



South Pacific Regional Environment
Programme

Regional Environment Technical
Assistance (RETA) 5403

**Strengthening Environment
Management Capabilities in Pacific
Island Developing Countries**

Cook Islands

Review of Environmental Law

by Mere Pulea

1992

With assistance from the Asian Development Bank,
IUCN - The World Conservation Union and the
Australian Centre for Environmental Law

USP Cataloguing-in-Publication Data

South Pacific Regional Environment Programme
Review of Environmental Law in the Cook Islands.
(Strengthening environment management capabilities
in Pacific-Island developing countries)

1. Environmental law - Cook Islands I. South
Pacific Regional Environment Programme. Regional
Technical Assistance Project II. Title III. (Series)

344.046099623
ISBN 982-04-0052-X

Prepared for publication by the Australian Centre for
Environmental Law, Faculty of Law, University of Sydney,
Australia.

© Copyright South Pacific Regional Environment

Programme, 1993.

The South Pacific Regional Environment Programme
authorises the reproduction of textual material, whole or
part, in any form, provided appropriate
acknowledgement is given.

South Pacific Regional Environment Programme

Regional Environment Technical
Assistance (RETA) 5403

**Strengthening Environment
Management Capabilities in Pacific
Island Developing Countries**

Cook Islands

Review of Environmental Law

by Mere Pulea

1992



IUCN
The World Conservation Union

ACEEL
AUSTRALIAN CENTRE FOR ENVIRONMENTAL LAW



FOREWORD

This Review of Environmental Law in the Cook Islands has been implemented as an important component of the Regional Environment Technical Assistance (RETA) Project. The RETA project has been developed to address environmental issues in a number of Pacific countries. It has been funded by the Asian Development Bank with technical assistance from IUCN - the World Conservation Union. The RETA project is an important regional initiative, which reflects the need for careful management of the Pacific environment.

Pacific Islanders have lived in close harmony with their island environments for thousands of years and are well aware of its importance to their way of life. Pacific peoples face the complex challenge, in common with many other countries of the world, of integrating economic development with the need to protect the environment. This is the primary aim of sustainable development, and must be addressed if the Pacific way of life is to survive.

The introduction of appropriate legislation represents one important means by which sustainable development can be achieved in the Pacific. A fundamental first step is the identification and review of existing environmental legislation in each Pacific country.

The Review of Environmental Law in the Cook Islands contained in this publication is indeed timely. It has identified the principal laws relating to the environment and to natural resource management. These laws have then been reviewed in terms of their effectiveness in addressing the major environmental issues existing in the country. The research has had a particular focus on the development of practical recommendations that build on the findings of the Review.

This Legal Review is an important step along the road to improved environmental management in the Pacific region. It is important to build on this base in order to ensure that environmental law reflects the unique needs and circumstances of each Pacific country. It is also important that this law reflects, and where appropriate, incorporates, customary laws and practices that relate to environment protection.

The Review forms part of a series of five Legal Reviews; the other countries reviewed are the Federated States of Micronesia, the Republic of the Marshall Islands, the Kingdom of Tonga and Solomon Islands.

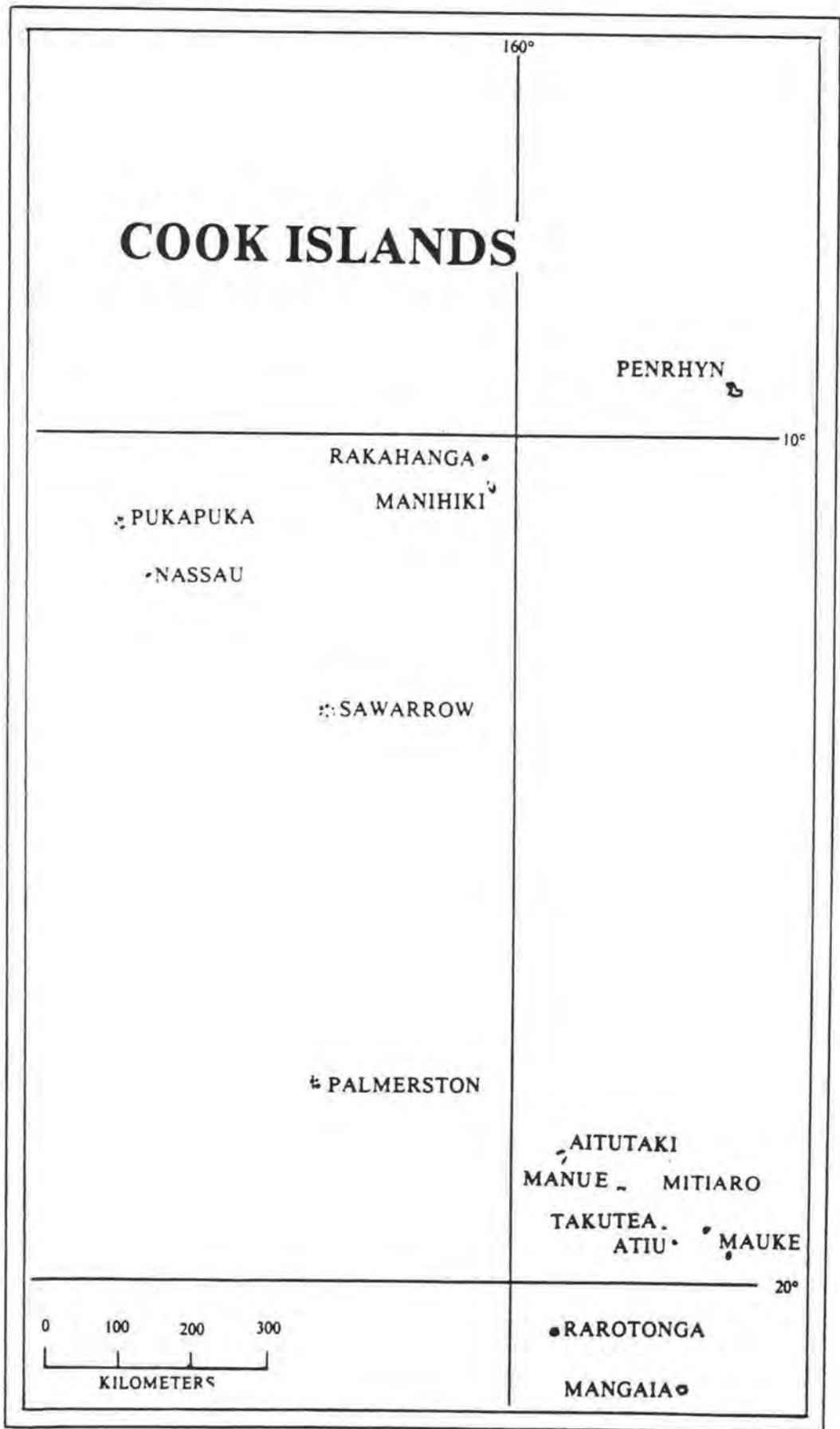
This and the other four Legal Reviews have been supported by the Environmental Law Centre of IUCN - the World Conservation Union. I would like to thank the Centre for its financial and technical assistance. I would also like to pay tribute to Ms Mere Pulea, who prepared this Review and the Review for the Kingdom of Tonga. The work of Ms Elizabeth Harding, who prepared the Reviews of Environmental Law in the Republic of the Marshall Islands and in the Federated States of Micronesia, and Professor Ben Boer, who prepared the Review of Environmental Law in Solomon Islands, and who was responsible for coordinating and editing the five Reviews, should also be recognised here.

Vili A Fuavao
Director
South Pacific Regional Environment Programme

CONTENTS

Foreword	
Map of the Cook Islands	(i)
Summary of Principal Suggestions and Recommendations	(ii)
Acknowledgements	(vi)
CHAPTER	
1. Introduction	1
2. Constitutional & Administrative Structures	3
3. Land Tenure	11
4. Physical Planning & Assessment	19
5. Agriculture	25
6. Forestry	36
7. Fisheries	38
8. Water Supply and Water Quality	47
9. Waste Management and Pollution	51
10. Tourism	58
11. Biodiversity Conservation	64
12. Wildlife Conservation	69
13. Protection of National Heritage	72
References	74

COOK ISLANDS



SUMMARY OF PRINCIPAL SUGGESTIONS AND RECOMMENDATIONS

CHAPTER TWO

Constitutional and Administrative Structure

It is recommended that:

1. further training in such areas as Environmental Impact Assessment, pollution monitoring, soil conservation, protected area management, wildlife protection and control be considered for members of the Conservation Service (Agency) to develop their expertise in these matters;
2. consultation be carried out on a regular basis where environmental responsibilities are fragmented between line Ministries and the Conservation Service (Agency) to sort out areas that are likely to cause confusion;
3. the engagement of a corporate planner be considered to assist the Conservation Service (Agency) in finding ways to obtain funds to implement its various programmes;
4. an independent assessment be made of the institutional structure of the Conservation Service (Agency) and to investigate ways in which the Conservation Service (Agency) could be supported by, and be more closely linked to, the Office of the Prime Minister or the Central Planning Office.

CHAPTER FOUR

Physical Planning and Assessment

It is recommended that:

5. the *Land Use Act* be updated to include provisions for Environmental Impact Assessments;
6. some consideration be given for the preservation of buildings of special architectural or historic interest in the current land use and building legislations;
7. an explanatory guidance document covering all aspects of the *Land Use Act* be developed as part of a community education programme;
8. alternative methods be investigated to enforce those laws which are environmentally sound but remain unpopular with members of the community;
9. the new *Environment Bill* be enacted.

CHAPTER FIVE

Agriculture

It is recommended that:

10. a review be carried out on all the laws that regulate agricultural activities with the view to updating old laws to reflect modern and current agricultural practices;

11. the existing laws providing for and regulating agricultural activities be strengthened in order to deliver the range of environment protection measures necessary to prevent or minimise the risks to the environment and fragile ecosystems caused by agricultural activities;
12. some consideration be given to the possible incorporation of a number of Acts into a single *Agricultural Act*;
13. the *Land Use Act* be applied for the purpose of zoning agricultural land.

CHAPTER SIX

Forestry

14. The development of any forestry legislation needs to be compatible with the *Land Use Act 1969*, any conservation legislation (e.g proposed *Environment Bill*) and in line with a comprehensive statement on national forest management objectives.
15. A Code of Logging, Environmental Impact Assessments and measures to prohibit fires be considered and included as part of the legislative package for forestry.
16. The proposed *Environment Bill* be examined to cure any overlapping management responsibilities in relation to forests between the Agency for the Environment and the Ministry of Agriculture and Forests to cure any confusion and potential conflict that is likely to occur.
17. The United Nations Conference on Environment and Development *Forest Principles* be examined and principles incorporated where appropriate when formulating forestry laws.

CHAPTER SEVEN

Fisheries

18. It is recommended that the Environment Agency's management responsibilities in the proposed *Environment Bill* for Cook Island waters and water resources be assessed in the light of the management responsibilities of the Ministry of Marine Resources over the same areas and resources to avoid any conflicts that may arise.

CHAPTER EIGHT

Water Supply and Water Quality

It is recommended that:

19. the proposed *National Water Authority Bill* and the proposed *Environment Bill* be assessed together to identify areas where there are overlapping responsibilities to avoid any conflict that is likely to arise in the management of water resources;
20. the protection of the catchment areas and ground water lenses be given more protection than presently exists;
21. the *National Water Authority Bill* be considered urgently with a view to implementation.

CHAPTER NINE

Waste Management and Pollution

It is recommended that:

22. that emissions from sand quarrying and motorised vehicles be assessed with a view to establishing air quality objectives.
23. that regulations be considered for the prevention of marine pollution;
24. Article 9 of the *SPREP Convention* which relates to airborne pollution be considered when drafting detailed provisions to prevent and control air pollution under the proposed *Environment Bill*;

CHAPTER TEN

Tourism

It is recommended that:

25. the *Tourist Authority Act* and the *General Licensing Act* be assessed in the light of the environmental directions given in the Tourism Master Plan;
26. that Environmental Impact Assessment guidelines be established in the interim and applied to tourism projects (e.g. hotel construction) before approval is given to implement the projects;
27. other destinations within the Cook Islands which have potential for ecotourism be investigated.

CHAPTER ELEVEN

Biological Diversity

It is recommended that:

28. the involvement of landowners in the management of protected areas be a continuing process to ensure the success of the protected area system.
29. the use of Ra'ui to protect species and habitats be considered and, if feasible, to be given legislative support;
30. Article 14 of the *SPREP Convention* and the *Apia Convention* be examined when details of National Parks and Reserves outlined in Part III of the proposed *Environment Bill 1992* is drafted to ensure that the obligations under both Conventions have been complied with;
31. moratoriums to protect species and habitats be considered;

CHAPTER TWELVE

Wildlife Conservation

The value that the Cook Islands place on wildlife should be clearly reflected in strong legislative provisions. It is suggested that:

32. specific wildlife legislation capable of standing alone be considered, or alternatively, adequate measures to protect wildlife and endangered species be incorporated in the proposed *Environment Bill 1992*;
33. consideration be given to accession to the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*.

CHAPTER THIRTEEN

Protection of National Heritage

It is recommended that:

34. assessment be made of the existing historic buildings in the Cook Islands with a view to ensuring their preservation. Where a specific system for the preservation of historic buildings is instituted, the provisions in the building legislation, the *Land Use Act* and the proposed *Environment Bill* would need to be examined and harmonised with any provisions made to safeguard the national heritage.

ACKNOWLEDGEMENTS

This Legal Review would not have been possible without the assistance and advice received from all resource persons in the various Departments, Ministries, Non-Governmental Organisations and from other individuals who gave up their time to participate in discussions. The advice and the assistance received from the Conservation Service who coordinated this programme in the Cook Islands was invaluable. Ms. Melina Bellini, provided research assistance on a voluntary basis and her contribution to the chapter on Tourism in particular is much appreciated. I am also grateful for the advice received from Mr David Sheppard, RETA Project Co-ordinator and Professor Ben Boer, Corrs Chambers Westgarth Professor of Environmental Law, University of Sydney and Team Leader of the RETA Legal Reviews is much appreciated. I alone am responsible for the deficiencies in this Review.



