

Cook Islands

NCSA Capacity Development Action Plan and Final Report

NATIONAL CAPACITY SELF ASSESSMENT FOR GLOBAL ENVIRONMENT MANAGEMENT

May 2009



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List of Acronyms

ABS	Access and Benefit Sharing - refers to Equitable Sharing of Benefits and Access to Biological Resources
ADB	Asian Development Bank
AIACC	Assessment of Impacts and Adaptation to Climate Change
AOSIS	Alliance of Small Island States (for UNECCC)
BCU	Biodiversity Conservation Unit of the National Environment Service
BPOA	Barbados Programme of Action
BTIR	Business Trade and Investment Board
CRDAMPIC	Capacity-building for Development of Adaptation Measures in Pacific Islands
ebbrinitie	Countries
CBO	Community Based Organisation
CDM	Clean Development Mechanisms
CFC 12	Chlorofluorocarbon 12
CHARM	Comprehensive Hazards and Risks Management
CIANGO	Cook Islands Association of Non-Government Organisations
CLIMAP	Climate Change Adaptation Program for the Pacific
EIA	Environment Impact Assessment
EMCI	Emergency Management Cook Islands
GEF	Global Environment Facility
GHG	Greenhouse Gases
GIS	Geographical Information Systems
GMO	Genetically Modified Organism
HOM	Head of Ministry
INC	Initial National Communication
IPCC	Inter-governmental Panel on Climate Change
LMO	Living Modified Organism
LPG	Liquid Petroleum Gas
MEA	Multilateral Environment Agreements
MFEM	Ministry of Finance and Economic Management
MMR	Ministry of Marine Resources
MOA	Ministry of Agriculture
MOE	Ministry of Education
MOH	Ministry of Health
MOIP	Ministry of Infrastructure and Planning
MOT	Ministry of Transport
MOU	Memorandum of Understanding
NAP	National Action Plan for UNCCD
NAPA	National Adaptation Plan of Action for UNFCCC
NBSAP	National Biodiversity Strategy and Action Plan
NCAP	National Compliance Action Plan for ODS
NCCCT	National Climate Change Country Team
NCSA	National Capacity Self-Assessment
NES	National Environment Service
NESAF	National Environment Strategic Action Framework
NGOs	Non-Government Organisations
NHT	Natural Heritage Trust
NSDP	National Sustainable Development Plan
ODS	Ozone Depletion Substance
OMIA	Office of the Minister for Outer Islands Administration
PEIN	Pacific Environment Information Network

PICCAP	Pacific Island Climate Change Assistance Program
PI-GCOS	Pacific Islands Global Climate Observation Systems
PILN	Pacific Invasives Learning Network
PIREP	Pacific Island Renewable Energy Project
POPs	Persistent Organic Pollutants
PopGIS	Population GIS – software programme
SARS	Severe Acute Respiratory Syndrome
SGP	Small Grants Programme (under the GEF)
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SPREP	South Pacific Regional Environment Programme
SOPAC	South Pacific Applied Geoscience Commission
TAU	Te Aponga Uira o Tumu-te-Varovaro
TCA	Takitumu Conservation Area
TIS	Te Ipukarea Society
TKP	Traditional Knowledge and Practises
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention for Combating Desertification
UNDP	United Nations Development Program
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
V&A	Vulnerability and Adaptation Assessment (under Climate Change)
WSSD	World Summit for Sustainable Development
WWF	World Wide Fund for Nature

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Executive Summary

Cook Islands, like many developing countries, faces increasing challenges in managing its environment, addressing global environment agendas and objectives and in achieving its national Sustainable Development Goals and its commitment to the Millennium Development Goals. In recognition of the need for support and collective action for effective environment management, the Cook Islands became a Party to three important Multi-lateral Environment Agreements namely United Nations Conventions on Climate Change (UNFCCC), Conservation of Biodiversity (UNCBD) and Combating of Desertification – or Land Degradation (UNCCD) The need to participate effectively in these conventions and the recognition of the limited capacity at the national level led Cook Islands to join 151 other GEF developing country members to make use of the opportunity presented by the GEF of funding assistance to undertake a National Capacity Self Assessment (NCSA) targeting the three conventions and the issues they were set up to address.

This report is the last of a series of reports produced under the NCSA project. It presents an overview of the country context and sustainable development challenges, highlights the process involved in undertaking the NCSA and the main issues and capacity gaps identified through the process. An important section of the report presents the Capacity Development Action Plan intended to guide, promote and monitor actions by a wide range of stakeholders to achieve identified capacity development outputs and environment outcomes and goals. The Action Plan also identifies the institutional arrangement for implementation, coordination and monitoring of the actions and identifies likely challenges for implementation.

Environment issues, gaps in capacity to address them and capacity development actions are discussed under different sections on Climate Change, Biological Diversity and Land Degradation. A number of environment and capacity issues have been grouped under the category of Cross-cutting Issues. These are issues that are related to all three of the Convention themes, need the coordinated action of a number of stakeholders in an integrated manner and are identified as a common requirement across all three conventions. The Cross-cutting Issues identified include: Education, Awareness and Training, Knowledge Management, Mainstreaming of Environment Management, Implementation of MEA's, Integrated Resource Management, Integrated Coastal Zone Management, Water Resources Management and Waste Management.

The NCSA has been a challenging exercise that has proven to be very useful for Cook Islands. In addition to the extensive assessment of capacity needs and identification of capacity development actions the project has also brought additional benefits. These include: Strengthened collaboration and coordination amongst national agencies, heightened awareness of environment issues by leaders and the public, sharing of experiences and learning exchanges with other Pacific Island Countries, planning for the review of NESAF, strengthening linkages between capacity development for environment management with other national environment and sustainable development agendas and initiatives and the identification of potential project concepts for discussion and negotiation as part of the GEF Pacific Alliance for Sustainability (GEF-PAS).

The challenge now will be to ensure that this action plan is implemented and does not just become another report. To that end, it is hoped that actions identified through the NCSA will be integrated into the revised National Environment Strategic Action Framework (NESAF) and National Sustainable Development Plan (NSDP), both of which are planned to undergo review by the end of 2008. As living documents, capacity issues for environment management may be regularly assessed and addressed through this process of review. The integration of actions into national planning and budgetary processes as well as the development of project proposals for funding will also be key to ensuring the implementation of this action plan and the support necessary for effective and sustainable environment management.

Summary of Findings

This plan contains a comprehensive list of actions required to build capacity to respond to the challenges of biodiversity conservation, climate change and land degradation (as covered by the three key conventions) and nine cross-cutting subjects. This list is divided into a series of goals and some of these goals have a series of sub-headings as themes.

This section summarises the key issues affecting each subject and then lists the highest priority actions for each which it is hoped can be implemented over the next three years -a timeframe that coincides with national strategic planning.

BIOLOGICAL DIVERSITY

Key Issues:

- \rightarrow Island ecosystems and species under threat as a result of a host of factors including infrastructure development, agriculture development, and natural disasters.
- → Increasing threat of invasive species entering Cook Islands and impacting negatively on the bio-diversity, economy and peoples way of life.
- → Increasing risk of LMO's and GMO's entering Cook Islands and impacting negatively on the bio-diversity, peoples' health and the economy.
- → Increasing risk of Cook Islands government and people missing out on future Equitable Sharing of Benefits and Access to Biodiversity (ABS)

Goal	High Priority Capacity Building Actions
Goal 1: Integrating & institutionalising biodiversity	 Develop & implement National Biodiversity Programme including formalising Biodiversity Taskforce (1.1.1) Strengthen biodiversity conservation and policy development capacity of relevant Government agencies and NGO's (1.1.2, 1.1.4) Ensure biodiversity considerations are incorporated in national and sectoral planning (1.1.3, 1.1.4)
Goal 2: Conservation of species & ecosystems	 Establish the National Biodiversity Programme and strengthen the capacity of the NES to lead it. (2.1.1) Develop local capacity for monitoring, evaluation and management of ecosystems and protected natural areas, including strengthening the roles of NGOs and local communities through provision of resources and training (2.1.2)
Goal 3: Invasive species	 Strengthen capacity of relevant agencies to implement the Biosecurity Act 2008, including training and provision of resources (3.1.1) In line with the National Biodiversity Programme, develop a National Invasive Species Strategy between all stakeholders to coordinate efforts to manage invasive species, including priorities for eradication and control of invasive species (3.1.3)
Goal 4: Biosafety	• Designate an authority to be responsible for Biosafety to control trans-boundary and inter-island movement of terrestrial and marine flora and fauna and of Living Modified organisms (LMOs) and Genetically Modified Organisms (GMOs) (4.1.1)
Goal 5: Access & benefit sharing	 Develop legislation to manage all activities related to Access and Benefit Sharing of Cook Islands biological resources. Including mandating the Biodiversity Conservation Unit (BCU) within the National Environment Service as coordinators (supported by capacity development of staff in ABS issues, negotiations and mediation) a requirement for thorough risk assessment procedures before any proposed ABS activity or research can be approved (5.1.1)
Goal 6: Information management	• Develop and maintain an integrated biodiversity information system to manage core environment and biodiversity information in a central comprehensive framework, including of past, current and on-going biodiversity related activities and research through support, resources and training of appropriate personnel

CLIMATE CHANGE

Key Issues:

- → Increasing frequency of extreme events such as cyclones, changes in weather patterns affecting agriculture production, increased coastal erosion due to sea level rise and increasing intensity of storm surges, all causing losses to the biodiversity, economy and people's lives.
- \rightarrow The country's generally low level of resilience and low capacity to adapt.
- → Limited use of technologies and funding mechanisms for cleaner, more efficient and sustainable sources of energy and a low level of involvement and contribution to global efforts at mitigating the causes of climate change.

Note: Although the level of GHG emissions by Cook Islands is very low compared to many other countries the move to be more efficient in the use of energy and adopt appropriate renewable energy technologies will bring many benefits to the country and contribute to its sustainable development plan objectives.

Goal		High Priority Capacity Building Actions
Goal 1: Integrating and institutionalising climate change		 Develop and implement a National Climate Change Policy, Programme, and Strategy and Action Plan to address risks of climate change to the environment, economy and people of the Cook Islands. Incorporate climate change into the National Development Plans and discuss proposed actions at all levels of planning and forums
Goal 2: People of Cook Islands adapting to climate change	Theme: Adaptation	 Integrate Climate Change adaptation into national, NGO, civil society and private sector policies, programmes, and initiatives using appropriate tools, (for example use of EIAs, cost benefit analysis, vulnerability assessments) Expand upon current information on adaptation, particularly within the NESAF, to fully articulate priorities and project profiles with an appropriate framework.
	Theme: Vulnerability & Adaptation	• Develop local technical and human capacity to carry out Vulnerability and Adaptation assessments, particularly at the community level
	Theme: Research & Systematic Observation	 Identify key data gaps in research and systematic observation and develop data collection programmes as part of the overall national programme for climate change. Strengthen technical and human capacity for continuous research and systematic observation in general and analytical capacity for monitoring of climate change, including through training and upskilling of Meteorology Service staff.
	Theme: Disaster Risk Management	 Promote and support dialogue, exchange of information and coordination amongst early warning, disaster risk reduction, disaster response, development and other relevant agencies and institutions at all levels, with the aim of fostering a holistic and multi-hazard approach towards disaster risk reduction. Assess existing human resource capacities and develop regular training and learning programmes in disaster risk reduction targeted at specific sectors (development planners, emergency managers, local government officials, etc.).
Goal 3: Cook Islands contributing to mitigation of	Theme: GHG Inventories	• Develop capacity and mechanisms to undertake annual GHG Inventories and improve data quality and collection, including establishing institutional arrangements with key agencies and private sector, with resulting information mainstreamed into statistical bulletins, energy development plans and disseminated to stakeholders.
greenhouse gas emissions and climate change	Theme: Mitigating GHG's	• Develop overarching National Policy and legislation to reduce GHG emissions in the Cook Islands through the development and implementation of Renewable Energy, Vehicle Emissions and Importation Standards, Energy Efficiency Standards, Economic Incentives to reduce emissions and the integration of locally appropriate sustainable fuels.
	Theme: Renewable Energy	 Reduce the reliance on high GHG based fossil fuel by identifying and adopting technically feasible and financial viable alternative energy sources for all islands, including by undertaking cost-benefit analysis of RE implementation and technologies Develop and implement a Renewable Energy Development Plan for Rarotonga a s a priority to reduce petroleum imports and control electricity demand growth on Rarotonga.
	Theme: Energy Efficiency	• Create an enabling environment for energy efficiency through the development and implementation of policies and legislation for importation, design, construction, installation, and use of appliances and technologies to restrict or ban (low energy efficiency products)
Goal 4: Cook Islands climate change information is effectively managed and exchanged		• Define responsibilities of relevant agencies and organisations with regards to generating and implementing climate change data collection and information management programmes and identify appropriate personnel within each organisation to take on this responsibility. (4.1.1)
Goal 5: People of the Cook Islands are aware and educated on climate change		• Develop a systematic approach to environment education awareness including regular specific climate change communications strategies and measures for different levels, including NGOs and community groups (5.1.1)
Goal 6: Appropriate technology transfer to support climate change adaptation and mitigation efforts		• Undertake Technology Needs Assessment and Technology Transfer Project Design (6.1.1)

LAND DEGRADATION

- → Land-use activities for infrastructure development purposes is causing land degradation, affecting bio-diversity, water quality and causing increased vulnerabilities to Climate Variability and Change
- → Unsustainable land use practises causing land degradation, such as; uncontrolled vegetation clearance near streams, wetlands and foreshore burning, deforestation and denuding of virgin land or arable agricultural land
- → Degraded lands are not rehabilitated and increases the risk of further degradation, spread of invasive species, and pollution.

Goal		High Priority Capacity Building Actions
Goal 1: Implementing Sustainable Land Management and	Theme: Development	 Undertake a comprehensive inventory of natural resources, land degradation and existing development conditions on a GIS platform, to provide baseline information for resource management and development decisions (1.1.1) Develop and promote locally appropriate measures and practises for mitigating land degradation from land development to developers, the private sector and communities for voluntary compliance in incorporating recommendations into all land development activities (1.1.2)
mitigating Land Degradation	Theme: Land Use Practises	 Ensure that environment considerations for land degradation and sustainable land management are promoted and integrated into relevant sectoral policies and plans (1.2.1) Widely promote locally appropriate and environmentally sustainable land management and agricultural practises, that takes into consideration human health in order to prevent further land degradation (1. 2.2)
	Theme: Rehabilitation of Degraded Land	 Undertake assessment and data collection programme to determine and map extent, severity and causes of degraded land areas in the Cook Islands including possible options for rehabilitation (1.3.1) Develop best practise guidelines for activities that may degrade land to minimise potential land degradation and develop rehabilitation plans following use (1.3.2)
Goal 2: Land Degradation and SLM mainstreamed into national planning		 Develop and adopt an integrated land and resource management framework that is in harmony with the principles of sustainable land management and the customary land tenure systems, to guide land use change, tourism and urban development and associated infrastructure based on the links between SLM, environment sustainability and economic development (2.1.1) Complete the National Action Plan for Land Degradation, ensuring coverage of issues in the Outer Islands and strengthen national ownership of the LD NAP across all sectors and into relevant national development plans (2.1.2)
Goal 3: People of the CI's accessing information and technical capacities for land degradation		• Strengthen the capacity of the designated agency to facilitate and manage a central land and resource information system that is accessible by all stakeholders (3.1.1)

COASTAL RESOURCES

Key Issue:

→ Inadequate local capacity to effectively manage coastal resources leaves the Cook Islands vulnerable to the risks of loss of ecosystem services, extreme events and sea level rise.

Goal	High Priority Capacity Building Actions
Thematic area:	• Development of an integrated coastal resource management framework to counter fragmentation,
Coastal Zone Management	duplication, policy gaps and conflicting mandates within coastal areas related to the management of
	limited resources in coastal areas and the management of human activities in coastal and adjoining
	areas (1.1.1)
Thematic area:	• Develop a coordinated programme and technical capacity to carry out vulnerability and adaptation
Coastal vulnerabilities	assessments for coastal areas of all islands in the Cook Islands (1.2.1)

RESOURCE MANAGEMENT

Key Issues:

- → Fragmented management of natural resources, legislation and policies governing resource use are sectoral, outdated or only apply to some islands.
- → Coordination and collaboration necessary to ensure that all resources are managed in a sustainable manner are missing.

Goal	High Priority Capacity Building Actions
Goal: Resources are managed sustainably	• Incorporate the principles of sustainable resource management into the mandates and procedures of all institutions dealing with developmental planning and resource management, and work with the private sector to promote these principles (2.1.1)

WATER RESOURCE MANAGEMENT

- → Water resource management is fragmented, supply-driven and lacks coherent policies, strategies, legislation, regulation and monitoring.
- \rightarrow Capacity of and demand on current water resources and water quality has not been fully assessed for all islands.
- → Water security is an issue with current sources vulnerable to climate change, salt water intrusion and extreme weather events.

Goal	High Priority Capacity Building Actions
Theme: Water resources managed sustainably	 Support the Integrated Water Resource Management Project (IWRM), which aims to strengthen the enabling environment for water resource management and can be used as a pilot project for launching improved and integrated waster resource management to all islands in the Cook Islands (3.1.1) Undertake a comprehensive inventory to determine the current state of water resources for all islands (3.1.2)
Theme: Water supply and demand managed	• Reassess levels of current demand and supply of water resources on all islands including dynamics of supply (3.2.1)
Theme: Water quality improved	 Implement a coordinated monitoring regime for water quality with all relevant agencies and a centralised testing facility for all environment testing, and develop a coordinated monitoring programme to guide water testing activities (3.3.1) Strengthen capacity for conducting testing, monitoring and results analysis of drinking water quality amongst relevant agencies including the determination of agreed testing parameters, and the surveillance and monitoring of public water supplies and source waters (3.3.2)

WASTE MANAGEMENT

Key Issues:

- \rightarrow Management of waste is haphazard and piecemeal.
- → Legislation for solid waste management are inadequate and there are limited resources and inadequate sites for disposal.
- \rightarrow There is poor management of sewage and agricultural liquid waste.
- → Capacity, regulatory frameworks, policies and institutional arrangements to move and manage hazardous and dangerous substances are limited.
- \rightarrow There is limited capacity to deal with oil or pollutant spills in the marine environment.

	Goal	High Priority Capacity Building Actions		
Goal: Waste, pollution	Theme: Waste Management	• Clarify the roles and responsibilities of relevant waste management stakeholders in the review of the draft National Waste Strategy as an immediate priority, finalise and submit to Cabinet for endorsement and support for implementation		
and sanitation are managed	Theme: Solid waste	 Encourage 'at source' separation to minimise solid waste and ensure the life of the landfill is extended Encourage the reduction of solid waste to the minimum practicable level using the principles of refuse, reduce, reuse, and recycle and "polluter pays" 		
	Theme: Liquid waste	• Undertake a feasibility assessment to identify possible mechanisms to support the retrofit of septic tanks and sewage systems to comply with new Sewage Regulations		
	Theme: Hazardous & dangerous waste	• Develop and strengthen local capacity to carry out a national assessment of hazardous and dangerous substances and waste in the Cook Islands (4.1.16)		
	Theme: Marine pollution	 Review the Prevention of Marine Pollution Act 1998 with a view to incorporating amendments taking into consideration the roles of various government agencies in the management of marine pollution from ships and land based sources and appropriate legal and institutional frameworks Revise the National Oil Spill Contingency Plan to include standards and protocols for the environmentally sound disposal of any waste oil recovered after a spill: to regulate the types of dispersants that can be used during any spill and to regulate clean up activities in sensitive and coastal foreshore areas 		

INTEGRATED ENVIRONMENT MANAGEMENT

- → Cook Islands lacks institutional structures and support mechanism to collaborate, monitor and enforce national economic and development plans and develop new legislation and regulations in a timely manner.
- → Environment protection and environment development issues are not accorded a high degree of priority in current political setting.

Goal	High Priority Capacity Building Actions
Goal 1:	• As part of a National Monitoring and Evaluation Process, undertake the preparation of National State
Integration of environment	of the Environment Reports on a regular basis as a legal requirement by responsible ministries and
and economic policies into	departments, for monitoring of environment implementation and health.
national planning and	• Environment information and data, including State of the Environment Reports, should be promoted
development processes.	and made available to policy makers and planners, and used to lobby support for the integration and
	implementation of environment management activities within relevant ministries and agencies

EDUCATION AND AWARENESS

Key Issues:

- → Environment education and awareness programmes are produced on an ad hoc basis with little collaboration and coordination of activities
- → Resources and capacity to support education and awareness and media programmes are limited, especially in the Outer islands.
- \rightarrow Lack of simplicity and languages used in technical environment reporting are major constraints.

Goal	High Priority Capacity Building Actions
Goal 1: People of the Cook Islands are educated and aware of environment issues	• Develop a systematic approach to environment education and awareness including developing specific communications strategies, effective measures at different levels (e.g. national or community), and partnerships between stakeholders in order to achieve positive behavioural change towards the environment.
	• In collaboration with the Ministry of Education, incorporate environment education into targeted professional development programmes for educators and develop curriculum resources, expertise and support to strengthen capacity to undertake environment education

INFORMATION MANAGEMENT

Key Issues:

- → A lack of quality environment, socio-economic and spatial information, including on patterns of natural resources, land resource characteristics, population dynamics, resource demands and risks contributes to inconsistent and poorly founded decision-making.
- → Poor management of traditional knowledge and practises (TKP) related to environment management in the Cook Islands. Programmes to record traditional knowledge have been inconsistent and ad hoc.
- \rightarrow Poor policies and legislative frameworks in place to protect TKPs and the rights of the holders of such knowledge.
- → Communications and data sharing mechanisms are limited hindering the effective dissemination of data and information.
- → Sharing of available data is constrained as sectoral agencies occasionally tend to withhold data and information necessary for environment planning and decision making.

Goal		High Priority Capacity Building Actions		
Goal 1:	Theme:	• Undertake an assessment of available data to determine data gaps and information needs		
Environment Information		for environment management including natural resources, ecosystems and sustainable		
information Management		land management (7.1.1)		
is managed Theme:		• Develop national policies for maintaining the use and value of traditional knowledge and		
and	Traditional knowledge	practices related to the environment and natural resources		
disseminated & practices				
effectively	Theme:	• Review current databases to identify opportunities and synergies for networking and		
	Information exchange	information exchange		

MULTILATERAL ENVIRONMENT AGREEMENTS (MEA's)

- → There is growing concern about our ability to meet commitments and reporting requirements to these international conventions.
- \rightarrow There is a need to ensure that those with national responsibilities under the UN Conventions are properly mandated with these responsibilities and this should translate into the allocation of appropriate resources to achieve these mandates.

G	Foal	High Priority Capacity Building Actions
Goal 1: Cook Islands obligations to MEA's are met.	Theme: Implementation	 Promote and improve the awareness of politicians, decision makers and Government ministries of MEAs, that the Cook Islands are a signatory to, the environment issues they are address, and how this affects the Cook Islands in a local context. Clearly define the responsibilities of all relevant Government agencies with roles under the UN Conventions, ensure these agencies are properly mandated with these responsibilities at the highest level and allocated appropriate resources to achieve this mandate and deliver MEA programmes.
	Theme: Reporting	• Strengthen national reporting capacity and evaluation processes, including establish a Clearing House Mechanism in line with existing structures for the collation and dissemination of Conventions-related information to reduce the efforts required to produce national reports to the UN Conventions.

• Strengthen the capacity of the MEA focal point and implementing agencies through trainings and exposure to high-level meetings to build confidence and understanding of global issues of national significance.

FINANCIAL RESOURCES

- → The Cook Islands is highly reliant on external donor funding for operational support of environment projects as local Government funds and resources are insufficient.
- → Many government departments, NGOs and community groups do not have the experience and skills to aggressively pursue external funding options and meeting criteria for funding, including the local component of the GEF Small Grants Programme.
- → Limited levels of awareness and political support for environment management have played a role in determining national funding priorities in comparison to other national agendas

Goal	High Priority Capacity Building Actions
Theme: External donor funding	• Undertake training of planning officers and stakeholders in identification of environment funding opportunities, proposal writing and project management.
Theme: National funding	• Improve knowledge and understanding, especially of budget decision makers, of donor funding mechanisms and expenditure limitations to highlight the need for national implementation and funding

PART 1: NCSA Final Report

A. Introduction

1.1 Cook Islands – National context and sustainable development challenges.

Located in the Pacific Ocean, South-East of Samoa and South-West of Tahiti (see Map in Annex 1), the Cook Islands is a self governing nation in Free Association with New Zealand with a population of 19,569 (2006) There is a distinct geographical divide between the islands with those in the Northern Group comprising of atolls and sand cays while those in the Southern Group comprising volcanic islands and makatea. Cook Islanders are ethnically Maori Polynesians and are custodians over a total land area of 240 sq km and an oceanic Exclusive Economic Zone (EEZ) of 1.8 million sq km.

