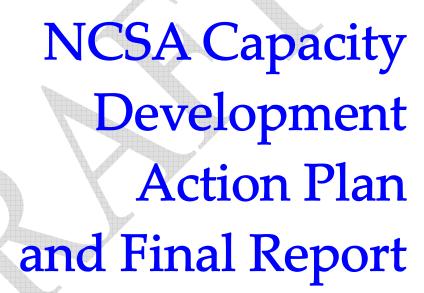


NATIONAL ENVIRONMENT SERVICE

TU'ANGA TAPOROPORC COOK ISLANDS

Cook Islands



NATIONAL CAPACITY SELF ASSESSMENT FOR GLOBAL ENVIRONMENT MANAGEMENT

June 2008





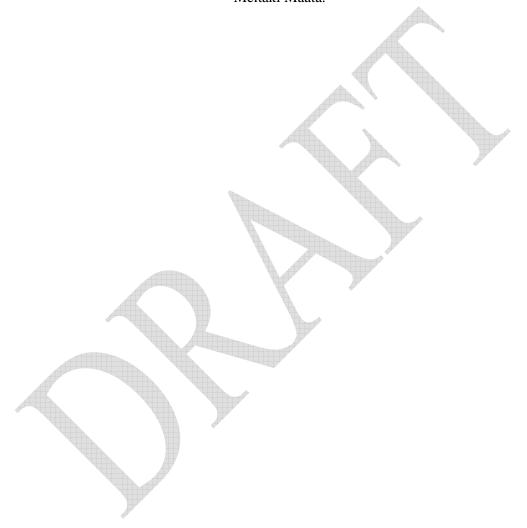




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Meitaki Maata.



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Prepared for the Cook Islands NCSA Project, National Environment Service COOK ISLANDS

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 UNFCCC)

BCU Biodiversity Conservation Unit of the National Environment Service

BPOA Barbados Programme of Action
BTIB Business Trade and Investment Board

CBDAMPIC Capacity-building for Development of Adaptation Measures in Pacific Islands

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 Environmental 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
MOT Ministry of Transport
MOW Ministry of Works

MOU Memorandum of Understanding NAP National Action Plan for UNCCD

NAPA National Adaptation Programmes 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 environmental 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 environmental management 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 environmental 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 environmental outcomes and goals. The Action Plan also identifies the institutional arrangement for implementation, coordination and monitoring of the actions, presents a monitoring approach and identifies likely challenges for implementation.

Environmental 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 environmental 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 Environmental 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 environmental issues by leaders and the public, heightened awareness of environmental 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 environmental management with other national environmental 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.



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 Environmental 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 environmental 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 environmental management and sustainable development are presented in Diagram 1 below:

Diagram 1: Framework of national strategies and plans relating to environmental 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.



Goal 1 Enhance the management, protection and sustainable use of our natural resources

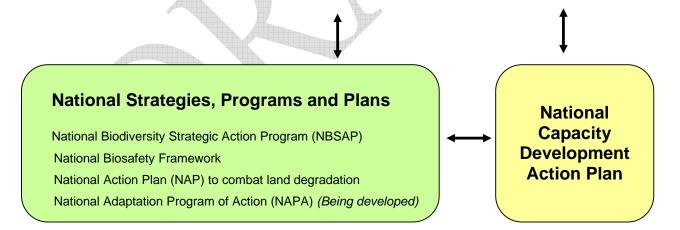
Goal 2 Reduction and prevention of environmental degradation from waste and all forms of
pollution

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 Environmental 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 environmental 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 environmental management agendas that Cook Islands has committed to and is using to guide its program and initiatives.

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

Climate Change

Ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1993 and the Kyoto Protocol (2001)

Endorsed the Pacific Regional Climate Change Framework (2000)

Endorsed the Strategic Programme of the Pacific Regional Environment Programme Strategic Programme including Outputs relating to Climate Change and Support for Meteorological Services (2005)

Acceded to the Vienna Convention for the Protection of the Ozone Layer (2004) and the Montreal Protocol on substances depleting the ozone layer (2004)

Endorsed the regional Pacific Island Global Climate Observing System (PIGCOS) Action Plan (2002)

Conservation of Biological Diversity

Ratified the United Nations Convention on Biological Diversity (1993)

Signed the Cartagena Protocol on Biosafety (2001)

Acceded to the International Plant Protection Convention (2004)

Ratified International Treaty on Plant Genetic Resources for Food and Agriculture (2004)

Endorsed the Action Strategy for Nature Conservation in the Pacific Region (2002)

Endorsed the Strategic Programme of the Pacific Regional Environment Programme Strategic Programme including Outputs relating to Island Ecosystems management (2005)

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 environmental agendas and objectives. Recognising the need for support and collective action for effective environmental 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 environmental 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 environmental 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 environmental 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 (completed in August 2005)
- 3. Thematic assessments (identify causes of gaps, capacity needs and capacity development actions within the scope of each of the three Conventions *completed in September* 2007).
- 4. Cross-cutting assessment (identification of cross-cutting issues and potentials for synergies *completed in November 2007*)
- 5. Development of a Final Report and a Capacity Development Action Plan (completed in June 2008).

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 environmental 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 5*).

2.5 NCSA Project Outputs

The main **NCSA Project Outputs** 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 4.





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 environmental outcomes and goals, which will also contribute to the achievement of Cook Islands National Sustainable Development Plan (NSDP) Goals (refer to Appendix 3) 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 3 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 Environmental Outcomes and Environmental Goals. Performance Indicators and their Means of Verification are used only at the level of Capacity Outputs and Environmental Outcomes.

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 for immediate implementation within the first two years of this document. The criteria used 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

The remaining actions have been compiled at the end of each matrix and highlight actions for implementation in the medium to long term (3-5 years and beyond).

Performance Indicators and Means of Verification

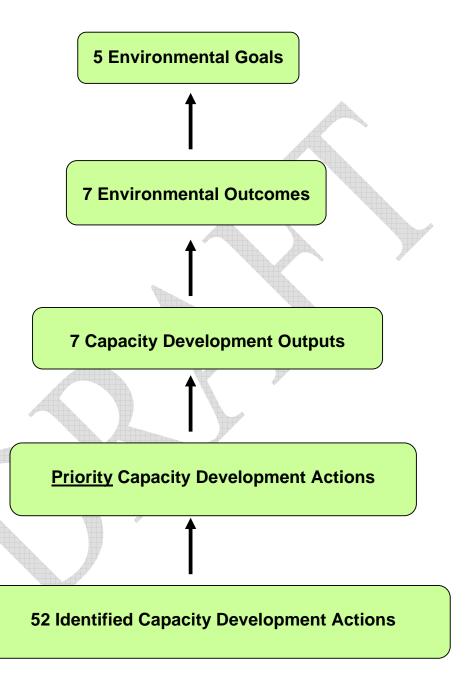
Each matrix has performance indicators and means of verification identified to measure progress towards capacity outputs and environmental outcomes. However the ability to include smart indicators that can more accurately reflect sustainability issues is limited by the lack of data in certain areas. This lack of data is one issue that the NCSA Capacity Development Action Plan will address in time. Until then, for this report, where data is available or obtainable with a high degree of reliability and accuracy, more specific and measurable indicators have been included. Where this data is not available or would be dependent on certain actions within

this Action Plan being carried out, more general indicators have been use. 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 environmental and capacity indicators.





Biological Diversity – Capacity Development Action Plan Summary



ENVIRONMENTAL GOAL 1:

Integrating and Institutionalising Biodiversity

Enviro	nmental Outcome	Performance Indicator(s)	Means of Verif	ication	
1.1	Biodiversity priorities are mainstreamed into national economic and development planning and budgetary processes	Biodiversity issues clearly articulated in NDSP and Budget Policy Statement, National Economic Development Strategy	 NSDP 2010-2015 Budget Policy Statement NES Business Plan National Economic Development Strategy 		
Capac	ity Development Output				
1.1a	Government has the capacity to identify and implement biodiversity priorities, and integrate them into national strategic and development plans and budgets.		_	et Policy Statement Ministry Strategic Plans and Budgets	
Capac	ity Development Actions		Lead Agency	Partner Agencies	
1.1.1	Develop and implement a National Biodiversity Progra conservation and management of biological resources Taskforce, including terms of references and MOUs, to	s in the Cook Islands, and formalise the Biodiversity	NES	MOA, MMR, NHT, TIS, WWF, TGA, MOCD	
1.1.2	Develop and strengthen the biodiversity conservation Ministries and Agencies, NGOs and CBOs to enable Programmes and develop mechanisms for increase capacity building initiatives.	them to effectively implement National Biodiversity	BD Taskforce	MOA, MMR, NHT, TIS, WWF, TGA, MOCD	
1.1.3	Integrate biodiversity priorities and capacity issues in planning processes such as the Budget Policy implementation of the NBP and resource allocation		NES OPM	BD Taskforce	
1.1.4	Strengthen local capacity for policy development a frameworks specifically for biodiversity and ensure the relevant sectoral planning consistent with a shared research related knowledge	nat biodiversity considerations are incorporated into	OPM NES	BD Taskforce	

Long Term Priorities

- Enhance 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.

ENVIRONMENTAL GOAL 2:

Effective Conservation of Cook Islands Biodiversity

Then	Thematic Area: Conservation of Species, Ecosystems and Natural Areas				
Enviro	Environmental Outcome Performance Indicator(s) Means of Verification			ication	
2.1	Bio-diversity species, ecosystems and protected natural areas are managed and monitored effectively and habitat loss minimized.	 At least 25% of targeted threatened species protected and showing no decline compared to the established baseline situation. Priority important ecosystems and areas of significance identified and at least 30% protected through a National System of Protected Areas 	 Annual reports of National Biodiversity Programme Biodiversity Regulations enacted Suwarrow Regulations enacted National assessment report 		
Capac	city Development Output				
2.1a	Government and stakeholders have the capacity to manage and monitor endangered, 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 by participants on achievement of learning outcomes Public support for biodiversity conservation through the increased number of community based initiatives for biodiversity conservation implemented 	 Training and programme reports Survey of community initiatives 		
Capac	city Development Actions		Lead Agency	Partner Agencies	
2.1.1		nensive assessment of the status of biodiversity in the Cook n order to provide a baseline for monitoring and evaluation	NES/NHP terrestrial MMR/NHP marine	MOA, MMR, NHT, TIS, WWF, TGA, MOCD	
2.1.2	Develop and implement programmes to conserve all endemic flora and fauna, including rare plants used in Maori medicine, rare varieties of Agro-biodiversity species.		NHT	MOA, MOCD, NES, MMR, TIS,	
2.1.3	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 national system of protected areas		NHT/NES	MOA, MOCD, Aronga Mana,	
2.1.4	Draw on local and regional expertise to establish criteria based on sound and preven eciantific principles for			NHT, MOA, MMR, SPREP, USP, SPC, NZ DoC	
2.1.5		for all types of protected areas, important ecosystems, and ntific management principles and community considerations			

2.1.6	Promote and encourage private and community-based conservancy and management activities such as the Ra'ui	NES	MOA, MMR, NHT, TIS, WWF, TGA, MOCD
2.1.7	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		
2.1.8	Conduct awareness activities for all relevant stakeholders, particularly those within or adjacent to key ecosystems, habitats and protected areas to develop long term local support and commitment to compliance with conservation and management activities		
2.1.9	Promulgate the Suwarrow National Park Regulations	NES	
Long	Long Term Priorities		

- 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,
- 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

Them	Thematic Area: Invasive Species Management				
	nmental Outcome	Performance Indicator(s)	Means of Verificat	ion	
2.2	Minimal negative impact on biodiversity, people and the economy of the Cook Islands caused by invasive species	 15% of invasive species programmes implemented as part of the National Biodiversity Programme No new outbreak of invasive species negatively affecting biodiversity and peoples livelihoods in Cook Islands Decrease in the number of introductions of new invasive species Number of detections of invasive species 	NESAF Reports Border Control Ir Ministry of Agricu	•	
Capac	ity Development Output				
2.2a					
Capac	Capacity Development Actions			Partner Agencies	

2.2.1	Develop a strategic implementation plan between all stakeholders to coordinate efforts to manage invasive species, including priorities for eradication and control of invasive species.	MOA - agriculture MMR- marine NES - biodiversity	MOH, NGOs, Divers, Customs, Ports Authority, Airport Authority, Police
2.2.2	Develop a national programme to survey invasive species involving all islands, and develop feasibility studies for the eradication and control of invasive species	NES	NHP MOA
2.2.3	Strengthen and implement more stringent quarantine and border control legislation, procedures for the interisland 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
2.2.4	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 Customs MMR Ports Authority
2.2.5	Strengthen links to the Pacific Invasive Learning Network (PILN) and Regional Invasive Species Programme.	MOA NES	SPREP FAO MMR SPC

- 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

Them	Thematic Area: Ex-situ Conservation				
Enviro	Environmental Outcome Performance Indicator(s)			ation	
2.3	Identified appropriate Cook Islands species conserved through ex-situ conservation.	% of total targeted important and appropriate species identified and placed under ex-situ conservation as part of the National Biodiversity Programme by 2014 Arrangements in place for regional ex-situ conservation activities		rts blace locally blace with regional agencies	
•	ity Development Output				
2.3a	Government able to identify species of importance for ex-situ conservation access regional organizations to assist with ex-situ conservation with conditions for prior informed consent involving Cook Islands species	 Continuation of current ex-situ conservation efforts Guidelines for ex-situ conservation and obtaining prior informed consent developed Mechanisms for prior informed consent are integrated into MOUs 	MOA Reports Guidelines Appropriate changes to MOUs SPC germplasm collection reports		
Capac	ity Development Actions		Lead Agency	Partner Agencies	

2.3.1	Utilize regional agencies to preserve species ex-situ and develop Memorandums of Understanding for ex		
	situ conservation including ownership of Cook Islands species that prohibits distribution without prior	MOA	MMR NES
	informed consent from the Cook Islands		

- Utilise baseline information from national biodiversity programmes to investigate species of importance for ex situ conservation including feasibility studies.
- 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.