CHAPTER ONE

COOK ISLANDS REVIEW OF ENVIRONMENTAL LAW

1.1 Relevant Legislation

Conservation Act 1986/87
Environment Bill
Sustainable Environment Development Bill
Marine Resources Act 1989

1.2 Introduction

This Legal Review of Environmental Law in the Cook Islands was conducted from 10 March to 2 April 1992. The Review is part of the South Pacific Regional Environment Programme (SPREP) country assistance agenda through the Regional Environment Technical Assistance (RETA) project to strengthen environmental management capabilities in Pacific developing countries. This RETA Project is funded by the Asian Development Bank and IUCN, the World Conservation Union. The Legal Review is funded through the Environmental Law Centre input to the RETA Project. The purpose of the Review is to collate information, summarise the legal provisions recognised as 'environmental' and analyse their effectiveness in addressing environmental issues.

1.3 Sustainable Development

Perceptions about the environment have drastically changed at all levels, with the growing realisation that there are limits to the capacity of the environment to withstand both short and long term degradation. In the last decade, environmental problems have been more defined not only in terms of direct damage to the physical environment and human health but also in terms of their effect on the very ecosystem which sustains life. The need to protect and conserve the environment itself has become more urgent, especially in small island countries mainly dependent on a subsistence economy and a majority of the population dependent on local resources. The lives of people in such communities are linked to the sustainability of their resources. The use of resources for food supply, or for ornamental (coral, pearls, giant clams) or scientific purposes (for pharmaceuticals products) or ecosystems that are permanently destroyed through agricultural development or the growth of urban settlement can put valuable resources at risk to the point of extinction if they are unable to renew themselves. The World Conservation Strategy (IUCN:1980) makes the comment that conservation and development have so seldom being combined that they often appear, and are sometimes represented as being, incompatible.

The *World Conservation Strategy* further points out that conservation and sustainable development are mutually dependent. For development to be sustainable it must take account of social and ecological factors, as well as economic ones (IUCN, 1980:1). *Agenda 21*, an action strategy for the next decade generated by the Conference on Environment and Development United Nations, encourages the integration of environment and development in the decision making process. Chapter 8 of *Agenda 21* sets out in detail the actions to be taken to integrate environment and development. Countries are encouraged to incorporate the concept of environment and sustainable development into their laws and regularly assess their laws and regulations to make them more effective.

Legislation is seen as only one measure to ensure sustainable development and to prevent and minimise the adverse effects on the environment, whether by the activities of human or by natural causes, but environmental law, though a powerful tool, cannot be solely relied upon. The scale of environmental problems dictate other measures (such as environmental education) to support and supplement environmental legislation. The changing perceptions concerning the environment have also resulted in changing perceptions with regard to the environmental provisions in the regulatory framework. This Legal Review is part of that changing perception as

the protection and conservation of the environment cannot be effectively carried out without first making some assessment of the strengths and weaknesses of the existing environmental provisions and the institutions which implement them. More importantly, a review of this nature provides the basis for the development of new environmental policies and laws.

1.4 Environmental Conventions

The growth in the number of environmental Conventions in the Pacific in the last decade and the number of environment-related Conventions to which Pacific countries have become Contracting Parties represents a major response to tackle environmental problems at the international, regional and national levels. The emergence of a distinct body of law considered as 'environmental' is beginning to make an impact on Pacific law and practice. This is also evident in the Cook Islands where some of the newer pieces of legislation, such as the *Marine Resources Act 1989*, adopts environment protection and conservation principles in a more direct sense. The 1986/87 *Conservation Act* (not legally in force) and its predecessor, the 1975 *Conservation Act*, as well as the proposed *Environment Bill 1992* demonstrate the efforts made to introduce substantial legal reforms at the national level to protect and conserve the environment and to utilise resources within the ideology of 'sustainable development'.

1.5 Scope of Review

Laws brought into the scope of this Review cover those affecting the population, natural resources, wildlife and the nation's heritage. A chapter briefly describing the land tenure system has been included for two reasons, namely, to increase our understanding of the complexities of the tenure system and that land use is essentially determined by the limitations of the natural environment and the nature of ownership. The provisions of the 1986/87 *Conservation Act* have been discussed in some detail throughout the Review as, whilst the Act is not legally in force, the Conservation Service, in the absence of enabling legislation, relies on its provisions to guide its work. Essentially, a broad definition of environmental law has been chosen to include laws which are not only concerned with the protection of the physical environment, but also laws which are concerned with facilitating the sustainable development of resources.

There already exists a substantial body of environmental law in the Cook Islands. Apart from the Conservation Acts and the proposed *Sustainable Environment Development Bill* (now the *Environment Bill 1992*), environmental provisions are scattered in a number of pieces of legislation and Council By-laws. In practice, the primary focus of this Review is on legislation. A number of issues identified during the course of this Review highlight the fact that where adequate environmental provisions exist, enforcement and non-compliance have been found, in some cases, to lag. The scope and potential for including environmental conditions in leases and licences requires investigation. Customary law also has a great deal to offer. The use of Ra'ui (customary prohibition) was highlighted in the public Environment Seminar held in Rarotonga in March 1992, but research needs to be done by Cook Islanders to identify those other customary practices that are sensitive to the environment so that they can be reinforced through education and, where necessary, by appropriate legal procedures.

It must however be borne in mind that it is not possible to analyse in depth the effectiveness of any statute or by-law within the short time span of this Review, as at this stage the identification of all laws affecting the areas listed in this Review and a description of the contents of the laws are just the first steps. Sometimes Ministries and Departments are not aware of the range and content of laws that provide for or regulate their many responsibilities. In view of this, some of the areas of law described contain both an evaluation of the environmental measures as well as a detailed description of the content of laws. The critique of the effectiveness of any statute or by-law would involve a much more complicated process, namely the detailed examination by the various Ministries and Departments of the laws for which they are responsible. However, with the changes brought about by environmental education and awareness, the various laws cited in this Review have been examined for the inclusion of environment protection measures where the existing laws are silent on such matters and for a description of environmental provisions that exist in the current laws.

CHAPTER TWO

CONSTITUTIONAL AND ADMINISTRATIVE STRUCTURE

2.1 Relevant Legislation

Conservation Act 1975
Conservation Act 1986/87
Cook Islands Act 1915
Cook Islands Constitution Act 1964
Cook Islands Constitution Amendment (No.9) 1980-81
Cook Islands Constitution Amendment Act 1965
House of Arikis Act 1966
Marine Resources Act 1989
Ministry of Cultural Development Act 1990
Outer Islands Local Government Act 1988
Proposed Environment Bill 1992
Rarotonga Local Government Act 1988

2.2 Introduction

The Cook Islands became a self-governing state in free association with New Zealand in 1965 under the *Cook Islands Constitution Act 1964* and the *Cook Islands Constitution Amendment Act 1965*. The severing of formal ties to New Zealand, in existence since 1901, brought to a close the power to direct the internal affairs of the Cook Islands, thus ending sixty four years of this relationship. Defence and external relations continue to remain the responsibility of the New Zealand government and the Cook Islanders continue to retain New Zealand citizenship rights. The Head of State is "Her Majesty the Queen in right of New Zealand" who is also the "Head of State of the Cook Islands" (Art. 2). Executive authority is vested in Her Majesty under Article 12 of the Constitution. The Queen is represented in the Cook Islands by the Queen's Representative (Art. 3) who is appointed on the advice of the Cook Islands Government.

The Parliament of the Cook Islands consists of 25 members elected by secret ballot under a system of universal suffrage (1/91) (Art. 27(2)). The Constitution makes provision for representation in Parliament from nearly all the islands (Art. 27). The 1980-81 Constitutional amendments (number 9) created an overseas constituency, which includes New Zealand and all other areas outside the Cook Islands (Art. 27(2)(k)).

A cabinet of Ministers, comprising the Prime Minister who presides over a Cabinet of not fewer than six nor more than eight other Ministers (21/91) have the general direction and control of the executive government and are collectively responsible to Parliament (Art. 13(1)). All Ministers are elected members of Parliament (Art. 13(3)). The Prime Minister is appointed by the Queen's Representative, as a member of Parliament commanding the confidence of the majority of the members. The other Ministers are appointed on the advice of the Prime Minister.

2.3 House of Arikis

The Constitution provides for the establishment of the House of Arikis (chief) under Article 8. The Constitutional provisions are supplemented by the *House of Arikis Act 1966* and its amendments. The House comprises eight Arikis representing the Outer Islands and not more than six appointed to represent Rarotonga and Palmerston. Members of the House are appointed by the Queen's Representative (Art. 8(3)). The House is required to meet at least once in every 12 months (Art. 11(2)). The function of the House is to consider matters relating to the welfare of the people of the Cook Islands as may be submitted to it by Parliament and to express its opinion and to make recommendations thereon (Art. 9(a)). It may also make recommendations to Parliament on any question affecting the customs and traditional practices of the Cook Islanders.

2.4 Sources of Law

The Constitution is the supreme law of the land. No Bill can become law until it has been passed by Parliament and has been assented to by the Queen's Representative (Art. 44(1)). Parliament alone has the power to make laws for the 'peace, order and good government of the Cook Islands' (Art. 39(1) and laws 'having extra-territorial operation' (Art. 39(2)). Parliament also has the power to amend and repeal laws.

Other sources include the following:

- any New Zealand statutes made applicable to the Cook Islands by the Cook Islands Parliament (Art. 46);
- New Zealand Acts made applicable to the Cook Islands and Cook Islands Ordinances made prior to 1965;
- the law of England existing on 14 January 1840 (the date New Zealand became a colony of Britain) and English common law and equity as developed by the courts unless inconsistent with any Act or inapplicable to the circumstances of the Cook Islands (s 615, *Cook Islands Act 1915*);
- the ancient custom and usage of the people of the Cook Islands particularly in relation to land (s 422 *Cook Islands Act 1915*).

2.5 Judiciary

The 1980-81 Constitutional Amendment (No. 9) prescribed three Divisions for the High Court: civil, criminal and land. The passing of the *Constitution Amendment Act* (No. 9) also brought about important changes to the judicial and appellate structures. In particular, a Court of Appeal of the Cook Islands was created by the new Article 56 of the Constitution. Appeals from all divisions of the High Court now proceed to the Cook Islands Court of Appeal and the decisions of the Court of Appeal are final (Art. 59(1)). In the past, appeals were directed to the Supreme Court of New Zealand. The Court of Appeal is composed of three Judges, one of whom must be a Judge of either the Court of Appeal or the High Court of New Zealand. The exception to the finality of the decisions of the Court of Appeal of the Cook Islands is provided by the new Article 59(2) which states:

There shall be a right of appeal to Her Majesty, the Queen in Council, with leave of the Court of Appeal, or, if such leave is refused, with the leave of Her Majesty the Queen in Council, from judgements of the Court of Appeal in such cases and subject to such conditions as are prescribed by Act.

2.6 Local Government

The *Outer Island Local Government Act 1988* applies to all islands except Rarotonga. The *Rarotonga Local Government Act 1988* (9/88) is administered by the Rarotonga Island Council but it is understood that no Island Council has been established on Rarotonga as yet.

Wherever the *Outer Islands Local Government Act* applies, local government is in the main vested in the Island Councils. Membership of an Island Council consists of the following:

- (a) the Ariki or the Ui Ariki of the island (if any);
- (b) a representative of the Aronga Mana of the island who is elected at a meeting chaired by the Chief Administration officer of the island;
- (c) the members of Parliament of the island;

- (d) the elected members of the island council constituencies for each island (s 5(1)).

Only elected members are entitled to vote at any meeting of an Island Council although members belonging to (a)(b)(c) categories listed above enjoy the right to speak and be heard at such a meeting (s 5(2)). Each Island Council is empowered to elect a mayor and deputy mayor from the elected members. The mayor is entitled to a deliberative vote and in the event of an equality of votes, he or she is entitled to a casting vote (s 6).

Section 7 of the Act provides the following functions for Island Councils:

- (i) to carry into effect and administer the provisions of Ordinances and By-laws that may be applicable to the Island;
- (ii) to assist in the co-ordination of any activity relevant to the economic and social development of the island;
- (iii) to assist the Government of the Cook Islands in the good rule and government of the islands; and
- (iv) to advise on or determine any matter, question or dispute referred to it by any person or organisation.

Under section 16 of the Act, an Island Council has the power to make, alter or revoke By-laws. Any offence committed against any By-law or Ordinance made under this Act is punishable in the High Court (s 17). It is the responsibility of the Cook Islands Police to ensure the enforcement of By-laws and Ordinances applying to the island (s 19).

2.7 International Conventions

The Cook Islands is a Party to a Number of Conventions concerned with the environment, namely:

- the *Convention for the Protection of Natural Resources and Environment of the South Pacific Region (SPREP Convention)* and related Protocols, namely:
 - *Protocol for the Prevention of Pollution of the South Pacific Region by Dumping;*
 - *Protocol concerning Co-operation in Combating Pollution Emergencies in the South Pacific Region;*
- *Convention on the Conservation of Nature in the South Pacific (Apia Convention);*
- *Law of the Sea Convention;*
- *Forum Fisheries Agency Convention;*
- *South Pacific Nuclear Free Zone Treaty;*
- *Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific;*
- *Convention for the Protection of the Ozone Layer.*

2.8 Administrative Responsibility for Environmental Matters

The Conservation Service is the principal agency dealing with environmental matters. The Service administers seven programmes namely:

- Resource Management and Environmental Impact Assessments;
- Wildlife Protection;
- Environmental Education;
- Soil Conservation;
- Pollution;
- Coastal Zone Management; and
- Cultural Conservation, including the conservation of medicinal trees;

and in addition, has begun a three year trainee employment programme to provide opportunities for people to be employed in the above programmes (see **Recommendation 1**). The Service works in close cooperation with other government departments, non-governmental organisations and with the local Island Councils in the outer islands.