While the country enjoys pleasant tropical conditions (daily temperatures between 21-28°C and average rainfall of 2,000mm per year), its people and biodiversity continue to be very vulnerable to the disastrous effects of tropical cyclones and the impacts of Climate Variability and Climate Change. The nation is governed by a Parliament of 24 elected members, is a member of the Commonwealth with the Queen of England as its Head of State, and traditional leaders also play an important role in guiding decision making on national issues through the establishment and functions of the House of *Ariki* and *Te Koutu Nui*.

Cook Islands is performing relatively well compared to other Pacific Island Countries with respect to a range of key socio-economic indicators, as documented in the country's recent MDG Report (2005). Economically the country has been experiencing good annual growth rate of 2.5% with a rising per capita GDP and a steady growth in the tourism, pearl, finance and fishing sectors, driven mainly by the private sector. Demographic statistics show that over the past years many Cook Islanders, particularly those in the outer islands, have migrated overseas, mainly to New Zealand. This has resulted in a situation where for every resident citizen there are now four Cook Islanders living abroad. Unemployment is also more prevalent in the outer islands requiring special attention from the national government. Ironically labour shortages experienced in some of the sectors particularly tourism and fisheries has brought about the need to recruit foreign workers. A situation that calls for increased investment in training and human resource development.

On many fronts, the people, biodiversity and economy of Cook Islands remain very vulnerable to a host of external factors that pose many challenges for the country. These challenges are articulated succinctly in the Cook Islands NSDP (2007-2010). The performance of the national economy is subject to fluctuations influenced mainly by changes in the global economy. Of particular importance is the need to keep abreast with changing demands for domestically produced goods and services. There is the ongoing threat of natural disasters especially cyclones that have the potential to inflict severe losses to the economy, biodiversity and peoples lives. Rising incidences of life-style and communicable diseases have been recorded and correlate positively with changing dietary patterns and lifestyles. Increase in trade with the global economy brings with it new challenges such as the need to prevent and control invasive species and the need to ensure access to benefit sharing from the use of biodiversity. The impressive growth in the tourism industry is putting pressure on land and marine habitats and requiring increased efforts at undertaking impact assessments and adopting practices and technologies that can give rise to sustainable use of land and marine resources and minimization of externalities. Increasing commercial activities and disposable incomes of families is giving rise to higher levels of consumption and waste generation with the threat of pollution levels affecting the natural environment and human health if left unchecked.

1.2 National Sustainable Development and Environment Management Agenda

The Cook Islands National Sustainable Development Plan (NSDP) 2007-2010 and the National Environment Strategic Action Framework (NESAF) 2005-2009 are the main frameworks intended to guide national programmes and initiatives on sustainable development and environment management. The NSDP is being coordinated by the Office of the Prime Minister while implementation of the NESAF is coordinated by National Environment Service and is up for review in 2008. The NSDP has four Strategic Outcomes and eight Strategic Goals. Actions within the scope of this NCSA Action Plan will be contributing to the achievement of the NSDP Strategic Goals and the four Goals of the NESAF. A diagrammatic presentation of the framework of cascading and inter-linked national strategies and plans relating to environment management and sustainable

development are presented in Diagram 1 below:

Diagram 1: Framework of national strategies and plans relating to environment management and sustainable development.

National Sustainable Development Plan (2007-2010)

Strategic Goal 4:	Sustainable use and management of our environment and natural resources
Strategic Goal 6:	A safe, secure and resilient community
Strategic Goal 8:	Strengthened national coordination and institutional support systems for development
	planning, monitoring and evaluation.

National Environment Strategic Action Framework (2005-2009)

Goal 1	Enhance the management, protection and sustainable use of our natural resources
Goal 2	Reduction and prevention of environmental degradation from waste and all forms of pollution
Goal 3	Increase resilience by strengthening national capacities for climate change, variability, adaptation and mitigation
Goal 4	Improve institutional support and implementation mechanisms to manage the environment in a sustainable manner.



1.3 Commitment to Global and Regional Environment Agendas on Climate Change, Conservation of Biological Diversity and Combating Land Degradation.

Despite its limited resources and capacity the Cook Islands continues to find ways to actively participate in and fulfil its commitments to global and regional environment agendas in the areas of Climate Change, Conservation of Biological Diversity and the Combating of Land Degradation. The NCSA Thematic Assessments have found that there are still gaps in implementation brought about by a host of 'root causes' mainly capacity needs at the systemic, institutional and individual levels across a wide range of stakeholders. Past and current efforts have been aimed at addressing national needs, which when achieved, can give rise to fulfilling regional and global commitments. At the same time guidelines and obligations found in international and regional conventions and strategies etc have been used to guide planning and implementation at the national level. The diagram below presents the global and regional environment management agendas that Cook Islands has committed to and is using to guide its program and initiatives.

Diagram 2: Global and regional environment agendas that Cook Islands are committed to and are using to guide its national programs and initiatives.





Combating Land Degradation

Adopted the United Nations Convention to Combat Desertification (UNCCD) in June 1994 and entered into force in December 1996.

B. The National Capacity Self Assessment Project (NCSA)

2.1 Background

The Cook Islands, like many developing countries, face increasing challenges in managing its environment and addressing global and national environment agendas and objectives. Recognising the need for support and collective action for effective environment management, the Cook Islands became a Party to three important Multi-lateral Environment Agreements (MEAs) namely the United Nations Conventions on Climate Change (UNFCCC), the Conservation of Biodiversity (UNCBD) and Combating of Desertification – or Land Degradation (UNCCD).

On ratifying each of the three Conventions, the Cook Islands are committed to undertaking a range of activities and programmes including, inter-alia; establishing national policies and programmes, raising awareness, conducting research, strengthening enforcement measures, implementing actions, all aimed at improving national environment management and contributing to improving the global environment.

Acknowledging the limited capacity and resources of the Cook Islands to meet the obligations and commitments under the three MEAs, the National Environment Service (NES) utilised the Global Environment Facility (GEF) fund to undertake the National Capacity Self Assessment (NCSA) project. This specific capacity building assistance is provided through the sub-regional country office of the United Nations Development Programme (UNDP) in Samoa.

2.2 Purpose

The purpose of the NCSA project funded by GEF is to enable developing countries like the Cook Islands to:

- Review its capacity needs to address priority national and global environment issues in relation to Biodiversity, Climate Change and Land Degradation.
- Determine what actions are needed to strengthen management of these issues.
- Prepare a national capacity development strategy and plan of actions.

The NCSA project is considered to be a strategic implementation tool for effective and efficient environment management in the Cook Islands.

2.3 The Approach

The approach taken by the Cook Islands in implementing the NCSA project followed closely that which was recommended in the NCSA Guide (UNITAR) which included the following main stages:

- 1. Inception Report
- 2. Stock-take and gap analysis
- 3. Thematic assessments (identify causes of gaps, capacity needs and capacity development actions within the scope of each of the three Conventions)
- 4. Cross-cutting assessment (identification of cross-cutting issues and potentials for synergies)
- 5. Development of a Final Report and a Capacity Development Action Plan

2.4 Stakeholder Participation

The breadth and depth of baseline information and analysis produced by the NCSA Project has been the result of extensive consultation with and participation by many stakeholders throughout the country as well as abroad. Membership on the Thematic Working Group (TWG) ensured representation from key government agencies and NGOs.

Links with regional stakeholders was made possible through the Pacific Regional Support Mechanism for the NCSA, coordinated by SPREP and international help was obtained through the NCSA Global Support Programme overseen by UNDP and UNEP and based in New York.

The need to consult stakeholders posed a special challenge for NCSA facilitators, members of the Thematic Working Groups, consultants and staff of the NES mainly because people in the Cook Islands are now

experiencing 'consultation fatigue' after having been consulted numerous times over the past on environment issues. Cognizant of this situation, a strategic consultation approach was taken which included; i) Literature review to capture stakeholder feedback on issues during past consultations, and ii) Focused group consultation sessions targeting gaps and emerging issues.

As an example of the extent of consultations carried out by the NCSA Project, the Stock-taking exercise alone included 26 key stakeholders and 67 experts and extended to two outer islands. A list of stakeholders consulted and literature used throughout the assessment process are attached (*refer to Appendix 4*).

2.5 NCSA Project Outputs

The main **<u>NCSA Project Outputs</u>** expected of countries include:

- i). A Stocktake Report identifying previous and current activities relating to capacity building (such as enabling activities) for each of the three sectors.
- ii). An account (report) of the process by which the NCSA was prepared, including stakeholder participation.
- iii). A description (inventory) of capacity building needs in the three sectors with prioritization to the extent possible, and other related capacity needs.
- iv). An identification of cross cutting issues and synergies
- v). A plan of action to meet prioritized needs and a mechanism for monitoring and evaluating progress made in meeting those needs.

A summary of Benefits of the NCSA project to the Cook Islands and Lessons Learnt can be found in Appendix 3.

PART 2 Capacity Development Action Plan

Capacity Development Action Plan

The purpose of the Capacity Development Action Plan is to:

- 1). Enable national stakeholders to take ownership of and implement capacity development actions aimed at achieving targeted capacity outputs that in turn will lead to the achievement of environment outcomes and goals, which will also contribute to the achievement of Cook Islands National Sustainable Development Plan (NSDP) Goals (*refer to Appendix 2*) as well as the achievement of Cook Islands obligations under the UNCBD, UNFCCC and UNCCD.
- 2). Enable the national government and agencies responsible for achieving NSDP and National Environment Strategic Action Framework (NESAF) Goals (*refer to Appendix 2 for Summary of NESAF Goals*) to identify capacity development actions necessary to be taken to ensure the NSDP goals are achieved and seek ways and means to support these actions.
- 3). Provide capacity development targets and indicators so that progress with future capacity development work can be monitored and evaluated.
- 4). Enable donor partners as well as regional and international organizations to be aware of the capacity development actions needed to be taken by the Government and the People of the Cook Islands with the intent to seek ways to support the actions identified.

Capacity Development Action Plan Matrix – A tool for implementation, monitoring and evaluation

The Capacity Development Action Plans are presented in Matrices similar to that outlined in a typical Logical Framework Matrix. Capacity Development Actions, once successfully implemented can contribute to the achievement of Capacity Outputs, which in turn can contribute to the achievement of Environment Outcomes and Environment Goals. Performance Indicators and their Means of Verification are used only at the level of Capacity Outputs.

Actions proposed in the NCSA Thematic Assessment Report and Cross Cutting Assessment Report have been edited, merged in some cases and rearranged into the Log Frame Matrix format. Given the number of Capacity Development Actions proposed in total from both these reports, prioritisation was undertaken to identify priority actions. The criteria used by working groups for prioritising the timing of implementation include:

- 1). Importance of issue
- 2). Urgency of issue (severity and extent of environment impact if nothing is done)
- 3). Actionability Ability of the action to be implemented
- 4). Consistent with the National Sustainable Development Plan and Millennium Development Goals
- 5). Enhances community participation and local capacity for environment management

Those actions identified as priority are intended to be linked to the timeframe of the NESAF 2010-2015 and the Medium Term Budgeting Framework and implemented over a 3-6 year timeframe. The remaining actions have been compiled at the end of each matrix and highlight actions that are of lower priority or for implementation in the longer term (6 years and beyond).

Performance Indicators and Means of Verification

Each matrix has performance indicators and means of verification identified to measure progress towards building capacity. Future reports and matrices will benefit from the outcomes of the CDAP in terms of better data collection and information management to support the development of better environment and capacity indicators.

The Log Frame Matrices are divided into four sections – Biodiversity, Climate Change, Land Degradation and Cross Cutting issues. The environment goals and sub thematic areas covered are listed below;

Biodiversity

- 1. Integrating and Institutionalising biodiversity
- 2. Effective conservation of Cook Islands species, ecosystems and natural areas
- 3. Cook Islands biodiversity is adequately protected from invasive species
- 4. Cook Islands biodiversity is adequately protected through biosafety measures
- 5. Cook Islanders enjoy equitable sharing of benefits from access to biological resources
- 6. Improved biodiversity protection and management through better information management & exchange

Climate Change

- 1. Climate Change Integrated and Institutionalised in the Cook Islands
- 2. People of the Cook Islands adapting to the effects of climate change
 - a. Adaptation
 - b. Vulnerability and Adaptation Assessment and Implementation
 - c. Research and Systematic Observation (meteorological, hydrological and climatological)
 - d. Disaster Risk Management
- 3. Cook Islands contributing to mitigation of Green House Gas emissions and Climate Change
 - a. GHG Inventories
 - b. Mitigating GHGs from Transport, Land Use and Waste
 - c. Renewable Energy
 - d. Energy Efficiency
 - e. Clean Development Mechanisms
- 4. Cook Islands climate change information is effectively managed and exchanged
- 5. People of the Cook Islands are aware and educated on Climate Change
- 6. Appropriate technology transfer to support climate change adaptation and mitigation efforts
- 7. Ozone depleting substances are phased out of the Cook Islands

Land Degradation

- 1. People of the Cook Islands implementing sustainable land management practises mitigating land degradation
 - a. Development
 - b. Land Use Practises
 - c. Rehabilitation of Degraded Land
- 2. Land degradation and Sustainable Land Management mainstreamed into national planning processes
- 3. People of the Cook Islands accessing information and technical capacities for land degradation

Cross Cutting Issues

- 1. Coastal resources in the Cook Islands are managed in an integrated manner
 - a. Unknown
 - b. Coastal Vulnerabilities
- 2. Resource Management
- 3. People of the Cook Islands practising sustainable and integrated water resource management
 - a. Water Resource Management
 - b. Water Demand and Supply
 - c. Water Quality
- 4. Waste, Sanitation and Pollution in the Cook Islands are being managed

CROSS CUTTING CAPACITY ISSUES

- 5. Environment is managed in an integrated manner by multiple stakeholders
- 6. People of the Cook Islands are educated and aware of environment issues
- 7. Environment information is managed and disseminated effectively
 - a. Information Management
 - b. Traditional Knowledge and Practises
 - c. Information Exchange
- 8. People of the Cook Islands are meeting our obligations to Multilateral Environment Agreements
 - a. MEA Implementation
 - b. MEA Reporting
 - c. MEA Negotiations
- 9. Cook Islands accessing financial resources to support implementation of environment management activities
 - a. External Donor Funding
 - b. National Funding

Capacity Development Action Plan Matrices

Biological Diversity – Capacity Development Action Plan Summary



ENVIRONMENT GOAL 1:

Enviro	Environment Outcome				
1.1	Biodiversity priorities are mainstreamed into national economic and development planning and budgetary processes.				
Capaci	ty Development Output	Performance Indicator(s)	Means of Verifica	tion	
1.1a	Government has the capacity to identify and implement biodiversity priorities, and integrate them into national strategic and development plans and budgets.	 National Biodiversity Programme (NBP) formalised Biodiversity prioritised in Budget Policy Statement, and Strategic Plans of multiple ministries 	 Annual Budget Policy Statement Government Ministry Strategic Plans and Budgets NBP MOU's signed 		
Priority	Capacity Development Actions		Lead Agency	Partner Agencies	
1.1.1	Develop and implement a National Biodiversity Progra the conservation and management of biological resou (BD) Taskforce, including terms of references and MOU	amme (NBP), with supporting policies and legislation, for irces in the Cook Islands, and formalise the Biodiversity Js, to drive its implementation	NES	MOA, MMR, NHT, TIS, WWF, TGA, MOCD	
1.1.2	Develop and strengthen the biodiversity conservation and management capacity of relevant Government Ministries and Agencies, NGOs and CBOs to enable them to effectively implement National Biodiversity Programmes and develop mechanisms for increased coordination, resource sharing and partnership capacity building initiatives.			MOA, MMR, NHT, NES, TIS, WWF, TGA, MOCD, Aronga Mana	
1.1.3	Contribute to national economic, development and be Statement and Budget Process, to integrate biodiver allocations for the implementation of the NBP	udgetary planning processes such as the Budget Policy sity priorities and capacity issues and support resource	NES/ OPM	BD Taskforce	
1.1.4	Strengthen local capacity for policy development and a specifically for biodiversity and ensure that biodiversi planning consistent with a shared responsibility to main	analysis to support the development of policy frameworks ty considerations are incorporated into relevant sectoral tain Cook Islands biodiversity and related knowledge	OPM/ NES	BD Taskforce	
Other Long Term Actions					
•	 Ennance and strengthen the role and responsibilities of key national policy decision-making bodies such as Cook Islands Research Foundation or National Sustainable Development Committee as they relate to providing guidance on sustainable development policy decisions Provide briefings as necessary for key law and policy makers on national biodiversity issues and the implications for the Cook Islands. Develop, identify and engage relevant legal and planning personnel to improve the quality and effectiveness of legislations and CBD-specific regulations, policy and action plan development. Establish a biodiversity trust fund to support the wide range of activities required to conserve Cook Islands biodiversity in an integrated and equitable manner. 				

ENVIRONMENT GOAL 2:

Enviro	Environment Outcome					
2.1	2.1 Bio-diversity species, ecosystems and protected natural areas are managed and monitored effectively.					
Capac	ity Development Output	Performance Indicator(s)	Means of Verification	tion		
2.1a	Government and stakeholders have the capacity to manage and monitor threatened, endemic or protected species, ecosystems and natural areas in the Cook Islands, as part of a National Biodiversity Programme	 National Biodiversity Programme and supporting enabling legislation and policies implemented by 2010 Interactive training and capacity building programmes for agencies and communities implemented and evaluations showing high level of satisfaction among participants Public support for biodiversity conservation through the increased number of community based initiatives for biodiversity conservation implemented 	 NBP Reports Training and programme reports Survey of community initiatives 			
Priorit	y Capacity Development Actions		Lead Agency	Partner Agencies		
2.1.1	Establish the National Biodiversity Programme	and strengthen the capacity of the NES to lead it.	NES	MOA, NHT, TIS, WWF, TGA, MOCD		
2.1.2	Develop local capacity for monitoring, evaluat including strengthening the roles of NGOs and	ion and management of ecosystems and protected natural areas, local communities through provision of resources and training	NES	NHT, MMR, MOA		
2.1.3	Conduct awareness activities for all relevate ecosystems, habitats and protected areas to with conservation and management activities	BD Taskforce	NES, MMR, NHT, MOA, TIS			
2.1.4	Undertake, and systematically update, a com Islands (including flora, fauna and ecosystem biodiversity and environment integrity	NES / NHT terrestrial MMR / NHT marine	MOA, TIS, WWF, TGA, MOCD			
2.1.5	Develop and implement programmes to cons Maori medicine, rare varieties of Agro-biodiver	NHT	MOA, MOCD, NES, MMR, TIS,			
2.1.6	Identify species requiring ex-situ conservation	as part of their management.	NES	MOA, NHT		
2.1.7	Utilize regional agencies to preserve species conservation including ownership of Cook Is consent from the Cook Islands	MOA	MMR, NES			
2.1.8	Identify and develop legislation or mechanisms to protect strategically important areas or ecosystems and support the establishment, management and enforcement for the protection of such areas including through a NH national system of protected areas			MOA, MOCD, Aronga Mana,		
2.1.9	Draw on local and regional expertise to esta selecting and designating protected areas for e	NES	NHT, MOA, MMR, SPREP, USP, SPC, NZ DoC			
2.1.10	Develop and implement management guideli sensitive areas based on sound and proven so	nes for all types of protected areas, important ecosystems, and ientific management principles and community considerations	NES	BD Taskforce, TIS, Aronga Mana, CBOs		
2.1.11	Promote and encourage private and commu Ra'ui	nity-based conservancy and management activities such as the	NES	MOA, MMR, NHT, TIS, WWF, TGA, MOCD		
2.1.12	Promulgate the Suwarrow National Park Regu	lations	NES	Crown Law		

Other Long Term Actions

- Develop technical expertise in ecosystems and all their component processes, through training, short courses and practical application.
- Consider financial incentives and mechanisms to fund monitoring, enforcement, and education awareness activities of protected areas such as licensing, user pays fees, fines.
- Review, consider and consult on appropriate policies and legislations for land use planning and zoning, as a means of protecting important ecosystems
- Improve scientific understanding on the effectiveness of Ra'ui areas and impacts on effectiveness to improve management of Ra'ui protected areas.
- Use international legal designations (such as Ramsar and World Heritage) to leverage technical and financial support for island protected areas
- Undertake risk assessments and extensive consultations with scientific and local communities to raise awareness of *ex-situ* conservation issues prior to using this methodology.
- Develop and raise awareness of guidelines for locally appropriate *ex situ* practises that the community and NGOs can get involved in e.g. botanical gardens.

ENVIRONMENT GOAL 3: Cook Islands biodiversity is adequately protected from invasive species

Environ	Environment Outcome					
3.1	Cook Islands biodiversity, people and economy protected from negative impact of invasive species through effective programmes and biosecurity measures.					
Capacit	y Development Output	Performance Indicator(s)	Means of Verification			
3.1a	Government and stakeholders have the capacity and necessary supporting technical and scientific expertise to establish an enabling environment and take action to minimize the negative impacts of Invasive Species, particularly through effective biosecurity and border control	 Risk assessments procedures, Emergency Response plans and manual in effect Stringent biosecurity procedures in place Community participation in local invasive species programmes Full Public compliance with biosecurity legislation and measures Biosecurity integrated as a programme into NSDP2010-2015 National Biosecurity Database established, maintained and regularly updated National Invasive Species Strategy approved 	 NESAF Reports Biosecurity reports Biosecurity Act and Cook Islands Parliament Service Revised NSDP2010-2015 reflects Biosecurity Programmes Border Control Incident Reports 			
Priority	Capacity Development Actions		Lead Agency	Partner Agencies		
3.1.1	Strengthen capacity of relevant agencies to implof resources	MOA	Customs, Ports Authority, NES			
3.1.2	Develop a national programme to survey invasive the eradication and control of invasive species	BD Taskforce	NHP, MOA, NES, MMR, Island Councils, CBOs			
3.1.3	In line with the National Biodiversity Programstakeholders to coordinate efforts to manage invasive species.	MOA - agriculture MMR- marine NES / NHT - biodiversity	MOH, NGOs, Divers, Customs, Ports Authority, Airport Authority, Police			

3.1.4	Strengthen and implement more stringent quarantine and border control legislation, procedures for the inter- island movement of species, as well as capacity of focal points and key institutions to support the effective monitoring and management of invasive species	MOA	Customs, MMR, NES, MAF- NZ, SPC, SOPAC, FAO	
3.1.5	Develop the capacity of focal points to carry out thorough risk assessment to support quarantine and border control processes, drawing on local or regional expertise for in country training and resources.	MOA	NES, SPREP, FAO, MAF-NZ, SPC, MMR, Ports Authority, Customs	
3.1.6	Strengthen public education and awareness campaign designed for both the private and public sectors informing them of Biosecurity issues and its importance and impacts on the future of Cook Islands society.	MOA	MOE, SPC, FAO, MAF-NZ, SPREP	
3.1.7	Strengthen links to the Pacific Invasive Learning Network (PILN) and Regional Invasive Species Programme.	MOA/ NES	SPREP FAO MMR SPC	
Other Long Term Actions				

Other Long Term Actions

- Ensure that biosecurity issues are included in the National Strategic Development Plan
- Undertake a multi-sectoral review, in partnership with the private stakeholders in regards to the control of transboundary and inter-island movement of terrestrial and marine flora and fauna.
- Conduct trials/pilot projects to determine effective locally appropriate measures to eradicate or control invasive species
- Develop a community based programme to eradicate those invasive weeds and animal pests that are not yet widespread on particular islands
- Develop media and communications strategies to increase exposure and awareness of invasive species issues to local communities including measures to reduce risk of spread of invasive species

ENVIRONMENT GOAL 4: Cook Islands biodiversity are adequately protected through biosafety measures

Environment Outcome						
4.1	Cook Islands biodiversity, people and economy protected through effective biosafety measures.					
Capacit	y Development Output	Performance Indicator(s)	Means of Verificat	tion		
4.1a	Government and stakeholders have the capacity to develop and achieve an effective biosafety enabling environment with the necessary supporting technical and scientific expertise.	 Biosafety Policy Framework in place and being effectively implemented Stringent biosafety procedures in place Full Public compliance with biosafety legislation and measures Biosafety integrated as a programme into NSDP2010-2015 National Biosafety databases established, maintained and regularly updated 	 Revised NSDP2 Programmes 	2010-2015 reflects Biosafety		
Priority Capacity Development Actions		Lead Agency	Partner Agencies			
4.1.1	Designate an authority to be responsible for Bi terrestrial and marine flora and fauna and of Organisms (GMOs)	osafety to control transboundary and inter-island movement of Living Modified organisms (LMOs) and Genetically Modified	BD Taskforce /OPM			
4.1.2	Impose rigorous Biosafety restrictions to protect and ecosystems including through the develop within identified key stakeholders to address bord storage and handling of LMOs and GMOs	human life, health, and the integrity of natural flora and fauna ment of policies, procedures and in-house technical expertise der control, monitoring and compliance, safety trans-movements	MOA / NES	Customs, Ports Authority		

4.1.3	Develop a risk management regime and the capacity of focal points to carry out thorough risk assessment for the importation, use, or the conducting of experiments with LMOs and GMOs.	MOA / NES	FAO, SPREP, SPC, MAF-NZ		
4.1.4	Initiate an education and awareness campaign designed for both the private and public sectors informing them of Biosafety issues and its importance and impacts on the future of Cook Islands society	NES	SPREP, MOE, SPC, FAO		
Other	Long Term Actions				
• Er	Ensure that biosafety issues are included in the National Strategic Development Plan				
• De ma	 Develop and maintain mechanisms to improve coordination and management of Biosafety information, resources and knowledge e.g. databases and information management systems 				
 St 	aff training in safe handling procedures and the movement of waste and hazardous goods, LMO's and GMOs.				