ENVIRONMENTAL GOAL 3: Cook Islands biodiversity are adequately protected through Biosafety and Biosecurity measures

Environmental Outcome		Performance Indicator(s)	Means of Verification			
3.1	Cook Islands biodiversity, people and economy protected through effective biosafety and biosecurity measures.	A STATE OF THE STA	Biosecurity Reports and Port incident reports			
Capaci	Capacity Development Output					

3.1a	Cook Islands Biosecurity Bill 2008			ct and Cook Islands Parliament Service DP2010-2015 reflects Biosafety and
Capacit	y Development Actions		Lead Agency	Partner Agencies
3.1.1	Establish the Cook Islands Biosecurity Service, supported by legislation and policy framework, to control transboundary and inter – island movement of terrestrial and marine flora and fauna.			Customs, Ports Authority
3.1.2	Develop and maintain mechanisms to improve coordination Biosafety and Biosecurity information, resources and knowledge e.g. databases and information management systems			Customs, Ports Authority, Statistics
3.1.3	Ensure that biosafety and biosecurity issues are	included in the National Strategic Development Plan	MOA/ NES	OPM
3.1.4	them of Biosecurity issues and its importance ar		MOA	SPC FAO NZMAF MOE
3.1.5	them of Biosafety issues and its importance and		NES	SPREP MOE
3.1.6	Designate an authority to be responsible for Bio of terrestrial and marine flora and fauna and of Organisms (GMOs)}	BD Taskforce /OPM		
3.1.7	Develop a risk management regime and the ca for the importation, use, or the conducting of exp	pacity of focal points to carry out thorough risk assessment periments with LMOs and GMOs.	MOA NES	FAO SPREP SPC MAF-NZ
Long To	erm Priorities			

ENVIRONMENTAL GOAL 4: Cook Islanders enjoy equitable sharing of benefits from access to biological resources

Impose rigorous Biosafety and Biosecurity restrictions to protect human life, health, and the integrity of natural flora and fauna and ecosystems.

Staff training in safe handling procedures and the movement of waste and hazardous goods, LMO's and GMOs.

movements storage and handling of LMOs and GMOs and Biosecurity

Develop policies, procedures and in-house technical expertise within identified key stakeholders to to address border control, monitoring and compliance, safety trans-

Environmental Outcome		Performance Indicator(s)	Means of Verification		
4.1	Equitable sharing of benefits and Access to Biodiversity assured for the people and government of the Cook Islands.	 No cases of people and Government of Cook Islands being disadvantaged or exploited in terms of access and benefit sharing in relation to Cook Island biodiversity. Research applications that access biological diversity go through ABS approval process, managed by NES ABS contracts in place and communities/ resource owners are equitably receiving benefits 	NES Reports OPM (Research) Reports ABS Research Contracts		
Capac	ity Development Output				
4.1a	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 		
Capac	ity Development Actions		Lead Agency	Partner Agencies	
4.1.1	resources. Include mandating the Biodiversity Conservation coordinators (supported by capacity developed)	ed to Access and Benefit Sharing of Cook Islands biological Unit (BCU) within the National Environment Service as oment of staff in ABS issues, negotiations and mediation) procedures before any proposed ABS activity or research	NES	OPM, Aronga Mana, MMR, MOA, Crown Law	
4.1.2	Expand the mandate of the National Research	n Committee to serve as the permitting authority for ABS erships between OPM (as the research focal point) and NES ons for ABS research.	NES/OPM	National Research Committee	
4.1.3		nd Contracts database for ABS and link with the planned	NES	ОРМ	
4.1.4	Establish a 'Roster of Local Experts' to act as lo building their capacity to monitor and police ABS	cal ABS supervisors and inspectors, and build and develop research activities	NES	NHT	
Long	Term Priorities				

- 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.
- 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, especially targeting decision makers and resource providers with the aim to fostering a public fully informed on ABS issues.
- Develop locally appropriate informational materials in English and Maori including simplified guidelines to the application process and handbooks for public education purposes.

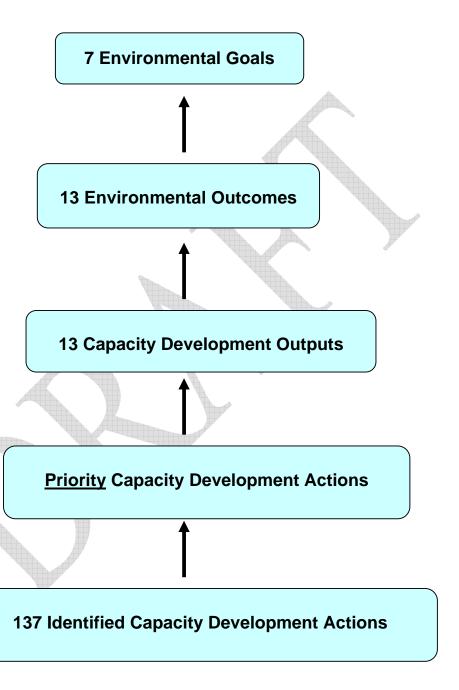
ENVIRONMENTAL GOAL 5: Improved protection and management of biodiversity through better Information Management and Exchange

Environmental Outcome		Performance Indicator(s)	Means of Verification		
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 Capacity Development Output		opana distribution of prismy species mapped	system GIS maps of priority species Biodiversity databases		
5.1a	Government and stakeholders are able to collect, analyse and manage appropriate data and knowledge in a centralised manner so that stakeholders have access to the data and knowledge collated.	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	 Survey reports on use of biodiversity information and databases n or al 		
Capacit	y Development Actions		Lead Agency Partner Agencies		

5.1.1	Maintain and periodically update the NHT database bibliography including establishing links to the National Research Registry.	NHT	MOA, MMR, NES, TIS, TCA
5.1.2	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		MOA, MMR, NES, TIS, TCA
5.1.3	Strengthen institutional capacity of key stakeholders involved in the collection and/or management of biodiversity data, including developing mechanisms to share data with the biodiversity CHM, and to develop and implement consistent, systematic, ongoing biodiversity data collection and recording programmes	BD Taskforce	
5.1.4	Develop and implement capacity building and development initiatives to address insufficient technical capacity for scientific collection, surveying and monitoring of biodiversity data, data analysis and GIS	NHT	Statistics MOW NES MMR MOA
5.1.5	Develop data collection programmes under the National Biodiversity Programme to increase knowledge about Cook Islands biodiversity, including population dynamics and spatial distribution of identified species, forest cover and vegetation	BD Taskforce	All taskforce agencies, TCA, TIS, NGOs, CBOs, etc
5.1.6	Strengthen the capacity of focal points to develop and maintain a registry and information management system for all research related to biodiversity in the Cook Islands and to enforce requirements for documentation and information sharing from researchers.	OPM Research	NHT NES
5.1.7	Encourage research into Cook Islands biodiversity through the identification and promotion of our national biodiversity research priorities	P	



Climate Change – Capacity Development Action Plan Summary



ENVIRONMENTAL GOAL 1: Climate Change Integrated and Institutionalised in the Cook Islands

Capacity D 1.1a Na sta str Cr arr Capacity D 1.1.1 De	proved adaptation and mitigation actions as result of an improved enabling environment. Development Output ational government agencies and akeholders able to develop policies and rategies to guide actions related to Climate mange, supported by adequate institutional rangements and strengthening Development Actions Evelop and implement a National Climate Challed a sign of alimate above to the applicance.	 Increased level of awareness of climate change issues at the Ministerial and senior officials' level and the manner in which that is translated into responsibilities requiring action. Climate change adaptation and mitigation actions in the NSDP 2010 -15 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 	Statement and National Clima	the NSDP, NESAF, the Budget Policy d the National Budget. ate Change policy ate Change Programme Partner Agencies
1.1a Na sta str Ch arr	ational government agencies and akeholders able to develop policies and rategies to guide actions related to Climate nange, supported by adequate institutional rangements and strengthening Development Actions evelop and implement a National Climate Cha	 developed and being implemented Institutional arrangements to support implementation of national climate change programmes are identified and adjusted accordingly 	National Clima	ate Change Programme
State str. Charmann Capacity D 1.1.1 De	akeholders able to develop policies and rategies to guide actions related to Climate nange, supported by adequate institutional rangements and strengthening Development Actions evelop and implement a National Climate Cha	 developed and being implemented Institutional arrangements to support implementation of national climate change programmes are identified and adjusted accordingly 	National Clima	ate Change Programme
1.1.1 De	evelop and implement a National Climate Cha	ange Deliev Dregramme, and Strategy and Action Dian to	Lead Agency	Partner Agencies
		and Delicy Drogramme and Strategy and Action Dlan to		Tartilei Agencies
au	dress risks of climate change to the environme	int, economy and people of the Cook Islands.	ОРМ	NCCCT, NES, MFEM
1.1.2 Indoor	corporate climate change into the National Dev planning and forums.	relopment Plans and discuss proposed actions at all levels	OPM	NCCCT, NES
me wit	echanisms, guidelines and processes to acceath the help of donor and implementing agencies	ecially of budget decision makers, on donor funding ss other funding for Climate Change-related programmes	MFEM	AMD, NES, MFAI
	prove knowledge and understanding, especial enefits of adaptation and energy planning decisi	Illy of budget decision makers, of the priorities, costs and ons.	MFEM	OPM HOMs
pla	anning processes including through the develop	ncorporate climate change considerations into annual pment of climate change personnel within key ministries.	NCCCT	
		e change and appoint a full time National Climate Change e change activities and enhance continuity of capacity.	NCCCT	
	entify focal points in key government ministries ell as mechanisms for communication and inform	, NGOs, outer islands, civil society, for Climate Change as mation sharing such as the NCCCT	ОРМ	СТМ
1.1.8 St		and disaster management activities and expand focus from	ОРМ	NES, NCCCT
1.1.9 Re arr sy:	eview Meteorology Service and Emergen- rangements, organisational structure, function estematic observation and climate risk managen		PSC	MET, EMCI
	romote national priorities for climate change resonsider the possibility for setting up a trust to fac	earch, support the work being done in country and cilitate national research by nationals	OPM - Research	CSO, USP, NHRD

- Explore and develop private sector or Government led risk sharing and transfer mechanism for climate impacts, such as insurance. Activate partnerships and resource sharing opportunities e.g. for a national centralised laboratory under the national research framework

ENVIRONMENTAL GOAL 2:

People of the Cook Islands adapting to the effects of climate change

Thematic Area: Adaptation				
Environmental Outcome	Performance Indicator(s)	Means of Verific	cation	
2.1 Increased level of resilience and adaptation to the effects of Climate Change.	Increase in the adoption of climate change adaptation considerations into infrastructure, development and planning activities at all levels of society	 National Climate Change Programme Reports Island Physical Plan - mapping and zoning 		
Capacity 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. National Climate Change Policy in place Climate Change education and awareness programmes Revised NESAF clearly articulates Adaptation priorities Climate Change Policy in place Government agency/ministry annual workplans NSDP 2010-2015 NSDP 2010-2015 				
Capacity Development Actions			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	
2.1.2 Lobby Government support to drive the develop under a national programme for climate change	ment of policies, legislation and incentives for adaptation	CSO	NCCCT	
2.1.3 Develop and strengthen local capacity for project local ability to access funding for adaptation prioriti	t proposal development, writing and reporting to increase es.	AMD	OPM, HRD, USP	
2.1.4 Undertake targeted awareness programmes highli to reinforce the need for a precautionary approach	ghting the impacts of climate change and use case studies	NES	NCCCT	
project profiles with an appropriate framework.	5 Expand upon current information on adaptation, particularly within the NESAF, to fully articulate priorities and		MFEM - Statistics, OPM, NCCCT	
2.1.6 Promote research on the development of local reclimate proofing.	esources as adaptation options and long term benefits of	OPM	NES, MOW, NCCCT	
Thematic Area: Vulnerability and Adaptation	n Assessment and Implementation			
Environmental Outcome	Environmental Outcome Performance Indicator(s) Means of Verification			

2.2 Increased levels of adaptation through better understanding of vulnerabilities and the identification and implementation of adaptation options.	At least 5 separate adaptation projects funded by 2012 addressing identified vulnerabilities in at least 3 sectors of the economy and involving at least 2 communities.	Adaptation P	ress reports roject Proposals unding Agreements
Capacity Development Output			
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. 		g Reports pased V&A Reports
Capacity Development Actions		Lead Agency	Partner Agencies
particularly at the community level	o carry out Vulnerability and Adaptation assessments,	CSO	CSO, OPM, EMCI, OMIA, Island Councils
2.2.2 Push for the need for development of SIDS s Convention level	pecific tools and methodologies at the International and	NES	NCCCT, MFAI
through 'hands – on training' at the national and co		MOCD/ NES	Aronga Mana, NCCCT, Island Councils
issues within the context of adapting to Climate Ch		NES	MMR MOH MOW
as well as in sectors on Vulnerability and Adapt beach profiling; upskilling and development of inv	raining programmes to train or up skill personnel on islands ation Assessment. Some of the identified needs include, estigation guidelines for environment and health inspectors ta analysis and processing; community based Vulnerability is sof adaptation options.	NES	MFEM - AMD, OPM, MMR, OMIA, Island Councils, NGO's, Community Groups
Thematic Area: Research and Systematic Ob	servation – (meteorological, hydrological and cl	imatological)	
Environmental Outcome	Performance Indicator(s)	Means of Verif	ication
improved planning and implementation of climate change research and systematic observation resulting in increased levels of adaptation through better use by public and government of research and systematic observation	 Improved access and use of information derived from research and systematic observation compared to baseline year of 2009. 	Climatology pri Meteorology re Report of surv	
Capacity Development Output			

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	•		
Capac	Capacity Development Actions		Lead Agency	Partner Agencies	
2.3.1	Priority and recognition at the national and institutional level should be given to an agency responsible for early warning systems and climate change analysis.		MET	EMCI, OPM, NES, MMR, Police	
2.3.2	Identify key data gaps in research and systematic observation and develop data collection programmes as part of the overall national programme for climate change.		MET	EMCI, OPM, Police, MOW	
2.3.3	Strengthen technical and human capacity for continuous research and systematic observation in general and		MET	EMCI, OPM, Police, MOW	
2.3.4	Develop technical capacity for the maintenance and u	upgrading of weather stations.	MET	EMCI, OPM, Police, MOW	

- 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, within the National Research Framework., 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.