The administrative and statutory framework for the Service was first established by the 1975 *Conservation Act* which created the Conservation Service within the Ministry of Internal Affairs and Conservation. In time the 1975 Act "was considered inadequate with the increase in commercial activities and Government's policy to boost the private sector" (Cook Islands, 1992, page 66). The responsibilities of the Service were increased and strengthened by the 1986/87 *Conservation Act* which repealed the 1975 Act. Under section 4 of this new Act, the Queen's Representative may by Order in Executive Council specify from time to time the parts of the Act or the whole Act to apply to parts or to all of the Cook Islands and Cook Island waters. The Conservation (Application) Order 1987 dated the 10th April 1987 applied the whole Act to Rarotonga and Aitutaki and Parts VII and VIII of the Act to all Cook Islands waters, but unfortunately, five days before the Act itself had been enacted. This procedural error was discovered in May 1991 during the first criminal prosecution under the Act. Although a new Application Order was drafted by the Crown Law Office to remedy this error, the Government decided not to proceed with this amendment but in stead to consider a new and more comprehensive *Environment Act* (Rongo, pers. comm. : 12 March 92).

Although the 1986/87 *Conservation Act* is not legally in force, it is important to discuss as the work of the Conservation Service is largely guided by its provisions. Under the Act, the Conservation Service is established as a body corporate and administered by a Conservation Council consisting of five members chaired by the Director of Conservation (s 8). As a body corporate, the Service is capable of holding real and personal property and can sue and be sued (s 5) for any wrongful action taken or advice given.

One of the key features of the Act is the power given to the Director to prepare draft management plans for the protection, conservation, management and control of national parks, reserves, Cook Island waters and water resources, coastal zones, indigenous forests, and to prevent or minimise soil erosion and pollution (s 30). By necessity, because of its broad powers, the Conservation Service is required to work in close cooperation with other Government Ministries, particularly where responsibilities overlap. For example, the Ministry of Marine Resources has responsibility for the preparation of management plans for marine resources under the *Marine Resources Act 1989*. A similar situation also occurs with other Ministries (Public Works, Agriculture and Forests) in regard to the management plans for soil conservation, indigenous forests or coastal zones. Thus any new environmental legislation envisaged for the Conservation Service must harmonise the responsibilities for environmental management and planning with other Ministries, as overlapping functions could bring about conflict and reduce the effectiveness of the programme. Specific aspects of environmental management should also be well defined and clarified with other Ministries and Departments so that each can be held accountable for their own environmental management functions.

The Act also gives wide powers to Conservation officers to search, arrest and seize where there is reasonable ground to believe that an offence has been committed (ss 18-21)

The Ministry of Marine Resources is empowered under the *Marine Resources Act 1989* to manage fisheries resources and to ensure their sustainable development. The present Government's policy makes clear that economic exploitation of marine resources must take into account conservation and protection measures to prevent the depletion of species beyond sustainable levels. Controls imposed in the lagoon areas must also be designed to prevent pollution. The Ministry has responsibility for monitoring and regulating foreign fishing vessels in the Exclusive Economic Zone (EEZ) and for enforcing the ban on driftnet fishing.

The Ministry of Agriculture and Forestry is generally responsible for matters relating to agricultural activities and forestry. The various agriculture related statutes (see chapter on Agriculture) empower the Ministry to regulate and control the introduction of animals and plants and set standards for the export of agricultural crops. The Ministry promotes research into agricultural crops, forest species, pest and diseases and conducts trials, tests pesticides and biological controls at the Research Station at Totokoitu. Agricultural planning, Extension Services and Quarantine are also part of the Ministry's extensive responsibilities. The Forestry programme established in 1986 includes introduced forest species trials on all types of soil as part of its mandate. In the last four years, 456.4 hectares of forests have been established on fern land. The programme also focuses on conservation of indigenous species as well as on production forestry (Cook Islands, 1992, page 68).

The Ministry of Cultural Development was established in 1990 by the *Ministry of Cultural Development Act*. The functions of the Ministry includes the preservation of cultural heritage, the development of cultural art forms and where appropriate, presentation of the varied elements of ancient and contemporary Cook Islands art and culture. The preservation and use of local wood and materials for the making of local artifacts are also part of the Ministry's function.

The Ministry of Health includes sanitation, waste management, and monitoring the quality of water supplies amongst its responsibilities.

In the Non-Government sector, the Cook Islands Chamber of Commerce has established an Environmental Sub-Committee to assist the Conservation Service. The waste management sector has received particular attention.

2.9 Proposed Environment Bill

During the period of this Legal Review, a new draft Bill entitled *Sustainable Development Environment Bill 1992* was under discussion. This Bill has now been revised and renamed the *Environment Bill 1992*. Similar to the 1986/87 *Conservation Act*, the new Bill establishes the Agency for the Environment as a body corporate which will be composed of an Environment Council and an Environment Service (s 5). The functions of the Agency have been broadened to include more specific matters such as the management and control of endangered species; the prohibition of trade in wildlife and the protection and preservation of sites of national historic and archaeological significance. The functions of the Environment Council have been strengthened to include the coordination of environmental policies and programmes and to advise the Minister responsible for the environment on these matters.

2.10 Environmental Impact Assessment (EIA)

Part II of the Bill makes provision for Environmental Impact Assessments (EIAs) to deter projects being carried out without proper attention being given to the environment. This provision was not included in the 1986/87 *Conservation Act*. As the *Environment Bill* makes provision for the Crown to be bound, every application for a project permit (government or private) must be submitted to the Agency for the Environment for an Environmental Impact Assessment. Section 31 of the Bill sets out the procedure for Environmental Impact

Assessments. Environmental Impact Assessment is essentially carried out to evaluate the actual, cumulative and potential impacts a particular project has on the environment. The nature and magnitude of the impact varies with each project. Special attention must therefore first be given to environmental factors before permission is granted to implement the project.

The establishment of National Parks and Reserves (Part III) and the issue of Environment Notices (Part IV) are also provided for in the revised *Environment Bill*.

2.11 Management Plans

Part V provides the details and the scope for the preparation of Management Plans for:

- wildlife, endangered species and their habitats;
- national parks;
- reserves;
- Cook Islands water and water resources;
- foreshore areas;
- forests;
- soil erosion;
- pollution and waste;
- any other matter relating to the environment which, in the opinion of the Director, will benefit from a management plan.

The Director is required to issue a public notice after a draft management plan is prepared to allow for representations to be made by any interested party. The Minister for the Environment is given power to amend, alter or vary the draft management plan before submitting it to Cabinet for adoption. Cabinet may approve the draft management plan or refer the plan back for revision. Once a Plan is adopted, it will come into force by Order in Executive Council.

The Bill also makes provision for Island Environment Management Plans (s 42). The Director may prepare draft management plans in respect of any particular island and, with the consent of the Island Council and the Aronga Mana, prepare draft plans for the protection, conservation, management and control of any aspect of the environment. The involvement of the Island Councils and the Aronga Mana in the management plans of any of the island environments is the key to the success of island management plans, as Island Councils are composed of representatives from the various parts of the island. The representatives would be in a position to initiate consultation with the people and monitor the implementation of any approved management plan.

2.12 Foreshore

The designation of the "foreshore" in Part IV of the *Sustainable Development Environment Bill* (now in Part V of the revised *Environment Bill*) came under discussion during a public Environment Seminar on March 27 1992 in Rarotonga. The discussions over the area to be designated as "foreshore" highlighted the concerns felt by landowners over the "encroachment" of the Conservation Service (now changed in the revised *Environment Bill* to Agency for the Environment) in an area regarded as essentially private property. In section 40(11) of the revised Bill the designation of "foreshore" draws attention to the fact that there has been an increase over the last decade in the pace and extent of development of residential houses and

tourist accommodation and other facilities (e.g. restaurants) on the foreshore. There is increasing evidence of foreshore decay as a result of these developments.

The *Sustainable Environment Development Bill* has received public comment and further comments from the FAO and the SPREP/RETA Legal Consultants. The FAO Legal Consultant has made useful and extensive written recommendations in her *Report on Legislation for Conservation and Restoration in Land Use*. The Bill is comprehensive and fundamentally sound and with some amendments and additions should become one of the most important pieces of environmental protection legislation in the Cook Islands.

2.13 Conclusion

The Conservation Service (Agency for the Environment) currently undertakes a wide range of environmental responsibilities, sets its own standards and attempts to enforce them. If the proposed *Environment Bill* is adopted, the responsibilities of the Agency will be even greater. This logically envisages the type of Agency which has the capability to undertake environmental measures such as Environmental Impact Assessments, pollution monitoring control, soil conservation, water protection, protected area management, wildlife protection and control etc., and to have expertise and resources to undertake all these tasks. The Agency currently lacks the required technical expertise and the financial resources to undertake some of these tasks. The Agency is given an enormous range of duties but with no real standing of influence with those Ministries and Departments which have some legal sectoral responsibilities for the environment. Current areas of overlapping responsibilities need to be identified and defined and it is suggested that a thorough assessment be made to eliminate the confusion of overlapping responsibilities (see **Recommendation 2**).

The creation of the Agency as a corporate body requires special attention. As a corporate body, the Government underwrites its resources but the Agency, accountable for its activities, is in an extremely vulnerable position as it can be sued for actions taken and presumably also for advice given. The resulting consequences flowing from legal actions taken against the Agency could have disastrous results and undermine its work in the community. The work of the Agency could also be greatly inhibited by the possibility of being sued for its actions. There are suggestions, expressed in the *Cook Islands State of the Environment Report 1992* (page 85), that the Agency should find ways to obtain other financial resources. It proposes an environmental tax charge on tourist accommodation and culture tours but these would only partially solve the Agency's needs for financial resources. The suggestion in the Report (page 85) to engage a corporate funding planner to assist in this regard is supported (see **Recommendation 3**).

The location of the Agency also requires consideration. The importance and current high interest placed on the environment and the range of environmental problems identified in the 1992 *Cook Islands State of the Environment Report* indicate that the proposed Environment Council and Agency under the new Bill will bear the substantial responsibilities for the furtherance of the national environmental agenda. Closer ties with direct responsibilities to the Office of the Prime Minister or the Central Planning Office is recommended. An independent assessment of the institutional structure of the Agency is also recommended (see **Recommendation 4**).

2.14 Recommendations for Chapter Two

It is recommended that:

1. further training in such areas as Environmental Impact Assessment, pollution monitoring, soil conservation, protected area management, wildlife protection and control be considered for members of the Conservation Service (Agency) to develop their expertise in these matters;

2. consultation be carried out on a regular basis where environmental responsibilities are fragmented between line Ministries and the Conservation Service (Agency) to sort out areas that are likely to cause confusion;
3. the engagement of a corporate planner be considered to assist the Conservation Service (Agency) in finding ways to obtain funds to implement its various programmes;
4. an independent assessment be made of the institutional structure of the Conservation Service (Agency) and to investigate ways in which the Conservation Service (Agency) could be supported by, and be more closely linked to, the Office of the Prime Minister or the Central Planning Office.

CHAPTER THREE

LAND TENURE

3.1 Relevant Legislation

Code of Civil Procedure of the High Court 1981
Cook Islands Act 1915
Cook Islands Amendment Act 1946; 1952 & 1954
Land (Facilitation of Dealings) Act 1970
Leases Restrictions Act 1976
Legislative Assembly paper No. 28 on Maori Customs
Moturakau Vesting Act 1965
Rarotonga Motus Prohibition of Leases Act 1881-82
Short Term Crop Leases Act 1966

3.2 Introduction

The emotions which characterise the debates over land matters in Pacific Islands countries make land use planning a challenging issue. Laws relating to land are often the most difficult to implement. Managing land for multiple use and in accordance with the principles of conservation and sustainable development must take cognisance of the intricate weave of custom, law and practice in relation to land.

A brief account of the land tenure system is provided in this Review to serve as a background to those laws (e.g. protected area legislation, land use laws) that rely on the land tenure system. Professor Ron Crocombe has written extensively on the land tenure systems in the Pacific including the Cook Islands. His and other writings have been used to guide this chapter, as well as consultations with Cook Islanders involved with this topic. Further detail may be obtained from the publications listed in the reference at the end of this chapter.

Tenures are human-made and shaped both by external forces and the society they serve. In his article "The Cook Islands, Fragmentation and Emigration" (Crocombe, 1987, page 59; see also Crocombe, 1964), Crocombe describes the main landholding units throughout the Cook Islands during the pre-contact period as localised, patrilineal descent groups. In the southern high islands, three levels of chieftainship were recognised - the Ariki, Mataiapo and Rangatira but only one or two levels in the small atolls of the north. Rarotonga, before the coming of Europeans, had the most elaborate hierarchy of landholding. Atiu, Mauke and Mitiaro had tenure systems broadly similar to that of Rarotonga. Land tenure in Mangaia was determined by the fortunes of war between the major social units. In Aitutaki, the system appears to have been based on several chiefly structures which were in some respects similar to those found on the northern atoll of Tongareva.

The atolls of Manihiki and Rakahanga were inhabited by a population of common origin and there was considerable movement from one to the other, as dictated by food supplies. The small population, ample resources and common descent may explain the relative lack of conflict over land. On Pukapuka, the villagers had a greater role in land administration and matrilineal descent groups had certain responsibilities in relation to land (though less important than patrilineal ones). Palmerston was uninhabited at the time of European contact and was subsequently populated by an Englishman and his three wives from Tongareva, leading to the evolution of a unique and complex system of land tenure shaped by the environmental constraints of a small, multi-islet atoll, the demographic needs of three clans (descended from the three wives), some English and Polynesian principles (from the founding parents), subsistence and market forces, and the requirements of distant governments (Crocombe and Marsters, 1987).

One of the characteristics of the islands in the Northern Group is the large lagoons. Traditionally, rights were claimed over both land and lagoon areas. This changed with the legal

incorporation of the Cook Islands within the boundaries of New Zealand, whereby all land below high water mark was declared Crown land. Traditional claims remained unspoken and recognised in varying degrees, generally more in the atolls than in the high islands, reflecting the geographical differences between the Northern and Southern Groups. In heavily populated Rarotonga, the customary rights to lagoons are now of minimal significance. In the other Southern Group islands they are of minor significance, but in the atolls of growing importance especially now that the cultivation of artificial pearls is becoming an important and lucrative industry.