ENVIRONMENT GOAL 5: Cook Islanders enjoy equitable sharing of benefits from access to biological resources

Envire	Environment Outcome					
5.1	Equitable sharing of benefits and access to Biodiversity assured for the people and government of the Cook Islands.					
Capad	city Development Output	Performance Indicator(s)	Means of Verific	ation		
5.1a	Government and stakeholders are able to develop an effective enabling environment for Access and Benefit Sharing (ABS), establish necessary regulations and provide supporting technical and legal expertise.	 ABS legislation and regulations in place by 2014 Designated permitting authority trained in ABS issues and carrying out functions with minimal complaints from public Supervisor and inspectors trained in ABS issues and regulations and applying new knowledge and skills at the workplace Roster of Local Experts established 	 ABS Act Training reports Roster of Experts Record of post-training interviews with supervisors and inspectors 			
Priori	Priority Capacity Development Actions			Partner Agencies		
5.1.1	 Develop legislation to manage all activir resources. Include mandating the Biodiversity Conservation (supported by capacity development) requirement for thorough risk assession approved 	ties related to Access and Benefit Sharing of Cook Islands biological tion Unit (BCU) within the National Environment Service as coordinators of staff in ABS issues, negotiations and mediation) sment procedures before any proposed ABS activity or research can be	NES	OPM, Aronga Mana, MMR, MOA, Crown Law		
5.1.2	Expand the mandate of the National Research Committee to serve as the permitting authority for ABS activities in the Cook Islands and develop partnerships between OPM (as the research focal point) and NES for the coordination of applications and negotiations for ABS research.		NES/OPM	National Research Committee		
5.1.3	Strengthen the capacity of the National Research Committee to ensure an effective and aware permitting authority, through trainings and education awareness of ABS issues and how they relate to the Cook Islands.			BD Taskforce		
5.1.4	Develop a National Registry of Application registry of research and Cook Islands Res	ons and Contracts database for ABS and link with the planned national search website.	NES	ОРМ		
5.1.5	Establish a 'Roster of Local Experts' to building their capacity to monitor and polic	act as local ABS supervisors and inspectors, and build and develop are ABS research activities	NES	NHT, MOA, MMR, TIS		

Other Long Term Actions

- Develop and implement procedures for ABS risk assessments including terms of reference and criteria for approval.
- Develop mechanisms and networks for accessing scientific knowledge to support technical assessments of ABS activities and research, including links to regional organisations and academic institutions.
- Identify and train appropriate nationals as fully qualified negotiators and mediators
- Strengthen the role of communities and resource owners to enable them to fully participate in the negotiations process of ABS agreements for equitable sharing of benefits, through training in negotiations, mediation, interpretation and drafting of legal contracts.
- Develop a communications strategy and an education awareness programme with locally appropriate informational materials in English and Maori, especially targeting decision makers and resource providers with the aim to fostering a public fully informed on ABS issues.

ENVIRONMENT GOAL 6: Improved biodiversity protection and management through better Information Management & Exchange

Environment Outcome						
6.1	Better information and knowledge on Cook Islands biological resources due to sufficient and accurate biodiversity data and knowledge that can support decision making regarding protection and management of Cook Islands biodiversity					
Capacit	y Development Output	Performance Indicator(s)	Means of Verific	ation		
6.1a	Government and stakeholders are able to collect, analyse and manage biodiversity data and knowledge in a centralised manner that is accessible to stakeholders and the public	 Improved access by public to biodiversity information and databases compared to baseline year of 2009 Number of data collection and information management programmes in place for biodiversity under the National Biodiversity Programme Training in data collection, analysis and management carried out for key biodiversity stakeholders 	 Annual NBP reports Survey reports on use of biodiversity information and databases Training reports 			
Priority	Capacity Development Actions		Lead Agency	Partner Agencies		
6.1.1	Maintain and periodically update the NHT databa Research Registry.	ase bibliography including establishing links to the National	NHT	MOA, MMR, NES, TIS, TCA		
6.1.2	Develop and maintain an integrated biodive biodiversity information in a central compre- biodiversity related activities and research throug	rsity information system to manage core environment and nensive framework, including of past, current and on-going gh support, resources and training of appropriate personnel	NHT	MOA, MMR, NES, TIS, TCA		
6.1.3	Strengthen institutional capacity of key stakehold data, including developing mechanisms to share consistent, systematic, ongoing biodiversity data	ders involved in the collection and/or management of biodiversity data with the biodiversity CHM, and to develop and implement collection and recording programmes	BD Taskforce	All taskforce agencies, TCA, TIS, NGOs, CBOs		
6.1.4	Develop and implement capacity building and of for scientific collection, surveying and monitoring	levelopment initiatives to address insufficient technical capacity of biodiversity data, data analysis and GIS	NHT	Statistics, MOIP, NES, MMR, MOA		
6.1.5	Develop data collection programmes under the Cook Islands biodiversity, including population cover and vegetation	National Biodiversity Programme to increase knowledge about dynamics and spatial distribution of identified species, forest	BD Taskforce	All taskforce agencies, TCA, TIS, NGOs, CBOs		
6.1.6	Strengthen the capacity of focal points to develo for all research related to biodiversity in the Co information sharing from researchers.	op and maintain a registry and information management system ok Islands and to enforce requirements for documentation and	OPM - Research	NHT, NES		
6.1.7	Encourage research into Cook Islands biodive biodiversity research priorities	ersity through the identification and promotion of our national	BD Taskforce	OPM - Research		

Climate Change – Capacity Development Action Plan Summary



ENVIRONMENT GOAL 1:

Climate Change Integrated and Institutionalised in the Cook Islands

Environment Outcome						
1.1	1.1 Improved adaptation and mitigation actions as a result of an improved enabling environment.					
Capacit	y Development Output	Performance Indicator(s)	Means of Verific	ation		
1.1a	National government agencies and stakeholders able to develop policies and strategies to guide actions related to Climate Change, supported by adequate institutional arrangements and strengthening	 National Climate Change Policy and Programme developed and being implemented Institutional arrangements to support implementation of national climate change programmes are identified and adjusted accordingly 	National Climate Change policyNational Climate Change Programme			
Priority	Capacity Development Actions		Lead Agency	Partner Agencies		
1.1.1	Develop and implement a National Climate Ch address risks of climate change to the environme	ange Policy, Programme, and Strategy and Action Plan to ent, economy and people of the Cook Islands.	OPM	NCCCT, NES, MFEM		
1.1.2	Incorporate climate change into the National De of planning and forums.	velopment Plans and discuss proposed actions at all levels	OPM	NCCCT, NES		
1.1.3	Improve knowledge and understanding, especially of budget decision makers, on donor funding mechanisms, guidelines and processes to access other funding for Climate Change-related programmes with the help of donor and implementing agencies			AMD, NES, MFAI		
1.1.4	Improve knowledge and understanding, especial benefits of adaptation and energy planning decise	ally of budget decision makers, of the priorities, costs and ions.	MFEM	OPM, HOMs		
1.1.5	Strengthen sectoral capacity to understand and planning processes including through the develo	ncorporate climate change considerations into annual pment of climate change personnel within key ministries.	NCCCT	NES, MET, EMCI		
1.1.6	Identify and mandate a host institution for clima Coordinator to coordinate and mainstream clima	te change and appoint a full time National Climate Change te change activities and enhance continuity of capacity.	NCCCT			
1.1.7	Identify focal points in key government ministrie well as mechanisms for communication and info	s, NGOs, outer islands, civil society, for Climate Change as mation sharing such as the NCCCT	OPM	СТМ		
1.1.8	Strengthen capacity to integrate climate change just being donor or project driven.	and disaster management activities and expand focus from	OPM	NES, NCCCT		
1.1.9	Review Meteorology Service and Emerger arrangements, organisational structure, functio systematic observation and climate risk manage	ncy Management Cook Islands including institutional ns and duties in the context of continuous research and ment.	PSC	MET, EMCI		
1.1.10	Promote national priorities for climate change re- consider the possibility for setting up a trust to fa	search, support the work being done in country and cilitate national research by nationals	OPM - Research	CSO, USP, NHRD		
Other L	ong Term Actions					
Exp Act	plore and develop private sector or Government le	d risk sharing and transfer mechanism for climate impacts, su ties e.g. for a national centralised laboratory under the nation	ich as insurance. al research framewo	rk		
. 101						

ENVIRONMENT GOAL 2:

Thematic Area: Adaptation					
onment Outcome					
Increased level of resilience and adaptation to the effects of Climate Change.					
city Development Output	Performance Indicator(s)	Means of Verific	ation		
People and Government are aware of the need to adapt to climate change; and able to mainstream Climate Change into national, local and organizational strategies, policies and development plans.	 National Climate Change Policy in place Climate change education and awareness programmes Revised NESAF clearly articulates Adaptation priorities Climate Change adaptation issues in NSDP and annual budgets and workplans 	 Mandate structure of institutional synergies Government agency/ministry annual workplans NESAF NSDP 2010-2015 			
ty Capacity Development Actions		Lead Agency	Partner Agencies		
2.1.1 Integrate Climate Change adaptation into national, NGO, civil society and private sector policies, programmes, and initiatives using appropriate tools, (for example use of EIAs, cost benefit analysis, vulnerability assessments) NES NGOs, NCCCT, RAC, CSO					
Lobby Government support to drive the development of policies, legislation and incentives for adaptation under a national programme for climate change			NCCCT		
3 Develop and strengthen local capacity for project proposal development, writing and reporting to increase local ability to access funding for adaptation priorities.			OPM, HRD, USP		
Undertake targeted awareness programmes highl reinforce the need for a precautionary approach	ghting the impacts of climate change and use case studies to	NES	NCCCT		
.5 Expand upon current information on adaptation, particularly within the NESAF, to fully articulate priorities and project profiles with an appropriate framework.		NES	MFEM - Statistics, OPM, NCCCT		
Promote research on the development of local resproofing.	ources as adaptation options and long term benefits of climate	OPM	NES, MOIP, NCCCT		
natic Area: Vulnerability and Adaptation	n Assessment and Implementation				
onment Outcome					
Increased levels of adaptation through better under	standing of vulnerabilities and the identification and implementation	on of adaptation opti	ons.		
city Development Output	Performance Indicator(s)	Means of Verific	ation		
Improved capacity of national institutions and individuals to adopt, develop and use information and tools to undertake vulnerability assessments and identify adaptation options.	 Representatives from at least 5 communities and 8 public and private organizations, who are able to conduct vulnerability assessments, plan and implement adaptation options. At least 10 vulnerability assessments undertaken for at least 3 sectors including at least 5 community based assessments and adaptation options identified and prioritised by end of 2012. 	 NESAF Progres V&A Training R Community bas Sectoral V&A R 	ss Report eports ed V&A Reports eport		
	natic Area: Adaptation onment Outcome Increased level of resilience and adaptation to the exity Development Output People and Government are aware of the need to adapt to climate change; and able to mainstream Climate Change into national, local and organizational strategies, policies and development plans. ty Capacity Development Actions Integrate Climate Change adaptation into national, initiatives using appropriate tools, (for example use Lobby Government support to drive the development national programme for climate change Develop and strengthen local capacity for project ability to access funding for adaptation priorities. Undertake targeted awareness programmes highlireinforce the need for a precautionary approach Expand upon current information on adaptation, project profiles with an appropriate framework. Promote research on the development of local responding. matic Area: Vulnerability and Adaptation onment Outcome Increased levels of adaptation through better under individuals to adopt, develop and use information and tools to undertake vulnerability assessments and identify adaptation options.	natic Area: Adaptation onment Outcome Increased level of resilience and adaptation to the effects of Climate Change. city Development Output Performance Indicator(s) People and Government are aware of the need to adapt to climate Change and able to climate Change into national, local and organizational strategies, policies and evelopment plans. • National Climate Change Policy in place • Climate Change adaptation into national, local development plans. • Climate Change adaptation issues in NSDP and annual budgets and workplans ty Capacity Development Actions • Climate Change adaptation issues in NSDP and annual budgets and workplans Integrate Climate Change adaptation into national, NGO, civil society and private sector policies, programmes, and initiatives using appropriate tools, (for example use of EIAs, cost benefit analysis, vulnerability assessments) Lobby Government support to drive the development of policies, legislation and incentives for adaptation under a national programme for climate change Develop and strengthen local capacity for project proposal development, writing and reporting to increase local ability to access funding for adaptation priorities. Undertake targeted awareness programmes highlighting the impacts of climate change and use case studies to reinforce the need for a precautionary approach Expand upon current information on adaptation, particularly within the NESAF, to fully articulate priorities and project profiles with an appropriate framework. Promote research on the development of local r	Indic Area: Adaptation Increased level of resilience and adaptation to the effects of Climate Change. Increased level of resilience and adaptation to the effects of Climate Change. City Development Output Performance Indicator(s) Means of Verifice People and Government are aware of the need on adapt to climate change; and able to climate Change into national, local and organizational strategies, policies and development plans. Performance Indicator(s) Means of Verifice Y Capacity Development Actions Climate Change adaptation issues in NSDP and annual budgets and workplans NESAF Integrate Climate Change adaptation into national, NGO, civil society and private sector policies, programmes, and initiatives using appropriate tools, (for example use of EIAs, cost benefit analysis, vulnerability assessments) NES Lobby Government support to drive the development of policies, legislation and incentives for adaptation proteites AMD Develop and strengthen local capacity for project proposal development, writing and reporting to increase local ability to access funding for adaptation proteites. MES Undertake targeted awareness programmes highlighting the impacts of climate change and use case studies to need for a precautionary approach. NES Promote research on the development of local resources as adaptation options and long term benefits of climate onge and protech profing. NES		

Priority Capacity Development Actions			Lead Agency	Partner Agencies
2.2.1	Develop local technical and human capacity to carry out Vulnerability and Adaptation assessments, particularly at the community level			CSO, OPM, EMCI, OMIA, Island Councils
2.2.2	Push for the need for development of SIDS specif level	ic tools and methodologies at the International and Convention	NES	NCCCT, MFAI
2.2.3	Draw on and traditional knowledge related to clima 'hands – on training' at the national and community	te change and apply methodologies, where appropriate through level	MOCD/ NES	Aronga Mana, NCCCT, Island Councils
2.2.4	Tools and methodologies for vulnerability and adaptissues within the context of adapting to Climate Characteria	tation assessments developed to address specific sectoral ange.	NES	MMR, MOH, MOIP
2.2.5	Utilise regional and international expertise and/or training programmes to train or up skill personnel on islands as well as in sectors on Vulnerability and Adaptation Assessment. Some of the identified needs include, beach profiling; upskilling and development of investigation guidelines for environment and health inspectors environment health education; water testing; data analysis and processing; community based Vulnerability and Adaptation assessment, and cost benefit analysis of adaptation options.			MFEM - AMD, OPM, MMR, OMIA, Island Councils, NGO's, Community Groups
Then	natic Area: Research and Systematic Ob	servation – (meteorological, hydrological and clima	tological)	
Envir	onment Outcome			
2.3	Improved planning and implementation of climate of government of collected observations	change research and systematic observation resulting in increase	ed levels of adaptation	on through better use by public and
Capa	city Development Output	Performance Indicator(s)	Means of Verification	
2.3a	National government and stakeholders have the capacity to carry out appropriate research and systematic observation to better inform policy and actions relevant to climate changes.	 Methodologies for data collection and management identified and implemented Priority Systematic research programmes developed and implemented Training in research and systematic observation for key stakeholders 	Training reports	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
2.3.1	Priority and recognition at the national and institution warning systems and climate change analysis.	nal level should be given to an agency responsible for early	MET	EMCI, OPM, NES, MMR, Police
2.3.2	Identify key data gaps in research and systematic the overall national programme for climate change.	observation and develop data collection programmes as part of	MET	EMCI, OPM, Police, MOIP
2.3.3	Strengthen technical and human capacity for co	ntinuous research and systematic observation in general and		
	analytical capacity for monitoring of climate cha Service staff.	nge, including through training and upskilling of Meteorology	MET	

Other Long Term Actions					
 Develop clear policies at the national level to support the implementation of and budgeting for consistent and continuous research and systematic observation (such as coral monitoring and beach profiling) for monitoring purposes and to detect trends. Address issues with intellectual property rights and data ownership to improve access to climate information Ensure priority research needs for meteorological, hydrological and climatological areas are identified and built into any national research programme and strategic framework. Cultivate support for continuous research and systematic observation for monitoring of climate change, including the need for outer island weather stations. Encourage partnerships and resource sharing opportunities e.g. for a National centralised laboratory under the National Research Framework. 					
Them	atic Area: Disaster Risk Management				
Enviro	onment Outcome				
2.4	Increased levels of risk reduction and adaptation to	climate change through disaster preparedness, emergency risk r	management and na	tional hazard risk assessment	
Capac	rity Development Output	Performance Indicator(s)	Means of Verific	cation	
2.4a	 2.4a 2.4a Autional government and stakeholders have the capacity to Prepare for Natural Disasters, Manage Emergencies and Risk and undertake a National Hazard Risk Assessment. C) Disaster Management Action Plan developed and implemented. C) Disaster Management Action Plan developed and implemented. C) Regular training exercises carried out to a satisfactory standard Publicity Programmes for Disaster Management carried out All Government agencies have an institutional level Disaster Management Plan L) evel of Awareness and Preparedness increased 				
Priori	y Capacity Development Actions		Lead Agency	Partner Agencies	
2.4.1	Ensure that disaster risk reduction is a natio reflected in budget allocations to undertake prevention	nal priority with strong institutional basis for implementation, entative and response measures	EMCI	OPM, MFEM, NES	
2.4.2	Promote and support dialogue, exchange of info reduction, disaster response, development and o of fostering a holistic and multi-hazard approach	ormation and coordination amongst early warning, disaster risk other relevant agencies and institutions at all levels, with the aim towards disaster risk reduction.	ОРМ	EMCI, Police, CI Red Cross, MOH MET	
2.4.3	Assess existing human resource capacities and risk reduction targeted at specific sectors (de officials, etc.).	I develop regular training and learning programmes in disaster velopment planners, emergency managers, local government	OPM/ EMCI	NHRD	
2.4.4	Promote community-based training initiatives, co local capacities to reduce risk and cope with disa	nsidering the role of volunteers, as appropriate, to enhance asters.	CSO	EMCI, CI Red Cross	
2.4.5	2.4.5 Protect and strengthen critical public facilities and physical infrastructure, particularly schools, clinics, hospitals, water and power plants, communications and transport lifelines, disaster warning and management centres, and other important lands and structures through proper design, retrofitting and re-building, in order to render them adequately resilient to hazards.				
2.4.6	Locally appropriate scenarios based on anticipat and integrated into sectoral and national strategi	ted climate change need to be developed, tested, put into place es	OPM	NCCCT	
2.4.7	Support the development and sustainability of s well as infrastructure needed to research, obs related hazards, vulnerabilities and disaster impa Mapping	scientific, technological, technical and institutional capacities as serve, analyse, map and where possible forecast natural and acts including for National Hazards Risks Analysis and Hazard	MET	MOIP, EMCI, OPM	

2.4.8	Expand the scope of existing risk assessment systems, such as EIA, to incorporate climate and disaster related risks and support the development of common methodologies for risk assessment and monitoring.	NES	MOA MOH
2.4.9	Review current early warning systems to address gaps and develop systems to strengthen response to national disasters including meteorological information, communications and early warning systems to outer islands	MET	CSO, EMCI
2.4.10	Installation of manual and automatic data monitoring stations on each island to improve data collection and consistency and enable immediate transmission of forecasts	MET	MMR MOA
2.4.11	Develop localized early warning information systems that are people centered, ensure warnings are timely and understandable to those at risk, which take into account the target audiences, including mention of risks such as sea surge and guidance on how to act upon warnings, and that support effective operations by disaster managers and other decision makers.	EMCI	OPM, MET, Police, Aronga Mana, CSO, MOH
2.4.12	Provide for alternative communications methods that can fully transmit to all islands of the Cook Islands (e.g. iridium phones, ham radios)	EMCI	Telecom, MET, Radio, OPM
2.4.13	Establish storage facilities for medical, food/water facilities, communication systems and training centre	МОН	CSO, Police
2.4.13 2.4.14	Establish storage facilities for medical, food/water facilities, communication systems and training centre Strengthen or revive traditional knowledge relating to weather indicators of hurricanes and rain or drought.	MOH CSO	CSO, Police NES, MET, Aronga Mana, CSO
2.4.13 2.4.14 2.4.15	Establish storage facilities for medical, food/water facilities, communication systems and training centre Strengthen or revive traditional knowledge relating to weather indicators of hurricanes and rain or drought. Strengthen or revive traditional and modern planting practices that help protect against drought, salt water infiltration, salt spray, floods, pests and diseases.	MOH CSO MOA	CSO, Police NES, MET, Aronga Mana, CSO CSO, Local Farmers
2.4.13 2.4.14 2.4.15 2.4.16	Establish storage facilities for medical, food/water facilities, communication systems and training centre Strengthen or revive traditional knowledge relating to weather indicators of hurricanes and rain or drought. Strengthen or revive traditional and modern planting practices that help protect against drought, salt water infiltration, salt spray, floods, pests and diseases. Promote a culture of disaster resilience through awareness of hazards and vulnerabilities to disasters that communities and sectors face and actions to be taken on the basis of that knowledge	MOH CSO MOA EMCI	CSO, Police NES, MET, Aronga Mana, CSO CSO, Local Farmers OPM, Police, Traditional leaders, CSO
2.4.13 2.4.14 2.4.15 2.4.16 2.4.17	Establish storage facilities for medical, food/water facilities, communication systems and training centre Strengthen or revive traditional knowledge relating to weather indicators of hurricanes and rain or drought. Strengthen or revive traditional and modern planting practices that help protect against drought, salt water infiltration, salt spray, floods, pests and diseases. Promote a culture of disaster resilience through awareness of hazards and vulnerabilities to disasters that communities and sectors face and actions to be taken on the basis of that knowledge Promote the inclusion of disaster risk reduction knowledge in relevant sections of school curricula at all levels and the use of other formal and informal channels	MOH CSO MOA EMCI MOE	CSO, PoliceNES, MET, Aronga Mana, CSOCSO, Local FarmersOPM, Police, Traditional leaders, CSOEMCI, CSO, NGOs, Youth
2.4.13 2.4.14 2.4.15 2.4.16 2.4.17 2.4.18	Establish storage facilities for medical, food/water facilities, communication systems and training centre Strengthen or revive traditional knowledge relating to weather indicators of hurricanes and rain or drought. Strengthen or revive traditional and modern planting practices that help protect against drought, salt water infiltration, salt spray, floods, pests and diseases. Promote a culture of disaster resilience through awareness of hazards and vulnerabilities to disasters that communities and sectors face and actions to be taken on the basis of that knowledge Promote the inclusion of disaster risk reduction knowledge in relevant sections of school curricula at all levels and the use of other formal and informal channels Provide training for food storage and processing techniques to improve food security, livelihood of family household isolated from the availability of food products	MOH CSO MOA EMCI MOE CSO	CSO, PoliceNES, MET, Aronga Mana, CSOCSO, Local FarmersOPM, Police, Traditional leaders, CSOEMCI, CSO, NGOs, YouthNCW, EMCI, MOA, MOH

Other Long Term Actions

• Develop and improve collaboration between law and border control agencies and processes.

