the R2R districts. These Plans will highlight priorities for protection, rehabilitation and management. For the Buada district an additional management plan will be developed specifically for the unique brackish water lagoon. The lagoon itself, although quite small has played a significant role in the livelihood and food security of this district. However, recent ownership issues, pollution (surface and underground) and lack of management has resulted in the degradation of this system. Protocols and systems development for the marine managed areas in Component 1 will be adopted were relevant and implemented for this management plan.
- 166. A summary of indicative activities is provided below.

Activity 2.1.2.1	>		information, review the im			and	local
Activity 2.1.2.2	A	nent for t	manner final he entire isla				

Output 2.1.3: Soil and water conservation measures implemented, including rehabilitation of degraded land in 'ridge' and topside areas using economic species such as fruit trees and increase of communal water storage facilities in the five R2R water-stressed project districts to support home gardens and household water supply.

167. The natural vegetation and associated soil profiles of Nauru have been changed and severely degraded. Coastal erosion and development has resulted in considerable removal of vegetation and soil loss associated with the coastal strip and lower ridge areas of the island whilst the "top side" of

⁴ To be supported through education and training activities in 4.1.2

the island has been significantly altered due to mining operations that have removed over 70% of the island natural vegetation and soil. The loss of vegetation and soil has had direct impacts on the island's fresh-groundwater (the only natural freshwater in the nation) resulting in salt water intrusion and loss of volume. Further degradation and contamination of the groundwater has resulted from poor land use practices and solid waste management systems. Contamination from human and animal waste systems has resulted in unacceptably high levels of fecal coliform bacteria resulting in water from the groundwater being not suitable for human consumption. Water for drinking is always limited in Nauru and during the seasonal low rainfall period there are very serious water supply issues (droughts). The provision of year around safe and potable water is a major development issue to be address in Nauru.

- 168. In the long term improvements in ground water quality will be essential in meeting the water needs of the nation. These improvements will require a long term government and community partnership to rehabilitate mining areas and adopt different approaches to land use and waste management. In the short term urgent actions to meet the water requirements of the population will include an expansion of current government initiatives including providing tree saplings to assist in soil retention and water maintenance, installation of rain water harvesting systems (roofs, gutters and drainage pipes) and provision of additional water tanks to each districts.
- 169. The R2R project in collaboration with the DoA (and DCIE) and community stakeholders in each of the projects five districts will provide 43 rainwater harvest systems (Anabar 5, Ijuw 3, Anibare 7, Buada 14, and Meneng 14). The selection of houses are a result of the outputs of the Nauru Global Climate Change Alliance (GCCA) project funded by the European Community (EU) which undertook an extensive island wide stakeholder assessment. Water storage units have also been supplied by an AusAID project. The R2R Project will complete the system for storage of rainwater in the pilot districts. The R2R interventions will focus on enhancing the roofing system in selected households in order to greatly increase the nation's access to safe water for drinking whilst providing avenues for increased self-sufficiency and improved livelihood opportunities.
- 170. Similarly, the R2R Project through DoA (and DCIE) will provide community stakeholders in the five pilot districts 50 fruit tree (e.g. bread fruit) saplings per district. This will be supported by a local training programme on soil protection, water management, and pollution (nutrients) control and food security. The R2R interventions will assist in the long term restoration in ecosystem functions.
- 171. A summary of indicative activities is provided below.

Activity 2.1.3.1	Further expand the production capability of the government plant nurseries to improve production and distribution of stocks of suitable trees
Activity 2.1.3.2	Distribute food tree samplings to each community within the 5 R2R project districts to improve food security (50 per district) and provide guidance on most suitable management approaches
Activity 2.1.3.3	 Distribute rainwater harvesting systems to individual houses within each of the 5 R2R project districts to be utilized for home gardening Provide guidance to communities on long-term management of systems.

Output 2.1.4: Drought- and salt-tolerant food crops tested and practices disseminated to communities and households building on initiatives of bilateral and multilateral organizations.

172. Over the last 30 plus years Nauran's traditional subsistence skills of the fields of agriculture, fishing and related customary knowledge have rapidly declined. This loss of knowledge has led to the degradation of farming land and in most cases the dominance of invasive plant species, the loss of Nauruan adapted food crop varieties, with related poor soil and water management practices. Further

impacting on food crops production is the long term alteration and degradation of the islands natural vegetation, associated soils degradation and the reduction in volume and contamination of ground water. Coastal erosion and urban development has resulted in considerable removal of vegetation and soil loss associated with the coastal strip and lower ridge areas of the island whilst the "top side" of the island has been significantly altered due to mining operations that have removed over 70% of the island natural vegetation and soil.

- 173. Available land for small scale household farming is limited and generally restricted to the coastal strip. Therefore to reinvigorate the subsistence and possibly small scale commercial production of root crops both drought and salt resistant varieties and the agricultural technical knowledge and skills is required. These improvements are being developed through a DoA and community partnership program (*Grow and Green*) to provide saplings and cuttings to communities from a government owned plant nursery which is promoting cultivation of root crops that meet the district's environment and community expectations.
- 174. To scale up the *Grow and Green Initiative* the R2R project in collaboration with the DoA (and DCIE) and community stakeholders in each of the projects five districts an assessment of potential plant (root crops) species that can be successfully cultivated for subsistence food security and small scale livelihood opportunities will be undertaken and discussed through formal workshops. Seedlings of the selected species will be cultivated at the DoA agricultural plant nursery and through a community extension project operated by the DoA and assisted by the R2R project provide the seed stock and technical skills and knowledge to grow these root crops in the districts. R2R intervention will provide assistance to the DoA to upgrade the current nursery facility located in Buada district (e.g. provide water catchment systems, basic gardening tools) and to undertake a study tour of Fiji to upgrade technical skills and knowledge on root crop grafting techniques, the production of grafts and seedlings in nurseries and farms and to secure new varieties and species of root crops suitable for the environment in Nauru. The R2R interventions will assist in the long term improvements of drought resistant root crop production enhanced food surety and management of farming areas.
- 175. A summary of indicative activities is provided below.

Activity 2.1.4.1	 Enhance capacity of DoA staff to cultivate salt resistant food crop species through intensive capacity building at SPC (agriculture) in Fiji
Activity 2.1.4.2	> The DoA plant nursery to actively culture 10 species of salt resistant food
	crops suitable for planting in Nauru and ensure availability to communities
Activity 2.1.4.3	Distribute salt and drought resistant food crops to each community within the 5 R2R project districts to improve feed security.

Output 2.1.5: Innovative measures implemented (e.g. small scale solid and wastewater treatment systems, i.e. composting toilets) to reduce pollution loads by at least 10% on MMAs to improve ecosystem health and sustain ecosystem services (based on successes of pilot demonstrations of the IWRM project and as a way of implementing the national IWRM plan).

176. The natural ecosystems of Nauru have been altered and degraded from a variety of anthropogenic sources. The removal of vegetation in Nauru has resulted in an increase in surface water runoff, soil erosion, nutrient loading and pollutants being deposited into ground and coastal waters. There is a direct impact on natural systems. Further degradation and contamination of the land and groundwater has resulted from both poor land use practices and solid waste management. Improved solid waste systems are needed to decrease the current levels of land and water contamination. An integrated solid waste management plan (humans and animals) is an essential and

a valuable tool to identify specific management options required to ensure the long term sustainable protection of the environment. These plans and their specific recommendations can address specific issues and can guide the further development of policy and legislation. The R2R pilot site management plans will be developed to ensure they are able to be duplicated for all districts of Nauru.

- 177. Only one District in Nauru (Location Community in Denigomodu District) has access to a sewage system (built in the 1970) however currently maintenance is limited and it is in poor condition. The remaining districts are connected to either a cesspit (soak away) or a septic tank (Bureau of Statistics, 2013) which either directly or eventually discharges into the groundwater. Similarly, waste from cultivated pigs and poultry is washed from pens directly into groundwater. Contamination from human and animal waste has resulted in unacceptably high levels of fecal coliform bacteria resulting in groundwater and is not suitable for human consumption. Nutrients derived from poor waste management systems enter the coastal environment resulting in habitat degradation.
- 178. Long term improvements in groundwater quality and quantity will be essential to meet the water requirements of the nation. This will be achieved through a long term government and community partnership to rehabilitate mining areas, modify current land use practices and waste management systems. In the immediate and short term current pollution levels of the ground water can be reduced through further expansion of the existing pilot initiatives by providing composting toilet systems and their correct use and practical waste collection and management of animal solid waste through compositing systems to reduce solid waste entering the nation's waste system.
- 179. Through the R2R project in collaboration with the DoA (and DCIE) and community stakeholders in each of the projects five districts, 31 waste management systems (compositing toilets) will be deployed (Anabar 6, Ijuw 6, Anibare 6, Buada 6, and Meneng 7). The selection of houses to receive the toilets within the project districts are a result of the Nauru governments International Water Resource Management (IWRM) project which was developed through an extensive island wide stakeholder assessment and based on expressions of interest in the new technology. The National water, sanitation and hygiene policy Plan has been developed by the IWRM project and will be built upon during the R2R Nauru intervention. The allocation of items through this intervention builds on these plans and will be guided by the IWRM project team to ensure successful implementation.
- 180. These R2R interventions will further enhance community exposure to new environmentally sound technology and significantly contribute to the nation's objective to reduce ground water and coastal pollution.
- 181. A summary of proposed activities is provided the table below.

Activity 2.1.5.1	Distribute waste water treatment systems (compositing toilets) to selected individual houses (identified in IWRM Plan) within each of the 5 R2R project Districts to reduce impact on ground water quality.
Activity 2.1.5.2	Provide information and awareness for selected households on use of composting toilets

Component 3 Governance and Institutions:

Co-financing amounts for Outcome 3:

GoN - DCIE U\$\$ 200,000 GoN - NFMRA U\$\$ 312,500 UNDP U\$\$ 40,000 Estimated Total co-financing: US\$552,500 Project grant requested: US\$334,095

- 182. This component of the project will focus on strengthening Nauru's DCIE and NFMRA regulatory and policy framework to build governance systems to effectively manage Nauru's natural resources and provide effective training and capacity building to staff.
- 183. The expected outcome of Component 3 is strengthened legislation, policy and functions, of the DCIE, DoA and NFMRA in relation to mainstreaming biodiversity conservation and sustainable land, marine and coastal management. Specifically, the R2R project will support to and work with these key government agencies to articulate and develop (i) plans for operationalizing the NBSAP (corporate plan), (ii) a waste management policy framework (iii) environmental and social safeguard policy and guidelines, (iv) a land use framework for the Agricultural Division, and (v) fisheries law and regulations.
- 184. To support the development of policies and frameworks and to ensure national ownership in the process. Partner ministries and agencies (e.g. NFMRA) will also undertake training and capacity development in specific areas of policy formulation including drafting of legislation; monitoring and evaluation of physical, biological and chemical parameters; project management, implementation and oversight skills; GIS; and land-use planning. Community participation in supporting these governance developments is essential to successful implementation and thus local communities will be provided training to further educate and to empower grass roots their participation in these initiatives.

OUTCOME 3.1: Biodiversity conservation and SLM mainstreamed in policy and regulatory frameworks.

- 185. The focus of this outcome is to ensure that capacity is established to design, develop and implement DCIE governance policies and frameworks and legislation on the development and management of the nation's biodiversity and natural resources. These governance systems will articulate the roles and responsibilities of DCIE and its divisions (e.g. Division of Agriculture) and provide a platform to engage other government ministries, agencies and communities through a partnership approach that enables a holistic appreciation of the sustainable management of these resources.
- 186. The results from this outcome are governance arrangements with clear roles and responsibilities for DCIE and its divisions identified and supported by specific environmental management systems. Community partnership (including awareness and support) will contribute to improvements in waste management systems, and land use practices. In addition, a regulatory framework to ensure environmental and social safeguard protocols are used for all development activities within the nation will be established. Community awareness, education, gender considerations, and ownership are integral components of this outcome.
- 187. The Government of Nauru through DCIE and NFMRA are providing co-financing for the realization of this outcome. DCIE will spend US\$200,000 in coordinating environmental policy, laws and programs, beach profiling, vegetation survey, and a rapid biodiversity assessment. NFMRA will spend US\$312,500 for ensuring that fishing waters are not overfished and that the impact of fisheries upon the environment is reasonable, and seeking to ensure that the impact of human activities on fisheries is reasonable. The R2R project will also build upon UNDPs ongoing support to Nauru's Legislative process and will incorporate lessons learned, gaps identified, and capacity development approaches proposed through the Legislative Needs Assessment (LNA) conducted through the Legislative Strengthening Preparatory Assistance Project (US\$ 40,000). The R2R project will build on these initiatives and provide capacity development opportunities to improve the overall governance and management of biodiversity and natural resources.

Output 3.1.1: Relevant policies developed for key sectors such as environment, waste management, natural resource management, coastal fisheries management, and agricultural landuse developed.

- 188. This output will support policy development. These policies, frameworks and their guidelines are essential components of good governance and are required to ensure government roles and responsibilities are clearly identified and are responsive to national issues. Nauru operates in a constantly changing political and social environment and thus as a consequence requires policies, frameworks and guidelines that provide direction for the government and that can be periodically amended to address issues that arise.
- 189. The existing environmental governance arrangements in Nauru are inadequate for sustainable management of the nation's resources, thus updating and/or developing new policies and guidelines to amend existing legislation and regulations is required to ensure the sustainable management.
- 190. Through discussion during the development of this R2R project and in collaboration with the DCIE and community stakeholders the R2R project will provide support to review current environmental policies, frameworks and guidelines. The review will identify areas for improvement and/or change and in collaboration with DCIE and where needed recommend new systems. These will specifically include the development of a plan for DCIE to implement the NBSAP and associated programs, a revised and updated land use framework for the DoA, a revised and updated waste management policy framework and the development of a new environmental and social safeguard policy including guidelines to monitor and manage potential environmental impacts associated with development on the island.
- 191. The development of these policies and frameworks will involve extensive government, community and stakeholder input to ensure recommended changes are useful and suitable for sustainable development of Nauru's natural resources. External assistance as part of the final review stages maybe required, this is especially relevant to the development of environmental and social safeguards systems. The UNDP multi country office in Fiji should be consulted throughout the process if required.
- 192. Linked to each of these activities will be an extensive country-wide community consultation process with associate information and awareness activities.
- 193. This component will link with the review of the Fisheries Law and related provisions under component 1 of this project.
- 194. A summary of proposed activities is provided the table below.

Activity 3.1.1.1	 Review and finalise sectoral policies under DCIE responsibilities including NBSAP
Activity 3.1.1.2	Review and develop an Environmental and Social Safeguard Policy and Guidelines for DCIE.
Activity 3.1.1.3	Review and develop a Land Use Policy Framework
Activity 3.1.1.4	 Review and develop Fisheries Law and regulation with NFMRA (link to component 1)

Output 3.1.2: Capacity strengthening of national agencies associated with new policies and framework process development and formulation, including drafting of legislation; monitoring and evaluation (impacts, water quality, etc.); project implementation/management and oversight; GIS; and land-use planning.

195. The development of key policy, frameworks, guidelines and regulative measures are essential components of governance and are required to ensure government roles and responsibilities are clearly identified and are responsive to the issues facing the nation. The effective development of

these governance documents requires a high level of technical and managerial skills and a sound understanding of issues facing the nation's government and citizens.

- 196. Through discussion during the development of the R2R project and in collaboration with the DCIE and community stakeholders the R2R project will provide professional (international and local) support to ensure relevant government staff are actively involved and mentored through the review and development process of new DCIE policies and framework documents. In addition, staff will be provided extensive hands-on technical knowledge transfer and skills exchanged to ensure the skills set required to develop governance documents are provided. These will include training programs associated with policy and framework development, legislation drafting, monitoring and evaluation protocols and systems, project implementation and management, Global Information Systems GIS and land use planning. This capacity building program will be extended to staff associated with other government line ministries (e.g. DoA, Tourism, and Ministry of Health MoH) and agencies (e.g. NFMRA, Nauru Rehabilitation Corporation NRC) that are involved with the management of the environment.
- 197. In addition and as a direct result of the R2R interventions key staff of both government ministries and agencies will have the skills and knowledge to deliver training programs themselves to staff and communities. This outcome is especially important to ensure the long term sustainability of the R2R interventions and replicability of the training and capacity building program. The intervention will produced up date and new policies and frameworks as identified above whilst improving Nauru government staff knowledge and skills to articulate governance.
- 198. A summary of proposed activities is provided the table below.

