

National Stocktake Report



National Capacity Self Assessment for Global
Environment Management Project



NATIONAL ENVIRONMENT SERVICE
TU'ANGA TAPOROPORO
COOK ISLANDS

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List of Acronyms

ADB	Asian Development Bank
AMMAG	Avana Muri Marine Action Group
AusAID	Australia Agency for International Development
BPOA	Barbados Programme of Action
CAN	Climate Awareness Network
CBDAMPIC	Capacity-building for Development of Adaptation Measures in Pacific Islands Countries
CHARM	Comprehensive Hazards and Risks Management
CIANGO	Cook Islands Association of Non-Government Organisations
CIDA	Canada International Development Assistance
CLIMAP	Climate Change Adaptation Program for the Pacific
EIA	Environmental Impact Assessment
ENSO	El Nino-Southern Oscillation
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gases
GIS	Geographical Information Systems
GTZ	German Technical Cooperation
INC	Initial National Communication
IPCC	Inter-governmental Panel on Climate Change
IWP	International Waters Program
MFAI	Ministry of Foreign Affairs and Immigration
MMR	Ministry of Marine Resources
MOA	Ministry of Agriculture
MOH	Ministry of Health
MOW	Ministry of Works
NBSAP	National Biodiversity Strategy and Action Plan
NCSA	National Capacity Self-Assessment
NCW	National Council of Women
NDMO	National Disaster Management Office
NES	National Environment Service
NESAF	National Environment Strategic Action Framework
NGOs	Non-Government Organisations
NIWA	National Institute of Water and Atmosphere (NZ)
NSDP	National Sustainable Development Plan
NZAID	New Zealand Agency for International Development
ODS	Ozone Depletion Substance
OMIA	Office of the Minister for Outer Islands Administration
PACER	Pacific Agreement on Closer Economic Relations
PATA	Pacific Area Tourism Association
PERCA	Public Expenditure Review Committee and Audit
PICCAP	Pacific Island Climate Change Assistance Program
PICTA	Pacific Islands Country Trade Agreement
PI-GCOS	Pacific Islands Global Climate Observation Systems
PIREP	Pacific Island Renewable Energy Project
POPs	Persistent Organic Pollutants
REAP	Rarotonga Environmental Awareness Program
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	Taporoporoanga Ipukarea Society
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention for Combating Desertification
UNDP	United Nations Development Program
UNEP	United Nations Environment Programme
UNESCO	United Nations Education, Social and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
USDA	United States Department of Agriculture
WSSD	World Summit for Sustainable Development
WWF	World Wide Fund for Nature

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I. INTRODUCTION

A. UNDP-GEF National Capacity Self-Assessment for Global Environment Project for the Cook Islands

1. The Cook Islands National Capacity Self Assessment (NCSA) programme was supported by the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP) office in Samoa. The 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 islands 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.”
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.¹ Project proposals for GEF funding are submitted through its four implementing agencies – the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), World Bank and recently the Asian Development Bank.
3. This particular capacity building assistance is provided under the UNDP Capacity Development Initiative programme, aimed at identifying priorities and capacity development needs in various regions and countries to meet national obligations to the Multilateral Environmental Agreements (MEAs).
4. 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.
5. 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.
6. 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 first step towards accessing GEF resources for capacity development to implement the recommendations that will be presented in the NCSA Strategy and Action Plan. GEF funding totalling US\$25,000 were requested by the Cook Islands government to facilitate and support the consultation activities including this stocktake.
7. One of the expected outputs of the NCSA project is a stocktaking of previous and on-going activities related to capacity building (such as enabling activities). 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 description/inventory of capacity building needs in the three sectors with prioritisation to the extent possible, and other related capacity needs;

¹ GEF. (2005). The Global Environment Facility. Brochure: GEF. www.gefweb.org

- c. An identification of cross cutting issues and synergies, and
 - d. A Plan of Action to meet prioritised needs and a mechanism for monitoring and evaluating progress made in meeting those needs
8. This snapshot exercise is expected to guide detailed assessments to identify country level priorities and needs for capacity building in the Cook Islands. This will help the Cook Islands meet its commitments and obligations under global environment conventions, particularly those under three thematic areas covering the Convention for Biodiversity (CBD), UN Framework Convention on Climate Change (UNFCCC) and the UN Convention to Combat Desertification (UNCCD). Additionally, this stocktake will identify constraints and gaps likely to impede progress in implementing national programmes related to MEAs and link country action to the broader national environmental management and sustainable development frameworks.
9. The report is divided into two major parts:

Part One - Background to NCSA and National Commitments to MEAs

- Introduction and background information
- National obligations to the MEAs
- Overarching policy frameworks

Part Two - Existing Mechanisms and Constraints to Implementation of MEA Obligations and National Priorities

- Capacities of government and NGOs
- National structures and processes
- National Initiatives, policies, strategies and sector plans
- Stakeholder participation, communication and education
- Monitoring and Evaluation
- Resources
- Outer Islands Situation
- Capacity Constraints and Gaps Identified
- Conclusions and recommendations

B. Objective of the stocktake

10. The objective of the NCSA stocktaking exercise and stakeholder consultations is to review existing mechanisms and capacities of institutions and stakeholders. It will also identify capacity needs and gaps, appropriate facilities and systems and the knowledge and resources required for developing and strengthening the Cook Islands' capacity to implement and meet national obligations under the MEAs.

C. Methodology

11. The stocktaking and stakeholder consultations were carried out by Upoko Solutions Ltd. The NCSA stocktake overlapped with the Cook Islands Second National Communications (CI2NC) stocktake. It was suggested then that the CI2NC stocktake outcomes and information were considered relevant and an appropriate component of the NCSA stocktake. A New Zealand-based consultant and the NES Climate Change Technical and Research Officer were involved in the CI2NC meetings. Methodologies used include:
- Gathering of information through literature research and analysis relating to the national and international activities focussed on the implementation of MEAs,
 - Meetings and/or consultations with relevant staff of the National Environment Service.

- Meetings and/or consultations with relevant government ministries and agencies, NGOs, private sector and community leaders.
12. The first step started with literature research and analysis of international, regional, national and local reports including thematic area reports. These included the National Development Plan process document, National WSSD Report, National BPOA+ 10 Report, National Environment Strategic Action Framework 2005 - 2009, National Report for the Convention to Combat Desertification. During the review, issues regarding programme profiles, status, risks, physical aspects, as well as policy and institutional frameworks were evaluated for their capacities, roles and functions within the national context regarding the MEAs.
 13. Two outer islands, Aitutaki and Mangaia, were visited as case study outer islands in order to collect information about local community participation and capacities in implementing MEAs related activities. Expert opinions were also sought from locals involved in these activities and programmes.
 14. A total of 26 key stakeholders and institutions involving 67 experts were visited during the stocktaking and stakeholder consultation meetings. A list of individuals and their organisations is attached in Annex 2 and 9 of this document.
 15. Over 30 hours of stakeholder consultations were carried out over a two month period, from March 1st to April 29th, 2005. Each of the group meeting and/or individual discussions was conducted in 30 minute to two hour periods. The profile of institutions currently implementing components of the MEAs is in Annex 3 and 4.

II. NATIONAL OBLIGATIONS TO MEAs DEFINED

As signatories to the three Rio Conventions – the CBD, UNFCCC and UNCCD – it is important to understand what our obligations under these conventions are and to work towards fulfilling them. This chapter simplifies some of those important provisions and obligations in the context of their relevance to the Cook Islands and summarises some of the other Conventions that may be relevant. The NCSA process should help to identify what capacity constraints and gaps exist in terms of the Cook Islands meeting its global obligations as well as fulfilling its national priorities. Annex 11 highlights the Cook Islands status regarding key international and regional environmental Conventions and related protocols.

United Nations Convention on Biological Diversity (CBD)

Background

16. The Convention on Biological Diversity (CBD) was opened for signing in 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil and came into force in December 1993.² In ratifying the CBD in 1993, the Cook Islands government has committed itself and the Cook Islands people to the implementation of the CBD and meeting its targets.

Objective

17. The Convention's objectives include engaging global commitments in the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising from the use of natural and genetic resources. Objectives include appropriate access to genetic resources and appropriate transfer of relevant technologies, taking into account all rights over those resources and technologies, and with appropriate funding.³

National Commitments under the Convention

18. Article 3 of the principles recognises the sovereign right of the Cook Islands to develop and use our resources, as specified in the Environmental Act or related policies such as the NEMS and NESAF, and to make sure that our local activities do not damage the environment and resources of our islands, our waters and beyond our borders.
19. Article 6 states that the Cook Islands will develop its own national strategies, plans or programmes such as the NBSAP for the conservation and sustainable use of plants and animals. Government will also improve related strategies, plans or programmes including outer islands plans, programmes and policies which meet Cook Islands needs.
20. Articles 7 to 10 of the Convention requires the Cook Island to make a list of species (such as the Natural Heritage flora and fauna database) for conservation and sustainable use in their natural habitat or place of origin, and monitor them especially those requiring urgent conservation measures and those which will offer the greatest benefit for sustainable use.
21. Work plans, structures, programmes and activities which have or are likely to have major negative impacts on the conservation and sustainable use of biological diversity must be monitored. The resulting data and or information gathered from the identification and monitoring activities are to be managed and analysed properly.
22. Articles 11 to 21 concern cross-cutting issues related to adoption of incentive measures, research and training, public education and awareness, the use of environmental impact assessment and minimising adverse impacts, access to genetic materials and access to and transfer of technology. Other issues include exchange of information, technical and scientific

² United Nations, (Dec 2003). Convention on Biological Diversity: Text and Annexes, Secretariat of the Convention on Biological Diversity, UN

³ *ibid*

- cooperation, handling of biotechnology and distribution of its benefits, financial resources, and financial mechanisms.
23. In relation to the CBD, the Cook Islands also signed the Cartagena Protocol on Biosafety. National obligations to the Biosafety Protocol are briefly explained in the latter part of the chapter.
 24. Additionally, the Cook Islands is also in the process of acceding to other related international conventions and agreements, protocols and their amendments. These include: the Convention on Wetlands of International Importance Particularly as Waterfowl Habitat (1971); Convention on the Protection of the World's Cultural and Natural Heritage (1972); Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973). NZ ratified these Conventions and extended that qualification to the Cook Islands as well. National obligations under these Conventions are briefly explained in the latter part of chapter.

Cartagena Protocol on Biosafety to the Convention on Biological Diversity

Background

25. The Biosafety Protocol was adopted in Montreal on 29 January 2000 and entered into force on the 11 September 2003. The Cook Islands signed the Biosafety Protocol in May 2001 but it is yet to be ratified.

Objective⁴

26. The objective of the Biosafety Protocol is to create an enabling environment to allow for the safe transfer, handling and use of living modified organisms resulting from biotechnology. It deals primarily with GMOs that are to be intentionally introduced into the environment (such as seeds, trees or fish) and with genetically modified farm commodities (such as corn and grain used for food, animal feed or processing). The protocol considers the risks to human health, specifically focussing on transboundary movement of GMOs and impacts on the conservation and sustainable use of biodiversity.

National Commitments under the Protocol

27. The Protocol calls for the Cook Islands to establish the necessary and appropriate institutional structures, mechanisms and measures to ensure the development, handling, transportation, use, transfer and release of living modified organisms or genetically modified organisms are carried out in a manner that prevents or reduces the risks to the environment and also human health.
28. It recognises the potential of biotechnology in improving human welfare and set out provisions on transboundary movement decisions, processes and procedural agreements for the Cook Islands to follow when dealing with LMOs and/or GMOs.
29. It also covers the risk management aspects of LMOs and GMOs and highlights measures needed to be taken to prevent or reduce any adverse impact from these products on the environment or humans.
30. The Convention considers the administrative, capacity building, and resources needed at the international, regional and national level to sustain the biosafety protocol.

⁴ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

International Plant Protection Convention (IPPC)⁵

Background

31. The IPPC was adopted in Geneva, in 1951 and entered into force in 1952. It has since undergone many amendments. The Cook Islands acceded to the Convention in November 2004.

Objective

32. The IPPC seeks to secure common and effective action to prevent the spread and introduction of pests of plants plant products and including natural flora, and to promote appropriate measures for their control.

National Commitments under the Convention

33. The Convention imposes obligations on the Cook Islands to apply phytosanitary measures to regulate the importation of plants and plant products and other objects, materials capable of harbouring plant pests.

International Treaty on Plant Genetic Resources for Food and Agriculture

Background

34. The International Treaty on Plant Genetic Resources for Food and Agriculture was adopted in November 2001 and came into force in June 2004. This legally-binding Treaty covers all plant genetic resources relevant for food and agriculture. It is in harmony with the Convention on Biological Diversity. The Cook Islands ratified the Treaty in November 2004.

Objective

35. The Treaty seeks the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of benefits derived from their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security.

National Commitments under the Convention

36. The Convention imposes obligations on the Cook Islands to establish an efficient, effective and transparent Multilateral System to facilitate access to plant genetic resources for food and agriculture, and to share the benefits in a fair and equitable way. It also requires the development of national legislation and regulations needed to implement the Treaty

United Nations Framework Convention on Climate Change

Background

37. The United Nations Framework Convention on Climate Change (UNFCCC) was adopted by the United Nations in May 1992 and came into force in March 1994. The Cook Islands signed the UNFCCC in June 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil and ratified it in April 1993.⁶

Objectives

38. The objective of UNFCCC is to achieve stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic (human) interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow

⁵ IPPC Secretariat (2004). Guide to the International Plant Protection Convention. IPPC Secretariat., FAO , UN

⁶ PICCAP Cook Islands. (1999). Initial National Communications under the UNFCCC. PICCAP, Government of the Cook Islands.

ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

National Commitments under the Convention

39. Article 4 requires the Cook Islands to regularly report to the UN on the greenhouse gases (GHG) emission inventories and related activities including those linked to GHG removals, and mitigation activities. It requires the Cook Islands to actively prepare for adaptation to the impacts of climate change and develop integrated plans, policies, and projects using scientific, technological, technical, socio-economic and other tools. It also requires the building of databases, information exchange, training and awareness programmes to address relevant social, economic and environmental impacts from climate variability and extremes.
40. Article 12 of the Convention requires the Cook Islands to communicate a national inventory of man-made greenhouse gas emissions by source and the means of removal, steps taken or envisioned to implement the Convention; and any other information considered relevant to the achievement of the objective of the Convention and suitable for inclusion in national communications
41. It is also important to note that the Convention recognises the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change such as small island countries and countries with low-lying coastal areas like the Cook Islands. These specific needs and concerns should be communicated to developed member countries for consideration and funding support.

Kyoto Protocol

Background

42. The **Kyoto Protocol** (KP) to the UNFCCC was adopted at the third Conference of the Parties (COP 3) in Japan, in December 1997. It has recently gained the necessary number of signatories and entered into force by the United Nations on the 16 February 2005.⁷ The Cook Islands signed the Kyoto Protocol in September 1998 and ratified it in August 2001.⁸

Objective

43. The Kyoto Protocol mechanism commits developed countries by setting legally binding targets and timetables to reduce their greenhouse gases emissions. Efforts are concentrated mainly on six (6) major greenhouse gases that are not controlled by the Montreal Protocol, namely: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydro fluorocarbons (HFCs), perfluoropcarbons (PFCs), sulphur hexafluoride (SF₆).

National Commitments under the Protocol⁹

44. While the UNFCCC encouraged developed countries to stabilise their GHG gases emissions, the Protocol commit them to reduce their collective emissions by at least 5%. Each country's emissions levels will be calculated as an average of the years 2008-2012; these five years are known as the first commitment period. Governments must make demonstrable progress towards this goal by the year 2005.

⁷ UNFCCC Int. (2005). News Release: World Event Marking the Kyoto Protocol Entry into force. www.unfccc.int.

⁸ Carruthers, P. (2004). Climate Change: National Capacity Self Assessment, National Environment Service. Cook Islands

⁹ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

Vienna Convention for the Protection of the Ozone Layer, and Protocols

Background

45. The Vienna Convention was adopted in Vienna, in March 1985 and entered into force in September 1988. The Cook Islands acceded to the Convention in December 2003 and it entered into force for the Cook Islands in March 2004.

Objective

46. The Vienna Convention seeks to protect and conserve human health and the environment against adverse effects resulting from human activities which modify or are likely to modify the earth's ozone layer.

***National Commitments under the Convention*¹⁰**

47. The Convention imposes obligations on the Cook Islands for the maintenance of the ozone layer by cooperation on the taking and exchange of research and systematic observations of the environment for substances believed to adversely modify the ozone layer.

Montreal Protocol on Substances that Depleted the Ozone Layer

Background

48. The Montreal Protocol is a mechanism for implementation of the Vienna Convention. It is a landmark international agreement designed to protect the stratospheric ozone layer and was originally signed in September 1987. It underwent several amendments and adjustments processes which were entered into force during the Meeting of the Parties between 1987 and 2002. The Cook Islands acceded to the Convention in December 2003 and entered into force in March 2004.

***Objective*¹¹**

49. The Montreal Protocol is aimed at limiting dangerous emissions into the environment by taking precautionary measures to equitably control total global emissions of substances that deplete the ozone layer. Special provision of finance is offered to developing countries. The protocol allows for the trade-off of levels of ozone depleting substances.

National Commitments under the Protocol

50. The Montreal Protocol requires the Cook Islands to limit dangerous emissions into the environment by taking precautionary measures to equitably control total global emissions of substances that deplete the ozone layer.¹²
51. The Protocol also stipulates that the production and consumption of compounds that deplete ozone in the stratosphere--chlorofluorocarbons (CFCs), halons, carbon tetrachloride, and methyl chloroform--are to be phased out by 2000 (2005 for methyl chloroform). It requires the establishment of baseline data for Ozone Depleting Substances (ODS), regular reporting and control of trade of certain substances in the Cook Islands, mainly refrigerants and halons (fire extinguishers).

¹⁰ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

¹¹ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

¹² Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

United Nations Convention to Combat Desertification (Land Degradation)

Background

52. The UN Convention to Combat Desertification (CCD) was adopted in June 1994 and entered into force in December 1996. The Cook Islands, as a member of the UN Small Island Developing States (SIDS) and having concerns with foreshore erosion, filling of wetlands and farm land soil erosion, adopted the Convention on 21 August 1998 and it entered into force on 19 November 1998.

Objective

53. The objective of the Convention is to combat desertification and mitigate the effects of droughts or human activities through effective action at all levels supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with the aim of achieving sustainable development in affected areas.¹³
54. Combating desertification will require long term solutions that focus on affected areas to improve productivity of the land, rehabilitation, conservation and sustainable management of the land and water resources leading to improved living conditions, in particular at the community level. It is recognised that certain land forms and ecosystems are extremely vulnerable to over-exploitation and inappropriate human activities linked to poverty, political uncertainty, deforestation, and inappropriate agricultural and industrial practices. Real and difficult changes will have to be made, both at the international and the local levels.

National Commitments under the Convention

55. Article 3 of the Principles calls for the Cook Islands to ensure local people participate and are involved in decision-making. It also calls for international and regional organisations, government, NGOs and landowners to make available financial, human, organisational and technical resources for programmes aimed at sustainable use of land and scarce resources in affected areas.
56. Article 4 calls for the Cook Islands to implement its obligations under this Convention, individually or with development partners, showing the need to coordinate efforts and develop a sound long-term plan at all levels. This plan should include strategies to remove poverty as part of the efforts to combat land degradation and lessen the effects of natural and man-made disasters.
57. Article 5 calls for the Cook Islands to set up strategies and priorities within the framework of sustainable development plans and/or relevant existing legislation. Where they do not exist, the Cook Islands is asked to enact new laws and establish long-term policies and action programmes to combat land degradation and lessen or mitigate the effects of natural and man-made disasters. Appropriate training and educational and awareness programmes must be promoted through local populations, particularly women and youth, with the support of non-governmental organisations.
58. Article 10 calls for the development of national action programmes to identify the factors creating land degradation and adopt practical ways needed to combat land degradation and mitigate effects of natural and man-made disasters.
59. National action programmes must specify the roles of government, local communities and land users and the resources available and needed to combat land degradation.
60. National programmes must include measures in some or all of the following priority fields as they relate to combating land degradation and mitigating the effects of drought in affected areas and to their populations: Promotion of alternative livelihoods and improvement of national economic environments with a view to strengthening programmes aimed at the

¹³ United Nations (2005). UN Convention to Combat Desertification: Text with Annexes. Secretariat of CCD. United Nations. www.unccd.de

eradication of poverty and ensuring food security, demographic dynamics; sustainable management of natural resources; sustainable agricultural practices; development and efficient use of various energy sources; institutional and legal frameworks; strengthening of capabilities for assessment and systematic observation, including hydrological and meteorological services, and capacity building, education and public awareness.

Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal

Background

61. The Basel Convention was adopted in 1989 and entered into force in May 1992. The Cook Islands acceded to the Convention in June 2004 and entered into force in September 2004.

Objective¹⁴

62. The Basel Convention is a global treaty that grew out of the need to stop the dumping by the developed countries of hazardous waste in developing countries that were ill-equipped to deal with its impact. The primary objective of the Convention is to minimize, with the aim of eliminating, the generation and transboundary movement of hazardous waste. The Convention also aims at preventing illegal trafficking in waste.

National Commitments under the Convention¹⁵

63. By providing access to information and technical assistance on best practice guidelines and procedures for waste handling, storage and destruction, the Convention promotes the environmentally sound management and disposal of hazardous waste. The Basel Convention does not cover radioactive waste or waste discharged from ships.

Stockholm Convention on Persistent Organic Pollutants

Background

64. The Stockholm Convention was signed in May 2001 and entered into force in May 2004. The Cook Islands adopted the Convention in June 2004 and entered into force in September 2004.