The introduction of Christianity, the annexation of the Cook Islands by the New Zealand Government in 1901, emigration of Cook Islanders and the decline of the population due to diseases, brought changes to the tenure system in a number of ways. Women became eligible to hold chiefly titles and the powers of high chiefs over land increased greatly for a time last century in all the larger islands except Aitutaki. Increased mobility led to individuals holding land rights over a much wider area and to land rights being acquired by women with increased frequency. Some land was leased by chiefs to Europeans but permanent alienation was prohibited (Crocombe and Marsters, 1987, page 60).

3.3 Customary Rights to Land

In the Federal Parliament of the Cook Islands on 3 August 1894, the Ui Ariki explained the position with regard to land as follows:

The land belongs to the tribe; but its use is with the family that occupy that land. The family consists of all the children who have a common ancestor, together with the adopted children and all the descendants who have not entered other tribes.

At least that is the record in English. The Ariki spoke in their language and no record of that remains. So it is only a loose and general summary, with the actual operation of the system still in dispute.

The lands of the tribe are distributed by the head of the family who is the Ariki or a Mataiapo to the various descent groups who were called Ngati. The Ngati included everyone with close and recognised blood connections.

In 1901, a Land Court was established along the lines of the New Zealand Maori Land Court. Its first aim was to make "idle" land available to European settlers and secondly, to increase production from lands used by islanders by individualising titles thereby 'freeing' the commoners from the control of the chiefs. The first goal was soon abandoned as few European settlers were attracted. The second goal has been implicit in the court's work ever since and has been the major cause of the decline of the chiefly authority.

The Legislative Assembly Paper Number 28 on Maori Customs Approved by the House of Ariki 1970 describes in Part III the Maori Custom regarding land. The paper describes the Ariki, Ui Mataiapo and Ui Rangatira as blood relatives who have rights to land within the family circle. The common people (Unga) are not land owners but live on the lands under the direction of the Ariki, Mataiapo and Rangatira. That, however, was an Ariki perspective and is not supported by the evidence or the legislation. The government did not accept the views expressed in that paper.

In Rarotonga, the three tribes, Takitumu, Te-au-o-Tonga and Pu-ai-kura had full control of land within their own boundaries. In Aitutaki, the four Arikis were over-lapping and each Ariki had an interest in certain lands within the general area of others. In Ngaputoru (Atiu, Mauke, and Mitiaro) also, land of various kin groups were inter-digitated.

3.4 Categories of Land under the *Cook Island Act 1915*

The *Cook Island Act 1915* apports land into three major parts:

- (a) Crown land
- (b) Customary land; and
- (c) Freehold

3.4.1 Crown Land

All land in the Cook Islands is vested in Her Majesty except for those lands which were vested in persons before the commencement of the *Cook Islands Act* or any Crown land which had vested in any person for an estate in fee simple (an "Estate in fee simple" means that the land is free from any restrictions and the title is absolute and the land can be inherited by heirs whether male or female.): s 354.

There are two exceptions to section 354 namely:

- the Island of Nassau is vested in the "natives of Pukapuka (s 7 of the *Cook Island Amendment Act 1952*); and
- the island of Palmerston in the "native inhabitants" (s 2 of the *Cook Islands Amendment Act 1954*), except that 10 acres may be taken by the Crown for public facilities on Palmerston.

Crown land is nominally controlled by the Queen's Representative on behalf of Her Majesty (s 363) and he or she is empowered under section 355(1) to grant Crown land in fee simple or to grant leases, licences, easements or any other limited estate; or rights or interest in Crown land (s 355(1)). The land may also be reserved for a public purpose. Where this is done, no grant can be made over the same piece of land (s 355(2)). The land may at any time be de-reserved by a warrant issued by the Queen's Representative (s 361).

"Public purpose" is defined in s 364 of the Act to include:

naval and military defence, education, public health, pearl and other fisheries, public buildings, wharves, jetties, harbours, prisons, water supply, sites for townships, public recreation, the burial of the dead, all purposes for which money is appropriated by Parliament...and all lawful purposes and functions of the Government of the Cook Islands and also includes any housing purpose...

The Queen's Representative may take any land in the Cook Islands for any public purpose (ss 356 and 357) and anyone who has a right, title, estate or interest which is extinguished or divested by the taking is entitled to compensation from the Crown (s 359). However, if the land taken is Native Customary land, the Land Court, on the requisition of the High Court, must investigate the customary title and determine by order the persons entitled and the relative interests of those persons. The High Court will assess and award compensation accordingly (s 359).

Crown land which is found to be no longer required for a public purpose may be vested in private persons. For example, the *Moturakau Vesting Act 1965* (1/65) was passed to enable the island known as Moturakau, in the Aitutaki lagoon, which had been used as a leper station, to vest in persons found by the Land Court to be entitled. Moturakau was no longer required for a public health purpose upon the closure of the station. The Act also declared that the land should revert to customary land and to be held by persons entitled and their descendants according to native custom and usage (s 2).

Any Crown land held under lease or being subject to any right, title or interest may, on a warrant issued by the Queen's Representative, be resumed for a public purpose, and compensation payable to those affected (s 360). No Crown grant, Crown lease or other alienation or disposition of land by the Crown can be questioned, invalidated or affected by the fact that native customary title to that land has not been extinguished (s 418).

3.4.2 Customary Land

The term customary land is used to describe both native land and native customary land. These words are sometime used interchangeably.

Part XII of the *Cook Islands Act 1915* provides for customary land. Customary land may be declared as Crown land if the Queen's Representative is satisfied that the land is free from native customary title, (because the title has been extinguished or the land has never been subject to native ownership) (s 417).

The limits of native customary land, whether judicially investigated or not, lie at the high water mark (i.e. the line of medium high tide between the spring and neap tides). Any land below the high water mark is Crown land (s 419).

For certain purposes, customary land can be deemed to be Crown land. This situation arises when recovering possession of customary land from any person in wrongful occupation. For the purposes of preventing any trespass or other injury, or for recovering damages for trespass or injury in these circumstances, all such land is deemed to be Crown land (s 420(1)).

The Land Court (a branch of the High Court of the Cook Islands Judicial System) has exclusive jurisdiction to investigate the title to customary or uninvestigated land and to determine the interests of owners but it is within the jurisdiction of the Land Appellate Court to determine whether any land is customary or not (s 421). However, by virtue of Article 48 of the *Cook Island Constitution Amendment (No. 9)*, the Land Court's jurisdiction does not extend to the islands of Mangaia, Pukapuka and Mitiaro. Land matters in these islands are to be dealt with in accordance with local custom unless the Aronga Mana (the traditional chiefly authority) of an island requests the assistance of the Land Court (cl. 48(3)(a)(b)(c)).

The Land Court is empowered to investigate any title to native land in accordance with ancient custom and usage (s 422). However, the Court does not insist on "ancient" custom. For example, it accepts that women can now hold chiefly titles, and now hold equal land rights with men, which they did not under ancient custom. The Court also accepts bi-lateral inheritance, which was also not acceptable under ancient custom.

The Court may make one of the following Orders:

(a) Freehold Orders

After investigation and determination by the Land Court, a Freehold Order may be made which defines the area and the persons entitled to the land and their interest in the land (s 423). The effect of the Freehold Order is to vest the land in the names of the persons entitled to a legal estate in fee simple in possession in the same way as if the land was granted to those persons by the Crown. The land then ceases to be customary land and becomes Native Freehold land (s 424). If two or more persons are named in the Freehold Order as entitled to land, those persons hold the land as tenants in common in shares expressed in the Order (s 425). In practice, in most cases, large numbers of people hold rights in common to a single plot of land.

(b) **Ariki Land:**

Where any land belongs to an Ariki or Native Chief by operation of native custom, the Land Court in making a freehold order must declare accordingly and the land must vest in fee simple in the Ariki or Native Chief and successors in office as if they were a corporation sole (s 426).

The Code of Civil Procedure of the High Court 1981 sets out the procedures to be followed when application is made for orders to be issued by the Land Court. A brief description here is useful as it emphasises the complexities of customary tenure and describes further the ways in which land can be held.

3.5 Application for investigation of title

- (i) Any person claiming to have an interest in customary land may apply to the Court to have the title to such land determined (s 341). The submission of a survey plan is mandatory with every application. The Court may also direct that all claims likely to affect the order sought must be made in writing within a time specified by the Court. No claims or applications will be admitted after the time specified except by leave of the Court and subject to terms and conditions the Court may impose (s 344). Information required before the hearing could include the material grounds for the claim, the boundaries of the land, the genealogical tables, the names and approximate locations of cultivations, settlements, places of historic interest and any signs of occupation (s 345). The Court may also, during any stage of the proceedings, direct the applicant to produce a list of the names and addresses of all persons admitted by him or her as claiming and entitled with him or her to the land. Every name determined by the Court to be included in any Order must be signed by the presiding Judge which cannot later be altered except by leave of the Court (s 346).

Other applications that can be determined by the Land Court include:

- (ii) applications to determine Relative Interest. A person who has interest in any land may apply to the court for the determination of relative interests (s 347).
- (iii) application for Partition. Such an application must be accompanied by a plan showing the applicant's proposed partition of the land (s 348).
- (iv) application for an Exchange Order. The Court may make such an Order if the agreement is signed by both parties (s 349).
- (v) application for Succession. Any person claiming an interest in the estate or lands of a deceased person may make application to the Court for an order for succession. Such an application must be accompanied by a memorandum of the applicant's genealogy showing the relationship and right of the applicant and the deceased person to the lands included in the application (s 350).
- (vi) Application for an Order of Confirmation. An application made for an Order of Confirmation for any alienation of land must be lodged together with the instrument of alienation (s 351).

3.6 Other Changes to the Land Tenure System

Freehold land can be held by individuals in the following ways:

- (i) through the leasehold system:

As the sale of land is prohibited, the only transfer permitted (apart from inheritance) is by lease and occupation rights. Leaseholding was formally introduced in 1891 to enable

a few Europeans and Chinese to obtain secure tenure to business premises and small plantations but the area leased has always been very small (Crocombe and Marsters, 1987, page 64). Leaseholding between Cook Islanders was virtually unknown until the 1960s, though customary permission to occupy land in return for a usually unspecified gift was widespread. After self-government in 1965, the then ruling Cook Islands Party proposed to legislate to distinguish rights between "ownership" of the land and ownership of the things growing on the land. A *Short Term Crop Lease Act* was passed in 1966 as the "first trial towards changes in land tenure" in order to protect users with land from the many non-users with an equal legal right to the same land.

Under the *Short Term Crop Lease Act*, a landowner who wanted to plant land in which he or she had some right could obtain the signatures of the majority of resident co-owners, deposit the form with the Registrar of the Land Court and thereon automatically be guaranteed fifteen months undisturbed occupation. This was long enough for a cash crop on farmed land to mature but not long enough to recoup one's investment if heavy secondary growth had to be cleared. In 1967 the period of lease was lengthened to five years.

The *Leases Restrictions Act* passed in 1976 required all leases, sub-leases and assignments to be approved by a Leases Approval Committee (s 3(3)). This introduced a political element in the leasing process. Leases and sub-leases under the *Leases Restrictions Act* do not include any lease under the *Short Term Crop Leases Act 1966* or any lease under five years (including the right of renewal) (s 2). In addition, resolutions passed at any meetings of any owners to lease any land under the *Land (Facilitation of Dealings) Act 1970* required the approval of the Leases Approval Committee before confirmation could be given by the Land Court (s 3(4)). Leases or sub-leases for less than five years are exempted from this requirement. The *Land (Facilitation of Dealings) Act* was designed to overcome the problems of unutilised land of absentee landowners and provided the opportunity for landowners to lease land to others.

Leasing restrictions also extended to certain areas of land. For example, the *Rarotonga Motus Prohibition of Leases Act 1981- 82* (21/1981-82) prohibited the leasing of any land on any of the motus of Rarotonga as set out in the Schedule to the Act (s 2). The areas include Motutapu, Oneroa, Koromiri and Taakoka.

(ii) through Occupation Rights:

In 1946, a scheme was introduced to permit land-holding groups to allot to one or more individual co-owners, exclusive rights of occupation to particular portions of the lands in which he or she (or they) held rights, in order to plant long term crops. Occupation rights were also later extended for housing and agricultural purposes such as the citrus schemes (6). Occupation rights obtained through an agreement by the landowners must be registered with the Land Court.

Section 50 of the *Cook Islands Amendment Act 1946* provides that in cases where the Land Court is satisfied that the wish of the majority of the owners of any native land, being that land or any part of it, should be occupied by named persons (being natives or descendants of natives), an order may be made granting the right of occupation of the land to those persons for periods of time and on such terms and conditions as the Court thinks fit. Anyone occupying the land under a Court Order is deemed to be the owner of the land under native custom and no further Order can be made by the Court without the consent of persons to whom the right of occupation has been granted.

The conditions and rights attached to Occupation Rights include:

- each householder must pay a peppercorn rent in each year as an "atinga" (tribute) for the land;

- so long as the descendants or near relations of the occupier are alive they are deemed to be absolute owners of the house and the land. If the family dies out, the Ariki of the District or his representative may apply to the Court to replace the occupier;
- the occupier may sell or lease his or her rights acquired in the section of land (i.e. his/her own life interest only) and any rent received is the property of the occupier;
- any owner of the house may purchase the soil on which his or her house is built and become the absolute owner provided such arrangements are made with the Court's consent;

Land areas under Occupation Rights are usually quite small, in most cases covering an area of about 1/4 acre (0.10 ha). Some increase in population is expected, particularly in Rarotonga, with the down-turn of the economy in New Zealand and Australia. A large number of landowners returning home could result in an increase in the number of claimants to sections of land with individual occupation rights.

In 1985 the Land Court attempted to solve the problem of "idle" lands resulting from occupation rights granted to absentee landowners, by deciding not to entertain any application for occupation rights from landowners residing outside the Cook Islands at the time the Land Court is in session. More stringent rules were established for out of country applications, and these applications could not be considered unless specific details were given on the intention of the applicant's return to reside in the Cook Islands. These details enabled the Court to decide whether the outside applicant had a stronger claim over those who live permanently in the Cook Islands.