Activity 3.1.2.1	>	Develop and deliver capacity building and training courses to relevant government sectors/staff involved in policy formulation to increase knowledge, skills, and capacity.
Activity 3.1.2.2	>	Participate in relevant national and regional training programs provided by the regional program support project of the Pacific R2R Program

Output 3.1.3: Community leaders in 5 districts capacitated towards biodiversity conservation, sustainable land management and climate change adaptation through appropriate training and other capacity building activities focusing on: project management, land-use planning, waste management, and LMMA management.

- 199. Good governance needs to be based on sound and realistic policies, frameworks, guidelines and legislation. These elements need to be accepted and understood by communities for the governance to be successful. Government and community partnerships supporting information and knowledge exchange are essential to ensure compliance with national regulations and directives. Community councils and their representatives play a vital role in ensuring national and community regulations and guidelines are understood and adhered to by communities.
- 200. The R2R Project in collaboration with the DCIE and community stakeholders will provide professional (international and local) support to ensure community leaders associated with the five R2R districts are actively involved in training and capacity building programs to provide information exchange and awareness on biodiversity, government regulations and management of natural resources. The training programs will include participatory workshops and information exchange sessions involving the development of management plans and regulations, the science behind the planning process, and methods used to manage enforcement.
- 201. Additionally, the R2R project in collaboration with DCIE and community leaders and representatives will broaden the capacity and awareness programs to ensure all members of each district associated are provided with information and training on environmental management systems

and the communities and individuals role. These community awareness programs will be essential to ensure communities are aware of their roles and responsibilities and the long term sustainable use of their resources.

- 202. The training and capacity building programs delivered through the R2R project for the project districts will be developed to ensure they are replicable to other districts within Nauru.
- 203. A summary of proposed activities is provided the table below.

Activity 3.1.3.1	 Leadership training course – Develop and deliver a leadership training course targeting all district leaders (5 districts) in Nauru (DCC members, women representatives, NGO reps) on the subject of leadership and sustainable management including R2R approaches (5 districts – 3 representatives / DCC)
Activity 3.1.3.2	Community training courses - Develop and delivery training activities for district communities on R2R approaches (biodiversity, sustainable marine and terrestrial resource, and environmental management.) with specific training for selected audiences including youth, women and those with special needs.

Component 4 Knowledge Management

Co-financing amounts for Outcome 4

GoN - DCIE GoN - NFMRA	US\$200,000 US\$312,500	
Estimated Total co-financing: Project grant requested:	US\$512,500 US\$100,210	

- 204. This component will focus on improving data and information systems on biodiversity conservation and land, coastal and marine management best practices for relevant government agencies and communities. It will involve the development of a nationwide database housed at the DCIE which will integrate data and information from the various government, non-government and community sources using a user-friendly system that is designed for Nauru. Specific R2R intervention publications, training manuals and reporting requirements will be an essential component of the data base. Information collated in the database will be used to further enhance the knowledge and management of the nation's biodiversity.
- 205. In addition, and to further provide community awareness and understanding of biodiversity and the government's efforts to manage them, knowledge products (such as videos, photo stories, flyers, brochures) on all thematic areas will be developed, including a specifically designed DCIE web site that houses the information allowing web based access. It will also capture best practices of the project and disseminate through various media including print and broadcast in Nauru.

Outcome 4.1: Improved data and information systems on biodiversity and land management best practices.

206. The management of SIDS terrestrial and marine biodiversity has been well studied and includes a plethora of publications and training aids to assist nations to develop specific governance interventions to manage these resources. In the past Nauru has received assistance to manage their biodiversity, albeit less than neighboring nations, however access to past programs initiatives and

resulting documents including lessons learned have not been managed successfully. This has resulted in less than ideal data base systems to house and retrieve information when required.

- 207. Information detailing past biodiversity initiatives in Nauru, especially reports focusing on successes, failures and lessons learned, are essential to ensure current and future efforts to manage these resources do not repeat past mistakes and develop accordingly to successes. Likewise, information detailed in documents from projects and workshops have limited use if the information detailed are not distributed widely to the different audiences and used in the development of future activities and programs.
- 208. The Government of Nauru through DCIE and NFMRA are providing co-financing for the realization of this outcome. DCIE will spend US\$200,000 in coordinating environmental policy, laws and programs, beach profiling, vegetation survey, and a rapid biodiversity assessment. NFMRA will spend US\$312,500 for ensuring that fishing waters are not overfished and that the impact of fisheries upon the environment is reasonable, and seeking to ensure that the impact of human activities on fisheries is reasonable. The R2R project will provide an opportunity to systematically collect and make accessible information from DCIE and NFMRA, as well as those generated through the R2R project, in order to improve the overall management of knowledge on biodiversity conservation and natural resources in Nauru.

Output 4.1.1: Integrate data and information on biodiversity and sustainable land management and relevant sectors on the environment.

- 209. The R2R project in collaboration with the DCIE and other government agencies, NGO's and community stakeholders will provide technical (international and national) support to develop a user friendly database, to be housed at DCIE that will provide an electronic platform to store and allow access to documents associated with biodiversity and natural resource protection and management. The development of this data base will include hands on technical training to selected staff at DCIE who will be trained in all facets of the management and development of the data base. Equipment required to develop the data base and the knowledge to access information are key elements of this intervention. The DCIE will be provided the skills to take ownership and responsibility of the data base system on behalf of the nation.
- 210. Climate database for environment (CliDE) will be an integral part of this project. Clide is a Climate Data Management System (CDMS) that was initially developed as part of the Pacific Climate Change Science Program (PCCSP)⁵. Although efforts for database development under CliDE have been initiated in Nauru, it requires further expantion and integration. R2R will build on CliDE to sustain and expand its effort to provide a comprehensive and integrated climate change database for Nauru managed by DCIE.
- 211. In addition, the R2R project in collaboration with the DCIE will instigate a program that provides the information required to access regional and international reports held outside of the Nauru to be collected and incorporated into the biodiversity database. Assistance from regional agencies including UNDP may be required to ensure continued access to data base systems and information.
- 212. A summary of proposed activities is provided the table below.

Activity 4.1.1.1	>	Develop and finalise an environmental data base system for DCIE to manage,
		analyse, use and monitor data.
Activity 4.1.1.2	×	Develop and deliver capacity building and training to relevant staff to increase
		knowledge, skills, and capacity associated with data base systems within DCIE.

⁵ http://www.bom.gov.au/climate/pacific/about-clide.shtml

Activity 4.1.1.3	> Coordinate with the Pacific R2R Regional Program Support Project in terms
	providing project-related information for monitoring and evaluation of the enti
	R2R program.

Output 4.1.2: Knowledge products (videos, photo stories, flyers, brochures) on all thematic areas and best practices developed and disseminated through various media (print and broadcast).

- 213. Information is only useful when it is available and accessible. All too often valuable information is available in documents that are not accessed and used, resulting in less than ideal decision-making outcomes. To address this issue the R2R Project in collaboration with the DCIE and other government agencies, NGO's and community stakeholders will provide professional (international and local) support to a nationwide dissemination of knowledge products outlining biodiversity and sustainable resource management. Information gathered and stored within the DCIE biodiversity data base will provide the information that is to be reviewed and if required edited to develop practical, user friendly media publications that highlight key biodiversity and resource management issue and their mitigation measures facing Nauru. Interaction with local communities to define and articulate methods of information exchange will be an important attribute to the successful delivery of this initiative. Similarly, the development and management of a user friendly easily accessible DCIE web site highlighting biodiversity and resource management (among other DCIE responsibilities) will be developed. Collaboration and direct partnerships with regional agencies (e.g. UNDP, SPC, SPREP and IUCN) to access and obtain media products (e.g. video, posters) is to be further developed.
- 214. The focus on the information and awareness campaigns will be to support implementation of the various elements of the project. In particular, this will include, but not be limited to:
 - Coastal mangement and the protection of marine and coastal biodiversity
 - Role of LMMAs in coastal management and potential role of FADs
 - Water resoruce management
 - Land-use planning
 - Waste water managemeth and pollution
- 215. To ensure the successfully delivery of information produced by the R2R Project a full time local position (Communication Officer) will be supported. The position will have a dual role in supporting the dissemination of information produced by the R2R project and in the broader context the role of the DCIE in relation to biodiversity and resources management. The result of these interventions will ensure communities are exposed to practical media release and information detailing the need for the management of biodiversity and resources, positive and negative implications to the livelihoods and income generation opportunities and broaden the general communities understanding of ecosystem functions.
- 216. A summary of proposed activities is provided the table below.

Activity 4.1.2.1	Develop and deliver capacity building and training to the R2R communication officer to increase knowledge, skills, and capacity associated with the delivery of information to the government, project stakeholders, communities, and regional agencies.
Activity 4.1.2.2	Develop and deliver communication and knowledge products developed on all thematic areas associated with the R2R project.
Activity 4.1.2.3	Develop and delivery of best practise resource management and sustainable development activities to the government and communities associated with the R2R project districts and to the wider Nauru population.

Activity 4.1.2.4	The projects staff involvement in regional and international events to show case the R2R projects achievements and lessons learnt and to receive positive feedback from regional programme's to improve the delivery of the R2R project.					
Activity 4.1.2.5	 Develop and finalise a web site for DCIE and for the R2R project that are informative and interactive. Undertake extensive island wide community consultation and awareness of the above activities and ensure R2R community engagement. 					
Activity 4.1.2.6	Actively contribute to and garner support from PacIW: LEARN platform, building and sustain existing resources and networks available in the Pacific of peer to peer scientific and technical in-service-training					

2.5 Project indicators

- 217. The projects key performance indicators developed for assessing the achievement of the project are detailed in the Project Results Framework (PRF) and include both impact (objective) indicators and outcome (performance) indicators, as detailed in Table 8 below. Each of these indicators are SMART: Specific, Measurable, Achievable, Relevant, and Time-bound. These indicators along with their baseline, end of project targets, sources of verification and risk assumptions and those associated with the output level are included in the PRF located in section 3 of this document.
- 218. The R2R project has been designed that during the project inception and initiation phase, through the assistance of the UN volunteer and guidance from UNDP, the projects annual work plan will be developed that will include the development of process orientated indicators to augment the project's M & E framework. A site level M & E framework will help guide and monitor the project implementation. The R2R overall project M & E framework will build upon the existing UNDP M & E framework.
- 219. Table below presents project indicators and end of project targets.

Indicator	End of Project Target
Objective Level	
Tracking Tool BD 2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation	 Approximately 10 kilometres (33% of total coastline of Nauru) of coastal shoreline and adjacent intertidal and sub tidal reef managed under a locally managed marine areas (LMMA) arrangements (where 15% of LMMA's are designated as protected areas of the inshore marine habitats) and supported by the fisheries and marine act (when finalised through R2R project intervention). The marine management areas focus is on the sustainable management of resources and the natural ecosystem. Provision of alternative fishing opportunities targeting near shore pelagic fin fish reducing fishing pressure on inshore species by the deployment of 8 Fish Aggregating Devices (FADs).
Tracking Tool LD 3: Integrated landscape management practices adopted by local communities	 In each of the five project sites land use developed, improved production from government nursery distributing at least 50 seedlings to each project district and An extensive district education and awareness program including a biodiversity data base and educational material disseminated through a range of media,

Tracking Tool IWs 3: IW portfolio capacity and performance enhanced from active learning/KM/ experience sharing.	 A DCIE web/data base and tools developed resulting in community wide understanding of biodiversity and land use management. In each of the five project sites will have; Water quality improved through the deployment of at least 6 installed and operating compositing toilet units, and 43 rain water harvesting units deployed and functioning.
Outcome Level	7 45 fain water harvesting units deployed and functioning.
Outcome 1.1	By the end of the project each of the pilot sites will have; 33% of coastline of Nauru (approximately 10km) incorporated into LMMAs (15% of which are designated as protected areas) with management action plans developed in at least 4 districts
Outcome 2.1	By the end of the project each of the pilot sites will have; 5 district land-use management plans actively implemented Improved soil fertility and water access and landscape planted with drought and salt tolerant food crop species and 50 fruit trees growing per district sites, Enhanced water storage capacities for home gardening, and Waste water treatment capacities enhanced through installation of 28 new composting toilets in the 5 sites
Outcome 3.1	By the end of the project, At least 45 national civil servant staff, representatives of communities in all 5 districts involved in the project are able to identify environmental risks and prioritize, plan, and implement community-based measures in coastal areas and inland lagoon. At least 4 national policy framework/corporate plan/policies & guidelines are developed, approved and applied.
Outcome 4.1	By the end of the project, One integrated database for information on biodiversity and sustainable land management is managed and utilized by DCIE At least 500 households from all 5 pilot districts are able to draw on lessons and knowledge generated through the R2R project.

2.6 Risks and Assumptions

220. Anthropogenic activities have altered the terrestrial and coastal/marine environments of Nauru and subsequently natural systems and ecosystem functions have changed. Mining activities and to a lesser degree coastal development have significantly reduced natural systems and resources. Expected increase in occurrence and severity of extreme weather systems (e.g. storms and drought events) resulting from climate change will play a significant role in dictating natural systems resilience to these pressures and possess significant risk to the success of the delivery of the R2R intervention and for the longer term. Through formal and informal workshops and meeting with the R2R projects government and community stakeholders key project risks were identified and discussed. In line with UNDP project risk management practices, a Risk Log has been prepared which outlines the major risks and proposed mitigation actions (see Annex 44). The table below summarise the key risk and assumptions, impact rating and mitigation measures.

Risk/Assessment	Dating	Mitigation Massura				
(Details as per section 3.0 - Project Results Framework)	Rating Impact/ Probability High = 5 Low = 1	Mitigation Measure (Detailed as per section 3.0 - Project Results Framework)				
Lack of community buy-in due to lack of awareness, land tenure issues, and perceived loss of food source.	Impact - 4 Probability - 1	All community members were included during project design consultations, including the launch of the PPG phase, project design workshop, and appraisal workshop. They are all members of the Nauru R2R teamwork's space, established and hosted by UNDP, and are kept updated with R2R related matters. Proper advocacy activities for district leaders and community members on the short-term and long-term benefits of LMMAs will dispel doubts on permanent loss of their food source. As well, communities will be enabled to use alternative fishing methods that will not affect sites preserved as LMMAs.				
Lack of political support and buy in for sustainable management of biodiversity, ecosystem functions and resources.	Impact - 4 Probability - 3	The R2R project includes an extensive capacity enhancement programs and provides support to address political concerns and provide innovative solutions. Project support to develop national polices, finalise legislation and regulations will provide a supportive platform for biodiversity and resource management.				
Systematic approach and mechanisms lacking for biodiversity conservation and sustainable coastal and land use management.	Impact - 3 Probability - 3	The project will introduce Ridge-to-Reef training and implementation for sustainable coastal, marine, terrestrial and biodiversity conservation with the relevant sectors of government in cooperation with NGOs and community organisations and community themselves.				
Marine and terrestrial ecosystems are not sufficiently resilient and their biological and physical integrity is compromised by the effects of global and regional climate change.	Impact – 2 Probability - 4	The project will undertake coral reef and revegetation activities that will contribute to reducing the impacts of climate change on ecosystem services and human infrastructure (through coastal protection). As well, agricultural activities using drought resistant plants will increase resilience to climate change impacts.				
Limited capacity could limit success of project implementation	Impact - 4 Probability - 3	The R2R program includes a capacity enhancement program for national partners. The project is allocating sufficient resources to ensure participation of key local staff. Based on agreement by Government, UNDP MCO is providing direct implementation support such as recruitment, procurement and payment of services. These will greatly facilitate the implementation of the project.				