Objective¹⁶

65. The Stockholm Convention was adopted to control and eliminate the production and use of certain persistent organic pollutants, namely: aldrin, chlordane, DDT, dieldrin, dioxins, endrin, furans, hexachlorobenzene, mirex, PCBs and toxaphene.
66. The Convention aims to eliminate the production, use and emissions of POPs while preventing the introduction of new chemicals with POP-like characteristics and ensuring the environmentally sound destruction of POPs waste stockpile.

National Commitments under the Convention¹⁷

67. The Convention sets out the actions to be taken by the Cook Islands to reduce and where

¹⁴ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

¹⁵ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

¹⁶ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

¹⁷ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

feasible, eliminate releases of by-product POPs chemicals. Technical and financial assistance is also possible.

Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

Background

68. The Rotterdam Convention was adopted in 1998 and entered into force in February 2004. The Cook Islands acceded to the Convention in June 2004 and entered into force in September 2004.

Objective¹⁸

69. The objective of the Rotterdam Convention is to promote shared responsibility and cooperative efforts among parties in the international trade in hazardous chemicals. The long term goal is to reduce the risk to human health and the environment from hazardous chemicals.

National Commitments under the Convention¹⁹

70. The Convention helps the Cook Islands learn more about the characteristics of potentially hazardous chemicals and pesticide formulations in addressing growing chemical production and trade of toxic chemicals. It provides the Cook Islands with the information and the means to stop the unwanted imports of toxic chemicals. The Convention puts the requirement on the exporter to advise of an export of potentially hazardous substances and an onus on the exporting country to comply with the decisions of importing countries and those transit countries through whose territory the waste will pass.

KEY REGIONAL CONVENTIONS RATIFIED

Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region

Background

71. The Waigani Convention was adopted in September 1995. The Cook Islands ratified the Convention in October 2000 and entered into force in November 2000.

Objective²⁰

72. The Waigani Convention objective is to stop the importation of hazardous and radioactive waste into the South Pacific region, to minimize production within the region and to ensure the environmentally sound management and disposal of already existing waste.
73. The Convention provides a mechanism to stop waste traders from using the South Pacific as a highway for hazardous waste or as a waste dump.

¹⁸ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

¹⁹ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

²⁰ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

National Commitments under the Convention²¹

74. The Convention allows the Cook Islands to be eligible for technical and financial assistance to help in the management of hazardous or nuclear waste, thereby creating an effective regional mechanism to facilitate the cleanup of hazardous and radioactive waste.

Apia Convention on Conservation of Nature in the South Pacific Region

Background

75. The Apia Convention was adopted in June 1976 and entered into force in June 1990. The Cook Islands acceded to the Convention in March 1987 and entered into force in June 1987.

Objective²²

76. The objective of the Convention seeks the conservation, utilisation and development of the natural resources of the South Pacific region. It encourages the creation of national parks (or protected areas) for the preservation of indigenous fauna and flora. The Convention seeks to have countries create protected areas to safeguard representative samples of ecosystems, and places of scenic, geological, aesthetic, historical, cultural or scientific importance.

National Commitments under the Convention²³

77. The Convention obligates the Cook Islands in general terms to create protected areas to safeguard areas of importance. It also prohibits the taking or killing of fauna (including eggs and shells) unless the taking is controlled by the competent national authorities concerned or unless in pursuance of “duly authorised” scientific investigations. There is a further obligation for the Cook Islands to use their best endeavours to protect indigenous species from unwise exploitation and other threats that may lead to their extinction.

Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (SPREP or Noumea Convention with Annexes/Protocol on Dumping (1986) as well as Protocol on Pollution Emergencies (1986))

Background

78. The Noumea Convention was adopted in November 1986 and entered into force in August 1990. The Cook Islands ratified the Convention in September 1987 and entered into force in Oct 1987.

Objective²⁴

79. The Convention applies to the South Pacific region. The parties seek to conclude bilateral or multilateral agreements for the protection, development and management of its marine and coastal environment, and to prevent, reduce and control pollution of the Convention areas.

²¹ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

²² Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

²³ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

²⁴ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

*National Commitments under the Convention*²⁵

80. The Convention obligates the Cook Islands to take all appropriate steps for the protection, development, and management of its marine and coastal environment, and to prevent, reduce and control pollution of the Convention areas.

ADDITIONAL CONVENTIONS UNDER CONSIDERATION

Ramsar Convention on Wetlands of International Importance especially Waterfowl Habitat – Amendments – Paris 1982 and Regina 1987

Background

81. The Ramsar Convention was adopted in February 1971 and entered into force in December 1975. The Cook Islands have not yet ratified the Convention.

*Objective*²⁶

82. The Convention seeks to conserve wetlands areas being marsh, fern, peatland, or water, whether natural or artificial, permanent or temporary to conserve the habitat for waterfowl which are birds ecologically dependent on wetlands.

*National Commitments under the Convention*²⁷

83. The Convention obligates the Cook Islands to take steps to conserve and provide adequately for the management and wise use of wetlands and their resources.

Convention on the Protection of the World's Cultural and Natural Heritage (World Heritage Convention)

Background

84. The World Heritage Convention was adopted in November 1972 and entered into force in December 1975. The Cook Islands have not yet ratified the Convention.

*Objective*²⁸

85. The Convention seeks to address the increasing threat of destruction to the cultural and natural heritage of the world by establishing an effective system of collective conservation and protection of the cultural and natural heritage of the world. There are particular parts of our global heritage which are of such outstanding interest that they need to be preserved as part of the world heritage of mankind as a whole.

*National Commitments under the Convention*²⁹

86. The Convention obligates the Cook Islands to establish a protective system on an effective, organised, and permanent basis and in accordance with modern scientific methods. This system is to ensure that effective and active steps are taken for the protection, conservation

²⁵ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

²⁶ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

²⁷ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

²⁸ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

²⁹ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

and presentation of the Cook Islands' cultural and natural heritage.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Background

87. The CITES Convention was adopted in March 1973 and entered into force in July 1975. The Cook Islands have not yet ratified the Convention.

Objective³⁰

88. The Convention seeks to ensure that international trade in specimens of wild animals and plants does not threaten their survival. It seeks to protect from trade all species threatened with extinction and which are or may be affected.

National Commitments under the Convention

89. The Convention provides a framework which obligates Cook Islands to impose strict regulation of all species threatened with extinction which are or may be affected by trade in order not to further endanger their survival. Trade must only be authorised in exceptional circumstances and this should also apply to species not necessarily now threatened with extinction
90. Although a non-party to this convention, the Cook Islands through the National Environment Service is still obligated to provide CITES permits to facilitate and monitor the movement of restricted quantities of CITES listed species to member countries.

³⁰ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

III. OVERARCHING POLICY FRAMEWORKS

91. The following chapter highlights some of the key national and international policy frameworks which underpinned or provide additional mandate for the Cook Islands to pursue the implementation of MEAs programmes nationwide. These are:

a. **Overarching National Policy Frameworks**

92. The National Environment Service (NES) completed its medium term National Environment Strategic Action Framework (2005-2009) in December 2004. The mandate for developing the NESAF came from the Cook Islands Environment Act 2003. The NESAF replaces the 1992 National Environmental Management Strategy (NEMS) as the leading environmental policy framework over the next 5 years. The NESAF is further explained in Part 2 of the report.
93. The NESAF was linked to the medium term National Sustainable Development Plan (NSDP) process which is now under review by the Office of the Prime Minister (OPM) and Ministry of Finance and Economic Management (MFEM). The proposed NSDP is expected to include the World Summit on Sustainable Development (WSSD) and Millennium Development Goals (MDG) strategies together with those covered under the Barbados Programme of Action (BPOA) review. These national programmes provide an integrated assessment of environmental concerns with the economic and social challenges.
94. The draft NSDP identified 11 strategic priority areas for the Cook Islands to address in their 20 Year Vision and 5-Year medium term NSDP (2006-2010).

Strategic Priority Areas include:

1. *Governance, Law and Order;*
2. *Economic Development*
3. *Education and Human Resources Management*
4. *Health Services*
5. *Infrastructure, Utilities and Transport*
6. *Agriculture and Outer Islands Development*
7. *Marine Resources*
8. *Tourism*
9. *Environment and Natural Resources*
10. *Youth Development*
11. *Culture and Heritage*

b. **Pacific Islands Regional Frameworks**

95. The draft Pacific Plan is a new framework to fully realise the Pacific Islands Forum Leaders' Vision for the whole Pacific region. It aims to strengthen the cooperation and integration between the Cook Islands and other countries in the region in the following areas where the Cook Islands will gain the most from sharing resources in implementing governance and aligning policies.

- **Economic growth**
- **Sustainable development**
- **Good governance**
- **Security**

96. The Pacific Plan sustainable development component for improving livelihoods is aligned to developing a more effective resource management based on better country-specific and regional information/statistics bases; reducing serious threats to sustainable development by immediately implementing regional policies and plans relating to natural disasters; waste management; biodiversity and conservation; climate change and variability; water resource management; and fisheries and ocean resources.³¹
97. CROP agencies including SPREP, SOPAC, FFA, SPC, and FORSEC have also made policy decisions that affect the delivery and influence the outcomes of many local environmental projects. It is therefore crucial that CROP agencies role and responsibilities are well understood locally and that national focal points actively liaise with these agencies in accessing external assistance.

c. International Sustainable Development Policy Frameworks

98. The Cook Islands is party to key international conventions including the UN Declaration on Environment and Development (Rio Declaration) which provides the backdrop to sustainable development initiatives, the Barbados Declaration & Programme of Action (BPOA) and the Millennium Development Goals (MDGs) and MEAs.
99. These frameworks are facilitated and coordinated by their independent Secretariats which coordinate and monitor implementation efforts at global, regional and national level. The Cook Islands received GEF funding to support enabling activities related to these Conventions.
100. The 1992 World Summit on Sustainable Development (Rio de Janeiro Declaration on Environment and Development) seeks the establishment of a new and equitable global partnership through the creation of new levels of cooperation between nation, key sectors of society and people relating to sustainable development for the mutual well-being of all people with their environment. It makes certain general statements on issues relating to poverty, eco-system preservation, pollution, economies, gender, youth and war.³²
101. The BPOA was made by the Small Island Developing States (SIDS) recognising that their survival is related to their people and cultural heritage which need protection and assistance with sustainable development and environmental programmes that enhance peoples' quality of life, health, well-being, and safety. It also refers to the effects of climate change, education and the need for assistance.³³
102. The Millennium Declaration by the United Nations formally adopted the Millennium Development Goals (MDGs) in September 2000. The 8 MDGs represented a comprehensive multi-sectoral and integrated development agenda that for the first time combined the international goals and strategies for economic, social and environmental sectors into one framework. The MDGs are:

<i>Goal 1</i>	<i>Poverty and Hunger</i>
<i>Goal 2</i>	<i>Universal Primary Education</i>
<i>Goal 3</i>	<i>Gender Equality & Empowerment</i>
<i>Goal 4</i>	<i>Reduce Infant Mortality Rate</i>
<i>Goal 5</i>	<i>Improve Maternal Health</i>
<i>Goal 6</i>	<i>HIV/AIDS and Other Diseases</i>
<i>Goal 7</i>	<i>Environmental Sustainability</i>
<i>Goal 8</i>	<i>Partnership and Development</i>

³¹ FORSEC (2005). Draft Pacific Plan for Strengthening Regional Cooperation and Integration. Pacific Islands Forum Secretariat.

³² Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

³³ Lynch, P. Moekaa, M., & de Romilly, G. (2005). Conventions, Agreements and Treaties Relating to the Environment. National Environment Service. Government of the Cook Islands.

IV. CAPACITIES OF GOVERNMENT AGENCIES AND NON-GOVERNMENT ORGANISATIONS

103. In order to establish the capacity needs of the Cook Islands regarding national obligations under the MEAs, a profile of various government agencies and non-government institutions was developed as part of the stocktake. The profile is highlighted in Annex 3 and 4. In this chapter the roles and responsibilities of relevant government and non-government agencies were briefly stated as follows:

Roles and Responsibilities of Government

- a. The Ministry of Foreign Affairs and Immigration is the official national focal point for all international conventions and multi-lateral environmental agreements (MEAs). MFAI also contributed and continues to play a major part in the MEAs negotiations and also on information dissemination and exchanges. They also facilitate and support the ratification process for any MEA that Cook Islands wishes to become parties to.
- b. The National Environment Service is the agency responsible for the facilitation, coordination and implementation of environmental programmes nationally, including the MEAs. Its divisions include: Environment International Division, Enforcement and Compliance Division, and Administration and Finance. Currently, active MEA-related projects include the International Waters Programme, National Climate Change Programme, and National Biodiversity Strategic Action Plan – Add On Project (NBSAP). The NES is a member of several national committees.
- c. In 2003, the National Environment Service appointed a coordinator to manage the NBSAP Add On programme.
- d. The appointment of two more staff in 2004 and 2005 enhances the NES - Compliance and Enforcement Division's ability to follow up, monitor and adequately address risk analysis and assessment of environment impacts. A senior staff member has recently completed his post graduate degree studies at the University of Auckland.
- e. The Environment International Division of NES consists of a single staff member overseeing and managing the CBD, UNFCCC, IWP, CCD and NCSA programmes as well as conducting negotiations in conjunction with its core advisory responsibility. There is a need to address the heavy workload associated with meeting the office's advisory, negotiations and project management responsibilities.
- f. NES has engaged a legal adviser to provide advice, especially in the areas of enforcement, compliance and general NES and Islands Environment Council decisions.
- g. The Cook Islands Natural Heritage Trust was given a mandate by an Act of Parliament in 1999 to collect and record scientific and traditional knowledge on all Cook Islands plants and animals.³⁴ The project has produced a multimedia database with a list of 3,700 species and meets the obligations of Article 7 of the Convention. Majority support for this work is provided by the Government of the Cook Islands and the NBSAP and the NBSAP Add-on Projects have also provided valuable assistance to the compilation of the database. This database is also available to schools on CD-ROM. This programme is currently coordinated by a single staff member.
- h. The Ministry of Agriculture (MOA) is responsible for providing crop and livestock support through research, technical, advisory, education and awareness programmes to local

³⁴ McCormack, G. (2002). National Biodiversity Strategy and Action Plan. NBSAP Committee, Government of the Cook Islands.

farmers and the general public. It has basic capacity in horticultural and entomology laboratory research and plant nursery programmes. In 2003 and 2004, the Ministry of Agriculture launched two successful pest eradication and quarantine projects for coconut flat moth and the Queensland Fruit Fly on Rarotonga and the Outer Islands.

- i. The Cook Islands is still free of several major pests and diseases prevalent in the Pacific region and the Quarantine Service of the MOA provides the only line of defence in the border control of introduced foreign plants and animals into and around the country.³⁵ A new and independent National Biosecurity Agency has been proposed as the new secretariat for quarantine, biosafety and biosecurity initiatives, but this is still being discussed. A draft Biosecurity Legislative Bill and draft Biosafety policy framework have been completed.
- j. The Cook Islands forestry programme originated as a MOA programme in 1984. It was established with NZAID, USDA, GTZ, AusAID, Canada and French assistances. The forestry programme was disbanded in 1996 due to changes in government and aid donors' priorities. As a result of declining resources, its capacities including staffing levels and functions were also reduced to basic seedling nursery management, plantation maintenance as well as fire suppression activities under the administration of the island councils, and until recently the MOA.
- k. The Ministry of Education through its Curriculum Advisory Unit and the Teachers Training College has begun incorporating environmental education courses or materials into the school curriculum including marine studies at all levels of schooling. While a number of teachers integrate broader environmental issues into social science and science courses, their numbers are limited and their confidence level needs to be improved further through professional development training.
- l. The Ministry of Marine Resources is responsible for the management and sustainable development of the Cook Islands' marine resources. The Ministry has adequate qualified staff providing management, research and technical support to pearl farmers, island councils, environment councils and longline fishing businesses as well as fishermen and women regarding fisheries stock, environmental reports and adoption of appropriate practices and technology. It has provided field and laboratory support for community marine reserves or rau'i projects, aquaculture development and lagoon environment and water quality monitoring. It is also responsible for monitoring and enforcement of regulations on fisheries activities within the Cook Islands EEZ.
- m. The MMR legal office provides legal advice on aspects related to the UN Convention on the Law of the Sea, the Convention on the Management of Straddling Fish Stock and Highly Migratory Fish Stocks and other marine-related regulations.
- n. The Ministry of Culture has one staff member dedicated to the programme for the protection and preservation of our cultural and historical heritage through important sites, landmarks and buildings. The programme has a National Board of Trustees for Cultural Heritage but is yet to complete its investigation and compile a listing of heritage sites, landmarks and buildings. Outstanding work programmes include the strengthening of the above "Board" responsible for the preservation, renovation and restoration of cultural and historical sites and the recording of oral tradition as these have direct influence on land rights, traditional knowledge and custom.³⁶
- o. Cook Islands Tourism Corporation (CITC) is responsible for monitoring, facilitating and administering the development of the tourism industry, promotions and marketing of the Cook Islands as a popular tourist destination. Its role include the secretariat to the Tourism Industry Council and implementing agency for monitoring and vetting the quality accommodation accreditation scheme and promotion of the PATA environment code of

³⁵ Anon. (2003). National Assessment Report: BPOA + 10 Years Review. Office of the Prime Minister. Government of the Cook Islands.

³⁶ Anon. (2003). National Assessment Report: BPOA + 10 Years Review. Office of the Prime Minister. Government of the Cook Islands.

conduct and the Cook Islands Tourism Industry Environment Charter. CITC work closely with NES in consultation on industry's strategies for environmental concerns including climate change impacts especially cyclones, environmental degradation which affected sites of tourism interests, tourists, accommodations and flights in and out of the country as well exchange of other relevant tourism data and information.

- p. The Ministry of Works is involved in infrastructure development works on roads and bridges, building construction and foreshore development including coastal protection installations. These activities require Environmental Impact Assessments to be conducted and/or applications for construction permits. MOW was the implementing agency for the ADB CLIMAP project.
- q. The Water Works Division – MOW is responsible for the maintenance of water intakes and the safeguard of water catchment areas around Rarotonga. The department manages the network reticulation system on Rarotonga and is involved in promoting education and awareness programmes regarding the protection and conservation in the use of water as a natural resource. The department has recently collaborated with the CBDAMPIC project in Aitutaki to collect data and information and has developed an important database of the Aitutaki water reticulation network system.
- r. MOW - Waste Management Division is responsible for the management of the new engineered landfill and waste management facilities which consists of recycling plants in Arorangi (Rarotonga) and Aitutaki. These facilities will reduce the amount of solid waste and provide better sewage treatment and management on both islands. This will in turn reduce greenhouse gases emissions and land-based pollution contaminating streams, lagoons and reef ecosystems.
- s. The Energy Division (Te Uko Natura) - MOW is responsible for implementing the national energy sector policy including the enforcement of regulations and standards. It is involved in the promotion of renewable energy and energy efficiency programmes. Its role includes the coordination of local and regional initiatives on renewable energy and energy efficiency pilot projects.
- t. The Ministry of Health is responsible for addressing public health issues related to waste management and sanitation, quarantine of vessels and aircrafts, and monitoring of water supply qualities and vector borne diseases and conditions. Recently, it has begun implementing the new Public Health Act and was a driver in monitoring the Titikaveka irritant syndrome problem. It has capacity to conduct drinking water quality testing in its own laboratory but because the laboratory is designated as a clinical laboratory only, this is not done. The ministry is concerned about this and has appointed two additional public health junior staff to strengthen its enforcement and monitoring of sanitation, drinking water quality and waste management programmes under the new Public Health Act.
- u. The Ministry of Transport, in collaboration with the MMR and NES, is responsible for enforcement of the Marine Pollution Prevention Act which provides oversight of the dumping and transportation of waste in the Cook Islands waters.³⁷ The maritime programme covers the management of oil spillage, enforcement of safety procedures and legislation for the transfer and storage of fossil fuel products, and for disposal of garbage from vessels.
- v. Te Aponga Uira of Tumu-te-Varovaro is a State Owned Enterprise responsible for power generation and electricity distribution on Rarotonga. The agency has 42 staff including 6 who hold university degrees. The generation rate for energy on Rarotonga has increased from 16,623,000 kWh in 1995 to 24,826,000 kWh in 2003. This has resulted in an increase in CO₂ emissions representing 98% of GHG emissions nationally.^{38 39} Te Aponga Uira has

³⁷ Anon. (2003). National Assessment Report: BPOA + 10 Years Review. Office of the Prime Minister. Government of the Cook Islands.

³⁸ Upoko, T (2004). National Environment Strategic Action Framework. National Environment Service. Government of the Cook Islands.

³⁹ PICCAP (1999). Initial National Communications under the UNFCCC. PICCAP. National Environment Service. Government of the Cook Islands.

proposed a study of the feasibility of adopting a pilot energy conversion project at its power plant in Avatiu and the promotion of energy efficiency and conservation through consumers' education and awareness programmes.