Then	Thematic Area: Disaster Risk Management				
Environmental Outcome		Performance Indicator(s)	Means of Verific	cation	
2.4	Increased levels of risk reduction and adaptation to climate change through disaster preparedness, emergency risk management and national hazard risk assessment	Decline in degree of damage and losses caused by disasters as a result of improved risk management practices throughout the country Preparation of a Disaster management Action Plan Publicity Programme Level of Awareness	Local governme	to Parliament (Annual)	
2.4a	 2.4a National government and stakeholders have the capacity to Prepare for Natural Disasters, Manage Emergencies and Risk and undertake a National Hazard Risk Assessment. Disaster Management Action Plan involving government agencies, NGOs and local authorities, local government, traditional leaders, youth groups etc. Regular "task force like" meetings Island Government agencies, NGOs and local authorities, local government, traditional leaders, youth groups etc. 				
Capa	Capacity Development Actions			Partner Agencies	

2.4.1	Ensure that disaster risk reduction is a national priority with strong institutional basis for implementation, reflected in budget allocations to undertake preventative and response measures	EMCI	
2.4.2	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.	ОРМ	
2.4.3	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.).	ОРМ	NHRD
2.4.4	Promote community-based training initiatives, considering the role of volunteers, as appropriate, to enhance local capacities to reduce risk and cope with disasters.	CSO	EMCI
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 rebuilding, in order to render them adequately resilient to hazards.	CIIC	MOH, NCCCT, MOW, NES, MMR ALL OTHERS
2.4.6	Locally appropriate scenarios based on anticipated climate change need to be developed, tested, put into place and integrated into sectoral and national strategies	ОРМ	NCCCT
2.4.7	Support the development and sustainability of scientific, technological, technical and institutional capacities as well as infrastructure needed to research, observe, analyse, map and where possible forecast natural and related hazards, vulnerabilities and disaster impacts including for National Hazards Risks Analysis and Hazard Mapping	MET	MOW, 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	моа мон
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
2.4.14	Strengthen or revive traditional knowledge relating to weather indicators of hurricanes and rain or drought.	CSO	NES, MET, Aronga Mana, CSO
2.4.15	Strengthen or revive traditional and modern planting practices that help protect against drought, salt water infiltration, salt spray, floods, pests and diseases.	MOA	CSO, Local Farmers
2.4.16	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	EMCI	OPM, Police, Traditional leaders, CSO
2.4.17	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	MOE	EMCI, CSO, NGOs, Youth

2.4.18	Provide training for food storage and processing techniques to improve food security, livelihood of family household isolated from the availability of food products	CSO	NCW, EMCI, MOA, MOH
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- 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 environmental 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.

ENVIRONMENTAL GOAL 3: Cook Islands contributing to mitigation of Green House Gas emissions and Climate Change

Then	Thematic Area: GHG Inventories				
Environmental Outcome Performance Indicator(s)		Means of Verific	cation		
3.1	Better planning of mitigation measures as a result of the establishment of Green House Gas (GHG) Inventories	GHG Inventory reports showing a sustained low level of emissions compared to national targets Inventory of source and type of GHG carried out by end of 2008, and on an annual basis, with active participation of Cook Island agencies and private sector Mitigation measures incorporated into Government Policies	National Communications Report Annual GHG Reports Stakeholders involved in GHG reports		
Capac	city Development Output				
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					
Capac	city 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	Establish an easy to use GHG inventory database to record annual GHG activity data, (e.g. energy use, livestock numbers, waste etc) MFEM - Statistics	MOTE – Energy, NES, MOA, Private Sector, TAU

- Develop and implement legislation and or policies as appropriate to mandate key agencies to supply and collect data and undertake annual GHG Inventories Raise awareness of GHG emission trends in the Cook Islands and ways to reduce emissions, as well as encourage locally appropriate alternatives to fossil fuel use Ensure training is available for GHG guideline requirements, or identify guidelines better suited to the Cook Islands situation

Thematic Area: Mitigating GHGs from Transport, Land Use and Waste				
Envir	Environmental Outcome Performance Indicator(s) Means of Verification		cation	
2.2	Mitigation of Green House Gas Emissions from land use and waste	Reduction in GHG emissions from transport, land use and waste compared to baseline year (2000) and GHG Inventory under the 2 nd National Communications.		
Capa	Capacity Development Output			
2.2a	National 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 Number of emissions mitigation measures implemented effectively by 2012	Guidelines Annual GHG Inventory reports	
Capacity Development Actions		Lead Agency	Partner Agencies	
2.2.1	development and implementation of Renewable	n to reduce GHG emissions in the Cook Islands through the Energy, Vehicle Emissions and Importation Standards, ves to reduce emissions and the integration of locally		NES, Private Sector

2.2.2	Review, endorse and implement National Waste Strategy and prioritised subcomponents, to ensure special consideration of emissions reductions options and to minimise residual solid waste going to the landfill	MOW	NES, CSO, Private Sector
2.2.3	Assess and develop guideline recommendations on practical mitigation actions to reduce GHG emissions including options for improving transport and energy related systems with emissions reductions technology	MOTE – Energy	NES, NCCCT
2.2.4	Promote and explore options for reducing transport emissions including through development of policies and legislation of standards for vehicle importation in consultation with the private sector, emissions testing	MOTE	OPM, Private Sector, Customs - MFEM
2.2.5	Incorporate training of technicians for emissions testing, and maintenance of alternative and energy fuel efficient vehicles into any emissions reduction implementation strategy	HRD	Private Sector
2.2.6	Develop a road users campaign to promote GHG reducing tips such as carpooling and the cost saving benefits	CSO	MOTE, Road Safety Council, Police
2.2.7	Strengthen enforcement of burning bans and other waste regulations under public health act including through the provision and promotion of safer or more efficient alternatives	МОН	NES, CSO, MOW
2.2.8	Explore and promote locally appropriate alternatives to artificial fertilizers to reduce nitrous oxide emissions	MOA	NES, MOH, CSO, Private Sector

- Assess the options and practicality of introducing criteria or policy on importation practises and excess packaging in order to reduce waste before it comes in-country Ensure roads are well maintained to allow for fuel efficient driving conditions
- Implement pilot projects to trial biofuels production, use and suitability to the Cook Islands

Thematic Area: Renewable Energy						
Environmental Outcome		Performance Indicator(s)	Means of Verification			
2.3	Increased use of Renewable Energy Technologies throughout the country through improved support from government and increased involvement of all stakeholders and resulting in a decline in reliance of fossil fuels especially in remote locations	Increased level of adoption and use of Renewable Energy Technologies compared to baseline year of (2000) and Importation statistics for fuel, solar equipment energy saving devices like light bulbs, cooking appliances etc.	Islands			
Capacity Development Output						

	Greater capacity to support renewable energy initiatives and programs at both the National and
2.3a	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 on use of Renewable Energy in Cook Islands
- PIGGAREP reports

	onorgy motalitations		
Capac	city Development Actions	Lead Agency	Partner Agencies
2.3.1	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, MOW, Aid, OMIA, MFEM
2.3.2	Develop and implement a Renewable Energy Development Plan for Rarotonga as a priority to reduce petroleum imports and control electricity demand growth on Rarotonga.	ОРМ	MFEM, Energy Committee, MOTE – Energy
2.3.3	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, Energy - MOT
2.3.4	Investigate the potential for economic incentives to encourage use of renewable energy technology.	MOTE – Energy	OPM, MFEM, Private Sector, TAU
2.3.5	Develop strategies and programs that implement the Energy policy including the development and implementation of standards and policies for Renewable Energy.	MOTE – Energy	TAU
2.3.6	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
2.3.7	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
2.3.8	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
2.3.9	Investigate the potential for regional bulk buying of renewable energy technology	MFEM	TAU, MOTE – Energy, Private Sector

- 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 environmental viability with consideration of lessons learnt from analogous countries.

Then	Thematic Area: Energy Efficiency				
Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation	
2.4	Reduction in energy consumption and emissions through use of energy efficient practices and technologies.	Importation statistics for fuel, solar equipment energy saving devices like light bulbs, cooking appliances etc indicating an improvement in energy efficiency practices.	Islands	Energy reports	
Capa	city Development Output				
2.4a	Households, organizations and businesses are able to adopt practices and technologies that are energy efficient. Households, organizations and businesses are installations, level of overall financial support for RE and the usage of tax incentives. • Survey report on use of Renewable Energy Islands • Energy reports • NESAF progress reports				
Capa	city Development Actions		Lead Agency	Partner Agencies	
2.4.1	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)		ОРМ	MFAI, MOTE – Energy, Customs	
2.4.2	Decrease per capita energy consumption by increasing efficiency in energy use through the adoption of new technologies and energy conservation practices.		CSO	MOTE – Energy, TAU, Private Sector	
2.4.3	Develop strategies and programmes that imple implementation of standards and policies for Energ	ment the Energy policy including the development and y Efficiency and an Energy Conservation Act.	MOTE	OPM, TAU, MFEM	
2.4.4	Investigate the potential for economic incentives to	promote energy efficient technologies and practises	Private Sector	MFEM, OPM, TAU	
2.4.5	Introduce mechanisms to monitor consumption of energy and raise awareness and educate consumers on energy efficiency options.		MOTE – Energy	Private Sector, CSO, MMR	
2.4.6	Strengthen demand side management – regulative reduce energy use.	e the pattern of energy usage and provide incentives to	MOTE – Energy	TAU, CSO	
2.4.7	Promote the benefits of alternative technologies for all scales, in the form of pilot projects and incentive	r renewable energy and energy efficiency at all levels and es for consumers.	CSO	MOTE – Energy	

- Develop a programme for Energy Auditing including training, in order to implement practical recommendations for cost saving measures (possibly through the energy permitting system)
- Develop capacity for training in energy efficiency locally training modules focusing on energy efficiency which could be integrated into technical training programs for electricians and plumbers.
- Implement a local training and accreditation scheme for energy efficiency drawing on international expertise.
- Review Energy Division including organisational structure, functions and duties in the context of Renewable Energy and Energy Efficiency implementation and develop a programme to increase capacity.
- Investigate the potential for regional bulk buying energy efficiency technology.

Thematic Area: Clean Development Mechanisms

- 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
- Promote specific criteria through AOSIS at international level that will assist small islands to access CDM specifically for renewable energy and energy efficiency.
- Identify and mandate a Designated National Authority to explore the options of CDM and its appropriateness to the Cook Islands.
- Explore CDM and other opportunities for pilot/demonstration projects to show cost benefits of reducing emissions.

ENVIRONMENTAL GOAL 4: Cook Islands climate change information is effectively managed and exchanged

Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation	
4.1	Accurate and continuous data with the support of appropriate information management systems enables National government agencies and stakeholders to adapt and mitigate to climate change.	 Government agencies and public have better and reliable access to climate change information and able to apply information and knowledge for climate change adaptation and mitigation. 	 Increase in Climate Change Activities Centralised Database NESAF reports 		
Capac	city Development Output				
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	identified within key institutions and Ministries	tion,		
Capac	city Development Actions		Lead Agency	Partner Agencies	
4.1.1	climate change data collection and information nappropriate personnel within each organisation to the		MET	NES, MOW, MMR, MOH	
4.1.2		ng local capacities for management of climate change data inventories development, data collation and analysis, GIS,	MOW	MOH, MMR, NES	
4.1.3		Environmental Information Network (PEIN), and Population of Information sharing within and between agencies, electronic applications	MOW	NES, MMR, MOH	
Long	Term Priorities				

- 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.

