



**NATIONAL ENVIRONMENT SERVICE**

TU'ANGA TAPOROPORO  
COOK ISLANDS

# *Cook Islands*

## **Cross Cutting Capacity**

## **Assessment Report**

**NATIONAL CAPACITY SELF ASSESSMENT  
FOR GLOBAL ENVIRONMENT MANAGEMENT**

**November 2007**



*Cook Islands*



## **Acknowledgement**

The National Environment Service would like to gratefully express our gratitude to the NES staff, NCSA Steering Committee and Technical Working Groups, those individuals, experts, institutions and community groups who kindly gave valuable assistance and information during the NCSA Cross Cutting Analysis consultations and the compilation of this report.

Meitaki Maata.

This report was prepared by the Cook Islands NCSA Project Management Unit with the support and input of numerous stakeholders in the Cook Islands, SPREP and UNDP.

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**Prepared for the 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 Substances
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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## I. BACKGROUND INFORMATION

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Increasing recognition of the changes in the natural environment as a result of human interference has led to the international community agreeing on a number of multi-lateral environmental agreements (MEAs). At the 1992 Earth Summit, world leaders agreed on a comprehensive strategy for "sustainable development" – meeting our needs while ensuring that we leave a healthy and viable world for future generations. Three key agreements from the Summit are the United Nations Convention on Biological Diversity, the United Nations Framework Convention on Climate Change and United Nations Convention to Combat Desertification. These three are known as the Rio Conventions.

Each of these Conventions deals with the conservation and management of the natural environment with a view to ensuring resource protection within sustainable frameworks. As such they share common elements between the three that can overlap, requiring an integrated approach to the implementation of the three conventions. Lack of capacity at different levels has been identified by the international community, as well as various national initiatives, to be one of the key challenges that constrain implementation of these Conventions. Small countries like the Cook Islands already have strained resources and need to strengthen and develop their capacity in order to meet national priorities and international obligations.

As a party to these Conventions, the Cook Islands Government is committed to promoting cooperation between government agencies and other institutions and organizations, to develop synergies for implementation at the local and national level. The NCSA continues the self-assessment process and should help address some of our issues as well as support the development of new opportunities for funding.

### *Overview of the Conventions*

The objective of the **United Nations Framework Convention for Climate Change** (UNFCCC), as stated in Article 2, is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Work under the Convention has been focusing on activities relating to mitigation and adaptation to climate change. These activities include the agreement on greenhouse gas emission targets, policies and measures for achieving these targets, the development of guidelines for the preparation of greenhouse gas inventories, development and transfer of technology, assessment and mitigation of adverse effects of climate change, research and systematic observation and funding. Recently, work has been concentrating on developing the legal framework for the entry into force of the Kyoto Protocol. This legal framework includes such issues as land use, land-use change and forestry, compliance, cooperative mechanisms, reporting and review, and good practices in policies and measures.

The objectives of the **United Nations Convention on Biological Diversity** (UNCBD), as stated in Article 1, are the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising from the utilization of genetic resources. Work under the Convention is ecosystem driven, in accordance with the established programmes under the convention bodies. These programmes include agricultural biodiversity, dry and sub-humid lands biodiversity, forest biodiversity, inland water biodiversity and marine and coastal biodiversity. Cross-cutting issues addressed under each of these programmes include access and benefit sharing, climate change and biodiversity, biodiversity and tourism, the ecosystem approach, indicators, protected areas, and sustainable use of biodiversity. In addition, the Convention includes provisions on cross-sectoral integration, technology transfer and cooperation, compliance, cooperation and reporting. Furthermore the COP has identified areas of inter-linkages between biodiversity and climate change.

The objective of the **United Nations Convention to Combat Desertification** (UNCCD), as stated in Article 2, is to combat desertification and mitigate the effects of drought in countries experiencing this phenomenon. The Convention works principally on a regional basis and it is driven by National Action Programmes which aim at identifying the factors contributing to desertification and the practical measures necessary to combat desertification and mitigate the effects of drought. The Convention includes a separate annex for its implementation in each region: Africa, Asia, Latin America and the Caribbean, Northern Mediterranean and Central and Eastern Europe. Each annex contains specific requirements on commitments, the role of developed and developing Parties, action programmes, financial resources, mechanisms, and other matters.

### Capacity Development

Capacity building and development can be defined as -

*‘the actions needed to enhance the ability of individuals, institutions and systems to make and implement decisions and perform functions in an effective, efficient and sustainable manner’*

It is a dynamic, endogenous process generally associated with training, human resources development, knowledge acquisition, the learning organization etc that builds upon existing systemic, organizational and individual capacity.

There are three levels of capacity – individual, institutional and systemic. Capacity building and development at the individual level refers to the process of changing attitudes and behaviours through imparting knowledge and developing skills, learning by doing, participation, and changes in management, motivation and morale. The institutional level focuses on overall organizational performance capabilities, adaptability to change, clarification of structures, responsibilities and accountability, changes in procedures, communications and the deployment of human resources. At the systemic level, the creation of ‘enabling environments’ is important, that is, the overall policy, economic, regulatory and accountability frameworks within which institutions and individuals operate. Relationships and processes between institutions, both formal and informal, as well as their mandates, are also important.

### Project Background

1. The National Environment Service, with support from the Global Environment Facility (GEF) through the sub-regional country office of the United Nations Development Programme (UNDP) in Samoa, is undertaking the National Capacity Self Assessment Project (NCSA) for Global Environment Management.
2. The GEF provides financial support to developing countries to protect and manage the global environment. Its activities are focused in four focal areas: biological diversity, climate change, international waters and depletion of the ozone layer. Activities addressing land degradation – especially, desertification and deforestation – are also funded when they relate to one or more of the focal areas. Project proposals for GEF funding are submitted through its implementing agencies – including the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and World Bank.
3. The Cook Islands National Capacity Self Assessment (NCSA) Project evolved from many international declarations and policy statements such as the Agenda 21 and the WSSD Johannesburg Plan of Action and in the case of Small Island developing states, the Barbados Programme of Action. According to UN decision 2/CP.7, “capacity building is a continuous, progressive and iterative process, the implementation of which should be based on the priorities of developing countries.”
4. This project was created under the Capacity Development Initiative (CDI) in order to address capacity needs issues countries may be facing. It provides the Cook Islands with an opportunity to review our global environmental responsibilities and determine how to reconcile these



responsibilities with national sustainable development and environmental priorities. The overall aim of the NCSA process is to identify national priorities and needs for capacity building and development to address global environment issues, in particular, biodiversity, climate change and desertification/land degradation.

5. The NCSA should contribute to strengthening existing national programmes and should lead to targeted action plan development and implementation both within and across the thematic areas of biodiversity, climate change and land degradation. It should also help to identify linkages between global and national environmental management issues and capacity building efforts.
6. This project also provides an opportunity for the Cook Islands to review its national environment programmes across sectors. It provides a good basis to maximise synergies, linkages and understanding of issues between national and local level programmes, together with regional and international environmental frameworks.
7. The project is expected to collate information on continuing programmes, institutional structures, resource availability, future prospects, training activities and relevant supporting policies and processes needed to sustain the implementation of MEAs obligations nationwide. This is the second step towards accessing GEF resources for capacity development to implement the recommendations that will be presented in the NCSA Strategy and Action Plan.
8. This document is prepared for a multitude of stakeholders at the local, national, regional and international level. The term ‘stakeholder’ refers to a person, group, organization, etc, that has an interest or will be affected by actions or initiatives in different areas. The types of stakeholders affected in the NCSA process will depend on which thematic area is being addressed in each section, for example, the stakeholders affected under Waste, Sanitation and Pollution issues, will not necessarily be the same as stakeholders affected by Education and Awareness issues.

## **II. CROSS CUTTING ANALYSIS AND REPORT**

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### **Cross Cutting Report**

9. One of the expected outputs of the NCSA project is an identification of cross cutting issues and synergies. Other outputs include technical reports on the following;
  - a. An account of the process by which the NCSA was prepared, including stakeholder participation;
  - b. A stocktaking of previous and on-going activities related to capacity building (such as enabling activities).
  - c. A description/inventory of capacity building needs in the three focal areas with prioritisation to the extent possible, and other related capacity needs;
  - d. A Plan of Action to meet prioritised needs and a mechanism for monitoring and evaluating progress made in meeting those needs
10. The Cross Cutting Analysis and Report is the fourth stage in the NCSA process and builds on the findings of the Thematic Assessments, which identified capacity issues for each convention. Its purpose is to identify opportunities for synergy and inter-Convention cooperation, optimise capacities and response mechanisms in areas related to biodiversity, climate change and land degradation. The cross-cutting analysis also identified capacity issues that cut across both global and national environmental management in the Cook Islands.
11. Expected outputs of the Cross Cutting Report include the following;
  - a. An account of the process by which the Cross Cutting Analysis was conducted;
  - b. Detailed outcomes of the Cross Cutting Analysis models applied.
  - c. A detailed description/inventory of capacity building needs to meet cross cutting environmental and capacity needs
  - d. Recommendations for future actions to address capacity needs for cross cutting

environmental and capacity issues

12. The Cross Cutting Assessment was aided by being combined with the third stage Thematic Assessment. During the process of undertaking the Thematic Assessment, particularly the preliminary prioritization of thematic areas and the Root Cause Analysis, a number of issues were clearly identified as being cross cutting.
13. The Crosscutting Analysis will form the basis of the Action Plan, which will recommend capacity development actions to address cross-cutting capacity needs and promote synergies.

### Defining Cross Cutting issues

14. Cross cutting issues in this document are defined as either capacity issues or environmental issues. Cross cutting capacity issues are issues that are common to more than one convention i.e. they 'cut across' conventions. This could include areas such as Education, Awareness and Training, Financial Mechanisms and Good Governance. Cross cutting environment issues or 'Inter-linkages' are connections among themes and issues addressed under multiple MEAs such as the UNFCCC, UNCCD and UNCBD.
15. Given the limited capacity and resources of small islands like the Cook Islands, it is becoming increasingly important to use those limited resources in areas where they will have the most effect. Actions that utilise opportunities for synergies and linkages between thematic areas will therefore have greater effect by impacting multiple areas. In this way, it can be considered a strategic tool for effective and efficient environmental management implementation.

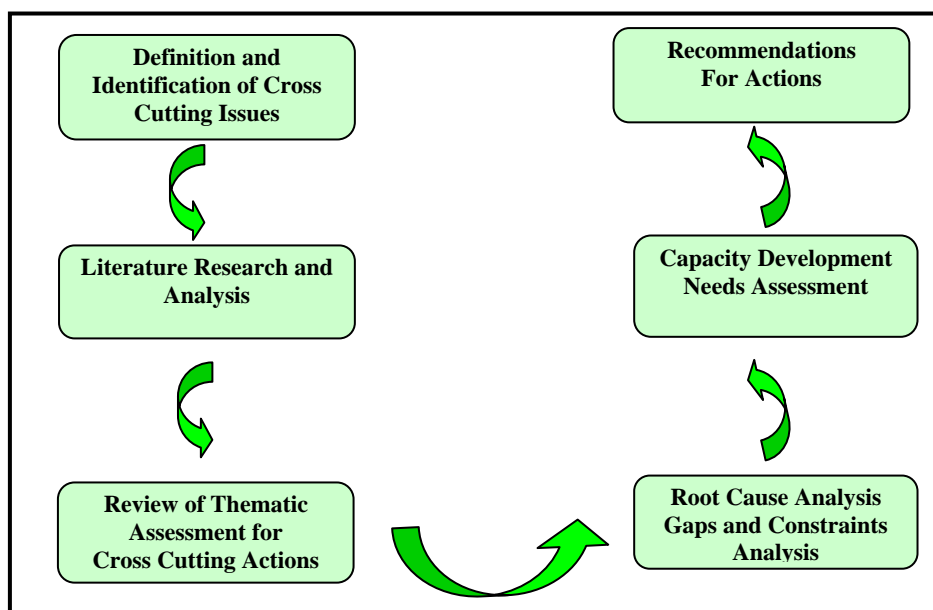
### Analysis Methodology

16. The analysis of cross cutting issues was carried out by the National Environment Service using similar methodology used for the Thematic Assessment. Methodologies used include:
  - a. Definition and Prioritization of Cross Cutting Issues
  - b. Gathering of detailed information through desk study and analysis relating to the national and international activities focussed on the implementation of MEAs,
  - c. Meetings and/or consultations with key government ministries and agencies, NGOs, private sector and community leaders.
  - d. Further in depth analysis using appropriate strategic analytical models.
17. During the Thematic Assessment (TA), a preliminary exercise was undertaken to define the key issues under each thematic area for in-depth analysis. Identification of these issues also drew on previous assessments, including the NBSAP and the NESAF, which had already identified priority areas for action.
18. Throughout the Root Cause Analysis of the TA, it was realised that some of the identified issues crossed more than one of the three thematic areas, i.e. they had impacts on Biodiversity, Land Degradation and Climate Change. This prompted the PMU to clearly define cross cutting issues and once identified, these issues were moved to the Cross Cutting section.
19. Further information on these cross cutting issues was gathered through literature research and analysis of international, regional, national and local reports including the National Sustainable Development Plan, National Environment Strategic Action Framework 2005 - 2009, the ADBTA Preventative Infrastructure Master Plan and the ADBTA Legal and Institutional Strengthening of Environment Management documents.
20. During the review, issues regarding capacity constraints and gaps within programmes at all levels were evaluated and grouped.
21. Root Cause Analysis was conducted for further evaluation of the identified cross cutting issues to determine root causes.
22. Actions were then proposed to address identified root causes and gaps at the systemic, institutional and individual capacity levels, for core competencies and capacity needs nationally.
23. A final review of the completed Thematic Profiles under the Thematic Assessment to highlight cross cutting capacity actions for inclusion in the Cross Cutting Report.