2.7 Cost-effectiveness

- 221. The total project cost is US\$11,051,358 and consists of a GEF contribution of US\$ US\$2,644,358 and indicative co-financing of US\$8,407,000. The GEF component is derived from three focal areas including Biodiversity (BD -2) US\$1,789,829, Land Degradation (LD-3) US\$699,429 and International Waters (IW-3) US\$155,100 with the corresponding co financing for each focal area including (BD-2) US\$2,134,000, (LD-3) US\$2,073,000 and (IW-3) US\$4,200,000, respectively. The GEF investment will be used to directly support GEF desired outcomes.
- 222. During the project design cost effectiveness of all R2R Project interventions were considered. The project costs have been discussed with key government and community stakeholders and agreements reached, thus providing the best value for money whilst ensuring the successful delivery of the R2R activities.
- 223. Costs associated with technical expertise required for the project have been minimized with advice and guidance from DCIE and where possible local consultants will be used. External assistance to Nauru is expensive due to its remoteness, nevertheless external assistance is unavoidable. Terms of Reference for all R2R staff and consultants have been developed to ensure value for money. All external R2R consultants will be contracted through the UNDP Fiji multi country office in Fiji to assist in cost effectiveness and time management.
- 224. Cost effectiveness played a significant role in the development of the R2R project's capacity building and training programmes. Due to the fact that Nauru is one single small island with good access by road to all communities including the R2R pilot project districts costs associated with travel for community engagement and the delivery of the R2R pilot project initiatives are low. To further implement cost effectiveness of project deliverables the project has been designed to ensure the majority of the community workshops and informal meetings will be undertaken in the districts themselves minimizing travel and workshop costs whilst maximizing the number of community stakeholders that can attend and participate in the training workshops. Similarly, the project has been developed to ensure the R2R project team consultants maximize their travel by co-sharing vehicles and offices space and working within the existing Nauru government system.
- 225. Through extensive stakeholder discussion and at the request of the Nauru government's implementing agency (DCIE) the R2R project has factored into the project the services of a suitable qualified and skilled United Nations Volunteer (UNV) to assist in the startup and initial operations of the project. The position has been budgeted for two years full time however the second year is dependent on a projects needs assessment and will be funded only if required. This position will provide hands on capacity building expertise to ensure the R2R project management systems are developed in accordance to GEF and UNDP protocols and to provide on the ground advice to the Nauru government and stakeholders to develop the protocols and systems required to manage the project (refer Annex 99 for details of TOR). It is envisaged this position will take a lead role at the beginning of the R2R project and in time, through transfer of skills, relinquish this role to Nauru government staff.
- 226. The provision of alternative fishing to the reef fishing and gleaning through the provision of Fish Aggregating Devices (FADs) in the offshore areas will provide long-term cost effective livelihood options for local communities while contributing to biodiversity conservation. These relatively inexpensive outcomes are anticipated to have a significant long-term impact on the livelihoods of local communities.
- 227. Additionally, those activities identified to improve water quality and land-use, e.g. planting fruit trees, will also demonstrate a long-term and cost effective approach through the generation of cobenefits, i.e. ecosystem rehabilitation and food security.

228. The R2R Project through stakeholder discussion and direction has included a number of short term professional international and local consultant positions to undertake specific activities throughout the duration of the project. Terms of Reference (TOR) for each consultant have been articulated (refer Annex 99) and detailed budget allocations can be found in section 4 of this document. Each international and/or local professional consultant will be contracted to delivery on the positions specific TOR and are to provide mentoring and capacity skills development for the assigned Nauru government and stakeholders counterparts. Furthermore, each international/local professional consultant will be assigned a specific "local" counterpart contracted from the communities to work alongside and to be trained. These initiatives have been incorporated into the R2R project at the request of the Nauru government to maximize information and technical and managerial skill exchange which will lead to local ownership and the ability to ensure work undertaken within the R2R project is sustained beyond the life of the R2R project.

2.8 Sustainability

- 229. The Nauru R2R Project from its conceptualization has been designed through extensive consultation and participatory approach that included government line ministries, semi-autonomous agencies, development partners, and through detailed consultations and dialogues with district councils and community representatives. The detailed consultation process was designed to obtain a full and real understanding of the past and current issues facing the communities and people of Nauru associated with land and water resources and especially how these impact their daily lives. Information gathered from these consultations resulted in the R2R project being designed to build on community strengths and capabilities whilst addressing major issues inhibiting long term sustainable natural resource management. The R2R project has made the assumption that sustainability can only be achieved by establishing processes that build and retain local ownership and commitment and these need to be supported by sound national governance.
- 230. The sustainability of the R2R project is integrated within the project at various different levels and is reliant and based on Nauru's commitment to sustainably manage land, freshwater and marine ecosystems and to redefine development planning to maintain ecological integrity of these systems. Efforts were initiated to ensure sustainability of project initiatives and actions are linked to existing and incorporated into new government policies, frameworks, guidelines and legislation. Notwithstanding the government's commitment to the sustainable management of the nation's resources, large scale mining and extraction of minerals continues. The impacts of mining have and continue to place enormous pressure on the islands biological systems. Until mining is finished and rehabilitation of mining land has been completed, the aspirations of sustainably managing Nauru ecosystems will be compromised.
- 231. Equally important the R2R Project has been designed on the premise that the whole-of-community engagement and ownership is critical to achieving sustainability of benefits. Therefore, the roles and responsibilities of both genders and the aged and young in natural resource use and management have been carefully assessed. All project interventions have incorporated the collective and unique needs of all community members and their concerns and aspirations have been taken into full account. Project impacts monitoring systems will include gender assessments.
- 232. All four R2R Project components integrate resource management and community awareness through capacity building and information exchange and are supported by updated and new government systems (e.g. policies, frameworks and guidelines) that support sustainable management which includes adaptive financing opportunities and management to contribute significantly to the overall sustainability of project results.

- 233. The integration of extensive environmental and capacity building mechanisms into each component of the project and the direct involvement of local communities in management and planning decisions will develop a broader grass roots understanding of linkage between long-term economic prospects for the human populations and ecological stability of the coastal lagoon ecosystems. In particular, the project will achieve sustainability through the following approaches:
 - Institutional sustainability: Capacity building in all of government, autonomous agencies and the community at large is an integral and significant element of the Nauru R2R project and is considered critical for sustainability. In particular, it will insure biodiversity and ecosystem sustainability are integrated into national government policies, frameworks that will be reflected in legislation and all development planning procedures. Similarly through capacity and awareness programs these initiatives will be transferred to the district level and directly integrated in all programs initiated through the communities. Capacity building initiatives developed through the R2R project will be proactive and diverse to ensure the different government and community stakeholders can equally receive information to ensure improved decision making processes are reached.
 - **Financial sustainability:** Financial sustainability is essential to the long term success of the R2R project. The project will develop and subsequently support newly developed government processes to ensure the delivery of resources to the national government, local communities and specifically to the five districts involved with the R2R pilot projects. These project initiatives will further enhance both government and community capacities to independently seek assistance funds to further augment current activities including the R2R project and new opportunities. The R2R project through its development has ensured it builds upon existing government budget allocations (DCIE operating funds), partner agencies (e.g. NFMRA and NRC) and compliments other donor support projects.
 - Environmental Sustainability: The project's focus on enhancing the resilience and sustainability of Nauru's ecosystems (especially already degraded freshwater, land and inshore marine resources) to future environment degradation and possible resource collapse is based on the premise that maintaining the health and environmental integrity of the ecosystems as a whole is the most effective way of building natural resilience. This premise is fully supported by specific activities integrated into the project. Addressing ridge and coastal land use practises directly with inshore coastal marine waters usage and ecosystem management in a holistic Ridge to Reef manner will ensure integrated management solutions are developed resulting in better environmental outcomes. Strengthening solid waste management resulting in decreased land and freshwater contamination, improving subsistence food supply and ensuring land is rehabilitated linked with specific land and marine/coastal areas under a management partnership between national government and communities will result in increased biological productivity of these systems.
- 234. Finally the generation of "co-benefits" will contribute to the sustainability of the benefits generated by the Nauru R2R Project. Examples of "co-benefits" include the provision on FADs to support the migration of fishers to deeper water fishing while protecting precious reef species, provision of fruit trees to assist in enhancing land use management. Finally, ensuring local communities have a clear role in the management process will ensure a sustainable long-term solution.
- 235. Through the above measures the, Nauru R2R measures can be mainstreamed, expanded and demonstrate suitable long-term sustainable approaches to the implementation of ridge to reef initiatives in Nauru. A detailed exit strategy will be prepared by the PMU. However, the broad exit strategy will be to handover full implementation of the R2R project achievements to the government

of Nauru and to the Local District Councils by year 2 and then provide continuing assistance to monitor and evaluate project activities.

2.9 Replicability

- 236. The Nauru R2R Project for has been designed to ensure all activities implemented are fully replicable and transferable. This will be achieved through on the ground institutional strengthening, mentoring and capacity building from the R2R staff in particular the UN volunteer, project consultants (local and international), UNDP Fiji Multi Country Office to local counterparts and the community itself and through the development of specific training modules, workshops, study tours and on the ground technical exchange of ideas, concepts and information.
- 237. The project will demonstrate a full and comprehensive approach to the development and implementation of a government and community partnership to enhance the general understanding of sustainable resource management and ecosystem maintenance. The R2R project has been designed to ensure each of the projects four components are piloted and implemented in each of the five districts with the inclusion of extensive capacity building and awareness. The pilot demonstration sites have been designed to be useful and replicable for other sites within Nauru. The project will set in place the national institutional framework, policies, legislation management plans and capacity within the government and communities to support the conservation of marine biodiversity and the sustainable land and water management. These activities will be further supported by improved governance and institutional strengthening and knowledge management systems.
- 238. The R2R project where applicable has designed its interventions to assist in scaling up and expanding existing government and/or community initiatives to ensure local ownership of the project and to increase outputs achieved. Estabishment of policy frameworks, as well as generation of data and knowledge on land-use, water, and marine resources will enable tools and lessons learned to be easily replicable to the entire island context. Linkages within the government line ministries, agencies and the communities are important project activities that will enhance information exchange and knowledge retention. Synergies will be created directly with other environmental and marine biodiversity initiatives and projects operating within Nauru and regional donor agencies to broaden the scope and opportunities for the success of the R2R project. Information exchange with other project is essential to the long term information exchange and replicability of the R2R project.
- 239. It is expected at the completion of the R2R project the project will leave behind a fully functional project model with skilled and knowledgeable staff for future replications as well as numerous tangible products such as policy and framework and legislations, management plans, training guides and lessons learned documents. These documents will provide information to guide future replication and improvements of project outcomes as outlined above for use in other GEF related programs and in other donor supported initiatives.

2.10 Stakeholder Involvement Plan and Communication Strategy

2.10.1 Key stakeholders

- 240. An extensive range of government, non-government agencies, community groups and community stakeholders were actively engaged during the development of the Nauru R2R PPG. Information gathered from formal and informal meetings, workshops and discussions has been incorporated into the PPG. Similarly, it is expected that the same wide range of key stakeholders will be involved with the Nauru R2R projects implementation to ensure the projects specific outcomes of the four project components are successfully delivered.
- 241. Annex 2 provides a detailed stakeholder's engagement plan with the various roles to be assigned during the implementation of R2R project. The PPG team did consult widely in the proposal

development phase, however it is expected that additional stakeholders will be identified that will play a key role in project delivery.

- 242. Key stakeholders include a range of national government line ministries, national non-government agencies, Civil Society Organizations (CSOs) including NGOs and churches, district and community council elected leaders, communities and private sector interest groups. A brief summary is provided below.
- Relevant government agencies: the Department of Commerce, Industry and Environment (DCIE) is the lead agency in the planning and administration of environmental matters in Nauru and functions as the GEF Focal Point and is responsible for the delivery of the R2R project. The Division of Agriculture (DoA) is responsible for the development of agriculture and livestock within the nation and will be the projects primary government implementing stakeholder partner and is accountable to DCIE for all project work. The Planning & Aid Division (PAD) is the lead agencies responsible for harmonising development projects and oversees the implementation of the National Sustainable Development Strategy (NSDS). The PAD role associated with the R2R project is to ensure all four components remain aligned to the NSDS and no duplication of activities occurs.
- <u>Independent Authorities:</u> The National Fisheries and Marine Resources Authority (NFMRA) is responsible for ensuing sustainable inland, inshore and offshore fisheries management and development within the nation and will be the projects primary semi government implementing stakeholder partner and is accountable to DCIE for all project work.
- <u>Non Government Agencies:</u> Community Based Organisations (CBO) are an "umbrella" parent body for all district and communities within the nation to ensure harmonisation and coordination between the different groups. The CBO's in the districts associated with the R2R project will play a pivotal role as a key project partner in the awareness, understanding and on the ground delivery and management of the R2R project activities. National Community Council (NCC) are elected representatives of each district and work in partnership with the national government on all community development projects ensuring local ownership. The NCC associated with the R2R pilot districts will play a significant coordinating and supportive role for the delivery of the R2R community initiatives. The NCC in the 5 districts are key community stakeholders and are the projects primary community implementing partner.
- <u>International Partners:</u> UNDP, the GEF Implementing Agency, is strengthening regional governance of coastal and marine resources through its support for Pacific countries. The UNDP role is to ensure that the GEF Secretariat is continually informed of activities and progress through M&E via an Annual Monitoring Report/Project Implementation Review.
- <u>Regional Partners:</u> Secretariat of the Pacific Community (SPC), the South Pacific Regional Environment Programme (SPREP) and Food and Agricultural Organisation (FAO) provide technical and financial assistance to the government of Nauru. Coordination of these partners with the R2R project will expedite the development and delivery of the R2R project activities.
- <u>Local Business Community Partners:</u> Including the business sector (e.g. Chamber of Commerce, fisherman, farmers), church organisations, district and village groups, research groups, women's groups and land owners are essential and are an integral component of the successful development and delivery of the R2R project and will assist in the broader community understanding, awareness and delivery of the R2R project activities.

2.10.2 Stakeholder engagement plan

243. The primary level stakeholder for planning, coordination and management of this proposed project is the Department of Commerce, Industry and Environment (DCIE). The DCIE on behalf of the Nauru government will also function as the Project Board Executive. It is the Division of Agriculture (DoA) (DCIE), the Nauru Fisheries and Marine Resource Authority (NFMRA) and the Nauru Community Council (NCC) in the demonstration pilot districts that will be the projects primary executing stakeholder partners whom will activity coordinate and work with community groups and project civil stakeholders.