ENVIRONMENTAL GOAL 5:

People of the Cook Islands are aware and educated on Climate Change

Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation	
5.1	Integrated education and awareness programmes for climate change	 Education Curriculum incorporating climate change topics and children understand important climate change concepts and information. Public understand important climate change concepts and key messages on adaptation and mitigation 	 Climate Change Courses/Papers in education curriculum Positive impact of Publicity Campaign Government and Stakeholder participation 		
Capa	city Development Output				
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 				
Capa	city Development Actions		Lead Agency	Partner Agencies	
5.1.1		al education awareness including regular specific climate for different levels, including NGOs and community groups	NES	CSO, NGO, MOE	
5.1.2	interactive programmes such as Sandwatch, SPAF		NES	NCCCT, CSO	
5.1.3	professional development to support teachers with		NES	MOE, CSO	
5.1.4	Produce media and education packages featurin bilingual format.	g local climate change relevant information in a simplified	NES	CSO, MOTE, NCCCT	
5.1.5	Need for 'information brokers' who are able to und into simplified clear format/language	lertake the translation of scientific and technical information	CROP agencies/ NES	CI Maori Language experts, Aronga Mana, CSO	
5.1.6	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 under with local counterparts for practical capacity buildir	take climate change research for the Cook Islands, working and training	USP	NHRD, OPM	
5.1.8	Undertake training for planners, developers and disaster management considerations into infrastruc	lecision makers on how to incorporate climate change and cture and development	OPM	NCCCT, MFEM	

- Provide for the collation and ongoing documentation of local climate change relevant information, including traditional and local knowledge
- Explore the use of innovative communications mechanisms such as local radio stations and Radio Network for dissemination climate information

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

Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	ation	
6.1	Technology transfer, use and maintenance programmes are supported, funded and maintained.	Government reports showing increase in use and benefits of appropriate technology compared to baseline year of 2009	VISIDIDA,	Government reportsPrivate sector reports	
Capac	ity Development Output				
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 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 per year Technology needs assessment report Private sector report				
Capac	city Development Actions		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 approis considered at the initial design and review stage	priateness of any technology transfer related project designs	MOT E - Energy / TAU	NCCCT, NES, Private Sector, Community	
6.1.3 Gather and disseminate lessons learnt in adoption and use of technology transferred to improve decision making regarding technology transferred			NES	NCCCT, NES, MOH	
Long Term Priorities					
• P	Provide resources and training opportunities to develop local capacity in engineering, policy and technical areas.				

ENVIRONMENTAL GOAL 7: Ozone depleting substances are phased out of the Cook Islands

Ensure technology transferred is labelled in English and have both instruction manuals and practical demonstration training.

Environmental Outcome	Performance Indicator(s)	Means of Verification
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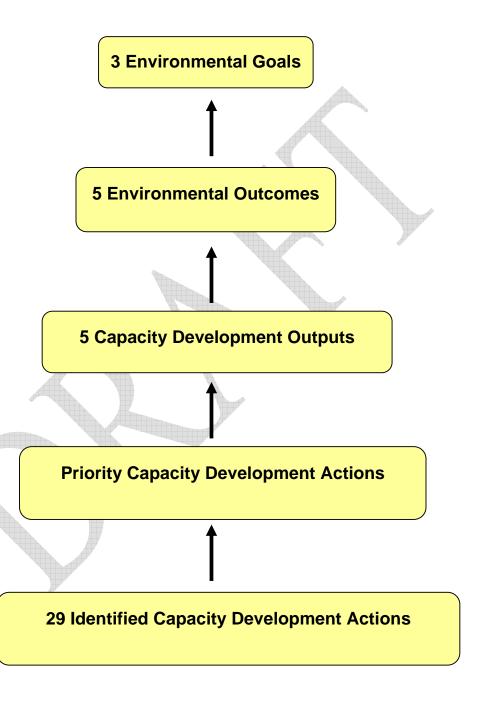
7.1	Cook Islands contributing to global efforts to protect the Ozone Layer by phasing out and banning the use of ozone depleting substances	ODS phased out of Cook Islands completely by 2010		vate Agency reports treal Protocol Secretariat s records
Capa	city Development Output			
7.1a	Government agencies 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 licensing systems in place ODS Regulations in place Training of key stakeholders in implementation and enforcement of ODS Regulations and ODS phase out programme undertaken Training undertaken of Customs officers for monitoring of imports or ODS or ODS using technology 		nt (ODS legislation) Compliance reports
Capa	city Development Actions		Lead Agency	Partner Agencies
7.1.1	Develop ODS legislation controlling the import, us ODS with the view to phase out all ODS in the Coc stakeholders	e, management, and disposal of ODS or appliances using ok Islands and undertake consultation process with relevant	NES	Statistics, Customs - MFEM
7.1.2	Designate agencies responsible to enforce eleme for enforcement and permitting systems for ODS or	nts of the legislation and develop a monitoring programme nce legislations are in place.	NES	Statistics, Customs - MFEM
7.1.3	Train Customs officers in the need for permits and imported	d permitting requirements to reflect the types of ODS being	NES	SPC, Customs, MFEM, CROP Agencies
7.1.5	activities such as climate change mitigation and wa	ODS in the Cook Islands in partnerships with other relevant aste related conventions e.g. bulk white waste disposal	MOW	NES, Private Sector
7.1.6	Change Country Team or the proposed Hazardou out of ozone depleting substances in the Cook Isla		NES	NCCCT, NSDP Committee, MOH
7.1.7	ODS in public and private sector and promote awa		NES	NCCT, CSO, MFEM, MOH, Customs
7.1.8	to use this checklist a well as promoting the be alternatives.	containing ODS' checklist and train Customs and importers nefits of ODS phase out as well as identify and promote	NES	MFEM, MOH, Customs
7.1.9	Increase awareness and education at all levels for ODS appliances and best practices for the phasmedia campaigns, promotions and advocacy progr	climate change and ODS concerns on alternatives to ODS, se out of ODS through participatory approaches, ongoing	NES	MOTE, CSO, Private Sector, Communities

- Adopt recognised standards for an accreditations scheme for licensing of ODS handlers and implement training programmes for relevant stakeholders such as refrigeration technicians, customs officers and recyclers in identification/handling and recapture/disposal of ODS 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.



Land Degradation – Capacity Development Action Plan Summary



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

Then	Thematic Area: Development				
Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation	
1.1	Land resources able to provide and support ecosystem functions, maintenance of biodiversity, support development needs and contributes to adaptation to Climate Change.	 Increase in proportion of land area covered by forest compared to the baseline year of 2003 Ratio of area protected to maintain biological diversity compared to baseline year of 2003 Land use change patterns indicating increase in areas under sustainable land management practices compared to baseline year of 2003 	 National reports to the UNCCD Sustainable Land Management Project report GIS reports and maps 		
Capa	city Development Output				
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	and land use National Economic Development Strategy Land Use Policy guidelines formalised Land Use Act revised PIMP Project designs		
Capa	city Development Actions		Lead Agency	Partner Agencies	
1.1.1	degradation and existing development condition information for resource management and cassessments)	a comprehensive inventory of natural resources, land ns on a GIS platform, which should provide baseline levelopment decisions (including environmental impact	MOW	MOA, MMR, NES, MOH, GIS Users Group	
1.1.2	development (e.g. excavation techniques, soil eros and communities for voluntary compliance in in activities	es and practises for mitigating land degradation from land sion control measures etc) to developers, the private sector accorporating recommendations into all land development	NES/MOW	Private Sector, MOA, MOH, Engineers	
1.1.3	administration including the promotion of efficien	n and capacity development to facilitate improved land nt, effective and more dynamic approaches to land use, ment which will involve a participatory and consultation	NES	MOJ, MOW – Survey, Aronga Mana	

1.1.4	Undertake where necessary, institutional reform and capacity development to manage current development efforts and project economic growth, • including through knowledge sharing, training to improve technical capacities in suitable SLM practices	OPM/MOW	NES, MOH
1.1.5	Support activities that monitor the environment for land degradation such as beach profiling, coral monitoring, water quality testing and extend to cover all islands in the Cook Islands	NES	MMR, MOA, MOH

- Strengthen existing legislation, including the promulgation of regulations under the Environment Act 2003 to control development in specific areas of concern and the environmental 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, environmental benefits and future benefits

	Thematic Area: Land Use Practises						
	onmental Outcome	Performance Indicator(s)	Means of Verification				
1.2	Sustainable land use practices contributing to the maintenance of soil productivity, maintenance of biodiversity, agriculture production, food security and stable landscapes.	 Total arable land under sustainable land management practices Water quality monitoring tests showing maintenance and/or improvement in water quality compared to an established baseline situation. GIS Mapping analysis of temporal change in land use patterns showing improvement in sustainable land management based on established criteria. Increased crop quality and yield Increased soil quality and usage Increased usage of land for agricultural purposes Increased awareness about sustainable practices 	National reports to the UNCCD Water Quality Monitoring reports MOW reports GIS reports and maps Soil quality tests and results Participation Nos in agriculture Market saturation of local agricultural products No of enquiries to MOA and NES about land use practice				
Capa	city Development Output						
1.2a	Government, stakeholders and land resource owners able to develop and use policies, regulations and technical expertise to ensure and promote sustainable land use practices particularly in relation to agriculture and physical development. Government, stakeholders and land resource owners are educated and aware of sustainable land use management and practises and actively implement	materials in SLM produced targeting different audiences from policy makers to communities and individuals	MOW and MOA reports GIS reports and maps Economic valuation reports Check indicators in the slm project				

Capacity Development Actions			Lead Agency	Partner Agencies
1.2.1	Ensure that environmental considerations for land degradation and sustainable land management are promoted and integrated into relevant sectoral policies and plans.			MOW, MOA, Engineers
1.2.2	practises, including through community based	mentally sustainable land management and agricultural training, formal and informal education and awareness nan health in order to prevent further land degradation	МОА	TGA, NES, Other Community Groups and NGOs
1.2.3		value of arable land for agriculture to support economic ration of prime arable land for agricultural purposes.	MOA	OPM/MOW
Then	natic Area: Rehabilitation of Degraded I	and		
Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation
1.3	Degraded lands are rehabilitated and their capacity to contribute towards ecosystem functions, biodiversity protection and improved adaptation to climate change is restored.	 Extent of land degradation in the Cook Islands established through a national survey and priority areas for rehabilitation identified by end of 2011 Rehabilitation of priority degraded areas underway by 2011 	 SLM Project Reports NES reports NESAF progress reports 	
Capac	city Development Output			
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 land information system Training reports Guidelines ESD and EIA applications for land development Policies and legislation for rehabilitation of degraded lands Surveys Education and awareness activities 	
Capac	city Development Actions		Lead Agency	Partner Agencies
1.3.1	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		NES/MOW	MOA, OMIA, SPREP, SPC
1.3.2			NES	MOA, SPREP, SPC, OPM, MOW
1.3.3	Promote locally appropriate technology and method		NES	MOA, SPREP, MOW, SPC
1.3.4	Develop locally appropriate plans, policies and legi and develop appropriate capacity to monitor and en	slation to ensure the proper rehabilitation of degraded land, nforce such plans	OPM	NES, MOA, MOW, SPREP, SPC, Private developers, Aronga Mana

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

Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation
2.1	Improved land degradation mitigation actions as a result of an improved enabling environment.	 Level of awareness of land degradation issues at the Ministerial and senior officials' level and the manner in which that is translated into responsibilities requiring action. Land degradation and SLM issues in the NSDP, NESAF, the Budget Policy Statement and integrated into annual workplans of key Government agencies 	Government reports SLM Project report NESAF NSDP National budgets Ministry work plans	
Capa	Capacity Development Output			
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	
Capa	city Development Actions		Lead Agency	Partner Agencies
2.1.1	policies, plans and legislation, that is in harmony of customary land tenure system, to guide land use	ource management framework, supported by appropriate with the principles of sustainable land management and the change, tourism and urban development and associated e of the links between SLM, environment sustainability and with communities	OPM/MOW	NES, MOJ, Aronga Mana, TourismCls, + Govt Agencies
2.1.2		adation, ensuring coverage of issues in the Outer Islands, P across all sectors, including communities, into relevant	NES	MOA, MOW, OPM, Community groups, TIS, SPREP, SPC

2.1.3	Formalised coordinating mechanisms such as a national taskforce or country team, to develop and strengthen coordination between relevant stakeholders for consolidated and effective management of natural resources, ecosystems and land degradation	NES / OPM	MOA, MOW, Aronga Mana, MOH, NGO's, MMR
2.1.4	Develop capacity for the application of Economic Valuation of Land Degradation especially to promote areas where sustainable land management is important and the consequences of actions or inaction	NES / NHRD	OPM, MFEM, MOW, SPREP, SPC
2.1.5	Develop media and communications strategy to increase exposure and awareness of land degradation issues to local communities and target the mainstreaming of land deg and SLM into sectoral planning	NES	MOW, 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	MOW, MOA, OPM, MFEM – Aid, MMR, NGO's

- 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.