24. Draft section reports were compiled for each cross cutting issue, based on the analysis work and actions identified in previous steps, and disseminated to stakeholders.
25. Consultation meetings were opened to members of the four Technical Working Groups and the NCSA Steering Committee as well as key technical experts, NGO's and organisations, to evaluate the outcomes of the analysis work undertaken through the review of the draft section reports for feedback and validation of results.

Figure 1: **Cross Cutting Process**

– Graphical representation of the Cross Cutting Process. Stakeholder input at all stages.





# Thematic Profile

## **Cross Cutting Issues in the Cook Islands**



## Cross Cutting Thematic Profile

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The Cross Cutting Analysis is drawn from issues that were found to cut across Conventions or thematic areas, including those identified during the Thematic Assessment phase. The in-depth analysis for cross cutting issues is divided into Cross Cutting Environment Issues and Cross Cutting Capacity Issues.

### CROSS CUTTING ENVIRONMENT ISSUES

Thematic Area: **Integrated Coastal Management**

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The coastal zone is one of the Cook Islands greatest assets, its unique coastal values and resources are vital to our way of life. Within these areas, there is an interacting mix of terrestrial, estuarine and marine ecosystems that support a wealth of biodiversity. Coastal biodiversity supports the resource base for a broad range of commercial and non-commercial activities. Coastal activities dependent on healthy coastal environments include subsistence fishing and seafood gathering; tourism and recreation; urban development; shipping and transportation; coastal agriculture; and trade. Equally the coastal zone has important social, cultural and indigenous values, including coastal landscapes, amenity and access.

There are a number of substantial environmental pressures and symptoms of environmental decline affecting coastal resources in the Cook Islands due to development and conservation challenges in coastal areas. This includes ecosystem degradation (particularly for wetlands and in-shore reefs), land degradation such as soil and coastal erosion and declines in marine and freshwater quality from pollution, sedimentation and salt water intrusion.

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 climate change, extreme events and sea level rise. For small islands like the Cook Islands, where entire islands are coastal areas, these risks are amplified a hundred fold.

#### **Management of Coastal Resources**

- **Summary of Capacity Gap**

Cook Islands' coastal resources are not being satisfactorily managed. Government is highly sectoral with responsibilities for the management of coastal resources dispersed among several agencies, leading to programmatic fragmentation, duplication of activities, policy gaps and conflicting mandates within the coastal area. The lack of an integrated approach to coastal resource management, as well as supporting institutional and legislative frameworks, furthers fragmentation. Necessary planning work, required for effective management of coastal environments has not been adequately undertaken. Effective mechanisms for inter-agency dialogue, cooperation, coordination and collaboration are limited. Staffing levels, expertise, resources and operational budgets in many line agencies are insufficient to cope with the dimensions and complexities of the rising challenges of coastal management. Basic baseline data of our coastal resources and conditions is also lacking, which inhibits informed decision making at the systemic and institutional levels to ensure the sustainability and effective integrated management of our coastal resources.

## Root Causes

- ▣ 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
- ▣ Poor implementation and enforcement of management regimes within the coastal zone, where they do exist
- ▣ Lack of clarity of existing mandates and delineation of responsibility between agencies and ministries related to coastal zone management
- ▣ No plan of action to bring together all the parts of government for integrated coastal management together and to work in a cohesive fashion
- ▣ Human, financial and 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
- ▣ Absence of effective, routine inter-governmental coordinating mechanisms for information sharing, alignment of programmes and collaboration for overall environment management
- ▣ Limited capacity of staff to provide sound legal, social, economic and biological advice to support well informed decision making related to coastal zone management

## ACTIONS:

- Clarify and evaluate roles and responsibilities, institutional arrangement options and coordination mechanisms between relevant ministries, organisations and private sector etc in order to develop a harmonized approach to coastal zone management
- Within the context of an integrated resource management framework, establish an appropriate legal and institutional framework, including integrated and consolidated legislation with clear delineation of mandates and responsibilities, focused on the sustainable use of limited resources in coastal areas and managing human activities in coastal and adjoining areas to maintain, restore or improve the quality of coastal zone ecosystems and the societies they support,
- Ensure that development activities within the coastal zone are co-ordinated amongst responsible agencies, meet clearly defined standards, does not cause harm to human health or the environment, and that all activities are within the “carrying capacity” of fragile coastal resources.
- Legislation developed or amended should empower appropriate agencies to undertake by a specified date, and regularly update a comprehensive inventory of marine and coastal resources and conditions, which should provide baseline information for coastal zone management and development decisions.
- Strengthen working relationships of Ministry of Marine Resources and the National Environment Service with other organisations responsible for environmental health and quality issues
- Develop Coastal Atlases and an Integrated Coastal Management (ICM) Plan to address land and water management problems affecting the coastal zone, through broad-based consultation at the community level, and ensure necessary legislative frameworks to implement and enforce the management plans.
- Establish guidelines and standards for the siting, construction, development and operation of residential, tourism and industrial structures in the coastal area.
- Develop human technical capacity to plan, implement, monitor and evaluate Integrated Coastal Management programmes and activities



- Develop training manuals and courses related to coastal management at different levels - drawing on institutional knowledge from experienced staff - for capacity development and empowerment of relevant agencies, organisations and communities
- Develop capacity of relevant ministry and agency staff to provide sound advice (legal, social, economic, biological) for coastal resource and environment management
- Establish or identify appropriate inter-governmental mechanisms to facilitate regular information sharing and coordination of activities related to management of the coastal area

## **Coastal Vulnerabilities**

- **Summary of Capacity Gap**

Coastal infrastructure is extremely vulnerable to coastal erosion, and the impacts of climate change such as sea surge, sea level rise and extreme events. Current planning procedures and the environmental impact assessment process look at the impact of the development on the environment but do not sufficiently take into account the impact of the **environment** on a project or development. An integrated approach to adaptation and coastal resource management is lacking, including preventative infrastructure planning to adjust to the possible increased risks from climate change impacts. Data gaps and technical capacity issues limit detailed information about coastal vulnerabilities including to the impacts climate change, extreme events and sea level rise, and the lack of consensus on appropriate or suitable technology to use.

## **Root Causes**

- ▣ Outdated or un-enforced policies and legislations regarding land zoning, infrastructure and building standards
- ▣ Limited capacity of regulatory agencies to incorporate climate change considerations into the development approval process
- ▣ Limited information available for preventative infrastructure planning and climate proofing of infrastructure and development to accommodate climate change impacts
- ▣ Vulnerability and adaptation assessments carried out were restricted to a few islands and therefore does not have national coverage
- ▣ Limited studies on, or vulnerability assessments of, existing infrastructure and properties along coastal areas likely to be affected from natural hazards and climate change
- ▣ Limited available data or access to data for mapping of coastal vulnerabilities including of coastal infrastructure to flooding and sea surge, or the vulnerability of all islands to periods of drought and flooding
- ▣ Limited capacity, including technical expertise and equipment to properly assess hazards, risks and vulnerability including V&As, CHARM
- ▣ Solutions or technology for coastal protection can be site specific and need to be tailored to suit local conditions - one-size fits all approach is not applicable
- ▣ Insufficient data and research to identify appropriate adaptation technologies that can be employed at suitable locations to mitigate coastal vulnerabilities, including coastal protection mechanisms.
- ▣ Lack of programmatic approach and mandate for the collection and collation of data on coastal resources to support scientific research and decision making
- ▣ Limited local capacity to conduct studies of risks and locally appropriate adaptation technologies including coastal protection mechanisms
- ▣ Inadequate capacity of vulnerable communities to cope with onset of droughts and flood events
- ▣ Awareness about the future risks of property from climate change and coastal erosion or potential climate and cyclone proofing best practises is limited at best

## **ACTIONS:**

- Ensure as an urgent priority that assessments of the possible impacts of the environment, including climate change, on a project are a formal part of all development planning processes, and appropriate changes should be made in the relevant legal and institutional structures to facilitate such considerations.
- Incorporate design, construction and building technologies related to climate change, extreme events and future conditions into current building control codes and standards, and develop inspection guidelines and regulatory enforcement systems with appropriate capacity building and training in implementation, to support preventative planning at the development stage
- Develop and disseminate guidelines and best practises for preventative infrastructure planning and climate proofing of infrastructure and developments to accommodate climate change impacts
- Establish and develop effective climate monitoring capacity to provide for effective climate change risk management physical planning
- Develop a coordinated programme and technical capacity to carry out vulnerability and adaptation assessments for all islands in the Cook Islands
- 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.
- Appropriate risk management regimes should be established to reduce the risks of extreme events associated with climate change/variability.
- 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.
- 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 coastal resource management
- Develop local capacity for risk analysis and research into locally appropriate adaptation technologies including coastal protection mechanisms
- Develop capacity of vulnerable communities to cope with onset of droughts and flood events through emergency management plans and promotion of water conservation practises

### **Impacts of Activities within the Coastal Zone**

- **Summary of Capacity Gap**

Degradation of coastal resources, and any decline in coastal biodiversity, will have serious implications for the people of the Cook Islands. Tourism relies heavily on sustaining healthy pristine environments, particularly beachfront foreshore areas and lagoons, which are also an important subsistence source for local people. The management of activities within coastal foreshore area of all islands is therefore important, most especially on the islands in the Cook Islands where the majority of land if not the entire island is coastal area. The lack of adequate data or information related to activities in the coastal zone of each island and the environmental, social and economical impacts of these activities to aid planning and decision making is a major gap.

Poor development and land use practises can have a significant impact on coastal resources, including causing sedimentation, siltation and nutrient loading of lagoons from runoff. Compliance

with existing legislation and policies is limited, as is individual awareness of the potential negative flow on effects of land based activities on coastal ecosystems and resources. Local communities and individuals have limited capacity for sustainable management of resources, which contributes to the lack of compliance and buy in.

Current monitoring programmes carried out for coastal resources are limited in scope and lack adequate assessment of the usefulness of data collected to determine ways to strengthen or improve procedures. Capacity within the relevant line agencies to monitor and gather data on coastal activities is largely constrained by the limited staff, staff expertise and material resources to cope.