244. Project roles and functions of key stakeholders are outlined below:

Stakeholder	Expected Role in Project Implementation
DCIE	Government Role:
	> Lead agency in the planning and administration of environmental matters in
	Nauru;
	> Government Department directly responsible for the nation's environmental
	policies and legislation, agriculture, livestock development and tourism, as well
	as indirectly responsible for the affairs of the Nauru Phosphate Commission
	(NPC).
	R2R Project Role:
	The project board Executive;
	Lead agency for the R2R project planning, coordination, management and
	monitoring including;
	 Ensure political and executive awareness and support for the project, Ensure collaboration and communications within government Ministries,
	departments, divisions and between civil society (e.g. CBO, NGOs, agencies
	and commercial entities),
	 Ensuring timely and successful delivery of project components, including the
	management of staff and consultants,
	> Ensure project components are monitored and feedback to UNDP and
	Stakeholders are provided in a timely manner,
	> Ensure capacity building components both of government and public sector
	are fully delivered, and
_	> Ensure public awareness of project activities is widely published.
DoA	Government Role:
	> Government Division directly responsible for the development of agriculture
	and livestock development within the nation.
	R2R Project Role:
	 It is the projects primary government implementing stakeholder partner and is accountable to DCIE for all project work.
	 Is responsible for the delivery of R2R project component "Sustainable Land"
	and Water Management" including;
	 Ensuring collaboration and communications with government and civil society
	(e.g. CBO, NGOs, agencies and commercial entities) stakeholders,
	> Ensuring timely and successful delivery of project activities on land
	management, including the management of staff, project consultants and
	stakeholder inclusion,
	> Ensure project activities are monitored and feedback provided to DCIE in a
	timely manner,

Ensure capacity building activities both of government and public sector are fully undertaken, and Ensure public awareness of project activities is widely published. NFMRA Agency Role: Agency responsible for ensuring sustainable inland, inshore and offshore fisheries management and development within the nation. NFMRA's involvement will result in waters that are not overfished, fishing impacts on the environment and other human activities are reasonable and sustainable. > Agency mandated to develop legislation to guide and enforce the protection of Nauru's marine resources and maximize economic returns from offshore commercial fishing within the nation. R2R Project Role: It is the projects primary semi government implementing stakeholder partner and is accountable to DCIE for all project work, Is responsible for the delivery of R2R project activities on "Conservation of Marine Biodiversity", including; > Ensuring collaboration and communications with government and civil society (e.g. CBO, NGOs, agencies, fishers and commercial entities) stakeholders, > Ensuring timely and successful delivery of project activities, including the management of staff, project consultants and stakeholder inclusion, > Ensure project activities are monitored and feedback provided to DCIE in a timely manner, Ensure capacity building activities both of government and public sector are fully delivered, and Ensure public awareness of project activities is widely published. PAD Agency Role: Is the link between bilateral partners and the Nauru government entities and is responsible for harmonizing developmental projects and plans in all sectors of government and to ensure that external assistance received are not duplicated between sectors. The Division oversees the implementation of the National Sustainable Development Strategy (NSDS) and works with the Aid Management Unit (AMU) in ensuring that all donor funded projects are part and parcel of the NSDS. R2R Project Role: PAD coordinating role is to ensure all four R2R project components including outcomes and outputs are and remain aligned with the Nauru NSDS strategies, no duplication exists, and Coordinates with all relevant government agencies to monitor the implementation of the R2R project. CBO Agency Role: CBO are an "umbrella" parent body for all district and communities within the nation and main function is to ensure harmonisation and coordination between the different groups. The CBO's in the districts associated with the R2R project will play a pivotal role as a key project partner in the awareness, understanding and on the ground management of the project. R2R Project Role: CBO will play a coordinating role to ensure all communities within the nation are fully briefed on the R2R projects specific activities including outcomes and

outputs are will play a supportive and/or coordinating role to ensure the

successful delivery of the project.

NCC Agency Role:

The nation is divided up into 14 districts all of which have a community council that is elected and represent the population of each community. The district councils are very organized and active as important national issues are often encompassed within the 14 councils, which include meetings of council leaders to meet and discuss important national issues. The leaders of each district council form the National Community Council (NCC). The Government of Nauru works in partnership with the NCC for development projects that require community buy-in and ownership.

R2R Project Role:

- The NCC especially the district councils associated with the R2R project demonstration sites will play a significant coordinating and supportive role to ensure all members of their communities are fully briefed on the R2R projects specific components including outcomes and outputs to ensure the successful delivery of the project.
- The NCC in the 5 project demonstration sites districts are key community stakeholder and are the projects primary community implementing stakeholder partner.

Others International and Regional Partners:

Nauru, through its regional and international arrangements have a number of development and research orientated partner stakeholders that have provided many years of assistance and financing in the natural resource sector. This includes United Nations Development Programme (UNDP), Secretariat of the Pacific Community (SPC), South Pacific Regional Environment Programme (SPREP), Food and Agricultural Organisation (FAO).

R2R Project Role:

The R2R project has been designed to capitalise on these specific partners skills to provide both additional technical and financial assistance as well as being incorporated directly within the project to provide specific technical assistance. The coordination of these key partners with the R2R project will expedite the development of the R2R programme and nations aspiration for this sector.

Local Partners:

Local stakeholder partners include the business sector (e.g. Chamber of Commerce, fisherman, and farmers), church organisations, district and village groups, research groups, women's groups and land owners.

R2R Project Role:

The R2R project has been designed to ensure information exchange and dialogue with the various stakeholder groups is an essential and integral component of the development and delivery of the project. The inclusion of these key partners with the R2R project will expedite the development of the R2R programme and nations aspiration for this sector.

2.10.3 Communication strategy

245. In addition, it will be vital for the successful implementation of the Nauru R2R project to develop and deliver an appropriate and effective public communication program to ensure the engagement and understanding of the wider community and project partners to successfully delivery the project

objectives. Annex 9 provides a detailed communication and knowledge management strategy outlining activities that the project needs to deliver to ensure the nation as a whole understands the project and its purpose. Innovative approaches need to be developed and information communicated needs to be tailored to ensure the material delivered is easily understood and socially and culturally appropriate for Nauru.

- 246. Flexibility in the mode of communication and type of public awareness will depend on the target audience. This will include a wide range of communication material ranging for verbal information exchange through workshops, small discussion groups, one to one exchange, radio/TV, printed material in the forms of fact sheets, pamphlets, posters, reports and the delivery and access of this information through electronic media applications (e.g. web sites, email, and face book).
- 247. There will be a need for ongoing awareness throughout the project duration, in order to influence behavioural change and gain support from all audiences for the implementation of the project and the continuous management of the nation's marine and terrestrial resources beyond its project life.
- 248. Key communication areas of information exchange need to include but not limited to;
 - Roles, activities and outcomes of the R2R project.
 - Roles, activities and function of the relevant Nauru Government Ministries including the activities associated with the R2R project,
 - Information pertaining to the new laws, regulations, guidelines developed under the project and their impact on communities,
 - Roles of District and Community participation in environmental management.
 - Community awareness of environmental awareness and sustainable resource management.
- 249. For the effective implementation of resource management issues there will be an ongoing need to mainstream these concepts that contribute to Nauru's conservation and sustainable development into the national and community strategic development plans, institutional operational plans, and community development plans.
- 250. The design of the R2R project incorporates key government ministries, agencies, district/community representatives and the private sector thus providing direct communications linkages and information exchange on all aspects of the project. Stakeholder engagement and communication linkages are important and discrete activities under each of the R2R project components, with Component 4 specially designed to provide knowledge and information systems to educate and inform the government and all communities on best resource management practices.
- 251. Knowledge and information generated through the national R2R project will be integrated, reflected, and shared with the Regional R2R community which will sustain and expand the professional and technical community developed through Pacific IW: Learn.

2.11 Environmental and Social Safeguards

- 252. The environmental and social screening template has been completed and is attached in Annex 88. At this stage of project design, there are no specific identified activities that are considered to have substantial negative environmental impacts and/or unintended negative social consequences. However, these will need to be monitored over the full life of project implementation to ensure specific issues do not arise.
- 253. At the development of this project the Nauru governments specifically DCIE does not have an environmental or social screening process nor any legislation for Environmental Management Plans

or Environmental Impact assessments (EIA). The development of such a document is included in the R2R project. Until this document is drafted and adopted screening of any new activities proposed within the project cannot be undertaken through the Nauru government. It is therefore proposed that standard UNDP environmental screening process is used until such time as the Nauru safeguard document is finalized. Once finalized it is suggested in order to ensure the on-going planning, screening and implementation, the following is proposed:

- All new activity proposals, in particular related to building development are reviewed and screened to ensure the specific activities are planned to be implemented in a manner to minimize environmental impacts. The PMU should be tasked to undertake the review and screening in collaboration with additional government staff as required. All results of the environmental screening will be provided to the Project Steering Committee;
- Should an activity be deemed by the process above to be environmentally sensitive, an
 Environmental Management Plan (EMP) will be developed and approved prior to
 implementation. The EMP will outline specific activities that must be followed by relevant
 agencies to limit impacts.

3 Project Results Framework

3.1 Ridge-to-Reef (R2R) Nauru Project Results Framework

This project will contribute to achieving the following Country Programme Outcome as defined in UNDAF:

UNDAF Focus Area 1: Environmental Management, Climate Change and Disaster Risk Management

Regional UNDAF Outcome 1.1: Improved resilience of PICTs, with particular focus on communities, through integrated implementation of sustainable environmental management, climate change adaptation/mitigation, and disaster risk management.

Nauru UNDAF Outcome 1.1: National and local capacities sustainably manage environmental and water resources and ability to respond to climate change and natural disasters

UNDAF Outcome Indicators:

Outcome 1.1: % Terrestrial and marine areas protected (MDG7)

Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 1. Mainstreaming environment and energy OR 4. Expanding access to environmental and energy services for the poor.

Applicable GEF Strategic Objective and Program:

BD-2: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors

LD-3: Integrated Landscapes: Reduce pressures on natural resources from competing land uses in the wider landscape

IW-3: Support foundational capacity building, portfolio learning, and targeted research needs for joint, ecosystem- based management of trans-boundary water systems

Applicable GEF Expected Outcomes:

BD-2: Outcome 2.1: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation.

Outcome 2.2: Measures to conserve and sustainably use biodiversity incorporated in policy and regulatory frameworks.

LD-3: Outcome 3.2: Integrated landscape management practices adopted by local communities.

IW-3: Outcome 3.1: Political commitment, shared vision, and institutional capacity demonstrated for joint ecosystem management of water bodies and local ICM principles. 3.2. On the ground modest actions implemented in water quality, quantity, fisheries and coastal habitat demonstrations for "blue forest" to protect carbon.

Applicable GEF Outcome Indicators:

BD-2: 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

Indicator 2.2: Polices and regulations governing sectoral activities that integrate biodiversity conservation as recorded by the GEF tracking tool as a score.

LD-3: Indicator 3.2 Application of integrated natural resource management (INRM) practices in wider landscapes

IW-3: 3.1: Agreed SAPs at ministerial level with considerations for climatic variability and change; functioning national inter-ministry committees; agreed ICM plans. 3.2 Measurable results contributed at demo scale

Objectives and Outcomes	Indicator	Baseline	Targets End of Project	Source of verification	Risks and Assumptions		
Component 1: Conservation of marine biodiversity							
OBJECTIVE: To preserve biodiversity, ecosystem services, improve climate resilence and sustain livelihoods inNauru using a ridge to reef approach.	Status of integrated land, water and coastal management in Nauru	Sectoral approach with minimal efforts towards coastal biodiversity conservation	LMMA implementation and integrated land-use management planning and implementation	Project reports and government and community adoption	Supportive government and communities Local capacity is harnessed for project implementation		
OUTCOME 1.1 Improved management effectiveness of new marine conservation areas.	Area of coastal and marine water under active management as a	Zero= LMMA will be introduced through this project	33% of coastline of Nauru (approximately 10	Management Plan with attached budgets and implementation plans	Communities are supportive of LMMA development		

	Locally Managed Marine Area		km) incorporated into LMMA with implementation of management plans in 4 Districts (Anabar, Anibare, Ijuw and Meneng)		Annual reporting on progress against management plans	•	Plans can be developed in a timely manner
Output 1.1.1 A network of locally managed marine areas (community based (CB) or locally managed marine areas (LMMAs) established through community actions and supporting enabling government actions	Agreement between Government and DCC on LMMA establishment management . Ecosystem health survey identifying priority sites for protection and management	Zero Limited information exists	4 agreements with 4 coastal districts Important marine biodiversity protected through zoning plans	•	Agreement signed between DCC and Government Ecosystem health report Zoning maps for LMMA Communities / stakeholder consultation report; Government approval on Fisheries Act; LMMA network conference reports;	•	Surveys can be completed Committees are willing to protect high value ecosystems; Proper training for NFMRA officers on the short-term and long-term benefits of LMMAs.
Output 1.1.2 LMMAs strengthened through development and implementation of management plans (following participatory approaches and Integrated Coastal Management to address threats, including climate change impacts; guidelines for	Development of island level (national) based / CCA / LMMA Plan	Zero national plan developed	National LMMA plan prepared and adopted	•	National LMMA system report Approved plans by government Approval by communities Minutes of meetings	•	Loss of main source of livelihoods for district communities; lack of resources for implementation; and conflicts between district communities. Proper advocacy for
utilizations of MMAs including closed seasons and closed areas agreed on and implemented)	Implementation of District level LMMA action Plans	Zero LMMA action plans	4 Management Plans developed and implemented for each selected Districts	•	Reports for 20 community/stakeholder consultations; Approval of Management Plans by Government and DCC (Anabar, Anibare, Buada, Ijuw); Annual monitoring reports	district leaders and community members the short-term and lor	district leaders and community members on the short-term and long- term benefits of LMMAs.
2 Sustainable land and water	er management						
OUTCOME 2.1 Integrated landscape management practices adopted by local communities living within the 'bottom-side', and applicable 'ridge', and 'topside' areas not covered by mining.	Land-use management plans being actively implemented in all 5 districts ⁶	Currently zero.	5 district land-use management plans being actively implemented	•	Plans Minutes of meetings Baseline surveys Monitoring and evaluation Annual technical reports Monthly monitoring reports	•	Lack of awareness by district community members result in non- compliance of integrated agricultural practices and

⁶⁶ Plans for management of waste from piggery and poultry included in this plan

					waste management practices. Community management of sustainable land and water management and associated scientific work is adequately resourced and function effectively.
Output 2.1.1 Biophysical, demographic and socioeconomic assessments conducted and reviewed in the project districts, focusing on the bottom-side and applicable 'ridge' areas and topside not covered by mining.	2.1.1.1 Baselines for land-use plan and terrestrial environmental management established.	Rudimentary land- use maps with limited district focus terrestrial	National assessment completed with detailed 5 district terrestrial profiles	 Reports for community / stakeholder consultations; Reviewed biophysical, demographic and socioeconomic assessment reports for 5 districts (Anabar, Anibare, Buada, ljuw). 	 Conflict between districts regarding land ownership. Ensuring full participation by community Information is available.
Output 2.1.2 Integrated agriculture land-use plan developed for the bottom-side and applicable 'ridge' and topside areas that are not covered by mining through review of the draft land-use plan and patterns of land ownership for the project districts/sites.	2.1.2.1 Integrated land- use plan	Land-use plan (1994).	Island-wide integrated agriculture land-use plans developed with special focus on priority districts.	Reports for community / stakeholder consultations; approved integrated land-use plan.	 Lack of political will Able to ensure cooperation of all national agencies National Environment Coordinating Council (NECC) will complete approval process.
Output 2.1.3 Soil and water conservation measures implemented, including through rehabilitation of degraded land in 'ridge' and topside areas using economic species such as fruit trees and increase of communal water storage facilities in the five water-stressed project districts to support home gardens and	2.1.3.1 Number of households growing fruit-trees to contribute to soil conservation measures 2.1.3.2 Water storage enhanced in selected	Less than 5% in each of the 5 districts growing fruit trees (tbc during land-use planning) Approximately 195 water harvesting /	20% of households in each of the 5 districts. 43 additional water harvesting /	 Operational MOU and LOA finalised and (R2R –GCCA-IWRM-Agriculture); Number of households with more rain water catchment systems; Report on safe household drinking water introduced; and 	 Lack of access to water will result in failure of intervention. Advance planning for access to funding to ensure that water is available and supply is consistent for this intervention.
household water supply.	communities	storage facilities (with 3,000m³ capacity) in place ⁷	storage facilities established	Drought Management Strategy	 Households are interested to participate

⁷ SOPAC (2007). Nauru Technical Report. Rainwater Harvesting: Asset Condition Survey of Domestic Infrastructure. http://ict.sopac.org/VirLib/ER0080.pdf