• Mainstream disaster risk considerations into planning procedures, especially for major infrastructure projects, including criteria for design, approval and implementation of such projects and considerations based on social, economic and environment impact assessments.

• Build new and improve existing community cyclone shelters and disaster management facilities on all islands and ensure that they are fully equipped with appropriate personnel identified and trained to manage such facilities

• Implement measures to protect Meteorology Service building and equipment from risks such as sea surges and high winds

• Investigate and promote the development of financial risk-sharing and transfer mechanisms, particularly insurance and reinsurance against disasters and mechanisms such as a national disaster emergency fund with joint private and public sector support for areas where insurance is not available in the commercial market.

ENVIRONMENT GOAL 3: Cook Islands contributing to mitigation of Greenhouse Gas emissions and Climate Change

Thematic Area: GHG Inventories					
Envire	onment Outcome				
3.1	Better planning of mitigation measures as	a result of the establishment of Greenhouse Gas (GHG) Inventories			
Capad	city Development Output	Performance Indicator(s)	Means of Verific	ation	
3.1a	Capacity and support to plan and carry out GHG Inventories annually, and disseminate information to key stakeholders, including decision-/policy makers	 Number of nationals trained to conduct GHG Inventories Institutional arrangements for annual GHG inventory process in place and effective by end of 2009 GHG database established and maintained Results of Annual GHG Inventory analysed and disseminated to stakeholders 	 Training workshops reports and evaluations Annual GHG Inventory Reports produced GHG database 		
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies	
3.1.1 Develop capacity and mechanisms to undertake annual GHG Inventories and improve data quality and collection, including establishing institutional arrangements with key agencies and private sector, with resulting information mainstreamed into statistical bulletins, energy development plans and disseminated to stakeholders.			NES, MFEM - Statistics, OPM		
3.1.2	3.1.2 Establish an easy to use GHG inventory database to record annual GHG activity data, (e.g. energy use, livestoch numbers, waste etc)			MOTE – Energy, NES, MOA, Private Sector, TAU	
Other	Long Term Actions				
• C R E	evelop and implement legislation and or po aise awareness of GHG emission trends in nsure training is available for GHG guidelin	licies as appropriate to mandate key agencies to supply and collect data an the Cook Islands and ways to reduce emissions, as well as encourage loc e requirements, or identify guidelines better suited to the Cook Islands situ:	nd undertake annual ally appropriate alter ation	GHG Inventories matives to fossil fuel use	
Them	natic Area: Mitigating GHGs from	n Transport, Land Use and Waste			
Envire	onment Outcome				
3.2	3.2 Mitigation of Greenhouse Gas Emissions from land use and waste				
Capad	city Development Output	Performance Indicator(s)	Means of Verific	ation	
3.2a	3.2aNational agencies and staff have the capacity to develop and implement mitigation measures for sources of GHG emissions• Guidelines on locally appropriate emissions mitigation measures developed and disseminated by 2010 • Increased number of emissions mitigation measures implemented effectively by 2012, compared with baseline year of 2008• Guidelines • Annual GHG Inventory reports			ventory reports	

Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies	
3.2.1	Develop overarching National Policy and leg development and implementation of Renewa Efficiency Standards, Economic Incentives sustainable fuels.	islation to reduce GHG emissions in the Cook Islands through the ble Energy, Vehicle Emissions and Importation Standards, Energy to reduce emissions and the integration of locally appropriate	OPM / MOTE	NES, Private Sector	
3.2.2	Review, endorse and implement National V consideration of emissions reductions options	Vaste Strategy and prioritised subcomponents, to ensure special and to minimise residual solid waste going to the landfill	MOIP	NES, CSO, Private Sector	
3.2.3	Assess and develop guideline recommendation including options for improving transport and e	ations on practical mitigation actions to reduce GHG emissions energy related systems with emissions reductions technology	MOTE – Energy	NES, NCCCT	
3.2.4	Promote and explore options for reducing t legislation of standards for vehicle importation	ransport emissions including through development of policies and in consultation with the private sector, emissions testing	MOTE	OPM, Private Sector, Customs – MFEM	
3.2.5	Incorporate training of technicians for emission vehicles into any emissions reduction implement	ons testing, and maintenance of alternative and energy fuel efficient entation strategy	HRD	Private Sector	
3.2.6	.6 Develop a road users campaign to promote GHG reducing tips such as carpooling and the cost saving benefits			MOTE, Road Safety Council, Police	
3.2.7	Strengthen enforcement of burning bans and provision and promotion of safer or more effici	other waste regulations under public health act including through the ent alternatives	МОН	NES, CSO, MOIP	
3.2.8	Explore and promote locally appropriate altern	atives to artificial fertilizers to reduce nitrous oxide emissions	MOA	NES, MOH, CSO, Private Sector	
Other	Long Term Actions				
• A • E • Ir	assess the options and practicality of introducing insure roads are well maintained to allow for fue nplement pilot projects to trial biofuels production	g criteria or policy on importation practises and excess packaging in ord el efficient driving conditions on, use and suitability to the Cook Islands	der to reduce waste	before it comes in-country	
Then	natic Area: Renewable Energy				
Envir	onment Outcome				
3.3	Increased use of Renewable Energy Technol resulting in a decline in reliance of fossil fuels	ogies throughout the country through improved support from governmespecially in remote locations	nent and increased i	nvolvement of all stakeholders and	
Capa	city Development Output	Performance Indicator(s)	Means of Verific	Means of Verification	
3.3a	Greater capacity to support renewable energy initiatives and programs at both the National and Island Government level with consumers nationwide attracted to adopting and maintaining RE technologies.	 Government funding to support RE increased by at least 50% by 2012, New RE initiatives established and operational throughout the country by 2012, Incentives regime for consumers operational by 2010 Importation figures, household surveys, renewable energy installations 	 Survey report Cook Islands PIGGAREP rep Importation record 	on use of Renewable Energy in ports ords	
Priori	ty Capacity Development Actions	Lead Agency	Partner Agencies		
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3.3.1	Reduce the reliance on high GHG based fossil fuel by identifying and adopting technically feasible and financial viable alternative energy sources for all islands, including by undertaking cost-benefit analysis of RE implementation and technologies	MOTE – Energy	OPM, Private Sector, NES, MOIP, Aid, OMIA, MFEM		
3.3.2	Develop and implement a Renewable Energy Development Plan for Rarotonga as a priority to reduce petroleum imports and control electricity demand growth on Rarotonga.	OPM	MFEM, Energy Committee, MOTE – Energy		
3.3.3	Obtain political and financial commitment from Government for renewable energy adoption and implementation as part of an overall government energy strategy to reduce fossil fuels	MFEM	Int. Aff, OPM, MOTE – Energy		
3.3.4	Investigate the potential for economic incentives to encourage use of renewable energy technology.	MOTE – Energy	OPM, MFEM, Private Sector, TAU		
3.3.5	Develop strategies and programs that implement the Energy policy including the development and implementation of standards and policies for Renewable Energy.	MOTE – Energy	TAU		
3.3.6	Build and develop the capacity of Te Aponga Uira (for Rarotonga) and Outer Islands to design, install, operate and maintain renewable energy systems.	MOTE – Energy	TAU		
3.3.7	Review Energy Division including organisational structure, functions and duties in the context of Renewable Energy implementation and strengthen capacity to develop, implement and monitor renewable energy activities	PSC	MOTE – Energy, AMD		
3.3.8	Promote the benefits of alternative technologies for renewable energy and energy efficiency at all levels and all scales through education and awareness, targeting decision makers and affected local communities, through the use of pilot projects and incentives for consumers e.g. caps rebate system.	CSO	MOTE – Energy		
3.3.9	Investigate the potential for regional bulk buying of renewable energy technology	MFEM	TAU, MOTE – Energy, Private Sector		
Other	Other Long Term Actions				
• F • II • II	 Revisit past feasibility assessment studies for integrating Renewable Energy into current energy system for their present and future viability and improve where necessary. Improve forward planning capacity of local energy providers in a proactive approach to prevent adoption of policies based on reactive or crisis management, which locks limited capital and capacity into fossil fuel energy and technology. Develop capacity for renewable energy training needs locally - training modules focusing on renewable energy should be made available for integration into technical training programs for electricians and plumbers. 				

- Implement a local training and accreditation scheme for renewable energy drawing on international expertise.
- Promote local research to investigate the types of bio-fuels suitable to our climate, availability of resources its economic and environment viability with consideration of lessons learnt from analogous countries.

Thematic Area: Energy Efficiency

Environment Outcome

3.4 Reduction in energy consumption and emissions through use of energy efficient practices and technologies.

Capa	city Development Output	Performance Indicator(s)	Means of Verific	cation	
3.4a	Households, organizations and businesses are able to adopt practices and technologies that are energy efficient.	Importation figures, household surveys, renewable energy installations, level of overall financial support for RE and the usage of tax incentives.	 Survey report Cook Islands Energy reports 	 Survey report on use of Renewable Energy in Cook Islands Energy reports 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies	
3.4.1	Create an enabling environment for energy efficiency legislation for importation, design, construction ban (low energy efficiency products)	iciency through the development and implementation of policies and n, installation, and use of appliances and technologies to restrict or	ОРМ	MFAI, MOTE – Energy, Customs	
3.4.2	Decrease per capita energy consumption by technologies and energy conservation practice	r increasing efficiency in energy use through the adoption of new es.	CSO	MOTE – Energy, TAU, Private Sector	
3.4.3	Develop strategies and programmes that implementation of standards and policies for E	implement the Energy policy including the development and nergy Efficiency and an Energy Conservation Act.	MOTE	OPM, TAU, MFEM	
3.4.4	Investigate the potential for economic incentive	es to promote energy efficient technologies and practises	Private Sector	MFEM, OPM, TAU	
3.4.5	Introduce mechanisms to monitor consumptio efficiency options.	n of energy and raise awareness and educate consumers on energy	MOTE – Energy	Private Sector, CSO, MMR	
3.4.6	Strengthen demand side management – regreenergy use.	ulate the pattern of energy usage and provide incentives to reduce	MOTE – Energy	TAU, CSO	
3.4.7	3.4.7 Promote the benefits of alternative technologies for renewable energy and energy efficiency at all levels and all cso MOTE – Energy MOTE – Energy			MOTE – Energy	
Other	Long Term Actions				
• [Develop a programme for Energy Auditing inclusion	uding training, in order to implement practical recommendations fo	r cost saving meas	ures (possibly through the energy	
• [• [Develop capacity for training in energy efficient electricians and plumbers.	cy locally - training modules focusing on energy efficiency which co	ould be integrated in	nto technical training programs for	
•	mplement a local training and accreditation sche	me for energy efficiency drawing on international expertise.			
• F	Review Energy Division including organisationa programme to increase capacity	structure, functions and duties in the context of Renewable Energy	and Energy Efficie	ncy implementation and develop a	
•	nvestigate the potential for regional bulk buying	energy efficiency technology.			
The	Thematic Area: Clean Development Mechanisms				
Other	Long Term Actions				
• P	• Increase understanding and awareness of Clean Development Mechanisms and its implications for the Cook Islands, and explore opportunities for pilot/demonstration projects to show cost benefits of reducing transport emissions				
• F	Promote specific criteria through AOSIS at intern dentify and mandate a Designated National Auth	ational level that will assist small islands to access CDM specifically for nority to explore the options of CDM and its appropriateness to the Cod monstration projects to show cost banefits of reducing amiaziona	or renewable energy ok Islands.	and energy efficiency.	
_ • E	spiore com and other opportunities for pilot/de	nonstration projects to show cost benefits of reducing emissions.			

Envir	Environment Outcome			
4.1	Accurate and continuous data with the support of appropriate information management systems enables National government agencies and stakeholders to adapt to and mitigate climate change.			
Capa	city Development Output	Performance Indicator(s)	Means of Verific	cation
4.1a	National government agencies and stakeholders are able to manage climate change data and information (including capacity to develop information management systems, undertake data collation and analysis, and use GIS), and to mobilize appropriate data dissemination to all levels of users	 Data sharing mechanisms regularly updated and utilised by multiple stakeholders at levels greater than baseline year of 2008 Focal points for climate change data collection identified within key institutions and Ministries Training programme climate change data collection, analysis and management developed and implemented 	 Records of access numbers NCCCT reports Training reports 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
4.1.1	1.1 Define responsibilities of relevant agencies and organisations with regards to generating and implementing climate change data collection and information management programmes and identify appropriate personnel within each organisation to take on this responsibility.			NES, MOIP, MMR, MOH
4.1.2	.2 Develop a programmatic approach to strengthening local capacities for management of climate change data and information, including training in database and inventories development, data collation and analysis, GIS, MOIP MOH, MMR, NES			MOH, MMR, NES
4.1.3	.3 Develop and strengthen mechanisms for data sharing within and between agencies, including existing tools such as the Pacific Environmental Information Network (PEIN), Population Geographic Information Systems (PopGIS) and EDF9 MapServer, and promote the need for web based accessibility of data and a Clearing House Mechanism for climate change data and information			NES, MMR, MOH, MFEM – Statistics, MOA, Met. Serv.
Other	Other Long Term Actions			
 Draw on stocktakes under processes such as UNCCD National Reports, UNFCCC National Communications, the National Biodiversity Strategy and Action Plan, Environment Vulnerability Indices, Ozone Depleting Substances NCAP etc, to review current databases for upgrade and identify opportunities and synergies for networking and information exchange. Establish and maintain a Clearing House Mechanism (and appropriate capacity) to collate, store, and disseminate climate change information including of past, current and on-going activities and research for stakeholders awareness and promoting linkages, supported through the process of National Communications. Foster the importance of the Small Islands Developing States (SIDS) network for addressing issues both nationally and internationally. 				

ENVIRONMENT GOAL 5:

Envir	onment Outcome			
5.1	Integrated education and awareness programmes	for climate change		
Capa	city Development Output	Performance Indicator(s)	Means of Verific	ation
5.1a	Government and stakeholders have the capacity to create and deliver education and awareness programmes for climate change.	 Educational authorities have access to climate change technical advice and incorporating climate change in curricula No of stakeholder representatives trained in climate change awareness No of Publicity Campaign 	 Educational texts and materials Ministry of education reports Awareness survey reports 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
5.1.1	Develop a systematic approach to environment communications strategies and measures for difference	education awareness including regular specific climate change rent levels, including NGOs and community groups	NES	CSO, NGO, MOE
5.1.2	Strengthen partnership roles in strategy design and implementation. e.g. Live & Learn, the Green Maze, and interactive programmes such as Sandwatch, SPARCE, Te Kaveinga Ora			NCCCT, CSO
5.1.3	Incorporate climate change into the formal education curriculum and provide resource materials and professional development to support teachers with this subject area		NES	MOE, CSO
5.1.4	Produce media and education packages featuring local climate change relevant information in a simplified bilingual format.		NES	CSO, MOTE, NCCCT
5.1.5	Need for 'information brokers' who are able to une simplified clear format/language	dertake the translation of scientific and technical information into	CROP agencies/ NES	English and CI Maori Language experts, Aronga Mana, CSO
5.1.6	Encourage schools to take part in environment Government Departments	monitoring e.g. beach, climate, water and assist NGOs and	NES	MOE, MMR, CSO, MOA, MOH
5.1.7	Encourage regional tertiary organisations to undertake climate change research for the Cook Islands, working with local counterparts for practical capacity building and training		USP	NHRD, OPM
5.1.8	.8 Undertake training for planners, developers and decision makers on how to incorporate climate change and OPM NCCCT, MFEM			NCCCT, MFEM
Other	Other Long Term Actions			
• F • E	Provide for the collation and ongoing documentation explore the use of innovative communications mecha	of local climate change relevant information, including traditional a anisms such as local radio stations and Radio Network for dissemi	nd local knowledge nation climate inform	nation

ENVIRONMENT GOAL 6: Appropriate technology transfer to support climate change adaptation and mitigation efforts

Environment Outcome				
6.1	Technology transfer, use and maintenance program	nmes are supported, funded and maintained.		
Capa	city Development Output	Performance Indicator(s)	Means of Verific	ation
6.1a	Government agencies, private sector and community have identified technology needs and have the capacity to utilise and maintain appropriate technology to support climate change adaptation and mitigation	 Technology Needs Assessment completed Deployment of at least one technology to support adaptation or mitigation per year 	Technology needs assessment reportPrivate sector report	
Priority Capacity Development Actions Le			Lead Agency	Partner Agencies
6.1.1	Undertake Technology Needs Assessment and Te	chnology Transfer Project Design.	NES	MOTE, NCCCT
6.1.2	Ensure that sustainability concerns and local appropriateness of any technology transfer related project design is considered at the initial design and review stages			NCCCT, NES, Private Sector, Community
6.1.3	1.3 Gather and disseminate lessons learnt in adoption and use of technology transferred to improve decision making regarding technology transferred NES NCCCT, NES, MOH			NCCCT, NES, MOH
Other Long Term Actions				
• F • E	 Provide resources and training opportunities to develop local capacity in engineering, policy and technical areas. Ensure technology transferred is labelled in English and have both instruction manuals and practical demonstration training. 			

ENVIRONMENT GOAL 7:

Envire	Environment Outcome			
7.1	Cook Islands contributing to global efforts to protect	t the Ozone Layer by phasing out and banning the use of ozone c	lepleting substances	3
Capad	city Development Output	Performance Indicator(s)	Means of Verific	cation
7.1a	Government agencies and the private sector have the capacity to develop and comply with measures that phase out and ultimately eliminate the use of ozone depleting substances in the country.	 National Policy on ODS, ODS Regulations and ODS licensing systems in place Training of key stakeholders in implementation and enforcement of ODS Regulations, and Customs officers for monitoring of imports of ODS using technology ODS phase out programme undertaken 	 Act of Parliame National Policy Training reports Quarterly ODS 	nt (ODS legislation) S Compliance reports
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
7.1.1	Develop ODS legislation controlling the import, us with the view to phase out all ODS in the Co stakeholders	e, management, and disposal of ODS or appliances using ODS ok Islands and undertake consultation process with relevant	NES	Statistics, Customs – MFEM
7.1.2	2 Designate agencies responsible to enforce elements of the legislation and develop a monitoring programme for enforcement and permitting systems for ODS once legislations are in place.		NES	Statistics, Customs – MFEM
7.1.3	Train Customs officers in the need for permits a imported	and permitting requirements to reflect the types of ODS being	NES	SPC, Customs, MFEM, CROP Agencies
7.1.5	Develop sector specific strategies for phasing ou activities such as climate change mitigation and wa	t ODS in the Cook Islands in partnerships with other relevant aste related conventions e.g. bulk white waste disposal	MOIP	NES, Private Sector
7.1.6	Consider utilising a broader existing committee, Change Country Team or the proposed Hazardous ozone depleting substances in the Cook Islands	such as the National Environment Council, National Climate s substances Committee (Dirty Six), to oversee the phase out of	NES	NCCCT, NSDP Committee, MOH
7.1.7	Identify options for ODS and ODS appliances alte public and private sector and promote awareness	rnatives, provide incentives for the use of alternatives to ODS in o importers and Merchants	NES	NCCT, CSO, MFEM, MOH, Customs
7.1.8	Develop and regularly update a simplified 'goods use this checklist a well as promoting the benefits	containing ODS' checklist and train Customs and importers to of ODS phase out as well as identify and promote alternatives.	NES	MFEM, MOH, Customs
7.1.9	Increase awareness and education at all levels f ODS appliances and best practices for the phase campaigns, promotions and advocacy programmes	or climate change and ODS concerns on alternatives to ODS, e out of ODS through participatory approaches, ongoing media s.	NES	MOTE, CSO, Private Sector, Communities
Other	Long Term Actions			
• A	dopt recognised standards for an accreditations sc echnicians, customs officers and recyclers in identified	heme for licensing of ODS handlers and implement training progration/handling and recapture/disposal of ODS	rammes for relevant	stakeholders such as refrigeration

• Further trainings; regional, in house trainings for additional staff on climate change and ODS related areas of concern.

• Simplify notifications on phase out of ODS from the Montreal Protocol text, and make available on posters pamphlets, website etc. easily accessible to public and industry.



Then	Thematic Area: Development			
Envir	onment Outcome			
1.1	Land resources able to provide and sup Change.	oport ecosystem functions, maintenance of biodiversity, support development r	needs and contribute	es to adaptation to Climate
Capa	city Development Output	Performance Indicator(s)	Means of Verific	ation
1.1a	Government, stakeholders and land resource owners able to develop and use policies, regulations and technical expertise that ensure infrastructure and economic development activities do not cause land degradation	 Natural resources, land degradation and development data incorporated in GIS platform Integrated Land and Resource management framework with relevant policies, regulations for land degradation and land resource use are put in place and reflected in the National Economic Development Strategy Land degradation mitigation options and land resource use are seriously considered in the designs of projects under the Preventative IMP Specific guidelines for of land degradation mitigation options produced for different levels of users Land Use guidelines formalised 	 Increased numb resources and la National Econor Land Use Policy IMP Project des 	er of data layers for natural and use nic Development Strategy guidelines formalised igns
Priori	Priority Capacity Development Actions			Partner Agencies
1.1.1	Empower appropriate agencies to unde existing development conditions on a GIS and development decisions (including env	rtake a comprehensive inventory of natural resources, land degradation and s platform, which should provide baseline information for resource management rironment impact assessments)	MOIP	MOA, MMR, NES, MOH, GIS Users Group
1.1.2	Develop and promote locally appropriate (e.g. excavation techniques, soil erosion voluntary compliance in incorporating reco	measures and practises for mitigating land degradation from land development control measures etc) to developers, the private sector and communities for ommendations into all land development activities	NES/MOIP	Private Sector, MOA, MOH, Engineers
1.1.3	Undertake where necessary, institutiona including the promotion of efficient, eff monitoring and management which will in	I reform and capacity development to facilitate improved land administration ective and more dynamic approaches to land use, planning, development, volve a participatory and consultation approach	NES	MOJ, MOIP – Survey, Aronga Mana
1.1.4	Undertake where necessary, institutional project economic growth, including through knowledge sharing 	reform and capacity development to manage current development efforts and , training to improve technical capacities in suitable SLM practices	OPM/MOIP	NES, MOH
1.1.5	Support activities that monitor the enviru quality testing and extend to cover all island	onment for land degradation such as beach profiling, coral monitoring, water not in the Cook Islands	NES	MMR, MOA, MOH

ENVIRONMENT GOAL 1: People of the Cook Islands implementing sustainable land management practises mitigating land degradation

Other Long Term Actions

- Strengthen existing legislation, including the promulgation of regulations under the Environment Act 2003 to control development in specific areas of concern and the environment impacts assessment (EIA) (or permits and consents) process which should take into consideration impacts from extreme events and climate change.
- Build capacity of responsible staff and all relevant stakeholders on the specific issues and mandates of other land agencies and in the implementation of land use and development legislation to ensure sure understanding and avoidance of conflicting powers.
- Further assess the problem of piece meal approach to large scale development and develop recommendations for action
- Develop a participatory approach to land use planning for landowning families with targeted public awareness programmes to focus on the role of and options for landowning families to alleviate land degradation and promote public good, environment benefits and future benefits
- Make information of contours and other natural features a standard requirement of all survey maps used in the development application process

Thematic Area: Land Use Practises

Environment Outcome

1.2	Sustainable land use practices contributing to the maintenance of soil productivity, maintenance of biodiversity, agriculture production, food security and stable landscapes			
Capad	Capacity Development Output Performance Indicator(s) Means of Verification			
1.2a	Government, stakeholders and land resource owners are educated and aware of sustainable land use management and practises and actively implement	 At least 5 awareness activities and 5 educational materials in SLM and practises produced targeting different audiences from policy makers to communities and individuals Economic Valuation of Land Degradation and SLM outcomes carried out Improved compliance to land use policies Improved monitoring of activities and collection of information by MOA and NES 	 MOIP and MOA GIS reports and Economic valuat 	reports maps tion reports
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
1.2.1	Ensure that environment considerations integrated into relevant sectoral policies a	for land degradation and sustainable land management are promoted and nd plans.	OPM/NES	MOIP, MOA, Engineers
1.2.2	Widely promote locally appropriate and including through community based traini into consideration human health in order t	MOA	TGA, NES, Other Community Groups and NGOs	
1.2.3	2.3 Develop awareness programmes to promote the value of arable land for agriculture to support economic growth and food security and to encourage preservation of prime arable land for agricultural purposes.			OPM/MOIP
Other	Other Long Term Actions			
• S • P	 Strengthen the capacity and resources of Ministry of Agriculture to provide technical support services to local communities to ensure sustainable practices of land cultivation Provide information to the public on land use capabilities and suitabilities's to assist with the promotion of sustainable agricultural practises 			

Thematic Area: Rehabilitation of Degraded Land

Environment Outcome

1.3.2

1.3	Degraded lands are rehabilitated and their capacity to contribute towards ecosystem functions, biodiversity protection and improved adaptation to climate change is restored.			
Capa	city Development Output	Performance Indicator(s)	Means of Verific	ation
1.3a	Government, stakeholders and land resource owners have the capacity to identify degraded lands, develop strategies to rehabilitate and be able to use guidelines, financial resources and expertise to undertake rehabilitation work.	 Data layers of land degradation and land use produced by 2011 Training in land degradation data collection and mapping undertaken Best practise guidelines disseminated to key stakeholders, including developers and communities by 2011 Land degradation mitigation options are promoted and incorporated into land development and planning Enabling environment of rehabilitation of degraded land developed/strengthened Increased awareness among stakeholders regarding rehabilitation initiatives 	 Centralised lance Training reports Guidelines ESD and Elidevelopment Policies and legidegraded lands Surveys Education and a 	I information system A applications for land gislation for rehabilitation of wareness activities
Priori	Priority Capacity Development Actions			Partner Agencies
1.3.1	Undertake assessment and data collection land areas in the Cook Islands including pos	programme to determine and map extent, severity and causes of degraded ssible options for rehabilitation	MOIP / NES	MOA, OMIA, SPREP, SPC

-	following use	-	SPC, OPM
1.3.3	Identify and promote locally appropriate technology and methods for rehabilitation of degraded lands	NES	MOA, SPREP, MOIP, SPC
1.3.4	Develop locally appropriate plans, policies and legislation to ensure the proper rehabilitation of degraded land, and develop appropriate capacity to monitor and enforce such plans	OPM	NES, MOA, MOIP, SPREP, SPC, Private developers, Aronga Mana
Other	Long Term Actions		
• F €	Review existing legislation and policies to provide for specific mention of the need to operate development within the framework of sustainable land management and to ensure SLM issues are recognized in sectoral management plans.		