- w. The Ministry of Finance and Economic Management's (MFEM) core responsibility is the management of the treasury and the economy. During economic reform in 1996, incentives such as a tax rebate for the use of solar energy was withdrawn by the government. Currently, there are no tax-free incentives related to environmental friendly related products, technologies or services. The Aid Management Division of the MFEM is responsible for the administration of overseas donor funds including GEF appropriations, while the Statistics Office is responsible for the collection and managing of data on national activities including environmental-related information. Data collation and processing has emerged as a major concern and is known to be unreliable and suspect in some sectors, which could affect planning processes. The MFEM is the focal point for the Asian Development Bank.
- x. The National Disaster Management Office (NDMO) of the Ministry of Police is responsible for the national disaster management programme and national emergency operations centre. Its role and responsibilities include pre-disaster and emergency preparedness, trainings and educational and awareness, vulnerability and adaptation assessments, hazards risks assessments, and disaster response and relief operations as well as rehabilitation programmes. The lack of a national disaster management strategy and disaster preparedness plans and coordination was evident in the recent disaster management exercise. NDMO is now undertaking the development of a National Disaster Management Strategy with NZAID assistance.
- y. The Meteorological Service is collaborating with regional and global institutions in the Systematic Observations and Pacific Islands - Global Climate Observing System (PI-GCOS) programme. Its responsibilities include collection, analysis and management of climatic data and systematic observations. The MET office has seven (7) weather observation stations, five (5) of them automated. It collaborates with regional and global institutions in information networking, and provides up-to-date climate and weather forecasts, including early warning forecasts for ENSO and tropical cyclones, for the Cook Islands.
- z. The Office of the Minister for Islands Administration's (OMIA) main focus is to provide technical assistance to the Islands Administrations in the outer islands. Their responsibilities include providing administration, engineering and infrastructure support through financial and technical advice, maintenance, acquisition and construction programmes. Due to the involvement of NZAID funds in outer islands projects, there are NZAID conditions requiring most construction and all infrastructure projects to provide EIA reports before physical work begins. This procedure is now embedded in the OMIA project process.
- aa. All inhabited outer islands except for Nassau, which is jointly administered from Pukapuka have Island Administrations responsible for providing government services to local communities. Islands Administrations are responsible to the Local Island Councils on each island. Three of these islands, Aitutaki, Mitiaro and Atiu have Environment Officers. The rest are yet to fully appreciate and accede to the National Environment Act 2003. This means development activities on some islands are being carried out without the environmental assessment processes that are strictly applied on Rarotonga. Current capacity in dealing with environmental issues is limited, although there are locals capable of being trained as environmental officers.

Roles and Responsibilities of Non-Government Organisations

104. There are several non-governmental organisations and private sector businesses that are actively involved in promoting environmental issues nationally and implementing activities especially at the local community level.
- a. The House of Ariki is the highest body of traditional paramount chiefs' in the Cook Islands and the Koutu Nui is a representative body of lower ranked high chiefs. They are both high level policy making bodies with the House of Ariki mandate provided under Article 8 of the Constitution. They both have tremendous influence on decision making processes affecting community welfare, land-use, customs and traditional practices of Cook Islanders.
 - b. Island Councils members are publicly elected and are partly responsible for the development of communities on their respective islands. This role is shared with the Aronga Mana, who are the traditional leaders on their islands, and Members of Parliament.
 - c. CIANGO is the umbrella NGO body responsible for the main administration, coordination and advocacy of NGOs activities in the Cook Islands. Goal seven (7) of its medium term strategy aims "to enhance and promote the preservation and conservation of the Cook Islands environment - our heritage."
 - d. Taporoporoanga Ipukarea Society (TIS) is a non-profit voluntary organisation which promotes the establishment of nature reserves. It was instrumental in lobbying for Suwarrow atoll to remain a National Park as established in 1979. It is highly active in implementing small community-based environmental projects such as species conservation, waste management, historical and heritage recordings, education and awareness programmes. It has participated in environmental monitoring projects including the lagoon monitoring and water quality testing programme since the out break of the Titikaveka Irritant Syndrome.
 - e. The Avana-Muri Marine Action Group (AMMAG) is a community group formed by volunteers from private sector interests, home owners and landowners. It is a lobby group aimed at monitoring development activities around the Avana-Muri lagoon, motu and surrounding ecosystems. Their activities have expanded to include the promotion of lagoon monitoring and water quality testing, education and awareness as well as other environmental concerns such as waste and sewage management. Like TIS, AMMAG is actively involved in implementing small community-based environmental-related projects.
 - f. The Cook Islands branch of the World Wide Fund for Nature is another non-government organisation active in providing environmental education and awareness programmes on Rarotonga and in the Outer Islands. It is now helping to implement the "Te Kaveinga Ora no te Aorangi"-a strategy for Environmental Education in the Cook Islands. The WWF is also involved in the implementation of community projects such as the Unga Onu (Coconut Crab) Conservation project in Mitiaro and the development of the Tiriara Conservation Area (Mangaia). It is also helping the Mitiaro people in lobbying for the Lake Te Rotonui on Mitiaro to be listed under the Ramsar Convention for Wetlands.
 - g. Takitumu Conservation Area (TCA) is another non-governmental organisation dedicated to the protection and conservation of the endangered Rarotongan Flycatcher (Kakerori) specie through their Kakerori Recovery Programme. It has designated conservation areas in the Takitumu valleys for the specie. A small population of the Kakerori was also established on Atiu under the TCA guidance as an alternative and second conservation area. The TCA provides guided tours to visitors into the conservation area which helps funding of the programme. The TCA is currently conducting its perennial population survey this year.
 - h. The Whale Research Center was recently established as a support facility to the core whale research programme set up by researcher Nan Hauser. The privately funded research programme has been instrumental in promoting the plight of whales and turtles nationally

through population surveys, research and observations, education and awareness. This led the government to declare the Cook Islands EEZ a National Whale Sanctuary Zone in 2003.

- i. The Mangaia Tangaeo Rangers is another non-government organisation made up of Mangaian youths and children. It focuses on promoting environmental education and awareness programmes on Mangaia. Responsibilities include the collection and processing of recyclable aluminium, plastics bottles, and glass bottles wastes for shipment to Rarotonga. The group is also involved in tree planting programmes.
- j. The Mitiaro Itiki Rangers is another non-government organisation made up of Mitiaro youths involved in promoting environmental education and awareness programmes on Mitiaro.
- k. Rarotonga Environment Awareness Programme is highly active in providing community education and awareness programmes through the media and small community projects. It is especially focused on domestic rubbish and waste management campaigns.
- l. Tourism Industry Council Environment Committee is a sub-committee of the Tourism Industry Council members. Its focus is to deal with environmental issues likely to have an impact on the tourism industry as well as formalising the proposed Tourism Environment Charter.
- m. Red Cross Cook Islands is highly active in disaster preparedness and responses. One of its programmes is focused on getting communities to conduct vulnerability and adaptation capacity assessments through trainings and awareness exercises.

V. NATIONAL STRUCTURES AND PROCESSES

105. Sustainable development structures and processes are crucial to the successful mainstreaming and integration of environmental considerations into the national economic and social frameworks. It is recognised that the lack of formalisation of a National Sustainable Development Council may have weakened the integration of efforts for sustainable development and conservation of natural resources and environmental programmes within the economic and social sectors. This is evident in the slow progress in completing the National Sustainable Development Strategy. The committee is essential and would become a key national policy maker. Nonetheless, some key institutional structures exist to implement activities outlined under the Conventions:
- a. Key bodies such as the National Sustainable Development Working Group and the National MDG Working Group have been set up to develop the National Assessment Reports for the WSSD and BPOA, as well as report on national baseline situation for the MDGs.
 - b. Rarotonga Environment Authority is by default the current national environmental policy decision-making body despite it being formed to oversee environmental policies for Rarotonga only. In hindsight, the Authority should be credited for bringing environmental issues to the fore but this is expected to change as Outer Islands form their own Island Environment Authority as they each accede to the Cook Islands Environment Act 2003. The council is responsible for formulating environmental policies and for approving environmental impact assessments reports and applications for non-commercial and commercial development and including construction projects.
 - c. The National Environment Council's function and responsibilities are stipulated in the Environment Act 2003. Their functions include formulating and coordinating policies and programmes consistent with the functions of the National Environment Service. At the 2004 National Environment Forum, it was recommended that the role and function of the National Environment Council be expanded in light of other islands acceding to the Environment Act and given the increasing concerns for the environment and emerging environmental issues.
 - d. Outer Islands are obliged to form their own Island Environment Authorities with members consisting of representatives from the Aronga Mana, Island Council, Island Administration, local business sector and NGOs. Their role and function is to oversee, develop and implement policies regarding environmental concerns on their respective islands. Each outer island is encouraged to formulate their environment by-laws before acceding to the National Environment Act. So far, only three outer islands have formally established their Environment Authorities - Atiu, Mitiaro and Aitutaki.
 - e. Island Environment Office is a designated office of the National Environment Service for each island that has acceded to the National Environment Act 2003. Their role and function is to provide administrative and advisory support to the Island Environment Authority and implement their policies. The office is administered under the National Environment Service. Again, only three Outer Islands have formally established their Island Environment Offices - Atiu, Mitiaro and Aitutaki. The appointment of a National Environment Service officer in the Outer Islands can be suggested as an incentive for the outer islands to accede to the National Environment Act. Most islands have enquired about the establishment of an environment office on their islands but this is not possible unless their environment by-laws are ready and the islands have adopted the Act.
 - f. Board of Trustees for the Cultural and Historic Places Trust is a body responsible for the registration of designated historical and cultural sites, landmarks, monuments, buildings and their surroundings for investigation, classification, protection and preservation under the Historical and Cultural Places Act 1994-95, the Ministry of Cultural Development Act

1990 and the Environment Act 2003. While a list of identified and classified cultural and historical sites, areas and buildings has been completed, Parliament has not formally adopted it. Secretariat support is provided to the Board by the Ministry of Cultural Development and responsible for coordinating capacity building exercises including trainings and workshops.

- g. A National Intellectual Property Rights (IPR) working committee has been developing a framework for Intellectual Property Rights legislation for the Cook Islands over the last two years. The legislation will become an ‘umbrella legislation by Act’ while national sectors and industries develop their own regulations to cover their areas of concern. The Ministry of Justice will eventually administer and implement the legislation. Current priorities include sourcing of technical assistance to draft the legislation from World Intellectual Property Organisation through the Regional Focussed Action Plan as a component of the Forum Economic Action Plan.

CBD-related

- h. The National Biodiversity Steering Committee was formed in 2001 to guide the work leading to the completion of the NBSAP. One project officer was employed during the NBSAP process to facilitate activities related to the completion of the NBSAP assisted by the Director for Natural Heritage as the Technical Advisor. Membership of that committee includes several outer islands representatives but has changed since completing the NBSAP programme. The NBSAP Add-On Project Steering Committee was formed in 2003 under the NBSAP Add-On Project which is aimed at undertaking capacity building activities related to biodiversity. Committee members include representatives of traditional leaders’ as well technical personnel from relevant agencies of government.
- i. The Irritant Syndrome Project/Titikaveka Task Force is a joint community and government response to resolve the irritant syndrome health scare experienced around the Titikaveka and Ngatangiia lagoon and foreshore areas during the early months of 2004. This is an on-going activity that was temporarily set up for five months to monitor and guide all programmes investigating the problem. The MOH, MMR and NES took the lead in this programme. During its initial stages, the health scare was a major concern for government that saw intervention by the Prime Minister and Cabinet. Ms. Jackie Evans (a Cook Islander who recently graduated from the University of Hawaii) was appointed to coordinate this programme. There have been no reported cases of the problem recurring on Rarotonga since the early months of 2004.
- j. National Research Foundation is a government-sponsored committee made up of the representatives from government agencies, including Cultural Development, Agriculture, Marine Resources, the Prime Minister’s Office, Health, OMIA, Environment and Natural Heritage. It aims to develop policies to guide, coordinate and monitor all research activities and studies being conducted in-country by overseas as well as local institutions and individuals. Most of these studies are specifically based on biodiversity components. The committee is supported by the Prime Minister’s office despite it having no budget allocation for the programme. The committee is currently dysfunctional with irregular meetings and committee processes including vetting of permits and database lacking. Recent activities were focussed on completing the National Research Policy.
- k. A National Biosafety Steering Committee has been set up to look into national issues related to biosafety and to guide project activities needed to develop a picture of the status of biotechnology and biosafety in the Cook Islands. It also oversees the development of national biosafety and biosecurity structures, policies and legislation and has produced a draft National Biosafety Policy Framework. Since the MOA is responsible for national biosecurity, the Biosafety Consultative Workshop recommended that biosafety become part of biosecurity. The committee is made up of members representing NES, MOA, MOH,

House of Ariki and Koutu Nui. It is important to note here that these are the same representatives as that of the NBSAP Add-on Steering Committee to ensure cross-fertilisation of biodiversity-related issues.

UNFCCC-related

- i. The NES Climate Change Technical and Research officer is responsible for coordinating UNFCCC-related activities nationally. However, this is yet to be established as a permanent position. One staff member is responsible for implementing the programme. There was no designated Climate Change Coordinator at time of reporting of this stocktake.
- m. The National Climate Change Country Team (NCCCT) is a multi-disciplinary group of decision-making people at senior levels of relevant government ministries and related agencies or businesses. This committee was responsible for preparations and activities leading to the submission of the first National Communication Report to UNFCCC. The first NCCCT was dominated by heads of government agencies. In the proposal to access GEF funds for preparing the Second National Communication, the proposed structure for the NCCCT was agreed by stakeholders to include NGOs and the private sector representatives. The NCCCT is chaired by the Director of the Meteorological Service.
- n. The NCCCT was also responsible for the drafting of the national Climate Change Adaptation Policy (also known as the National Implementing Strategy) which is yet to be formally adopted.
- o. Additionally, the NCCCT provided support to the Pacific Islands Renewable Energy Project (PIREP) in conjunction with the NES and Energy Division of MOW. The PIREP looked at efforts to reduce greenhouse gases emissions in the Pacific by cutting use of fossil fuels for energy.⁴⁰

CCD-related

- p. The inactive Agricultural Chemicals (Pesticide) Board established under the Pesticides Act 1987 was responsible for monitoring the level and standards of chemicals, especially pesticides, and fertilisers imported and used in the country. Currently, there is limited control over the importation and use of chemicals despite the presence of adequate legislation such as the Pesticide Act for this purpose.⁴¹ According to MOA policies they rely on New Zealand border management and importation standards and regulations to vet unwanted and banned chemicals and fertilizers from entering the Cook Islands. The assumption is that all purchased chemicals and fertilizers must come from stocks in New Zealand, which should have met New Zealand standards. The Board has been inactive since 1994.
- q. A National Waste Management Committee was formed with members representing the Ministry of Works, Ministry of Health, and the NES following the completion of the ADB sponsored Cook Islands Waste Management Project in December 2004. The project objectives were specifically:
 - To protect the environment in view of our dependence on tourism
 - To ensure sustainability of waste management services
 - To improve the standards of waste management to protect public health
 - To increase public awareness on waste disposal practices
- r. The committee membership was a continuation of key representatives from the Cook Islands Waste Management Construction Project Steering Committee structure. The committee is responsible for the implementation of the National Waste Management Strategy and related policies including those in the new Public Health Act.

⁴⁰ Anon. (2003). National Assessment report: BPOA + 10 Years Review. Office of the Prime Minister. Government of the Cook Islands.

⁴¹ Fullerton, R. (2001). Review of the Research and Development Programme of the Cook Islands Ministry of Agriculture. Ministry of Agriculture. Government of the Cook Islands.

VI. NATIONAL INITIATIVES, STRATEGIES AND PLANS

In the context of progress in building local capacities, the following environmentally-related national initiatives, policies and strategies paint a mixed picture of brilliance, partial fulfilments and non-achievements.

106. The recently completed National Environment Strategic Action Framework 2005-2009 (NESAF), which replaces the 1992 National Environment Management Strategy (NEMS) is the leading policy paper for environmental programmes in the Cook Islands. The NESAF provides guidance and direction over the next five years for achieving sustainable social and economic progress for the Cook Islands by utilising our natural resources and environment wisely. The medium term framework is focused on four strategic areas:

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

107. The challenge for the sector is in attaining the necessary capacity and resources to implement the strategy. It is crucial that the National Environment Service as well as the National Environment Council strive for the successful implementation of this strategy.

108. The draft Cook Islands Tourism 2005-2015: A Geotourism Strategy currently under review defines another path for national tourism development based on geotourism – “tourism that sustains or enhances the geographical character of a place - its environment, culture, aesthetics, heritage, and the well-being of its residents.” The strategy second overall goal is to protect and enhance the Cook Islands environment.

109. The National Energy Policy 2003 is a short-to-medium term framework aimed at providing cost effective electricity for all Cook Islands citizens. It covers the design of a fair pricing mechanism for electricity, renewable energy and petroleum fuels and encourages the efficient use of energy as well as conservation. The policy calls for pricing formulas for all forms of energy to be clearly defined and for transparency in all price submissions. The policy provides for energy services to be delivered in a manner which ensures the safety of the people of the Cook Islands and protects the integrity of the environment.

110. Te Kaveinga Ora No Te Aorangi-A Strategy for Environmental Education in the Cook Islands is sponsored by the WWF Cook Islands and endorsed by the Curriculum Advisory Unit of the Ministry of Education, the National Environment Service and the Cook Islands Association of Non-Government Organisations. The strategy provides a coherent framework focussed on capacity and dialogue building; advocacy, action and sustainable lifestyles; and community ownership. It is aimed at strengthening the school curriculum and the capacities of teachers, the business sector and local communities.

CBD-related

111. No Cook Islands Report to the United Nations Convention on Biological Diversity (UN-CBD) has been produced to date. It was recommended that the third national report be produced as a first national report and submitted with some explanation to the CBD

- Secretariat to waive the first and second reporting obligations.⁴² The cumbersome guidelines and lack of a consistent international reporting format also contributed to the decision to defer preparation of the country reports.⁴³
112. The National Biodiversity Strategy and Action Plan (NBSAP) project was probably the most influential national programme related to CBD when it started in 1996. Currently, NBSAP strategies need to be transformed into activities on the ground which is the challenge for all stakeholders. The NBSAP was finally completed in 2002.
 113. During the drafting of the NESAF 2005-2009, the NBSAP strategies were reproduced and integrated in the NESAF component on biodiversity. While the NESAF is the next five years' strategic framework for the environment sector, the NBSAP, which was completed in 2002, was considered still valid for the next five years with most of its strategies and actions not yet implemented. Further work was recommended by Butler (2003) in translating the NBSAP strategies into detailed implementation plan and actual activities. The NBSAP was also recommended for translation into the Pukapuka dialect.
 114. The implementation of NBSAP actions and strategies is currently progressing slowly, which is something the NBSAP steering committee should be concerned about. NBSAP strategies must be practically transformed into action at the local level and comments from both government and NGOs representatives suggest this is a bigger problem overall as financial resources and limited skilled programme coordinators are not always available.
 115. The NBSAP Add-On Project was implemented to address three priority components including: general measures for in-situ and ex-situ conservation, methods for evaluating or assessing threats to biodiversity and preservation of traditional knowledge, practices and innovation.⁴⁴ These areas of environmental importance are not usually well promoted because of limited capacity and awareness. Therefore, the project's objective was to assess capacity needs through information collection.⁴⁵ The NBSAP Add-On Project is focused on implementing five pilot projects and has produced three reports which are listed in Appendix 6.
 116. One of the NBSAP Add-On projects looked at Protected Natural Areas (PNA) within a Proposed National System and listed 36 established PNA nationwide ranging from a national park, whale sanctuary as well as land and marine rāui and conservation areas.⁴⁶ This is an area of much interest and promotes participation in conservation activities, especially by local communities. Recommendations were made for the creation of a national information-sharing network, training in monitoring, and management activities, as well as continuation of education and awareness programmes nationally.
 117. The Impact of Invasive Alien Species on Rarotonga, Aitutaki, Mauke, Atiu and Mitiaro project was conducted using field survey and interview techniques to assess and map out the spread of invasive species on those islands for future reference and policy development. Recording of current control mechanisms was also assessed.
 118. An overall Report on the Full Implementation and Analysis of the State of the Capacity and Future Needs to Survey and Conserve Rare Vairakau Plants provided useful insight into the current status of local medical plants and practices in the outer islands. Two Taunga Vairakau Maori workshops, field visits and interviews were conducted on the islands of Mangaia and Mitiaro during the project. Objectives include surveying and determining rare vairakau plants and finding ways of conserving them. The status of the Taunga was also assessed and data collected were analysed to determine future capacity building needs.
 119. All NBSAP Add-On project reports recommended the strengthening of policies, guidelines

⁴² Butler, D. (2003). Cook Islands Government Enabling activity for Biodiversity project (NBSAP). UNDP, Samoa

⁴³ *ibid*

⁴⁴ Saul, E., Tiraa, A. (2004). Proposed Natural Areas in the Cook Islands within a Proposed National System, National Environment Service, Government of the Cook Islands.

⁴⁵ Munro, E. (2003). Biodiversity Report 2003. National Environment Service, Government of the Cook Islands.

⁴⁶ Saul, E., Tiraa, A. (2004). Proposed Natural Areas in the Cook Islands within a Proposed National System, National Environment Service, Government of the Cook Islands.

- and regulations in the sub-sectors of biodiversity studied.
120. The new National Biosafety Framework project is in its infancy stage and a number of factors were suggested by Turia (2004) as priorities including development of appropriate legislation and framework as a matter of urgency, education and awareness and improving the use and management of information, resources and knowledge on biosafety-related activities. A full time biosecurity office is proposed to be established under the MOA. That office is expected to work closely with other Agriculture Divisions, Ministry of Health, Ministry of Marine Resources, OMIA, outer islands administrations, NES and Customs.
 121. MMR is finalising its Fisheries Master Plan with assistance from NZAID, and has completed the draft Manihiki Lagoon Management Plan. The fisheries initiative is for the management of tuna and other fisheries stocks in the Cook Islands EEZ, while the lagoon management plan is to safeguard the pearl industry by controlling pearl farming activities in the Manihiki and Penrhyn lagoons. In 1998, a viral infection affected pearl stocks in the Manihiki lagoon leading to introduction of stricter control of farming activities and changes in some farming practices.