### Root Causes

- ▣ Development activities have been conducted without proper consideration for the sustainability of resources and the ‘carrying capacity’ of the environment
- ▣ Limited assessment of impacts of activities within and upon the coastal zone, including tourism ventures
- ▣ Systematic and ongoing monitoring and data collection programmes related to coastal resources and activities are limited
- ▣ Limited staff, technical capacity and material resources within line agencies that regulate activities in the coastal zone for ongoing monitoring, enforcement and education awareness
- ▣ 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
- ▣ Communities were not fully aware of the need to upgrade sewage systems and many do not have the means to do so
- ▣ No mechanism to facilitate the implementation and enforcement of new Sewage and Sanitation regulations, for example, in terms of upgrading existing systems to meet new standards
- ▣ Lack of mechanisms to facilitate or provide incentives for access to affordable and locally appropriate waste treatment systems in country
- ▣ Currently relying on overseas studies of coastal areas, where they have with different conditions, due to the limited research being carried out in this area in the Cook Islands
- ▣ Involvement of traditional and customary leaders in coastal resource management tends to be limited to Ra’ui areas

### ACTIONS:

- |  |
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| <ul style="list-style-type: none"><li>▪ Encourage better understanding among both institutions and developers regarding Environment Impact Assessments (EIAs), its purpose and how it can also be a useful tool for determining the impact of the environment on development and activities</li><li>▪ 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</li><li>▪ 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</li><li>▪ Foster and maintain closer working relationships between government and environmental NGOs, CBOs and the private sector involved in fisheries, land, water, and waste management issues or activities that impact upon coastal resources.</li><li>▪ Promote the need for more local case studies in coastal resources and management, encourage partnerships with relevant institutions, agencies and technical expertise, and</li></ul> |
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develop local capacity for coastal zone research through mechanisms such as research counter-parting programmes

- 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 foreshore
- 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
- Protect reefs to ensure resilience and the removal or reduction of additional stress from land based human activities including through mechanisms such as Ra'ui
- Strengthen integrated management and sustainable harvesting of fisheries resources in the Cook Islands lagoons including through closer working relationships with environmental NGOs, CBOs and the private sector involved in fisheries and land and water management issues that impact upon coastal resources.
- Assess inshore fisheries pressures such as demand, harvesting methods and practices, fisheries population dynamics, and identify critical areas and stocks to determine sustainable harvesting levels and ecologically sound practices.
- Develop appropriate communications strategies will need to be developed to raise awareness of the impacts of activities, climate change and poor land management on the coastal zone and promote alternatives or adaptation option
- Develop community programmes for coastal protection including planting of traditional trees and native plants along the foreshore
- Encourage school programmes related to coastal resource management such as 'Adopt a beach' and Sand Watch
- Strengthening the role of customary practices in environmental and coastal zone management through the Ariki and Aronga Mana (traditional leaders).
- Promote the ecosystems approach for Ra'ui and protected areas establishment and management

**Thematic Area:**

## Resource Management

One of the Cook Islands challenges is the way we manage our natural resources such as land, water, soil, native vegetation, and the biological resources base. Ensuring the ecologically sustainable management of natural resources is a critical issue as any depletion of the natural resource base runs the risk of reduced ecosystem resilience and productivity, or the loss of ecosystem services altogether. This would have serious implications for social and economic wellbeing, as well as sustainable livelihoods.

Overall, the management of resources in the Cook Islands is woefully inadequate and fragmented. Current legislation and policies governing resource use and management are sectoral in nature, many are outdated, or only apply to islands that have acceded to it and do not establish the co-ordination and collaboration necessary to ensure that all resources are managed in a sustainable manner that reflects current ecosystems approaches to management. Decision making regarding resource management is not based on any sound inventory of natural resources and there is no formal consideration as to the "carrying capacity" of resources, or whether the activity that affects this resource is sustainable.

Island communities are largely dependent on resources, including local biodiversity for food and to support major industries such as tourism, which creates resistance to policies and legislation limiting or controlling access to these resources. The traditional land tenure system, whereby land in the Cook Islands is mostly owned by family groups, creates a situation in which it is widely

perceived that government has limited regulatory power and in which the regulatory efforts of natural resources by the national government are resisted at the local level. However, increasing commercial and consumer demand for agricultural products as agricultural and livestock production levels decline nationwide highlights the increasing demand on Cook Island natural resources and the potential for exploitation to meet that demand if sustainable resource management and use is not implemented as a priority.

### Root Causes

- ▣ Existing legislation does not adequately cover resource management and use and lacks clear guidance to ensure sustainability of the resource
- ▣ Weak land use policies and lack of resource use/management policies and plans
- ▣ Limited baseline information or inventory of Cook Islands natural resources
- ▣ Multiple agencies and stakeholders have varying degrees of responsibilities for natural resources, their uses and management
- ▣ Weak structural and organizational capacities and capabilities amongst key agencies managing our natural resources.
- ▣ No agency/ministry is mandated to undertake an inventory of Cook Islands natural resources
- ▣ Enforcement officers lack the capacity or tools to effectively implement existing legislation including capacity for control and surveillance of resource use
- ▣ Limited and scattered information and data to manage available data on resources and resource use
- ▣ Limited local capacity to undertake baseline assessments and to determine 'carrying capacity' of Cook Islands natural resources
- ▣ Different methodologies for determining carrying capacity lead to confusion over which way is appropriate for the Cook 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 health
- ▣ Current monitoring and data collection programmes are constrained by budget support and commitment for ongoing collection to extend to all islands
- ▣ Issues of insufficient staff, staff expertise, materials and resources to undertake resource management activities
- ▣ Consumer attitudes assume resources are plentiful, due to lack of awareness and information as to the scope of the problem and the limited promotion of conservation of biodiversity and natural resources on all islands.
- ▣ Community acceptance and support of the need for resource management has not been actively pursued
- ▣ Limited awareness and promotion, particularly at the community level, of the Land use policy currently being developed

### ACTIONS:

- Undertake a comprehensive inventory of natural resources and existing development conditions on all islands to provide baseline information for resource management and development decisions (including environmental impact assessments)
- 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.

- Incorporate the principles of sustainable development into the mandates and procedures of all institutions dealing with developmental planning and resource management
- Develop, through broad-based community consultation, comprehensive and integrated Resource Management plans, policies, programmes and actions to promote and ensure 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
- Support and effectively promote the Land Use policy development process being undertaken to ensure adequate awareness and understanding of the outcomes by informed communities
- Utilise national frameworks such as the National Sustainable Development Plan to mainstream sustainable resource use and management
- 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 an assessment on the impact of the proposed development of the natural resources and social development in any local area.
- Strengthen and develop institutional capacity for sustainable and adaptive resource management within relevant agencies and organisations for improved resource management and response to changing environments and situations
- Develop and provide training and capacity building programmes to relevant agencies and communities for resource use management and to carry out monitoring regimes i.e. baselines, stock and ecosystem assessments with the mind to identify carrying capacities and developing management plans and policies
- 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
- Develop capacity for Environmental Evaluation, especially to promote areas where sustainable resource use is important
- 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.
- Establish and maintain a Land Information Management System on a Geographic Information System (GIS) platform that will be the basis for integrated and co-ordinated physical planning and resource planning, management, use and development activities
- Support initiatives such as the MapInfo Server database aimed at improving land use, survey and building data access and ensure that all relevant agencies actively contribute to the content of this site where possible to aid better planning and decision making, including through training and provision of resources
- 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.
- Support information dissemination, education and awareness programmes for sustainable resource use and management at all levels in locally appropriate formats



- Work with the private sector to develop an accreditation scheme in sustainable practises for marketing and consumer benefit, and undertake education awareness of consumers of the benefits of supporting sustainably harvested products

Thematic Area:

## Water Resource Management

### **Enabling Environment and Institutional Arrangements**

- **Summary of Capacity Gap**

Effective care and management of water resources, which includes lagoon, surface and ground water, is critical for the economic and social wellbeing of the Cook Islands. Yet the sector is the most fragmented, is supply-driven and lacks coherent policies, strategies, legislation, regulation and monitoring.<sup>1</sup> The lack of clarity of the roles and responsibilities of relevant agencies and organisations related to various aspects of water resources management is a major contributing factor towards this fragmentation.

The lack of a legal and policy framework to support water resource management in the Cook Islands is a key gap. There is no single national water resource legislation in place except for scattered provisions that address the supply of water to the public such as the Rarotonga Waterworks Ordinance of 1960. Institutional constraints, limited resources within relevant agencies and coordination between them, and the lack of identification of an agency to lead the process, are some of the identified barriers. Technical capacity for water management is present however staff are inundated with projects in many different areas related to water and there is insufficient staff to take on new initiatives. The National Water Policy currently being drafted and the Integrated Water Resource Management Project under the Ministry of Works is expected to address some of these issues however political and community will for integration and collaboration between agencies will be the largest requirement for the effective and sustainable management of water resources.<sup>2</sup>

### **Root Causes**

- ▣ Ownership and management of water resources is unclear and needs to be determined at the national level
- ▣ Lack of an integrated national water resource management policy
- ▣ 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
- ▣ No management framework for integrated water resource management or to control pollution in water supplies, or encroachment into water catchment areas.
- ▣ Disjointed activities and coordination processes for forestry, water catchments, wetlands, lagoon environment, water supply, waste water and solid waste disposals have also produced mixed results
- ▣ Limited coordination and collaboration amongst all agencies/stakeholders responsible for management of different aspects of water resources
- ▣ 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

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<sup>1</sup> ADBTA Preventative Infrastructure Master Plan, Government of the Cook Islands

<sup>2</sup> Integrated freshwater and coastal management on Rarotonga, Integrated Water Resource Management (IWRM) Demonstration Project

- ▣ Ministry of Works Water Works Division's mandate does not cover the outer islands so Island Councils and other appropriate stakeholders will need to get involved and proactively manage their water resources in a sustainable manner
- ▣ Technical and human capacity for water resource management in the Cook Islands is insufficient – staff retention is a problem and retraining is required every time capacity is lost

## ACTIONS:

- Support the Integrated Water Resource Management Project (IWRM), which aims to strengthen the enabling environment for water resource management and can be used as a pilot project for launching improved and integrated water resource management to all islands in the Cook Islands.
- Undertake a comprehensive inventory to determine the current state of water resources **for all islands in the Cook Islands** including all freshwater resources (surface and underground), water intakes, watersheds and water catchments to provide sound information with a view towards the formulation of plans, policies, programmes and projects to ensure that freshwater resources are available to facilitate the sustainable development of the country, and to serve as a basis for planning approvals and environmental impact assessments.
- Conduct a legislative review of various acts and regulations that regulate water resource, water supply or water quality management and implement appropriate recommendations to address key issues and promote integrated approaches and institutional structures to sustainable management of water resources and watersheds in the Cook Islands
- Develop and implement policies for water governance as an immediate step towards an overarching policy for integrated water resource management, in collaboration with the IWRM project and EU Water Governance program
- Develop Island specific water resource management plans for all island in the Cook Islands
- 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
- 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
- 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
- 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



## **Water Demand and Supply**

- **Summary of Capacity Gap**

National water demand and supply dynamics for the whole of the Cook Islands have not been fully assessed. Leakage and wastage of reticulated water are major issues for Rarotonga where water supply is funded directly through government expenditure (i.e. no water charges either by volume or connection). The funding system also makes infrastructure investment vulnerable to change through political and government budgetary constraints.<sup>3</sup> Free and unrestricted water usage for consumers, including commercial enterprises, has encouraged a wasteful attitude and placed pressure on our limited water supply. Pilot projects for water demand management may provide valuable information to improved water resource management on Rarotonga however the lack of determination of the full extent of water resources demand and supply on all islands hinders informed decision making and planning.

Currently, water security is already a concern with all islands having experienced critical water shortages. In most of the Outer Islands, particularly the Northern Group, access to water is limited to rainwater harvesting and ground water sources. Water supply on these islands is therefore vulnerable to climate variability and change, and in particular to periods of drought and salt water intrusion. Future planning and viable alternative options to supplement water supply will need to be explored for those islands.

Currently, there is 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. Limited technical capacity and funding issues are major constraints to the implementation of activities and maintenance of water infrastructure in the Outer Islands and needs to be addressed.

At the community level, little action is being taken to conserve what drinking water we do have. There is limited individual awareness of the long-term potential consequences of water wastage, and water conservation measures, including traditional knowledge and practises, are not promoted with any vigour.