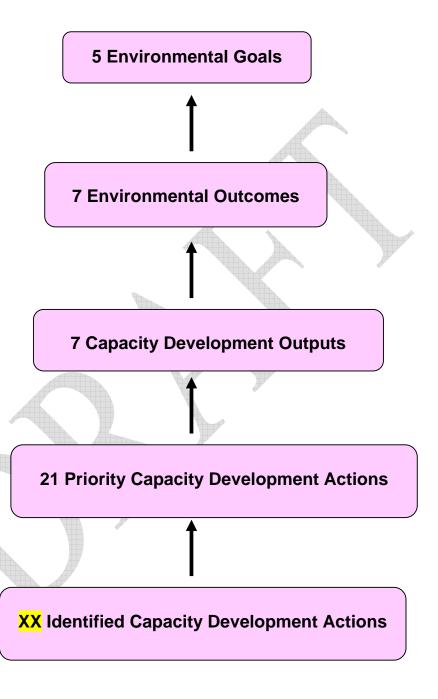
ENVIRONMENTAL GOAL 3: People of the Cook Islands accessing information and technical capacities for land degradation

Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation
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	resources management compared to 2009	 Increase in Land Degradation Mitigation Activities Centralised Database NESAF reports 	
Capa	Capacity Development Output			
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.	 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	
Capa			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	MOW, NES, MOA, OMIA, OPM, Aronga Mana, NGO

	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, MOW, 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	MOW, MOA, NES, OMIA, MMR, MOH, OPM
3.1.4	Formal and informal training and skills development of national and community level personnel for resource use planning methods, techniques, approaches and systems; GIS development; resource inventory methods; multi-criteria and objective based planning; ecosystems approaches to land use planning; land capability/suitability methods; and, integrated catchment and coastal zone approaches.	NHRD	NES, MOA, MOW, OMIA, OPM, SPREP, SPC



Cross Cutting Environmental and Capacity Issues



CROSS CUTTING ENVIRONMENT ISSUES

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

Then	Thematic Area:				
Envir	onmental Outcome	Performance Indicator(s)	Means of Verifi	cation	
1.1	Coastal resources are effectively managed in an integrated manner	 Improved information and knowledge base data system developed Education awareness campaign commenced Co-ordination of policy and coastal management issues strengthened Buy-in by government agencies/local government to work collaboratively 	TV, Print andDatabase insNew financial budget proces	 Workshops conducted TV, Print and Radio Media campaign confirmed Database inserted within key ministries New financial resources appropriated through budget process Operating Manuals 	
Capa	city Development Output				
1.1a	That appropriate mechanisms are in place for people of the Cook Islands and stakeholders to manage our coastal resources in a manner that is efficient, cost effective and meets the standards of legislative and policy requirements	 Realignment of outputs and individual Ministry business plans Agreements established between Government, private sector and community Monitoring framework established Inter agency / local government consultations conducted 	 Annual Work plans identified Inter agency Protocols established Training workshops in progress Incorporate in Budget Policy Statement Operating Manuals 		
Capa	city Development Actions		Lead Agency	Partner Agencies	
1.1.1		anagement framework to counter fragmentation, duplication, al areas related to the management of limited resources in ities in coastal and adjoining areas	NES	OPM, OMIA, MMR	
1.1.2	Clarify and evaluate roles and responsibilities, insti	itutional arrangement options and coordination mechanisms or to develop a harmonized approach to coastal zone	PSC	NES, COC, MMR, MOE	
1.1.3	comprehensive inventory of marine and coastal information for coastal zone management and deve				
1.1.4	Ministry of Health with other organisations respons		NES	MOH, OPM	
1.1.5	coordination of activities related to management of				
1.1.6	management problems affecting the coastal zone	istal Management (ICM) Plan to address land and water, through broad-based consultation at the community level, capacity to implement, monitor and evaluate management			

1.1.7	Develop human technical capacity to plan, implem programmes and activities	nent, monitor and evaluate Integrated Coastal Management				
1.1.8	Establish guidelines and standards for the siting tourism and industrial structures in the coastal area	g, construction, development and operation of residential,				
Long	Term Priorities					
• [Develop capacity of relevant ministry and agency staf	f to provide sound advice (legal, social, economic, biological) coastal management at different levels – drawing on insti, organisations and communities				
Then	natic Area: Coastal Vulnerabilities					
Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	ation		
1.2	People of the C.Is are fully aware of coastal erosion and impacts of climate change on our coastal environment	 Changes to outdated policies and legislation undertaken Assessments on vulnerability and adaptation carried out Ensure all future infrastructure development is aligned to the NSDP and NES Environment Framework Consultation workshops in progress Local government involvement 	legislation compCo-ordinated CoNSDP and NES	ommunication Strategy in place SAF Review Reports orkshops completed strategy in place		
Capa	city Development Output					
1.1a	Better co-ordination between stakeholders, Ministries, and community organizations resulting in sharing of information, database, management and monitoring mechanisms	 Increased capacity of regulatory agencies to coordinate and share information Human resource capacities identified Development of database 	Effective of Inter Age	cy direction communications strategy in place gency/local government partnership developed		
Capacity Development Actions			Lead Agency	Partner Agencies		
1.1.1	development, training, newsletters, resource sharin					
1.1.2	with climate change/variability.	stablished to reduce the risks of extreme events associated				
1.1.3		the possible impacts of the environment, including climate evelopment planning processes, and appropriate changes hal structures to facilitate such considerations				
1.1.4	future conditions into current building control cod regulatory enforcement systems with appropriate of preventative planning at the development stage	hnologies related to climate change, extreme events and les and standards, and develop inspection guidelines and capacity building and training in implementation, to support				
	Develop a coordinated programme and techniassessments for all islands in the Cook Islands	ical capacity to carry out vulnerability and adaptation	NES	MMR, MOW, MOH, COC, OMIA		

1.1.5	Develop and disseminate guidelines and best practises for preventative infrastructure planning and climate		
	proofing of infrastructure and developments to accommodate climate change impacts		
	Source necessary data and develop data sharing arrangements needed to undertake Vulnerability and		
	Adaptation assessments for all islands in the Cook Islands		
	Develop a "vulnerability atlas" which identifies areas that are vulnerable to the impacts of climate change, land		
	degradation and biodiversity loss		
	Assess options to identify appropriate adaptation technologies and solutions that are suitable and can be		
	employed at specific locations to mitigate identified coastal vulnerabilities, including technologies such as		
	coastal protection mechanisms		
1.1.6	Develop capacity of vulnerable communities to cope with onset of droughts and flood events through	MOW	NES, CIIC, MOH, Koutu Nui, Media
	emergency management plans and promotion of water conservation practises		

- 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

	Thematic Area: Impacts of Activities within the Coastal Zone				
Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	Means of Verification	
1.1	People of the Cook Islands are aware of the impacts activities within our coastal zone will have on our environment		 Monitoring input by Aronga Mana confirmed Legislation and policy directions established Implementation and monitoring of actions Database of information on activities established 		
Capa	Capacity Development Output				
1.1a	That Government and stakeholders take responsibility for ensuring that all development planning in the Cook Islands takes cognizance of likely impacts any development will have towards our coastal resources	Improvements to guidelines and best practices for preventative measures developed	Business plans		
Capa	city Development Actions		Lead Agency	Partner Agencies	
1.1.1		istal zone are co-ordinated amongst responsible agencies, nvironment, and that all activities are within the "carrying			
1.1.2		nstitutions and developers regarding Environment Impact is as a tool for determining the impact of the environment on	NES	MOW, MOH	

1.1.3			
	the private sector involved in fisheries, land, water, and waste management issues or activities that impact		
	upon coastal resources		
1.1.4	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	MMR	NES
	research through mechanisms such as research counter-parting programmes		
1.1.5	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		
1.1.6	Promote the ecosystems approach for Ra'ui and protected areas establishment and management		
1.1.7	Implement and maintain information management systems for data related to coastal areas, resources and		
	activities, in line with land information management systems and ensure appropriate local capacity in relevant		
	agencies for ongoing maintenance and updating of these information systems		

- 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 environmental 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 foreshoreProtect 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 environmental 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

ENVIRONMENTAL GOAL 2: Resource Management

Envir	onmental Outcome	Performance Indicator(s)	Means of Verification
2.1	Cook Islands natural resources are managed in a sustainable manner within the carrying capacity of the resource	VIII VIII VIII VIII VIII VIII VIII VII	 Quarterly/6 monthly meetings of stakeholders Inclusion in all new policy proposals on development Training workshops on capacity building implemented Community initiatives in place
Capa	city Development Output		
2.1a	Government and stakeholders aware, have sufficient information available on resources and are implementing sustainable resource management	Review programs implemented by government on information availability for resource management and capacity 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

Capac	city Development Actions	Lead Agency	Partner Agencies
2.1.1	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	NES	OPM, MOW, Private Sector
2.1.2	Utilise national frameworks such as the National Sustainable Development Plan to mainstream sustainable resource use and management	ОРМ	NES, MOW, MMR, MOA
2.1.3	Develop capacity and undertake an assessment of the "carrying capacity" of the existing environment including natural resources through identification of locally appropriate methodologies, in addition to an assessment of the impacts of social and economic development to determine appropriate guidelines for future development	NES	MOW, MMR, MOH, MOA, OPM, Regional expertise
2.1.4	Develop, through broad-based community consultation, integrated Resource Management plans, programmes and actions to protect the capacity of island ecosystems to deliver goods and services and biological resources that support sustainable livelihoods, and will not undermine the rights of traditional landowners, traditional conservation practices, island customs and the land tenure system	NES	
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	
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	
2.1.7	Support initiatives such as the MapInfo Server database under MOW 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	MOW	Land data agencies OPM, NES,
2.1.8	Develop capacity in the application of economic valuation of environmental services, especially to promote areas where sustainable resource use is important and the consequences of actions or inaction	NES	SPREP, SPC, MFEM, OPM, MOA, MOW, Private Sector, NGO's

- Establish a legal and institutional framework for the coordinated inter-sectoral management of natural resources and environmental programmes focused on sustainable use and managing human activities in sensitive areas to ensure that development does not cause harm to human health or the environment, 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

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

Then	Thematic Area: Water Resource Management			
Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation
3.1	Improved quality and quantity of water resources in Cook Islands due to better management in an integrated and sustainable manner	Water quality tests showing good quality of water based on established quality criteria and very low levels of water borne diseases compared to 2000 levels At least 75% of water needs of Cook Islanders addressed in a sustained manner	 Reports on capacity of water resources Water demand vs. available water supply / total water use per capita Reports on water quality tests 	
Capa	city Development Output			
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 Water Policy completed and implemented Recommendations of Water related legislation review implemented Workable interagency plans and sharing of information Comprehensive inventory undertaken on all islands to assist with development of water policy initiatives Island specific water resource management plans developed on all islands by 2010 	Report on Water Resources OPM – Water Policy Legislation Review report	
Capa	city Development Actions		Lead Agency	Partner Agencies
3.1.1		nent Project (IWRM), which aims to strengthen the enabling can be used as a pilot project for launching improved and ands in the Cook Islands.	MOW – Water Works	NES, MOH, IWRM team
3.1.2	Undertake a comprehensive inventory to determin Cook Islands including all freshwater resources water catchments to provide sound information programmes and projects to ensure that freshw	e the current state of water resources for all islands in the (surface and underground), water intakes, watersheds and with a view towards the formulation of plans, policies, vater resources are available to facilitate the sustainable basis for planning approvals and environmental impact	MOW/ Island Councils	OPM, OMIA, NES, MOH

3.1.3	Conduct a legislative review of various acts and water quality management and implement appropintegrated approaches and institutional structure watersheds in the Cook Islands	Crown Law/OPM	MOW, MFEM – Aid Management	
3.1.4		nce as an immediate step towards an overarching policy for oration with the IWRM project and EU Water Governance	ОРМ	NES, MOH, MOW, OMIA, MFEM – Aid Management
3.1.5	Develop Island specific water resource manageme	nt plans for all island in the Cook Islands	MOW/ Island Councils	IWRM team
3.1.6	Develop and strengthen local capacity for sustainable water resource management at the national, institutional and community levels, including capacity to monitor and enforce water resource policies			NES, MOH, MMR
3.1.7	Centralise resources and establish a core technical group of water professionals/agencies that are directly responsible for water quality monitoring or health surveillance, that would collate data and prepare annual reports on water resources, including drinking water quality of various supplies (urban, rural and outer-island) and water-borne disease statistics			MOW, MOH, MMR, NES, Island Councils
3.1.8	Develop strategies for attracting and maintaining local expertise in water resource management within agencies, including staff succession and counter-parting plans and ongoing capacity building and training programme			NHRD, PSC, MFEM, MOW
Then	natic Area: Water Demand and Supply			
Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation
3.2	Water supply and demand is at sustainable levels and with measures in place to adapt to impacts of climate change and natural disasters	 Adequate use of water compared to available water Percentage of households with water tanks/water storage Percentage of households with water supplies susceptible to impacts of climate change and natural disasters 	Water demand and supply data – MOW Statistics census data Vulnerability analysis and mapping	
Capac	city Development Output			