UNFCCC-related

122. The Initial National Communications (INC) of the Cook Islands to the UNFCCC was submitted to COP 5 in 1999. It was prepared by the PICCAP Country Team and funded by the GEF Climate Change Enabling Activity through the PICCAP. A project design proposal was submitted to NES as part of the process to access GEF funds for preparations of the Second National Communications Report. Several reports were produced on vulnerability, adaptation and mitigation activities that were carried out nationally during the PICCAP Phase 1 and 2 programmes.⁴⁷
123. The draft National Implementation Strategy provides the principal instruments to assist the Cook Islands to measure and adapt to the adverse effects of climate change. It provides for clear identification and understanding of the likely threats as well as impending critical issues posed by global climate change.⁴⁸ This policy paper is yet to be formally adopted and will need to be updated.
124. The Cook Islands has carried out its first greenhouse gases inventory with base year data set for 1994. This project has provided crucial baseline information that has been useful to the PIREP, Energy Division of MOW and other adaptation initiatives. However, it is important to have local people capable of continuing with the inventory assessment and related technical activities. The Second National Communication is proposing for the next GHG inventory to establish the next base data set for year 2000.
125. At the moment, although adequate, the Cook Islands capacity to carry out another inventory assessment was unable to progress beyond step 4 of the 7 step Inter-governmental Panel on Climate Change (IPCC) approach to vulnerability and adaptation assessment used in identification of adaptation to analysis and prioritisation of adaptation options within the INC enabling activities time frame. This is due to the complexities in the process involved. Despite this the sectoral government NCCCT representatives conducted the vulnerability assessment as summarised in the INC, while island specific V&A assessments were carried out for three islands (Aitutaki, Mangaia, and Tongareva) of the 15 geographically diverse Cook Islands by consultants.⁴⁹
126. There is need to develop local capacity to understand IPCC processes and contribute to their activities especially in relation to scientific research and systematic observations programmes.

⁴⁷ Carruthers, P. (2004). Climate Change Report Presentation. National Environment Service, Government of the Cook Islands.

⁴⁸ Carruthers, P (2003). Draft National Implementation Strategy. National Environment Service, Government of the Cook Islands.

⁴⁹ Sem, G., Upoko, T. (2005). Project Proposal for Second National Communication of the Cook Islands under the United Nations Framework Convention on Climate Change (UNFCCC). National Environment Service. Cook Islands Government.

127. The draft National Marine Spill prevention Plan (NATPLAN) is aimed at reducing the risks of oil spills by providing mechanisms at the local port in the event of oils spills, as well as procedures for transportation of oil products and requirements of permits for work carried out on vessels while in port. The Ministry of Transport in conjunction with the Port Authority and Ports Safety Committee administers this plan.

CCD-related

128. The gradual pollution of groundwater lens and nearby lagoons as a result of build-up of excess nutrients from agriculture, tourism and domestic household discharges have seen problems of fish poisoning as well as algal bloom explosions. The Titikaveka Irritant Syndrome Task Force was established by government on Rarotonga and had been monitoring and gathering data and information about the irritant syndrome problem in Titikaveka. The field monitoring work was supported by the Ministry of Marine Resources, NES and TIS. The current capacity for lagoon water quality data collation is adequate.
129. The Titikaveka Irritant Syndrome Task Force through the government has also been instrumental in making major policy changes such as the installation of new farm waste digester systems in the Titikaveka area. Tom Wichman, a local environmental technology expert, provided the technical know-how for the digester systems and improvements on domestic septic tank systems.

The Cook Islands also carried out several pilot programmes funded by various international programmes.

130. The first project was a regional initiative funded by CIDA for Capacity Building to Enable the Development of Adaptation Measures in Pacific Island countries (CBDAMPIC). Aitutaki was chosen as project site based on a Community Vulnerability and Adaptation study undertaken by the PICCAP project. A climate change community team was formed locally. A training workshop for core group of village based facilitators was conducted. A community vulnerability and adaptation assessment process through problem solution identification was adopted, followed by a project proposal development & implementation phase. The programme also provided awareness raising and mainstreaming exercises for climate change within the community. This project was seen as consolidating and enhancing the value and appreciation of the presence and capacity of NES and Island Environment Council on the island.
131. The second project was an Assessment of Impacts and Adaptations to Climate Change (AIACC) research based initiative which is an attempt at modelling of coastal inundation on Aitutaki with storm surge and climate change. Training on use of the “next generation” models for integrated modelling and vulnerability assessments for policy and adaptation planning was a major goal. This is a specialised technical area and while training has been provided for MOW staff, the number of capable technicians is still limited. Funding was sourced through the GEF via the Systems for Analysis, Research and Training (START) programme. The programme did not really eventuate for the Cook Islands as intended but was recognised as a scientific base that could assist the CBDAMPIC project in Aitutaki, hence it being located on that island.
132. Another regional exercise is the ADB sponsored Climate Change Adaptation Programme for the Pacific (CLIMAP) project which focuses on generating three case studies that demonstrate an integrated risks and cost/benefit approach to climate variability and change and mainstreaming of adaptation. Some of the project outcomes for follow-up activities were:⁵⁰

⁵⁰ Hay, Dr. J. (2004). Climate Change Adaptation for the Pacific (CLIMAP) Project Report-Country level Component. ADB TA 6064-REG. Asian Development Bank.

- Ensuring that the Avatiu Harbour Western Basin breakwater is designed to accommodate increased risks attributable to climate change;
 - Developing a proposal that will result in GEF funding the incremental costs of "climate proofing" the design and construction of appropriate coastal protection for the north coast as well as changes in land-use and other remedial measures to reduce the damage costs of both inland flooding and storm surges. Sea surges impose the greatest climate risk to Avatiu-Ruatonga. Likely damage costs to structures (residential, commercial and community buildings) over the next 50 years are projected to be \$31 million without climate change, increasing to \$41 million with climate change. Without climate change, damage costs resulting from extreme rainfall are less than half those associated with sea surge flooding, and will not increase markedly due to climate change;
 - Ensuring that climate risks are taken into account in future development projects – for example, without adequate drainage works, extending the airport runway into the Avatiu swamp would cause a greater increase in flood damage than is projected to result from climate change; and
 - Implementing the Cabinet approved “Cook Islands National Sustainable Land Development and Resource Management Project”, as one means to address the key findings of the ADB climate change project.
133. The Pacific Islands Renewable Energy Project (PIREP) was a mitigation exercise and not adaptation. The 15 month study provided an opportunity for national consultants and/or training for local counterparts in identifying barriers to renewable energy use and investigates capacity to address them. An additional benefit was training in understanding of GEF project process which was followed by full sized project application.
134. One of the regional programmes the Cook Islands is participating in and developing its local capacity is the Pacific Islands’ Global Ocean Observing System (PI-GOOS) which seeks to ensure that relevant applications for ocean observations and resulting products from global, regional and national long-term observing systems are made available to relevant government departments, in particular MOW, Met. Office, MMR, NDMO and MOA.
135. The Cook Islands has also been participating in the South Pacific Sea Level and Climate Monitoring Project which has a string of automated tide gauge monitoring units across the South Pacific ocean including one each on Rarotonga and Penrhyn. Currently, all South Pacific data are automatically collected via satellite and processed at the University of Hawaii under an international agreement between key international and regional geological survey-related institutions and government agencies. These data and related products are available and accessible via the internet to all stakeholders including local government departments. The Australia Geological Survey and Flinders University of South Australia via National Tidal Facility were also collecting the same project data.

CCD-related

136. The Cook Islands forestry programme was introduced, in 1984, initially to address problems associated with the abandonment of pineapple plots and other crops on slope areas.⁵¹ The programme was focused on soil conservation, fernland fire suppression, public awareness, rural employment, and general environment improvements. Operational activities included forestry research, seedling nursery programmes, site preparations, fernland afforestation, forest inventories and staff training.

⁵¹ Carruthers, P. & Apera. E. (1999). Mangaia Vulnerability and Adaptation Assessment Report. PICCAP Programme. Government of the Cook Islands.

137. In 1995, the NZODA Forest/Land Management programme, which was the major sponsor, terminated its participation in the programme.
138. The Cook Islands had continuously participated in regional capacity building programmes in Fiji and Samoa on agro-forestry and integrated pest management technologies since 1985.
139. During the late 1980s to early 1990s, the UNV-FAO taro irrigation project on Atiu and Mangaia were able to provide assistance to growers to boost taro production and deal with severe drainage and siltation problems in the wetlands areas on these islands.
140. Other programs that were adopted to combat land degradation include the FAO funded soil rehabilitation project in 1992 which consisted of a review of the Conservation Act 1986-87.⁵²
141. A Land Commission was set up in 1995 by the Justice Department to look at land tenure and land use policies including commercial interests in land and administration of land matters.⁵³ According to Rongo (2003), the major outcomes of the Land Commission's findings as related to the CCD were:
 - The administration arrangements for the determination, allocation and confirmation of land issues were cumbersome.
 - Land issues as a result of human determination and intervention were complex and historical
 - There was a pattern of unregistered lands and disputes arising from Crown land misuse.
142. Key recommendations of the Land Commission as related to CCD were:
 - Realigning of land laws and land decisions with Maori Custom
 - Establishing a Cook Islands Land Court.
 - Restructuring the operations of the land division of the Ministry of Lands and Survey.
143. Numerous studies and research by New Zealand, Australian, Japanese and local engineers have seen local coastal protection systems/devices (COPED) designs tested at regional research laboratories. Locally designed models have since been patented internationally, as well as tested and installed on Rarotonga.⁵⁴
144. In 1995, the Government through the National Environment Service and the National Taskforce on Environment and Development decided to support the SPREP/UNDP funded capacity building Coastal Zone Management project which saw the preparation and completion of environmental management plans, policy instructions and proposed resource management by-laws for the islands of Aitutaki, Mangaia and Mauke.⁵⁵ According to Rongo (2003), this project also introduced the concept of EIA to the outer islands. The island environmental plans for Mauke and Mangaia identified the issues of improper land use development and recognised the efforts of the forestry programs to combat soil erosion and reduced soil values. However, Government support to these efforts did not continue because of lack of funds. Until recently, the importance of these by-laws was again discussed and calls were made for these to be completed and formally adopted.
145. The enactment of the Rarotonga Environment Act in 1994-95 strengthened land conservation measures with the introduction of provisions that required EIA reports; prior consent for any proposed activities in the sloping land areas, wetland areas and foreshore areas.⁵⁶ EIA guidelines and standards have since been improved.
146. Most EIA studies were carried out by local experts but the pool of trained persons is limited

⁵² Rongo, T (2003). Cook Islands National Report to the Convention to Combat Desertification (Land Degradation). National Environment Service. Government of the Cook Islands.

⁵³ Rongo, T (2003). Cook Islands National Report to the Convention to Combat Desertification (Land Degradation). National Environment Service. Government of the Cook Islands.

⁵⁴ Steering Committee. (2001). Hurricane Sea Surge Protection-Design and Costs: Avarua/Avatiu Commercial and Government District, Rarotonga, Cook Islands. Government of the Cook Islands.

⁵⁵ Rongo, T (2003). Cook Islands National Report to the Convention to Combat Desertification (Land Degradation). National Environment Service. Government of the Cook Islands.

⁵⁶ Rongo, T (2003). Cook Islands National Report to the Convention to Combat Desertification (Land Degradation). National Environment Service. Government of the Cook Islands.

- to Rarotonga and Outer Island communities have expressed their interests in getting some training for locals on each island.
147. In 1994 NZODA funded the environmental impact assessment project to establish the EIA program of the National Environment Service, administrative processes and the preparation of EIA guidelines.⁵⁷
 148. In 2003, the Cook Islands conducted its national assessment review process to complete the First National Report for the UN Convention to Combat Desertification (Land Degradation). While, there are no desertification problems in the Cook Islands, it is important that mitigation efforts to land degradation caused by storm surges, drought or other climatic changes and especially human activities, are taken seriously. The limited land mass on small islands and increasing competing interests for commercial use and developments made this an important programme. Negative on-land development and practices were also polluting waterways, beaches and lagoons.
 149. Between 1984 and 1986, an ADAB/CIG study of wave heights and currents produced valuable data required for planning needs, engineering design and construction considerations of foreshore infrastructure and land-use around the northwest side of Rarotonga.⁵⁸
 150. Since its establishment, SOPAC had conducted trainings and physical assessments of harbours, the port area and coastal areas of Rarotonga, as well as conducted bathymetry mapping and GIS systems of Penrhyn, Manihiki, and Aitutaki lagoons for improved planning, management and development. Local planners, technicians and engineers from the MOW, MMR, MOA, OMIA and Statistics Office benefited from these foreshore protection and related courses, workshops, field trainings and attachments to SOPAC in Fiji.
 151. The MOW has recently appointed a local engineer as Director for Waste Management to oversee the implementation of the newly completed National Waste Management Strategy. The strategy consist of two (2) main parts:
 - The National Waste Policy defines wastes and sets out the general principles which guide how waste issues are dealt with in the Cook Islands
 - The Waste Management Plan highlights specific objectives and actions proposed to manage waste in the Cook Islands.
 The National Waste Management Strategy is the first of its kind for the country and will guide the drafting of the following sub-sector plans.
 - Rarotonga Solid Waste Management Plan
 - Aitutaki Solid Waste Management Plan
 - Outer Islands Solid Waste Management Plan
 - National Septage Management Plan

Other Conventions

152. While there are significant number of local people on Mitiaro and Mangaia who are knowledgeable about their small lakes and surrounding environment, the capacity to coordinate and link the community activities to national and international activities under the **Ramsar Convention** is limited.
153. National activities under the **Vienna Convention** are focused on promoting the use of renewable energy as well as the reduction in the amount of greenhouse gases emissions by cutting the use of fossil fuels for energy needs.
154. There is need for training of outer islands personnel in the removal and disposal of asbestos as the material is prevalent on public buildings in the outer islands especially school

⁵⁷ Rongo, T (2003). Cook Islands National Report to the Convention to Combat Desertification (Land Degradation). National Environment Service. Government of the Cook Islands.

⁵⁸ Wilton & Bell, Ltd. (1987). Avatiu Harbour Western Side Development Study: final Report. ADAB/CIG.

buildings. The skills and means for the safe removal of these materials in the outer islands have been provided to an extent under the POPs in PICs Programme. These activities fall under the **Waigani and Basel Conventions**.

155. Importers of fuel, oil and other petroleum-based lubricants and sealants need to take responsibility for recycling and repatriation of their waste or by-products to the source of import.
156. The NES has established a **CITES** permit process and provided public educational and awareness programmes which has been active for over four years now. The CITES monitoring and enforcement capacity within the NES has gradually been boosted with additional staff being employed over the years and the Ministry of Marine Resources is able to provide supporting role with its pool of scientists. A CITES database needs to be developed and to make sense of the daily permits issued and data collected by NES.
157. A couple of reports were prepared during the assessment and collection of information on the stockpile of persistent organic pollutants (**POPs**) within the country. A total of 3943 kilograms of POPs were collected recently from Rarotonga and several Outer Islands and packed for shipping to Australia for disposal under a regional POPs disposal programme.⁵⁹ There is no capacity in the country in the appropriate disposal of such chemicals and the Cook Islands will continue to rely on outside expertise for technical advice.
158. Under the **Basel Convention**, several school buildings on Rarotonga have had asbestos removed from them and it has been disposed of under the supervision of the National Environment Service. A National Guideline for the Management of Asbestos was developed with the support of NZ Occupational Safety and Health Services.

National workshops and training

159. Several international, regional and national/local workshops and meetings related to MEAs activities were convened and attended in the recent past as part of the enabling programmes and capacity building initiatives. Some included:
 - a. A National Capacity Self Assessment (NCSA) workshop was conducted on Rarotonga in September 2003. The workshop was an attempt at introducing the NCSA process to identified key stakeholders and progressive ways and means of completing the NCSA.

CBD-related.

- b. In June 2001, the first National Biodiversity Workshop was conducted to collect and analyse information as well as discuss strategies for the NBSAP. Community consultation meetings (meetings and workshops) followed and were held in the Vaka and outer islands communities except for Manihiki, Rakahanga, Pukapuka and Nassau during the preparations of the NBSAP. The difficulty was access to transportation to and from the Northern Group islands and its cost.
- c. Several expatriate species specialists and local experts were also engaged during the formulation of the NBSAP to assist and contribute to the technical reports of the NBSAP.⁶⁰
- d. A national consultative workshop on Access and Equitable Sharing of Benefits of Genetic Resources (ABS) was held in 1998 under the banner of CBD to review and discuss this issue at the national level. One priority recommendation of that workshop is the need to review the current National Research Committee (NRC) given that it is the

⁵⁹ Upoko, T (2004). National Environment Strategic Action Framework (NESAF). National Environment Service, Government of the Cook Islands.

⁶⁰ McCormack, G. (2002). National Biodiversity Strategy and Action Plan. NBSAP Committee, Government of the Cook Islands.

only formal channel of access to Cook Islands knowledge and traditional knowledge by outsiders as well as access to genetic resources. It required to ensure that the guidelines of the NRC is adequate to meet the needs of ABS under CBD as well as to ensure that communities are represented on the NRC to ensure fair decision making.

- e. The Cook Islands Agricultural plant Genetic Resources Stakeholders workshop was conducted in August 2003, and aimed at building awareness and capacity in understanding the plant genetic and biosafety-related information and developments.
- f. A national consultative meeting was held in 2004 to discuss and provide guidance on a National Biosafety Framework for the Cook Islands. The workshop concluded that biosafety should be part of the biosecurity regime as most felt that most of the provisions for biosafety such as Risk Assessment, Risk Management, Public Participation in Decision Making, Precautionary Principle - to name a few, will strengthen our national biosecurity regime.
- g. Cook Islands representatives have attended regional and international workshops to build up local capacity in the negotiation process for CBD.

UNFCCC-related

- h. Two Cook Islanders received training opportunities at Waikato University in 1998 on climate change vulnerability and adaptation activities.
- i. A national workshop was held on vulnerability and adaptation assessments in Rarotonga. This was followed by similar workshops for Mangaia, Aitutaki, and Penrhyn. A Vulnerability and Adaptation Assessment Report was completed for Mangaia.
- j. Two Cook Islanders received training at the University of the South Pacific in 1999 on greenhouse gases inventory assessment. A national training workshop allowed for the training of a further 3 Cook Islanders on greenhouse gases inventory assessment.
- k. A workshop was also held to discuss the outcomes of the Climate Change Adaptation for the Pacific (CLIMAP) project.
- l. A training workshop was also provided for a core group of village-based facilitators in Aitutaki, during the process of their CIDA-funded pilot project for the Capacity Building to Enable the Development of Adaptation Measures in Pacific Island Countries.
- m. The Cook Islands PICCAP Country Team received training in fulfilling national and international obligations under the UNFCCC. This training coincided with preparation of the Initial National Communication.
- n. A training exercise was conducted in Aitutaki for using new Integrated Assessment Modelling of Coastal Inundation with storm surge and climate change scenarios and how to use models for policy and adaptation planning.
- o. A workshop on Systematic Observations and Pacific Islands - Global Climate Observing System (PI-GCOS) PI-GCOS was convened by the Meteorological Service in 2003 to identify the technical needs for systematic observations in Pacific Island countries including the Cook Islands.
- p. The NES staff also received training in international negotiations through the participation in UNFCCC negotiations, participation in IPCC working groups, secondment with UNFCCC Secretariat.

CCD-related

- q. Since its execution in 1979 by SOPAC, several Cook Islands technicians and budding engineers completed the two year Certificate of Earth Science and Marine Geology (CESMG) programme from the USP. This is the only formal training programme to build national capacity in the areas of applied geoscience for local technicians with minimal university entrance qualifications.

- r. Two forestry officers graduated from the PNG University of Technology with degrees in Forestry Science in 1984 and 1989.
- s. Four local forestry officers from Mangaia, Mauke and Atiu also graduated as Forestry Technicians from Fiji since the forestry programme started in 1984.
- t. Since the forestry programme started, a plant nursery training programme through attachments to forestry nurseries in New Zealand gave several local forestry officers opportunities to advance their skills.
- u. MOA staff also received trainings in Fiji, and Samoa on agro-forestry and integrated pest management techniques to enhance crop yields while reducing subsequent farmland erosion, depletion of fertile soil, and reduction of use of pesticides, since 1985. In 2001, an agro-forestry training workshop was conducted in Mangaia for the island agricultural sector.
- v. In 1994, a sectoral training program for senior government officials, especially National Environment Service and Ministry of Planning and Economic Development (MOPED) staff involved in project planning was instigated on EIA processes.⁶¹
- w. A national watershed planning and training workshop was also conducted by the SPFDP and USDA Forest Service in 1994.
- x. A training workshop on Sandalwood Cultivation-“From Seed to High Value Plantation,” was conducted on the island of Mitiaro for forestry officers in 2004 to boost sandalwood planting programmes for economic and soil stabilisation purposes in the makatea and coastal areas. In 1993, a similar workshop was conducted for sandalwood nursery training.
- y. Another training workshop was conducted in Mitiaro in 2004 to develop a Management Plan for Conserving, Managing and Sustainability of the Mitiaro A’i (*Santalum insular* var. Mitiaro).
- z. In 2004, the Ministry of Works in conjunction with Meritec Ltd (NZ), a New Zealand engineering firm, conducted a waste management training course for waste operators on Rarotonga and Aitutaki. The course was aimed at improving the skills of business operators and waste facilities managers and familiarisation with the operations of newly built waste facilities.

Legislation

160. The Cook Islands’ environmental programmes are regulated by statutory acts that have significant influence on the conservation of our environment, sustainable use of natural resources and other related aspects of the programmes, in particular:

CBD-related

- a. The Environment Act 2003 provides for the conservation of nature and natural resources as well as the protection, conservation and management of the environment in a sustainable manner including the proclamation of any land, lagoon, reef or island or any Cook Islands waters, or seabed within those waters to become national park or reserves.
- b. The Marine Resources Act 2005 consists of extensive provisions for fisheries management and development with established measures for effective conservation and optimum utilisation of marine resources. The new Marine Resources Act was recently passed by Parliament and replaces the Marine Resources Act 1989. The new Act is yet to be enforced which will be announced by the Minister for Marine Resources soon. It is currently being strengthened with some minor regulatory amendments.

⁶¹ Rongo, T (2003). Cook Islands National Report to the Convention to Combat Desertification (Land Degradation). National Environment Service. Government of the Cook Islands.