### **Root Causes**

- ☒ 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.
- ☒ Insufficient baseline information/data on water resources and the current situation on all islands
- ☒ Implementation of activities to support water resource management and maintenance of water infrastructure in the Outer Islands is vulnerable to sufficient funding and support being provided to Island Councils
- ☒ High dependence on rainwater and roof catchment as the principal source of water for the Northern Group atoll islands
- ☒ Limited capacity for water demand management including capacity and resources for measuring flow supply, identifying consumer water habits, water use audits and efficiency plans
- ☒ The value of water resources, particularly on Rarotonga, are not fully appreciated leading to a wasteful attitude
- ☒ Limited promotion of water conservation measures and wise water use technologies

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<sup>3</sup> Integrated freshwater and coastal management on Rarotonga, Integrated Water Resource Management (IWRM) Demonstration Project

- ▣ Lack of 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
- ▣ 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

### **ACTIONS:**

- Reassess levels of current demand and supply of water resources on all islands including dynamics of supply
- Investigate alternative water sources and viable options to supplement water supply for all islands in the Cook Islands, including groundwater and desalination
- Develop innovative community and educational awareness programmes, highlighting the finite nature of water resources, the need to protect water supply sources and promote water conservation awareness programmes discouraging water wastage or excessive use as well wise water use technologies such as dual flush toilets and reduced-flow shower heads
- Develop economic incentives to encourage the use of water storage facilities, including the installation of water tanks and low energy pumping equipment, and to encourage investments in alternate water catchment technologies and equipment including the installation of roof spouts and gutters for rain catchment.
- Ensure that any regulatory regime for water resource management incorporates appropriate adaptation strategies to address likely impacts from climate change/variability.
- Strengthen the capacity for monitoring effects of Climate Change on water resources including early warning systems for water resources supply and ongoing monitoring for onset of drought through systems
- 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.

### **Water Quality**

- **Summary of Capacity Gap**

The water system at present is vulnerable to any form of disaster, such as contamination from agriculture chemicals, sanitation contamination, saltwater intrusion and extreme weather events. Water quality on Rarotonga, especially for human consumption, remains a major concern especially with the high faecal coliform counts recorded in some water intakes. Contamination of water and poor water quality highlight the limited management of activities within areas surrounding water catchments, water sources and intakes, and the inadequacies of the few mechanisms in place to preserve and protect our water resources. Difficulties arise as all water intakes are on land owned by family groups and individuals, and any management of activities would require community and land-owner endorsement.

There are a number of different agencies and organisations conducting various aspects of water quality testing and monitoring with different testing parameters. There is a need to develop coordinated programmes amongst these agencies, and to ensure that information is comparable with appropriate facilities and capacity to support testing and analysis.

## Root Causes

- ▣ Limited management of activities in the water catchment areas and water supply systems
- ▣ No plan of action to guide the actions of agencies involved in water testing
- ▣ Definition of roles of individual agencies involved in water testing is unclear
- ▣ Institutional arrangements for the monitoring of water resources are fragmented and lack coordination or a consistent monitoring regime
- ▣ Insufficient capacities and resources for ongoing water testing, monitoring and analysis
- ▣ Baseline assessment of in-country lab capacity – poor in terms of technical capacities, resources, data storage and monitoring programme
- ▣ Different testing locations are utilised by the various water testing agencies leading to incomparable results for quality assurance
- ▣ Limited research into the causes of the high faecal coliform counts in water intakes and water supply systems
- ▣ Lack of acceptable standards for water quality
- ▣ Results of water quality tests are not made readily available to the public

## ACTIONS:

- Implement a coordinated monitoring regime for water quality with all relevant agencies and a centralised testing facility for all environmental testing, and develop a coordinated monitoring programme to guide water testing activities
- Strengthen capacity for conducting testing, monitoring and results analysis of drinking water quality amongst relevant agencies including the determination of agreed testing parameters, and the surveillance and monitoring of public water supplies and source waters
- Promote water resource analysis outcomes to decision makers for informed policy and action development and to gain on-going Government commitment and support to water resource programmes
- Develop a centralised platform for rapid dissemination of water quality and quantity information to stakeholders and the general public
- Strengthen Catchment Management at all twelve (12) intakes on Rarotonga, including through the establishment of legal measures and the development of management plans to protect water catchment areas
- Develop appropriate site and island specific management plans for all water catchment areas and water supply systems
- 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
- 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

## Thematic Area: **Waste, Pollution and Sanitation**

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Waste Management is widely recognised as a major concern for the Cook Islands with the potential to cause negative impacts on national development activities, including tourism and trade, food supplies, public health and the environment. The generation and disposal of wastes has direct and indirect linkages to economic development. Waste materials represent wasted money, in terms of both the original cost of the materials, the costs of disposal, and also the potential value of the material as a reusable resource. Poorly managed wastes can have negative effects on tourism, by detracting from the “Island Paradise” image and by association with health warnings about infectious and vector-borne diseases. There is the potential for contamination of food supplies, which can have impacts on local markets or revenue from export crops. And there are numerous health and environmental hazards that arise when wastes are poorly managed and disposed.

Currently, management of waste is haphazard and piecemeal. There is a lack of clear direction and delineation of responsibilities of key agencies and organisations related to the effective management of waste, which is not helped by poor communications to prevent duplication of activities. Current waste management does not take a ‘cradle to grave’ approach in order to manage waste from the moment it enters the country until it is disposed off or recycled. Our economy of scale makes it difficult also to manage waste at its point of entry, where certain waste streams can be prohibited or minimised, thereby we tend to only deal with waste at the end of its cycle the ‘grave’ aspect of waste management. Our waste issue is also exacerbated by the limited land space available for disposal of waste; hence importation bans, separation, reuse and recycling of waste is a more sensible direction to take. In addition, we lack the capacity and knowledge to deal with ‘new’ or non traditional wastes, especially hazardous wastes, electronic wastes and white-ware materials. Options for the application of viable economic incentives to encourage waste management have not been adequately explored. Public awareness, self compliance, community cooperation and appropriate economic incentives are central to the effective management of waste by all Cook Islanders.

### **Root Causes**

- ▣ National Waste Strategy has been drafted but lacks adequate clarification of roles and responsibilities of relevant waste management stakeholders and still needs Cabinet endorsement
- ▣ Strategy lacks identification of appropriate technologies and incentives for waste management
- ▣ Lack of island specific management plans for waste especially in the Outer Islands except for Aitutaki
- ▣ Lack of training resources and community programmes for education and awareness of waste management
- ▣ Insufficient capacity, resources and funding to support the production and dissemination of education and awareness resources for waste management activities

### **ACTIONS:**

- 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

- Designate an appropriate existing board or committee to coordinate and implement the National Waste Strategy and expand their mandate to cover this if necessary
- Promote the National Waste Strategy to the private sector for private sector involvement
- Produce island specific management plans for waste, particularly for the Outer Islands with an emphasis on waste minimisation
- National Environment Service, Waste Management Division of the Ministry of Works, Public Health and other relevant agencies to continue to update and implement communication strategies to promote effective management of waste including public and community engagement.
- Strengthen relationships between agencies and organisations involved with waste management for improved collaboration and coordination of activities

## **Solid Waste**

### **• Summary of Capacity Gap**

Limited resources to deal with solid waste and inadequate sites for waste disposal are a threat to human health and the environment. Most islands, apart from Rarotonga and Aitutaki have inadequate solid waste disposal facilities. Even with proper facilities, it will be crucial for waste disposal to be effectively managed, to avoid further degradation and pollution of nearby lands and the surrounding waters. Open dumping, burning and ad hoc garbage disposal is common and these practices are increasingly becoming a health and environmental issue for the Cook Islands, especially for population and tourism-congested Rarotonga.

There is a gap in current legislation and institutional arrangements in some aspects of solid waste management, whereby legislation or institutional arrangements are either conflicting or do not provide sufficient direction. Options for waste minimisation should be widely promoted as part of the solution. Other areas such as the disposal of wastes from ships and aircraft from on-site incinerators at the port and airport remain largely unregulated. New forms of solid waste such as whiteware and electronic waste have increased in volume significantly, and the capacity and knowledge on its proper disposal are very limited. Offshore disposal or exporting waste to developed countries are proving to be difficult as it is covered under international conventions and most developed countries will only accept waste that has some economic value.

Education and awareness activities to support recycling have had mixed results. Public support has been received however incorrect separation of waste has negated these efforts and forced rubbish contractors to mix recyclables with general landfill waste. This has led to the public perception that separation is a waste of time which is damaging for public awareness and cooperation. The lack of separation of food scraps and soiled wastes such as disposable nappies in waste going to the landfill also increases the potential for vector-borne diseases from flies etc.

## **Root Causes**

- ☒ 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.
- ☒ No legal requirement for operators handling and transporting waste to be licensed
- ☒ No waste reception facilities legally established for solid waste (or sewage or oil) from visiting vessels, which are required under the MARPOL 73/78 Convention.
- ☒ Recycling and disposal options for motor vehicles, whiteware, computers and other household appliances have yet to be implemented fully.
- ☒ No comprehensive assessment of the management and disposal regimes for solid and hazardous waste on the outer islands.

- ▣ Limited infrastructure available in the outer islands to ensure that solid waste is managed sufficiently and in a sustainable manner
- ▣ Lack of operational standards for waste transporters – whether they be licensed under the Public Health Act 2004 or the Environment Act 2003.
- ▣ Contracts for waste collectors are awarded on an annual basis only and short term contracts do not encourage contractors to invest in better equipment
- ▣ 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

### **ACTIONS:**

- Incorporate standards for the disposal of airport incinerator ash in regulations under the Public Health Act.
- Clearly define regulatory, management and enforcement roles and responsibilities of the various agencies, Island and Vaka councils related to waste, with clarity provided under appropriate regulations.
- Establish appropriate legal and institutional frameworks and operational plans for the management of solid wastes on all Outer Islands, and pass appropriate bylaws.
- Introduce and legislate innovative economic measures, including focused tariffs and levies to support sound environmental management of solid waste from point of entry through to disposal.
- Recommend that a Waste Disposal Tariff be added to the cost of selected imported goods be established within the next 5 years, and that the Waste Disposal Tariff be collected by the Crown and placed in a Trust Fund to be used by a registered recycling operator for the disposal of selected items.
- Strengthen the capacity of Customs and MFEM to implement the Waste Disposal Tariff to ensure that
- Recommend that consideration be given to providing other economic incentives to support the fledgling recycling industry
- Recommend that appropriate economic incentives be established to promote the reduction and recycling of aluminium cans, glass and plastic bottles, and plastic shopping bags.
- Encourage the reduction of solid waste to the minimum practicable level using the principles of reduce, reuse, and recycle and “polluter pay”.
- Encourage at source separation to minimise waste and ensure the life of the landfill is extended
- Support the private sector goal of ‘Zero Waste’ as an over-arching goal for waste management in the Cook Islands
- Strengthen and support education and awareness activities related to waste management and pollution

### **Liquid Waste**

- **Summary of Capacity Gap**

Increasing incidences of water pollution or eutrophication due to agricultural and nutrient run off, especially after heavy rains, is a concern. Anecdotal evidence suggests poor management of sewage and agricultural waste may be a major cause of this problem. High tourism density in coastal areas may be exacerbating the deterioration of the lagoon environment. For some aspects of liquid waste management, where legislation or institutional arrangements are provided it is either conflicting or does not provide sufficient direction for effective management. Sewage regulations have been drafted to establish higher standards for sewage treatment systems, installers, designers, servicing agents and inspectors however the solutions to improved liquid waste management are expensive



and require enormous investment.