Originally, occupation rights could only be cancelled by the Land Court if the land had not been occupied for 10 years, but to deal with the problem of "idle" lands, the Court has reduced this period to five years and an occupation right will automatically lapse if the applicant/ occupier has not commenced building within five years or within a further two years extension.

A Long Occupation Right (Vested Order) may be made by the Court if any person has lived on Crown land or Customary land without any right for 20 years or more. Such persons can apply to the Land Court for a right to occupy the same land indefinitely. When such right is granted, this is referred to as a Long Occupation Right or Vested Order (Cook Islands 1988, page 20; see also *Land Tenure in the Atolls 1987*, Part 5). Vesting Orders vest rights of landowners in customary land in individuals, thus enabling a member of the family group to obtain a piece of land for personal use.

The leasing of land is becoming a more popular method to deal with land use. But the lands that remain unused because of multiple ownership problems and absentee landowners are still significant. As the number of co-owners increase, the land entitlements decrease with each generation until it eventually becomes impossible to deal with sections of land because of the intricacies of tenure.

A paper entitled "Maori culture approved by the Koutu-Nui and supported in most parts by the House of Arikis in 1977" proposed guidelines and amendments to the *Cook Islands Act 1915* with respect to land. The paper prepared by the secondary level chiefs reaffirmed the principles of customary rights to land through the following recommendations made by the House of Arikis:

- that any land law which is repugnant to Maori custom should be amended or revoked;

- that the only qualification to land ownership must be by a blood right to the source of the land which is the common ancestor or the ancestral land owner. It is recommended that any person who may succeed to land must trace him or herself not only to the persons he or she is succeeding to but also to the common ancestral land owners; and
- that land matters must be looked at from two aspects, namely:-
 - (a) Ownership - the qualification should be by blood right to the ancestral landowner; and
 - (b) Occupation - the qualification should be long usage of land.

They did not define, however, what constituted Maori custom, a matter which is subject to many different interpretations, and has never been resolved.

3.7 Conclusion

The development and intervention of statutes, the granting of occupation rights and leases as described in this chapter are among the factors changing and shaping the land tenure system. The disadvantages associated with land lying "idle" through absenteeism or dispute within the community of owners, the granting of leases to individuals over portions of customary land and multiplicity of right-holding through bi-lateral inheritance, are among the factors changing the character and scope of traditional authority over land. To extrapolate from these generalisations would require a complicated exploration of land tenure which is beyond the scope of this Review.

CHAPTER FOUR

PHYSICAL PLANNING AND ASSESSMENT

4.1 Relevant Legislation

Airports and Airport Authorities Act 1968-69
Building Controls and Standards Act 1991
Building Controls and Standards Regulations 1991
Conservation Act 1986/87
Cook Islands Act 1915
Cook Islands State of the Environment Report 1992
Land Use Act 1969
National Building Code

4.2 Introduction

In the Cook Islands where land is limited and land adjudications plentiful, the difficult task of administering and enforcing any physical planning laws is foremost among current natural resource issues. The current *Land Use Act 1969* lies dormant and unenforceable and is an indication of the significance of this issue. The *Land Use Act* is old law and developing alongside it is a relatively new and fast growing body of law intended to protect and conserve the environment. The merging of past and present laws is changing the basis of land use planning with users facing new restrictions on their land use activities.

The responsibilities for land use planning is shared by several authorities - the Central Government to exercise its powers under the 1915 *Cook Islands Act* to take land for public purposes; the Justice Department under the *Land Use Act 1969*; the Land Court Division of the High Court and the Department of Surveys. There is no Local Government Council established as yet in Rarotonga although a *Rarotonga Local Government Act* was passed on 26 June 1988. There is no specific department dealing with land use planning and there are no known national land use planning policies.

4.3 Statutory Background

The *Land Use Act 1969* (10/1969) administered by the Ministry for Justice is the principal Act dealing with physical planning. Although the Act has been dormant for a number of years because of the effect it could have on the present system of land holdings, it is still useful to record the main features of the Act.

The Act establishes a Land Use Board consisting of five members, one of whom is the Chief Judge of the Land Court who is also the Chairperson (s 9). The function of the Board is to hear and determine submissions from any occupier, persons or groups with respect to:

- any zoning or proposed zoning order;
- application by an occupier for permission to deviate from a zoning order;
- any application concerning the use of land or zoning or other order (s 10(1)).

The Board may also make recommendations to the Minister of Justice to establish any zone or class of zones, the conditions to be attached, and the alteration or rescission of any zoning order (s 10(2)). The Act gives the Board "all the powers necessary to carry out its functions under this Act..."(s 11).

4.4 Zoning

Zoning is the regulation of land according to its nature or uses. It is an administrative allocation of land use which permits only certain uses in some areas, thus allowing the community as a whole to be developed in an orderly manner. Zoning provisions must be reasonably necessary for reasons of public health, safety and general welfare of the community. Since zoning regulates and restricts the use of land, it inevitably affects the rights of landowners, and the question arise as to whether the general welfare of the public is considered as paramount and superceding private rights. The Government's power to regulate zoning is subject to the constitutional limitations for compensation to be paid to landowners for the loss of property rights (s 7).

Under the *Land Use Act 1969*, a zone or zones for land use may be established in any island in the Cook Islands by the Queen's Representative by Executive Order in Council (s 3). Once a zoning order is made, the use of land within the zone created will be in accordance with the provisions of the zoning order. The order will not in any way be deemed an acquisition by the Crown of any right or interest in the land affected (s 4). Zoning orders may provide for the use of land in any one or more of the following aspects:-

- (a) the use of land primarily for public recreation and enjoyment;
- (b) the use of land primarily for tourist accommodation;
- (c) the use of land primarily for residential purposes;
- (d) the use of land primarily for industrial purposes;
- (e) the use of land primarily for commercial purposes;
- (f) the use of land primarily for agricultural purposes;
- (g) the use of land primarily for public works including roads (s 5(1)).

Any zoning order may also include provision for any use incidental or subsidiary to the primary uses designated (s 5(2)).

Once a zoning order is made with respect to any land, the occupier may continue to use the land in the same mannara as the land was used at the date of the zoning order, but he or she is prohibited from making any permanent improvement or alteration to the land or any building except in accordance with the terms of the zoning orders and with the prior consent of the Board (s 6). A person could be guilty of an offence and liable, on conviction, to a maximum fine of \$100 for failure to comply with a zoning order. A further maximum fine of \$20 per day for each day the offence continues can be imposed (s 8).

If at any time while a zoning order is in force, the occupier uses the land contrary to the provisions of the order and ceases to use the land for a period of 12 months, the occupier will not be permitted to resume the "non-conforming use" of the land without first obtaining the consent of the Board. The occupier may make application to the Board to continue to use the land in the same manner as before the issue of the zoning order. If the Board refuses the application, the occupier is entitled to request the Crown to take over the land and to pay compensation in accordance with the provisions of section 357 of the *Cook Islands Act 1915* (s 7).

The Act imposes on the Board the following matters to be taken into account when considering any application:

- (a) the interests of the public generally, which shall be the paramount consideration;

- (b) the needs of an island or part of an island in relation to the use of the land concerning which the application or matter arises;
- (c) any hardship imposed on any occupier or other person affected by the determination of the Board" (s 13).

The Board may also conduct any hearings in public or otherwise as it deems fit (s 11).

Only one Zoning Order has been made since the Act came into force. In 1973, an order was made to zone an area for public recreation and enjoyment, but the Order was revoked in 1983 under the *Revocation of Zoning Order (No. 1)1973*, 1983.

The *FAO Interim Report* to the Government of the Cook Islands on Legislation for Conservation and the Restoration in Land Use dated August 1991 encourages the involvement of the community in the gradual introduction of planning and zoning for Rarotonga (page 3).

4.5 Environmental Impact Assessment

There is no requirement under the *Land Use Act* for an Environmental Impact Assessment (EIA) to be carried out with respect to any project (see **Recommendation 5**). Environmental Impact Assessment is carried out to identify the possible environmental impacts a project is likely to have at the project site, surroundings, natural resources and on the human environment, where applicable. Environmental Impact Assessments is usually carried out at the project formulation stage. The Authority reviewing a project application may approve the project, reject it on the grounds of adverse environmental impacts the project is likely to have or call for more information to be satisfied that the project is unlikely to cause significant adverse impacts on the environment. Environmental Impact Assessments usually apply to projects within the public and private sector.

Cook Islands is a member of South Pacific Regional Environment Programme (SPREP) which enables the Conservation Service (Agency) to draw assistance from this organisation for outside experts to undertake Environmental Impact Assessments when necessary. An Environmental Impact Assessment undertaken on the Cook Islands Government Sheraton project in 1991 by an outside expert is an example of this assistance.

The *Cook Islands State of the Environment Report* states (page 71) that a recent evaluation made on the draft Tourism Master Plan strongly highlights the need for evaluating projects in terms of their potential social and ecological effects and that the lack of evaluation is perhaps the greatest single factor acting against the interests of sustainable development in the Cook Islands. Under the current FAO Soil Conservation Project, a draft of Environmental Impact Assessment guidelines has been prepared for the Conservation Service based on the initial Environmental Impact Assessment provisions proposed for the 1986/87 draft *Conservation Act*.

4.6 Planning and Building Control

Planning control is dependent on the definition of development. Whether buildings are included in this definition in the Cook Islands is difficult to determine as neither the *Building Controls and Standards Act 1991* nor the *Land Use Act 1969* define the term. The erection of buildings on any land changes the use and the physical characteristics of the land. In the Cook Islands, a permit is required to erect a building under the *Building Controls and Standards Act 1991*. For the purposes of the Act, the word 'building' includes any temporary or permanent structure in the ordinary and natural meaning of that word...(s 3). An application for a building permit is not part of the physical planning process under the *Land Use Act* as such applications are submitted to the Ministry of Works for approval.

No one is permitted to erect any building without first obtaining a building permit from the Building Controller unless the building is exempted by regulations made under the Act (12(1)). Under the *Building Controls and Standards Regulations 1991* a building permit is not required for

the erection of a number of structures such as temporary construction work for building maintenance; scaffolding; and for traditional Cook Island Maori buildings such as kikau houses, limited to an area of 25 square meters and using traditional materials and methods of construction (rule 5(1)).

A building permit will be issued if the Building Controller is satisfied with all the documents submitted and that the proposed building complies with the requirements of the National Building Code. As the Cook Islands is often threatened by cyclones, the promulgation of the National Building Code and the *Buildings Control and Standards Act* have made substantive improvements to the standards of buildings.

There is no reference made in the current building laws to the preservation of buildings of special architectural or historic interest. There are a number of buildings which require particular attention, such as ecclesiastical buildings and ancient monuments that are of special interest and form part of Cook Islands' national heritage. It is suggested that some consideration be given to the preservation of such buildings and monuments in the current building and land use planning legislation (see **Recommendation 6**).

4.7 Controls over the Littoral Zone

All foreshores and soil under the water are owned by the Crown. Section 419 *Cook Islands Act 1915* explains the Crown's position as follows:

Native customary title whether judicially investigated or not, shall not extend or be deemed to have extended to any land below the line of high-water mark, and all such land, except so far as it may have been granted by the Crown in fee simple before the commencement of this Act, is hereby declared to be Crown land.

The term "high-water mark" means the line of median high tide between the spring and neap tides (s 419(2)).

The 1986/87 *Conservation Act* makes provision for the protection of the foreshore. Sections 33 and 34 prohibit the removal of any silt, sand, gravel, cobble, boulders or coral from the foreshore and coastal waters without the prior consent in writing of the Conservation Council. An exception will be made if the Council is of the opinion that the removal will result in the restoration or preservation of the natural configuration and features of the foreshore or the natural flow of the water. Any excavation, clearing, paving or dredging or any activity which could result in the alteration of the natural configuration of the foreshore or coastal areas is also prohibited unless prior approval is obtained from the Council. The placing of any fill or material of any kind on the foreshore and coastal areas or the construction or erection of any structure in those areas are also prohibited unless prior approval is obtained.

The Director of Conservation may take action against anyone contravening sections 33 and 34 and order the person to take any remedial action considered necessary. If the person refuses, the Director is under a duty to take any remedial action (s 35). A penalty of up to \$5,000 can be imposed on anyone who commits an offence under these sections and in addition, the High Court may order the offender to restore the damage done or require the offender to pay the Conservation Service the expenses incurred by the Service to restore the damage (s 36).

4.8 Other Laws

This chapter would not be complete without making some reference to other laws that deal with special problems associated with physical planning and land use.

4.9 Subdivision of Land

The *Cook Islands Act 1915* makes provision for the partition of land. Section 429 gives the Land Court exclusive jurisdiction to partition native freehold land. But the jurisdiction is discretionary and the Court could refuse to partition land if it is not in the public interest or in the interest of the owners or other persons who have an interest in the land. Land may be partitioned either into parcels to be held by single owners, or into parcels to be held by a number of owners as tenants in common (s 432). Section 433 imposes a duty on the Court to exercise its jurisdiction in such a way so as to avoid subdivisions that are too small to be suitable for separate ownership or occupation.

4.10 Reservations

The Queen's Representative may by warrant set apart and reserve any native land, whether freehold or customary, for the purposes of a burial ground, fishing ground, village site, landing place, place of historic or scenic interest, source of water supply, church site, building site, recreation ground, bathing place or for any other specified purpose (s 487). Any land included in a native reservation is inalienable (s 489).

4.11 Conservation Areas

One of the important aspects of physical planning is that the characteristics of the surrounding area must be taken into account in any development. In the absence of a single local planning authority to take specific steps to safeguard the characteristics of any area and preserve buildings of special architectural or historic interest in any proposed development, the *Conservation Act 1986/87* provides some remedy. This Act makes provision for the establishment of National Parks and Reserves. The details of these provisions are dealt with more fully in Chapter 11 on Biodiversity Conservation.

4.12 Land for Public Purpose

Any Crown land can be set aside as a reserve for any public purpose (*Cook Island Act 1915* s 356). Public purpose is defined to include any naval or military defence, education, public health, pearl and other fisheries, public buildings, wharves, jetties, harbours, prisons, water supply, sites for townships, public recreation, the burial of the dead and housing (s 364).