Output 2.1.4 Drought- and salt-tolerant food crops tested and practices disseminated to districts (communities and households) building on initiatives of bilateral and multilateral organizations.	2.1.4.1 Number of participating households using new crop varieties in all 5 districts	Zero households using "New" drought and salt-tolerant crops not currently available	20% of households in each of the 5 districts	 Reports for community / stakeholder consultations; Nursery reports Training reports Activity monitoring report. Able to view growing crops Household surveys 	 Species of agricultural crop not able to be identified Lack of community support; Lack of capacity. Communication and extension materials are not available
Output 2.1.5 Innovative measures implemented (e.g. composting toilets) to reduce pollution loads by at least 10% on LMMAs to improve ecosystem health and sustain ecosystem services. This is based on successes of pilot demonstrations of the IWRM project and as a way of implementing the national IWRM plan. Component 3: Governance as	2.1.5.1 Number of waste water treatment systems (compositing toilets) for reducing pollution established.	6 composting toilets operational in 5 districts	28 new composting toilets operational in 5 districts	 Monitoring reports on implementation of new waste management systems by households and farmers. Reports of number of systems being implemented. Activity monitoring reports. 	Community commitments; overflow of waste; lack of support from stakeholders; and limited resources.
Component 3. Covernance a					
OUTCOME 3.1 Biodiversity conservation and SLM mainstreamed in policy and regulatory frameworks.	Same as Output 3.1.1				
Output 3.1.1 Relevant policies developed for key sectors such as environment, waste management, natural resource management, coastal fisheries, and agricultural land-use" developed.	3.1.1.1. Number of policies developed for key sectors incorporating R2R considerations.	Various old and draft plans exist, but need urgent re-validation and revision to support JNAP and NBSAP implementation	4 sectoral plans / strategies developed e.g. Waste Management; Integrated Agriculture Land Use; NBSAP implementation; Environmental & Social Safeguards Policy & Guidelines	 Policy and framework documents Policy advice reports Meetings / review discussions. 	 Delay of approval of policy and framework documents. Requires revival of National Environment Coordinating Council (NECC)
Output 3.1.2 Capacity strengthening of national agencies associated with new policies and framework process development and formulation, including drafting of legislation, monitoring and evaluation (impacts, water quality, etc.), project implementation/ management and oversight, GIS, land-use planning; participation in relevant trainings	3.1.2.1 Number of trained government personnel on integrated R2R approaches (gender disaggregated data)	Limited – Zero Training on GIS, project implementation / management and oversight in 2007 and 2008) and on Vulnerable & Adaptation	45 staff from across ministries and fisheries authority.	Training TORs; training reports & evaluation; records of training sessions by training institutions; annual faculty reports; list of certificates awarded.	Lack of interest and participation in training; no training follow-up. Advance planning and advocacy for training activities as well as follow-up.

organized through the regional R2R project.		assessment for JNAP.			
Output 3.1.3 Community leaders in 5 districts capacitated towards biodiversity conservation, sustainable land management and climate change adaptation through appropriate trainings and other capacity building activities focusing on: project management, land-use planning, waste management, and marine	3.1.3.1. Number of district leaders trained on applying and enforcing skills in integrated R2R approaches with due consideration for gender distribution 3.1.3.2. Proportion of population (households) adopting specific actions	~20% of households (All community members exposed to	15 community leaders (DCC, Women Reps and NGO reps) all 5 districts for each district) Up to 80% of households adopting specific	 Post-training surveys. Monitoring reports. Household surveys Training and workshop reports Training evaluation; Pre- and post-training surveys. 	 Lack of interest and participation in training; no training follow-up; and delays in accessing funds for pilot site activities. Advance planning and advocacy for training activities as well as follow-up; and advance
management. 4 Knowledge management	to enhance R2R management in districts	community outreach in Past)	actions		planning for access to funding.
	T	T		,	
OUTCOME 4.1 Improved data and information systems on biodiversity and land management best practices.	Same as 4.1.1.1 and 4.1.2.1				
Output 4.1.1 Integrate data and information on biodiversity and sustainable land management and relevant sectors on the Environment; provide inputs to the regional R2R program on monitoring and progress reporting on the Pacific R2R program	4.1.1.1. Number of databases developed for DCIE.	Zero (one database was developed for climate change, however this needs to be expanded and integrated)	1 (integrated database)	 Operational and fully functional database; Training materials for staff Databased accessible on a range computers Training TORs, reports, 	Delays in database set- up due to limited stock of software/hardware and delays in shipment; irregular internet service; and loss of
	4.1.1.2. Number of training courses conducted on database setup & maintenance.	Zero	4 (1 per year)	 Pre- and post-training evaluation reports. Number of requests for data from databased 	skills due to staff turnover. Systematic planning for procurement of database software/hardware; subscription to regular internet option; and include transfer of skills as part of staff handover notes.
Output 4.1.2 Knowledge products (videos, photo stories, flyers, brochures) on all	4.1.2.1. Number of community members receiving information on	Zero community households	500 households	Community information programs	Delays in delivering products due to limited

thematic areas and best practices developed and disseminated through various media (print and broadcast).	R2R management and taking action to enhance environment 4.1.2.2. Number of	Zara (lucavida desa	42 (2	•	Radio and TV awareness programs Training reports R2R videos,		stock of knowledge management materials and delays in shipment; irregular internet service; non-participation in global/regional events due to unavailability of required visas; and loss of skills due to staff turn-over.
	knowledge products, including best practices, produced on all thematic areas, disseminated through various media	Zero (knowledge products exist for water management, climate change, and land management only but none on integrated activities)	12 (3 per year)	•	Photo stories, Flyers, brochures; case studies; A wards Reports of global/regional/national events; Project website.		
	4.1.2.3. Participation in regional R2R activities	Not applicable	Regular participation in the regional R2R activities as may be requested by national and regional stakeholders in the areas of capacity building, knowledge management, among others		Project website.	•	Systematic planning for procurement of knowledge management materials; subscription to regular internet option; advance planning of travel and associated requirements; and include transfer of skills as part of staff handover notes.
	4.1.2.4. Project website	None	Project website that is accessible and regularly updated				

4 Total Budget and Work Plan

Award ID:	00084678	Project	00092583				
		ID(s):					
Award Title:	Implementing a "Ridge to Reef" approach	Implementing a "Ridge to Reef" approach to protecting biodiversity and ecosystem functions in Nauru (R2R Nauru).					
Business Unit:	FJI10						
Project Title:	Implementing a "Ridge to Reef" approach to protecting biodiversity and ecosystem functions in Nauru (R2R Nauru).						
PIMS Number:	5218						
Implementing Partner	Department of Commerce, Industry & Environment (DCIE), Nauru						
(Executing Agency)							

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agency	Fund ID / Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	See Budget Note:
		62000 GEF	71200	International Consultants	152,300	97,300	66,900	36,500	353,000	1a
			71300	Local Consultants	18,000	14,000	12,000	6,000	50,000	1b
OUTCOME 1: Improved	NFMRA / DCIE / UNDP		71400	Contractual services - Individual	118,000	115,000	33,000	33,000	299,000	1c
management			72300	Material & Goods	92,000	102,000	92,000	92,000	378,000	1d
effectiveness of new			71600	Travel	137,200	34,700	-	-	171,900	1e
marine conservation areas.			72200	Equipment and Furniture	21,135	7,633	1,13 <mark>2</mark>	-	29,900	1f
			72500	Office Supplies	18,625	-	-	-	18,625	1g
			74500	Miscellaneous	3,000	3,000	3,000	3,100	12,100	1h
				Total Outcome 1	560,260	373,633	208,03 <mark>2</mark>	170,600	1,312,525	
OUTCOME 2: Integrated			71200	International Consultants	58,750	58,750	-	-	117,500	2a
landscape	DCIE / UNDP	62000 GEF	71300	Local Consultants	10,500	10,500	-	-	21,000	2b
management practices adopted by			71400	Contractual services - Individual	39,000	40,500	50,000	30,000	159,500	2c
local communities			72300	Materials & Goods	133,100	133,100	83,200	18,100	367,500	2d
living within the			71600	Travel	28,630	-	34,700	5,800	69,130	2e
'bottom-side', and applicable 'ridge',			72200	Equipment and Furniture	12,500	-	6,500	2,630	21,630	2f

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agency	Fund ID / Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	See Budget Note:
and 'topside' areas			72500	Office Supplies	-	2,500	2,500	2,500	7,500	2g2g
not covered by			74500	Miscellaneous	800	250	250	250	1,550	2h2h
mining.				Total Outcome 2	283,280	245,600	177,150	59,280	765,310	
			71200	International Consultants	94,500	43,000	-	-	137,500	3a
Outcome 3:			71300	Local Consultants	18,000	-	-	-	18,000	3b
Biodiversity conservation and			71400	Contractual services - Individual	24,000	23,500	62,000	22,000	131,500	3c
SLM mainstreamed	DCIE / UNDP	62000 GEF	72300	Materials & Goods	5,000	2,000	2,000	2,000	11,000	3d
in policy and		GEF	71600	Travel	-	-	-	28,900	28,900	3e
regulatory frameworks.			72200	Equipment and Furniture	-	-	-	5,000	5,000	3f
			74500	Miscellaneous	695	500	500	500	2,195	3g
				Total Outcome 3	142,195	69,000	64,500	58,400	334,095	
OUTCOME 4: Improved data and	DCIE / UNDP	62000	71200	International Consultants	75,600	7,218	-	-	82,818	4a
information systems			71300	Local Consultants	13,800	2,000	2,000	2,000	19,800	4b
on biodiversity and		GEF	74500	Miscellaneous	1,000	1,000	1,000	1,810	4,810	4c
land management best practices.				Total Outcome 4	90,400	10,218	3,000	3,810	107,428	
	DCIE / UNDP	OCIE / UNDP 62000 GEF	71200	International Consultants	7,500	18,783	7,500	32,500	66,283	PMC 1
			71400	Contractual services - Individual	8,000	8,000	8,000	8,000	32,000	PMC 2
Project Management Cost (PMC)			75700	Training, workshop & conference	500	-	-	-	500	PMC 3
			71600	Travel	317	300	300	300	1,217	PMC 4
			74500	Miscellaneous (DPC)	8,798	7,296	3,922	4,984	25,000	PMC 5
				Total PMC	25,115	34,379	19,722	45,784	125,000	
	PROJECT TOTAL (GEF)						472,404	337,874	2,644,358	

Summary of Funds: 8

	Amount	Amount	Amount	Amount	Total
	Year 1	Year 2	Year 3	Year 4	
GEF	1,101,250	732,830	472,404	337,874	2,644,358
Cofinancing	2,101,750	2,101,750	2,101,750	2,101,750	8,407,000
TOTAL	3,203,000	2,834,580	2,574,154	2,439,624	11,051,358

⁸ Summary table should include all financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...

Budget	Description of Cost Item
Note	
1.0 Cons	ervation Of Marine Biodiversity
1a	International Consultants:
	> To acquire specific specialised technical skills and knowledge to assist with Outputs 1.1.1 and 1.1.2. The consultants will constitute as Senior Technical Advisors with extensive experience in

- (i) (Fisheries Lawyer) reviewing and developing the Nauru fisheries Act and regulations that will provide the legal baseline for the sustainable development and management of the nation's inshore fisheries resources (1.1.2), (ii) (Marine Managed Area Advisor) review and develop the framework to develop a LMMA network system within Nauru and the associated training, capacity building, awareness and technical data collection required for both government and community stakeholders associated with the four marine districts associated with the Nauru R2R project (1.1.1) and (iii) Fisheries biologist to design, train and initiate and monitor a fisheries data collection programme that will compare fishing pressure on inshore reef associated fin fish (catch numbers, effort and total weight) and fin fish catches associated with the deployment of inshore and offshore FADs in the four marine districts associated with the Nauru R2R project. Each consultant will be contracted directly to UNDP Fiji through UNDP professional international consultant's procurement protocols as requested and agreed by the government of Nauru. The review of the fisheries Act is expected to be undertaken within the first year of the project, the "Marine Managed Area Advisor" consultancy is expected to undertake two monthly in country inputs for the first two years and one month in the third year of the project whilst the fisheries biologist will undertake a one month annual input for the duration of the project.
- One month (30 full working days) has been allocated for the *Fisheries Legal Expert* consultancy which includes a single in country input of 10 days with the remaining days allocated to finalize the Act. It is envisaged that the NFMRA through consultation with the PMU will undertake the stakeholder discussions and awareness programmes associated with this work (funds have been allocated below). The budget includes consultants fees, (30 days @ US\$700 a day = \$21,000), one return economy international air flight (US\$3,500), per diem (DSA) (10 days @ US\$200 a day = US\$2,000) and a contingency of US\$1,000 per month to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs of this activity are US\$27,500.
- Five month (150 full working days) has been allocated for the *Marine Managed Area Advisor* consultancy which includes five in country input of 25 days per month in country (5 additional days are allocated for reporting duties off island). This equates to 125 days in total in country and 25 days allocated for outside country requirements. This position will link and coordinate with the NFMRA and will delivery work programmes through consultation and include extensive training and capacity building activities.
- > The budget includes consultants fees, (150 days @ US\$700 a day = \$105,000), five return economy international air flight (US\$3,500, 5 flights is US\$17,500), per diem (DSA) (125 days @ US\$200 a day = US\$25,000), and a contingency of US\$1,000 per month (US\$5,000 in total) to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs of this activity are US\$152,500.
- > Four months (120 full working days) has been allocated for the *Fisheries Biologist* consultancy which includes four in country inputs of 25 days per month in county (5 additional days are allocated for reporting duties off island). This equates to 100 days in total in country and 20 days allocated for outside country requirements. This position will link and coordinate with the NFMRA and will delivery work programmes through consultation and include extensive training and capacity building activities.
- > The budget includes consultants fees, (120 days @ US\$700 a day = \$84,000), four return economy international air flight (US\$3,500, 4 flights is US\$14,000), per diem (DSA) (100 days @ US\$200 a day = US\$20,000), and a contingency of US\$1,000 per month (US\$4,000 in total) to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs of this activity are US\$122,000.

Coral reef health survey and ecological assessment

> To provide funds to commission an island wide study into the biodiversity, marine ecosystem health study for the island of Nauru. The study needs to be ensure seasonal changes in circulation patterns are recorded. The study should include both the inshore (reef flat and reef slope) and offshore (possible use the inshore and offshore FAD for deployment of materials) water patterns. Funds are allocated to undertake the study and to produce the study findings. The study findings will provide scientific information to provide scientific information for the placement of Marine

- protected areas within the Nauru LMMA network. A specific consultant input has been allocated to develop a guidance document and appraoch on this issue.
- > To acquire specific specialised technical skills and knowledge to assist with Outputs 1.1. The consultants will constitute as Senior Technical Advisors (Coral Reef Ecologist) with extensive experience in coral reef ecological systems and larval dispersal mechanisms as they relate to coral reef management. The consultancy is for one month and will require one in county input once the circulation data collection programme has been completed and data is available.
- > One month (30 full working days) has been allocated for the Coral Reef Ecologist consultancy which includes a single in country input of 10 days with the remaining days allocated to finalizing the report. The budget includes consultants fees, (30 days @ US\$700 a day = \$21,000), one return economy international air flight (US\$3,500), per diem (DSA) (10 days @ US\$200 a day = US\$2,000) and a contingency of US\$1,000 per month to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs of this activity are US\$27,500.

Fish Catch Study

> There is limited baseline information on fish catchment in Nauru. Therefore, at the beginning and throughout the project, data will be gathered and recorded. The TOR specific will need to be further discussed and identified through consultation with Nauru government partners (e.g. SOPAC) to clearly define specific requirements. The study should be commenced as soon as possible within the project time frame. Specific time lines and deliverables need to be determined and therefore a lump sum of US\$24,000 has been allocated for this study.

Alternative livelihood assessment

- > To assess social and economic impacts including gender and propose effective implementation strategy for proposed alternative livelihoods/food security intervention in Outcome 1 including FADs, clams/seeweed farming, and/or food tree planting
- > One month (30 full working days) has been allocated for the the socio-economic assessment consultancy which includes a single in country input of 10 days with the remaining days allocated to finalizing the report. The budget includes consultants fees, (30 days @ US\$700 a day = \$21,000), one return economy international air flight (US\$3,500), per diem (DSA) (10 days @ US\$200 a day = US\$2,000) and a contingency of US\$1,000 per month to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs of this activity are US\$27,500.