### Root Causes

- ▣ No effective regulatory regime in place to manage pollution caused by poorly sited, constructed or inadequately managed septic tanks and sewage treatment systems.
- ▣ Limited coordination between the three government agencies involved (i.e., Ministry of Health, Building Controller in Ministry of Works, and National Environment Service)
- ▣ Effective operation of sewage treatment systems has been hampered by the absence of appropriate storm water drainage standards in the National Building Code.
- ▣ Lack of standards and effective control over the siting, construction and operation of septic tanks and sewage treatment systems on residential and commercial properties
- ▣ 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
- ▣ The cost to install or upgrade existing septic tanks to standards in sewage regulations is prohibitive but necessary
- ▣ Limited capacity in designing, installing, servicing and inspecting sewage treatment systems

### ACTIONS:

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| <ul style="list-style-type: none"><li>▪ Develop appropriate bylaws or regulations to manage liquid waste and sludge in the Outer Islands</li><li>▪ Strengthen capacity to implement the Sewage Regulations including institutions roles and responsibilities, development applications and the siting, construction and operation of septic tanks and sewage treatment systems and the Sewage Code</li><li>▪ Ensure that appropriate storm water drainage standards are established and integrated into the Building Code; a legal mandate be given to public works to establish appropriate storm water drainage management regime.</li><li>▪ Minimum Standards for septic tanks and septic treatment plants should be included as part of the Tourism Accreditation Scheme</li><li>▪ Conduct a detailed economic and environmental feasibility study comparing the options of a centralised sewage system, communal or cluster systems, on-site sewage treatment systems, and a combination of the three and composting toilets..</li><li>▪ Provide for ongoing training in on-site sewage management systems and drainlaying</li><li>▪ Undertake feasibility and needs assessment for a centralised environment laboratory testing facility that could test for treated sewage effluent</li><li>▪ Strengthen capacity to test for treated sewage effluent</li><li>▪ Recommend that government provides the following economic incentives to assist compliance with Sewage Regulation upgrade requirements: that 100% depreciation be allowed on septage equipment installed by an accredited plumber and that a fund be established to assist property owners with the costs of installing and upgrading sewage treatment systems to the new standards</li></ul> |
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### Hazardous & Dangerous Substances or Waste

- **Summary of Capacity Gap**

The Cook Islands has limited capacity to manage hazardous and dangerous substances and waste, with no proper regime in place to govern the movement and management of such materials. There is little effective legislation, policies and institutional arrangements to manage all hazardous

substances with little control of radioactive waste or substances from the hospital, or hazardous waste from the incinerator at the airport. An assessment of what hazardous & dangerous substances and waste are present in the Cook Islands is lacking, particularly for the Outer Islands.

### Root Causes

- ▣ 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.
- ▣ Hazardous waste such as oils and paints, obsolete chemicals and asbestos require management plans and proper disposal mechanisms.
- ▣ Limited quantities of persistent organic pollutants (POPs) (as defined under the Stockholm Convention) and ozone depleting substances (ODS). However, there are still significant amounts of obsolete pesticides, fertilizers and other chemicals in the country.
- ▣ Lack of technical, human and financial capacity and resources to undertake a national assessment of hazardous and dangerous substances and waste
- ▣ Lack of knowledge on viable economic incentives for the Cook Islands and how to implement incentives for management of wastes
- ▣ Technical know-how to handle and manage hazardous & dangerous substances and waste materials is far and few between
- ▣ Lack of resources committed for hazardous & dangerous substances and waste including radioactive wastes and POPs.
- ▣ Problems with disposal of wastes from electricity generating/transmission equipment and ballast in light fixtures largely due to concerns relating to contamination to the environment and potential harm to human health resulting from the uncontrolled disposal of such equipment

### ACTIONS:

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| <ul style="list-style-type: none"><li>▪ Designate an appropriate existing board or committee to coordinate and implement the National Waste Strategy, which includes hazardous and dangerous substances and waste, and expand their mandate to cover this if necessary</li><li>▪ Appropriate legislative and institutional structure should be established to provide for the development and implementation of; a National Hazardous Substance Inventory, Policy and Management Plan; provide for the licensing of hazardous waste facilities and transporters; and an integrated pest management program to reduce reliance on chemical pesticides in agriculture.</li><li>▪ Develop and strengthen local capacity to carry out a national assessment of hazardous &amp; dangerous substances and waste in the Cook Islands</li><li>▪ Establish regulatory instruments which will create appropriate economic incentives to promote the sound management and disposal of hazardous substances</li><li>▪ Provide fiscal incentives for promoting the phasing-out of pesticides and chemicals and to encourage the importation of "environmentally friendly" alternatives;</li><li>▪ Develop mechanisms to ensure encourage "life cycle management" and the recovery and recycling of hazardous substances</li><li>▪ Provide incentives for industries to establish sound hazardous substance management plans and provide training in hazardous substance management, recycling and disposal</li><li>▪ Identify and promote alternatives for current chemicals and pesticides, including Reslin, that are effective and proven environmentally friendly</li></ul> |
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## **Marine Pollution**

- **Summary of Capacity Gap**

The Cook Islands has limited capacity to deal with oil or pollutant spills within the marine environment. The Prevention of Marine Pollution Act 1998 is obsolete and needs to be replaced with legislation that is more integrated to provide clear concise direction for all involved agencies, in conjunction with management regimes and institutional arrangements.

### **ACTIONS:**

- Investigate feasibility of revoking the Prevention of Marine Pollution Act 1998 and replace it with a new Act to take 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 framework
- Recommend that the National Oil Spill Contingency Plan be revised to include standards and protocols for the environmentally sound disposal of any waste oil recovered after a spill; to regulate the type of dispersants that can be used during any spill; and to regulate clean up activities in sensitive coastal and foreshore areas.

## **CROSS CUTTING CAPACITY ISSUES**

Thematic Area: **Integrating Environment Management**

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Outdated and inappropriate legislation on environment issues has resulted in stakeholders working in isolation of each other with no clear policy directions. Environment and economic policies have not yet been fully integrated, which is a major obstacle as the integration of environment issues at the forefront of strategic economic and policy planning is essential in order to achieve positive environment outcomes in the Cook Islands

The mainstreaming of environment management issues into national economic and development planning processes has improved over the years however implementation of such plans still remains weak. The National Sustainable Development Plan, the Millennium Development Goals Report, and the National Environment Strategic Action Framework have all addressed environment management to some degree but time has shown that the Cook Islands lacks the institutional structures and support mechanisms to collaborate, monitor and enforce these national plans.

The inability for new legislation and regulations to be developed and approved in a timely fashion are important cross-sector constraints identified by stakeholders. There is a critical shortage of legislative drafting skills nationally, and specifically within Crown Law. Most recent drafting has been undertaken by overseas experts who are characterized, fairly or unfairly, as not being familiar with, or having sensitivity to, local ways and conditions.<sup>4</sup>

There is limited capacity for monitoring environment management, such as through environmental accounting or auditing. National monitoring and evaluation processes are yet to be established, particularly for the implementation of national documents including the National Sustainable Development Plan. Key monitoring and evaluation tools, such as State of the Environment Reports, have not been compiled for many years, owing to the limited capacity to undertake such activities

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<sup>4</sup> Preventive Infrastructure Master Plan. (2006). Vol 3 Institutional Analysis and Preventative Capacity, Strengthening Disaster Management and Mitigation (ADBT A 4605-COO). Government of the Cook Islands.

and limited budgetary support. 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 in the current political setting, accorded a high degree of priority, as evidenced by the limited support for environmental concerns in Government's annual Budget Policy Statement – which indicates priorities for local funding. There also continues to be limited awareness of high-level decision makers and budget committees of the restrictions of donor aid funding and that national implementation still requires national funding. Environment management is the responsibility of all stakeholders and it is therefore important to strengthen capacity to develop partnerships between stakeholder agencies and the community for implementation and advocacy.

### Root Causes

- ▣ Limited capacity to develop and implement national Monitoring and Evaluation processes, including tools such as State of the Environment reports
- ▣ Not a legal requirement of responsible ministries and departments to produce regular State of the Environment Reports
- ▣ 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.
- ▣ Weak reporting and monitoring capacities for climate change, biodiversity, land degradation and cross cutting environmental issues at all levels.
- ▣ 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
- ▣ 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
- ▣ 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

### ACTIONS:

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| <ul style="list-style-type: none"><li>▪ As part of a National Monitoring and Evaluation Process, undertake the preparation of National State of the Environment Reports on a regular basis as a legal requirement by responsible ministries and departments, for monitoring of environment implementation and health.</li><li>▪ Through stakeholder consultations, such as the Environment Forum, identify lead and supporting agencies for the implementation of activities under national plans including the NSDP and NESAF</li></ul> |
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- Environment information and data, including State of the Environment Reports, should be promoted and made available to policy makers and planners, and used to lobby support for the integration and implementation of environment management activities within relevant ministries and agencies
- Promote environmental management as a priority area in the annual Budget Policy Statement and Government planning and budgetary processes, including through the presentation of support data or economic valuations, to ensure adequate resources are allocated for implementation activities
- Strengthen local capacity for the development of policies and strategic planning to support the integration of environment management activities within Ministries
- Work in collaboration with national and regional agencies to provide focussed training in project proposal report writing, project design, project implementation and management at all levels
- Increase awareness and understanding of the limitations of donor funding to project outputs and the need for national level support for national and local implementation of environment management activities
- Improve capacity of government to implement environment related strategies and policies in a coherent and effective way, including through training in planning and programmatic approaches, for improved environment management
- 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
- Expand the capacity of Crown Law to provide additional support for necessary legislation development and review,
- In the short term, supplement allocated Government budgets to facilitate the development of priority legislation in a timely manner through the utilisation of regional and international legal expertise
- Where possible, ensure that any regional or international legal expertise sourced for the development and review of legislation in the Cook Islands has a local counterpart for capacity building and development purposes as well as to make sure that local conditions and customs are taken into consideration
- 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
- Strengthen the partnerships between environmental NGOs, private sector and government including through collaborative efforts on advocacy and capacity building programmes
- 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 promote cooperation and collaboration, sharing of resources and avoid duplication of efforts
- Consideration should be given to strengthening the role of customary practices in environmental and resource management
- Encourage the participation of members of the general public (through education/awareness and providing simple tools) to undertake systematic observations of their environment, as part of efforts towards monitoring for environment management
- Activities that monitor the environment such as beach profiling and coral monitoring should be supported and extended to cover all islands in the Cook Islands

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. Efforts over the past year have worked to greatly improve this through the production of communications strategies in some agencies and improved dialogue and partnerships however more support is needed to ensure that messages are effective and produce positive results.

Formal environment education continues to be limited. Environment education has not traditionally been a part of teacher training packages but over the last five years it has begun to be integrated into lessons however this is at the discretion of individual teachers and is strongly influenced by how comfortable they are with teaching an issue. Resources and capacity to support the integration of environment issues into formal education is limited, especially in the Outer Islands. Comprehension of the basic concepts of biodiversity, climate change and land degradation at different levels of users is difficult due to the lack of simplicity in environment technical reporting and language, which also has implications on educators' ability to teach environment programmes. There are few locally relevant or produced educational and media materials available related to the environment, other than the WWF Te Kaveinga Ora and the NES Environment Education package produced for teachers.

Most environment education awareness and media programmes tend to be restricted to Rarotonga and Aitutaki and do not extend to national coverage due to limitations in resources and costs associated with dissemination to the Outer Islands. There is insufficient capacity, including facilities and expertise within agencies and organisations to produce quality and audience targeted environment media productions, educational and awareness materials and information Resources and programmes are also usually only in English, which hinders understanding at all levels but most especially in the Outer Islands where the various dialects of Cook Islands Maori are the main language of communities.

Despite recent successful youth programmes such as Sandwatch and the International Waters Project's StreamWalk, there still remains insufficient engagement of youth and community groups in environment programmes, especially as these programmes are usually limited to Rarotonga. The difficulties in inducing and measuring behavioural change also highlight the lack of formal mechanisms for feedback and evaluation of the effectiveness of environment programmes and various forms of media. Linking education at schools with information and actions at home and within communities is weak and will need to be focussed on in order to achieve education awareness goals and meaningful change towards sustainable environment management.