- c. The Plant Act 1973, Plant Quarantine Regulations 1993, Animals Act 1975, Animals Disease Prevention Regulations 1982, Pesticide Act 1987, Land Use Act 1969 and Land Use Capability Guideline 1990 all provide comprehensive provisions for adopting good agricultural practices and related activities including quarantine measures in an attempt to reduce the risk of damage to the environment.
- d. International Departure Tax Act amendment to form the Environment Protection Fund (EPF) 1984 allows for the allocation of a percentage of every International Departure Tax fee (NZ\$25.00) collected for the purpose of funding local environmental projects under the EPF. The International Departure Tax was recently repealed by the Te Pakau Aroa Act 2005 which allows the collection of a NZ\$30.00 fee at international points of departure. Environmental components of the new NZ\$30.00 fee will be shared between the EPF (NZ\$5.00), Waste Management (NZ\$3.50), Cook Islands Cultural Development & Heritage Trust (NZ\$1.00) and Natural Heritage Trust (NZ\$0.50).
- e. Natural Heritage Trust Act 1999 gives the Natural Heritage Trust a mandate to carry out its responsibilities to collect scientific and traditional names of Cook Islands plants and animals.
- f. Outer Islands Local Government Act 1987 provides for the Island Councils to make by-laws that maybe applicable to these islands. This Act is currently earmarked to be repealed by the Island State Government Act 2005 (draft Bill).
- g. Island State Government Act 2005 (draft Bill) gives all islands other than Rarotonga, the mandate under Section 9, paragraph (k) to promote sustainable and environmental friendly management and practices in the management of island resources. Provisions for the Island State Governments to enact by-laws that maybe applicable to these islands including environmental by-laws can be applied under this principal Act. The draft Island State Government Bill is now being amended following the completion of the annual Mayors Forum discussions between Mayors, Island Councilors and Island Secretaries and will be submitted to Parliament for enactment.
- h. Aitutaki Fisheries Protection By-laws (1990) were enacted by the Aitutaki Island Council to protect the giant clam population and other fisheries on the island of Aitutaki which has seen uncontrolled harvesting in the past.
- i. Manihiki Pearl and Pearl Shells By-Laws (1991) allow for the management of pearl farming and spat collection activities by requiring farmers to apply for permits to engage in such activities in the Manihiki lagoon. The by-laws also impose conditions and time restrictions for the harvesting of shells.
- j. Territorial Sea and Exclusive Economic Zone Act (1977) provisions allow for the demarcation of the Cook Islands' marine spaces such as territorial sea, internal waters, the exclusive economic zone and the right of the Cook Islands to manage and exploit the resources within those boundaries.
- k. Ministry of Cultural Development Act 1990 provides the mandate for the establishment of the Ministry of Cultural Development. One of its principle objectives is to preserve, perpetuate and enhance the cultural heritage of the Cook Islands to uphold tradition and develop an appreciation for this important national resource.
- l. Historical and Cultural Places Act 1994-95 is administered by the Ministry of Culture and provides the mandate for the Cultural and Historic Places Trust to identify, investigate, classify, protect, preserve and keep permanent records of the historic heritage of the Cook Islands Environmental interests in this Act are provided by provisions covering archaeological, historic and traditional sites and areas.
- m. The draft collections of Cook Islands Biosecurity Bill 2005 comprise three main pieces of legislation; Biosecurity (Administration) Bill 2005, Biosecurity (Imports) Bill 2005; and Biosecurity (Exports) Bill 2005. Provisions include an administrative framework for the control of trade in the animal and plant products of the Cook Islands for biosecurity purposes, to provide for the control of animal and plant pests and diseases within the

Cook Islands, to facilitate international cooperation in biosecurity matters, and to make ancillary and related provisions.

UNFCCC-related

- n. The Energy Act (1998) and its subsidiary regulations are administered by the Energy Division of the Ministry of Works. Its provisions provide Te Uko Natura with substantial influence to enforce and maintain electrical standards and fuel pricing, as well as development of renewable energy sources.
- o. The Industrial and Labour Ordinance (1 of 1964) provides for the control of dust and harmful air emissions in the workplace, namely “all steam, fumes, dust and other impurities arising in the course of the work carried out on in the factory.”⁶²
- p. The draft 1998 Natural Disaster Management Bill provides the National Disaster Management Council (NDMC) and its secretariat, the National Disaster Management Office, statutory authority and discretionary powers for disaster management and emergency response actions. Various provisions of the Act covered functions such as preparation of suitable strategies and policies for disaster mitigation and preparedness and for training, management and public education in disaster management, prepare and implement adequate rehabilitation programmes after disasters.
- q. The Hurricane Safety Act 1973 is the only other disaster management-related Act currently being enforced but covers only hurricane safety provisions instead of cyclone hazard management and coastal/land environmental protection measures.
- r. The Meteorological Services Act 1995-96 provides for the making and issuing of weather forecasts, managing of meteorological information, conducting of research and investigation and the provision of expertise, advice and information to the public on meteorological conditions.

CCD-related

- s. The Land Use Act 1969 basically dictates the development of land to be orderly through a system of zoning for purposes such as: public recreation and enjoyment; tourist accommodation; residential; industrial; commercial; agricultural; public works, including roads; and any other use incidental or subsidiary to the primary use designated.⁶³ It does not restrict the level of land use and currently Rarotonga is experiencing land development problems as economic and building activities increases and land becomes scarce. The lack of enforcement of the zoning orders has long been ignored by developers land users and government.
- t. Building Controls and Standards Act 1991 and amendments has provisions requiring the need for applications of building permits from the Building Controller within the Ministry of Works after satisfying National Building Code conditions. In March 2005 an ordinance was released for all buildings including temporary houses which used to be exempted by regulations made under the Act (12(1)). Owners must now obtain approval from Building Control and Environment Service. Problems arose after temporary beach houses were easily destroyed by waves and winds and buildings materials were dangerously blown around homesteads, beach areas and public roads.
- u. Supportive Services Act 1973-74 gives the Ministry of Works the mandate to provide, construct and maintain roads, buildings, bridges, foreshore and other public infrastructure facilities. These roles and functions of the MOW were also supported under the as well as the Rarotonga Island Council Empowering (Public Works and Services) Ordinance 1959.

⁶² Trott et al., (2005). Discussion Paper: Section 5-Waste Management and Pollution. Legal and Institutional Strengthening of Environmental Management in the Cook Islands. (ADB TA 4273-COO). National Environment Service, Government of the Cook Islands.

⁶³ Pulea, M. (1992). Review of Environmental Law. Regional Environment Technical Assistance 5403. SPREP.

- v. The repealed Conservation Act 1986-87 and repealed Rarotonga Environment Act of 1994- 95 were an attempt to mitigate land degradation challenges on Rarotonga and the Outer Islands. Both Acts introduced the concept of coastal zone management well as protection of the lands behind it from further degradation. Both Acts have been replaced by the National Environment Act 2003 which requires the application and issuance of EIA permits for activities which cause or are likely to cause significant impact on the environment. Provisions of the Act also allow the permitting agency for the monitoring, implementation and confirmation of compliance with EIA and engineering reports recommendations.
- w. Marine Pollution Prevention Act 1988 provision prevents the dumping and transportation of waste in Cook Islands waters. The Act stipulates the establishment of mechanisms and procedures in response to oil spills and transportation of fossil fuel products. It provides for disposal of all marine waste from vessels in accordance with the MARPOL 73/78 Convention.
- x. The Public Health Act 2004 provisions highlight regulations for the management of buildings, water, mosquitoes and other regulated vectors, wastes, quarantine of vessels and aircraft, and offensive trades and nuisances.
- y. The Pesticide Act 1987 provisions were focused on registration and issuance of pesticides importation permits, monitoring of their sales and usage as well as promoting the efficient, prudent and safe use of pesticides.

VII. STAKEHOLDER PARTICIPATION, COMMUNICATIONS AND EDUCATION

161. National capacity building challenges for meeting national obligations under the Conventions come in many forms. Many of these evolved from stakeholders' involvement and experiences in community programmes.
- a. Community education and awareness programmes are proposed to be continued especially in the outer islands as the conservation message still needs to be reinforced in local communities. Te Kaveinga Ora no te Aorangi – A Strategy for Environment Education in the Cook Islands is a suitable framework to guide and lead this activity, given the NGO's leading role in it. The Ministry of Education and the National Environment Service will benefit greatly from this partnership programme by providing support for its implementation. NGOs such as WWF, TIS, Red Cross, AMMAG, TCA, and NCW are heavily involved in community awareness and educational activities.
 - b. Major retailers and businesses are also getting involved in recycling activities with Foodland, General Transport, Meatco and CITC participating in recycling aluminium cans, plastic bottles, cardboard, whiteware and vehicle body parts, while Reef Shipping provides subsidised freight for container shipment of these materials to New Zealand.
 - c. Some educational and awareness activities have been provided in schools and communities such as school environmental projects, the Home Educational Programme (THEP), Earth Watch environmental books, UNESCO Sand Watch, and NIWA SEAREAD programmes. It was found that while the present curriculum in schools does provide educational activities on environmental programmes, few social and science teachers teaching environmental-related studies are fully teaching the core subjects and will need more training in environmental topics so they can be confident in teaching and pass related information on to their students. Individual teachers usually ask for NES staff to make presentations to their classes on specific topics such as climate change and waste management.
 - d. Local outer islands NGOs and TV personalities are funding their own local TV programmes using receipts from fundraisings by the community as well as development aid. For example on Mangaia, local environmental programmes are funded by the Tangaio Rangers' project funds as well as the voluntary TV fees of \$5 per household, which is collected by the TV station's staff on a monthly basis.
 - e. Media awareness campaigns including school visits to the outer islands and Rarotonga, sponsoring the THEP diary, production and dissemination of public awareness brochures, TV and print media advertisements and programmes, as well as sponsorship of themes for annual international environment events have been found to be highly effective. Continuing training in the production and delivery of these media materials and attracting more sponsorship will improve these programmes.
 - f. Environment management and conservation as an issue have also been highlighted nationally through national song quests, song composers' competition and the annual Constitution Celebrations. As a theme, groups or individuals have examined the impact of development on the environment and called for traditional practices to be strengthened as well as empowering young people to take hold of the issue.
 - g. For the past 8 years NES has also provided on-going media awareness activities targeting specific issues at certain times of the year. It has coordinated various national or local awareness activities such Environment Week, Clean up the World and so on and has also produced some environmental education resource materials to be used by schools.

CBD-related

- h. NGO representatives noted their struggle with limited funding resources to sustain educational and awareness programmes and the shortage of programme coordination skills and personnel at local project level. Having additional project management training workshops will be desirable.
- i. The Island Councils and Aronga Mana in the Outer Islands are keen to learn the process and fast-track the preparations of island by-laws before acceding to the Environment Act. The NES has recently employed a lawyer to help speed up the programme.

UNFCCC-related

- j. There is concern that the inappropriate scale and scope of projects, the scarcity of technical experts and poor infrastructure will continue to contribute to local projects failing. For example, the pilot wind generation project on Mangaia does not have the technical expertise to provide support to the system in the long term due to the complexity of the technical information provided, the language used and inconsistencies in technology parts applied.
- k. Concern about natural disasters causing damage to the environment and properties has been realised during recent cyclones. Baseline information about coastal environments has not been determined, thus the level of damage which is evident in changes in beach profiles and coastal habitats during recent cyclones cannot be completely appraised.
- l. The installation of water tanks for households on Mangaia has provided some relief in term of easing of water shortages from drought effects as household water capacity improves for rain catchments.
- m. Water security has emerged as a major concern for people living in the Northern Group. Continuing training of personnel in B-Grade water quality testing; waste water treatment and earth science and marine geology certificate courses is necessary to provide better qualified and trained staff at all levels of water resources and water supply sector;
- n. The Meteorological Service has suffered inadequate budgetary support in the past for staff development initiatives and access to appropriate equipment.
- o. Continue to participate in regular international, regional or country-level meetings for participants to exchange information and learn from problems and solutions in similar island conditions to the Cook Islands;
- p. Pasha Carruthers and Tania Temata of the NES are currently participating in UNFCCC-related international negotiations as well personnel from the Meteorological Service and Ministry of Foreign Affairs in the past but there is need to expand this capacity with additional NES or NGOs or other relevant sector personnel participating and training in the negotiation process.
- q. The local climate change vulnerability and adaptation programme and greenhouse gas inventory programme capacity is capable at the moment of conducting further training of more local personnel to implement activities at the local level for such programmes. Tom Wichman, Koroa Raumea, Bobby Bishop, Pasha Carruthers, Enuā Pakitoa and Edwin Apera have all been trained overseas and locally to implement related activities.
- r. There is a need to introduce and strengthen community education on climate change and disaster management through locally-appropriate mechanisms and Maori language;
- s. Lack of adequate disaster preparedness and management among the communities/villages is a major concern. The Red Cross has proposed to conduct training in vulnerability capacity assessment for the outer islands.

CCD-related

- t. The Ministry of Works has built up its engineering capacity for various infrastructure constructions including building roads, drainage systems, retaining walls, coastal protection structures and water reticulation system. There are eight (8) engineers and two IT support staff at the MOW with the knowledge and qualifications to tackle any EIA, engineering designs and plans as well as implement a construction programme.
- u. OMIA's outer islands experience in harbour, cyclone shelter building and water construction projects as well as capability in conducting EIA requirements is crucial to long term infrastructure development.
- v. The capacity to implement an effective forestry programme is restricted due to decreasing funds for staff training, forestry maintenance programmes and equipments. Nonetheless, erosion control has been effective over the last ten (10) years.
- w. The lack of environmental guidelines and policies for activities such as road and access way construction can be linked to the degradation of wetlands, sloping lands and foreshore areas.⁶⁴ It is important that these guidelines be prepared based on the past EIA and engineering reports submitted to the Environment Council for their consideration.
- x. The outer islands are also suggesting that local personnel be trained in Environmental Impact Assessment (EIA) activities and reporting to allow locals to conduct their own investigations rather than bringing outsiders in to conduct the studies. There are capable personnel on each island who could apply EIA studies satisfactorily for projects if training is provided.
- y. Watershed management plans such as the one recently developed for the Takuvaine Valley watershed area by their village committee, with IWP assistance, is an example of how communities can lead the development of water policies nationally.
- z. Hajkowicz & Okotai (2005) suggested that government policy makers start to institute effective and improved watershed management regulatory provisions, policies, strategies and protection programmes aimed at reducing watershed pollution. Sem and Upoko (2005) suggested that water policies be developed for better water resources management on all islands since current government policies are either redundant or non-existent. They also suggested that stakeholders replicate and disseminate knowledge and lessons and/or best practices learned/gained from the CBDAMPIC project on Aitutaki on water resources on other islands.
- aa. Hajkowicz & Okotai (2005) also confirmed the fact that there is limited water quality testing capacity available for stream, tap and lagoon water on Rarotonga, and the Cook Islands generally. They suggested that tests for major pollutants should be undertaken at regular intervals according to appropriate standards and techniques. Water quality testing by different government agencies should be harmonised. Further efforts may be required to ensure ease of access to this data by the public.
- bb. Hay et al (2003), Hajkowicz & Okotai (2005) and Upoko (2004) recommended changes in community land use and other remedial measures, the adoption of land use management plan and appropriate legislations to help use the nation's scarce land resources effectively and reduce the damage costs of both inland flooding, erosion and storm surges. Community awareness programmes in areas prone to run-offs, soil erosion, sea surges and flooding need to continue and promoted. Cabinet must support the Cook Islands National Sustainable Land Development and Resource Management Project.
- cc. Current local capacity for development of projection models to predict the likelihood of extreme climate events such cyclones is sparse. It is important that technical capability is available locally and that this is translated into policies that take into account the climate

⁶⁴ Rongo, T. Cook Islands National Report: United Nations Convention to Combat Desertification (Land Degradation). National Environment Service, Government of the Cook Islands.

risks in future development planning. According to Sem & Upoko (2005), the lack of baseline data for resources in many sectors also means the effects of climate change including variability and extremes on terrestrial and marine ecosystems have not been substantiated. Analysis of data from beach profiles and causal factors has not been implemented and recent cyclones caused major transformation of sections along the foreshore on several islands. The limited number of coastal and foreshore assessments apart from EIA processing of the increasing numbers of development activities means availability of baseline data is still limited.

VIII. MONITORING AND EVALUATION

Monitoring Mechanisms

162. Conditions for the submission of periodic progress reports to the National Environment Service or leading implementing agencies and steering committees are commonly adopted in local government and NGOs' contracts. Reviews and follow-up field visits and consultation meetings have also been adopted as monitoring mechanisms for projects.
163. Follow-up exercises were limited and in the case of the NBSAP, momentum from previous activities has been lost as a result of delays or limited follow-up activities due to lack of funds.⁶⁵
164. Reviews and follow-up mechanisms have been problematic in the Outer Islands. Travel to the Outer Islands can be difficult and depends on availability of flights. In the case of the Northern Group islands boats can take a long time to get to their destinations. The costs of travelling to the Outer Islands are high and a factor in delays and limited follow-up and review exercises.
165. The role of Steering Committees is crucial in ensuring that projects are progressing well and guidance is provided to project managers and coordinators.
166. PERCA has expressed interest in establishing their environmental audit programme and has sent a staff member to international training programmes. This is an important process in ensuring government has established the appropriate mechanisms and committed sufficient resources to the appropriate environmental programmes, and that these are being delivered in an efficient and effective manner.
167. Enforcement and monitoring of development activities has been known to be a weakness between regulatory agencies including Building Control inspection, Public Health inspectors and the National Environment Service.⁶⁶ Common arguments for the weak enforcement and monitoring have often pointed to lack of budgetary support for transport, staff and equipment.
168. Some of these concerns can be resolved with better management, coordination and established guidelines and policies. Better communication with stakeholders will also assist in their understanding of the law and the consequences of their failure to comply and poor behaviours.

Reporting

169. Failure in reporting project status is still a problem at all levels of project implementation nationally. At the community level especially in the Outer Islands, WWF have used very simple reporting and Maori language formats so local personnel only provide useful information from the project. This strategy compensates for the lack of formal reporting skills in the Outer Islands at that level.
170. The outcomes of important meetings and projects are not being reported widely back to key implementing Ministries and the environmental community. The climate change coordinator has a list of climate change stakeholders who regularly circulate information widely by e-mail as soon as it becomes available. This sort of passive forum is important in sharing information widely and efficiently among stakeholders.
171. Delays in submission of important Conventions documents and reports are widespread among government agencies. The failure to provide a single National Biodiversity Report to

⁶⁵ Butler, D. (2003). Cook Islands Government Enabling Activity for Biodiversity Project (NBSAP). UNDP, Samoa

⁶⁶ Rongo, T. Cook Islands National Report: United Nations Convention to Combat Desertification (Land Degradation) National Environment Service, Government of the Cook Islands.

the Convention as of today illustrates a picture of limited capacity within leading agencies to address reporting issues and meet set timelines. In most cases, this reporting failure sets a new timeline for further progress in implementation and follow-up exercises which lessens stakeholders' enthusiasm and interest.

Evaluation

172. There is very little in-depth evaluation process of the successes of activities or projects at the sub-national level apart from general audits of project funds. Most of these projects were for enabling activities and that means emphasis is on review and assessments of situations and putting those into strategies and plans. Meaningful assistance towards actual implementation of these findings is either scarce or not available at all.

IX. RESOURCES

173. The success of implementing programmes under the Conventions will be influenced by the value and availability of resources nationally. For example the shortage of skilled staff available to deal with diverse environmental issues will have a direct effect on the capacity of institutions to deliver environmental benefits in an effective manner at the national and local levels.

Technical Support Facilities

174. It is recognised that the Cook Islands have limited technical capacity to deal with many of the local environmental concerns. It is therefore crucial that outside support in areas such as technical advice and support (expertise, skills and know-how); scientific laboratory testing, training, equipment and supplies, funding, transfer of necessary and appropriate technologies and good practices, continues.
175. Environmental-related research and scientific capabilities in-country is limited to the Ministry of Health, Ministry of Agriculture and Ministry of Marine Resources.
176. Each of the agencies mentioned above has some laboratory capability and capacity but this needs to be consolidated into an organised single entity or facility to allow better use of resources, knowledge, management and value for money.
177. Although highly trained, the number of qualified technical or laboratory staff manning these facilities is limited. Appropriate laboratory equipment and supplies are also scarce, limiting the type and number of research activities possible. Most activities are focused on generic usage rather than, for example, in-depth diagnostic, genetic or chemical analytical testing and research.⁶⁷
178. The Ministry of Agriculture's purpose-built laboratories are currently used for basic plant disease and entomology diagnostic testing. An entomology eradication programme uses these facilities for a breeding programme for imported biological control species to control other invasive species. A tissue culture laboratory is not currently used for that purpose due to lack of resources to continue the programme.
179. There is no waste water testing facility although the Ministry of Marine Resources laboratory on Rarotonga was originally built to be a salt and fresh water quality testing laboratory. Continuous relocation of the MMR head office and the lack of a purpose-built laboratory did have an effect on the continuous build up of laboratory-related capacity in the department. Both the Water Works Department and the Ministry of Health advocated having qualified staff to do drinking water quality testing.
180. The Ministry of Marine Resources has facilities, laboratory equipment and supplies on Rarotonga, Penrhyn, Aitutaki and Manihiki but these are not fully equipped. The Tongareva Marine Research Centre is a purpose-built laboratory for pearl oyster hatchery operation. The Manihiki monitoring and research facility provides a supportive role to the pearl farming operations on the island. The Araura Marine Research Centre is a hatchery and research operation for giant clams as well as trochus and pearl shells for restocking purposes. The costs of maintaining laboratory operations in the Outer Islands are enormous and have not been self sustaining.
181. The Ministry of Health purpose-built laboratory has the capacity to conduct drinking water quality testing, but is strictly focused on basic clinical diagnostic testing only. Again, no research development programme is conducted in their facility.