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 	 MFEM policy or technologies Economic incorpromoted Water catchment Training program progress ince 	;
Capa	city Development Actions	No. JULY SHARINGING	Lead Agency	Partner Agencies
3.2.1		water resources on all islands including dynamics of supply	MOW/OMIA	Regional expertise
3.2.2	Islands, including groundwater and desalination	tions to supplement water supply for all islands in the Cook	MOW	Regional expertise
		areness programmes, highlighting the finite nature of water		
3.2.3	discouraging water wastage or excessive use as and reduced-flow shower heads	es and promote water conservation awareness programmes well wise water use technologies such as dual flush toilets	MOW/OMIA	EMCI, Red Cross, NES, MOH, NGO's
3.2.3	discouraging water wastage or excessive use as and reduced-flow shower heads Develop economic incentives to encourage the temporary control of the control	es and promote water conservation awareness programmes well wise water use technologies such as dual flush toilets use of water storage facilities, including the installation of and to encourage investments in alternate water catchment	MOW/OMIA MOW/MFEM	
	discouraging water wastage or excessive use as and reduced-flow shower heads Develop economic incentives to encourage the water tanks and low energy pumping equipment, a technologies and equipment including the installati	es and promote water conservation awareness programmes well wise water use technologies such as dual flush toilets use of water storage facilities, including the installation of and to encourage investments in alternate water catchment on of roof spouts and gutters for rain catchment.		NGO's
3.2.4	discouraging water wastage or excessive use as and reduced-flow shower heads Develop economic incentives to encourage the water tanks and low energy pumping equipment, technologies and equipment including the installati	as and promote water conservation awareness programmes well wise water use technologies such as dual flush toilets use of water storage facilities, including the installation of and to encourage investments in alternate water catchment on of roof spouts and gutters for rain catchment. Source management incorporates appropriate adaptation lange/variability. Climate Change on water resources including early warning	MOW/MFEM	NGO's NES, OPM, Aid Management
3.2.4 3.2.5 3.2.5	discouraging water wastage or excessive use as and reduced-flow shower heads Develop economic incentives to encourage the water tanks and low energy pumping equipment, technologies and equipment including the installati Ensure that any regulatory regime for water restrategies to address likely impacts from climate chesting the control of the contr	as and promote water conservation awareness programmes well wise water use technologies such as dual flush toilets use of water storage facilities, including the installation of and to encourage investments in alternate water catchment on of roof spouts and gutters for rain catchment. Source management incorporates appropriate adaptation lange/variability. Climate Change on water resources including early warning	MOW/MFEM NES	NGO's NES, OPM, Aid Management MOW, OPM, EMCI, Island Councils EMCI, NES, Red Cross, Island

3.3	Cook Islands has improved quality of water resources	 Water quality testing results indicate that drinking water testing results are within WHO standards Nutrient levels for stream and lagoon water testing results are within acceptable levels Reduced risk of waterborne illness 	Water Quality Testing Reports		
Capac	city Development Output				
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 in place Interagency/local government and community awareness to monitor and protect water resources Public relations strategy developed Improvements to water quality testing facilities 	Partnership agrFunds approveTraining prograLaboratory faci	lity in place	
Capac	city Development Actions		Lead Agency	Partner Agencies	
3.3.1		vater quality with all relevant agencies and a centralised velop a coordinated monitoring programme to guide water	МОН	NES, MOW	
3.3.2		ring and results analysis of drinking water quality amongst of agreed testing parameters, and the surveillance and ers			
3.3.3		cision makers for informed policy and action development			
3.3.4	stakeholders and the general public	emination of water quality and quantity information to			
3.3.5	establishment of legal measures and the developm	lve (12) intakes on Rarotonga, including through the ent of management plans to protect water catchment areas			
3.3.6	supply systems	nagement plans for all water catchment areas and water			
3.3.7	Drawing on lessons learnt from the Takuvaine (Water Catchment) Management Plan produced under the International Waters Project, explore further application of community-based water resource management plans, ensuring provision of a legal basis for enforcement of such plans and the introduction of community policing of catchments by landowner groups				
Long	Term Priorities				

- 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

ENVIRONMENTAL GOAL 4: Waste, Sanitation and Pollution in the Cook Islands are being managed

Envir	onmental Outcome	Performance Indicator(s)	Means of Verification	
4.1	Effective strategic management of waste, pollution and sanitation systems in place for all Islands	National Campaign Strategy on Waste disposal promoted Updating of legislation and ineffective policies Monitoring of National planning processes Government resources allocated to assist with facilitating domestic waste management Donor funds sourced	 New monitoring procedures in place Trained personnel appointed Resources allocated through Budget Communication Strategy approved Waste Management projects approved 	
Capa	city Development Output			
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	Nationwide assessments undertaken within 12 months Project proposals identified for donor funding Development of legislation, by laws and policy relating to waste management activities	 Project Scoping completed Donor funds confirmed Lead agency identified for project management Public relations strategy developed 	

Capaci	ty Development Actions	Lead Agency	Partner Agencies
WASTE	MANAGEMENT		
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	MOW, NES, OMIA,
4.1.2	Strengthen relationships between agencies and organisations involved with waste management for improved collaboration and coordination of activities	ОРМ	NES, MOW, NGO's,
4.1.3	Promote the National Waste Strategy to the private sector for private sector involvement	ОРМ	NES, MOW, COC, NGO's,
4.1.4	Produce island specific management plans for waste, particularly for the Outer Islands with an emphasis on waste minimisation	ОРМ	NES, MOW, OMIA, NGO's Island Admin's, Tourism
4.1.5	Continue to support partnerships and resource sharing between waste management agencies in the implementation of communication strategies to promote effective management waste	OPM	NES, CITV, MOE, MOH, OMIA
SOLID V	VASTE		
4.1.6	Encourage at source separation to minimise waste and ensure the life of the landfill is extended	MOW	NES
4.1.7	Encourage the reduction of solid waste to the minimum practicable level using the principles of refuse, reduce, reuse, and recycle and "polluter pays"	NES	MOW, MOH, MOE, CITV
4.1.8	Clearly define regulatory, management and enforcement roles and responsibilities of the various agencies involved in waste management and Island councils, with clarity provided under appropriate regulations	OPM	NES, Crown Law, OMIA, MOW
4.1.9	Introduce and legislate innovative economic measures and incentives, such as focused tariffs and levies, to support sound environmental management of solid waste from point of entry through to disposal	NES	MFEM, MOW
4.1.10	Establish appropriate legal and institutional frameworks and operational plans for the management of solid wastes on all Outer Islands, and pass appropriate bylaws	ОРМ	NES, OMIA, Crown Law, Island Councils, MOW
LIQUID	WASTE		
4.1.11	Undertake a feasibility assessment to identify possible mechanisms to support the retrofit of septic tanks and sewage systems to comply with new Sewage Regulations		
4.1.12	Facilitate establishment of a centralized laboratory testing facility and to strengthen capacity to test for treated effluent	MOH	NES, MOA, MOW
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	MOW, MOE, COC
4.1.15	Conduct detailed economic and environmental 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	ОРМ	MOW, NES, COC, MFEM, CIIC
HAZARI	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	ОРМ	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
4.4.4	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	ОРМ	MOT, NES, Crown Law, OMIA, MOH, MOE, MOA
4.4.5	Provide incentives for industries to establish sound hazardous substance management plans and provide training in hazardous substance management, recycling and disposal	ОРМ	NHRD, NES, MOW
MARINE	POLLUTION		
4.4.1	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		Crown Law, Ports Authority
4.4.2	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	ОРМ	MOT, NES, Crown Law, MOH, Ports Authority



CROSS CUTTING CAPACITY ISSUES

ENVIRONMENTAL GOAL 5: Environment is managed in an integrated manner by multiple stakeholders

Envir	onmental Outcome	Performance Indicator(s)	Means of Verific	cation
5.1	Integration of environment and economic policies in to our national planning and development processes	 Percentage of national environment programmes supported and managed by NGOs Ministerial commitment to integrated environment activities Monitoring and Evaluation Framework established Ministries/local governments to produce State of the Nation Environment reports 	NSDP and NESAF Reports Budget process Ministry Business Planning processes Audit performance review reports NGO reports Island/local government reports	
Capa	city Development Output			
5.1a	Strengthening of Government, stakeholders and private sector capacity and responsibilities to ensure that legislation and policies are updated and resources allocated to support	 Outdated legislations and policies, identified, reviewed and updated Outsource legislation Drafting requirements Number of proposals for report writing, project management, design, planning and implementation Increased participation of stakeholders and NGO's at workshops 	 Budget Policy Statement Ministry business plans NSDP and NESAF Reports Legislation Drafting Outputs 	
Capa	city Development Actions		Lead Agency	Partner Agencies
5.1.1		Process, undertake the preparation of National State of the gal requirement by responsible ministries and departments, d health.		
5.1.2	Environment information and data, including St made available to policy makers and planne implementation of environment management act	ate of the Environment Reports, should be promoted and ers, and used to lobby support for the integration and ivities within relevant ministries and agencies		
5.1.3		riority area in the annual Budget Policy Statement and s, including through the presentation of supporting data or ces are allocated for implementation activities		
5.1.4	Strengthen local capacity for the development o environment management activities within Minist	policies and strategic planning to support the integration of ries		
5.1.5		mitations of donor funding to project outputs and the need applementation of environment management activities		

5.1.6	Build and strengthen local capacity to utilise economic valuation of environmental goods and services as planning tools, including capacity for environment accounting, economics and auditing, to promote the	
	"value" and contribution of natural resources and indicate the economic "consequences" of resource degradation and use	
5.1.7	Ensure that lead and supporting responsible agencies for the implementation of environment related strategies and policies are identified, and provided support for institutional strengthening and mechanisms for improved and coordinated environment management	
5.1.8	Strengthen partnerships and resource sharing agreements between Government ministries, environmental NGOs, private sector and communities for the implementation of MEA and environment activities including through collaborative efforts on advocacy and capacity building programmes	
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.	
5.1.10	Consideration should be given to strengthening the role of customary practices in environmental and resource management to encourage ownership and action by communities and individuals	
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	

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

Environmental Outcome		Performance Indicator(s)	Means of Verification	
6.1	Environment awareness issues integrated into education training related programmes through government, stakeholders, schools, community and the private sector	Number of schools adopting environmental related programmes apart from normal school environmental curriculum programmes Increasing number of scholarships related to environmental science and other related technical applications	 NHRD reports Budget process Expo displays and student community projects Partnerships developed between community, agencies and schools promoting environment awareness Community development programmes Increased participation at forums, workshops All schools participating 	
Capa	city Development Output			
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 environmental project management skills. • Number of new and locally relevant environmental project management skills. • Number of new and locally relevant environmental project management skills. • Annual statistics from schools and NHRD • Effective communication strategy implement Brochures and publications circulated • Education workshops implemented • Appropriate resources allocated • Island Strategic plans		unication strategy implemented bublications circulated shops implemented burces allocated	
Capa	city Development Actions		Lead Agency	Partner Agencies

6.1.1	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	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, MOW
6.1.5	Continue to support the production of media and education packages featuring locally relevant information in a simplified bilingual format, ensuring that materials for outer islands are in an appropriate language/dialect	NES	MOE, MOH, OMIA, NGO's, CITV
6.1.6	Work with appropriate authorities and individuals to develop Maori language for new environment information and terms e.g. land degradation	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, environmental 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 environmental 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 environmental monitoring e.g. Stream walk under IWP, Tanga'eo warriors etc and encourage the dissemination of similar programmes to all islands		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 environmental issues and conducting training and conservation initiatives for young people to enhance their skills in environmental management.		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 environmental events	NES	OPM, MOE, MOH, MOW, OMIA

ENVIRONMENTAL GOAL 7: Environment information is managed and disseminated effectively

Environmental Outcome		Performance Indicator(s)	Means of Verific	cation
7.1	People of the Cook Islands have the capacity and capability to manage environment information efficiently and effectively	 Enhance awareness on data and information Increase local capacity in data collection, analysis, dissemination and mapping Updated policies and legislation to incorporate IPR in MOU's for donor agencies Implementation of relevant training programmes 	 Database established Trained personnel appointed to manage database Ministry workplans NGO/local government, private sector reporting regimes Community initiates programs for data collection 	
Capac	city Development Output			
7.1a	Upskilling of technical capacity through training programmes supported by local, national and international donor agencies	 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 	• Improved competencies in information database	
Capac	city Development Actions		Lead Agency	Partner Agencies
Inforn	nation Management			
7.1.1	Undertake an assessment of available data to de management including natural resources, ecosyste	etermine data gaps and information needs for environment ems and sustainable land management	MOW	NES, OPM
7.1.2	Develop a multi-sectoral approach to data manaç advice from other sectors or relevant expertise	gement and data analysis as well as mechanisms to seek	OPM	NES,
7.1.3	.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	a central land and resource information system that is	Justice/MOW	MOW/Justice