1b Local Consultants:

- > To acquire specialised technical skills to assist the international consultant in delivering Outputs 1.1.1, to provide specific local context and information and received hands on technical capacity building, up skilling and knowledge based skills transfer during the international engagement. The local consultant will be assigned to the International consultant and contracted through the Nauruan governments due diligence processes for this specific consultancy. Due to the specific role and requirements of the (i) Fisheries Lawyer (Output 1.1.2) in country it was agreed that there would be no allocation for a local consultant
- > 5 local consultants have been allocated 50 full working days per month, to work directly with each assigned international consultant and to prepare logistic and other output based requirements needed to ensure the delivery of each output. The budget includes consultants fees, (50 days @ US\$200 a day = \$10,000). Total local consultancy indicative costs of US\$50,000.

1c Contractual Services

Project Coordinator (Full time, National):

- A Project Coordinator (PC) will be hired to provide specialized technical and financial management to ensure the full operation and function of the Project. The position will based within the DCIE and report directly to the R2R Project Board. The position will be full time for the duration of the R2R project (4 years).
- > The budget includes the total costs of the Project Coordinator package of US\$20,000. US\$ 80,000 for the entire project.

The first 2 years comes under OC1, 3rd year under OC2, and 4th year under OC3.

Project Assistant (Full Time, National):

Same as PMC 2

United Nations Volunteer (UNV, International):

> To acquire specialised technical skills and mentoring role to assist the Project Coordinator in the setting up a technically and operationally effective Nauru R2R project. The UNV will also provide capacity building and up skilling of project staff associated with the project to facilitate the technical set up of the project components. The budget also includes one International travel to a regional/global project event (e.g. conference, workshop) to participate in regional R2R activities

- per year. As the positions duties will include work on all four R2R project components the totals costs of the position has been equally divided between these components.
- > The position is to be full time for one year. The position has been budgeted for a second year however the inclusion of a second and third (with partial funds) year will be finalized through a review and assessment of the needs for the project. The budget includes the total costs of the UNV package of US\$50,000 and an allocation of US\$36,000 for housing (@US\$3,000 a month) and one international travel which includes one return economy international air flights (US\$3,000 per flight), per diem (DSA) (10 days @ US\$300 a day = US\$3,000), a computer allocation of US\$2,000 for the first year (the computer will remain with the project) and a contingency of US\$2,000 per year to address unforeseen events and exchange rate fluctuations. Total budget for the first year is US\$96,000, for the second year US\$94,000, and for the 3rd year is US\$60,000. Total allocated for the two years is US\$250,000).
- > 38% charged under OC1, 19% from OC2, 43% from OC3 as the UNV will be providing technical advisory role through his/her support to the Project Coordinator and the PMU.

Communication Officer (Full time, National):

- To hire a full time Communication Officer to provide specialised technical communication skills to assist the R2R project to develop and deliver the projects communication strategy and public awareness and educational programs. This position will based within the DCIE and report directly to the Project Coordinator of the Project Management Unit (PMU).
- The position is to be full time for the duration of the project (4 years). The budget includes US\$15,000/year. Total budget allocated per year is US\$60,000.
- > Cost-shared between OC 1 (Yr 1 and 2) 30K, OC2 (Yr 3 and 4) 30K

LMMA Officer (full time, National):

- > To provide funds to hire a full time Local Marine Management Area (LMMA) Officer to provide specialised technical community based marine management skills to assist the R2R project to develop and deliver the projects public awareness and educational programs to achieve outputs 1.1.1 and 1.1.2. This position will based within the NFMRA, however will report directly to the Project Coordinator of the Project Management Unit in conjunction with the Coastal Manager and AusAID fisheries Advisor located within the NFMRA. The position will be contracted directly to DCIE.
- > The position is to be full time for the duration of the project (4 years). The budget includes the total costs of the LMMA Officer package of US\$15,000. Total budget allocated for the four years is US\$60,000.

Fisheries Data Collection Officers (full time, National):

- To provide funds to hire four local staff, one each from the four coastal districts associated with the project to collect catch, effort and morphological (weight/length) data on fish caught associated with the projects FADs deployed in each project district. These positions will be based within the NFMRA, however will report directly to the Project Coordinator of the Project Management Unit in conjunction with the Coastal Manager and AusAID fisheries Advisor located within the NFMRA. The positions will be contracted directly to DCIE.
- These positions are budget for full time for the duration of the project (4 years). However, the positions should be paid on hours worked and will be subjected to the deployment of FAD's in the respective districts. The budget includes the total annual costs of one Fisheries Data collection officer of US\$4,500 (US\$18,000 for the four years). Total budget allocated for four staff for the four years is US\$72,000.

Lawyer (Part time, National)

- > To contract a local lawyer to draft community based and/or district LMMA/fisheries management bye laws associated with the 5 districts the R2R project is associated with to formalise the community based marine management plans and LMMA networks. This will assist the R2R project to develop a nationwide inshore marine management framework to achieve outputs 1.1.1 and 1.1.2. This consultancy is to be undertaken once the fishery Act has been finalised. It is envisaged this would be during the second year of the project. The consultancy will be contracted through the Nauruan governments due diligence processes, will be managed by the PMU and DCIE and work directly with the NFMRA.
- > 50 full working days have been allocated for this consultancy (10 days for each of the five districts associated with the R2R project) which includes community consultations and document preparations. It is expected that the consultancy will be delivery over a period of time based on the information being available for each district to allow the work to be undertaken. The budget for this consultancy only includes consultants fees of US\$15,000 (50 days @ US\$300 a day = \$15,000).

1d Materials & Goods Demarcation of MPAs

➤ 6 buoys will be deployed to demarcate the marine protected areas within the LMMA. US\$1,000 per buoy x 6 buoys + US\$ 4,000 for installation and maintenance. Total costs are US\$10,000.

Public Consultations/Workshops/Education/Awareness:

- > To provide funds to be used to cover costs associated with community consultations, hosting workshops, development and production of educational and awareness materials (posters, brochures, fact sheets, media releases and educational work (e.g. videos, radio programmes, web site and face book) of marine managed areas within the coastal communities associated with the project districts. The information developed for the projects districts will have a direct and positive spill over for the entire community of Nauru. The projects communication office will play a major role in coordinating the community education and awareness programmes.
- The budget allocated for these activities includes US\$3,000 per year for each of the four districts for communit y consultations, discussions and workshops (US\$12,000 per year in total and US\$48,000 for four years) and US\$25,000 allocated for the production of educational and awareness material. Total costs are US\$73,000.

Alternative Livelihoods/food security for marine resources:

- > To provide funds to construct, deploy, maintain and replace Fish Attracting Devices (FAD's), both inshore shallow (water depths 300-400 meters) and deep offshore (water depths of 2000 3000 meters) waters and equipment and construction of sea safe fishing "canoes" associated with the five project districts. FAD's are a fisheries management tool used to shift coastal communities fishing pressure from inshore reef associated finfish stocks to pelagic (oceanic) stocks. Reductions in fishing pressure on inshore coastal finfish resources allows the resource stocks of these fin fish to recovery whilst ensuring and maintaining household food security to communities through the collection of pelagic stocks attracted to the FAD's. The NFMRA fishing "canoe" provides the means for shore based coastal reef fishers to access the inshore (and offshore in fair weather conditions) FAD's resulting in decreased fishing pressure on coastal reef based fin fish stocks. FAD's and canoes are an integral component of LMMA framework systems being developed and implemented under the R2R project. NFMRA will be the lead agency for these two specific project activities and will report to DCIE. FAD's and Canoes are to be constructed and deployed throughout the latter half of the first year and subsequent years 2 and 3.
- Funds have been allocated to construct and deploy two deep water FAD (8 in total) associated with the R2R project. These funds are inclusive and include practical training programmes on their construction, deployment, use, maintenance and monitoring. In addition, funds have been allocated to ensure maintenance and replacement of material is undertaken (in the form of contingency funding). The budget allocated for one deep water offshore FAD is US\$15,000 (total 8 = US\$120,000) which includes all costs associated with the equipment procurement, construction, deployment and maintenance of each FAD. A contingency of S\$5,000 for offshore FAD's (US\$40,000) has been included to assist in the long term maintenance and part replacement (e.g. floating buoys, near surface equipment) and to address unforeseen events and exchange rate fluctuations. In addition US\$3,000+ a year has been allocated to provide fuel, boat costs to ensure scheduled FAD maintenance programmes are undertaken (US\$11,000 in total for 3 years). Total indicative costs for 8 FAD's are US\$171,000.
- Funds have been allocated to provide 5 fishing canoes for each of the four R2R projects district (20 in total) associated with the R2R project for trial fishing at the FADs that will be installed. These funds are inclusive and include practical training programmes on canoe construction, maintenance and safety. Safety will be an important element as these wooden canoes will be fishing in deeper fishing water than currently used by local communities. The canoes will be assigned to each district's CBO committee where they will be managed and provided to fisherman on a rotational basis, as developed by the NFMRA community based canoe project. It is expected that the distribution of canoes will be spaced out over the duration of the project however based on the needs of each of the four districts. The budget allocated for one NFMRA fishing canoe is US\$1,200 which includes all costs associated with the equipment procurement, construction and delivery to each district. Total indicative costs for 20 Canoes are US\$24,000.
- Based on findings from alternative livelihoods assessment, funds have been allocated to establish other appropriate marine-based alternative livelihood activities such as fish, clam, and/or seaweed farming. US\$ 100,000 has been allocated for partnering with specialized agencies (i.e. SPC) and local government for the design, training, procurement, implementation and management of marine-based alternative livelihood activities.

1e Travel:

Study Tours LMMA

- > To provide funds to undertake a LMMA "study tour" of the Fiji Local Marine Management Area (FLMMA) program and meet with community representatives and agencies for discussions, information exchange and capacity building for R2R PUM, DCIE and community representatives in each of the five project districts. It is anticipated that the following positions and numbers of people are to participate; PMU (1 people) Project Coordinator, DCIE (1) Director and/or a staff member, NFMRA (1) Coastal Manager and three (3) community representatives from each of the five project districts (15 in total) that are directly involved in the district LMMA's. Selection of community representatives need to be undertaken through discussion and selection involving DCIE, PMU, NFMRA and communities. Coordination of the study tour in Fijian will be undertaken by the PMU in conjunction with the Pacific Regional UNDP office in Suva, Fiji with duration of 10 days in total. The study tour should be undertaken in the first year of the project, preferably during the first or second quarter of the project.
- > The budget includes eighteen (18) return economy international air flight Nauru to Fiji (@US\$3,000 per flight, 18 flights is US\$54,000), per diem (DSA) (10 days @ US\$200 a day = US\$2,000 per participant, total 18 x US\$2000 = US\$36,000), Vehicle (bus) rental whilst in Fiji (10 days @ US\$350 = US\$3,500), and a contingency of US\$500 per participant (US\$9,000 in total) to address unforeseen events and exchange rate fluctuations. Total indicative costs of this activity are US\$102,500.

PMU: Funds for Regional programme

- > To provide funds for the R2R PMU Project Coordinator (PC) and government focal point to attend a regional R2R events (e.g. meetings, conference, workshop) on behalf of the project to ensure the sustainable and equitable management of the R2R project and further develop skills and capacity of each staff member.
- > By attending the regional workshop, PMU will be enhancing their knowledge and networks required to implement each Outcome/targets
- > The budget includes two (2) and one (1) international travel allocations for each year of the project for the Project Coordinator and Project Administration/Finance Assistant, respectively. It total, 3 international travel each year and 12 travel activities for the four years of the project. Each travel allocation has been allocated 10 days, resulting in a total of 30 travel days allocated for each year with a total of 120 travel days allocated over the duration of the project.
- > The budget includes 12 return economy international air flights (US\$3,500 per flight, US\$42,000), per diem (DSA) for 120 days @ US\$300 a day = US\$36,000), and a contingency of US\$1,000 per travel allocation (12 x US\$1,000 = US\$12,000) for the traveller to address unforeseen events and exchange rate fluctuations. Total indicative costs for each year are US\$22,500 and a total of US\$90,000 for the duration on of the project.
- Cost-shared between OC 1 (Yr 1 and 2), OC2 (Yr 3) and OC3 (Yr 4)

DCIE: Funds for Regional programme

- > To provide travel funds for the DCIE Director and/or staff to participate and attend regional/global project events (e.g. meetings, conference, workshop) on behalf of the Nauru Government to ensure the long term sustainable ownership and equitable management of the R2R project and further develop Nauruan government staff skills and capacity.
- > By attending the regional workshop, DCIE will be enhancing their knowledge and networks required to implement each Outcome/targets
- The budget includes two (2) international travel allocations for each year of the project (8 international travel allocations over the duration of the project) for the DCIE Director or staff member. Each travel allocation has been allocated 10 days, resulting in a total of 20 travel days allocated for each year with a total of 80 travel days allocated over the duration of the project.
- The budget includes 8 return economy international air flights (US\$3,500 per flight, US\$28,000), per diem (DSA) for 80 days @ US\$300 a day = US\$24,000), and a contingency of US\$1,000 per travel allocation (8 x US\$1,000 = US\$8,000) for the traveller to address unforeseen events and exchange rate fluctuations. Total indicative costs for each year are US\$15,000 and a total of US\$60,000 for the duration on of the project.
- Cost-shared between OC 1 (Yr 1 and 2), OC2 (Yr 3) and OC3 (Yr 4)

Communication Officer: Funds for Regional programme:

- To provide funds for the R2R Communication Officer to attend one regional/global project event (e.g. conference, workshop) on behalf of the project to further develop skills and capacity.
- By attending the regional and global events, the Communication Officer will be communicating results mainly from OC1 and 2

- > 10 days travel has been allocated for each of the four years of the project. The budget includes four return economy international air flights (US\$3,000 per flight, US\$12,000), per diem (DSA) for 40 days @ US\$230 a day = US\$9,200), and a contingency of US\$500 per travel allocation (4 x US\$500 = US\$2,000) for the consultancy to address unforeseen events and exchange rate fluctuations. Total indicative costs for each year are US\$5,800, and a total of US\$23,200 for the duration of the project.
- Cost-shared equally between OC 1 (Yr 1 and 2), OC2 (Yr 3 and 4)

1f Transport (vehicle) for PMU and Project:

- To purchase a vehicle that will provide local road transport for the project staff and associated contractors and stakeholders to ensure the delivery of the four project Components, particularly Outcomes 1, 2 and 3. The vehicle will be the responsibility of the PMU Project Manager and will follow the rules and regulations of the government of Nauru for its use. It is envisaged that the UN Volunteer will have access to the vehicle whilst they are contracted to the project. As the vehicle use will be required for all work on all four R2R project components the totals costs of the vehicle has been divided between these components. The vehicle will be purchased via international sources and follow government of Nauru protocols. The vehicle purchased will be used.
- > The purchase price and costs of transport and clearances for the vehicle landed in Nauru is U\$\$20,000. A yearly allocation of fuel of U\$\$3,500 (U\$\$14,000 for 4 years) and a yearly allocation for vehicle maintenance and servicing of U\$\$3,000 (U\$\$12,000 for four years) is required. The total indicative costs for the purchase of a project vehicle and operational costs for the duration of the project (4 years) is U\$\$41,000.
- Cost-shared between OC 1 (26,500) and OC2 (14,500)
- ▶ In addition, budget allocated for motor bikes (transport) includes US\$6,000 for the purchase of two (Honda CT110 "postie bike"), a yearly allocation of fuel and maintenance (1,130 per year plus contingency; 4530 for 4 yrs). Total budget is 10,530. Cost-shared by OC 1: 3,400, and OC 2: 7,130)

1g Office Supplies:

- > PMU (2), LMMA, Agriculture, Communication x lap top computers plus software, carry case, mouse, memory data sticks and back up hard drive. Indicative budget cost for one computer package is US\$2,200. Total costs US\$11,000. (Note: UNV computer in first year costs).
- > One (I) printer and additional cartridges (US1,000 for the first year) plus US\$500 for cartridges for years 2, 3, and 4. Total costs US\$2,500.
- > One digital projector, carry case and additional power cords (US\$1,000).
- > Project Internet usage Two (2) x Wireless Modem US\$130 and US\$1,500 per year internet connections. A total cost for the four years is US\$12,260.
- Office supplies, business cards, and refurbishment (in addition to in kind contribution from DCIE): US\$ 2365 for 1st year. US \$500 per year from year 2 - 4. US\$ 2,835 for four years.
- > Cost-shared between: OC 1 (Yr 1 and 2), OC2 (Yr 3) and OC3 (Yr 4)

1h Miscellaneous:

Approximately 1% of the total Outcome 1 budget for Y1-Y4 is allocated for contingencies related to inflation, current exchange fluctuations and other external shocks and contingencies. These may increase the cost of travel and materials.