SPC, OPM

NES

MOA, MOIP, SPREP,

Incorporate sustainable land management issues into educational curricula as teaching subject areas at all levels. ٠

Develop best practise guidelines for activities that may degrade land, including aggregates mining, local dumpsites and landfills, excavations and land clearance, to minimise potential land degradation and develop rehabilitation plans

ENVIRONMENT GOAL 2: Land degradation and Sustainable Land Management mainstreamed into national planning processes

Envir	Environment Outcome			
2.1	2.1 Improved land degradation mitigation actions as a result of an improved enabling environment			
Capa	city Development Output	Performance Indicator(s)	Means of Verifie	cation
2.1a	National government agencies and key stakeholders able to develop and effectively implement management frameworks and priority actions to address land degradation, land use and sustainable land management, with supporting coordination mechanisms, awareness and funding	 Integrated land and resource management framework in place At least 2 projects on land degradation and sustainable land management are developed and submitted to funding agencies Formalised coordinating taskforce or country team developed to address land degradation and sustainable land management issues 	 OPM reports NES reports SLM Project reports Project proposal documents Taskforce endorsed by Cabinet 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
2.1.1	2.1.1 Develop and adopt an integrated land and resource management framework, supported by appropriate policies, plans and legislation, that is in harmony with the principles of sustainable land management and the customary land tenure system, to guide land use change, tourism and urban development and associated infrastructure, based on information and knowledge of the links between SLM, environment sustainability and economic development development development development.			NES, Aronga Mana, TourismCls, MOJ, Govt Agencies
2.1.2	Complete the National Action Plan for Land Degr and strengthen national ownership of the LD NA national development plans	adation, ensuring coverage of issues in the Outer Islands, AP across all sectors, including communities, into relevant	NES	MOA, MOIP, OPM, Community groups, TIS, SPREP, SPC
2.1.3	Develop or strengthen existing coordinating mech- effective management of natural resources, e formalisation of a national taskforce or country tear	anisms between relevant stakeholders for consolidated and cosystems and land degradation, including though the m	NES / OPM	MOA, MOIP, Aronga Mana, MOH, NGO's, MMR
2.1.4	Develop capacity for the application of Economic where sustainable land management is important a	Valuation of Land Degradation especially to promote areas and the consequences of actions or inaction	NES / NHRD	OPM, MFEM, MOIP, SPREP, SPC
2.1.5	Develop media and communications strategy to in to local communities and target the mainstreaming	crease exposure and awareness of land degradation issues of land deg and SLM into sectoral planning	NES	MOIP, TIS, MOA
2.1.6 Develop project proposals based on the findings of the NAP, NCSA and NESAF, targeting on-the-ground projects for land degradation and sustainable land management, including capacity building and promote widely to donor agencies and Government.			NES	MOIP, MOA, OPM, MFEM – Aid, MMR, NGO's
Other Long Term Actions				
• F 6 • I	 Review existing legislation and policies to provide for specific mention of the need to operate development within the framework of sustainable land management and to ensure SLM issues are recognized in sectoral management plans. Incorporate sustainable land management issues into educational curricula as teaching subject areas at all levels. 			

ENVIRONMENT GOAL 3: People of the Cook Islands accessing information and technical capacities for land degradation

Environment Outcome				
3.1	Accurate and continuous data with the support of appropriate information management systems and technical capacities enables national government agencies and stakeholders to address land degradation issues			
Priori	ty Capacity Development Output	Performance Indicator(s)	Means of Verific	cation
3.1a	National government agencies and stakeholders are able to manage land degradation data and information (including capacity to develop information management systems, undertake data collation and analysis, and use GIS), to mobilize appropriate data dissemination to all levels of users and source funding to maintain data collection and information management programmes.	 Centralised land and resource information system Data gaps identified and prioritised, and a data collection programme developed to address gaps Training in information management, data collection, data analysis and GIS 	 Designated agency Protocols for information sharing developed Data layers collected Training Reports 	
Other	Long Term Actions		Lead Agency	Partner Agencies
3.1.1	Strengthen the capacity of the designated agen information system that is accessible by all stakeho	cy to facilitate and manage a central land and resource olders	LD taskforce	MOIP, NES, MOA, OMIA, OPM, Aronga Mana, NGO
3.1.2	Undertake an assessment of available data to determine data gaps and information needs for natural resources, ecosystems and sustainable land management and develop and implement monitoring and data collection programmes for natural resources, ecosystems and land information		NES	MFEM - Stats, MOIP, MOA, OMIA, MOH, SPREP, SPC
3.1.3	Strengthen the capacity of existing agencies responsible for natural resources in data collection, analysis, reporting		MFEM - Stats	MOIP, MOA, NES, OMIA, MMR, MOH, OPM
3.1.4	Formal and informal training and skills developme use planning methods, techniques, approaches ar multi-criteria and objective based planning; capability/suitability methods; and, integrated catch	ent of national and community level personnel for resource ad systems; GIS development; resource inventory methods; ecosystems approaches to land use planning; land ment and coastal zone approaches.	NHRD	NES, MOA, MOIP, OMIA, OPM, SPREP, SPC



CROSS CUTTING ENVIRONMENT ISSUES

ENVIRONMENT GOAL 1: Coastal resources in the Cook Islands are managed in an integrated manner

Thema	Thematic Area: Coastal Zone Management			
Environ	Environment Outcome			
1.1	1.1 Increased resilience and capacity of coastal resources to support population pressures through effective management and the reduction in impact of activities in the coastal zone			
Capacit	y Development Output	Performance Indicator(s)	Means of Verific	ation
1.1a	Better co-ordination between stakeholders, Ministries, and community organizations resulting in sharing of information, database, management and monitoring mechanisms	 Database/inventory of coastal resource information developed and utilised by stakeholders Coastal atlases and ICM plans developed for at least 3 islands by 2012 Co-ordination of policy and coastal management issues strengthened Guidelines for coastal resources developed and disseminated Training and capacity development exercises for ICM carried out for key stakeholders Increase in technical capacity Improvements to guidelines and best practices for preventative measures developed Increase in effective climate change monitoring mechanisms Interface process with stakeholder agencies/local government identified 	 Database insert NES reports Inter agency Pre Guidelines Training worksh 	ted within key ministries otocols established top reports
Priority	Capacity Development Actions		Lead Agency	Partner Agencies
1.1.1	Development of an integrated coastal resource policy gaps and conflicting mandates within co coastal areas and the management of human ac	management framework to counter fragmentation, duplication, astal areas related to the management of limited resources in tivities in coastal and adjoining areas	NES	OPM, OMIA, MMR
1.1.2	Clarify and evaluate roles and responsibilities, between public and private sector etc in order to	nstitutional arrangement options and coordination mechanisms develop a harmonized approach to coastal zone management	PSC	NES, COC, MMR, MOE
1.1.3	In collaboration with the national assessment comprehensive inventory of marine and coas information for coastal zone management and do	nt of natural resources, undertake and regularly update a tal resources and conditions, which should provide baseline evelopment decisions	NES/NHT	MMR, MOIP, MOH, TIS, OPM, OMIA, Island Councils, WWF
1.1.4	Strengthen working relationships of Ministry of Ministry of Health with other organisations respo	Marine Resources, the National Environment Service and the nsible for environment health and quality issues	NES	MOH, OPM
1.1.5	Establish or identify appropriate inter-governme coordination of activities related to management	ental mechanisms to facilitate regular information sharing and of the coastal area	OPM	NES, MOIP, MMR, MOH

1.1.6	Develop Coastal Atlases and an Integrated Coastal Management (ICM) Plan to address land and water management problems affecting the coastal zone, through broad-based consultation at the community level, and ensure necessary legislative frameworks and capacity to implement, monitor and evaluate management plans	NES	MOIP, MMR, MOH, WWF, TIS, Aronga Mana
1.1.7	Develop human technical capacity to plan, implement, monitor and evaluate Integrated Coastal Management programmes and activities	NES	NHRD, MMR, MOIP
1.1.8	Establish guidelines and standards for the siting, construction, development and operation of residential, tourism and industrial structures in the coastal area	OPM/SPC	MOA, NES, MMR, MOH
1.1.9	Ensure that development activities within the coastal zone are co-ordinated amongst responsible agencies, does not cause harm to human health or the environment, and that all activities are within the "carrying capacity" of fragile coastal resources	NES	MOH, MOIP
1.1.10	Encourage better understanding among both institutions and developers regarding Environment Impact Assessments (EIAs), its purpose and its usefulness as a tool for determining the impact of the environment on development and activities	NES	MOIP, MOH
1.1.11	Foster and maintain closer working relationships between government and environment NGOs, CBOs and the private sector involved in fisheries, land, water, and waste management issues or activities that impact upon coastal resources	NES	MOIP, MOH, MMR, TIS, AMMAG, WWF, Private sector
1.1.12	Promote the need for more local case studies in coastal resources and management, encourage partnerships with relevant institutions, agencies and technical expertise, and develop local capacity for coastal zone research through mechanisms such as research counter-parting programmes	MMR	NES, OPM, USP, CBOs, NGOs
1.1.13	Develop appropriate communications strategies to raise awareness of the impacts of activities, climate change and poor land management on the coastal zone and promote alternatives or adaptation option	NES	MOA, MOIP
1.1.14	Develop capacity to carry out Strategic Environment Assessments (SEAs) and ensure that SEAs are carried out for all new national and sectoral policies and strategies	NES	OPM, MOA, MMR, MOH, NHT, SPREP, Regional expertise
1.1.15	Implement and maintain information management systems for data related to coastal areas, resources and activities, in line with existing land information management systems and ensure appropriate local capacity in relevant agencies for ongoing maintenance and updating of these information systems	MOIP	NES, MMR, MOH, MOA
Other L	ong Term Actions		

- Develop capacity of relevant ministry and agency staff to provide sound advice (legal, social, economic, biological) for coastal resource and environment management
- Develop training manuals and courses related to coastal management at different levels drawing on institutional knowledge from experienced staff for capacity development and empowerment of relevant agencies, organisations and communities
- Identify and promote appropriate technologies to relevant stakeholders and communities to improve treatment and management of agricultural and commercial wastes and minimise the impacts of this waste on the environment
- Carry out on-going environment monitoring programmes for the Cook Islands, as part of an integrated coastal zone management strategy, including standardized long term beach profiling programme to allow for data comparison of any changes to coastal foreshore
- Protect reefs to ensure resilience and the removal or reduction of additional stress from land based human activities including through mechanisms such as Ra'ui
- Develop community programmes for coastal protection including planting of traditional trees and native plants along the foreshore
- Strengthening the role of customary practices in environment and coastal zone management through the Ariki and Aronga Mana (traditional leaders).
- Strengthen local capacity for coral reef monitoring to ensure continuous and comparable data, and expand the monitoring to other islands to have a better picture of total Cook Islands coral reef health
- Encourage school programmes related to coastal resource management such as 'Adopt a beach' and Sand Watch

Them	atic Area: Coastal Vulnerabilities			
Envire	onment Outcome			
1.2	Increased resilience and capacity of coastal resour	ces to coastal vulnerabilities and disasters		
Capad	city Development Output	Performance Indicator(s)	Means of Verific	cation
1.2a	Improved capacity to identify and address vulnerabilities of coastal resources, including through preventative infrastructure planning	 Building Code adjusted to incorporate vulnerabilities and impact of environment on infrastructure Increased capacity of regulatory agencies to co-ordinate and share information Human resource capacities identified Development of database Number of education and awareness materials produced and disseminated, targeting policy/decision makers and the general public as residents and resource users 	 MOIP Building Code Effective communications strategy in place Inter Agency/local government partnership protocols developed 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
1.2.1	Develop a coordinated programme and technical for coastal areas of all islands in the Cook Islands	capacity to carry out vulnerability and adaptation assessments	NES	MMR, MOIP, CI Red Cross, MOH, COC, OMIA
1.2.2	Source necessary data and develop data sharing a assessments for all islands in the Cook Islands	arrangements needed to undertake Vulnerability and Adaptation	NES	MMR, MOIP, MOA, CI Red Cross, MOH, Private Sector, Island Councils, OPM, EMCI
1.2.3	Based on V&A results, develop "vulnerability atlat climate change, land degradation and biodiversity	ses" which identifies areas that are vulnerable to the impacts of oss	NES	MMR, MOIP, CI Red Cross, MOH, OMIA
1.2.4	Ensure as an urgent priority that assessments change, on a project are a formal part of all develo made in the relevant legal and institutional structure	of the possible impacts of the environment, including climate opment planning processes, and appropriate changes should be es to facilitate such considerations	NES	MOIP, MOH, NSDC, Infrastructure Committee
1.2.5	Incorporate design, construction and building tech conditions into current building control codes and enforcement systems with appropriate capacity b planning at the development stage Develop part data sharing, website development, training, newsl	nologies related to climate change, extreme events and future d standards, and develop inspection guidelines and regulatory uilding and training in implementation, to support preventative nerships and protocols on a cross sectoral basis in regards to etters, resource sharing and policy exchange	NES	MOIP, MOH, Engineers
1.2.6	Develop and disseminate guidelines and best proofing of infrastructure and developments to acc	practises for preventative infrastructure planning and climate	NES / MOIP	MOIP, MOH, Engineers, International and regional expertise
1.2.7	Assess options to identify appropriate adaptatic employed at specific locations to mitigate identifie protection mechanisms	on technologies and solutions that are suitable and can be d coastal vulnerabilities, including technologies such as coastal	MOIP	NES, MMR, Engineers,
1.2.8	Develop capacity of vulnerable communities to co flood events, through emergency management pla	be with identified vulnerabilities, including onset of droughts and his and promotion of water conservation practises	MOIP	NES, CIIC, MOH, Koutu Nui, Media

Other Long Term Actions

- Undertake awareness programmes of risks of coastal area property and development from climate change and coastal erosion and promote and encourage the incorporation of adaptation technologies and consideration into future and, where possible, existing coastal development to mitigate coastal vulnerabilities
- Develop and update a Small Islands Developing States (SIDs) 'best practices' and lessons learnt on technologies applied and utilised for coastal protection and costal resource management
- Establish and develop effective climate monitoring capacity to provide for effective climate change risk management physical planning
- Develop local capacity for risk analysis and research into locally appropriate adaptation technologies including coastal protection mechanisms

ENVIRONMENT GOAL 2: Cook Islands natural resources are sustainably managed

Envir	Environment Outcome				
2.1	Cook Islands natural resources are managed in a s	sustainable manner within the carrying capacity of the resource			
Capa	city Development Output	Performance Indicator(s)	Means of Verification		
2.1a	Government and stakeholders aware, have sufficient information available on resources and are implementing sustainable resource management	 Assessments of status and carrying capacity of natural resources carried out Monitoring of NSDP activities relating to our natural resources carried out every 6 months Institutional strengthening issues identified Public relations campaign initiated Local government involvement Co-ordination of agencies for integration of initiatives such as MapInfo database within 12 months Centralization of physical, resource and planning management systems under a GIS platform Early identification of land usage availability 	 Database established on inventory of natural resources Review of legislation undertaken New policies implemented to reflect increase in awareness Inclusion in all new policy proposals on development Training workshops on capacity building implemented 		
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies	
2.1.1	Incorporate the principles of sustainable resou institutions dealing with developmental planning a promote these principles	rce management into the mandates and procedures of all ind resource management, and work with the private sector to	NES	OPM, MOIP, Private Sector	
2.1.2	Utilise national frameworks such as the Nation sustainable resource use and management	al Sustainable Development Plan and NSDC to mainstream	OPM	NSDC, NES, MOIP, MMR, MOA	
2.1.3	Develop capacity and undertake an assessment natural resources through identification of locally a impacts of social and economic development to de	of the "carrying capacity" of the existing environment including appropriate methodologies, in addition to an assessment of the termine appropriate guidelines for future development	NES	MOIP, MMR, MOH, MOA, OPM, Regional expertise	
2.1.4	Develop, through broad-based community const and actions that will protect the capacity of isla resources that support sustainable livelihoods, traditional conservation practices, island customs	ultation, integrated Resource Management plans, programmes and ecosystems to deliver goods and services and biological and will not undermine the rights of traditional landowners, and the land tenure system	NES	NSDC, OPM, MMR, MOA, Aronga Mana, MFEM, INT AFF, Island Councils, Private Sector, Commuities	

2.1.5	Facilitate the creation, operation and administration of community-based local area resource management programs (such as the local area management plan developed under the International Waters Program), which supports community management of natural resources, including appropriate capacity building programmes	NES	CBOs, Aronga Mana, Appropriate Government agencies, Private Sector, Resource Owners
2.1.6	Strengthen and develop institutional capacity for sustainable and adaptive resource management within relevant agencies and organizations for improved resource management and response to changing environments and situations	NES	MOA, MMR, MOIP, MOH, OPM, MFEM
2.1.7	Support initiatives such as the MapInfo Server database under MOIP and ensure that all relevant agencies actively contribute to the content of this site, in order to develop a centralised Land Information Management System on a GIS platform as a basis for integrated and coordinated physical planning and resource planning, management, use and development activities	MOIP	Land data agencies OPM, NES,
2.1.8	Develop capacity in the application of economic valuation of environment services, especially to promote areas where sustainable resource use is important and the consequences of actions or inaction	NES	SPREP, SPC, MFEM, OPM, MOA, MOIP, Private Sector, NGO's
Other	· Long Term Actions		
• E	Establish a legal and institutional framework for the coordinated inter-sectoral management of natural resources and and managing human activities in sensitive areas to ensure that development does not cause harm to human health of the sector of the sect	environment progra	mmes focused on sustainable use and that all activities are within the

"carrying capacity" of natural resources
Develop new and strengthen existing enforcement and compliance training programmes for newly developed and existing legislation, particularly for officers and community leaders dealing with relevant legislation so they are aware and can assist in enforcement programmes

• Promote and implement the National Environment Strategic Action Framework as one of our strongest tools for sustainable management and use of natural resources within the Cook Islands

• Co-ordinate through appropriate mechanisms, all decision-making concerning resource use and development activities to facilitate an integrated approach to resource management ensure it is guided by established local area and national resource management policies and plans, and assessment on the impact of the proposed development of the natural resources and social development in any local area

ENVIRONMENT GOAL 3: People of the Cook Islands practising sustainable and integrated water resource management

Then	Thematic Area: Water Resource Management			
Envir	onment Outcome			
3.1	.1 Improved quality and quantity of water resources in Cook Islands due to better management in an integrated and sustainable manner			
Capa	city Development Output	Performance Indicator(s)	Means of Verific	ation
3.1a	Government and stakeholders have the capacity to manage water resources in all islands sustainably and in an integrated approach, based on accurate data of the status of resources, with robust supporting legislation and policies	 Carrying capacity of water supplies on all islands completed and analysed Comprehensive inventory undertaken on all islands to assist with development of water policy initiatives Water Policy completed and implemented Recommendations of Water related legislation review implemented Workable interagency plans and sharing of information Island specific water resource management plans developed on all islands by 2010 	 Report on Water Resources OPM – Water Policy Legislation Review report 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
3.1.1	Support the Integrated Water Resource Manage environment for water resource management an integrated waster resource management to all islar	ment Project (IWRM), which aims to strengthen the enabling d can be used as a pilot project for launching improved and nds in the Cook Islands.	MOIP – Water Works	NES, MOH, IWRM team
3.1.2	Undertake a comprehensive inventory to determi Cook Islands including all freshwater resources (s catchments to provide sound information with a vi projects to ensure that freshwater resources are a and to serve as a basis for planning approvals and	ne the current state of water resources for all islands in the surface and underground), water intakes, watersheds and water ew towards the formulation of plans, policies, programmes and vailable to facilitate the sustainable development of the country, environment impact assessments.	MOIP/ Island Councils	OPM, OMIA, NES, MOH
3.1.3	Conduct a legislative review of various acts and a quality management and implement appropriate re approaches and institutional structures to sustain Cook Islands	regulations that regulate water resource, water supply or water ecommendations to address key issues and promote integrated hable management of water resources and watersheds in the	Crown Law/OPM	MOIP, MFEM – Aid Management
3.1.4	Develop and implement policies for water govern integrated water resource management, in colla program	ance as an immediate step towards an overarching policy for boration with the IWRM project and EU Water Governance	OPM	NES, MOH, MOIP, OMIA, MFEM – Aid Management
3.1.5	Develop Island specific water resource manageme	nt plans for all island in the Cook Islands	MOIP/ Island Councils	IWRM team
3.1.6	Develop and strengthen local capacity for sustaina community levels, including capacity to monitor and	ble water resource management at the national, institutional and d enforce water resource policies	MOIP	NES, MOH, MMR
3.1.7	Centralise resources and establish a core tech responsible for water quality monitoring or health on water resources, including drinking water quali borne disease statistics	nical group of water professionals/agencies that are directly surveillance, that would collate data and prepare annual reports ty of various supplies (urban, rural and outer-island) and water-	MOIP	MOH, MMR, NES, Island Councils
3.1.8	Develop strategies for attracting and maintaining including staff succession and counter-parting plan	ocal expertise in water resource management within agencies, s and ongoing capacity building and training programme	MOIP	NHRD, PSC, MFEM