⁶⁷ Turia, G (2004). Survey of Baseline Information for Assessing the Capacity Building Needs of the Cook Islands for the Safe Management of GMOs. National Environment Service. Government of the Cook Islands

182. There is local capacity for the development and construction of groynes or COPEDS, gabion, Reno mattresses, retaining walls as well as rock revetments for coastal protection. The MOW, T&M Heather Construction staff and Don Dorrell (a local engineering consultant) have experience in design, construction and installation of coastal protection systems. Don Dorrell holds an international patent for his locally produced and internationally tested COPED design.

Research and Technical Issues

183. Application of remote sensing and automated monitoring systems for lagoon ecosystems has been adopted by a couple of government agencies. The MMR has two automated buoy monitoring systems in Penrhyn and Manihiki which were set up with assistance from SOPAC. They have also installed lagoon temperature loggers in Palmerston and Pukapuka lagoons. MMR also requires all longline fishing vessels licensed to fish within the Cook Islands EEZ to install Automatic Location Communicators as part of the Vessel Management Systems programme under the Pacific Forum Countries Tuna Fisheries Commission.
184. The Department of Water Works in conjunction with NIWA (NZ) has been conducting a hydrological monitoring programme on Rarotonga since 1999 using installed three stream intakes, weirs, water flow meters and four rainfall gauges to obtain a better understanding of Rarotonga's water resources. SOPAC is collaborating with the DWW in network modelling of the water supply system using CyberNet. DWW is also using GPS instrument for data collection of the newly installed water network systems.
185. Meteorological Service has installed seven (7) weather observational systems and data collation stations on several islands. Five (5) stations are automated observation systems while two are upper air stations (1 GUAN and 1 standard). Communications are via internal modem dial-up and externally via the internet.

Information and Knowledge Management

186. An area lacking technical support is the management of databases as well as the accuracy and usefulness of information and data collated. The poor records and availability of quality data for environmental purposes could also be attributed to the poor processes for gathering and processing of data. The Ministry of Health, Marine Resources and the Statistics Office, MOW and MFEM are probably the only government agencies with internal IT support staff.
187. Computer laboratories are also limited and reflected by the lack of functional and networked databases nationwide. This also reflects the poor information collection and management processes in government departments. Of the key Ministries, the Ministry of Works, Ministry of Marine Resources, the National Environment Service, and Ministry of Finance and Economic Development (Statistics Department) and the Ministry of Health have functional networks. However, even in these key agencies, databases are often isolated on individual computers or non-existent for important programmes such as water quality testing results.
188. Accuracy of sources of data collated and the processing of such data and information contributes to wider discrediting of data as suspect.
189. The lack of quality data and poor data management has been singled out as the most pressing problem. There is an urgent need to address this problem as it will affect implementation of national and local programmes.
190. Use and application of the geographic information system (GIS) and remote sensing techniques would help alleviate shortcomings in areas such as producing acceptable land use and survey data for urban and rural planning purposes and other data from inaccessible and vast land, lagoon and ocean surfaces.

191. The lack of appropriate hardware and software to develop and, or improve data management systems for requirements of the various multilateral environmental agreements is a continuing dilemma.
192. The MFEM Statistics Department processes provide for adequate social and economic data but there is a need to work with the department in establishing key strategies to improve the continuous collection of key environmental statistics.
193. Websites are limited to several government agencies which include the Ministry of Marine Resources, National Environment Service, Ministry of Works, the Ministry of Finance and Economic Management, Tourism Cook Islands and the Ministry of Health. However, most of these websites are static and provide only basic information rather than interactive applications.
194. Several agencies have dedicated libraries or files collections with MEA-related collections of reports, articles and volumes. These are the Ministry of Marine Resources, the National Environment Service, the Aid Management Division at the MFEM, and the Ministry of Agriculture.
195. An Information, Communication and Technology Unit had been developed within the Office of the Prime Minister (OPM) which will drive an e-Government initiative. The OPM has engaged the UNDP to assist with the development of this programme. Current activities include planning, promotions and awareness.

Qualified Personnel and Trained Experts

196. The continuous turnover of staff in key implementing agencies and on national committees tends to sidetrack the momentum of projects and in many cases has contributed to the loss of project files and information as result of changes in personnel or offices.
197. The numbers of key tertiary educated personnel and trained experts within institutions directly implementing programmes related to MEAs are listed in Appendix 9. Turia in his survey on biosafety expertise has listed several local personalities with specific interest areas related also to MEAs.⁶⁸ Additional names has been included on the list.
198. It is a fact of life in small islands communities such as the Cook Islands that key personnel are expected to cover a wider area of expertise due to limited number of local staff available with the knowledge to share the workload.
199. Local capacity is also lacking in the preparation of project proposals for GEF and other sources of funding. This is an important area which allows project funding to be accessed on a timely basis so that projects can be implemented accordingly.

Financial Resources and Mechanisms

200. Despite the rhetoric from government to promote sustainable development and maintain environmental well-being, the total percentage of the annual national budget appropriations for the environment sector has not increased in value from 1.4% in 2000, 0.8% in 2001, and 1.0% in 2002 to 1.37% in 2003.
201. There is also limited funding support for implementation of programmes locally as well as a lack of national incentive mechanisms related to environmental activities and products.
202. Tax incentives for the use and adoption of various environmental friendly products and services are not well supported by the Cook Islands Government. For example, tax breaks for the use of renewable energy are not available especially for solar water heating appliances and solar lighting - the most commonly used and most effective renewable energy

⁶⁸ Turia, G (2004). Survey of Baseline Information for Assessing the Capacity Building Needs of the Cook Islands for the Safe Management of GMOs. National Environment Service. Government of the Cook Islands

- technologies available locally. Energy conservation appliances and materials are not tax free either.
203. There are no levies or tax incentives for the use of renewable energy appliances or technology despite the widespread use of solar water heating systems and lighting. There are also no levies or tax break mechanisms for recycling and importation of biodegradable products.
 204. The Environment Protection Fund has averaged about NZ\$380,000 annually over the last eight (8) years. This amounts to a total of over NZ\$3 million from 1997 to 2004. The fund was taken from a percentage of every airport departure tax on travelers leaving the country and the fund is subject to global travel trends. The fund is actively supporting domestic rubbish collection, management of the landfill on Rarotonga, awareness and education, environmental studies and monitoring, NES support and other smaller community projects.⁶⁹
 205. Donor contributions of funds to the national environment sector are divided into several programmes as highlighted in Appendix 11. The total amount of funds received from donors since 1999 to 2003 is about NZ\$7,767,002.
 206. Waste Management (MOW) received from donors over \$3 million dollars which in the past has been mostly appropriated towards a new landfill construction. The NBSAP received about NZ\$349,000 while International Waters Programme received NZ\$297,000 and Biosafety received about NZ\$143,000. Climate change programmes through the PICCAP, CBDAMPIC, and AIAAC received about NZ\$276,000. Disaster Management received about NZ\$40,000 while the Meteorological Service received about NZ\$150,000 for the period. The National Environment Service received from donors over NZ\$1,634,200 for other activities from 1999-2003.

⁶⁹ Upoko, T. (2005). National Environment Strategic Action Framework 2005-2009. National Environment Service. Government of the Cook Islands.

X. OUTER ISLANDS SITUATION

207. While most Outer Islands issues on the MEAs are covered in previous sections of this report, there is several capacity building issues that are repeatedly highlighted in their reports. These are as follows:
- a. The local women are the main practitioners of vairakau Maori (medicinal plants) applications and appreciate the opportunities to promote and improve their skills and green crafts.
 - b. Equipment and supplies that are taken for granted in Rarotonga are difficult to access. There is a lack of containers for storage of recycling materials for shipping to Rarotonga and this is a major problem for those taking responsibility for recycling of waste on the island.
 - c. Poor water quality and limited supplies are major concerns and there is a need to change the way people use the resource as well as to install more water tanks for water security purposes.
 - d. Dependency on fossil fuel is high and unlikely to change in the near future.
 - e. Sand mining and excavation work for lagoon silt (mud) to resurface roads and for aggregates is controversial but necessary for construction and building activities.
 - f. People in the Outer Islands also want continuing local awareness and educational programmes and for these to be presented in local languages.
 - g. Island leaders have expressed concern about training for ecotourism operators to allow consistent and accurate biodiversity and cultural information to be given to tourists.
 - h. There is a need for training in vulnerability and capacity assessment and this issue was reinforced by the recent spate of cyclones which caused widespread damage to coastal areas. Vegetation and the beach profile has completely been altered in some areas.
 - i. Training of Outer Islands people in removal of asbestos on government buildings in the Outer Islands is needed.
 - j. The Outer Islands want their own local people, especially youth, to be trained in conducting EIA activities.
 - k. There are suggestions to strengthen the community rai system still practiced for both marine and land-based rai as a management control for the use of natural resources. This can be done through education and awareness as well as by stricter enforcement of island by-laws related to the rai.
 - l. All islands need to develop or update their Environment Management Plans.
 - m. There were suggestions for the enactment of resource management by-laws in the Outer Islands or for the enactment of a National Resource Management Act to address concerns about activities and resources not covered by existing legislations.
 - n. The communities have expressed a desire to speed up development of their environmental by-laws and want extensive consultations to ensure that the local communities approve of the by-laws before acceding to the Environment Act. Outer islands leaders are keen to see some assistance from Rarotonga especially from local lawyers for the development of their island environment by-laws as soon as possible since there is basically no capacity on these island to assist them in that process.

XI. CAPACITY CONSTRAINTS AND GAPS IDENTIFIED

208. Capacity weaknesses and bottlenecks affect the Cook Islands performance in meeting the timeline and objectives set under the Conventions. Many of these are listed below:⁷⁰

Environmental policies and strategies

- a. Lack of national strategy for climate change, land degradation, disaster prevention, preparedness and management; and research foundation;
- b. Limited capacity to implement the NBSAP;
- c. Limited capacity in MEAs negotiations;
- d. Lack of capacity in preparation of project proposals for bilateral and multilateral funding;
- e. Limited capacity to assess the impact of both technological and policy measures for environmental concerns;
- f. Lack of capacity in effective implementation of various multilateral environmental agreements, including the UNFCCC and UNCCD;
- g. Difficulties in coordination and enforcing policies and regulations due to limited knowledge and resources;
- h. Lack of appropriate legislations for areas such as Intellectual Property Rights, Resource Management, Water, Hazardous Waste and Pollution, forestry, and research;
- i. Limited capacity in local communities in understanding the Environment Act;
- j. Lack of understanding, adoption and enforcement of international standards for Environmental Management Systems.⁷¹

Resource Management

- k. Lack of a National Resource Management Act;
- l. Lack of resource and key national assets inventories to monitor changes over time;
- m. Lack of expertise and capacity for environmental assessment;
- n. Lack of human and institutional capacity to deal with specific environmental problems;
- o. Lack of human and institutional capacity in project management and coordination to implement key programmes such as the NBSAP including NGO programmes;
- p. Lack of training, institutional and management frameworks for land-use, minerals, hazardous waste, water resources and watershed;⁷²⁷³

Technology

- q. Lack of database on technologies, including endogenous technologies;
- r. Lack of detailed assessment of technology needs;
- s. Lack of human and institutional capacity in assessing, evaluating and developing mechanisms for transfer of technologies;
- t. Limited use of automatic monitoring systems;
- u. There have been technical limitations and a lack of success stories to date;
- v. Acquisition of computers and access to the internet has been fairly limited due to financial constraints;

⁷⁰ Sem, G., Upoko, T. (2005). Project Proposal for Second National Communication of the Cook Islands under the United Nations Framework Convention on Climate Change (UNFCCC). National Environment Service. Cook Islands Government.

⁷¹ de Romilly, G, Manarangi-Trott, T, Matepi, M. and Tiraa-Passfield, A. (2005). Discussion Paper: Section 7-Commerce and Industry: Legal and Institutional Strengthening of Environmental Management in the Cook Islands. (ADB TA 4273-COO). National Environment Service, Government of the Cook Islands

⁷² Hajkowicz, S. and Okotai, P. (2005). An Economic Valuation of Watershed Management in Rarotonga, the Cook Islands: National Environment Service, Government of the Cook Islands.

⁷³ de Romilly, G, Manarangi-Trott, T, Matepi, M. and Tiraa-Passfield, A. (2005). Discussion Paper: Section 5-Waste Management and Pollution: Legal and Institutional Strengthening of Environmental Management in the Cook Islands. (ADB TA 4273-COO). National Environment Service, Government of the Cook Islands

- w. Lack of identification and removal of barriers to the adoption of technologies.

Research and Systematic Observation

- x. Inadequate human and institutional capacities to undertake, participate in, and contribute to research;
- y. Limited capacity at all levels (human, scientific, technical, technological, organisational, institutional and resources capabilities);
- z. Insufficient use of limited technically-trained personnel in project work;
- aa. Lack of and/or limited data and data management systems for environmental programmes over the long term through cross-sectoral analysis.

Information and Knowledge Management

- bb. Insufficient data collection and monitoring of environmental impacts;
- cc. Need to improve local capacity to undertake research, analysis and dissemination of information to local communities;
- dd. Marine environment is affected by on-shore activities, infrastructure development and other human activities. There is a basic lack of data and studies to confirm this premise;
- ee. There is a lack of confidence in some teachers while some are good in using specific environmental sectors such as climate change, biological diversity and land degradation as a thematic area for lessons;
- ff. Lack of expertise in effective communication strategies to induce behavioural change;
- gg. Insufficient data collection and monitoring of coastal erosion;
- hh. Limited understanding and monitoring of environment in health issues such as vector-borne, water quality, skin and respiratory problems
- ii. Marine environment is affected by on-shore activities, infrastructure development and other human activities;
- jj. There is a need to introduce and strengthen community education on the environment and how to relate this knowledge to other sectors such as tourism through locally-appropriate mechanisms and language;
- kk. There is a general need to introduce and strengthen environmental science, or general science programmes at the primary, secondary and post-secondary levels and through non-formal public education.

XII. CONCLUSIONS AND RECOMMENDATIONS

General Comments

209. As a result of this stocktake assessment, the following general conclusions can be drawn on the current capacity levels to implement the Cook Islands obligations under several MEAs:
- a. Many people in the Cook Islands are not knowledgeable about the Cook Islands' international obligations and Conventions and have limited understanding about the various processes involved.
 - b. The current staffing levels of various national agencies with related environmental programmes mean they are struggling to implement their core programmes and these institutions are treating their environmental responsibilities as secondary priority. This situation will continue given the continuing budgetary constraints and the overriding economic focus on development activities.
 - c. There are inadequate regulations and legislations including institutional structures to guide the implementation of MEAs and for capacities and processes to be strengthened for effective integration, oversight and enforcement.
 - d. Unless appropriately addressed, capacity weaknesses such as the lack of key management structures, strategies, policies and legislations, limited financial and technical resources including sub-standard research facilities in related sectors and programmes such as agriculture, land use, waste, marine resources, infrastructure, health, transport, meteorological services, water and the environment, will continue to affect sectoral priorities and the longer term sustainable development of the Cook Islands natural resources and environment programmes. This constraint will continue to pose a dilemma for the country when major environmental disasters or problems eventuate, as seen with the responses to the Titikaveka irritant syndrome outbreak.
 - e. There are limited numbers of highly skilled local professionals and support staff in the environment field for both government and NGOs and this will get worse with decreasing numbers of up and coming school leavers with recognised qualifications, scholarships students and graduates in environmental related studies. Training in negotiations, planning, project preparations and implementation and management, technology applications, technical and research activities, data collation and analysis will continue to be of great demand.
 - f. There is interest from both government agencies and non-government entities to collaborate to solve environmental-related problems and disseminate information to local communities through education and awareness programmes. However, communication between key agencies and programmes remains a weakness and could undermine established good working relationships and collaborative efforts.
 - g. It is recognised that there were weaknesses concerning information and knowledge management including poor data collation, analysis, records keeping, working computerised networks and databases nationwide due probably to poor processes and storage systems as well as a lack of institutional support. There is a desperate need to fix this and stop poor quality information being made available for management decision making and planning.

Recommendations

210. While, further activities will be carried out in the NCSA process to determine and map out the direction for strengthening and building national capacities to implement the MEAs, it is

envisaged that the National Environment Service will be mindful of the following recommendations:

- a. There is a concern about the limited communication, poor progress reporting and sharing of information on MEA projects between agencies, NGOs and even within institutions. It is recommended that institutions and committees find common ground for closer working relationships, sharing resources, information and project responsibilities to prevent the stifling of programmes as a result of poor communication.
- b. Community inputs in programmes and participation in their implementation is crucial to the successful outcome of projects. Government must provide the necessary resources to NGOs and local community groups to continue to take the lead in capacity building exercises at local community level. Acknowledgement of the importance of local knowledge, content and experiences including using the local language for delivery of education and awareness programmes is crucial in getting people understand their environmental responsibilities.
- c. There are key areas such as water etc. which have no national strategies, policies and legislation to guide environmental-related activities nationally and in local communities. These need to be developed and formalised as a priority.
- d. There is limited capacity in key areas considered essential as links between the international programmes and delivery of the national environment and related programmes nationwide. This also reflects the slow progress in meeting national obligations to the MEAs. For example, the NES need to improve the national capacity for MEA negotiations, project preparation, reporting and management and implementation of enabling activities and follow-up activities.
- e. Based on the premise that a single fully operational and well resourced research facility is better than several sub-standard research facilities, it is important that government pool its resources to establish and sustain a centralised, fully resourced and operational research facility on Rarotonga. This strategy is based on the “centres of excellence” principle and could be applied to targeted national programmes.
- f. Networking with overseas institutions and not necessarily CROP agencies broadens the scope and opportunities for strengthening and improving research, technical, information and technology-related capacities through training and sharing of resources.
- g. Improvements in data collation, processing and management will require specialised training in selected areas where key environmental data are generated. The appointment of permanent IT support staff to key government Ministries is vital. This will ensure that good quality data and information are collated, processed and databases are managed properly.
- h. Capacity building structures and programmes in the outer island need to be developed and will become a considerable challenge for the NES as more islands adopt the national Environment Act and start to established programmes on each island.
- i. Capacity building programmes are continuing on an ad hoc basis with NGOs, NDHRD, MOE, NES and other government departments and the private sector are conducting their own upskilling programmes for staff. The attempt by the NES in conjunction with NGOs, MOE and NDHRD to coordinate environmentally-related training programmes for both government departments and the communities should be supported.
- j. Improving the capacity of key agencies for programme planning, financial structuring and decision making based on sound assessment of data and information will enhance environmental programmes where applied.
- k. Key stakeholders capacities must be improved to allow them to implement programme efficiency measures including audits, setting standards and the reporting, monitoring and review of programme activities. It is important also to develop local capacity in the

application of ISO series of international standards for Environmental Management Systems.

- l. Training programmes must be made continuously available as there tends to be high turnover of staff in local projects due to the nature of the Cook Islands demographic trends.
- m. Improving the capacity of the outer islands to update or prepare their environmental and resource management by-laws and management plans is crucial in bringing them under the Environment Act and implementation of national programmes on these islands.

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Annexes

Annex 1. NCSA Stocktake Terms of Reference

Short term Consultancy Rio Conventions Stocktake Exercise

The Government of the Cook Islands has received funds through the UNDP/GEF to assist with assessment of the country's capacity to meet its commitments and obligations under the CBD, UNFCCC and the CCD. A good understanding of the current status of activities related to implementing obligations under the Rio Conventions is an essential prerequisite. The stocktake will review and summarise what's been done in terms of implementing the Rio Conventions and in terms of assessing and developing capacity to do so.

The Stocktake should be broad and inclusive – it is important to consider, at least briefly, all that has been accomplished related to each Convention, and so ensure that the NCSA builds on all past experience, all lessons learnt and all existing country-specific analyses. Thus, the stocktake should not be limited to official government exercises but also consider university studies and researches, unofficial government exercises, NGO studies etc.

This will include reports to the three Conventions, relevant Strategies and Action Plans, assessments of land, water and forest resources, preparation of national sustainable development strategies, environmental action plans, Barbados Programme of Action and Agenda 21. It will also include similar exercises for other international environmental conventions and agreements, and capacity assessments.

TASKS

The Consultant is required to:

- Identify documents related to past and current initiatives under the Rio Conventions (such as National Communications, National Reports)
- With regards to these documents and activities
 1. Collect and synthesize all existing relevant information for each convention; summarize and review activities and results achieved for all activities
 2. Identify capacity needs constraints
 3. Identify gaps and needs for further studies
 4. Review capacity links across Rio Conventions and sustainable development policies
 5. Identify lessons learnt
 6. Review initiatives undertaken under national sustainable development strategies and other MEAs
 7. Briefly summarise national obligations under the signed MEAs
 8. Identify technical capacity needs
 9. Based on the stocktake and consultations, compile a Stakeholders Analysis of which stakeholders this project affects the most and in what ways

Expectations:

The consultant is expected while undertaking the stocktake to:

- Review Convention documents and related activities
- Review national Sustainable development-related strategies and activities as it relates to the three Rio Conventions

- Examine and appraise relevant documents and activities under other closely related multilateral environment agreements (MEAs) e.g. CITES, Ramsar Convention, Montreal Protocol, Biosafety Protocol
- Consult with related agencies and organisations, including NGOs on activities that may have been or is being, carried out under the conventions in Rarotonga, Aitutaki and Mangaia as case study islands.
- Use these consultations as a tool for the Stakeholders Analysis

The stocktaking should not be regarded as a simple duplication of previous activities (“cut and paste”) but should build upon these where possible.