4.13 Restrictions on Land Use

The Rarotonga Airport (Land Use Restrictions) Order 1972 made pursuant to the *Airports and Airport Authorities Act 1968-69*, restricts the use of land in the vicinity of the International airport in Rarotonga (s 3). The Rarotonga Airport (Obstruction Removal) Order 1969 authorises the Minister responsible to remove or alter the height or position of any land, building, pole, mast or other structure, trees, shrubs, vegetation or foliage in order to obtain the necessary clearances required.

4.14 Conclusion

1. The existing laws on physical planning are inadequate to meet the current development needs of the Cook Islands. The *Land Use Act 1969*, though dormant for some years, in general does not unduly restrict the level of land use nor does it pose a serious threat in the future. The Act basically dictates that development be orderly through a system of zoning and that any building construction in a zoned area requires the prior approval of the Board. The Act gives the Ministry for Justice a central role in physical planning and establishes the Board as a planning authority. The *Land Use Act* is supplemented by other statutes described above that authorise other specific land uses and restrictions in the use of land. As laws are required to keep pace with current developments, a number of problems can be foreseen. With increases in population, residential areas, industry and towns are likely to spread outwards. There is already some concern expressed with

regard to the encroachment of residential areas on fertile agricultural land. Traffic, access and parking problems are likely to increase with the development of new buildings and tourist facilities. Without proper physical planning, conservation areas, amenities, historic sites and buildings of architectural and historic importance could also be at risk.

2. The *Land Use Act* does provide a legal regime for orderly physical planning to take place. This Act could be amended to include other aspects of physical planning. However, the lack of enforcement of this legislation reveals unresolved fundamental issues connected with land tenure; the resolution of these issues is needed before more detailed and expanded planning legislation can be suggested. The elimination of uncertainties expressed by landowners over the *Land Use Act* could be brought about by the involvement of the community in the gradual introduction of planning and zoning. This suggestion contained in the *FAO Interim Report* to the Government of the Cook Islands on "Legislation for Conservation and Restoration in Land Use" is endorsed. An explanatory guidance document covering all aspects of the *Land Use Act* as part of the community education programme may also be helpful (see **Recommendation 7**).
3. Potential may also exist through the reservation of land for public purposes and through leasing arrangements with landowners to meet physical planning objectives. It is obvious that alternative methods are needed to resolve the problems where sound laws are unpopular and cannot be enforced. Alternative methods merit further investigation (see **Recommendation 8**).
4. The provisions for Environmental Impact Assessment should be made mandatory for development projects. The new *Environment Bill* includes this requirement (see **Recommendation 9**).

4.15 Recommendations for Chapter Four

It is recommended that:

5. the *Land Use Act* be updated to include provisions for Environmental Impact Assessments;
6. some consideration be given for the preservation of buildings of special architectural or historic interest in the current land use and building legislations;
7. an explanatory guidance document covering all aspects of the *Land Use Act* be developed as part of a community education programme;
8. alternative methods be investigated to enforce those laws which are environmentally sound but remain unpopular with members of the community;
9. the new *Environment Bill* be enacted.

CHAPTER FIVE

AGRICULTURE

5.1 Relevant Legislation

Animal Disease Prevention Regulations
Animals Act 1975
Animals Importation Regulations
Cook Islands State of the Environment Report 1992
Copra Act 1970
Land Use Act 1969
Land Use Capability Guideline 1990
Manual for Crop Management and Export Standards of Fruits and Vegetables
Ministry of Agriculture Act 1978
Outer Islands Local Government Act 1987
Pesticide Act 1987
Plant Introduction and Quarantine Amendment Regulations 1980&1985
Plant Introduction and Quarantine Regulations 1976
Plants Act 1973
Short Term Crop Leases Act 1966
Wandering Animals Act 1976

5.2 Introduction

Agriculture in the Cook Islands falls into two main categories:

- subsistence agriculture; and
- commercial agriculture
(though in some cases this distinction is becoming less clear as more subsistence farmers, especially on Rarotonga, are turning to commercial agriculture).

Cook Islands agriculture has been built on a pattern of small family-based units. They form and would appear to continue to form the basic institution in agricultural production. The agricultural sector is characterised by small size agricultural holdings (av. 1.2 hectares) and a complex traditional land tenure system.

In relation to total population, some 67 per cent of all householders are agriculturally active (Cook Islands Census on Agriculture: 21). The main subsistence agricultural activities involve the growing of coconuts, bananas, citrus, pineapple, root crops such as taro, tarua, yams, sweet potatoes cassava and vegetables. The crops are grown in rotation leaving the land to lie fallow for short periods of six months to a year in Rarotonga but a little longer in the outer islands. The fallow period for cash crops is only one season (Hoskins, pers. comm. : 23/3/92). The Agricultural Census 1988 gives a figure of 6769 acres under crop but this may not now be accurate in 1992.

Subsistence agricultural practices pay little attention to environmental safeguards (Hoskins, per. comm. : 23 March 92) but the Department of Agriculture has responded to this situation by providing advice and information to farmers based on a 'management menu'. A 'management menu' is essentially a manual of agricultural management principles and practices which provide guidelines on such matters as the control and eradication of plant pests and diseases and the application of pesticides. The full extent of adverse environmental effects of agricultural activities is unknown but the 'management menu' is a practical strategy designed to assist and direct farmers to adopt sound methods of agricultural practices which attempt to minimise risks to the environment.

In recent years, the traditional methods of farming practices are being replaced by mechanised methods. This is particularly noticeable in Rarotonga where land clearing and preparation by tractors is recognised as an inevitable process in commercialised agriculture, but the full extent of the use of this method on surface land and fragile ecosystems is unknown. It is however possible for mechanised farming to be carried out with minimal impact on the ecosystems and made compatible with efforts to minimise damage to the environment. The Department of Agriculture recognises that there are a number of issues concerning the impact of mechanised farming that must be addressed. Without unnecessarily restricting farmers in the use of their land, the Department has outlined the need for further training of Agricultural Extension Officers so that appropriate advice could be offered in soil conservation and environmentally sound agricultural practices (Hoskins, pers. comm. : 23 March 92).

Commercial agriculture involves cash cropping for the domestic market with the main export crops of:

- taro, exported mainly to New Zealand;
- pawpaws exported mainly to New Zealand and Japan;
- vanilla grown mainly for the export market.

The export of fruit and vegetables is handled and coordinated through three main organisations - the Ministry of Agriculture, the Growers Association, and individual growers and exporters. The Ministry of Agriculture provides a registration system for both growers and exporters and an advisory service to growers on crop management for quality control, standards, grading, packaging and the use of pesticides. The Ministry's Manual for Crop Management and Export Standards of Fruits and Vegetables provide guidance and valuable advice to farmers.

5.3 Agricultural Land

The *State of the Environment Report 1992* describes the soil of the Northern Cook Islands as typically atoll soil derived from reefal material with a thin organic mantle. The soils are infertile, highly porous and capable mainly of supporting coconut and pandanus. There are areas of adequate quantities of organic soil found in marsh depressions which are mainly used for pulaka (*Sprematoma* spp.) crops. The Report points out that the soils of the Southern Cook Islands are more diverse and more suitable for major agricultural uses. With the exception of Rarotonga and Aitutaki, the other islands have large areas of makatea and this has limited the land area available for agricultural use on those islands. The loss of soil through bad land use practices in the high islands in the Southern Group causes drainage problems, especially in the taro growing swamps].

Agricultural development also faces a number of other constraints including distance from markets, irregular shipping to transport agricultural produce from the outer islands, communication, marketing and competition with more developed agricultural countries in export products. Recent housing development is putting considerable strain on land considered prime for agricultural purposes. A number of reasons have been suggested - one being the return of Cook Islanders from overseas with the downturn of the New Zealand and Australian economy. As there is no national policy on land use planning, the use of customary land is entirely at the discretion of landowners.

5.4 Statutory Background

The *Land Use Act 1969* (10/1969) makes provision for the zoning of land primarily for agricultural purposes (s 5(f)) but due to the complexities of the land holding system, and the landholder's right to make fundamental decisions about the use of their land, the *Land Use Act* has not been used for this purpose.

There are a number of statutes, regulations and Local Government By-Laws that regulate and control agricultural activities. In 1990 a Land Use Capability Guideline for the island of Atiu was developed jointly by the New Zealand Department of Scientific and Industrial Research (DSIR) and the Cook Islands Government Survey Department. Although the main purpose of the pilot study conducted to develop the Guidelines was primarily to assess soil erosion, the implications of the study have enormous relevance for agriculture. The pilot study recorded soil types, gradient of the land and other land use capability information which is now being made available (as the data is analysed and recorded) to farmers on Atiu on request. Land Use Capability Guidelines are expected to be developed for all islands.

Agriculture is controlled by the Ministry of Agriculture and Forests established under the *Ministry of Agriculture Act (13/1978)*.

Under the Act, the principal functions of the Department of Agriculture are to:

- (a) promote and encourage the development of all phases of agricultural, pastoral and horticultural industries;
- (b) promote and encourage the growing of bananas, citrus, copra, pineapples and other fruit, market garden and other vegetables, stock and poultry; and
- (c) increase the production of, and promote and encourage the marketing and sale of those products (s 4).

To enable the Department to carry out its functions, the Minister has wide powers to:

- (a) promote and take measures to prevent diseases in poultry, bees and plants; encourage soil management, the improvement of livestock, crops and pastures, and any other industry which the Department should promote and encourage;
- (b) promote public awareness programmes and the dissemination of information;
- (c) establish and maintain experimental, demonstration and research farms for the purposes of sharing knowledge and skills;
- (d) promote the testing of agricultural and horticultural seeds and bulbs;
- (e) promote the testing of machinery used in any of the industries;
- (f) enter into agreements with owners and occupiers to improve the strains of seeds, crops, pasture, horticultural and livestock production;
- (g) promote and investigate the harvesting, storage and transport of products; and
- (h) carry out economic surveys into any aspect of agricultural, pastoral and horticultural production (s 11).

The Minister also has power to conduct special investigations into any matter connected with the agricultural industry (s 12(1)); appoint advisory or technical committees and define their functions (s 13).

5.5 Council By-Laws

The *Outer Islands Local Government Act 1987* permits Island Councils to make, revoke or amend by-laws (s 15). A review of the ordinances and by-laws of Island Councils made between 1916 and 1965 leaves little doubt about the need for a regulatory approach to encourage better agricultural products as well as sound agricultural management practices. The By-laws covering the planting of land, coconut, copra, export of tomatoes, fruit packing and improvement of stock

etc. supplement the various statutes described in this chapter. Whilst the By-laws primarily regulate farming activities and control the quality of agricultural products, by analogy the same language in the By-laws extends to protection of the environment. For example, the Aitutaki Planting of Lands Ordinance 1916, No. 2 not only imposes a duty on every landowner to plant food trees and root crops for the family needs (By-law 4), it also requires every able-bodied man aged 16 upwards to cultivate and plant his land and at the same time keep the land clear of all rubbish and undergrowth (By-law 3).

5.6 The Importation of Plants and Animals

Due to the fragile nature of the atoll soils of the Northern Cook Islands and the dependency on domestic and export agricultural products, there are a number of statutes and regulations in force which are designed to protect plants and animals from introduced diseases and pests.

The importation of plants into the Cook Islands is regulated by:

- The *Plants Act* (21/1973);
- The *Plant Introduction and Quarantine Regulations 1976* (4/1976); and
- The *Plant Introduction and Quarantine Amendment Regulations 1980* (4/1980); and 1985 (3/1985).

The *Plants Act* (which is under review at present by the Office of the Solicitor General) binds the Crown (s 3). In order to protect the Cook Islands from the introduction of plant pests and diseases which could destroy agricultural crops, the Director of Agriculture may define any area under his or her control or, with the consent of the appropriate Minister, establish quarantine stations on Crown land for the detention of imported plant materials (s 4(1)). The Director may give directions on the regulation, management and control of quarantine stations and the disposal or treatment of plant material while in a quarantine station or in transit and specify the length of time the plant material is to be quarantined (s 4(3)).

The Minister may also specify, by notice in the Gazette, the port through which any plant material may be imported either generally or from any specified country or exported (s 5(a)), designate appropriate buildings to be stores for the inspection, grading (s 5(b)) and treatment of plant material after importation or before exportation (s 5(c)). Conditions may also be prescribed for inspection, grading or treatment of the material (s 5(d)).

Emergency restrictions to prevent the introduction of any serious disease or pest into the Cook Islands may also be imposed by the Director at any time by notice in the Gazette.

The restrictions could prohibit or restrict the introduction of any plant material (s 6(1)). Any notice issued is effective for six months from the date of publication and a notice may be renewed from time to time (s 6(2)) as long as the emergency persists.

The *Plants Act* also empowers agricultural inspectors to direct landowners or occupiers to control or prevent the spread of disease or pests (s 11). The Queen's Representative may also, by Proclamation approved in Executive Council, declare that a plant disease emergency exists and that action be taken to prevent the further spread of disease (s 12). Whilst the state of emergency continues, the Minister may specify measures to prevent the spread of the diseases or pests (s 13). Compensation is paid for plant materials destroyed in the emergency (s 13(2)). The Queen's Representative also has additional powers to make regulations by Order in Executive Council to control and prevent the spread of diseases (s 14).

The importation of prohibited plants may be permitted by the Director for scientific purposes but terms and conditions considered necessary to prevent the spread of any pest or disease may be imposed (s 7). Any plant material brought illegally into the Cook Islands can be seized by an Agricultural Inspector (s 8).

The *Plants Act* imposes a duty on Postal and Custom Officers to prevent the introduction of plants and materials and to exercise all powers conferred by the *Post Office Act 1959* and the *Customs Act 1913* respectively (s 9) with respect to the importation of plants.

The Queen's Representative may from time to time, by Order in Executive Council, make regulations to prohibit or restrict the introduction of plant materials having noxious or undesirable characteristics, or being a weak, inferior or undesirable strain. Regulations can also be made requiring the Harbour Board and airport authorities to provide and maintain suitable containers for garbage, rubbish and packing materials (s 10(ii)).