Then	natic Area: Water Demand and Supply			
Envir	onment Outcome			
3.2	Water supply and demand is at sustainable levels	and with measures in place to adapt to impacts of climate change	and natural disaster	S
Capa	city Development Output	Performance Indicator(s)	Means of Verific	cation
3.2a	Government and stakeholders have the capacity to monitor and manage water demand and supply in all islands, able to identify and implement adaptation measures for climate change and natural disasters, and promote water conservation measures	 At least 5 community education and awareness events and informational materials produced and disseminated Up to date data on water demand and water supply available Alternative water supply options identified for all islands Improved emergency preparedness Economic incentives to support water storage and water conservation technologies are passed implemented Strategic plans in place for all islands Education and awareness promotion campaign established Needs analysis of water supply and demand undertaken Introduction of water conservation measures as adapted through the IWP (Takuvaine Pilot Project) Strengthening water intake capacity Data collection and monitoring processes established 	 Education and awareness materials MFEM policy on water storage and water conservation technologies Economic incentives e.g. water tank subsidies promoted Water catchment facilities upgraded and maintained Training programs through media, schools, NGO's in progress incentives Public relations campaign introduced through schools and community Island Strategic Plans Budget Process Donor funds sourced 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
3.2.1	Reassess levels of current demand and supply of	water resources on all islands including dynamics of supply	MOIP/OMIA	Regional expertise
3.2.2	Investigate alternative water sources and viable Islands, including groundwater and desalination	options to supplement water supply for all islands in the Cook	MOIP	Regional expertise
3.2.3	Develop innovative community and educational a resources, the need to protect water supply sou discouraging water wastage or excessive use as reduced-flow shower heads	awareness programmes, highlighting the finite nature of water rces and promote water conservation awareness programmes well wise water use technologies such as dual flush toilets and	Moip/omia	EMCI, Red Cross, NES, MOH, NGO's
3.2.4	Develop economic incentives to encourage the u tanks and low energy pumping equipment, an technologies and equipment including the installati	se of water storage facilities, including the installation of water nd to encourage investments in alternate water catchment on of roof spouts and gutters for rain catchment.	MOIP/MFEM	NES, OPM, Aid Management
3.2.5	Ensure that any regulatory regime for water resou to address likely impacts from climate change/varia	rce management incorporates appropriate adaptation strategies ability.	NES	MOIP, OPM, EMCI, Island Councils
3.2.5	Strengthen the capacity for monitoring effects of systems for water resources supply and ongoing m	f Climate Change on water resources including early warning nonitoring for onset of drought through systems	MOIP/ Met. Serv.	EMCI, NES, Red Cross, Island Councils

Thematic Area: Water Quality

Environment Outcome

3.3 Cook Islanders enjoy quality water resources

Capad	city Development Output	Performance Indicator(s)	Means of Verific	cation
3.3a	Government and stakeholders have capacity and resources to monitor water quality and protect water sources	 Technical officers responsible for water testing can competently carry out their duties and have adequate equipment and operational budgets Guidelines for water quality and testing and quality management plans developed and partnership agreements in place Interagency/local government and community awareness to monitor and protect water resources Public relations strategy developed Improvements to water quality testing facilities 	 Annual reports from responsible Ministries Funds approved through Budget process Training program in place Laboratory facility in place 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
3.3.1	1 Implement a coordinated monitoring regime for water quality with all relevant agencies and a centralised testing facility for all environment testing, and develop a coordinated monitoring programme to guide water testing activities		MOIP	MOH, MMR, NES
3.3.2	3.2 Strengthen capacity for conducting testing, monitoring and results analysis of drinking water quality amongst relevant agencies including the determination of agreed testing parameters, and the surveillance and monitoring of public water supplies and source waters		MOIP	MOH, MMR, NES
3.3.3	Promote water resource analysis outcomes to decision makers for informed policy and action development and to gain on-going Government commitment and support to water resource programmes		MOIP	OPM, MOH, MMR, NES
3.3.4	Develop a centralised platform for rapid dissemination of water quality and quantity information to stakeholders and the general public		MOIP	MOH, MMR, NES
3.3.5	Strengthen Catchment Management at all twelve (12) intakes on Rarotonga, including through the establishment of legal measures and the development of management plans to protect water catchment areas		MOIP	OPM, NES
3.3.6	Develop appropriate site and island specific management plans for all water catchment areas and water supply systems		MOIP/NES	MOH, MMR, NES
3.3.7	Drawing on lessons learnt from the Takuvaine International Waters Project, explore further appli ensuring provision of a legal basis for enforceme catchments by landowner groups	(Water Catchment) Management Plan produced under the cation of community-based water resource management plans, nt of such plans and the introduction of community policing of	NES	Takuvaine Management Committee, SPREP, MOIP

Other Long Term Actions

- Strengthen legal and institutional structures with effective strategies and mechanisms to provide for co-ordinated and integrated approach to management and administrative functions in respect of water resource management activities by the large number of agencies that play some role in water resource planning, conservation, management or use.
- Provide for the integration of climate change and land degradation considerations into all national water resource management policies plans and programs
- Identify funding sources (national budget and donor aid) for water resource management including funding implementation of water safety and resource management plans
- Regularly disseminate information on water resource issues to stakeholders communities to ensure understanding and awareness, as well as buy-in into actions to address sustainable water resource management
- Improve access to relevant regional and national climatic data including through the establishment of networks with regional meteorological centres for information sharing on climate change and regional weather patterns
- Improve preparedness for natural disaster events that could have significant impact on water resources and water supply
- Develop capacity and resources for the integration of traditional and modern water resources management, including water conservation practices, across all subjects and levels of the school curriculum.
- Undertake capacity building and development for water quality monitoring programmes in the Outer Islands
- Involve communities in decision making regarding water resource management including conducting workshops to empower communities to take more ownership and responsibility of their drinking water
- Prepare annual reports on drinking water quality status and share among key stakeholders.
- Establish and enforce water quality standards (based on World Health Organization standards for drinking water, recreational waters, and irrigation waters) by the Ministry of Health and Department of Water Works
- Encourage the use of low cost water filters within water intakes and individual households to increase the quality of water supply
- Identify appropriate technology, infrastructure and equipment for water supply and to strengthen on-going monitoring of drinking water quality

ENVIRONMENT GOAL 4: Environmentally sound management of Waste, Sanitation and Pollution in the Cook Islands

Envire	onment Outcome			
4.1	4.1 Effective strategic management of waste, pollution and sanitation systems in place for all Islands			
Capad	city Development Output	Performance Indicator(s)	Means of Verific	ation
4.1a	Government, stakeholders and the private sector take responsibility for ensuring that effective waste management systems are implemented taking into consideration the impacts on our environment, tourism and regulatory requirements	 National Waste Strategy completed and implemented Nationwide waste management assessments undertaken within 12 months Operations Manual for Rarotonga Landfill adopted and implemented Tonnage of recyclables exported annually Compliance with Sewage Regulations Imports and exports of hazardous wastes 	 Island Waste Management Plans Operations Manual Recyclers reports on exports MOH Reports Customs and Statistics data 	
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies
WAST	EMANAGEMENT			
4.1.1	Clarify the roles and responsibilities of relevant waste management stakeholders in the review of the draft National Waste Strategy as an immediate priority, finalise and submit to Cabinet for endorsement and support for implementation		ОРМ	MOIP, NES, OMIA,
4.1.2	Strengthen relationships between agencies and organisations involved with waste management for improved collaboration and coordination of activities		OPM	NES, MOIP, NGO's,
4.1.3	Promote the National Waste Strategy to the priva	ate sector for private sector involvement	OPM	NES, MOIP, COC, NGO's,
4.1.4	Produce island specific management plans for waste, particularly for the Outer Islands with an emphasis on waste minimisation		OPM	NES, MOIP, OMIA, NGO's Island Admin's, Tourism
4.1.5	Continue to support partnerships and resour implementation of communication strategies to p	arce sharing between waste management agencies in the promote effective management waste	OPM	NES, CITV, MOE, MOH, OMIA
SOLID	WASTE			
4.1.6	Encourage 'at source' separation to minimise wa	ste and ensure the life of the landfill is extended	MOIP	NES
4.1.7	Encourage the reduction of solid waste to the n reuse, and recycle and "polluter pays"	ninimum practicable level using the principles of refuse, reduce,	NES	MOIP, MOH, MOE, CITV
4.1.8	Clearly define regulatory, management and enforcement roles and responsibilities of the various agencies involved in solid waste management and Island councils, with clarity provided under appropriate regulations		OPM	NES, Crown Law, OMIA, MOIP
4.1.9	Introduce and legislate innovative economic m support sound environment management of solid	easures and incentives, such as focused tariffs and levies, to d waste from point of entry through to disposal	NES	MFEM, MOIP
4.1.10	.10 Establish appropriate legal and institutional frameworks and operational plans for the management of solid OPM NES Court wastes on all Outer Islands, and pass appropriate bylaws			NES, OMIA, Crown Law, Island Councils, MOIP
LIQUI	D WASTE			
4.1.11	Undertake a feasibility assessment to identify p sewage systems to comply with new Sewage Re	possible mechanisms to support the retrofit of septic tanks and egulations	МОН	CIMRIS

4.1.12	Facilitate establishment of a centralized laboratory testing facility and to strengthen capacity to test for treated effluent	МОН	NES, MOA, MOIP
4.1.13	Develop appropriate bylaws or regulations to manage liquid waste and sludge for all islands	OPM	NES, Crown Law, OMIA, MOH
4.1.14	Encourage the provision of ongoing training in on site sewerage management systems and drain laying	NHRD	MOIP, MOE, COC
4.1.15	Conduct detailed economic and environment feasibility study to consider a centralized sewerage system, communal or cluster systems, on site sewerage treatment systems and a combination of the 3 and composting toilets	OPM	MOIP, NES, COC, MFEM, CIIC
HAZARE	DOUS AND DANGEROUS WASTE		
4.1.16	Develop and strengthen local capacity to carry out a national assessment of hazardous and dangerous substances and waste in the Cook Islands	OPM	NES, MOT, Ports Authority, OMIA, MOH
4.1.17	Establish a Cabinet Committee to co-ordinate and implement the National Waste Strategy which includes hazardous and dangerous substance and waste	OPM	MOT, NES, MOH
4.1.18	Establish regulatory instruments which will create appropriate economic incentives to promote the sound management and disposal of hazardous substances	Crown Law	OPM, MFEM, NES, MOT
4.1.19	Facilitate an integrated approach to establishing legislative and institutional structures to accommodate the development and implementation of national stocktake inventory on hazardous waste, policies and management plans, licensing procedures for waste facilities and transporters and an integrated pest management program	OPM	MOT, NES, Crown Law, OMIA, MOH, MOE, MOA
4.1.20	Provide incentives for industries to establish sound hazardous substance management plans and provide training in hazardous substance management, recycling and disposal	OPM	NHRD, NES, MOIP
MARINE	POLLUTION		
4.1.21	Review the Prevention of Marine Pollution Act 1998 with a view to incorporating amendments taking into consideration the roles of various government agencies in the management of marine pollution from ships and land based sources and appropriate legal and institutional frameworks	МОТ	Crown Law, Ports Authority
4.1.22	Revise the National Oil Spill Contingency Plan to include standards and protocols for the environmentally sound disposal of any waste oil recovered after a spill: to regulate the types of dispersants that can be used during any spill and to regulate clean up activities in sensitive and coastal foreshore areas	OPM	MOT, NES, Crown Law, MOH, Ports Authority

CROSS CUTTING CAPACITY ISSUES

ENVIRONMENT GOAL 5: Environment issues are managed in an integrated manner by multiple stakeholders

Envire	Environment Outcome			
5.1	1 Environment issues are given serious consideration and incorporated into all national planning and development processes			
Capad	Capacity Development Output Performance Indicator(s) Means of Verific			cation
5.1a	Key capacities and responsibilities in Government, NGOs, CSOs and private sector developed for the integration of environment management into national and sectoral planning processes with an integrated Monitoring and Evaluation Framework	 Number of personnel trained in environment M&E and the preparation of State of the Environment Reports Number of policy makers and planners trained in environment assessment and environment economic valuation Greater presence of environment considerations within national and sectoral plans/strategies/policies Active participation of stakeholders and NGO's at workshops Outdated legislations and policies, identified, reviewed and updated 	 Training reports State of the Environment Reports Budget Policy Statements Ministry business plans NSDP and NESAF Reports Legislation Drafting Outputs 	
Priori	Priority Capacity Development Actions			Partner Agencies
5.1.1	As part of a National Monitoring and Evaluatic Environment Reports on a regular basis as a le monitoring of environment implementation and h	n Process, undertake the preparation of National State of the gal requirement by responsible ministries and departments, for ealth.	NES/OPM	MMR, MOA, MOIP, MOH
5.1.2	Environment information and data, including Sta available to policy makers and planners, and u environment management activities within releva	ate of the Environment Reports, should be promoted and made sed to lobby support for the integration and implementation of ant ministries and agencies	NES	MFEM – Stats, MOIP
5.1.3	Promote environment management as a priority planning and budgetary processes, including valuations, to ensure adequate resources are all	 area in the annual Budget Policy Statement and Government through the presentation of supporting data or economic ocated for implementation activities 	NES	MFEM – Stats, MOIP, NHT, MMR, MOA
5.1.4	Strengthen local capacity for the development environment management activities within Minist	of policies and strategic planning to support the integration of ries	OPM	NES, MMR, MOA, MOH
5.1.5	Increase awareness and understanding of the national level support for national and local imple	imitations of donor funding to project outputs and the need for ementation of environment management activities	NES	MFEM, OPM, MOA
5.1.6	Build and strengthen local capacity to utilise ecc tools, including capacity for environment accor contribution of natural resources and indicate the	nomic valuation of environment goods and services as planning punting, economics and auditing, to promote the "value" and e economic "consequences" of resource degradation and use	NES	OPM, MOIP, SPREP and regional experts
5.1.7	Ensure that lead and supporting responsible ag and policies are identified, and provided support and coordinated environment management	encies for the implementation of environment related strategies rt for institutional strengthening and mechanisms for improved	NES/OPM	Identified agencies
5.1.8	Strengthen partnerships and resource sharing a private sector and communities for the implem collaborative efforts on advocacy and capacity b	greements between Government ministries, environment NGOs, nentation of MEA and environment activities including through uilding programmes	NES	OPM, TIS, WWF, others

5.1.9	Utilise existing mechanisms (such as for Head of Ministry meetings) for information sharing of planned activities and projects within and between Ministries and Agencies to avoid duplication of efforts and promote cooperation, collaboration and sharing of limited resources.	OPM	NES
5.1.10	Consideration should be given to strengthening the role of customary practices in environment and resource management to encourage ownership and action by communities and individuals	NES	House of Ariki, Koutu Nui, MOCD
5.1.11	Expand local capacity and resources for legislation development and review to support the necessary integration of environment issues into legislation including through ensuring local counterparts are attached to any regional or international legal expertise utilised in country	NES/Crown Law	USP

ENVIRONMENT GOAL 6: People of the Cook Islands are educated and aware of environment issues

Envire	Environment Outcome				
6.1	Environment awareness issues integrated into education training related programmes through government, stakeholders, schools, community and the private sector				
Capad	city Development Output	Means of Verific	cation		
6.1a	Training and skills enhancement programmes established to support environment awareness issues in collaboration with an appropriate communication and education awareness campaign	 Number of training and capacity building programmes delivered to local communities and youth groups. Increasing number of trained locals and community groups with environment project management skills. Number of new and locally relevant environment publications and brochures developed annually. 	 Annual statistics from schools and NHRD Effective communication strategy implemented Brochures and publications circulated Education workshops implemented Appropriate resources allocated Island Strategic plans 		
Priority Capacity Development Actions			Lead Agency	Partner Agencies	
6.1.1	Develop a systematic approach to environmer communications strategies, effective measure partnerships between stakeholders in order environment	nt education and awareness including developing specific s at different levels (e.g. national or community), and to achieve positive behavioural change towards the	NES	MOE, MOH, NGO's, Aronga Mana, WWF, TIS, MOA, MOE	
6.1.2	In collaboration with the Ministry of Education, incorporate environment education into targeted professional development programmes for educators and develop curriculum resources, expertise and support to strengthen capacity to undertake environment education		NES	MOE	
6.1.3	Biodiversity, climate change and land degradation experts need to provide more assistance to formal educators especially to help teachers develop and fully understand their environment programmes in an educationally useful format		NES	MFEM (Aid Management), Justice	
6.1.4	Develop capacity of appropriate staff within relevant agencies to act as information brokers or communicators who are able to undertake the translation of scientific and technical environment related information from Convention text, international and regional resources into simplified clear language for dissemination		NES	MOE, MOH, MMR, MOIP	
6.1.5	Continue to support the production of media an in a simplified bilingual format, ensuring the language/dialect	NES	MOE, MOH, OMIA, NGO's, CITV		
6.1.6	Work with appropriate authorities and individ information and terms e.g. land degradation	duals to develop Maori language for new environment	MOE	NES, Culture, MOE	

6.1.7	Improve local capacity at the government and community level and availability of resources to produce quality localised media productions, awareness and educational materials related to environment issues, including through development and implementation of targeted training programmes and the establishment of formal mechanisms to access international, regional and national expertise and resources	NES	OPM, Media, MOE, MOH
6.1.8	Strengthen working relationships between government, environment NGOs, CBOs, and academic institutions involved in environment awareness and education activities and utilise effective mechanisms to improve the exchange of data and information for improved coordination and collaboration of activities and resource sharing	NES	OPM, MOE, NHRD
6.1.9	Develop partnerships, cost sharing initiatives and innovative communication tools where possible for the production and distribution of environment related resources to maximise national coverage, particularly to the Outer Islands	NES	MOE, OMIA, CITV,
6.1.10	Identify and source resources that can be shared amongst communities/villages (especially in the outer islands), for accessing environment information.	NES	MOE, NGO's, MOH, OMIA,
6.1.11	Develop and strengthen capacity for monitoring and evaluation of environment education and awareness programmes and to undertake evaluations and cost-benefits analysis of various mediums for communications to determine the effectiveness of messages and mediums in disseminating environment information for different target audiences	NES	MOE, OPM
6.1.12	Ensure that national environment HRD priorities are identified, updated and promoted to NHRD, students and interested parties to garner interest in pursuing these areas of study and for scholarship selection purposes	MOE	NHRD, NES,
6.1.13	Empower Youth Division of Ministry of Internal Affairs, youth groups, environment NGO's to participate in any development of environment education in the Cook Islands including through capacity building and strengthening of coordinating mechanisms	INTAFF	NES, MOE,
6.1.14	Develop and implement programmes to involve students, youth and communities in environment monitoring e.g. Stream walk under IWP, Tanga'eo warriors etc and encourage the dissemination of similar programmes to all islands	MOE	NES, Island Admins
6.1.15	Continue to support the capacity development of community groups and youth to act as facilitators and peer educators in community awareness programmes on environment issues and conducting training and conservation initiatives for young people to enhance their skills in environment management.	NES	MOE, Natural Heritage
6.1.16	Where practical, utilise existing events such as expos, science fairs and competitions to promote environment issues to students and encourage students to participate in environment events	NES	OPM, MOE, MOH, MOIP, OMIA

ENVIRONMENT GOAL 7: Environment information is managed and disseminated effectively

Enviro	onment Outcome				
7.1	People of the Cook Islands have the capacity and capability to manage environment information efficiently and effectively				
Capac	Capacity Development Output Performance Indicator(s) Means of Verification				
7.1a	 Increase in the number of technical training positions Recruitment of IT specialists Support systems to develop and maintain data and information management systems encouraged Increase capacity for ministries to utilize GIS system including resources, equipment and software 		 Information database established Government buy in to centralize information database approved Improved competencies in information database management Training capacity implemented for relevant ministries 		
Priori	y Capacity Development Actions		Lead Agency	Partner Agencies	
Inforn	nation Management		1		
7.1.1	Undertake an assessment of available data to or management including natural resources, ecosy	letermine data gaps and information needs for environment stems and sustainable land management	MOIP	NES, OPM	
7.1.2	Strengthen capacity for environment statistics, li environment statistics in national level policy for	nkages to the national Statistics Office and the use of nulation and analysis.	NES/ Stats	OPM, MMR, MOA, MOH, TIS, NHT	
7.1.3	Encourage all ministries/organisations to promote awareness of available data through the use of mechanisms such as websites, newsletters and information expos		OPM	PSC, MOE	
7.1.4	Designate an agency to facilitate and manage accessible by all stakeholders	e a central land and resource information system that is	Justice/MOIP		
7.1.5	Need to develop cooperation in sharing data government agencies	abase development and maintenance expertise between	OPM	NES, MOE	
7.1.6	Develop and implement monitoring and data co land information, including strengthening capacit	lection programmes for natural resources, ecosystems and y of responsible agencies to implement these programmes	MOIP	NES, OPM, MFEM	
7.1.7	Promote mechanisms to involve communities an	d schools in the collection of environment data	NES	MOE, NGO'S TIS	
7.1.8	Provide training and training resources for na collation of environment related data, data mar Geographic Information Systems	tional institutions, NGO's and community groups in data agement and analysis, mapping and practical utilisation of	NES	MOIP, MOE, NGO's	
7.1.9	Identify data needs and benefits or desirable outputs for individual Ministries from a GIS, develop a targeted programme for practical utilisation of GIS data drawing on existing national GIS expertise and experience where possible to support training and resource sharing initiatives, particularly for the Outer Islands MOIP NES, OMIA			NES, OMIA	
Tradit	ional Knowledge and Practises				
7.1.10	Develop national policies for maintaining the use the environment and natural resources	e and value of traditional knowledge and practices related to	NES	Culture, MOH,	
7.1.11	Develop collection programmes that capture all i their resources	sland specific traditional knowledge and practises related to	МОН	Culture, NES, OMIA,	
7.1.12	Provide support to traditional practitioners for biological resources including the use of modern	documentation of traditional knowledge and practises of forms of documentation	МОН	NES,	

7.1.13	Ensure that the initial collection of information should always be in Maori or the relevant dialect	МОН	NES, MOCD, MOE
7.1.14	Ensure that analysis or studies related to traditional knowledge and practises are translated into Maori and available to the public	МОН	MOCD, NES, House of Ariki, Koutu Nui
7.1.15	Strengthen the role of traditional leaders to enable them to play a genuine role in environment management and conservation including collection of traditional knowledge and practises	Koutu Nui	NES, MOH, MOE, Culture, House of Ariki
7.1.16	Development and enforce Intellectual Property Rights and related legislations to protect traditional knowledge and practises and the rights of the holders of such knowledge	МОН	Crown Law, Culture, NES
7.1.17	Develop national programmes for promotion and awareness in the use, application and value of traditional knowledge and practices	МОН	MOE, Culture, NES, Media, House of Ariki, Koutu Nui, NGO's
7.1.18	Ensure traditional knowledge and practises is integrated into the MOE education policy and school curriculum as part of any biodiversity programme	NES	MOE, MOH
7.1.19	Identify/register people with the relevant knowledge and skills to train teachers or be trainers on knowledge and applications of traditional practices and systems	МОН	NHRD, MOE, Culture
7.1.20	Develop locally appropriate resource materials for the promotion of traditional knowledge, practises and systems including island specific materials	МОН	NES, MOE, Media, OMIA,
7.1.21	Strengthen cultural and traditional systems that improve the resilience of local communities to disaster events	Culture	NES, EMCI, INTAFF, OPM, MOH
Informa	ition Exchange		
7.1.22	Review current databases to identify opportunities and synergies for networking and information exchange	OPM	NES, Research
7.1.23	Appropriate practical mechanisms or networks should be established, including the possibility of moving towards open internet based systems that are editable, to facilitate communications and exchange of environment information and data between stakeholders and particularly to decision makers, policy makers and planners	OPM	NES, MOE
7.1.24	Improve institutional arrangements to address data management programmes and to facilitate the sharing of resources including data sets, maps etc and to maximise use of existing tools such as Population GIS, Pacific Environment Information Network (PEIN) and the EDF 9 Map Server, while also addressing data sensitivity and intellectual property rights issues.	MOIP	NES, OPM, Justice
7.1.2	Ensure that systems such as PEIN, POP GIS and MapServer are integrated, complement each other and have established linkages to regional initiatives where possible	MOIP	NES
7.1.26	Strengthen capacity for the development and ongoing maintenance of clearing house mechanisms	NES	ОРМ
7.1.27	Within the host institutions of CC, Biodiversity and Land Degradation develop and maintain a clearing house mechanism of past, current and on-going activities and research, supported through the process of national communications.	NES	ОРМ
7.1.28	Continue to support the 'E-government' Initiative and ICT in the Cook Islands including the development of agency databases and websites for information sharing and exchange	OPM	PSC, MOH, MOE, MFEM
7.1.29	Need for trained IT nationals in most organisations able to maintain e-government	ОРМ	All govt agencies and organizations
7.1.30	Identify and strengthen suitable personnel that will be dedicated to maintaining information management systems in key Ministries	OPM	All govt agencies and organizations

ENVIRONMENT GOAL 8: Cook Islands are meeting our obligations to Multilateral Environment Agreements