7.1.5	Need to develop cooperation in sharing database development and maintenance expertise between government agencies	OPM	NES, MOE
7.1.6	Develop and implement monitoring and data collection programmes for natural resources, ecosystems and land information, including strengthening capacity of responsible agencies to implement these programmes	MOW	NES, OPM, MFEM
7.1.7	Promote mechanisms to involve communities and schools in the collection of environmental data	NES	MOE, NGO's TIS
7.1.8	Provide training and training resources for national institutions, NGO's and community groups in data collation of environment related data, data management and analysis, mapping and practical utilisation of Geographic Information Systems	NES	MOW, 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	MOW	NES, OMIA
Tradit	ional Knowledge and Practises		
7.2.1	Develop national policies for maintaining the use and value of traditional knowledge and practices related to the environment and natural resources	NES	Culture, MOH,
7.2.2	Develop collection programmes that capture all island specific traditional knowledge and practises related to their resources	МОН	Culture, NES, OMIA,
7.2.3	Provide support to traditional practitioners for documentation of traditional knowledge and practises of biological resources including the use of modern forms of documentation	MOH	NES,
7.2.4	Ensure that the initial collection of information should always be in Maori or the relevant dialect	МОН	NES, MOCD, MOE
7.2.5	Ensure that analysis or studies related to traditional knowledge and practises are translated into Maori and available to the public	МОН	Culture, NES
7.2.6	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
7.2.7	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
7.2.8	Develop national programmes for promotion and awareness in the use, application and value of traditional knowledge and practices	МОН	MOE, Culture, NES, Media, Koutu Nui, NGO's
7.2.9	Ensure traditional knowledge and practises is integrated into the MOE education policy and school curriculum as part of any biodiversity programme	NES	MOE, MOH
7.2.10	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
7.2.11	Develop locally appropriate resource materials for the promotion of traditional knowledge, practises and systems including island specific materials	МОН	NES, MOE, Media, OMIA,
7.2.12	Strengthen cultural and traditional systems that improve the resilience of local communities to disaster events	Culture	NES, EMCI, INTAFF, OPM, MOH
Inform	nation Exchange		
7.3.1	Review current databases to identify opportunities and synergies for networking and information exchange	OPM	NES, Research, NES,

7.3.2	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	ОРМ	NES, MOE
7.3.3	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.	MOW	NES, OPM, Justice
7.3.4	Ensure that systems such as PEIN, POP GIS and MapServer are integrated, complement each other and have established linkages to regional initiatives where possible	MOW	NES
7.3.5	Strengthen capacity for the development and ongoing maintenance of clearing house mechanisms	NES	
7.3.6	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,
7.3.7	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
7.3.8	Need for trained IT nationals in most organisations able to maintain e-government	OPM	All govt agencies and organizations
7.3.9	Identify and strengthen suitable personnel that will be dedicated to maintaining information management systems in key Ministries	OPM	All govt agencies and organizations

ENVIRONMENTAL GOAL 8: People of the Cook Islands are meeting our obligations to Multilateral Environment Agreements

Thematic Area: MEA Implementation					
Envir	Environmental Outcome Performance Indicator(s)			cation	
8.1	Multilateral Environment Agreements (MEA) implementation, monitoring and evaluation are linked with existing National priorities and programmes.	 Number of new environmental initiatives and percentage of annual funding support by our development partners. Number of technical support assistances identified and awarded annually by our development partners MEAs compliment and are well integrated into National Priorities and programmes 	MEA reports NESAF review NES Annual R MEA Project r	Reports	
Capac	city Development Output				
1.1a	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				
Capac	Capacity Development Actions			Partner Agencies	

8.1.1		ans, decision makers and Government ministries of MEAs, avironmental issues they are address, and how this affects	NES	OPM, MMR, PSC,MFAT	
8.1.2	Conventions to support MEA implementation implementation with existing national priorities armore likely to support	Office of the Prime Minister to develop policies for UN and integration in the Cook Islands, and to link MEA and programmes as these are the actions that Government is	ОРМ	MFAI, NES	
8.1.3		Sovernment agencies with roles under the UN Conventions, with these responsibilities at the highest level and allocated and deliver MEA programmes.			
8.1.4	Combat insufficient capacity within agencies for implementation of MEA and environment activities by forming partnerships or resource sharing agreements where possible between ministries', private sector, NGOs and community groups for the implementation of MEA projects where goals align or are complementary				
8.1.5		luation and report writing including by drawing on regional ng programmes e.g. as identified in ADB-TA Legal and gement in the Cook Islands			
8.1.6	Develop national Human Resource Developmenthe Cook Islands, to determine human resources to effective implementation of the Conventions short-term training	9			
8.1.7	Develop local capacity for environmental eco- management initiatives are financial sustainable with realistic costs and considerations.				
8.1.8		s to manage and implement environment programmes and urses, practical application and programmes specifically			
8.1.9	Simplify and contextualise MEA information, en improve understanding of MEA issues	ducation and awareness materials with local examples to			
8.1.10	Establish and implement a stringent vetting pro- likely to be responsible for implementation, to a for approval	ocess, in consultation with relevant stakeholders that are ssess any proposed adoption of international conventions			
Thematic Area: MEA Reporting					
Enviro	Environmental Outcome Performance Indicator(s)		Means of Verification		
8.2	Reporting format and language of national reports to Multilateral Environment Agreements is simplified and appropriate.	 Centralised information management system for MEA established and used by officers for reporting purposes International and national streamlining of MEA reporting formats Donor agencies streamline MEA reporting format that is compatible with national reporting format Government agencies integrate National and MEA reporting formats 	MEA reports NES Annual Reports		

Capa	city Development Output			
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 Increase in numbers of regional and national officers capable of developing MEA reports compared to 2008	MEA reports NESAF review report SPREP Annual reports	
Capa	city 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		NES	MFAI, MOW, MOH, MOA
8.2.2	Encourage and facilitate capacity building for na counterparts with international and regional consul	tional reporting requirements through attachments of local tants	MFEM	OPM, NES, PSC
8.2.3	national biodiversity report to the UNCBD	t initiative for streamlining of Biodiversity MEAs to produce	AusGovt/ SPREP NES, MMR, MOA, NHT	
8.2.4	management, into the annual workplans of age Conventions	ss, particularly monitoring, evaluation and information encies and ministries with responsibilities under the UN	OPM MFEM, MFAI, NES	
8.2.5	MEA reporting, including technical report writing ar		AMD NGO's, NHRD,	
8.2.6		in reporting of community MEA activities, monitoring and and in Cook Islands Maori where possible and appropriate.	NES OPM, PSC, OMIA, NGO's	
Then	natic Area: MEA Negotiations			
Envir	onmental Outcome	Performance Indicator(s)	Means of Verification	
8.3	Cook Islands National Environmental interests are negotiated and mediated prior and during Multilateral Environment Agreements at an international and regional level.	Interests and priorities of Cook Islands are articulated and negotiated in MEA conventions and international and regional meetings	Cook Island delegation reports to MEA COPs, international and regional meetings	
Capacity Development Output				
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	NES reportsTraining reportsSPREP reports	
Capacity Development Actions			Lead Agency	Partner Agencies
8.3.1	high-level meetings for confidence building and un	d implementing agencies through trainings and exposure to derstanding of global issues of national significance	NES	MFAI, MOA, MOW, OPM, EMCI, Met Service
8.3.2	Ensure that the Cook Islands participate and be re international obligations development	epresented in forums and programmes related to MEAs and	MFAI	NES, MMR, OPM

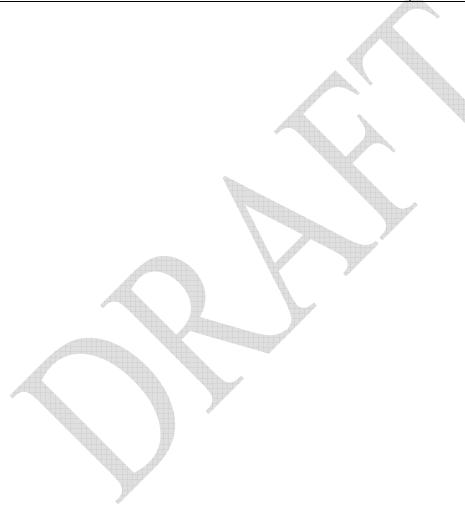
8.3.3	Access funding opportunities to increase the number of delegates to the COPs from the single individual who is typically attending in order to facilitate the development of greater institutional knowledge	NES	MFAI, PSC
8.3.4	Develop and institute succession plans and human resource strategies for Government agencies ensuring that training processes and mentoring is in place to prevent institutional memory loss of valuable environment management information		
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, MOW, MFAI
8.3.6	Access available MEA and negotiations training and awareness programmes such as UNITAR e-learning course and any regional efforts	NES	
8.3.7	Continue to contribute to the international efforts to find solutions to global environmental threats, especially those pertaining to the vulnerable Small Island Developing Nations such as the Cook Islands	NES	OPM, MFAI

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

Thematic Area: External Donor Funding				
Envir	onmental Outcome	Means of Verification		
9.1	Operational support for environment projects related to Biodiversity, Climate Change and Land Degradation are financially resourced by external donors.	 A % increases in ODA supporting the environment sector compared to 2008 levels Increase in number of proposals developed and targeting funding agency opportunities Number of new environmental initiatives and percentage of annual funding support by our development partners. Number of funding and technical support assistances identified and awarded annually by our development partners 		
Capac	city Development Output			
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				
Capac	city Development Actions		Lead Agency	Partner Agencies

9.1.1	Undertake training of planning officers and stakeholders in identification of environment funding opportunities, proposal writing and project management.			MOE, NES, NGO's,
9.1.2	Continue to maintain strong working relationships and networking opportunities with UN Convention Secretariats, Convention funding mechanisms such as the Global Environment Facility, 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			MFAI, OPM, MFEM
9.1.3	Increase capacity of NGO's, community groups in reporting) in order to better access funding opportu	n project proposal writing and reporting (including financial nities, including GEF Small Grants Programme funds	NES	MFEM, OPM, NGO's,
9.1.4	Utilise GEF OFP and local SGP focal point to identifying locally relevant projects that fit under the	assist communities in accessing technical assistance in a Small Grants Programme funding criteria	NES/SGP	
9.1.5	Raise awareness of known funding opportunities and projects	for community based environment management activities	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	AMD	MFEM, NES, NGO's	
Them	natic Area: National Funding			
Environmental Outcome Performance Indicator(s)			Means of Verification	
9.2	Environment projects are provided sustainable budgetary support from external donors in partnership with Government	 Budget support from National government for NES and environment protection and management initiatives at least maintained or improved annually by 15% Committed funds in Budget Policy Statement 	 Budget policy statement NES Annual Budget 	
Capac	city Development Output			
9.2a	Government and stakeholders have the capacity and capability to create innovative financial mechanisms and instruments for viable options to support the implementation of environment projects.	 Project Proposals NES reports Aid Management Officer reports 		
Capacity Development Actions				Partner Agencies
9.2.1	Improve knowledge and understanding, esp mechanisms and expenditure limitations to funding	ОРМ	NES, MFEM, MFAI, All Ministries, COC	
9.2.2	Increase levels of awareness and political biodiversity and climate change, drawing on national priorities, to promote the need for fun	NES	OPM, MOW, MOA, MOH, MMR, MFEM, NGO's, MOE	
9.2.3	Identify cross cutting areas, linkages and oppo	NES	OPM, MOW, MOA, MOH, MOE,	

9.2.4



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.

Hierarchy of monitoring and reporting Responsibilities Monitoring of how the Environmental Director or Senior **Outcomes and NESAF Goals are** Officer within NES contributing to the NSDP Goals Monitoring of how Actions are Senior Officer within NES and/or contributing to the achievement of Operational Focal Points of the **Capacity Outputs, Environmental** Conventions with the help and **Outcomes and NESAF Goals.** guidance from a Committee Implementation and Government Officers within monitoring of Actions designated lead agencies

Monitoring and evaluation mechanisms

Integrating actions into NESAF so will follow the M&E mechanisms for NESAF

Funding the CDAP

Identifying and obtaining appropriate funding will be crucial to the implementation of CDAP.

One of the main objectives of the NCSA process was to facilitate the development of concrete project proposals for further consideration by GEF and other interested donors. For cross-cutting and synergetic projects, in particular, the boundaries between global and national environmental management are difficult to determine. Swaziland must now consider developing detailed project proposals which strengthen the overall capacities both for national and global environmental management, with part of the funding originating from GEF and other parts originating from national and other external donors sources. Three potential sources of funding are summarised below.

4.4.1 External sources

Funding from foreign donors needs to be explored. The Global Environment Facility (GEF), which funded the development of the NCSA, funds projects related to biodiversity, climate change and land degradation

particularly projects which are transboundary in nature and of global significance. With the CDAP approved GEF will consider more favourably proposals emanating from Swaziland particularly those projects that strengthen capacity at all levels.

Other external sources could include bilateral grants from "developed" countries or loans from the international development banks and financing institutions.

Other potential sources also include Trust Funds, Debt-for-nature swaps, micro-credit systems, carbon offset projects (under the Kyoto Protocol), revenue from access to genetic resources, bio-prospecting and benefit sharing, user fees and tax incentives, private sector partnerships and eco-enterprise funds to name a few.

4.4.2 National sources

Various potential sources of funding exist from national sources including the Government of Swaziland, the private sector and the NGO community. Indeed, funding from the GOS is essential as this would indicate commitment on the part of the government.

4.4.3 National Environment Fund

A National Environment Fund (NEF) for Swaziland has been established and capitalised. The purpose of this fund would be to support environmental protection initiatives in the country. The donor community has indicated its willingness to support this fund on the basis that the GOS makes the initial contribution. Most CDAP activities would almost certainly be eligible for funding from the NEF once the modalities for utilising the fund are determined.

4.5 Monitoring Arrangements

Monitoring progress is vital to the success of the CDAP.

An important aspect of implementing the CDAP involves continuously monitoring the progress in implementing activities (e.g. against the planned schedule or budget). Monitoring the implementation of activities can be based on three fundamental steps: measuring progress (in implementing activities); analysing the situation (to determine the cause of any positive or negative deviations from the plan); and determining necessary action (to remedy the situation where necessary).