5.7 Export Crop

The control of diseases and pests in crops for export is also provided for under the *Plants Act*. If the Director has reason to believe that any disease, pest or residue of toxic chemical is present in any crop intended for export and that it would be impossible by grading and post-harvest treatment to eliminate the disease, pest or residue to a permissible level, the Inspector may, by notice in writing, direct the grower not to submit the plant for export. Any grower who acts contrary to this direction commits an offence against the *Plants Act* (s 15).

Regulations may be made to prohibit or restrict the export of plant material under section 16(i)). The *Fruit and Vegetables Export Regulations 1982* (2/82) provides that anyone wishing to export fruit or vegetables must comply with a licensing procedure (s 4) and stringent controls apply before any crop can be certified fit for export (s 20). Diseased fruit and vegetables are prohibited from export, but the Secretary for Agriculture may allow the export for scientific research and experimental purposes (s 21).

Although the *Plant Act* makes extensive provisions to prevent the introduction of pests and diseases, experience has shown that this has been difficult to completely control as a certain amount of plants escape detection through unchecked luggage. A way to deal with this situation is for the Department of Agriculture to develop a nursery and grow a large range of plants under controlled conditions that would meet the domestic market and reduce the necessity for plants to be smuggled into the country (Hoskins, pers. comm. : 23 March 92).

The *Copra Act 1970* (17/70) provides for the inspection and grading of copra for export. Where copra is found on inspection to be underdried, infested with insects or unfit in any way it will be rejected for export (s 4(2)). Copra has been at a low market value for a number of years and whilst there is no real economically viable copra market, there is potential for the copra industry to diversify into other marketable products such as timber, jewellery and fine foods (Hoskins, pers. comm.: 23/3/92).

5.8 Quarantine

The *Plant Introduction and Quarantine Regulations 1976* and amendments provide the details and the prerequisites for introducing plant material into the Cook Islands (Part III). The introduction of any plant must be made in accordance with the terms and conditions and the standards that are set out under Part II of the Regulations. Special requirements for introducing certain plant material are provided for under Part IV. These special requirements provide for the introduction of nursery stock, bulbs, corms, rhizomes, tubers and ornamental plants, fruit vegetables, seeds and cut and dried flowers. It is clear from the regulations that this permitting system is also limited by restrictions which the Regulation imposes. The importation of plants from certain countries listed in the Regulations is prohibited.

5.9 Enforcement

The *Plants Act* makes provision for the appointment of inspectors, who may be Agricultural officers (s 17), to enforce the provisions of the Act. Every inspector has the power to detain, open, inspect, examine, sample and submit plants for diagnostic examination, direct re-

shipment, or order quarantine, treatment, destruction or disposal of any plant as considered necessary (s 18).

5.10 Animals

The *Animals Act 1975* provides for the control of animal and animal diseases and, like the *Plants Act*, the *Animals Act* binds the Crown (s 3).

Under section 4(1) of the *Animals Act* any land, including Crown land with the consent of the Minister, could be set apart as a quarantine ground under the control of the Director of Agriculture for the detention of imported animals. No one is permitted to remove any animal from the quarantine grounds without the written consent of the Director (s 4(5)). Animals may only be introduced through those ports declared by the Minister by way of notice in the Gazette (s 5).

The importation of animals is controlled by way of a permit issued specifically by the Minister for Agriculture. Restrictions also apply to animal products, manure, packing material, fittings and fodder (s 6). A permit could contain additional conditions designed to further protect animals within the Cook Islands from diseases brought in from the outside (s 1(1)(2)(3)).

Section 7 of the Act sets out the types of animals that are prohibited from being imported into the Cook Islands. The prohibition of named animals in section 7 (e.g. snakes, venomous reptiles, monkeys) also applies to their eggs, semen and carcass (s 7(2)). The *Animal Importation Exemption Order 1985* allowed for the import from New Zealand of three adult Rhesus marke monkeys by the Rarotongan Marine Zoo Ltd. a company carrying out a business of aquarium and zoo keepers (rule 2). The Order imposed stringent health (rule 3) and security measures (rule 4) to be in place before the importation.

The *Animals Act* imposes a duty on owners, charterers, agent, master or captain of any ship or aircraft arriving in the Cook Islands to prevent any animal from being landed unless permitted by an Inspector (s 8(a)). The Inspector could require an importer to enter into a bond, of a maximum of \$1,000, to secure compliance with the provisions of the Act (s 8(b)). Where any animal or animal product is found on any ship or aircraft and is not being imported into the Cook Islands, the Inspector can direct that the animals and products be retained on board and re-shipped or be seized and destroyed (s 9). Any animal and animal material imported is destroyed unless the Director directs otherwise (s 10(1)(2)). An Inspector has the power to open baggage, packages and examine any goods brought in from overseas (s 10(4)).

The Director may also impose emergency restrictions, for the purpose of preventing the introduction of animal diseases, which may remain in force for a period of six months (s 11). The Act also imposes a duty on Postal and Custom Officers to assist in the implementation of section 10 of the Act by preventing the introduction of uncustomed or prohibited goods through the postal services and ports of entry respectively (s 12). Further power is given by the Act to the Queen's Representative to make regulations by Order in Executive Council to control the importation of animals and prevent the introduction of diseases (s 13).

Part II of the *Animals Act* makes provision for the control the spread of animal diseases. Where an Inspector believes or suspects any animal suffering from Schedule 1 diseases (such as foot and mouth disease, acute fowl cholera)(see Table 1), the Inspector is required to give notice to the Director of Agriculture who will issue a public notice identifying the infected area. Once an infected area is declared, facilities are put in place for the cleansing and disinfection of all vehicles and footwear and any things likely to carry infection from the area (s 16).

An animal disease emergency may only be declared by the Queen's Representative by Proclamation approved in Executive Council and, whilst an animal disease emergency exists, the Minister for Agriculture may:

- require any fit male person over the age of 18 years who lives or works within five miles of the infected area to give assistance, as the Minister specifies, to prevent and eradicate the spread of disease (s 18(4));
- require the owner of any article, equipment, land, premises, ship, aircraft to assist by transferring or permitting the use of equipment or land for a specified period. Compensation will be paid for the use of land or equipment (s 18(4)(b)(5)).

Where an Inspector finds animals suffering from any disease listed in Schedule 2 of the Act (see Table 1), a notice to the occupiers or, where they cannot be ascertained, a public notice, must be issued, requiring that every animal in the same lot be quarantined for a specified period. The declaration remains in force for 21 days but shorter periods may be specified (s 21). Any person who knowingly commits an offence, such as moving any animal out of a disease control area, is liable to a maximum fine of \$1,000 (s 21(7)). The *Animals Act* provides for the conduct of a post-mortem examination on diseased animals to obtain specimens for laboratory examination (s 23). Further provision is made in the Act for regulations to be made to prevent the spread of disease under section 29.

The *Animal Importation Regulations* and the *Animal Disease Prevention Regulations* as provided for under section 13 of the *Animals Act* were both brought into force in 1982. The *Animal Disease Prevention Regulations 1982* revoke the *Animals Regulation 1980* (3/80) (rule 16). The *Animal Importation Regulations 1982* revoke the Regulations made under the *Cook Islands Act 1915* for the protection of indigenous and imported birds and the prevention of the introduction of noxious animals and birds into the Cook Islands 1916 (New Zealand Gazette, 1916, No. 72) (rule 7).

5.11 *The Animal Importation Regulations*

Under these Regulations the ports of Avarua, Avatiu and the Rarotonga International Airport are the designated ports through which animals can be imported into the Cook Islands (rule 3(1)). Animals imported may be detained under surveillance for 30 days or for a period of time directed by the Secretary for Agriculture (rule 3(2)). During the period of detention the animals may be subjected to diagnostic tests and the animals cannot be removed without the written authority of the Secretary for Agriculture (rule 3(4)(5)). A permit to import animals will only be issued with respect to the animals specified in Schedule 1 (see Table 2) to these Regulations and may be imported only from those countries specified in that schedule (rule 4). Animals not included in Schedule 1 may be imported for research purposes but this does not include those animals that are prohibited under section 7 of the *Animals Act* (rule 5).

Different rules apply for the importation of fresh (chilled or frozen) beef, mutton, lamb or poultry which could be imported from Australia or New Zealand without a permit, provided it is accompanied by a statutory declaration stating that the animals were killed for human consumption in a plant under government supervision (s 6(1)). Different rules also apply to pig meats (fresh or cured) and Australia, Canada or New Zealand are the only countries from which pig meats can be imported. The animals must be subjected to ante-mortem and post-mortem inspection and that the swines from which pig meats are derived must have been tested to be free of Aujiskys's disease (rule 6(2)). The Regulations set out in detail the standards required for the importation of cooked meats and meats that have been preserved by chemical means, salting, drying, oiling, pasteurisation and accelerated freeze drying methods. Australia and New Zealand are the only countries from which these products are permitted to be imported (rule 6(3)(4)).

5.12 *Animal Diseases Prevention Regulations*

The *Animal Diseases Prevention Regulations* control and regulate animals, products and by-products and farm-related machinery brought into the Cook Islands by persons arriving by air or sea. The Regulations also make provision for amenities to be provided for the dumping of refuse at ports of entry, facilities for storage and incineration at ports of entry, and amenities for

the cleaning of vehicles, machinery and equipment arriving from overseas. The dumping and disposal of refuse within the territorial limits of the Cook Islands by overseas ships and aircraft is prohibited except in accordance with the Regulations (rule 5). The Regulations further provide for the holding of refuse (rule 6), the disposal of refuse (rule 7) and the provision of amenities for incineration of refuse (rule 8).

5.13 Wandering Animals

The 1988 Agricultural Census recorded the number of households in the Cook Islands that keep livestock. The range of livestock includes pig, sow, cattle, cow, chicken, goat, doe, horse and mare.

The *Wandering Animals Act 1976*, designed to reduce and prevent damage to the environment, risks to human health and animal safety, provides for animals to be secured and for pigs to be kept in enclosures. Animals are not permitted to wander or trespass and must be properly secured and fenced or securely tethered at all times. The Minister for Agriculture, in consultation with the Island Councils, must be satisfied that the manner of restricting animals on a particular island is satisfactory to prevent damage to crops and cultivated land (s 3). Restrictions apply to the tethering of animals: in a plantation, in an area under crop or in a citrus plot, without the authority of the owner; in a public place; in a manner likely to cause damage to trees, shrub or plants (s 4).

As pigs can cause considerable damage to the soil if left to wander, section 5 of the Act provides that pigs must be kept in enclosures at all times. This provision does not apply to any island, where the Minister, in consultation with the Island Council, is satisfied that the traditional form of pig husbandry on that island is satisfactory to prevent damage to crops and land under plantation (s 5). The owner of any land has the power to shoot or destroy any trespassing animals on his/her land or authorise an animal inspector to do so. The owner of such animals will not be absolved from any liability for damage caused to the land (s 7).

Some Island Councils have also passed by-laws to control wandering animals. For example, the *Aitutaki Ordinance 1916* provides for horses and pigs to be kept in enclosures and prohibits cattle owners from allowing their cattle to run loose (By-law 20-22)

5.14 Leasing System

The *Short Term Crop Leases Act 1966* provides that anyone wishing to grow short term crops is deemed to have a valid and enforceable lease, and that the covenants and terms are in accordance with the provisions set out in the Schedule to the Act, or that the terms have been agreed to by the parties and filed with the Land Court in Rarotonga (s 3). A short term crop as defined under section 2 of the Act includes any cultivated plant which may be sown and harvested within five years from the date of the commencement of the lease. The Act applies to all land and includes native freehold land, European land and Crown land. Leases are conditioned by the inclusion of environment protection stipulations in line with the covenants and terms in the Schedule to the Act as follows:

the lessee will at all times during the continuance of the lease, cultivate, use and manage in a proper and husbandlike manner, all parts of the leased land as are cultivable and will not waste nor impoverish the same and will not use the leased land at any time so that the occupancy of the lessee shall be or create a nuisance to the occupiers of any adjoining property (s 4).

the lessee will comply with all Regulations and Ordinances for the control and destruction of noxious weeds in force in the areas where the leased land is situated (s 5).

5.15 Control of Agricultural Chemicals

Agricultural chemicals are used to control unwanted pests such as the fruit fly (*Dacus melanotus* & *Dacus xanthodes*), Spiral White Fly, Mites, Indian Myna bird and diseases such as Anthracnose and Phytophthora.

The use of chemicals to control agricultural diseases and pests are controlled by the *Pesticide Act 1987* (22/87). The uncontrolled use of pesticides could be potentially hazardous to natural resources, fragile ecosystems and water sources from chemical run-off.

The Act establishes a Pesticides Board (s 5) to have the following functions:

- to assess and evaluate every application for the registration of a pesticide;
- to determine the use of any pesticide;
- to determine the efficient, prudent and safe use of pesticides and to cancel the registration of any pesticide (s 6).

No pesticide can be imported into the country unless registration is granted by the Board (s 10) and the Act imposes a duty on Customs Officers to assist in the enforcement of this provision (s 16).

Anyone wishing to import a pesticide for sale, supply or use must apply to the Board for registration (s 11(1)). The Board may register the pesticide with or without conditions or refuse registration (s 12(1)). The refusal to register a pesticide could be for a number of reasons, which may include the applicant's failure to establish the need and use of the pesticide (s 12(3)).

Once a pesticide is registered, the Registrar may issue a permit to any person who wishes to import that particular pesticide (s 14). The Registrar is required to keep a Register of Pesticides in which the name of every pesticide is registered, renewed or cancelled (s 15). The Act provides for the appointment of Inspectors who have the power to enter and inspect any land, vehicle, aircraft, ship, vessel, factory, commercial premises, dwelling house, store, or shed and to seize any pesticide if imported or sold contrary to the *Pesticides Act* (s 22). Anyone who commits an offence is liable on conviction, to a maximum fine of \$1,000 and/or 12 months imprisonment (s 23, s 24).