Them	atic Area: MEA Implementation					
Envire	Environment Outcome					
8.1	Multilateral Environment Agreements (MEA) imple	mentation, monitoring and evaluation are linked with existing	National priorities an	id programmes.		
Capad	apacity Development Output Performance Indicator(s)			cation		
8.1a	Human and technical capacity to undertake MEA implementation, monitoring and evaluation is mandated and well resourced.	 Annual reporting of achievements and shortfalls for compliance and fulfilment of obligations, multilateral agreements and programmes Timely national reports submitted as required to Convention Secretariats 	 MEA reports NESAF review report NES Annual Reports MEA Project reports 			
Priori	ty Capacity Development Actions		Lead Agency	Partner Agencies		
8.1.1	Promote and improve the awareness of politician that the Cook Islands are a signatory to, the end Cook Islands in a local context	ans, decision makers and Government ministries of MEAs, vironment issues they are address, and how this affects the	NES	OPM, MMR, PSC,MFAT		
8.1.2	Utilise planning and policy capacity within the Conventions to support MEA implementation implementation with existing national priorities a is more likely to support	OPM	MFAI, NES			
8.1.3	Clearly define the responsibilities of all relevant Government agencies with roles under the UN Conventions, ensure these agencies are properly mandated with these responsibilities at the highest level and allocated appropriate resources to achieve this mandate and deliver MEA programmes.		OPM	MFAI, NES		
8.1.4	Combat insufficient capacity within agencies f forming partnerships or resource sharing agree NGOs and community groups for the imple complementary	ОРМ	MFAI, NES			
8.1.5	Improve local capacity for MEA monitoring, evaluation and report writing including by drawing on regiona and international expertise to undertake training programmes e.g. as identified in ADB-TA Legal and Institutional Strengthening of Environment Management in the Cook Islands		NES	MFAI, OPM, SPREP, SPC, Regional experts		
8.1.6	Develop national Human Resource Development strategies and priorities for environment management in the Cook Islands, to determine human resources needs and professional development requirements related to effective implementation of the Conventions that includes needs assessments, staff re-profiling, and short-term training		NES	NHRD, MMR, MOA, MOH, TIS, WWF, others		
8.1.7	Develop local capacity for environment econ management initiatives are financial sustainable with realistic costs and considerations.	omics, law and accounting to ensure that environment and developed/implemented within appropriate frameworks	NES	USP, SPREP, SPC, Regional experts		
8.1.8	Develop the capacity of youth and communities activities, including though training, short co designed for them	NES/IntAff	MMR, MOA, WWF, TIS, Youth groups, communities			
8.1.9	Simplify and contextualise MEA information, e improve understanding of MEA issues	ducation and awareness materials with local examples to	NES	SPREP, SPC, MOE, MOA, MMR		

8.1.10	0 Establish and implement a stringent vetting process, in consultation with relevant stakeholders that are likely to be responsible for implementation, to assess any proposed adoption of international conventions for approval		MFAI	NES, OPM, MOA, MMR, Cabinet		
Them	Thematic Area: MEA Reporting					
Enviro	Environment Outcome					
8.2	Current conditions, challenges and progress made in addressing environment issues are represented in national reports to Multilateral Environment Agreements.					
Capac	city Development Output	Performance Indicator(s)	Means of Verification			
8.2a	Human resources and technical capacity to undertake Multilateral Environment Agreement reporting is strengthened and maintained	 At least one training and awareness activity per year on MEAs At least one training and awareness activity per year on MEAs Increase in numbers of regional and national officers capable of developing MEA reports compared to 2008 MEA reports NESAF review report SPREP Annual reports 		report reports		
Priorit	y Capacity Development Actions		Lead Agency	Partner Agencies		
8.2.1	Strengthen national reporting capacity and evaluation processes, including establish a Clearing House Mechanism for the collation and dissemination of Conventions related information especially to reduce the efforts required to produce national reports to the UN Conventions. This should be developed in line with existing structures, capacitating them as required to ensure their operational efficiency			MFAI, MOIP, MOH, MOA		
8.2.2	2 Encourage and facilitate capacity building for national reporting requirements through attachments of local counterparts with international and regional consultants			OPM, NES, PSC		
8.2.3	3 Utilise current SPREP and Australian Government initiative for streamlining of Biodiversity MEAs to produce national biodiversity report to the UNCBD			NES, MMR, MOA, NHT		
8.2.4	Integrate components of the reporting process, particularly monitoring, evaluation and information management, into the annual workplans of agencies and ministries with responsibilities under the UN Conventions			MFEM, MFAI, NES		
8.2.5	Draw on regional and national expertise to under MEA reporting, including technical report writing an	take training aimed at improving Government capacity for d training of communities in reporting	AMD	NGO's, NHRD,		
8.2.6	Draw on national expertise to undertake training evaluation, ensuring that training is non-technical a	in reporting of community MEA activities, monitoring and nd in Cook Islands Maori where possible and appropriate.	NES	OPM, PSC, OMIA, NGO's		
Them	atic Area: MEA Negotiations					
Enviro	onment Outcome					
8.3	Cook Islands national environment interests are ne	gotiated and mediated prior and during Multilateral Environm	ent Agreements at a	n international and regional level.		
Capac	city Development Output	Performance Indicator(s)	Means of Verification			
8.3a	Multilateral Environment Agreement negotiation skills at an international and regional level for biodiversity, climate change and land degradation are developed and sustained.	 At least one training activity every two years on MEA negotiations carried with assistance from SPREP and MEA Secretariats 	 on MEA NES reports Training reports SPREP reports 			

Priori	ty Capacity Development Actions	Lead Agency	Partner Agencies
8.3.1	Strengthen the capacity of the MEA focal point and implementing agencies through trainings and exposure to high-level meetings for confidence building and understanding of global issues of national significance	NES	MFAI, MOA, MOIP, OPM, EMCI, Met Service
8.3.2	Ensure that the Cook Islands participate and be represented in forums and programmes related to MEAs and international obligations development	MFAI	NES, MMR, OPM
8.3.3	Access funding opportunities to increase the number of delegates to the COPs from the single individual who is typically attending in order to facilitate the development of greater institutional knowledge	NES	MFAI, PSC
8.3.4	Develop and institute succession plans and human resource strategies for Government agencies ensuring that training processes and mentoring is in place to prevent institutional memory loss of valuable environment management information	NHRD	OPM, PSC
8.3.5	Draw on national and regional expertise to assist with the development of local capacity in negotiating skills with a focus on practical negotiations skills and experiences through in-country negotiations training workshops, provision of training materials, to better equip national representatives at international meetings of the UN Conventions	NES	NHRD, MOE, MOA, MOIP, MFAI
8.3.6	Access available MEA and negotiations training and awareness programmes such as UNITAR e-learning course and any regional efforts	NES	OPM, MFAI, USP
8.3.7	Continue to contribute to the international efforts to find solutions to global environment threats, especially those pertaining to the vulnerable Small Island Developing Nations such as the Cook Islands	NES	OPM, MFAI

ENVIRONMENT GOAL 9: Cook Islands accessing financial resources to support implementation of environment management activities

Them	Thematic Area: External Donor Funding				
Envir	nvironment Outcome				
9.1	Operational support for environment projects related to Biodiversity, Climate Change and Land Degradation are financially resourced by external donors.				
Capa	Capacity Development Output Performance Indicator(s)			Means of Verification	
9.1a	Government and stakeholders have the capacity and capability to access financial resources from external donors.	 Interactive training with Donor Agency Number of trainings at national and community level in project proposal writing, reporting and project management Number of project proposals submitted to external donor funding agencies for consideration External donor funding application training and funding awareness integrated into ODA agreements 	 NES reports Training reports Aid Management Office reports 		
Priori	Priority Capacity Development Actions			Partner Agencies	
9.1.1	1 Undertake training of planning officers and stakeholders in identification of environment funding opportunities, proposal writing and project management.		NHRD	MOE, NES, NGO's,	

9.1.2	Continue to maintain strong working relations Secretariats, Convention funding mechanisms sur agencies to keep up-to-date with funding oppo activities, training and capacity building in the Cool	NES	MFAI, OPM, MFEM		
9.1.3	.3 Increase capacity of NGO's, community groups in project proposal writing and reporting (including financial reporting) in order to better access funding opportunities, including GEF Small Grants Programme funds		NES	MFEM, OPM, NGO's,	
9.1.4	4 Utilise GEF OFP and local SGP focal point to assist communities in accessing technical assistance in identifying locally relevant projects that fit under the Small Grants Programme funding criteria		NES/SGP	SGP Committee	
9.1.5	Raise awareness of known funding opportunities for community based environment management activities and projects		NES	Aid Management, MOA, MOE, NGO's, COC	
9.1.6	Strengthen capacity for financial responsibility and through the provision of resources and training opp	accountability in the management of donor funds, including portunities	AMD MFEM, NES, NGO's		
Them	natic Area: National Funding				
Envir	Environment Outcome				
9.2	Environment projects are provided sustainable budgetary support from external donors in partnership with Government				
Capa	city Development Output	Performance Indicator(s)	Means of Verification		
9.2a	Government and stakeholders have the capacity and capability to create innovative financial	 At least one innovative financial mechanism developed and used every two years by NES and/or 	 Project Proposals NES reports Aid Management Officer reports 		
	to support the implementation of environment projects.	other government agencies that attracts and secures additional resources	Aid Managem	ent Officer reports	
Priori	to support the implementation of environment projects.	other government agencies that attracts and secures additional resources	Aid Managem Lead Agency	ent Officer reports Partner Agencies	
Priori 9.2.1	ity Capacity Development Actions Improve knowledge and understanding, especially and expenditure limitations to highlight the need for	other government agencies that attracts and secures additional resources	Aid Managem Lead Agency OPM	ent Officer reports Partner Agencies NES, MFEM, MFAI, All Ministries, COC	
Priori 9.2.1 9.2.2	ity Capacity Development Actions Improve knowledge and understanding, especially and expenditure limitations to highlight the need fo Increase levels of awareness and political support climate change, drawing on inter-linkages betweer need for funding for implementation in these areas	other government agencies that attracts and secures additional resources	Aid Managem Lead Agency OPM NES	ent Officer reports Partner Agencies NES, MFEM, MFAI, All Ministries, COC OPM, MOIP, MOA, MOH, MMR, MFEM, NGO's, MOE	
Priori 9.2.1 9.2.2 9.2.3	 mechanisms and instruments for viable options to support the implementation of environment projects. ity Capacity Development Actions Improve knowledge and understanding, especially and expenditure limitations to highlight the need fo Increase levels of awareness and political support climate change, drawing on inter-linkages betweer need for funding for implementation in these areas Identify cross cutting areas, linkages and opportun impacts of limited financial resources 	other government agencies that attracts and secures additional resources	Aid Managem Aid Managem OPM NES NES	ent Officer reports Partner Agencies NES, MFEM, MFAI, All Ministries, COC OPM, MOIP, MOA, MOH, MMR, MFEM, NGO's, MOE OPM, MOIP, MOA, MOH, MOE, MMR, MFEM, NGO's	

Implementing and Monitoring the Capacity Development Action Plan

Institutional arrangements for implementation of the Capacity Development Action Plan

The diagram below presents an overview of the institutional arrangements that are in place to coordinate, monitor and evaluate the implementation of the Capacity Development Action Plan.



Monitoring and evaluation mechanisms

The challenge now will be to ensure that this action plan is implemented and does not just become another report. There is an opportunity to integrate actions identified through the NCSA into the revised National Environment Strategic Action Framework (NESAF) and National Sustainable Development Plan (NSDP), both of which are planned to undergo review by the end of 2009. As living documents, capacity issues for environment management may be regularly assessed and addressed through this process of review. The integration of actions into national planning and budgetary processes as well as the development of project proposals for funding will also be key to ensuring the implementation of this action plan and the support necessary for effective and sustainable environment management.

There are a number of risks or challenges to the implementation of this action plan at the political, institutional and individual level. Political influence and interference, changes in Government and political parties in power, changes in institutional mandates or national priorities may affect support to this action plan. On a smaller scale, staff turnover in Government agencies is quite high. Loss of staff and their institutional memory is a concern and needs to be addressed immediately, either in terms of strengthening staff retention or employing succession plans for transfer of knowledge.

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Annexes:

Annex 1: Main Environment Issues, Gaps and Capacity Needs identified in past national reports and through the NCSA Project

1.1 Climate Change

Main Environment Issues	Summary of gaps and capacity needs		
Increasing frequency of extreme events such as cyclones, changes in weather patterns affecting agriculture production, increased coastal erosion due to sea level rise and increasing intensity of storm surges, all causing losses to the biodiversity, economy and people's lives. Coupled with this is the country's generally low level of resilience and low capacity to adapt	 Weak enabling environment for climate change work including; lack of National Climate Change Policy, Strategy and Action Plan, and limited integration of Climate Change considerations into national economic and development, planning budgetary processes. Absence of a National Adaptation Programme of Action (NAPA) identifying vulnerabilities and adaptation priorities Limited technical capacity and financial resources to undertake V&A assessments Lack of policies and very limited resources to support research and systematic observation Poor governance arrangements, policy setting and planning frameworks for Disaster Preparedness, Emergency Risk Management and National Hazard Risk Assessment Limited technical and financial capacity to identify, assess and monitor risks, prepare for extreme events and develop and maintain Early Warning Systems 		
Limited use of technologies and funding mechanisms for cleaner, more efficient and sustainable sources of energy and a low level of involvement and contribution to global efforts at mitigating the causes of climate change. Note: Although the level of GHG emissions by Cook Islands is very low compared to many other countries the move to be more efficient in the use of energy and adopt appropriate renewable energy technologies will bring many benefits to the country and contribute to its sustainable development plan objectives.	Limited knowledge and understanding by stakeholders on levels of energy use and GHG emissions in Cook Islands, how to undertake GHG inventories and develop mitigation actions Limited access to and use of climate change databases and information networks Limited technical and financial resources to assess emissions from land use, waste and the transport sector. Weak enabling environment and financial support for renewable energy adoption Lack of economic incentives to support adoption of RE as well as to develop standards for RE technologies. Requirements for energy auditing and energy efficiency measures not established as a result of limited technical and financial capacity and the absence of strategies and programmes peeded to implement the Energy		

1.2 Conservation of Biological Diversity

Main Environment Issues	Summary of gaps and capacity needs			
Island ecosystems and species are under threat of being reduced or made extinct as a result of a host of factors including infrastructure development, agricultural development, invasive species, and natural disasters.	 Weak enabling environment to support the designation, declaration, conservation and management of national parks and protected areas. Limited technical and financial capacity to develop appropriate regulations and criteria for designation of sites of ecological significance Limited local technical expertise to establish protected areas including those managed by communities. Insufficient financial resources and technical expertise to maintain protected areas on an on-going basis. Limited capacity to classify, map and prioritise ecosystems and sensitive areas for conservation. Lack of spatial information on ecosystems as well as technical capacity to analyse and use such information. Lack of baseline information on species needing consideration for ex-situ conservation and limited technical capacity to undertake ex-situ conservation work. Very limited research infrastructure and capability e.g. laboratories, for use in ex-situ conservation work. 			

Threat of invasive species entering Cook Islands and impacting negatively on the bio- diversity, economy and peoples way of life.	Quarantine and border control legislation not adequate to address invasive species, lack of procedures for and limited capacity of personnel to undertake risk assessments
	Lack of a strategic implementation plan to enable all stakeholders to coordinate efforts aimed at addressing invasive species
	Limited technical and financial capacity to undertake pilot programmes aimed at controlling and eradication invasive species and need for training targeted at priority needs
Increasing risk of LMO's and GMO's entering Cook Islands and impacting negatively on the bio-diversity, people's health and the economy.	Lack of an enabling environment (policy, strategic direction, legal and institutional framework) for Biosafety and Bio security work. Limited technical expertise with necessary skills to undertake Biosafety work Lack of facilities for safe handling of LMO's and GMO's Very limited knowledge and awareness of Biosafety issues
Increasing risk of Cook Islands government and people missing out on future Equitable Sharing of Benefits and Access to Biodiversity (ABS)	Lack of a policy or legislation specific to ABS and the absence of an agency mandated to coordinate and manage ABS issues. Lack of technical capacity to undertake risk assessments as well as negotiate and mediate ABS agreements. Limited technical personnel and lack of technical expertise to be supervisors and inspectors of ABS activities. Absence of a database with information on ABS research or activities.

1.3 Land Degradation

Main Environment Issues	Summary of gaps and capacity needs
Land-use activities for infrastructure development purposes is causing land degradation, affecting bio-diversity, water quality and causing increased vulnerabilities to Climate Variability and Change	Land-use Act inadequately addresses new challenges and institutional arrangements are not in place, particularly in the outer islands, to promote and enforce compliance. Limited human, technical and financial resources to implement building code Best practises guidelines not available to guide land development and promote voluntary compliance Limited awareness programmes of land use legislative requirements including the Environment Act, Public Health Act, Building Code etc Lack of formalised process and procedures for approval and monitoring of
	all development activities on land EIA processes and method needs improving to have a more holistic and strategic scope.
	Limited baseline information to inform and guide land-use practices
	Limited resources to support communications and awareness programmes in communities of land use and development legislation requirement
	Lack of information sharing and communications on traditional knowledge and practises related to land use
	Limited capacity, especially personnel and resources, to undertake coordinated monitoring activities on a regular basis
Unsustainable land use practises causing land degradation, such as; uncontrolled vegetation clearance near streams, wetlands	Limited resources to support institutional arrangements on each island for implementation of the Environment Act 2003 and enforcement and compliance with development
and foreshore burning, deforestation and denuding of virgin land or arable agricultural	Limited awareness on the need for environmentally sustainable agriculture and forestry practices and its benefits to environment and human health
land	Limited use and promotion of traditional and best practices in sustainable land management and field staff and development workers have limited skills to train people on these practices.
	Limited understanding of ecosystem functions including forests and their role in maintaining soil productivity
	Limited emphasis and support for the role of extension officers in Agriculture for promoting environmentally sustainable agriculture practices

Lack of policies, plans and legislation for proper rehabilitation of degraded			
, land after use i.e. landfills, dumpsites, quarries etc			
Limited resources and knowledge about options for rehabilitation of			
degraded land			
Limited coordinated effort at the national and local level to enforce any			
significant control over the use and rehabilitation of degraded land areas			
Limited data on the extent, causes and severity of degraded land in the			
Cook Islands.			
Inadequate technical and financial resources to plan and implement			
rehabilitation measures.			

1.4 Cross-cutting Environment & Capacity Issues

Cross-cutting Environment Issues	s Summary of gaps and capacity needs			
Integrated Coastal Management				
Inadequate local capacity to effectively manage coastal resources leaves the Cook Islands vulnerable to the risks of loss of ecosystem services, and the impacts of	Existing legislation and policy frameworks for management of coastal resources are fragmented, ineffectively implemented and only provides limited mandate to regulate or control activities that may impact upon the coastal zone			
climate change, extreme events and sea level rise.	Lack of clarity of existing mandates, delineation of responsibilities, and coordination of activities between agencies and ministries related to coastal zone management			
	Human technical resources available for coastal resource management, particularly enforcement and monitoring of activities, are overburdened with multiple responsibilities and insufficient to support a more coordinated framework for coastal zone management			
	Limited studies on, or vulnerability assessments of, existing infrastructure and properties along coastal areas likely to be affected from natural hazards and climate change			
	Insufficient data and research to identify appropriate adaptation technologies that can be employed at suitable locations to mitigate coastal vulnerabilities, including coastal protection mechanisms and cyclone and climate proofing of infrastructure			
	Limited local capacity and knowledge of appropriate tools and methodologies for monitoring of natural resources, especially for monitoring relationships between organisms as indicators of environment health			
	Limited knowledge and awareness of appropriate management and treatment technologies for safe disposal of agricultural and commercial waste or that minimise the impacts of that waste on the environment			
Resource Management				
Fragmented management of natural	Existing legislation does not adequately cover resource management and use and lacks clear guidance to ensure sustainability of the resource			
resources, legislation and policies governing resource use and management are sectoral,	Multiple agencies and stakeholders have varying degrees of responsibilities for natural resources, their uses and management			
do not establish the co-ordination and	Limited baseline data or inventory of Cook Islands natural resources			
collaboration necessary to ensure that all resources are managed in a sustainable manner	Issues of insufficient staff, staff expertise, materials and resources to undertake resource management activities			
	Consumer attitudes assume resources are plentiful, due to lack of awareness and information as to the scope of the problem and the limited promotion of conservation of biodiversity and natural resources on all islands.			
	Limited local capacity and knowledge of appropriate tools and methodologies for monitoring of natural resources, especially for monitoring relationships between organisms as indicators of environment heath			
	Current monitoring and data collection programmes are constrained by budget support and commitment for ongoing collection to extend to all islands			
Water Resource Management				
Water resource management is fragmented, supply-driven and lacks coherent policies,	Lack of an integrated national water resource management policy or management framework			
strategies, legislation, regulation and monitoring	Limited understanding of the close relationships between water resources and the total island environment at all levels, and the importance and principles of sustainable water resource management			

	Ownership and management of water resources is unclear and needs to be determined at the national level
	No comprehensive national legislation to manage water resources in the Cook Islands, and the scattered legal provisions that address the supply and quality of water to the public are conflicting or does not provide sufficient direction
Dynamics of the capacity of current water sources, the demand on water resources and water quality for all islands has not been fully	Lack of determination of the full extent of water resources demand and supply on all islands as well as viable options to supplement main supply sources.
assessed, and water security is an issue with current water sources being vulnerable to climate change, salt water intrusion and	Insufficient information and resources (including climatic data) to enable effective preparation and planning for the impacts of climate change and natural disasters on the sustainability of water supplies
extreme weather events	Limited capacity for water demand management including capacity and resources for measuring flow supply, identifying consumer water habits, water use audits and efficiency plans
	Limited promotion of water conservation measures and wise water use technologies, as well as policies and incentives to encourage water conservation practises such as rainfall harvesting and the use of water storage facilities e.g. water tanks, especially during dry periods
	Limited management of activities in the water catchment areas and water supply systems
	Lack of acceptable standards for water quality
	Institutional arrangements for the monitoring of water resources are fragmented and lack of coordination, capacities and resources for a consistent monitoring regime
Waste, Sanitation and Pollution	
Management of waste is haphazard and piecemeal	National Waste Strategy has been drafted but lacks adequate clarification of roles and responsibilities of relevant waste management stakeholders and still needs Cabinet endorsement
	Lack of island specific management plans for waste especially in the Outer Islands except for Aitutaki
	Insufficient capacity, resources and funding to support the production and dissemination of education and awareness resources for waste management activities
Solid waste management: Legislation and institutional arrangements for solid waste management are either conflicting	Overlap and lack of clarity in the functions and roles of the respective agencies in the collection and management of wastes, operation of the sanitary landfills, and the licensing of waste transporters.
or do not provide sufficient direction, there are limited resources to deal with solid waste and inadequate sites for waste disposal	Limited infrastructure and no comprehensive assessment of the management and disposal regimes for solid and hazardous waste on the outer islands.
	Recycling and disposal options for motor vehicles, whiteware, computers and other household appliances have yet to be implemented fully.
	Incorrect and poor separation of waste leading to increased potential for incidences of vector-borne diseases and shortening of the lifespan of the landfill
	Insufficient funding to support proper operation of the Rarotonga Landfill according to the standards of operation under the management plan
	Lack of operational standards for waste transporters – whether they are licensed under the Public Health Act 2004 or the Environment Act 2003.
Liquid waste management: Poor management of sewage and agricultural waste	No effective regulatory regime in place to manage pollution caused by poorly sited, constructed or inadequately managed septic tanks and sewage treatment systems.
	Lack of standards and effective control over the siting, construction and operation of septic tanks and sewage treatment systems on residential and commercial properties
	Limited coordination between the three government agencies involved (i.e., Ministry of Health, Building Controller in Ministry of Infrastructure and Planning, and National Environment Service)
	No land management plans and zoning plans are outdated and need revision if it is to be implemented
	with confidence
Hazardous and Dangerous Substances or Waste:	Strict legal mechanisms and an institutional framework are required to regulate and manage the collection, storage and disposal of hazardous
Limited capacity, regulatory frameworks, policies and institutional arrangements to	wastes, including standards for the transportation of hazardous wastes, and the siting and management of hazardous waste disposal facilities.

manage hazardous and dangerous substances and waste, including the movement and management of such materials.	Limited technical, human and financial capacity and resources to undertake a national assessment of hazardous and dangerous substances and waste and POPs.
Marine Pollution: Cook Islands have limited capacity to deal with oil or pollutant spills within the marine	Prevention of Marine Pollution Act 1998 is obsolete and needs to be updated to be more integrated with clear directions for all agencies involved
environment.	The National Oil Spill Contingency Plan does not include standards and protocols for the environmentally sound disposal of any waste oil recovered after a spill; or regulate the type of dispersants that can be used during any spill; and needs to include regulating clean up activities in sensitive coastal and foreshore areas.