2.0 Sustainable Land and Water Management

2a International Consultants:

- > To acquire specific specialised technical skills and knowledge to assist with Outputs 2.1.2. The consultants will constitute as **Senior Technical Advisor**s with extensive experience in (i) assess and develop an Land Use Management Plan (that includes spatial and policy frameworks for all economic activities such as agriculture (pig/poultry/crops, etc), settlements, and forestry) for the entire island with detail plans for the five project districts, (ii) to draft a management plan for the Buada lagoon (2.1.2) and (iii) to provide support to land-use strategy (which may be combined with consultancy (i) if it is most effective). The consultancies will include the land associated with the bottom side and applicable "ridge" topside areas that are not covered by mining. Each consultant will be contracted directly to UNDP Fiji through UNDP professional international consultant's procurement protocols as requested and agreed by the government of Nauru. Each consultant input is to be undertaken within the first year, to be commission in the second or third quarters.
- > Two month (60 full working days) has been allocated for consultancy (i) which includes two in country input of 40 days in total (20 days per in country input) with the remaining time allocated to drafting reports. The budget includes consultants fees, (60 days @ US\$700 a day = \$42,000), two

- return economy international air flight (US\$3,500 per flight Total US\$7,000), per diem (DSA) (40 days @ US\$200 a day = US\$8,000), and a contingency of US\$1,000 per month to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs are US\$59,000.
- > One month (30 full working days) has been allocated for consultancy (ii) which includes one in country input of 20 days with the remaining time allocated to drafting reports. The budget includes consultants fees, (30 days @ US\$700 a day = \$21,000), one return economy international air flight (US\$3,500), per diem (DSA) (20 days @ US\$200 a day = US\$4,000), and a contingency of US\$1,000 for the consultancy to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs are US\$29,000.
- > One month (30 full working days) has been allocated for consultancy (iii) which includes one in country input of 20 days with the remaining time allocated to drafting reports. The budget includes consultants fees, (30 days @ US\$700 a day = \$21,000), one return economy international air flight (US\$3,500), per diem (DSA) (20 days @ US\$200 a day = US\$4,000), and a contingency of US\$1,000 for the consultancy to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs are US\$29,000.
- The total cost of all consultancies is US\$117,000.

2b Local Consultants:

- > To acquire specialised technical skills to assist the international consultants in delivering Out puts 2.1.1 and 2.1.2, provide specific local context and information and received hands on technical capacity building, up skilling and knowledge based skills transfer during the international engagement. The local consultant will be contracted through the Nauruan governments due diligence processes for the three specific consultancies. One local consultant will be contracted for each consultancy and assigned to the International consultant.
- > Each local consultant has been allocated 30 full working days, of which 20 days are allocated to work directly with the assigned international consultant and 15 days to prepare logistic and other output based requirements needed to ensure the delivery of each output. The budget includes consultants fees, (35 days @ US\$200 a day = \$7,000 per month for each consultancies). Total local consultancy indicative costs of US\$21,000.

2c Contractual Services - Individual

Project Coordinator, Project Assistant, UNV, Communication Officer

> Same as 1c

Land Management Officer (Full time, National):

- > To hire a full time Agricultural Officer to provide specialised technical community based agricultural skills to assist the R2R project to develop and deliver the projects outputs associated with Outcome 2, with particular emphasis on awareness and educational training the projects district sites. This position will be based within the Division of Agriculture (DoA) and contracted directly to DCIE and will report directly to the Project Coordinator of the Project Management Unit in conjunction with the Director of Agriculture.
- > The position is to be full time for the duration of the project (4 years). The budget includes the total costs of the Agricultural Officer package is US\$15,000. Total budget allocated for the four years US\$60,000.

2d Materials & Goods

Rainwater Harvest Systems for home gardens

- > To provide direct assistance to the five project districts (Ananbar, Anibare, Buada, Ijuw and Meneng) to increase household water storage capacity through the replacement of associated water collection and delivery systems. In total 43 households will be included in the project (Ananbar (5), Anibare (7), Buada (14), Ijuw (3), and Meneng (14). The selection of households in each district is based on the priority selection identified through the Global Climate Change Alliance (GCCA): Pacific Small Island States: "Increasing rainwater harvesting capacity and improving water security Nauru". These households within the projects districts have been agreed and endorsed by the GCCA. Each house identified by the GCCA and included in this project has as a prerequisite a working water storage facility (tank). It is envisaged that 20 rainwater harvesting systems such as piping and gutters to be connected to the roof will be re/placed for the first three years of the project.
- A total of US\$3,000 has been allocated for each household. This has been based on the detailed budget derived from the GCCA assessment and advice provided by the GCCA Project Coordinator. Each household requirement may differ resulting in different individual costs. These costs include the procurement of materials and supplies, labour and training. It may include the removal and replacement roof guttering and downpipes. The total budget allocation is 43

households @ US\$3,000 = US\$129,000. Additional budget allocation for water tanks and associated water delivery systems (gutters and down pipes) for public locations/those associated with root crop and fruit tree activities totals to US\$11,000. Total costs for rainwater harvest systems are US\$140,000.

Composting Toilet

- > To provide direct assistance to the five project districts (Ananbar, Anibare, Buada, Ijuw and Meneng) to introduce and pilot the installation and use of compositing toilet (waste management systems) to reduce the pollution resulting from current household sewage systems entering the islands ground water. In total 31 composting toilet units will be provided to 31 households (6 toilets each for Ananbar, Anibare, Buada and Ijuw districts and 7 for Meneng district). The selection of households in each district is based on the priority selection identified through the Nauru Sustainable Integrated Water Resource and Waste Water Management (IWRM) project: These households within the projects districts have been agreed and endorsed by the IWRM.
- A total of US\$5,000 has been allocated for each compositing toilet, one toilet will be provided to one household only. This has been based on the detailed budget derived from the Nauru IWRM assessment and advice provided by the IWRM Project Coordinator. These costs include the procurement of the material and supplies, deployment and training. The total budget allocation for is 31 compositing toilets @ US\$5,000 = US\$155,100.

Alternative Livelihood on land including root crops, poultry, and fruit tree

- Poulty, Fruit Trees and Root Crops: The budget allocated for the procurement of essential tools and equipment for production of poultry, fruit trees and root crops includes US\$10,000 annually (US\$2,000 allocated to each of the five R2R districts) and a total over the project duration of US\$40,000. Approximately 50 root crops, fruit trees, and 20 poultry per districts are estimated to be planted in each district. Building on existing partnerships, SPC's technical support will be sought (US\$16,400).
- > Total Cost is US\$ 56,400. Implementation expected to take place in yr 1 and 2.

Public Consultations/ Workshops/Education/Awareness for Agriculture

- > To provide funds to be used to cover costs associated with community consultations, hosting workshops, development and production of educational and awareness materials (posters, brochures, fact sheets, media releases and educational work (e.g. videos, radio programmes, web site and face book) of Buada lagoon managed areas and agriculture food security opportunities (e.g. fruit trees, root crops) focusing on the Buada district however awareness and educational material to include the other four project districts. The information developed for the projects districts will have a direct and positive spill over for the entire community of Nauru. The projects communication office will play a major role in coordinating the community education and awareness programmes.
- > The budget allocated for this activities includes US\$1,500 per year for community consultations, discussions and workshops within the Buada district (US\$6,000 for four years) and US\$10,000 allocated for the production of educational and awareness material. Total costs are US\$16,000.

2e Travel

PMU, DCIE, Communication Officer: Funds for Regional programme

Same as 1e

Training course/study tour:

- > To provide funds for staff of the Agriculture Division to undertake a Training course and "study tour" to Fiji to work with the SPC Land and Resources Division to build technical and capacity skills associated with the cultivation of salt and drought resistant food crops suitable for Nauru, acquire food crop grafts and bring them to Nauru and undertake a study tour of Fijian examples of community based projects that includes root crops and livestock (pigs and chickens) small scale waste management innovative systems (e.g. boys town). The training course is to be designed to train the Agriculture staff that upon their return training additional staff who intern pass this information on to the community farms within the Nauru (train the trainers). The coordination of the training course and study tour to Fijian will be undertaken by the PMU in conjunction with the Pacific Regional UNDP office in Suva, Fiji, Nauru Government and SPC. The delivery of training programmes of this nature is a SPC obligation to its member states of which Nauru is one. The duration of 14 days in total. The study tour should be undertaken in the first year of the project, preferably during the first or second quarter of the project. It is anticipated that three (3) staff members of the Agriculture Division and the Project Agriculture Officer will participate in the course.
- The budget includes four (4) return economy international air flight Nauru to Fiji (@US\$3,000 per flight, 4 flights is US\$12,000), per diem (DSA) (14 days @ US\$300 a day = US\$4,200 per

	participant, total 4 x US\$4,200 = US\$16,800), Vehicle (bus) rental whilst in Fiji (5 days @ US\$350
	= US\$1,750), and a contingency of US\$500 per participant (US\$2,000 in total) to address
	unforeseen events and exchange rate fluctuations. Total consultancy indicative costs of this
	activity are US\$28,630.
	Technical Support from SPC:
	> To hire support from SPC to set up technical data gathering methodology and tools for the project
	period for Outcome 2.
	Airfare: US\$ 3,000. DSA US\$ 200 x 15 days. Total US\$ 6,000.
2f	Transport (vehicle and motorcycle) for PMU and Project:
	➤ Same as 1f.
2~	Office Supplies:

- 2g Office Supplies:
 - > Same as 1g
- 2h Miscellaneous:
- US\$ 1,550550 spread across 4 years.

3.0 Governance & Institutions

3a International Consultants:

- > To acquire specific specialised technical skills and knowledge to assist with the Output 3.1. The consultants will constitute as **Senior Technical Advisors** with extensive experience. International consultants will be required to undertake four specific consultancies; (i) **Environmental & Social Safeguard Policies and Guidelines** for DCIE and (ii) **Land Use Policy Framework** (Legal framework incorporating results from Plan and Strategy under Outcome 1). Each consultant will be contracted directly to UNDP Fiji through UNDP professional international consultant's procurement protocols as requested and agreed by the government of Nauru. Each consultant input is to be undertaken within the first year, to be commission in the second, third or fourth quarters.
- ➢ One month (30 full working days) has been allocated for Land use Policy Framework, which includes a single in country input of 15 days with equal amount of time allocated to draft the report. The budget for each of these consultancies includes consultants fees, (30 days ② US\$700 a day = \$21,000), one return economy international air flight (US\$3,500), per diem (DSA) (15 days ② US\$200 a day = US\$3,000), and a contingency of US\$3,000 per consultancy to address unforeseen events and exchange rate fluctuations. Total consultancy indicative cost is US\$32,000.
- Two months (60 full working days) has been allocated for the Environmental & Social Safeguard Policies and Guidelines consultancy which includes two (2) in country input of a total of 25 days (15 days allocated for the first input an 10 days allocated for the second) with the remaining consultancy time (35 days) allocated for report drafting. The budget for this consultancy includes consultants fees, (60 days @ US\$700 a day = \$42,000), two return economy international air flights (US\$3,500 per flight, US\$7,000 in total), per diem (DSA) (25 days @ US\$200 a day = US\$5,000), Car rental (25 days @ US\$100 = US\$2,500), and a contingency of US\$3,000 per month of consultancy to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs for this consultant US\$62,500.
- The total International consultant indicative costs for 3.1 are US\$94,500.

Training Consultants (GIS Training Specialist):

- > To acquire specific specialised technical skills and knowledge to assist with Outputs 3.1.2. The consultants will constitute as Senior Technical Advisors with extensive experience in GIS system development, data base, training and capacity building skills. The consultant will be contracted directly to UNDP Fiji through UNDP professional international consultant's procurement protocols as requested and agreed by the government of Nauru. The consultant input is suggested to be undertaken within the second year of the project.
- > One month (30 full working days) has been allocated for the GIS training specialist consultancy which includes three (3) in country input of a total of 30 days (8 days allocated to each of the first and third input and 14 days allocated to the second in country inputs it is anticipated that the separate in country input would be spaced out over a year). The budget for this consultancy includes consultants fees, (30 days @ US\$700 a day = \$21,000), three return economy international air flight (US\$10,500), per diem (DSA) (30 days @ US\$200 a day = US\$6,000), Car rental (30 days @ US\$100 = US\$3,000), and a contingency of US\$3,000 per consultancy to address unforeseen events and exchange rate fluctuations. Total consultancy indicative cost of this consultancy is US\$43,000.

3b Local Consultants:

To acquire specialised technical skills to assist the international consultants in delivering Output 3.1.1 and provide specific local context and information and received hands on technical capacity building, up skilling and knowledge based skills transfer during the international engagement. The local consultant will be contracted through the Nauruan governments due diligence processes for the 3 specific consultancies. One local consultant will be contracted for each consultancy and assigned to the International consultant. Each local consultant has been allocated 30 full working days, of which 15 days are allocated to work directly with the assigned international consultant and 15 days to prepare logistic and other output based requirements needed to ensure the delivery of each output. The budget includes consultants fees, (30 days @ US\$200 a day = \$6,000 per month for each consultancy). Total local consultancy indicative costs for the four consultancies (100 days) are US\$18,000. 3c **Contractual Services** Project Coordinator, Project Assistant, UNV, Communication Officer 3d Goods and Services - GIS / Database Management software Purchase and maintenance of ArcGIS and other mapping/database software/license and hardware (powerful desktop computer, etc). 3e **Travel** PMU, DCIE, Communication Officer: Funds for Regional programme Same as 1e 3f Transport (vehicle) for PMU and Project: Same as 1f Miscellaneous: 3g Approximately 1% of the total Outcome 3 budget for Y1-Y4 is allocated for contingencies related to inflation, current exchange fluctuations and other external shocks and contingencies. These may increase the cost of travel and materials. 4.0 Knowledge Management 4a **International Consultants:** To acquire specific specialised technical skills and knowledge to assist with Outputs 4.1.1 and 4.1.2. The consultants will constitute as Senior Technical Advisors with extensive experience in developing (i) environmental data base systems, the delivery of training programmes and capacity building skills (4.1.1) and Web designer to develop a Web site for DCIE and R2R project and delivery a training programme to DCIE and R2R PMU staff to maintain and populate the site (4.1.2). The consultants will be contracted directly to UNDP Fiji through UNDP professional international consultant's procurement protocols as requested and agreed by the government of Nauru. The consultant input is to be undertaken within the first year, to be commission in the second or third quarters. Two months (60 full working days) has been allocated for the Data Base Development and Training consultancy which includes two (2) in country input of a total of 40 days (20 days allocated to each of the two in country inputs) with the remaining consultancy time (20 days) allocated for report preparations. The budget for this consultancy includes consultants fees, (60 days @ US\$700 a day = \$42,000), two return economy international air flights (US\$3,500 per flight, US\$7,000 in total), per diem (DSA) (40 days @ US\$200 a day = US\$8,000) and a contingency of US\$1,000 for the consultancy to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs for this consultant US\$59,000. 14 days have been allocated for the Web development consultancy which includes one (1) in country input of a total of 14 days. The budget for this consultancy includes consultants fees, (14 days @ US\$700 a day = \$9,800), one return economy international air flights (US\$3,500 per flight), per diem (DSA) (14 days @ US\$200 a day = US\$2,800), and a contingency of US\$500 for the consultancy to address unforeseen events and exchange rate fluctuations. Total consultancy indicative costs for this consultant US\$16.600. 7,218 for contingency 4b **Local Consultants:** To acquire specialised technical skills to assist the international consultants in delivering Outputs 4.1.1 and 4.1.2, provide specific local context and information and received hands on technical capacity building, up skilling and knowledge based skills transfer during the international engagement. The local consultants will be contracted through the Nauruan governments due

diligence processes for the two specific consultancies.