Expected Outputs

A comprehensive report should follow the format provided from the Australia GEH handbook provided and integrate into this new format, inter alia:

- Statement of national obligations under each of the Rio Conventions
- A list of related exercises, both ongoing and previous, and a short description of each exercise
- List and a short description of documents produced through related exercises
- List and a short description of national and community organisations, groups, agencies and institutions roles, responsibilities, structures and processes in environmental programmes and related exercises
- List of environmentally related policies and legislations.
- Discussion of the main Convention areas not addressed by the related exercises
- Discussion of the lessons learnt from the previous and related exercises
- Discussion of the main findings in terms of capacity and resourcing requirements
- Stakeholders Analysis
- List of people consulted

Qualifications

- Clear definition and understanding of the main obligations under each convention
- An advanced degree in a field of relevance to the objectives of the project
- At least five years of working experience in capacity building, institutional strengthening, self- assessments or other relevant fields
- A good understanding of the environmental issues in the Cook Islands
- Good communications and reporting skills
- Good technical, analytical and report writing skills
- Some understanding of local institutions and stakeholders
- Ability to meet deadlines and work under pressure

Annex 2. List of Stakeholders Consulted

NCSA Stakeholders and Institutions Consulted				
#	Official	Designation	Institution	Area of Expertise
1	Ian Karika	Chairman –REC Rarotonga Environment Council	REC/TCA/TIS	Biodiversity Species conservation Environment policies
2	Vaitoti Tupa	Director	National Environment Service (NES)	Environment policy
3.	Tania Temata	International Advisor	NES	All MEAs
4.	Parsha Carruthers	Climate Change Research & Technical Officer	NES	Climate change adviser
5.	Joe Brider & Vavia Vavia	EIA Compliance Officers	NES	EIA Compliance & enforcement
6	Elizabeth Munro	NBSAP Coordinator	NES	Biodiversity
7.	Denise Rairi	Acting Chief of Staff	OPM (Prime Minister’s Office)	Policy
8	Nandi Glassie	Secretary	OMIA (Outer Is.)	Outer Islands development policy
9	Otheniel Tangianau	Outer Islands devolution policy Forestry Expert	OMIA	Outer Islands Development, agriculture. forestry
10	Tenga Mana	Director Technical Services- Civil Engineer	OMIA	Outer Islands water resources, infrastructure
11	Nga Mataio	Secretary	Ministry of Agriculture (MOA)	Agriculture policy
12	Pavai Taramai	Biosafety Coordinator Senior Quarantine Officer	MOA (Agriculture)	Biosafety & biosecurity
13	William Wigmore	Director	Research –MOA	Crop research biodiversity
14	Mata Nooroa	Director	Energy Div. –MOW	National energy policies
15	Tangi Tereapii	Assistant Director	Energy Division	National energy policies & Renewable energy
16	Ata Herman	Secretary	Ministry of Works (MOW)	Infrastructure dev. Land use, coastal, waste management
17	Ben Parakoti	Director	Water Works Dept.-MOW	water resources management
18	Keu Mataroa	Senior Executive Officer	Policy –MOW	Infrastructure policies
19	Timote Tangiruaine	GIS/Info Officer	Admin.-MOW	GIS database development
20	Vaine Teokotai	Secretary	Ministry of Health	National health policies
21	Tuaine Teokotai	Public Health inspector	Ministry of Health	Public health policies,

				sanitation, waste
22	Mrs. Mii Rairi	Director	Nat. HRD	Post secondary schools training
23	Arona Ngari	Director	Meteorological Service	Climate change & observations
24	Maara Vaiimene	Division Manager	Meteorological service	Climate observations
25	Ian Bertram	Secretary	Ministry of Marine Resources (MMR)	Marine & fisheries resources management
26	Mrs. Vereara Maeva Taripo	President –NGOs	CIANGO	NGO environment related policies
27	Ms Pori Williams	Project Officer-NGOs	CIANGO	NGO projects
28	Mona Matepi	Project officer	WWF Cook Islands	Environment education & awareness
29	Noelene Browne	President	Avana Muri Marine Awareness Group (AMMAG)	Community environment advocacy & awareness programme
30	Ngatuaine Maui	Secretary designate	Ministry of Culture	Cultural heritage protection & conservation
31	Ken Matheson	Secretary	MOE (Education)	Environment Education
32	Gail Townsend	Science Education Curriculum Adviser	MOE-Curriculum Unit	Environment related curriculum
33	Richard Baker	Social science Education Curriculum Adviser	MOE-Curriculum Unit	Environment related curriculum
34	Jane Taurarii	Primary Education Curriculum Adviser	MOE-Curriculum Unit	Environment related curriculum
35	Tom Wichman	Energy and Technology Development Consultant	Private Sector	Waste management/ GHG inventory
36	Garth Henderson	Manager	AMD-MFEM	Aid funds administration
37	Enua Pakitoa	Senior Statistician	STATS-MFEM	Environment related statistics
38	Tanga Morris	Senior Statistician	STATS-MFEM	Environment related statistics
39.	Tarita Hutchinson	CEO	Cook Islands Investment Corporation	National capital projects development programmes
40	Sir Geoffrey Henry	Deputy Prime Minister	DPM Office	National development policies
41.	Tereapii Timoti	CEO	Te Aponga Uira	Energy policies & generation capacities
42	Metuatini Tangaroa	Inspector-National Disaster Management Office	Cook Islands Police	Disaster response & preparedness
43	Pira Wichman	Commissioner	Cook Islands Police	Disaster response & preparedness
44	Chris Wong	Tourism	Tourism	Tourism environment initiatives
45.	Nikki Rattle	Secretary General	Red Cross Cook Islands-CAN	Disaster preparedness

46	Charlie Numanga	Red Cross Officer	Red Cross Cook Islands-CAN	Disaster preparedness
47	Imogen Ingram	President	Taporoporoanga Ipukarea-CAN	Environment Education & awareness
48	Jackie Evans	Project Officer	Titikaveka Irritant Syndrome/ TIS	Lagoon monitoring environmental research & awareness
49	Myra Moekaa	International Adviser	Ministry of Foreign Affairs & Immigration	MEAs Official focal points & negotiations
Outer Islands – Mangaia Stakeholders				
50	Tuaine Tuara	Island Secretary	Mangaia Island Administration	Mangaia development policies
51	Alan Tuara	Coordinator	Tangao Rangers	waste management, community education & awareness
52	Mataora Harry	Chairman – Aronga Mana	Mangaia Aronga Mana	Traditional leaders islands wide policies, biodiversity, community projects
53	Ngarangi Tuakana	Senior agricultural officer	MOA	Biodiversity, agriculture, livestock
54	Anthony White	Manager	Mangaia Energy	Mangaia Energy, hybrid wind turbine project
55	Tuaiva Mautairi	Kavana-Veitatei	Mangaia Aronga Mana	Traditional leaders islands wide policies Biodiversity, community environment projects
56	Unlucky Tungata	Director	Mangaia Economic Development	Natural resources management
Outer Islands – Aitutaki				
57	Bobby Bishop	Environment officer	NES	All MEAs
58	Aisnes Lawton	Women’s Representative Business woman	Aisnes stall - Market	Women’s issues, lagoon monitoring, tours, sport fishing
59	Tepaeru Cameron	Waste management	Aitutaki Island administration	Waste management project
60	Rimaroa Tuiravakai	Manager	Aitutaki Energy	Aitutaki Energy needs
61	Tukua Upokomanu	Manager	Aitutaki water	water resources management
62	Fred Charlie	Director	Aitutaki -MOA	agriculture
63	Sabati Solomona	Island Secretary	Aitutaki Island Administration	Aitutaki development policies
64	Teaea Parima	Principal	Araura College	School curriculum
65	Temanu Unuka	Deputy Mayor	Aitutaki Island Council	Aitutaki Islands development projects
66	Mauke Mauke	Chairman-facilitators	CBDAMPIC – Aitutaki pilot project	Climate change adaptation community project

Annex 3. Stakeholders and Capacity Influences on MEAs

Stakeholders List and Influential Impact on Past and C			
	Internationa l Cooperation		Areas of Exper t Policy ISIA
		63	

Annex 4. Profile of Institutions Consulted

Institution	Stakeholders interests/responsibilities	Relevance to ALL MEAS/reasons for inclusion	Input in the self-assessment process
GOVERNMENTAL INSTITUTIONS			
Ministry of Foreign Affairs and Immigration	<p>Official point of contact-Focal Point of the GEF, and all MEAs as well as responsible for other trade agreements</p> <p>National coordination related to international cooperation</p>	<p>Facilitation and official information role related to all MEAs</p> <p>Effective participation and supportive role to NES in MEAs negotiations, dissemination of official information and facilitation for other related development internationally including impacts from MEAs on trade.</p>	<p>Official focal point for the international cooperation, especially MEAs and other agreements.</p> <p>Consultations on continuing participation in MEAs negotiations and also on information dissemination and exchanges.</p>
National Environment Service (NES)	<p>Implementing agency and operational focal point of the GEF, including UNFCCC, UNCCD and CBD and other MEAs.</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> - management of the state of the environment; -national coordination of actives and programmes related to MEAs including implementation, monitoring and evaluations -issuance and vetting of projects including permits and environmental impact assessments -Liaising with relevant national agencies for assistance to ensure the Cook Islands effective representation at meetings of the Parties to the Convention and other relevant meetings; - Liaising with relevant regional and international bodies to ensure that the representation of the Cook Islands at any meeting concerning all Convention is informed and effective; - Managing or participating in any project, or part of a project, aimed at implementing any aspect of environmental concerns - Disseminating information to local stakeholders and creating public awareness on environmental concerns - Preparing reports, and information 	<p>NBSAP, CC, IWP, NCSA, EC established under the National Environment Service.</p> <p>NBSAP, NCCCT, EIA, IWP & NCSA, Biosafety project committees established under the auspices of the NES with administrative and management support provided.</p> <p>Responsible for collaboration with relevant agencies and institutions in implementing MEAs.</p> <p>Responsible for the preparation and implementation of the NESAF 2005-2009 in collaboration with other relevant agencies.</p> <p>Responsible for the NCSA.</p> <p>Responsible for preparation of national strategies and implementation of action plans under all MEAs ratified.</p>	<p>Consultations on national priorities, mainstreaming of all MEAs issues in national environmental strategies, programmes and other national activities, as well as on current and planned projects.</p> <p>Regular consultations with the national stakeholders for discussion of MEAs programmes in terms of technical issues, opportunities for synergy among various projects and institutional arrangements.</p> <p>Regular consultations on the needs and priorities for capacity-building</p>

Institution	Stakeholders interests/responsibilities	Relevance to ALL MEAS/reasons for inclusion	Input in the self-assessment process
	<p>papers for the Minister and Cabinet in relation to the implementation of any Convention;</p> <p>-review and improvement of regulations, policies and strategies for implementing environmental concerns.</p> <p>- Provide technical support to any other relevant government department or agency) to implement any obligation under a Convention.</p>		
Ministry Of Agriculture	<p>Ministry responsible for development of agriculture products for export and local markets.</p> <p>- Promoting and encouraging development of organic farming, better plant and animal breeding and application of better practices</p> <p>- Consultations with relevant agencies on issues relating to crop production & research, food security, land-use, border control, water, biosafety and biosecurity.</p>	<p>Member of the NCCCT, NBSAP, EIA, PICCAP, Biosafety, & Nat. Research committees.</p> <p>Collaboration with NES on policy and strategies on agricultural developments as they relate to crop productions, food security, land-use, resources management, border control, use of chemicals and inorganic fertilizers, better technology and practices, environmental and agricultural information and data.</p>	<p>Consultation with regard to the issues related to agriculture research and crop productions especially technology application and techniques.</p> <p>Consultation on MEAs data needs regarding agricultural capacities including issues related to border control & quarantine, food security, invasive species, chemicals usage, and policies review and development.</p> <p>Consultation on the provision of MEAs data and information as well as on the needs for capacity-building, training and research (collection, analysis and archiving) and dissemination of information.</p>
Ministry of Marine Resources	<p>Ministry is responsible for managing the national fisheries and marine resources, including education and awareness programmes.</p>	<p>Member of the NBSAP, NCCCT, EIA, PICCAP, Nat. Research & Biosafety committees</p> <p>Promotes the well-being of marine resources, fisheries and lagoon ecosystems.</p> <p>Together with NES promotes programmes that heighten the awareness for communities' on effects on the environment including pollution, increases in sea temperature, sea-level rise, and resource exploitation and management practices.</p> <p>Provides water quality testing and applications of remote sensing technologies in pearl farming and tourism lagoons and fisheries resource monitoring.</p> <p>Provide professional advice, technical and research support to industry, community and private sector projects related to fisheries, conservation and other</p>	<p>Consultations on strategies for continued participation in preparation and implementation of environmentally related strategies and policies</p> <p>Strengthening of marine resources management and resilience from negative environmental impacts, through education and awareness, data and information collation & management, training and other capacity building exercises at both national, sectoral and community levels to address MEAs concerns.</p>

Institution	Stakeholders interests/responsibilities	Relevance to ALL MEAS/reasons for inclusion	Input in the self-assessment process
		marine resources management, monitoring and evaluations including environmental impact assessment.	
Office of the Prime Minister	Responsible for WSSD, MDGs, ICT and development of the National Sustainable Development Plan. National Policy Coordination Unit.	Member of the NCCCT, PIREP, WSSD, BPOA, MDGs, ICT & Nat. Research committees Effective integration of MEAs issues into national strategies and policies including sustainable development programmes	Consultation with regard to continue participation in preparations, development and integration of environmental programmes, strategies & policies in national policies and plans. Consultations on direction for national development and completion of the national development plan.
Office of the Minister for Islands Administration (OMIA)	Responsible for administration and technical support to Outer Islands administrations.	Proposed member of the NCCCT, member of the Nat. Research Foundation, WSSD, and National Development Plan. Provide expert advice on forestry issues and outer islands resource management issues especially water, soil erosions and infrastructure development with regards to environmental impacts. Effective participation in environment programmes in outer islands especially setting up environment authorities.	Consultations on effects of infrastructure development and related programmes on the environment as well as natural resources in the outer islands. Consultations as well on the effect of climate change on programmes in the outer islands especially infrastructure and water.
National Department of Human Resources	Mainly responsible for post secondary educational and training programmes	Not a Member of National Climate Change Country Team Responsible mainly for regional and international scholarships and in-country trainings. Encourage for development of sector plans for HRD development including the environment sector	Consultations on the future outlook of environmental related scholarships and training opportunities for school leavers and people already in the workforce.
Ministry of Health	Responsible for public health activities in clinical laboratory, public health management, waste and sanitation management, as well as surveillance and establishing early warning for vector-borne and water-borne diseases	Member of the National Climate Change Country Team, National Waste Management Committee, and Biosecurity Has collaborated with NES and Ministry of Works, Ministry of Marine Resources on public awareness on the effects of climate variability and extremes, waste and sanitation and concerns for land based pollutions affecting the lagoons and peoples health.	Consultations on information and data on the health effects of changes in rainfall and temperature Provision of public health statistics, information, and advice relating to environmental education and awareness programmes, enforcement of sewage management regulations, public health trainings, laboratory and research facilities and capacity, drinking water quality testing including vulnerability and adaptation assessments.

Institution	Stakeholders interests/responsibilities	Relevance to ALL MEAS/reasons for inclusion	Input in the self-assessment process
Meteorological Services	Responsible for providing national climate and weather (meteorological) services to the public	Chairman and Member of the National Climate Change Country Team Has collaborated with NES in providing support to Rarotonga Meteorological Services in data rescue programme and participate in climate-related projects	Will continue to participate in the second national communications. Consultations on strategies to enhance capacity-building on climate-related activities including data management activities and technologies including research and systematic observations applications
Ministry of Works, Energy, and Physical Planning (infrastructure, water, energy, survey, wastes management, building control, and coastal development)	Responsible for design and development of infrastructure of public works and services in communities, roads, bridges, drainage, water works, energy inspection, and development, coastal zone protection and management, building standards and control, land survey information, and waste management.	Member of the National Climate Change Country Team, PIREP, and Waste Management Undertakes climate change vulnerability and adaptation assessments, environmental impact assessment work, , resource investigations, research and studies, resources and infrastructure development management policies, plans and regulations, construction and building activities,.	Consultation on strategies for infrastructure development, buildings control standards, water resources and management, land-use, waste management and foreshore development. Involvement in environmentally-related activities including integrating of reducing impacts risks into development plans and policies, improvement in resource management and training as well as education and awareness
Cook Islands Investments Corporation	Responsible for the management of government assets especially housing and state-owned enterprises	-Responsible for government assets management and town planning, cyclone rehabilitation activities especially rebuilding of government buildings damaged in recent cyclones	Consultations on strategies for cyclone reconstruction efforts, reviews on building codes and standards and including legislations, and national GIS mapping project as well as the ADB TA for infrastructure and town planning.
Cook Islands Tourism Corporation	Responsible for the administering the development of the tourism industry, promotions and marketing of the Cook Islands as a tourist destination overseas	-Secretariat to the Tourism Council and implementing agency for marketing, monitoring and vetting the quality accommodation accreditation scheme and promotion of the PATA environment code of conduct and the Cook Islands Tourism Industry Environment Charter	Consultation on industry's strategies for environmental concerns including: climate change impacts especially cyclones which affected the accommodations and flights in and out of the country, waste management, pollution and lagoon issues, industry environmental promotions, awareness and incentives, eco and geo-tourism.
Police Department & National Disaster Management	Responsible for the national disaster management office and national emergency operations centre	-Responsible for pre disaster and emergency preparedness, trainings and educational and awareness, including vulnerability and adaptation assessments, and hazards risks assessments. -responsible for post disaster response and relief operations as well as rehabilitation activities	Consultations on strategies for improving and strengthening NDMO and disaster management processes including comprehensive reviewing of procedures, policies and mitigating activities. Continue participation in second national communications to UNFCCC
Office of the Deputy Prime Minister & Minister for Environment	Government minister responsible for the environment, economic development, outer islands and finance	-key policy decision maker on disaster management and cyclone damage rehabilitation activities, as well as general environmental programmes including legislation and polices development	Consultations on immediate and future government policies regarding climate change and impacts from extreme climate variability and adaptation, and vulnerability assessments;

Institution	Stakeholders interests/responsibilities	Relevance to ALL MEAS/reasons for inclusion	Input in the self-assessment process
			and environmental issues
Ministry of Transport	Regulatory agency responsible for administration of transportation sector, especially shipping and airlines, and ports facilities in the Cook Islands.	-Responsible for administering regulations related to marine pollution, oil spills and transport (ships and planes regulations and safety)	Consultations on strategies for disaster mitigation, preparedness and marine pollutions issues as well as effects of transportation on the environment, energy needs and infrastructure.
Statistics Department (Ministry of Finance and Economic Management)	Responsible for administration and management of official statistical data and dissemination of data and related information via regular public reports.	-Responsible for administration and dissemination of official statistics including annual GHG assessments updates, fossil fuel related data. Participated in the GHG assessments trainings. -	Consultations on strategies for further improving the GHG assessments reporting of data and information with quarterly updates of GHG emissions levels. Continue participation in the Second National Communication as well as for integration climate change surveys into National Census, Household expenditure survey and GIS Spot project.
Aid Management Division (Ministry of Finance and Economic Management)	Responsible for administration of foreign aid funding and TA projects in the Cook Islands	-Responsible for administration and disbursement of project funds	Consultations on the process of disbursement of funding and weaknesses and constraints in the processing of requisitions.
Ministry of Cultural Development	Responsible for Official point of contact-Focal Point of the GEF, and all MEAs as well as responsible for other trade agreements National coordination related to cultural development and heritage trusts.	Facilitation and official information role related to all protection and preservation of our cultural and historical heritage through important sites, landmarks and buildings. Effective participation and supportive role to NES in dissemination of official information and facilitation for other related development nationally on cultural development and heritage trusts. The Ministry is secretariat to the National Board of Trustees for Cultural Heritage but is yet to complete its investigation and compile a listing of heritage sites, landmarks and buildings. Outstanding work programmes include the strengthening of the above “Board” responsible for the preservation, renovation and restoration of cultural and historical sites and the recording of oral tradition as these have direct influence on land rights, traditional knowledge and custom.	Consultations on continuing participation in environmental concerns regarding areas of cultural and historical interests and also on information dissemination and exchanges.