Cross-cutting Capacity Issues Summary of gaps and capacity needs			
Integrating Environment Management			
Mainstreaming of environment management issues into national economic and development planning processes has	Limited identification of lead agencies or organisations for the implementation of national plans activities related to environment management, such as the NSDP and NESAF		
improved but the Cook Islands lacks the institutional structures and support mechanisms to collaborate, monitor and	Limited integration of environment management activities in national plans, such as the NSDP and NESAF, into annual business plans for Government Agencies and Ministries for implementation		
new legislation and regulations in a timely fashion.	Limited capacity to develop and implement national Monitoring and Evaluation processes, including tools such as State of the Environment reports		
Reactive rather than proactive approaches to	land degradation and cross cutting environment issues at all levels.		
environment management have dictated budget and political support, and tend to lead to band aid solutions as opposed to long term	Insufficient staff, staff expertise and resources within relevant Ministries and organisations to support the implementation of national plan activities such as in the NESAF and NSDP		
capacity development activities. As a consequence, environment protection and	Insufficient promotion and justification to decision makers, including politicians and budget committees, of the need to support environment management activities		
environment-development issues are not accorded a high degree of priority in the current political setting.	Lack of local expertise in several areas, most notably in the areas of environment accounting and economics, environment law and economic valuation of resources and ecosystem services.		
	Crown Law is overrun with legislation that requires drafting or review and there is a critical shortage of legislative drafting skills both within Crown Law and nationally		
	Reliance on overseas expertise to review or draft necessary legislation in a timely manner, which is costly and runs the risk of not being appropriate for local conditions and customs		
	Limited awareness and promotion of the limitations of donor funding for national implementation of environment management related activities		
Environment Education and Awaren	ess		
Environment education and awareness programmes in the Cook Islands tend to be	Technical environment data and information needs simplification and translation into Cook Islands Maori for broader understanding at all levels		
produced on an ad hoc basis with little collaboration and coordination of activities amongst various agencies and organisations	Shortage of training or professional development programmes and opportunities for education planners and environment educators to enhance the education of students on environment issues		
undertaking education and awareness activities.	Lack of localised information in an easy to use format readily available for educators, media or the general publics		
Resources and capacity to support environment education awareness and media programmes is limited, especially in the Outer Islands. The lack of simplicity in environment technical reporting and language is a major constraint.	Limited use of practical applications and fieldwork for environment monitoring and education to foster awareness and engage students interest at all levels		
	Lack of formal biodiversity, climate change and land degradation national programmes to implement information exchanges, education and awareness at all levels		
	Lack of capacity for the assessment of the effectiveness of education awareness programmes as well as mediums employed for information dissemination		
	High costs (in terms of value) of delivery of education, trainings and awareness programmes to all islands and in different media formats i.e. costs of advertising, printing, shipping etc		
	Limited opportunities for training and resources to support the production of quality local education, awareness and media materials, in various mediums		

	Lack of effective mechanism or process to improve the exchange of data and information between relevant government agencies, NGOs and academic institutions undertaking environment awareness and education activities for improved coordination and collaboration of activities and resource sharing			
Information Management and Excha	nge			
A dearth of quality environment, socio- economic and spatial information, including on patterns of natural resources, land resource characteristics, population dynamics, resource demands and risks contributes to inconsistent and poorly founded decision-making	Lack of policies to support the development and housing of environment and natural resources data in national databases/clearing house Lack of policy to incorporate IPR in MOUs for data collected in the Cook Islands held with donor agencies and any contracted consultants Limited local capacity in data collection, databasing, analysis, mapping, maintenance and utilisation of environment related data and information Limited capacity to utilise GIS technologies of benefit to relevant ministries including insufficient GIS resources such as relevant equipment and software, No coordinated and ongoing programme to collect information for the creation and maintenance of GIS data layers and maps necessary for			
Poor management of traditional knowledge and practises (TKP) related to environment management in the Cook Islands. Programmes or attempts to record traditional knowledge been inconsistent and ad	biodiversity, climate change and land degradation planning and monitoring No consistent, systematic, ongoing programme to record traditional knowledge, innovation and practises related to environment management, as well as resources and commitment to support such recording programmes			
hoc. Poor policies and legislative frameworks in place to protect traditional knowledge and	for documentation i.e. Are Taunga, Aronga Mana, Taunga vairakau Maori, Tumu Korero etc			
practises and the rights of the holders of such knowledge.	Limited recognition of how traditional practitioners and institutional systems can contribute to and fit with current western institutional arrangements Limited guidelines on applications of traditional use and customary			
	practices of environment management to support the promotion of TKP			
	Lack of coordination body to oversee facilitation and monitoring of TKP related programmes and activities including rights of knowledge holders in Access and Benefit Sharing (ABS)			
	Lack of protection policies for ta'unga of their local knowledge and information			
Communications and data sharing mechanisms exist, however each has limitations that hinder the effective dissemination of data and information.	environment information including technology information and data as well as past, current and on-going activities and research for stakeholder awareness and to promote linkages Limited human resources with the capacity to maintain current information			
occasionally there is a tendency for sectoral agencies to withhold data and information	systems such as PEIN and EDF9 Map Server			
necessary for environment planning and	appropriate structures to enhance networking and information exchange			
decision making.	There is currently no incentive or stimulant for agencies personnel to be involved in mobilizing environment information and knowledge or collaborating with other agencies databases and inventories, unless this is under a project mandate with appropriate funding.			
	stakeholders in some sectors			
Multilateral Environment Agreement	S			
There is growing concern about our ability to meet commitments and reporting requirements to these international conventions Limited human resources for MEA implementation, monitoring and reporting are a major constraint given the small size of the Cook Islands. There is a need to ensure that those with national responsibilities under the UN Conventions are properly mandated with	Poorly defined responsibilities for Cook Islands agencies and organisations in relation to the national obligations and commitments of the UN Conventions undermine existing capacity			
	of the Cook Islands national obligations as signatories to various MEAs, as well as the significance of international environment issues in the national/local context			
	Project approach to MEA implementation means that progress tends to be fragmented with limited follow up for MEA projects that were successful in the Cook Islands including conversion to national programmes or full sized projects			
these responsibilities and this should translate into the allocation of appropriate resources to achieve these mandates.	Translation of relevant MEA environment issues into national policies and programmes is limited by local budgetary support for programmes and activities related to implementation of MEAs			
	reporting, negotiations, monitoring and evaluation			

	Information provided by MEA Secretariats for education and awareness tends to use language that is too technical and of generic global relevance lacking any localised context through which to engage communities and stakeholders Lack of clearing house mechanism and/or information management system for MEAs Reliance on donor funding to facilitate Cook Islands MEA reporting Lack of simplicity and appropriateness in reporting format and language of national reports to MEAs Inadequate support and capacity for NGOs and community groups for monitoring and reporting of activities at the community levels Insufficient resources to support the development of local negotiations capacity and skill Limited opportunities for locals to train and gain experience and confidence in negotiating, especially at the international level
	agreements at different levels
Access to Financial Resources	
External Funding: The Cook Islands is highly reliant on external	Limited capacity to train planning officers and stakeholders in identification of environment funding opportunities, proposal writing and project management
environment projects as local Government funds and resources are insufficient.	Lack of capacity to encourage community groups, NGO's in project proposal writing and reporting (including financial reporting) in order to better access funding opportunities, including GEF Small Grants programme funds
community groups do not have the experience and skills to aggressively pursue external funding options and meeting criteria for funding, including the local component of the GEF Small Grants Programme.	The ability to strengthen and maintain strong working relationships and networking opportunities with the UN Conventions Secretariat, Convention funding mechanisms such as the GEF and regional CROP agencies to keep up to date with funding opportunities that may be available for environment projects, activities, training and capacity building in the Cook Islands
National Funding:	Knowledge of available external funding opportunities is limited, as is capacity to identify these funding opportunities for environment related projects and activities Capacity to access financial resources is limited by local capacity to develop quality project proposals as well as insufficient time and resources to do so Processing time for accessing funding can be lengthy - makes it extremely difficult to coordinate activities and achieve outputs Donor restrictions on project budget allocations often mean that projects have insufficient funds to cover salaries for personnel, and implementation of such project is reliant on existing personnel being allocated or reassigned to projects, sometimes in addition to current workloads. Limited awareness of funding opportunities available to NGO's and communities Limited technical assistance to assist identify Small Grants Programmes (SGP) projects for communities Limited local capacity at all levels to identify sources of funding and develop quality project proposals essential to accessing funding opportunities
Limited levels of awareness and political support for environment management have played a role in determining priority and importance in comparison to other national agendas when allocating funding	Limited pool of Government funds from which all Government ministries and agencies must bid for funds Inability to identify cross cutting areas, linkages and opportunities for partnerships and resource sharing to maximize the impacts of limited financial resources Lack of capacity to raise awareness of known funding opportunities for community based environment management activities and projects
	Lack of capacity to explore innovative financial mechanisms and instruments for viable options to support implementation of the conventions including user fee systems, low interest loans, private sector sponsorship and environment trust funds Poor understanding of budget decision makers about project funds expenditure limitations and that national implementation of environment management activities still requires national funding Government agreements often lack commitment in providing sustainable budgetary support to ODA initiated projects especially physical projects

NATIONAL SUSTAINABLE DEVELOPMENT PLAN (NSDP) 2007-2010

The NSDP 2007-2010 is a four-year strategic framework for achieving our strategic outcomes in 'Living the Cook Islands Vision – A 2020 Challenge' and paves the way to realising our National Vision. This is the first leg of our 'Te Kaveinga Nui' journey.

THE OBJECTIVE OF THE NSDP

To build a sustainable future that meets our economic and social needs without compromising prudent economic management, environmental integrity, social stability, and our Cook Islands Maori culture, and the needs of future generations.

To achieve the NSDP objective, eight (8) strategic goals are identified below.

1. Equal opportunities for education, health, and other social services towards maintaining an inclusive, vibrant, resilient and productive society in harmony with our culture

- 2. A society built on law and order and good governance at all levels
- 3. Innovative and well-managed private sector-led economy
- 4. Sustainable use and management of our environment and natural resources
- 5. A strong basic infrastructure base to support national development
- 6. A safe, secure and resilient community
- 7. A foreign affairs policy that meets the needs and aspirations of the Cook Islands people
- 8. Strengthened National Coordination and Institutional Support Systems for Development Planning, Evaluation and Monitoring

National Environment Strategic Action Framework (NESAF)

The mandate for developing the National Environment Strategic Action Framework 2005 - 2009 was given by the Environment Act 2003. The framework provides guidance and direction for achieving sustainable social and economic progress for the Cook Islands by utilising our natural resources and environment wisely. It aims to sustain efforts generated from growing environmental awareness to protect, conserve and manage our environment and natural resources.

The NESAF is also an attempt to make international obligations under Multilateral Environment Agreements (MEAs) meaningful and applicable at the national and community levels.

Strategic Goals

- 1. Enhance the management, protection and sustainable use of our natural resources
- 2. Reduction and prevention of environmental degradation from waste and all forms of pollution
- 3. Increase resilience by strengthening national capacities for climate change, variability, adaptation and mitigation
- 4. Improve our institutional support and implementation mechanisms to manage our environment in a sustainable manner

Annex 3: Benefits of the NCSA Project and Lessons Learnt in implementation

Benefits to the Cook Islands

The NCSA project has enabled the Cook Islands to review environment issues, take stock of progress in addressing these issues as guided by the Conventions, identify gaps in implementation and meeting of obligations, identify root causes of these gaps and determining actions to enhance capacity and address the gaps. The assessment of gaps in implementation and capacity needs was undertaken at the following three levels:

- i) Systemic capacity the enabling environment including policies, regulations and coordination mechanisms
- ii) Institutional capacity institutional mandates, strategies, resources, operational procedures
- iii) Individual capacity human resource development

The identification of capacity needs at these three levels has been integrated into a Capacity Development Action Plan (CDAP) for each thematic area; namely Biodiversity, Climate Change and Land Degradation. It is envisaged that this will strengthen existing national programmes and develop linkages between global and national environment management issues and capacity building efforts.

Other benefits from implementation of the NCSA

a). Strengthened collaboration and coordination amongst national agencies

TWG and SC meetings offered a mechanism for sharing information on past, current and future initiatives within sectoral agencies and NGOs, for awareness purposes and opportunities for partnership, resource sharing and avoiding duplication of activities.

b). Heightened awareness of environment issues by leaders and the public

The production of media (newsletters, newspaper articles, documentary) through the NCSA project, and the participation of the NCSA coordinator in National Environment Service public awareness and education activities, including national activities for World Environment Days, National Environment Week, field days, Careers Expo, offered opportunities to raise awareness of the UN Rio Conventions, and specific issues of biodiversity, land degradation and climate change.

c). Sharing of experiences and learning exchanges with other Pacific Island Countries

Having the opportunity to share experiences and learn the various ways other Pacific Islands countries were implementing their NCSA projects via regional workshops and emails was extremely helpful. Not only were we able to share what did work in our own experiences, but also what didn't, which is just as useful.

d). Identification of priority needs for formal training in environment management

A number of areas were identified through the NCSA process as gaps in technical capacity related to environment management and possible development of training programmes at both the national and community level. These include, inter alia, the broad areas of environment law, economics, accounting and auditing, as well as capacity for information management, production of quality media, data collection, analysis and GIS.

e). Planning for the review and revision of the National Environment Strategic Action Framework (NESAF)

The NCSA project was also instrumental in facilitating the review of the current NESAF, including stakeholder consultations. This review will lead to the revision and updating of the NESAF to cover a new six-year period, in line with the possible shift to medium term budgeting of Government agencies in the Cook Islands. It also offers an opportunity to integrate actions from this action plan into the revised NESAF and from there, mainstream actions and priorities upwards into the National Sustainable Development Plan and outwards into sectoral policies and plans.

f). Identification of linkages between NCSA Action Plan and other environment and sustainable development agendas and initiatives.

The NCSA project covers thematic areas linked to the National Sustainable Development Plan (NSDP), the Millennium Development Goals (MDGs), the National Environment Strategic Action Framework and the draft

National Economic Development Strategy. Part of the prioritisation process included an indication of contribution to the achievement of NSDP and MDGs goals.

g). Strengthening alignment of environment objectives with the National Sustainable Development Plan

Actions presented in the Capacity Development Action Plan will be mainstreamed into the review and revision process for the NESAF as the key strategic document for the environment sector. It is hoped through this process, issues and actions in the NESAF will then be incorporated into the National Sustainable Development Plan, which is expected to undergo review in late 2008/ early 2009.

h). GEF Programming

The assessment of activities related to biodiversity, land degradation and climate change, as well as the cross cutting issues, helped to increase awareness of the profile of the GEF and promote local GEF funded projects to stakeholders. The implementation of actions identified in the NCSA Action Plan will also address issues related to MEA implementation including accessing GEF funding at the national and community levels and project management capacity, should improve implementation of future GEF projects.

2.8 Lessons Learnt from the NCSA Project

a). Focus on National Priorities linked to Conventions

When the project began, the focus of the NCSA project was from the perspective of achieving obligations under UN Conventions. Switching the focus towards national priorities and national environment issues that tie-into the Conventions made the project more locally relevant and enabled a more persuasive incentive for stakeholder involvement and buy-in.

b). Use of consultants

The ability to utilise the same local consultants in all stages of the NCSA project would have greatly aided and fasttracked the process however this was not possible in the Cook Islands. The NCSA project covers a multitude of issues and concepts and works in a step by step process, with each phase leading into the next and providing the information to be utilised. If at all possible, other countries that are in the process of undertaking an NCSA through consultants, consider utilising the same consultants for each phase. There is a copious amount of information that needs to be absorbed and understood when consultants come on board, and a learning period for those that have never been exposed to the NCSA or Rio Conventions process. Using the same consultants over multiple stages means this learning period does not have to be repeated and that the movement of information from one phase to the next is better understood, hopefully improving the effectiveness and efficiency in completing phases.

c). Technical assistance and back-stopping

Timely access to technical assistance greatly aids the implementation of projects such as the NCSA. Having identified resource personnel in the Pacific available to provide this assistance is therefore a highly recommended action for future projects. In-country assistance is recommended where possible as it is of the greatest benefit, enabling the focus to be on country specific issues/challenges of implementation.

A recommendation could be to have technical and implementing agencies working as co-implementers of a project. UNDP is the implementing agency for the Cook Islands NCSA Project but SPREP was the technical go-to for NCSA process advice. In future, it might be beneficial to have that link established formally and project management and technical assistance closely coordinated.

Annex 4: Key Stakeholders Consulted during the NCSA Process including Technical Working Group members

This report was compiled with the assistance of the following experts:

Key NCSA Stakeholders and Institutions Consulted				
#	Official	Designation	Institution	Area of Expertise
1	Vaitoti Tupa	Director	National Environment Service	Environment policy
2	Tania Temata	Manager – Island Futures Division	National Environment Service	All MEAs, Environment Policy
3	Pasha Carruthers	Climate Change Technical Advisor	National Environment Service	Climate change
4.	Vavia Vavia	Manager – Advisory and Compliance Division	National Environment Service	EIAs, Compliance and Enforcement
5	Elizabeth Munro	Biodiversity Conservation Unit	National Environment Service	Biodiversity
6	Joseph Brider	Senior Compliance Officer	National Environment Service	EIA Compliance and Enforcement, Biodiversity
7	Antoine Nia	Senior Compliance Officer/ ODS Officer	National Environment Service	EIA Compliance and Enforcement, ODS
8.	Arona Ngari	Director	Meteorological Service	Climate change & observations
9.	Mata Nooroa	Director	Energy Division – MOT	National Energy Policies
10.	Tangi Tereapii	Energy Planner	Energy Division - MOT	National Energy Policies and needs
11.	Gerald McCormack	Director	Natural Heritage Trust	Biodiversity
12.	Tuaere Tangianau	(former) Chief of Staff	OPM (Prime Minister's Office)	National Policy
13.	Maria Tuoro	Policy Officer	OPM (Prime Minister's Office)	National Sustainable Development Plan, MDGs
14.	Charles Carlson	Director	Emergency Management Cook Islands	Disaster Management, Preparedness
15.	Donye Numa	Officer	EMCI/OPM (Prime Minister's Office)	Disaster Management, Climate Change
16.	Nga Mataio	Head of Ministry	Ministry of Agriculture (MOA)	Agriculture policy
17.	William Wigmore	Director of Research	Ministry of Agriculture	Agriculture Research and activities
18.	Ngatoko Ngatoko	Policy officer	Ministry of Agriculture	Quarantine and Biosecurity
19.	Pavai Taramai	Quarantine Officer	Ministry of Agriculture	Biosafety framework
20.	Ian Bertram	Head of Ministry	Ministry of Marine Resources (MMR)	Marine & fisheries resources management
21.	Peter Graham	Director – Legal and Policy Division	Ministry of Marine Resources	Marine legislations and policy
22.	Kori Raumea	Acting Director – Inshore Fisheries Division	Ministry of Marine Resources	Inshore fisheries
23.	Ata Herman	Head of Ministry (Former)	Ministry of Infrastructure and Planning (MOIP)	Infrastructure development, land use, coastal engineering
24.	Ben Parakoti	Director	Water Works DeptMOIP	Water resources management
25.	Keu Mataroa	Senior Executive Officer	Ministry of Infrastructure and Planning	Infrastructure policies
26.	Tekao Herrmann	Director Waste Management	Waste management Department-MOIP	Waste management
27.	Paul Maoate	Water Works officer	Water Works Dept. – MOIP	Water demand and capacity
29.	Garth Henderson	Manager	AMD-MFEM	Aid funds administration
30.	Taggy Tangimetua	Chief Statistician	STATS-MFEM	Environment related statistics
31	Tuaine Teokotai	Public Health inspector	Ministry of Health	Public health policies sanitation waste

32.	Jacqui Evans	Public Health Planner	Ministry of Health	Public Health policies
33.	Myra Moekaa	International Adviser	Ministry of Foreign Affairs &	MEAs Official focal points & negotiations
			Immigration	GEF Political Focal Point
34.	Otheniel Tangianau	Head of Ministry	OMIA (Outer Is.)	Outer Islands development policy
35.	Apii Timoti	Director	Te Aponga Uira (TAU)	Energy generation/needs
36.	Teresa Manarangi- Trott	President	Cook Islands Chamber of Commerce	Climate change, Private sector interests
37.	Tom Wichman	Energy and Technology Development Consultant	Private Sector	Waste management/ GHG inventory
38.	Ian Karika	Chairman – Rarotonga Environment Authority President – Te Ipukarea Society Technical manager – Takitumu Conservation Area	REA/TIS/TCA	Biodiversity, Species conservation Environment policies, Compliance & Enforcement
39.	Imogen Ingram	President	Island Sustainability Alliance Cook Islands (ISACI)	Environment Education & awareness Climate Change, Persistent Organic Pollutants
40.	Charlie Numanga	Red Cross Officer	Cook Islands Red Cross	Community Adaptation and Risk Management
41.	Vereara Maeva Taripo	President	Cook Islands Association of Non Government Organisation (CIANGO)	NGO environment related policies
42.	Mona Matepi	Project officer	WWF Cook Islands	Environment education & awareness
43.	Nandi Glassie	(former) Acting Chief of Staff	OPM (Prime Minister's Office)	National Policy
44.	Gerard Miles	Senior Project Manager	Cook Islands Investment Corporation	National capital projects development programmes
45.	Metuatini Tangaroa	(former) Inspector - National Disaster Management Office	Cook Islands Police	Disaster response & preparedness
46.	Trina Pureau	(former) Tourism Officer	Tourism Cook Islands	Tourism environment initiatives
47.	Rairi Rairi	(former) Head of Ministry	Ministry of Internal Affairs	Internal affairs, Outer Islands
48.	Metuatini Tangaroa	(former) Director	National Disaster Management Office	Disaster Management and Response
49.	Noelene Browne	President	Avana Muri Marine Awareness Group (AMMAG)	Community environment advocacy & awareness programme
50.	Ken Matheson	(former) Head of Ministry	Ministry of Education	Environment Education
51.	Ms Ana Tiraa-Passfield	Private Citizen		Biodiversity Expert
Oute	r Islands – Mangaia Stake	holders		
52	Tuaine Tuara	Island Secretary	Mangaia Island Administration	Mangaia development policies
53	Alan Tuara	Coordinator	Tangaeo Rangers	waste management, community education & awareness
54	Mataora Harry	Chairman – Aronga Mana	Mangaia Aronga Mana	Traditional leaders islands wide policies, biodiversity, community projects
55	Ngarangi Tuakana	Senior agricultural officer	MOA	Biodiversity, agriculture, livestock
56	Anthony White	Manager	Mangaia Energy	Mangaia Energy, hybrid wind turbine project
57	Tuaiva Mautairi	Kavana-Veitatei	Mangaia Aronga Mana	Traditional leaders islands wide policies Biodiversity, community environment projects
58	Unlucky Tungata	Director	Mangaia Economic Development	Natural resources management

Outer Islands – Aitutaki							
59	Bobby Bishop	Environment officer	NES	All MEAs			
60	Aisnes Lawton	Women's Representative	Aisnes stall - Market	Women's issues, lagoon monitoring, tours, sport			
		Business woman		fishing			
61	Tepaeru Cameron	Waste management	Aitutaki Island administration	Waste management project			
62	Rimaroa Tuiravakai	Manager	Aitutaki Energy	Aitutaki Energy needs			
63	Tukua Upokomanu	Manager	Aitutaki water	water resources management			
64	Fred Charlie	Director	Aitutaki -MOA	agriculture			
65	Sabati Solomona	Island Secretary	Aitutaki Island Administration	Aitutaki development policies			
66	Teaea Parima	Principal	Araura College	School curriculum			
67	Temanu Unuka	Deputy Mayor	Aitutaki Island Council	Aitutaki Islands development projects			
68	Mauke Mauke	Chairman-facilitators	CBDAMPIC – Aitutaki pilot project	Climate change adaptation community project			

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