- > The local consultant allocated for the data base consultant (4.1.1) has been allocated 25 full working days per month, of which 20 days are allocated to work directly with the assigned international consultant and five (5) additional days to prepare logistic and other output based requirements needed to ensure the delivery of the output. In total two months work will be required. The budget includes consultants fees only (25 days @ US\$200 a day = \$5,000 per month). Total local consultancy indicative costs are US\$10,000.
- > The local consultant allocated for the Web site designer base consultant (4.1.2) has been allocated 19 full working days for the consultancy, of which 14 days are allocated to work directly with the assigned international consultant and five (5) additional days to prepare logistic and other output based requirements needed to ensure the delivery of the output. In total 19 days work will be required. The budget includes consultants fees only (19 days @ US\$200 a day = \$3,800 per month). Total local consultancy indicative costs are US\$3,800.

4c Miscellaneous:

Approximately US\$1,000 per year for Y1-Y4 is allocated for contingencies related to inflation, current exchange fluctuations and other external shocks and contingencies. These may increase the cost of travel and materials.

Project Management Cost (PMC)

PMC 1 International Consultant

As per UNDP and GEF Monitoring and Evaluation Policies, the following International Consultants will be hired:

- > Audit Annually. \$6,000 Annually, 24,000 for Project Period. Total is 24,000.
- Midterm and Final Evaluation. Conducted in Year 2 and Year 4. Travel US\$ 3,000. DSA (US\$ 200) and Fees (US\$ 700) for fifteen (15) days including ten (10) days in country. \$25,000 per evaluation, 50,000 for Project Period. Note: Travel for consultants will be cost shared OC1-4.

PMC 2 | Contractual Services – Project Assistant (Full Time, National):

- ➤ To hire full time Project Assistant (PA) to provide specialized management and financial skills and services to ensure the full operation and function of the Projects Management Unit (PMU). The Assistant will also spend 20% of his/her time supporting the implementation of the specific project Outcomes.
- > The position will be based within the DCIE and report directly to the R2R Project Coordinator. The position will be full time for the duration of the R2R project (4 years).
- The budget includes the total costs of the Project Administration/Finance Assistant package of US\$10,000 annually. Total project cost of US\$40,000.

Cost shared between PMC (80%) annually, and OC1 (20% yr 1), OC2 (20% yr 2), OC3 (20% yr 3 & yr 4).

PMC 3 Meeting - Project Inception Workshop

US\$ 500 to cover meeting costs for Project Inception Workshop

PMC 4 Travel - Project Monitoring Costs:

> PMU will be provided with approximately US\$ 700 for entire project to conduct necessary project monitoring additional to what is already monitored through the project implementation. The cost may cover fees to hold necessary meetings or transport for field visits.

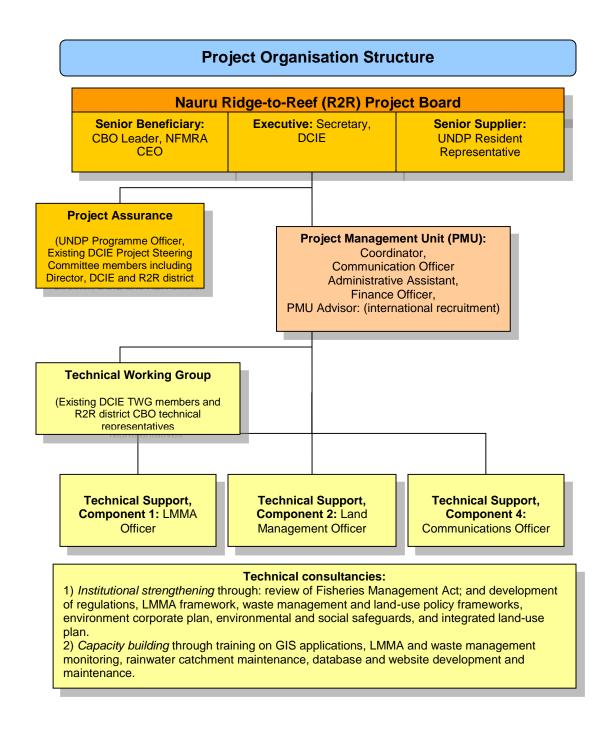
PMC 5 Miscellaneous – Direct Project Cost:

- > DPCs are execution-related costs that are separate and distinct from General Management Support (GMS) costs that are incurred by UNDP regardless of the implementation modality chosen for the project. DPCs normally relate to operational and administrative support activities carried out by UNDP offices on behalf of Direct Implementation Modality (DIM) or Country Office support to National Implementation Modality (NIM) projects, such as: (a) HR activities, including recruitment of project personnel, issuance of project personnel contracts, etc.; (b) costs incurred in the process of undertaking procurement activities of project goods and services; and (c) finance transactions that are performed on behalf of an Implementing Partner.
- Unit cost for each service is based on UNDP's standard and most recent Universal Price List (UPL)
- Budgeted DPC agreed upon with DCIE through a formal Letter of Agreement include: Recruitment and management of international consultants, interview of Project Management Staff, payment to vendors and staff and travel Assistance if needed.
- The Letter of Agreements (LOA) between the Implementing partners and UNDP is under process, expect to be completed within 3 months after CEO Endorsement submission

5 Management Arrangements

- 254. The GEF focal point for the Nauru R2R project is the Department of Commerce, Industry and Environment (DCIE) and will be the Government Project Executive Agency (EA) and will oversee the projects implementation. The project will be implemented under the National Implementation modality (NIM). The Department of Commerce, Industry and Environment (DCIE), Division of Agriculture and the Nauru Fisheries and Marine Resource Authority (NFMRA) will be the main implementing partners responsible for the achievement of the majority of the projects outcomes and outputs.
- 255. UNDP is the GEF implementing agency (IA) for this project. The UNDP Pacific Regional Multi-Country Office (MCO) based in Suva, Fiji, will support the project's implementation by maintaining the project budget, expenditures, contracting international consultant's and sub contractors, procurement and providing assistance to the National Executive Agency. The UNDP MCO will monitor and manage the projects implementation and achievements of the projects outputs and ensure due diligence, professional accountability, and proper use of UNDP/GEF funds.
- 256. The R2R Nauru project will be coordinated with the Regional R2R programme through 1) day-to-day communication and integration of activities between the pilot site activities, as well as 2) sharing of tools and approaches with the regional and national R2R projects through integrated knowledge management initiatives in country, as well as sharing of case studies and lessons learned in regional knowledge-sharign and capacity building forums.
- 257. **Project Board** is responsible for making management decisions for a project in particular when guidance is required by the Project Manager. The Project Board plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities. Based on the approved Annual Work Plan, the Project Board can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans.
- 258. In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the final decision shall rest with the UNDP Project Manager.
- 259. Potential members of the Project Board are reviewed and recommended for approval during the PAC meeting. Representatives of other stakeholders can be included in the Board as appropriate. The Board contains three distinct roles, including:
 - 1) An Executive: individual representing the project ownership to chair the group. The Nauru R2R Executive will be the DCIE Secretary.
 - 2) **Senior Supplier**: individual or group representing the interests of the parties concerned which provide funding for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier's primary function within the Board is to provide guidance

- regarding the technical feasibility of the project. The Nauru R2R Senior Supplier will be the UNDP Resident Representative
- 3) **Senior Beneficiary**: individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Nauru senior Beneficiary will be the leader of the CBO's and CEO or NFMARA
- 4) The **Project Assurance** role supports the Project Board Executive by carrying out objective and independent project oversight and monitoring functions. The Project Coordinator and Project Assurance roles should never be held by the same individual for the same project. The Nauru R2R project assurance will be held by the DCIE project steering committee.



260. **Project Coordinator:** The Project Coordinator has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner, within the constraints laid down by the Board. The Project Coordinators prime responsibility is to ensure that the project produces the results

specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

- 261. **Communications Officer:** The Communication Officer is directly responsible for undertaking activities and producing outputs associated with Component 4 "Knowledge Management". The Communications Officer reports directly to the Projects Coordinator on all matters relating to activities of Component 4.
- 262. **Administration Assistant:** This position reports directly to the Project Coordinator and is responsible for all administrative matters relating to the R2R project. The position provides administration assistance to the Project Coordinator, PMU Advisor, and Communications Officer.
- 263. **Finance Officer:** This position reports directly to the Project Coordinator and is responsible for all financial matters relating to the R2R project. The position provides financial reporting information to the Project Coordinator, PMU Advisor, the Government of Nauru, and UNDP Fiji Multicountry Office.
- 264. **PMU Advisor:** The PMU Advisor role is responsible for providing direct project managerial and technical support to the PMU project coordinator, communication officer and administration assistant. The UN Volunteer will be responsible for the role of the PMU Advisor.
- 265. The **Technical Working Group** supports the PMU by providing ad-hoc technical advice on specific activities for project components when needed. The existing DCIE Thematic Working Group as well as technical representatives from district community based organizations (CBOs) will comprise of the R2R project Thematic Working Group. Its distinct role will be to review TORs and technical reports resulting from project activities.
- 266. **Audit Requirements**: projects must be audited in accordance with UNDP Financial Regulations and Rules and Audit policies

6 Monitoring and evaluation framework

- 267. The project will be monitored through the following Monitoring and Evaluation (M&E) activities. The M&E budget is provided in the table below.
- 268. **Project Inception:** A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure (this includes members of the Project Board, Project Assurance, Technical Working Group, Project Management Unit), UNDP country office and where appropriate/feasible regional technical policy and programme advisors (from NFMRA, regional organizations, UNDP Asia Pacific Regional Center) as well as other stakeholders. The Inception Workshop is crucial to validating key elements of the project (such as the project results framework, budget, organisation structure) and building ownership for the project results and to plan the first year annual work plan.
- 269. The Inception Workshop should 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 CO and Asia Pacific Regional Centre (APRC) staff is 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 the Project Management Unit staff, staff who will be hired under the various project components and project consultants will be discussed again as needed.
 - b) Based on the project results framework and GEF Tracking Tools for Biodiversity, Land Degradation, and International Waters (Annex 10), review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks finalize the first annual work plan and agree to the indicative work plans for the second, third and fourth years.
 - c) Provide a detailed overview of reporting, M&E requirements. The M&E work plan and budget should be agreed and scheduled.
 - d) Discuss financial reporting procedures and obligations, and arrangements (for example between the DCIE and NFMRA) for the execution of project components as well as arrangements for the annual audit.
 - e) Plan and schedule Project Board meetings. Roles and responsibilities of all project organisation structures should be clarified and meetings planned. The first Project Board meeting should be held within the first 12 months following the inception workshop.
- 270. An <u>Inception Report</u> is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting. This is to include but not limited to the establishment of the PMU, hiring of project staff and clearly outlining agreements reached during the inception meeting.
- 271. In addition to the Inception Workshop, a comprehensive *data gathering and monitoring tools* will be developed for each component at the Project Inception. During this data gathering and monitoring design phase, detailed baseline data of indicators with no current information will be establish, data collected and analyzed in due course, Furthermore, as a method to examine project impact, a monitoring and reporting of key indicators in non-Project pilot sites may also be explored at project start.

272. Quarterly:

- > Progress made shall be monitored in the UNDP Enhanced Results Based Managment Platform.
- ➤ Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high.
- ➤ Based on the information recorded in UNDP's internal monitoring system (ATLAS), a Quarterly Progress Report (QPR) 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.

273. Annually:

Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project inception and in particular for the reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements and will be completed by the Project Management Unit, DCIE, and UNDP.

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.
- 274. **Periodic Monitoring through site visits:** UNDP MCO and the UNDP APRC will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/Back-To-Office Report (BTOR) will be prepared by the MCO and UNDP APRC and will be circulated no less than one month after the visit to the project team and Project Board members.
- 275. **Mid-term of project cycle:** The project will undergo an independent <u>Mid-Term Evaluation</u> at the mid-point of project implementation (at the end of year 2). The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction 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 document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-EEG. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Centre (ERC). The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

- 276. **End of Project:** An independent <u>Final Evaluation</u> will take place three months prior to the final Project 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 CO based on guidance from the APRC and UNDP- Environment & Energy Group (EEG) based in UNDP Headquarters.
- 277. The Final 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 Centre (ERC).
- 278. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.
- 279. During the last three months, the project team will prepare the <u>Project Terminal Report</u>. 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.

Learning and knowledge sharing:

- 280. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.
- 281. 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 though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects.
- 282. Finally, there will be a two-way flow of information between this project and other projects of a similar focus. Activities of the fourth component of the R2R Nauru project on knowledge management will provide key inputs for this.

Communications and visibility requirements:

- Full compliance is required with UNDP's Branding Guidelines. 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 needs 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 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.
- 284. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08 Branding the GEF%20final 0. https://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08 Branding the GEF%20final 0. https://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08 Branding the GEF%20final 0. https://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08 Branding the GEF%20final 0. https://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08 Branding the GEF%20final 0. https://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08 Branding 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.

285. 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

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time frame
Inception Report (for Inception Phase including Workshop)	Project Management UnitUNDP CO, UNDP	Monitoring and evaluation plan will be developed and completed by the Project Management Unit with the support from the PMU Advisor.	Within first two months of project start up
Measurement of Means of Verification of project results.	 UNDP CO Project Coordinator will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members. Within Component 1, technical assistance will be sought by SPC to set up a technical data gathering and monitoring & reporting framework. \$6,000 US. 	To be finalized in Inception Phase and Workshop. Indicative cost: \$6,000 (within Component 1).	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on output and implementation	Oversight by Project CoordinatorProject team	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	Project Coordinator and teamUNDP COUNDP APRC UNDP EEG	None	Annually
Periodic status/ progress reports	Project Coordinator and team	None	Quarterly
Mid-term Evaluation	 Project Coordinator and team UNDP CO UNDP APRC External Consultants (i.e. evaluation team) 	Indicative cost: 23,000	At the mid-point of project implementation.
Final Evaluation	 Project Coordinator and team, UNDP CO UNDP APRC External Consultants (i.e. evaluation team) 	Indicative cost: 27,000	At least three months before the end of project implementation
Project Terminal Report	Project Coordinator and teamUNDP CO	0	At least three months before the end of the project
Audit and HACT assurance	UNDP COProject Coordinator and team	Indicative cost per year (audit):6,000 (24,000 total) Indicative HACT assurance: cost per year 12,000 (up to 48,000 total)	Yearly
Visits to field sites	 UNDP CO UNDP APRC (as appropriate) Government representatives, NFMRA, and CBO representatives for the 5 project districts. 	For GEF supported projects, paid from IA fees and operational budget	Yearly

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time frame
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US\$128,000 (+/- 5% of total budget)	

7 Legal context

- 286. This document together with the UNDAF Country Results Matrix (CRM) 2013-2017 agreed by the Government and UN agencies, and the UNDP Sub-Regional Programme Document, which is incorporated by reference constitute together a Project Document as referred to in the SBAA and all UNDAF CRM provisions apply to this document.
- 287. Consistent with the Article III of the Standard Basic Assistance Agreement, 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.
- 288. The implementing partner shall:
- a) 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;
- b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.
- 289. 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 this agreement.
- 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/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
- 291. The UNDP Resident Representative in the Fiji Multi Country Office is authorized to effect in writing the following types of revisions to this Project Document, provided that s/he has verified the agreement thereto by the UNDP Regional Coordinating Unit and is assured that other signatories to the Project Document have no objections to the proposed changes:
 - Revision of, or addition to, any of the Annexes to the Project Document;
 - Revision which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
 - Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
 - Inclusion of additional attachments only as set out here in the Project Document.

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