### Root Causes

- ▣ Technical environment data and information needs simplification and translation into Cook Islands Maori for broader understanding at all levels
- ▣ Shortage of training programmes and opportunities for education planners and environment educators
- ▣ Limited teachers professional development programmes 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 public
- ▣ Limited use of practical applications and fieldwork for environment monitoring and education to foster awareness and engage students interest at all levels

- ▣ Lack of formal biodiversity, climate change and land degradation national programmes to implement information exchanges, education and awareness at all levels
- ▣ Limited support and coordination from Government for NGOs involved in environmental education activities at the grass-roots level
- ▣ 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
- ▣ Electronic multimedia facilities, equipment and software to produce locally relevant education awareness materials is limited
- ▣ Limited opportunities for training in the production of quality local education, awareness and media materials, in various mediums
- ▣ Limited translations of information into Maori language and relevant dialects
- ▣ Inability of Ministries to retain trained people so always limited capacity – issues of staff retention and lack of incentives to stay
- ▣ 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

### **ACTIONS:**

- Develop a systematic approach to environment education and awareness including developing specific communications strategies, effective measures at different levels (e.g. national or community), and partnerships between stakeholders in order to achieve positive behavioural change towards the environment
- In collaboration with the Ministry of Education, incorporate environment education into targeted professional development programmes for educators and develop curriculum resources, expertise and support to strengthen capacity to undertake environment education
- 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
- 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
- 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
- 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
- Work with appropriate authorities and individuals to develop Maori language for new environment information and terms e.g. land degradation
- Develop capacity to undertake evaluations of education and awareness programmes 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

- Strengthen capacity for monitoring and evaluation to undertake processes to assess the effectiveness of environment education and awareness programmes in raising awareness levels and inducing positive actions and behaviour change, including by using tools such as surveys of sample groups to test the effectiveness of message and medium.
- 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
- Establish formal mechanisms to access international, regional and national expertise and resources to improve availability of resources and local capacity at the government and community level to produce quality localised media productions, awareness and educational materials, including through development and implementation of targeted training programmes.
- Develop closer working relationships between government and 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
- Develop partnerships, cost sharing initiatives and innovative communication tools where possible for the production and distribution of resources to maximise national coverage
- Identify and source resources that can be shared amongst communities/villages (especially in the outer islands), for access to environment information.
- Where practical, utilise existing events such as expos, science fairs and competitions to promote the environment to students and encourage students to participate in environmental events This is based on the assumption that these events are actually effective – this would follow the need to strengthen capacity in monitoring or evaluation.
- 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
- 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.

## Thematic Area: Management of Information and Knowledge

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Inadequate management and exchange of information, including traditional knowledge and practises in environment management, continues to be a major gap. Technical capacity for the development and management of information management systems, such as databases and Geographic Information Systems, is well developed in some organisations but not all. Available datasets are limited to those produced as part of that organisations programme of work and therefore sectoral in nature, or those produced from a project which means it has limited scope. Mobilizing appropriate data for dissemination to all levels of users is poor and this is not helped by the limited awareness of and access to some sources of data. Appropriate policies, programmes and mandates to support data collection and information management activities are limited.

### **Information Management**

- Summary of Capacity Gap

Inadequate baseline data due to data gaps and the lack of data collection programmes continues to be a problem. A dearth of quality socio-economic and spatial information, including on patterns of



natural resources, land resource characteristics, population dynamics, resource demands and risks contributes to inconsistent and poorly founded decision-making.<sup>5</sup> Available datasets are scattered and poorly managed within some agencies and organisations, with limited stakeholder awareness of collected datasets and location of that information.

Data collation, analysis, databasing and management capabilities in most government agencies are weak and there is limited support to develop and maintain data and information management systems. Most Government Agencies have very limited capacity to utilise Geographic Information Systems, which can be useful in managing data. There is limited ownership of information and retention of data collected for project activities and research in the Cook Islands and no effective mechanism to maintain information in a cohesive manner. Some of the current data collection programmes are wasted as information gathered is not being used to aid analysis and decision making and highlights the need to reassess the rationale for collecting data and its usefulness. The ability to interpret and practically use information and data is an area that needs further development in the Cook Islands.

### Root Causes

- ▣ Limited awareness on available data and locality of that information
- ▣ Limited local capacity in data collection, databasing, analysis, mapping, maintenance and utilisation of environment related data and information
- ▣ Lack of policies to support the development and housing of environmental and natural resources data in national databases/clearing house
- ▣ No legal and policy recognition of the need to organize proper information in a central repository
- ▣ 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 to develop information management and administration systems including databases
- ▣ Limited functional databases/information management systems and networks for easy data access
- ▣ Competencies in database and inventories development, data collation and analysis, mobilizing information and dissemination is affected by inadequate staffing levels and limited skills
- ▣ Limited number of individuals nationally with the technical background in databases and IT development activities
- ▣ 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

### ACTIONS:

- Integrate into the National Research Policy and any contractual agreements, the need for MOUs concerning IPR and make provisions for the enforcement of this.
- Promote mechanisms to involve communities and schools in the collection of environmental data
- Provide training and training resources for national institutions, NGO's and community groups in data collation, administration and management of databases and data analysis

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<sup>5</sup> McIntyre, M. (2007). Capacity Building for Sustainable Land Management in the Cook Islands, GEF Medium Sized Project Proposal

- Develop a multi-sectoral approach to data analysis as well as mechanisms to seek advice from other sectors or relevant expertise
- Encourage all ministries/organizations to promote awareness of available data through the use of mechanisms such as websites, newsletters and information expos
- Strengthen the capacity of existing agencies responsible for natural resources in data collection, analysis, reporting
- Undertake an assessment of available data to determine data gaps and information needs for natural resources, ecosystems and sustainable land management
- Develop and implement monitoring and data collection programmes for natural resources, ecosystems and land information
- Include identification of appropriate personnel and training as part of a programmatic approach to database and inventories development, data collation and analysis, mobilizing information and dissemination
- Need to develop cooperation in sharing database development expertise between government agencies
- Investigate the potential for individuals in key ministries to collaborate and develop their skills in databases development and support this collaboration.
- Designate an agency to facilitate and manage a central land and resource information system that is accessible by all stakeholders
- 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.
- Identify data needs and benefits or desirable outputs for individual Ministries from a GIS, develop a targeted programme for practical utilisation of GIS data.
- Develop training programmes for practical training of relevant agencies and organisations in data collection, databasing, analysis, mapping, maintenance and practical utilisation of Geographic Information Systems
- Draw on existing national GIS expertise and experience where possible to support training and resource sharing initiatives, particularly for the Outer Islands

### ***Traditional knowledge and practises in environment management***

There is poor management of traditional knowledge and practises (TKP) related to environment management in the Cook Islands. Oral history and records have been traditionally relied on to preserve this knowledge however this can lead to loss of valuable information if this knowledge is not passed on. Programmes or attempts to record traditional knowledge have been inconsistent and ad hoc. Limited attempts have been made to capture traditional knowledge and practises from outer islands – each island can have different and locally specific traditional knowledge and practises based on their own biodiversity or circumstances. The Cook Islands also has poor policies and legislative frameworks in place to protect traditional knowledge and practises and the rights of the holders of such knowledge.

### **Root Causes**

- ▣ General lack of commitment to preserve traditional knowledge, innovation and practices
- ▣ No consistent, systematic, ongoing programme to record traditional knowledge and practises related to environment management
- ▣ Lack of resources to support recording programmes
- ▣ No synthesis of existing information into a central repository
- ▣ Difficulties in accessing these traditional practitioners due to high costs of travel to the outer islands.



- ☒ 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
- ☒ Lack of policies for promotion and awareness of traditional knowledge and practices as part of any environment programme
- ☒ Limited guidelines on applications of traditional use and customary practices of environment management
- ☒ Lack of locally appropriate resource materials 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
- ☒ Declining respect for the 'mana' or value of traditional knowledge and practises

### **ACTIONS:**

- Develop national policies for maintaining the use and value of traditional knowledge and practices related to the environment and natural resources
- Ensure that programmes capture all island specific traditional knowledge and practises related to their resources
- Provide support to traditional practitioners for documentation of traditional knowledge and practises of biological resources including the use of modern forms of documentation
- Ensure that the initial collection of information should always be in Maori or the relevant dialect
- Ensure that analysis or studies related to TKP are translated into Maori and available to the public
- Articulate and formalise functions and roles of traditional systems, such as Are Korero and Are Taunga, within the whole institutional framework i.e. island level and national level
- 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
- Develop national programmes for promotion and awareness in the use, application and value of traditional knowledge and practices
- Ensure traditional knowledge and practises is integrated into the MOE education policy and school curriculum as part of any biodiversity programme
- Identify/register people with the relevant knowledge and skills to train teachers or be trainers on knowledge and applications of traditional practices and systems
- Develop locally appropriate resource materials for the promotion of traditional knowledge, practises and systems including island specific materials
- Development and enforce IPR and related legislations and regulations to protect traditional knowledge and practises and the rights of the holders of such knowledge
- Strengthen cultural and traditional systems that improve the resilience of local communities to disaster events

### **Information Exchange**

- **Summary of Capacity Gap**

A number of regional and national communications and data sharing mechanisms exist, including the Pacific Environment Information Network (PEIN) and the EDF-9/MOW MapServer, however each has limitations that hinder the effective dissemination of data and information. PEIN has been distributed to several Government agencies however, it is still not fully functional nor a supported

Ministry priority. Sharing of available data is hindered as occasionally there is a tendency for sectoral agencies to withhold data and information necessary for environment planning and decision making. Many agencies especially government units do not have functional local area networks or websites for communication purposes and there is a general weakness of communications between sectors, NGO's, private sector and communities. The designated central repository for information, such as research findings, also needs to be re-evaluated due to issues of information loss.

### Root Causes

- ▣ No formal clearing house mechanisms for dissemination of national environmental information including technology information and data
- ▣ Limited human resources with the capacity to maintain current information systems such as PEIN and EDF9 MapServer
- ▣ Most databases remains isolated and need to be upgraded with appropriate structures to enhance networking and information exchange
- ▣ Limited support for the 'E-government' Initiative that was expected to provide the necessary motivation and stimulation for government agencies to develop their databases and websites
- ▣ No centralised Clearing House Mechanism of past, current and on-going activities and research for stakeholders awareness and promoting linkages
- ▣ 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

### ACTIONS:

- Review current databases to identify opportunities and synergies for networking and information exchange
- 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,
- Develop intra-governmental and HOMs mandate for systematic information exchange
- 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.
- Ensure that systems such as PEIN, POP GIS and MapServer are integrated, complement each other and have established linkages to regional initiatives where possible
- Strengthen capacity for the development and ongoing maintenance of clearing house mechanisms
- 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.
- 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
- Need for trained IT nationals in most organisations able to maintain e-government
- Establish and strengthen especially the PEIN system and including

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| <ul style="list-style-type: none"><li>▪ Identify and strengthen suitable personnel that will be dedicated to maintaining information management systems such as PEIN in key Ministries</li></ul> |
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Thematic Area: **Multilateral Environment Agreement's (MEAs)**

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**MEA Implementation**

• **Summary of Capacity Gap**

The Cook Islands has a number of obligations to fulfil as signatories to various multilateral environment agreements (MEAs), including the United Nations Framework Convention for Climate Change (UNFCCC), the United Nations Convention on Biological Diversity (UNCBD) and the United Nations Convention to Combat Desertification (UNCCD). There is growing concern about our ability to meet commitments and reporting requirements to these international conventions, which have thus far produced limited national benefits. The majority of MEA activities to date have been enabling and report based as opposed to real action on the ground which has resulted in stakeholders feeling over consulted with no visual benefit or improvement in the environment to justify further involvement in MEA consultations. The Cook Islands needs to be selective in adopting any further international conventions or MEAs to ensure that these translate into beneficial activities that are in line with national priorities and local programmes, and have sufficient support capacities available to take on this role.

Limited human resources for MEA implementation, monitoring and reporting are a major constraint given the small size of the Cook Islands. This often means there are very few experts in any particular field and can create problems of loss of institutional memory with the loss of staff. While it may be prudent to ensure that specific staff are allocated responsibilities under the UN Conventions, with agencies such as the National Environment Service whom are focal point to multiple MEAs, this is not always possible. Oft times MEA initiatives are over and above duties and responsibilities and can become a burden on overextended staff. It will be important that any MEA activities or obligations are aligned with national priorities and programmes to ensure local Government support and promote mainstreaming of MEA issues into national policy and planning.