Institution	Stakeholders interests/responsibilities	Relevance to ALL MEAS/reasons for inclusion	Input in the self-assessment process
Ministry of education	Responsible for education curriculum development which includes subjects relating to environmental programmes including fauna and flora, geophysical environment issue, wastes and pollutions, climate change, climate variability and sea-level rise.	Curriculum advisers responsible for development of primary school materials, senior high school courses and materials, as well as teachers' development on general environment issues. Individual schools encourage continuing to adopt their own independent environmental projects.	Consultations on the process of incorporating environmental issues into the teachers professional development programme and improve the education curriculum for environmental concerns including THEP, SEAREAD, Sand Watch as well as including climate change issues for senior high school students. Establishment of a Marine Studies programme at primary and secondary education levels in 2005/06 FY.
PUBLIC AND STATE INSTITUTIONS			
Te Aponga Uira (Electricity Power Provider)	Responsible for generating and supplying power (electricity) to commercial and residential sectors on Rarotonga.	Proposed Member of the National Climate Change Country Team and PIREP Heavily dependent on the use of fossil-fuel (diesel) and biggest single consumer of imported fuel in the Cook Islands	Consultations on strategies for reducing risks of damages including placing all new lines underground , reducing fossil fuel usage and promoting for energy efficiency and energy conversion studies. Active in public sector promotions and awareness in energy efficiency programmes.
NON-GOVERNMENT NGOS			
CIANGO	Responsible for central administration and support to all NGO including environmental NGOs in facilitating numerous community based programmes and including environment programmes	Proposed member of the National Climate Change Country Team, member of PIREP, NESAF, Waste Management Steering Committee, NBSAP, WSSD, BPOA, MDGs. Assist through their community based network to promote awareness, training and dissemination of information on environmental issues.	Consultations on close working relationship with NES and on strategies for environmental concerns including community awareness and training programmes.
Taporoporoanga Ipukarea Society (CAN)	Responsible for facilitating numerous community based environment programmes and assisted in the initiation of a Climate Change Action Network -Responsible for initiating the process to set up Suwarrow as National Park. -Responsible in promoting public awareness in environmental programmes and advocacy for specific environmental issues.	Climate Change Action Network, NBSAP, PIREP, Waste Management, NESAF member A member of CIANGO Active in environmental advocacy, education, awareness programmes and dissemination of information Assisted Cook Islands in the preparation of Initial National Communication Assisting the Cook Islands in the addressing Suwarrow issues, rai areas, waste management initiatives, and small community-based projects.	Consultations on close working relationship with NES and environmental strategies and capacities for education and awareness; training programmes, waste management, ecosystems management projects including implementing small community-based projects.
Avana-Muri Marine Action Group (CAN)	Responsible for facilitating community based environment programmes and assisted in the initiation of a Climate	Climate Change Action Network member to promote awareness and dissemination of information.	Consultations on close working relationship with NES and strategies for environmental community education and awareness, training

Institution	Stakeholders interests/responsibilities	Relevance to ALL MEAS/reasons for inclusion	Input in the self-assessment process
	Change Action Network Responsible in promoting public awareness in environmental programmes and advocacy for specific environmental issues	Assisted Cook Islands in the preparation of Initial National Communication A member of CIANGO and assisting the Cook Islands to prepare community vulnerability assessments,	programmes and implementing small community-based projects.
National Women's Council (CAN)	Responsible for facilitating numerous community based and national social development programmes. It has expanded their interests into community-based environmental programmes and assisted in the initiation of a Climate Change Action Network	Climate Change Action Network member to promote awareness and dissemination of information. Assisted Cook Islands in the preparation of Initial National Communication A member of CIANGO and assisting the Cook Islands to implement environmentally-related gender programmes	Consultations on close working relationship with NES and strategies for environmental community awareness and training programmes that promoted women welfare.
WWF –Cook Islands (CAN)	Responsible for facilitating numerous community based environment programmes and assisted in the initiation of a Climate Change Action Network	Climate Change Action Network member, PIREP, NBSAP, Waste Management Project Steering Committee to promote awareness and dissemination of environmental information. Assisted Cook Islands in the preparation of Initial National Communication, NESAF A member of CIANGO and assisting the Cook Islands to prepare community education and awareness programmes, community based projects, vulnerability assessments,	Consultations on close working relationship with NES and strategies for community awareness and training programmes and small community-based environmental projects
Titikaveka Irritant Syndrome Project	Responsible for: Temporary monitoring of the Titikaveka and Ngatangiia lagoons for outbreak of cases of irritant syndrome experience in the area during summer 2003/04	Titikaveka Task Force -It facilitate activities with various national agencies of monitoring of the lagoon in the affected area with water quality testing on weekly basis, community surveys and providing information with the public. -facilitate policy for reduce lagoon pollution including .installation of pig farm waste digester systems. - promote environmental awareness	Consultation on close working relationship with NES on extreme climate-related factors contribution to: - temperature increases in lagoons causing coral bleaching, -land-based pollution effects affecting the lagoons and coral reef ecosystems -project data and information including research activities
Cook Islands Red Cross	Responsible for: -providing disaster preparedness and emergency capacity buildings including trainings. -post disaster and emergencies relief activities.	Member of the National Climate Change Country Team and the Climate Change Action Network It conducts disaster prepared ness trainings such as Vulnerability Capacity Assessment and conducts climate changes awareness at the local communities' level. Promote the strengthening and building the capacity of local disaster management offices starting with NDMO.	-Consultations on further collaboration with NES on community vulnerability and adaptation assessment, especially in the Outer Islands -Promote strengthening of disaster management offices nationwide.
<u>Takitumu</u>	Dedicated to the protection and	It has established designated conservation areas in	Consultation on progress of the TCA

Institution	Stakeholders interests/responsibilities	Relevance to ALL MEAS/reasons for inclusion	Input in the self-assessment process
<u>Conservation Area</u>	conservation of the endangered Rarotongan Flycatcher (Kakerori) specie through their Kakerori Recovery Programme.	the Takitumu valleys for the specie. A small population of the Kakerori was also established in Atiu under the TCA guidance as an alternative and second conservation area. The TCA provides guided tours to visitors into the conservation area which helps funding for the programme.	programmes and areas needing further capacity development. Consultation on future plans for TCA as well as views on current national environment issues concerning biodiversity, climate change and other MEAs, including views related to the decisions of the Rarotonga Environment Council.

Annex 5. Graduates in environmentally-related fields since 1990

(Source: NDHRD, USP, (2005))

	Field of Study	Gender	Qualification	Institution	Date completed
1	Technology	M	B. Technology	USP	1990
2	Agriculture	M	B. Ag. Science	USP	1992
3	Environment	F	B. Env. Studies	USP	1995
4	Environment	F	B. Env. Studies	USP	1995
5	Land Management and Development	M	B. Land Mgnt. Dev.	USP	1995
6	Chemistry	M	B.Sc. Chemistry	UH	1996
7	Agriculture	M	M.Tropical Agriculture	UH	1998
8	Climate Change	F	PGC-Climate Change	USP	1999
9	Management/Marine Studies	M	B. Management/Marine Studies	USP	1999
10	Chemistry/Biology	F	BSC	USP	2000
11	Engineering	M	BE	C.QLD U	2000
12	Technology Management	M	MA	Uni NSW	2000
13	Environment	M	B. Env.Studies	USP	2000
14	Agriculture	F	BA	Alafua	2001
15	Biology	F	BSC	Akl Uni	2001
16	Civil Engineering	M	BSC	Uni NSW	2001
17	Teacher/Geography	F	B. Ed	USP	2001
18	Technology	M	B. Tech	FIT	2001
19	Environment	M	B.Env. Studies	USP	2001
20	Agriculture	F	B.Ag.	USP	2001
21	Technology	M	B. Tech	Massey	
22	Environment	M	B.Env.	USP	2002
23	Marine Resources	M	B.Marine Mgnt.	USP	2002
24	Marine Resources	F	B.Marine Science	USP	2002
25	Environment	F	BA	USP	2003
26	Agriculture	M	BA	USP	2003
27	Medical Laboratory. Technology	F	Diploma	FSM	2003
28	Marine Studies	M	BSC	USP	2004
29	Environment	F	B.Env.	USP	2004
30	Marine Resources	M	B.Marine Affairs	USP	2005
31	Agriculture	M	B.Ag.	USP	2005
32	Technology Engineering	M	B. Tech. Eng.	USP	2005

Appendix 6: Capacity Building Exercises conducted since 1996

CBD

1. Cook Islands Agricultural plant Genetic Resources Stakeholders workshop. August 2003
National Capacity Self Assessment (NCSA) workshop, Rarotonga, September 2003
2. Workshop to Strengthen Capacity of Pacific Islands Countries to Negotiate and Implement the International Biodiversity Climate Change Instruments, Fiji, November 2003
3. Cook Islands National Biodiversity Workshop June 2001. Rarotonga
4. Taunga Vairakau Maori Workshops, Mangaia and Mitiaro
5. Education and Awareness programmes in the Southern Group islands by NGOs, in particular the WWF.
6. Conservation consultations meetings (community workshops) were held in the Vaka and outer islands communities except for Manihiki, Rakahanga, Pukapuka and Nassau over a period of two years from 2001.

UNFCCC

7. Two Cook Islanders received training at Waikato University in 1998 on climate change vulnerability and adaptation activities.
8. A national workshop was held on vulnerability and adaptation assessments in Rarotonga. This was followed by similar workshops for Mangaia, Aitutaki, and Penrhyn.
9. Two Cook Islanders received training at the University of the South Pacific in 1999 on greenhouse gases inventory assessment.
10. A national training workshop allowed for the training of a further 3 Cook Islanders on greenhouse gases inventory assessment.
11. A workshop was also held to discuss the outcomes of the Climate Change Adaptation for the Pacific (CLIMAP) project which saw ADB TAs apply three climate change pilot case studies in infrastructure, regulations and policies areas.
12. A training workshop was also provided for a core group of village based facilitators in Aitutaki, during the process of their CIDA funded pilot project for the Capacity Building to Enable the Development of Adaptation Measures in Pacific Island Countries.
13. The NES staff also received training in international negotiations through the participation in UNFCCC negotiations, participation in IPCC working groups, secondment with UNFCCC secretariat.
14. The Cook Islands PICCAP Country Team received training in fulfilling national and international obligations under the UNFCCC.
15. A training exercise was conducted in Aitutaki for using new integrated assessment modelling of Coastal Inundation with storm surge and climate change scenarios and how to use models for policy and adaptation planning.

CCD

16. In 1984, with the establishment of the Cook Islands forestry programme, trainings were provided to local forestry staff in research, seedling nursery programmes, site preparations, fernland afforestation, forest inventories and capacity building. Programmes were focus on soil conservation, fernland fire suppression, public awareness, rural employment, and general environment improvement. Overseas advance forestry trainings in Fiji, Papua New Guinea, and New Zealand were also provided for competent local staff.
17. From 1985 to the present, Ministry of Agriculture staff also received trainings in Fiji, and Samoa on agro-forestry techniques to enhance crop yields while reducing subsequent farmland erosion and depletion of fertile soil.

18. During the late 1980s to early 1990s, the UNV-FAO taro irrigation project on Atiu and Mangaia were able to provide assistance to growers to boost taro production and deal with severe drainage and siltation problems in the wetlands areas on these islands.
19. Other programs that were adopted to combat land degradation include the FAO funded soil rehabilitation project in 1992 which includes a review of the Conservation Act 1987-88.
20. In 1994, a sectoral training program for senior government officials, especially National Environment Service and Ministry of Planning and Economic Development (MOPED) staff involved in project planning, were given on EIA processes.
21. Continuous research by New Zealand Australia, Japan and local engineers have seen local coastal protection systems (COPED) designs tested at regional research laboratories. Locally designed models have since been patented internationally, as well as tested and installed on Rarotonga.
22. In 1995, the SPREP/UNDP funded capacity building Coastal Zone Management project saw the preparation and completion of environmental management plans, policy instructions and proposed Resource Management By-laws for the islands of Aitutaki, Mangaia, Mauke and Penrhyn. However, most of these by-laws needed to be revised and formally adopted.
23. In 2003, the Cook Islands conducted its national assessment review and process to complete the National Report for the Convention to Combat Desertification (land degradation) and submitted it to CCD.
24. Between 1984 and 1986, an ADAB/CIG study of wave heights and currents produced valuable data required for economic-social and engineering study and design of foreshore infrastructure and land-use around the northwest side of Rarotonga.⁷⁴
25. Since its establishment, SOPAC had conducted trainings and physical assessment of harbours, the port area and coastal areas of Rarotonga, as well as conducted bathymetry mapping and GIS systems of Penrhyn, Manihiki, and Aitutaki Lagoon for improved planning, management and development. Local planners, technicians and engineers from the MOW, MMR, MOA, OMIA and Statistics Office benefited from these foreshore protection and related courses, workshops, field trainings and attachments to SOPAC in Fiji.
26. The Cook Islands had several local technicians and budding engineers who undertook the two year Certificate of Earth Science and Marine Geology (CESMG) from the USP, which was executed by SOPAC since 1979. This is the only formal training course to build the national capacity in the areas of applied geoscience for local technicians with minimal university entrance qualifications.

Appendix 7: National reports related to MEA activities

CBD

1. National Biodiversity Strategy and Action Plan (NBSAP) (2002)
2. Project Evaluation Report: Cook Islands Government Enabling Activity For Biodiversity Project (NBSAP) (2003)
3. An Overall Report on the Full Implementation and the Analysis of the State of Capacity and Future Needs to Survey and Conserve Rare Vairakau Plants (2004), which falls under the NBSAP Add On project.
4. The Impact of Invasive Alien Species on Rarotonga, Aitutaki, Mauke, Atiu and Mitiaro (2004), another project falling under the NBSAP Add on Project.
5. Protected Natural Areas in the Cook Islands within a Proposed National System (2004), another NBSAP Add On project.
6. Legislative Review: Report of Survey Findings and Policy for Legislative Framework (2004), a UNEP-GEF project on the development of a National Biosafety Framework.
7. Au Apinga Natura ote Kuki Airani (Cook Islands Biodiversity)
8. Database Update and technical Report, based mainly on Natural Heritage Trust activities
9. Survey of Baseline Information for Assessing the Capacity Building Needs of the Cook Islands for the Safe Management of Genetic Modified Organisms (GMOs).
10. Assessing the Current State of Biotechnology and Biosafety in the Cook Islands (2004).

UNFCCC

11. Initial National Communication Under the UN Framework Convention on Climate Change (1999)
12. Draft National Climate Change Adaptation Policy and Implementation Plan-(National Implementation Strategy)
13. Mangaia Vulnerability And Adaptation Assessment Report (1999)
14. Aitutaki Project Implementation plan: Capacity Building for the Development of Adaptation Measures in Pacific Island Countries.

CCD

15. Cook Islands National Report to the United Nations Convention to Combat Desertification (Land Degradation)
16. Cyclone Hazards: Analysis of Existing Cyclone Sea-State Protection and Disaster Potential-Avarua Town and Avatiu Harbour
17. Avatiu Harbour – Western Side Development Study
18. Analysis and Numerical Modeling of Cyclone Sea-States – Avarua and Nikao Areas
19. Coastal Protection and Port Improvements in the Cook Islands-JICA.
20. Hurricane Sea Surge –Design and Costs: Avarua/Avatiu Commercial & Government District Project Proposal

Appendix 8 List of National Obligations under the Conventions

(Source: GEF/UNITAR, 2001)

UNCBD - Biodiversity

1. Effective National Biodiversity Planning
2. Identification and Monitoring of components of biological diversity important for its conservation and sustainable use
3. In-situ conservation of biological diversity
4. Respect for and preservation of knowledge, innovations and practices of indigenous and local communities
5. Ex-situ conservation of components of biological diversity, including for collection of biological resources from natural habitats for ex-situ conservation purposes
6. Develop and introduce economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity.
7. Establish and maintain programmes for scientific and technical education and training
8. Promote and encourage understanding of the importance of, and the measures required for, the conservation of biological diversity
9. Introduce appropriate arrangements to ensure that environmental consequences of relevant programmes and policies are subject of environmental impact assessment and that significant adverse impacts on biological diversity are minimised
10. Develop and introduce appropriate measures to ensure safety regulations in handling living modified organisms resulting from biotechnology
11. Develop and introduce measures regulating the access to genetic resources and to provide access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biological diversity
12. Take legislative, administrative or policy measures, as appropriate, with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilisation of genetic resources
13. Establish and operate clearing-house mechanism to promote and facilitate technical and scientific co-operation
14. Implement Cartagena Protocol on Biosafety
15. Access financial resources provided via the financial mechanism of the Convention and/or via other donors
16. Other National Priorities (describe them)

UNFCCC – Climate Change

1. Institutional capacity-building, including the strengthening or establishment, as appropriate, of national climate change secretariats or national focal points
2. Enhancement and/or creation of an enabling environment
3. National communications
4. National climate change programmes
5. Greenhouse gas inventories, emission database management, and systems for collecting, managing and utilising activity data and emission factors
6. Vulnerability and adaptation assessment
7. Capacity-building for implementation of adaptation measures
8. Assessment for implementation of mitigation options
9. Research and systematic observation, including meteorological, hydrological and climatological services
10. Development and transfer of technology

11. Improved decision-making, including assistance for participation in international negotiations
12. Clean development mechanisms
13. Needs arising out of the implementation of Article 4.8 and 4.9 of the Convention
14. Education, training and public awareness
15. Information and networking, including the establishment of databases

UNCCD - Desertification/Land degradation

1. Education and public awareness
2. Transfer, acquisition, adaptation and development of environmentally sound, economically viable and socially acceptable technology
3. Training and technology regarding the use of alternative, renewable energy sources (aimed particularly at reducing dependence on wood for fuel)
4. Promotion of alternative livelihoods, including training in new skills
5. Training of decision-makers, managers and personnel responsible for collection and analysis of data for disseminating and using early warning information on drought conditions, water resources and for food production
6. Information collection, analysis and exchange (relevant short-term and long-term data and information; particularly to ensure systematic observation of land degradation in affected areas and to better understand and assess the processes and effects of drought and desertification)
7. Effective early warning and advance planning for periods of adverse climatic variation (provided in appropriate forms)
8. Research and development
9. Technical and scientific co-operation in the fields of combating desertification and mitigating the effects of drought through appropriate national, sub-regional and international institutions
10. Joint research programmes (also involving public and private sector) for the development of improved, affordable and accessible technologies for sustainable development

Appendix 9. List of Personnel with skills in specialized fields

(Source: Turia, 2003)

#	Name	Field	Agency	Designation
		Policy		
1.	Vaitoti Tupa	Environment	NES	Director
2.	Tania Temata	MEAs	NES	International Advisor
3.	Parsha Carruthers	Climate Change	NES	Climate Change Technical Adviser
4	Nga Mataio	Agriculture	MOA	Secretary
5	Josh Mitchell	Fisheries	MMR	Director Policy
6	Ian Bertram	Marine Resources	MMR	Secretary
7	Tuaere Tangianau	National	Private	Consultant
8	Vaine Teokotai	Health	MOH	Secretary
9	George Turia	National	DPM Office	CEO
10	Repeta Puna	Education	MOE	Director Education Policy
11	Vaine Wichman	National	MP	Development Economist
12	Edwin Pittman	Foreign Affairs	MFAI	Secretary Foreign Affairs
13	Nandi Glassie	Outer Islands	OMIA	Secretary
14	Ken Matheson	Education	MOE	Secretary
15	Terry Hagen	Justice/Land	MOJ	Secretary
16	Helen Wong	National	Private	Consultant
		EIA		
17.	Joe Brider	Technical assessment	NES	Enforcement and Compliance
18.	Vavia Vavia	Technical assessment	NES	Enforcement and Compliance
19.	Sam Brown	Impact assessment	Private	Consultant
20.	Teariki Rongo	Impact assessment	Private	Consultant
		Infrastructure & Transport		
21	Ata Herman	Civil engineer	MOW	Secretary
22	Ben Parakoti	Water works	MOW	Director
23	Tekao Herman	Civil engineer	MOW	Director Waste Management
24	Mathilda Tairea	Waste Management	MOW	Project Manager
25	Louis Teiti	Building Controller	MOW	Inspector

26	Angaroa Williams	Building Controller	MOW	Inspector
27	Tenga Mana	Civil Engineer	OMIA	Director – Technical Services
28	Aukino Tairea	Transport Regulations	MOT	Secretary
29	Andrew McBirney	Harbour facilities	Port Authority	CEO
30	Joe Ngamata	Airport Development	Airport Authority	CEO
31	Ewan Smith	Aviation Industry	Air Raro	Director
		Energy		
32	Mata Nooroa	Renewable Energy	MOW	Director Energy Division
33	Tangi Tereapii	Renewable Energy	MOW	Senior Officer
34	Tom Wichman	Energy Technology	Private	Consultant
35	Tereapii Timoti	Power Generation	TAU	CEO-Te Aponga Uira
36	Okirua Apera	Mobil Oil	Mobil	CEO-Mobil
		Agriculture		
37	William Wigmore	Agriculture Research	MOA	Director
38	Maja Poeschka	Entomology	MOA	Entomologist
39	Pavai Taramai	Quarantine	MOA	Quarantine Officer
40	Kato Tama	Soil Scientist	Private	Businessman
41	Otheniel Tangianau	Forestry Outer Islands Governance	OMIA	Project Management
42	Tinirau Tamarua	Livestock	OMIA	Project Management
43	Tiria Rere	Livestock	MOA	Livestock Officer
		Biodiversity		
44	Gerald McCormack	Natural Heritage Research	Nat. Heritage	Director
45	Elizabeth Munro	Biodiversity	NES	Biodiversity Coordinator
46	Ian Karika	Conservation	TCA	Conservationist
		NGOs & Community Development		
47	Mona Matepi	Community Adviser	WWF	OIC-WWF Cook Islands
48	Anna Passifield	Community Adviser	TIS	Volunteer
49	Vereara Maeva Taripo	NGO adviser	CIANGO	President
50	Imogen Ingram	Community adviser	TIS	Secretary
51	Noelene Browne	Community Adviser	AMMAG	President
		Private Sector		
52	Theresa Manarangi Trott	Business advocacy	Chamber of Commerce	President
53	Te Tika Mataiapo	Tourism Council Environment	CI Tourism Env.	Chairperson

		Committee	Committee	
54	Chris Wong	Tourism	CI Tourism Corporation	CEO
		Legal		
55	Peter Graham	Legal advisor	MMR	Legal advisor
56	Tingika Elikana	Legal advisor	Crown Law	Legal advisor
57	Janet Maki	Legal advisor	Crown Law	Solicitor General
		Weather and Disaster management		
58	Arona Ngari	Climate and Weather observation systems	Met Services	Director
59	Metuatini Tangaroa	Disaster management	Police	Director
60	Pira Wichman	Disaster Management	Police	Commissioner

Appendix 10 Donor Contributions to Environment Sector from 1999-2003

DONOR CONTRIBUTIONS TO ENVIRONMENT SECTOR FOR THE PERIOD 1999-2003

(All amounts in NZ\$)		1999	2000	2001	2002	2003	Total
UNDP-GEF	Envi. Service		206,000	400,000			606000
UNDP-NBSAP	Envi. Service				136,187	213,338	349525
UNDP-Int. Waters	Envi. Service				136,583	160,482	297065
UNDP-NCSA	Envi. Service					39,142	39142
UNDP-Trina	NDMO			22,723			
UNEP-Biosafety	Envi. Service					143,260	143260
FORUM SEC.	NDMO			20,382			
SPREP	Envi. Service	65468	120,000	50,000	1,999,974	156,568	2392010
NZAID	Envi. Service		300,000	100,000			400000
	Met. Service	70,000	60,000	20,000			150,000
ADB	Envi. Service		100,000	250,000			350000
	Waste (MOW)	500,000	440,000	2,100,000			3040000
Total		635468	1226000	2963105	2272744	712790	7767002

Source: Aid Management Division, MFEM, 2004.

Appendix 11 Multilateral Environment Agreements Applicable to the Cook Islands

<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.