Evaluating the impact of the strategy, i.e. ascertaining the degree of success in achieving the goal and objectives of the strategy, is also important. Evaluation can provide insight into what lessons can be learned to guide future efforts. Three simple questions can guide the evaluation process: to what degree were the agreed-to activities implemented? (see paragraph above); did these activities actually achieve the agreed-to goals and objectives?; and, if not, what further action is required?

The SEAP and BSAP outlines relevant indicators and monitoring systems for that process. These will not be repeated again here. Presented below are steps for monitoring the CDAP processes only. However, since the CDAP and SEAP processes are interconnected, the monitoring outlined below should be seen as part of the overall SEAP monitoring process and not in isolation.

There are two separate issues that require monitoring. The first is the CDAP implementation process itself. In other words, is CDAP being implemented according to the plan? The second is the state of Swaziland's environment and capacity development. In other words, is the implementation of CDAP improving the management of environmental resources and upholding its obligations under each of the UN environment conventions? The distinction is important. By way of example, the CDAP implementation process may be proceeding according to plan, but the threats and constraints on existing capacity (at all levels) to implement could still be increasing.

4.5.1 Monitoring the CDAP process

Monitoring the progress of CDAP should be a relatively simple process given the numerous models available. The priority actions identified by CDAP have been defined as clearly as possible (including the provision of a time-frame) so as to allow easy assessment of progress. The Environmental Conventions Coordinating Unit should review the progress of CDAP on a regular basis. The responsibility of actual monitoring would fall on the SEA and the mandated Focal Points.

Challenges and opportunities – systemic and institutional level

These may include: changing mandates of government agencies, staff turnover, changing priorities etc.

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 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.

Change in mandate
Loss of staff and institutional memory
Change in national priorities
Political influence and interference

References:

Butler, D. (2003). Cook Islands Government Enabling Activity for Biodiversity Project (NBSAP). UNDP, Samoa.

Carruthers, P. (2004). Climate Change: National Capacity Self Assessment Report. National Environment Service. Government of the Cook Islands

Carruthers, P. (2004). Climate Change Country Report Presentation. National Environment Service. Government of the Cook Islands

Carruthers, P (2003). Draft National Implementation Strategy. National Environment Service, Government of the Cook Islands.

Carruthers, P. & Apera. E. (1999). Mangaia Vulnerability and Adaptation Assessment Report. PICCAP Programme. Government of the Cook Islands.

de Romilly, G, Manarangi-Trott, T. Matepi, M. and Tiraa-Passfield, A. (2005). Volume 1: Review of Legal and Institutional Frameworks, Legal and Institutional Strengthening of Environmental Management in the Cook Islands. (ADB TA 4273-COO). National Environment Service, Government of the Cook Islands.

FORSEC (2005). Draft Pacific Plan for Strengthening Regional Cooperation and Integration. Pacific Islands Forum Secretariat.

Fullerton, R. (2001). Review of the Research and Development Programme of the Cook Islands Ministry of Agriculture. Ministry of Agriculture. Government of the Cook Islands.

GEF. (2005). The Global Environment Facility. Brochure: GEF. www.gef.org

GEF/UNITAR (2001). A Guide for Self-Assessment of Country Capacity Needs for Global Environmental Management: GEF Secretariat. Washington D.C.

GEF Global Support Programme 2005. Resource Kit for National Capacity Self-Assessment. United Nations Development Programme.

Hajkowicz, S. and Okotai, P. (2005). An Economic Valuation of Watershed Management in Rarotonga, the Cook Islands: National Environment Service, Government of the Cook Islands.

Lynch, P., Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

McCormack, G. (2002). National Biodiversity Strategy and Action Plan. NBSAP Committee. Government of the Cook Islands.

McIntyre, M. (2007). Capacity Building for Sustainable Land Management in the Cook Islands, GEF Medium Sized Project Proposal

Munro, E. (2003). Biodiversity Report 2003. National Environment Service, Government of the Cook Islands

PICCAP Cook Islands, (1999). Initial National Communications under the UNFCCC. PICCAP, Government of the Cook Islands.

Preventive Infrastructure Master Plan. (2006). Strengthening Disaster Management and Mitigation (ADBT A 4605-COO). Government of the Cook Islands.

Rongo, T (2003). Cook Islands National Report to the Convention to Combat Desertification (Land Degradation). National Environment Service. Government of the Cook Islands.

Saul. E., Tiraa, A. (2004). Proposed Natural Areas in the Cook Islands within a Proposed National System. National Environment Service. Government of the Cook Islands.

Sem, G., Upoko, T. (2005). Project Proposal for Second National Communication of the Cook Islands under the United Nations Framework Convention on Climate Change (UNFCCC). National Environment Service. Cook Islands Government.

Te Kaveinga Nui, Pathway for Sustainable Development in the Cook Islands – National Sustainable Development Plan 2007-2010. (2007). Government of the Cook Islands

Te Au Akakoro'anga Akapu'apinga o te Basileia – National Millenium Development Goals Report (2005). Government of the Cook Islands

Turia, G. (2004). Survey of Baseline Information for Assessing the Capacity Building Needs of the Cook Islands for the Safe Management of GMO's, National Environment Service, Government of the Cook Islands.

United Nations. (Dec 2003). Convention on Biological Diversity: Text and Annexes, Secretariat of the Convention on Biological Diversity, UN.

United Nations. (1999). Programmes for the Sustainable Development of Small islands Development States, Barbados 1994. UN

United Nations (2005). UN Convention to Combat Desertification: Text with Annexes. Secretariat of CCD. United Nations.

UNFCCC Int. (2005). News release: World Event Marking the Kyoto Protocol Entry into force... www.unfccc.int.

Upoko, T (2004). National Environment Strategic Action Framework (NESAF). National Environment Service. Government of the Cook Islands.

Upoko, T (2006). Third National Report to the UNCCD. National Environment Service. Government of the Cook Islands.

Wade, H. & Johnston, P. (2005) Pacific Regional Energy Assessment 2004: An assessment of the key energy issues, barriers to the development of renewable energy to mitigate climate change, and capacity development needs to removing the barriers: Cook Islands National Report, Apia, Samoa: SPREP.

Wilton & Bell PTY. Ltd. (1987). Avatiu Harbour Western Side Development Study: Final Report. Government of the Cook Islands.

Steering Committee. (2001). Hurricane Sea Surge Protection-Design and Costs: Avarua/Avatiu Commercial and Government District, Rarotonga, Cook Islands. Government of the Cook Islands

Annexes:

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

1.1 Climate Change

Main Environmental 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
	Systems
Limited use of technologies and funding mechanisms for cleaner, more efficient and sustainable sources of energy and a low level	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
of involvement and contribution to global efforts at mitigating the causes of climate change.	Limited access to and use of climate change databases and information networks
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	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
many benefits to the country and contribute to its sustainable development plan objectives.	established as a result of limited technical and financial capacity and the absence of strategies and programmes needed to implement the Energy Policy.

1.2 Conservation of Biological Diversity

Main Environmental 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 biodiversity, 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
	3
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 Environmental January				
Main Environmental 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 and foreshore burning, deforestation and denuding of virgin land or arable agricultural land	Limited resources to support institutional arrangements on each island for implementation of the Environment Act 2003 and enforcement and compliance with development Limited awareness on the need for environmentally sustainable agriculture and forestry practices and its benefits to environment and human health 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
Degraded land are not rehabilitated and increases the risk of further degradation, spread of invasive species, pollution,	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	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 environmental 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
outdated, or only apply to some islands and 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	Issues of insufficient staff, staff expertise, materials and resources to undertake resource management activities
manner	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 environmental 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 Works, and National Environment Service) No land management plans and zoning plans are outdated and need revision if it is to be implemented
	Carrying capacities of environment systems have never been established with confidence
Hazardous and Dangerous Substances or Waste: Limited capacity, regulatory frameworks, policies and institutional arrangements to	Strict legal mechanisms and an institutional framework are required to regulate and manage the collection, storage and disposal of hazardous 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

Integrating Environment Management

Mainstreaming of environment management economic issues into national and development planning processes has improved but the Cook Islands lacks the institutional structures and support mechanisms to collaborate, monitor and enforce these national plans, and develop new legislation and regulations in a timely fashion.

Reactive rather than proactive approaches to environment management have dictated budget and political support, and tend to lead to band aid solutions as opposed to long term investments in education and awareness and capacity development activities. As a consequence, environmental protection and environment-development issues are not accorded a high degree of priority in the current political setting.

Summary of gaps and capacity needs

Limited identification of lead agencies or organisations for the implementation of national plans activities related to environment management, such as the NSDP and NESAF

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

Limited capacity to develop and implement national Monitoring and Evaluation processes, including tools such as State of the Environment reports

Weak reporting and monitoring capacities for climate change, biodiversity, land degradation and cross cutting environmental issues at all levels.

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

Insufficient promotion and justification to decision makers, including politicians and budget committees, of the need to support environment management activities

Lack of local expertise in several areas, most notably in the areas of environmental accounting and economics, environmental 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 Awareness

Environment education and awareness programmes in the Cook Islands tend to be produced on an ad hoc basis with little collaboration and coordination of activities amongst various agencies and organisations undertaking education and awareness activities.

Resources and capacity to support environment education awareness and media programmes is limited, especially in the Outer Technical environment data and information needs simplification and translation into Cook Islands Maori for broader understanding at all levels

Shortage of training or professional development programmes and opportunities for education planners and environment educators to enhance the education of students on environment issues

Lack of localised information in an easy to use format readily available for educators, media or the general publics

Limited use of practical applications and fieldwork for environment monitoring and education to foster awareness and engage students interest at all levels Islands.

The lack of simplicity in environment technical reporting and language is a major constraint.

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 Exchange

A dearth of quality environmental, socioeconomic 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

Programmes or attempts to record traditional

knowledge have been inconsistent and ad hoc. Poor policies and legislative frameworks

in place to protect traditional knowledge and

practises and the rights of the holders of such

the

Cook

Islands.

in

management

knowledge.

Lack of policies to support the development and housing of environmental 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 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

Lack of empowerment of traditional practitioners and institutional systems for documentation i.e. Are Taunga, Aronga Mana, Taunga vairakau Maori, Tumu Korero etc

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. Sharing of available data is constrained as occasionally there is a tendency for sectoral agencies to withhold data and information necessary for environment planning and decision making.

No formal clearing house mechanisms for dissemination of national environmental 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 systems such as PEIN and EDF9 Map Server

Most databases remains isolated and need to be upgraded with appropriate structures to enhance networking and information exchange

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.

Lack of systematic (regular/consistent) communication amongst key stakeholders in some sectors

Multilateral Environment Agreements

There is growing concern about our ability to meet commitments and reporting requirements to these international

Poorly defined responsibilities for Cook Islands agencies and organisations in relation to the national obligations and commitments of the UN Conventions undermine existing capacity

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 these responsibilities and should translate into the allocation of appropriate resources to achieve these mandates.

Lack of awareness and understanding by politicians and decision makers of the Cook Islands national obligations as signatories to various MEAs, as well as the significance of international environmental 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

Translation of relevant MEA environmental issues into national policies and programmes is limited by local budgetary support for programmes and activities related to implementation of MEAs

Limited human and technical capacity to undertake MEA implementation, 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

Lack of local fully trained negotiators and mediators able to negotiate at the international level and negotiate legally binding contracts for agreements at different levels

Access to Financial Resources

External Funding:

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 capacity to train planning officers and stakeholders in identification of environment funding opportunities, proposal writing and project management

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

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

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

National Funding:

Limited pool of Government funds from which all Government ministries and agencies must bid for funds

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

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 environmental 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





Annex 4: 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 environmental 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:

- 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 environmental 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 environmental 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........

d). Identification of priority needs for formal training in environmental 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, leading to the production of a revised and updated NESAF.

f). Identification of linkages between NCSA Action Plan and other environmental 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 environmental 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). Implementing the various stages of the NCSA Process

Switching from focusing on UN Convention obligations to national environment issues that tie-into Conventions

Continuity of local consultants undertaking various stages would have greatly aided and fast-tracked the process

b). 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 of the greatest benefit to focus on country specific issues of implementation and

Perhaps a recommendation could be to have technical and implementing agencies working as coimplementers of

Annex 5: 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	Ministry of Works (MOW)	Infrastructure development, land use, coastal engineering		
24.	Ben Parakoti	Director	Water Works DeptMOW	Water resources management		
25.	Keu Mataroa	Senior Executive Officer	Ministry of Works	Infrastructure policies		
26.	Tekao Herrmann	Director Waste Management	Waste management Department-MOW	Waste management		
27.	Paul Maoate	Water Works officer	Water Works Dept. – MOW	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.	<mark>Ian Karika</mark>	Chairman – Rarotonga Environment Authority	REA/TIS/TCA	Biodiversity, Species conservation				
		President – Te Ipukarea Society Title? – Takitumu Conservation Area		Environment policies, Compliance & Enforcement				
39.	Imogen Ingram	President	Island Sustainability Alliance Cook	Environment Education & awareness				
			Islands (ISACI)	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	NGO environment related policies				
			Government Organisation (CIANGO)					
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				
Outer	Outer Islands – Mangaia Stakeholders							
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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