Many Government Ministries in the Cook Islands, although not officially responsible for any MEA, undertake a number of activities which impact on or feed into existing MEA obligations, including for biodiversity, climate change and land degradation. 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. It should be noted that none of the UN Conventions have had developed a specific policy, at best elements have been integrated into other sectoral policies.

Public awareness and participation in decision-making processes are among the most important commitments under the Conventions. A key weakness is the current levels of awareness and participation amongst many stakeholders in relation to the obligations within each of the UN Conventions. It will also be important to improve awareness of MEA issues in the local context if we are to build support for MEA activities at all levels. Having sufficient capacity for monitoring and evaluation of MEA progress in country, including good data collection and management programmes in place, will also be necessary if the Cook Islands are to fulfil its MEA obligations for national reporting.

## Root Causes

- ▣ Legal framework for environmental issues is fragmented and either outdated or lacking sufficient power for enforcement and compliance
- ▣ Project approach to MEA implementation means that progress tends to be fragmented
- ▣ Lack of 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 programmes is limited by local budgetary support for programmes and activities related to implementation of MEAs
- ▣ 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
- ▣ Many Government Agencies do not regard environment issues, let alone MEAs, as part of their roles and responsibilities
- ▣ Poorly defined responsibilities for Cook Islands agencies and organisations in relation to the national obligations and commitments of the UN Conventions undermine existing capacity
- ▣ Limited human and technical capacity to undertake MEA implementation, monitoring and evaluation
- ▣ General lack of qualified resource & technical personnel at the local level to sustain implementation and monitoring programmes on an ongoing basis
- ▣ Lack of expertise in several areas, most notably in the areas of environmental economics and environmental law.
- ▣ Limited conversion or integration of MEA issues into national policies
- ▣ General deficiency in planning and policy development capacity within key government agencies
- ▣ Weakness of project management skills, as well as limited opportunities to develop capacity in these areas
- ▣ Lack of clear national training strategies and human resource development path for environment management capacity
- ▣ A number of environmental NGOs operating in the Cook Islands undertake community conservation and education projects in isolation of the implementation of particular MEAs
- ▣ Limited community involvement in MEA implementation, 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

## ACTIONS:

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| <ul style="list-style-type: none"><li>▪ Utilise planning and policy capacity with the Office of the Prime Minister to develop policies for UN Conventions to support MEA implementation and integration in the Cook Islands</li><li>▪ Establish and implement a stringent vetting process, in consultation with relevant stakeholders that are likely to be responsible for implementation, to assess any proposed adoption of international conventions for approval</li><li>▪ Improve the ability of government and institutions to intervene on matters of national environmental importance</li><li>▪ Implement appropriate recommendations from the <i>Review of Legal and Institutional Framework</i> carried out under the ADB-TA project <i>Legal and Institutional Strengthening for Environment Management in the Cook Islands</i></li></ul> |
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- Promote and improve the awareness of politicians, decision makers and Government ministries of MEAs, particularly those that the Cook Islands are a signatory to, the environmental issues they are trying to address, and how this affects the Cook Islands in a local context
- Ensure that the need to increase exposure and awareness of environment issues and MEAs in the local context to politicians and decision makers is incorporated into relevant communications strategies and implemented as a priority
- Link MEA implementation with existing national priorities and programmes as these are the actions that Government is more likely to support and to limit duplication
- Clearly define the responsibilities of all relevant Government agencies with national responsibilities under the UN Conventions, ensure that agencies are properly mandated with these responsibilities at the highest level and allocated appropriate resources to achieve this mandate. This should include agencies who are not MEA focal points but whose activities are related to or impact on MEA obligations.
- Government must make a commitment to secure and provide resources to allow relevant Government agencies, NGOs and community groups to deliver programmes in the NESAF and develop our national capacity and capability to manage these MEAs
- Continue to strengthen and facilitate training opportunities and capacity development activities and programmes on MEAs
- 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
- Utilise planning and policy capacity with the Office of the Prime Minister to develop policies for UN Conventions to support MEA implementation and integration in the Cook Islands
- 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
- Improve local capacity for monitoring, evaluation and report writing including by drawing on regional and international expertise to undertake training programmes e.g. as identified in ADB-TA Legal and Institutional Strengthening of Environment Management in the Cook Islands
- Develop local capacity for environmental economics, law and accounting to ensure that environment management initiatives are financial sustainable and developed/implemented within appropriate frameworks with realistic costs and considerations.
- Develop national Human Resource Development strategies and priorities for environment management in the Cook Islands, to determine human resources needs and professional development requirements related to effective implementation of the Conventions that includes needs assessments, staff re-profiling, and short-term training
- Empowerment and training of community based organisations to enhance co-management of natural resources, awareness raising and educational programmes related to MEAs and environment management
- Increase community participation in MEA activities by developing the capacity of youth and communities to manage and implement environment programmes and activities, including through training, short courses, practical application etc
- Develop environment programmes specifically for and implemented by youth and communities to increase community participation in MEA activities, including for environmental monitoring e.g. stream walk, girl guides, Tanga'eo rangers etc.
- Information officers should be mandated with the responsibility of canvassing practitioners to contextualise MEA info, education and awareness materials within the national framework with local examples

- Establish a Clearing House Mechanism for the collation and dissemination of Conventions related information. This should be developed in line with existing structures, capacitating them as required to ensure their operational efficiency

## **MEA Reporting**

### **• Summary of Capacity Gap**

National reporting to the United Nations Conventions has been an issue in previous years, and is constrained by the lack of local funding to support reporting obligations, overburdened human resources, and limited capacity for reporting overall. Reporting obligations are often not well appreciated by local stakeholders and can be perceived as more consultations that will not produce any tangible on-the-ground results. While the Cook Islands have produced national reports for most UN Conventions through donor funding, the lack of reporting to date for the UNCBD remains a concern. It is possible that donor partners may have misgivings about the lack of national CBD reports and it will be important to produce a report for CBD as a priority. The lack of a central clearing house mechanism or information management system for MEAs, and the length and detail involved in national reports can make the reporting process daunting, and as a result expensive in terms of time and effort. Current international and regional efforts to streamline MEA reporting formats are appreciated and will be instrumental in minimising the burden of reporting on small countries like the Cook Islands.

## **Root Causes**

- ▣ Limited human resources, technical capacity and funding to undertake MEA reporting
- ▣ Lack of clearing house mechanism and/or information management system for MEAs
- ▣ Limited local capacity for technical report writing at both the national and community level to support reporting to MEAs
- ▣ Reliance on donor funding to facilitate MEA reporting
- ▣ Lack of funding to facilitate the CBD reporting process
- ▣ 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
- ▣ Local community managers and guardians of important ecosystems have limited ability to absorb technical training programmes
- ▣ Important MEA guidelines and reporting formats require translation into locally appropriate formats for communities and funding assistance to facilitate this

## **ACTIONS:**

- Strengthen national reporting capacity and evaluation processes, including developing regularly updated, centralised information management system for biodiversity, climate change and land degradation to reduce the efforts required to produce national reports to the UN Conventions.
- Encourage and facilitate capacity building for national reporting requirements through attachments of local counterparts with international and regional consultants
- Utilise current SPREP and Australian Government initiative for streamlining of Biodiversity MEAs to produce national biodiversity report to the UNCBD
- Integrate components of the reporting process, particularly monitoring, evaluation and information management, into the annual workplans of agencies and ministries with responsibilities under the UN Conventions



- Draw on regional and national expertise to undertake training aimed at improving Government capacity for MEA reporting, including technical report writing and training of communities in reporting
- Draw on national expertise to undertake training in reporting of community MEA activities, monitoring and evaluation, ensuring that training is non-technical and in Cook Islands Maori where possible and appropriate.

## **Negotiations**

### **• Summary of Capacity Gap**

The Cook Islands national interests are well represented at the regional and international level UN Convention meetings, however capacity for negotiations at this level is severely limited to just a handful of people. This leaves the Cook Islands vulnerable to institutional memory loss, in terms of skills and negotiations history, should there be any turnover in staff. Due to the technical level of some of the issues raised at MEA meetings, mechanisms or strategies need to be implemented to allow the transfer of knowledge and Convention negotiations history to counterparts as a means of developing capacity in regional and international negotiations.

Cook Islands participation in any regional and international meetings is almost always external funded as local funding and resources available to support negotiations process and capacity building is limited. The high costs involved in attending MEA Conference of the Parties (COP)/Meeting of the Parties (MOP) means we are reliant on donor or Secretariat funds to finance attendance and this is usually limited to one person per country. Unless additional funds are sourced, there will be limited opportunities for additional personnel to gain practical negotiations experience at the international level of these COP/MOPs under the guidance of experienced and knowledgeable mentors. In-country negotiations training and simulation exercises will therefore need to be utilised to the fullest extent possible for negotiations capacity development.

### **Root Causes**

- ▣ Limited human resources, technical capacity and funding to undertake MEA monitoring, evaluation, reporting and negotiation
- ▣ Insufficient financial resources to support local negotiations capacity development
- ▣ 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

### **ACTIONS:**

- Strengthen the capacity of the MEA focal point and implementing agencies through trainings and exposure to high-level meetings for confidence building and understanding of global issues of national significance
- Ensure that the Cook Islands participate and be represented in forums and programmes related to MEAs and international obligations development
- 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
- 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
- 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

- Access available MEA and negotiations training and awareness programmes such as UNITAR e-learning course and any regional efforts
- 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

## Thematic Area: **Access to Financial Resources**

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One of the critical constraints to the implementation of environment management activities and meeting our obligations and commitments to the UN Conventions continues to be access to financial resources to support such programmes. This is an area that needs to be addressed as resource mobilization strategies to implement the NCSA Action Plan, at least in the foreseeable future, are likely to rely on external financial mechanisms though efforts to access limited national financial resources will continue.

### **External Donor Funding**

- **Summary of Capacity Gap**

The Cook Islands is highly reliant on external donor funding for operational support of environment projects, particularly related to the three Rio Conventions, however donor policies have primarily been focused on enabling activities such as assessments, report and pilot projects. Taking the next step of replicating successful pilot projects or expansion into full size projects has not occurred as yet, and is constrained by the ability to access funding opportunities externally as Government funds and resources are insufficient.

The capacity, time and resources necessary to identify, develop and access international funding mechanisms is limited at all levels. Many government departments, NGOs and community groups do not have the experience and skills to aggressively pursue external funding options. The preparation of project proposals is usually outsourced to consultants as application processes can be lengthy and arduous, and place intensive time and work pressures on staff within government agencies that are often already overextended.

Opportunities exist locally to access funding under the Global Environment Fund Small Grants Programme (GEF SGP) however approval of successful NGO and community projects have been slow, as the application process is not simple and there have been difficulties in meeting criteria for funding.

### **Root Causes**

- ▣ 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
- ▣ Majority of funded provided by the Global Environment Facility is only for regional or multi – country projects and not to support national level projects that are specific to local issues

- ▣ 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

## **ACTIONS:**

- Training of planning officers and stakeholders in identification of environment funding opportunities, proposal writing and project management.
- 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
- Increase capacity of NGO's, community groups in project proposal writing and reporting (including financial reporting) in order to better access funding opportunities, including GEF Small Grants Programme funds
- Utilise GEF OFP and local SGP focal point to assist communities in accessing technical assistance in identifying locally relevant projects that fit under the Small Grants Programme funding criteria
- Raise awareness of known funding opportunities for community based environment management activities and projects
- Strengthen capacity for financial responsibility and accountability in the management of donor funds, including through the provision of resources and training opportunities

## **National Funding**

- **Summary of Capacity Gap**

Existing government agency/ministry budgets are very limited and considered insufficient, however the chances of increasing budget allocations significantly is unlikely as the Cook Islands is a small country and competing agencies and projects all vie for the same limited 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. The capacity to effectively lobby and provide justification for priority projects and activities within Governments annual budget allocations is weak but improving and will need to be strengthened.

## **Root Causes**

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

#### **ACTIONS:**

- Improve knowledge and understanding, especially of budget decision makers, of donor funding mechanisms and expenditure limitations to highlight the need for national implementation and funding
- Increase levels of awareness and political support around issues of land degradation, loss of biodiversity and climate change, drawing on inter-linkages between these areas and broader national priorities, to promote the need for funding for implementation in these areas
- Identify cross cutting areas, linkages and opportunities for partnerships and resource sharing to maximize the impacts of limited financial resources
- 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.

## Next Steps

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The NCSA Cross Cutting Assessment provided detailed analysis of capacity constraints and problems within that cut across the thematic areas of biodiversity, climate change and land degradation, and identified root causes for these problems. Actions have been proposed to address these root causes.

Actions developed from the Thematic Assessment and Cross Cutting Reports will form the basis for the final phase of the NCSA project – the Capacity Development Action Plan. This action plan will provide a framework for implementing priority actions to strengthen capacity for the implementation of activities related to biodiversity, climate change, land degradation and cross cutting areas while strengthening the coordination and collaboration of efforts for environment management and sustainable development.



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## Annexes:

### **Annex 1: Key Stakeholders Consulted including Technical Working Group members**

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

<b>Key NCSA Stakeholders and Institutions Consulted</b>				
<b>#</b>	<b>Official</b>	<b>Designation</b>	<b>Institution</b>	<b>Area of Expertise</b>
1	Vaitoti Tupa	Director	National Environment Service	Environment policy
2	Tania Temata	Manager – Island Futures Division	National Environment Service	MEAs, Environment policy and management
3	Pasha Carruthers	Climate Change Technical Advisor	National Environment Service	Climate change, MEAs, Water resources
4.	Vavia Vavia	Manager – Advisory and Compliance Division	National Environment Service	EIAs, Compliance and Enforcement, Waste, Development issues, Land degradation
5	Elizabeth Munro	Biodiversity Conservation Unit	National Environment Service	Biodiversity, resource management
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.	Taurki Raea	Senior Environment Officer	National Environment Service	Water resources, community education & awareness
9.	Deyna Marsh	Senior Environment Officer	National Environment Service	Water resources, community education & awareness
10.	Arona Ngari	Director	Meteorological Service	Climate change & observations
11.	Mata Nooroa	Director	Energy Division – MOT	National Energy Policies
12.	Tangi Tereapii	Energy Planner	Energy Division - MOT	National Energy Policies, renewable energy
13.	Gerald McCormack	Director	Natural Heritage Trust	Biodiversity, information management & exchange
14.	Tuare Tangianau	(former) Chief of Staff	OPM (Prime Minister’s Office)	National Policy
15.	Maria Tuoro	Policy Officer	OPM (Prime Minister’s Office)	National Sustainable Development Plan, MDGs
16.	Charles Carlson	Director	Emergency Management Cook Islands	Disaster Management, Preparedness
17.	Donye Numa	Policy Officer	EMCI/OPM (Prime Minister’s Office)	Disaster Management, Climate Change
18.	Nga Mataio	Head of Ministry	Ministry of Agriculture (MOA)	Agriculture policy
19.	William Wigmore	Director of Research	Ministry of Agriculture	Agriculture Research and activities
20.	Ngatoko Ngatoko	Policy officer	Ministry of Agriculture	Quarantine and Biosecurity
21.	Pavai Taramai	Quarantine Officer	Ministry of Agriculture	Biosafety framework
22.	Ian Bertram	Head of Ministry	Ministry of Marine Resources (MMR)	Marine & fisheries resources management
23.	Peter Graham	Director – Legal and Policy Division	Ministry of Marine Resources	Marine legislations and policy
24.	Kori Raumea	Acting Director – Inshore Fisheries Division	Ministry of Marine Resources	Inshore fisheries
25.	Nooroa Roi	Policy and Legal Officer	Ministry of Marine Resources	Marine resources
26.	Nga Makikiriti	Senior Fisheries Officer	Ministry of Marine Resources	Marine resources
27.	Ata Herman	Head of Ministry	Ministry of Works (MOW)	Infrastructure development, land use, coastal processes, engineering
28.	Ben Parakoti	Director	Water Works Dept.-MOW	Water resources management

29.	Keu Mataroa	Senior Executive Officer	Ministry of Works	Infrastructure policies
30.	Tekao Herrmann	Director Waste Management	Waste management Department-MOW	Waste management
31.	Paul Maoate	Water Works officer	Water Works Dept. – MOW	Water resource management, demand and capacity
32.	Loui Teiti	Building Inspector	Building Control – MOW	Development issues
33.	Enua Bishop	Building Inspector	Building Control – MOW	Development issues
34.	Garth Henderson	Manager	Aid Management Division - MFEM	Aid funds administration, water resources
35.	Steven Barret		Aid Management Division - MFEM	Water resources
36.	Taggy Tangimetua	Chief Statistician	STATS-MFEM	Environment related statistics
37.	Tuaine Teokotai	Public Health inspector	Ministry of Health	Public health policies, sanitation, waste
38.	Jacqui Evans	Public Health Planner	Ministry of Health	Sewage regulations, management
39.	Charlie Ave	Public Health Inspector	Ministry of Health	Development and waste issues
40.	Frances Topa-Apera	Manager	National Human Resources Department	Human resource development
41.	Myra Moekaa Paitai	International Adviser	Ministry of Foreign Affairs & Immigration	MEAs Official focal points & negotiations GEF Political Focal Point
42.	Otheniel Tangianau	Head of Ministry	OMIA (Outer Is.)	Outer Islands development policy
43.	Apii Timoti	Director	Te Aponga Uira (TAU)	Energy generation/needs
	Teresa Manarangi- Trott	President	Cook Islands Chamber of Commerce	Climate change, Private sector interests
44.	Tom Wichman	Energy and Technology Development Consultant	Private Sector	Waste management/ GHG inventory
45.	Ian Karika	Chairman – Rarotonga Environment Authority President – Te Ipukarea Society Title? – Takitumu Conservation Area	REA/TIS/TCA	Biodiversity, Species conservation Environment policies, Compliance & Enforcement
46.	Imogen Ingram	President	Island Sustainability Alliance Cook Islands (ISACI)	Environment Education & awareness Climate Change, Persistent Organic Pollutants
47.	Charlie Numanga	Red Cross Officer	Cook Islands Red Cross	Community Adaptation and Risk Management
48.	Vereara Maeva Taripo	President	Cook Islands Association of Non Government Organisation (CIANGO)	NGO environment related policies
49.	Mona Matepi	Project officer	WWF Cook Islands	Environment education and awareness
50.	Sylvia George	Marine officer	WWF Cook Islands	Marine protected areas, education and awareness
51.	Nandi Glassie	(former) Acting Chief of Staff	OPM (Prime Minister’s Office)	National Policy
53.	Gerard Miles	Senior Project Manager	Cook Islands Investment Corporation	National capital projects development programmes
54.	Metuatini Tangaroa	(former) Inspector - National Disaster Management Office	Cook Islands Police	Disaster response & preparedness
55.	Trina Pureau	(former) Tourism Officer	Tourism Cook Islands	Tourism environment initiatives
56.	Rairi Rairi	(former) Head of Ministry	Ministry of Internal Affairs	Internal affairs, Outer Islands
57.	Metuatini Tangaroa	(former) Director	National Disaster Management Office	Disaster Management and Response
58.	Noelene Browne	President	Avana Muri Marine Awareness Group (AMMAG)	Community environment advocacy & awareness programme

58	Ken Matheson	(former) Head of Ministry	Ministry of Education	Environment Education
59	Tamara File	Youth Coordinator	Te Ipukarea Society (TIS)	Youth environment issues, education & awareness
<b>Outer Islands – Mangaia Stakeholders</b>				
60	Tuaine Tuara	Island Secretary	Mangaia Island Administration	Mangaia development policies
61	Alan Tuara	Coordinator	Tangaeo Rangers	waste management, community education & awareness
62	Mataora Harry	Chairman – Aronga Mana	Mangaia Aronga Mana	Traditional leaders islands wide policies, biodiversity, community projects
63	Ngarangi Tuakana	Senior agricultural officer	MOA	Biodiversity, agriculture, livestock
64	Anthony White	Manager	Mangaia Energy	Mangaia Energy, hybrid wind turbine project
65	Tuaiva Mautairi	Kavana-Veitatei	Mangaia Aronga Mana	Traditional leaders islands wide policies Biodiversity, community environment projects
66	Unlucky Tungata	Director	Mangaia Economic Development	Natural resources management
<b>Outer Islands – Aitutaki</b>				
67	Bobby Bishop	Environment officer	NES	All MEAs
68	Aisnes Lawton	Women’s Representative Business woman	Aisnes stall - Market	Women’s issues, lagoon monitoring, tours, sport fishing
69	Tepaeru Cameron	Waste management	Aitutaki Island administration	Waste management project
70	Rimaroa Tuiravakai	Manager	Aitutaki Energy	Aitutaki Energy needs
71	Tukua Upokomanu	Manager	Aitutaki water	water resources management
72	Fred Charlie	Director	Aitutaki -MOA	agriculture
73	Sabati Solomona	Island Secretary	Aitutaki Island Administration	Aitutaki development policies
74	Teaea Parima	Principal	Araura College	School curriculum
75	Temanu Unuka	Deputy Mayor	Aitutaki Island Council	Aitutaki Islands development projects
76	Mauke Mauke	Chairman-facilitators	CBDAMPIC – Aitutaki pilot project	Climate change adaptation community project

**Annex 2: Cook Islands Multilateral Environment Agreements (MEAs)**

<u>Multilateral Environment Agreements</u>	<u>Cook Islands Status</u>	<u>Convention Date Signed</u>	<u>Convention Date Ratified Enforced</u>	<u>Cook Is Date Signed</u>	<u>Cook Is Date Ratified Enforced</u>
1. UN Convention on Biological Diversity	Ratified	5/6/1992	29/12/1003	12/6/92	20/4/93
2. Biosafety Protocol	signed	29/1/2000	11/9/2003	21/5/2001	not
3. Climate Change (UNFCC)	Ratified	9/5/1992	21/3/1994	12/6/1992	20/4/1993
4. Kyoto Protocol	Ratified	11/12/1997	16/2/2005	16/9/1998	27/8/2001
5. Montreal Protocol	Ratified	16/9/1987		22/12/2003	21/3/2004
6. Ozone Layer Convention (Vienna)	Ratified	22/3/1985	22/9/1988	22/12/2003	21/3/2004
7. Basel Convention	Ratified	22/3/1989	5/5/1992	29/6/2004	27/9/2004
8. Waigani Convention	Ratified	16/9/1995		17/9/1995	30/10/2000
9. POPs Convention (Stockholm)	Ratified	22/5/2001	17/5/2004	29/6/2004	27/9/2004
10. Desertification (UNCCD)	Ratified	17/6/1994	26/12/1998	21/8/1998	19/11/1998
11. Rotterdam Convention	Ratified	10/9/1998	24/2/2004	29/6/2004	27/9/2004
12. SPREP Convention	Ratified	24/11/1986	22/8/1990	25/11/1986	9/9/1987
13. Apia Convention	Ratified	12/6/1976	26/6/1990	27/3/1987	26/6/1987
14. UNCLOS (Law of the Sea)	Ratified	10/12/1982	16/11/1994	10/12/1982	15/2/1995
15. South Pacific Nuclear Free Zone Treaty (Rarotonga)	Ratified	6/8/1985	11/12/1986	6/8/1985	28/10/1985
16. International Plant Protection Convention	Ratified	1951	1952	17/11/2004	17/11/2004
17. International Treaty on Plant Genetic Resources	Ratified				
18. MARPOL 73/78 Convention	<i>Under consideration</i>	1972	1992	not	not
19. Intervention Convention 1969	<i>Under consideration</i>	1969		not	not
20. World Heritage Convention	<i>Under consideration</i>	23/11/1972	17/11/1975	not	not
21. Convention on International Trade of Endangered Species (CITES)	<i>Under consideration</i>	3/3/1973	1/7/1975	not	not
22. RAMSAR Convention	<i>Under consideration</i>	2/2/1971	21/12/1975	not	not

*Source: Velasquez et al. (2002), Lynch et al. (2005), Tania Temata, National Environment Service, Cook Islands 2004.*



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