The *Pesticides Act* imposes restrictions on the use of pesticides and specifically prescribes that every registered pesticide be used only by a registered user and under the terms and conditions specified by the Board (s 13(2)). Anyone who imports a restricted pesticide is prohibited from selling or giving the prohibited pesticide to anyone other than to persons approved by the Board (s 13(4)). Anyone who imports a 'restricted use' pesticide is required to keep a register of imported pesticide and the persons to whom that pesticide is sold or given (s 13(4)).

5.16 Biological Pest and Disease Control

Although there is adequate legislation in place to prevent and control the introduction into the Cook Islands of pests and diseases and the use of agricultural chemicals, the Ministry of Agriculture has been conducting research for a number of years into biological controls at the Totokoitu Research Station on Rarotonga. For example, the pest diamond black moth (*Plutella xylostella*)(DBM) in cabbages has been controlled by the biological insecticide Thuricide (*Bacillus thuringiensis*) and the level of control has been reported to be very good (*Totokoitu Research Station Report* page 27). The parasitoid wasp, *Diadegma semiclausum*, was introduced into Rarotonga in mid-1990 and was readily established in a plot of unsprayed cabbages heavily infested with diamond black moth. The wasps have subsequently been captured and introduced to localities around Rarotonga after successful trials at the Totokoitu Research Station.

The non-chemical means of control involves identifying particular pests in the environment that have the ability to suppress or terminate other pests. The long term benefits of such methods include cheaper and safer methods of controlling plant pests and diseases, healthier crops due to less chemical spraying, and less air pollution; in effect, biological controls are generally safer for the environment.

5.17 Conclusion

Although there is no single Act which regulates and controls agricultural activities, there are a number of statutes and regulations that provide a network of controls over agricultural activities. The statutes are also supplemented by Island Council By-laws and a number of documented instructions such as the Manual for Crop Management and Export Standards for Fruits and Vegetables. Quarantine Agreements with New Zealand. Other informal arrangements with farmers further regulate agricultural activities.

The Ministry of Agriculture provides an advisory service to farmers on crops, pesticides, diseases and pests. Advice is also given on crop rotation, periods of fallow and soil conservation. There is no study conducted as yet on the effect of pesticides on the soil but it is expected to be on the Ministry's future research agenda.

The law and by-laws regulating agriculture need to be reviewed as some by-laws in particular, date to 1916 and contain provisions that may not be relevant to the needs of a modern agricultural industry (see **Recommendation 10**). Current practices have also been viewed as incompatible with the values placed on prime agricultural land. The failure of the Land Use Act 1969 to designate and protect good agricultural land from residential encroachment could ultimately affect the agricultural industry and fail to provide a fair return to the people and to the country. There is no enforcement mechanism to assure compliance with the zoning of agricultural land under the *Land Use Act* and no prospect of penalties levied if violations occur. Recognising this reality, the involvement of landowners land use planning processes is encouraged.

Environmental protection is also dependent on adherence to specific land use planning and the requirements to provide environmental protection and not on a regulatory regime designed to further agricultural development. Reforms in current agricultural practices however do indicate a trend to include environment protection measures within the basic framework of agriculture.

It is not possible to analyse the effectiveness of any statute or by-law within the short time span of this Review as at this stage the identification of all the laws that effect agriculture and the contents reviewed is just the first step. The critique of the effectiveness of any statute is a matter for the Ministry responsible for Agriculture. However, with the changes brought about by environmental awareness, the laws regulating agricultural activities would need to be examined and updated where necessary with environmental goals in mind. The focus on the environment has also changed, at least in degree, the nature of law. Laws that are silent on environmental protective measures, particularly those developed in the early 1920s and still in force today provide insufficient guidance and are unable to assert authority to resolve persisting environmental degradation and damage. It is therefore recommended that existing laws be strengthened to deliver the range of environmental protective measures necessary to prevent or minimise the risks to the environment and fragile ecosystems caused by agricultural activities (see **Recommendation 11**).

5.18 Recommendations for Chapter Five

It is recommended that:

10. a review be carried out on all the laws that regulate agricultural activities with the view to updating old laws to reflect modern and current agricultural practices;

11. the existing laws providing for and regulating agricultural activities be strengthened in order to deliver the range of environment protection measures necessary to prevent or minimise the risks to the environment and fragile ecosystems caused by agricultural activities;
12. some consideration be given to the possible incorporation of a number of Acts into a single *Agricultural Act*;
13. the *Land Use Act* be applied for the purpose of zoning agricultural land.

CHAPTER SIX

FORESTRY

6.1 Relevant Legislation

Land Use Act 1969

Proposed Environment Bill 1992

Report to the Research Advisory Committee 1991 Totokoitu Research Station, Rarotonga.

United Nations Conference on Environment and Development Forest Principles

6.2 Introduction

There is no statute or By-law that provides for forestry in the Cook Islands. This section is however included following the recommendations made for the development of specific forestry legislation at the public Environmental Seminar conducted jointly by the Cook Island Conservation Service and the Regional Environmental Technical Assistance Programme (RETA) in Rarotonga from 25-27 March 1992.

The Forestry sector is located within the Ministry of Agriculture and operates within the broad responsibilities of the Ministry for Agriculture and Forests. Amongst its responsibilities, Forestry manages trial forest species programmes in an effort to determine a viable timber supply for domestic needs. Of some importance are the current trials for the species *Pinus caribea* at the Totokoito Research Station in Rarotonga. *Pinus caribea*, grown in trial plots since 1986, have been reported to be "growing vigorously" (*Totokoitu Research Station Report*, 1991, page 41). The *Cook Islands State of the Environment Report 1992* describes the current forest cover in the interior of Rarotonga and those found in the cloud community above 400 meters. *Pinus caribea* has not as yet been introduced into any of these areas as species trials and land suitability assessments can run into a number of years.

6.3 Forestry Legislation

From an environmental perspective, any legislation contemplated for forestry would need to be compatible with the *Land Use Act 1969*, any conservation legislation and in line with a comprehensive statement of national forest management objectives (see **Recommendation 14**). Forest planning is one of the most challenging issues faced by forest administrators charged with managing forests on a multiple use and sustainable yield system. Forests are generally managed not only for timber production but also for other reasons where some areas of forest lands are removed from timber production and protected for physical (e.g. where forest areas are located on steep slopes) or for environmental reasons. Forest resource management would need to take into account these constraints and allow for such uses as outdoor recreation in forest parks and for the conservation of species, wildlife and indigenous plant species in forest reserves. Management plans allowing for multiple use are similar to a comprehensive zoning plan with regulations to guide the uses of each area.

The multiple use system (i.e. production forests, reserves and national parks) of forestry dictates a legal regime that would guide forestry management and the allocation of forest land amongst these uses. Forest regeneration, soil conservation and the prevention and control of fire are essential components in any forestry legislation. Logging or clearing of forest areas should be carried out within management guidelines which would justify the development of a logging code and mandatory Environmental Impact Assessments if the quality of the water sources located in forest areas are to be preserved and ecological processes are not disrupted by the physical damage to the environment. The FAO Legal Consultant in her *Report on Legislation for Conservation and Restoration in Land Use* recommends that the type of fire prevention and control regulations currently envisioned under the *Conservation Act* be codified in legislation complementary to the *Conservation Act* (page 35). It would also need to be compatible with any proposed forestry legislation (see **Recommendation 15**).

The proposed *Environment Bill 1992* provides for the protection, conservation, management and control of forests as part of the Agency's responsibilities (s 6(c)). It would appear that this function would significantly overlap with the responsibilities of the Forestry sector. As the Forestry Sector is part of Ministry of Agriculture and Forests, it is suggested that these overlapping management responsibilities be assessed and areas of conflict eliminated to avoid confusion (see **Recommendation 16**).

6.4 Forest Principles

The statement of Forest Principles at the United Nations Conference on Environment and Development (UNCED) in Brazil in 1992 was an attempt to reach the first global consensus on the management, conservation and sustainable development of all types of forests (see **Recommendation 17**). The Principles are to be applied to all types of forests, both natural and planned in all regions and climatic zones. The preambular paragraph sets the context in which forest issues should be considered:

Forestry issues and opportunities should be examined in a holistic and balanced manner within the overall context of environment and development, taking into consideration the multiple functions and uses of forests, including traditional uses, and the likely economic and social stress when these uses are constrained or restricted, as well as the potential for development that sustainable forest management can offer.

6.5 Recommendations for Chapter Six

14. The development of any forestry legislation needs to be compatible with the *Land Use Act 1969*, any conservation legislation (e.g. proposed *Environment Bill*) and in line with a comprehensive statement on national forest management objectives.
15. A Code of Logging, Environmental Impact Assessments and measures to prohibit fires be considered and included as part of the legislative package for forestry.
16. The proposed *Environment Bill* be examined to cure any overlapping management responsibilities in relation to forests between the Agency for the Environment and the Ministry of Agriculture and Forests to cure any confusion and potential conflict that is likely to occur.
17. The United Nations Conference on Environment and Development *Forest Principles* be examined and principles incorporated where appropriate when formulating forestry laws.

CHAPTER SEVEN

FISHERIES

7.1 Relevant Legislation

Aitutaki Fisheries Protection By-laws 1990
Manihiki Pearl and Pearl Shell By-laws 1991
Marine Resources Act 1989
Marine Resources Sector Report 1992
Ministry of Marine Resources Act 1984
Outer Islands (Aitutaki Paua) By-laws 1988
Outer Islands Local Government Act 1987
Proposed Environment Bill 1992
Territorial Sea and Exclusive Economic Zone Act 1977

7.2 Introduction

Traditional Cook Island life and culture are tied intimately to the sea. Components of the Cook Islanders subsistence life style, such as the right to fish, are as necessary to them today as they were many years ago. Despite the growth in trade and the prevailing commercial culture, the sea and its resources still shape the subsistence life of many Cook Islanders. Customary fishing practices are not uniform nor have they remained static with changes brought about by a developing commercial culture. Customary fishing rights and practices differ significantly from one area to another. For example, rights to fish may be held communally by the group for its members or by chiefs for the community:

In Atiu in the 1950s, it was common practice for those wishing to fish in waters in front of land they did not own or have an occupation right, to seek permission to fish from the owners of the land fronting the water. There was a natural extension of "ownership" rights from the occupiers of land to the sea fronting the land. Water rights are regarded as an extension of land rights but it is uncertain whether such practices continue today (Crocombe, pers. comm.: 16 March 92).

Marine resource exploitation has been identified by the Cook Islands Government as a "frontline" industry and a lead sector for future economic growth" (1-57 *Round Table Meeting Report*, Geneva). The main objective is to increase self-sufficiency in food and protein production and to accelerate development in areas with the greatest potential for import substitution and export promotion.

The greatest potential for rapid growth lies in the country's lagoon fisheries, particularly with pearl shell and black pearl culture. This industry is established in Manihiki and further developments are likely to occur in Penrhyn, Rakahanga and Suvarrow. Efforts have also been intensified to introduce new species into the lagoon fishery. A clam hatchery on Aitutaki is planned to permit the seeding and re-seeding of all lagoons in the Cook Islands with nursery-raised giant clams. Trochus seeding is also taking place and trials are continuing or planned for other species such as tridacna and seaweeds. Trial species have included green snails, green mussels and the seaweed species *Euchema cottoni*.

The environmental policy of the Marine Resources Ministry is outlined in the Cook Islands Party (present Government) pre-election Manifesto. In developing marine resources, the Government's goal will be to "pursue a policy of sound economic exploitation, management and conservation" and also to "maintain strict management and environmental controls over the lagoons to prevent diseases and pollution in these ecologies." (*Marine Resources Sector Report 1992*).

7.3 Statutory Background

Before the enactment of the *Marine Resources Act* in 1989 (33/1989) fisheries in the Cook Islands were regulated by the Fisheries Ordinance 1950 and the Fisheries Protection Ordinance 1976. The *Marine Resources Act 1989* repealed the 1950 *Fisheries Ordinance* but it appears that the *Fisheries Protection Ordinance 1976* is not repealed as it is not included in the Schedule of the enactments repealed in the *Marine Resources Act 1989*.

The Ministry of Marine Resources was established in 1984 under the *Ministry of Marine Resources Act 1984*. Previous to this, the fisheries sector was managed by the Fisheries Department of the Ministry of Agriculture and Fisheries.

The objectives of the Ministry of Marine Resources are:

- to encourage the development of innovative technology transfer for increasing productivity, profitability and sustainability in developing Cook Islands marine resources;
- to formulate appropriate fisheries policies that contribute to a balanced development of the fisheries sector;
- to create an environment that is conducive to the development and growth of private sector involvement in fisheries (Sector Report).

The *Marine Resources Act 1989* makes extensive provision for fisheries management and development. A fishery can only be designated by the Minister for Marine Resources on the recommendation of the Secretary, after taking into account the scientific, economic, environmental and other relevant considerations regarding the importance of the fishery to the national interest, and if the fishery requires management and development measures for effective conservation and optimum utilisation (s 3(1)). Fishery is defined in section 2 to mean:

One or more stocks of fish or any fishing operation based on such stocks which can be treated as a unit for purposes of conservation and management, taking into account geographical, scientific, technical, recreational, economic and other relevant characteristics.

"Fish" is defined to include:

any aquatic plant or animal, whether piscine or not; and includes any oyster or other mollusc, crustacean, coral sponge, holothurian (beche-de-mer), or other echinoderm, turtle and marine mammal, and includes their eggs, spawn, spat and juveniles (s 2).

7.4 Fisheries Plan

Plans for designated fisheries in the fishery waters i.e. waters of the territorial sea, the Exclusive Economic Zone (EEZ) and other internal waters must:

- identify each fishery, its characteristics and the present state of its exploitation;
- set out the objectives to be achieved in the management of each fishery;
- outline the management and development strategies to be adopted;
- designate those fisheries for which licensing or other management measures may be established;

- specify, where applicable, the licensing programme to be followed for other fisheries;
- set out the limitations, if any, to be applied to local fishing operations and the amount of fishing to be allocated to foreign fishing vessels; and
- take into account any relevant traditional fishing methods or principles (s 3(2)).

Fisheries plans and reviews require Cabinet approval before implementation (s 3(5)).

Where the preparation of fisheries plans and reviews affect lagoon fisheries over which Island Councils have jurisdiction, the Act requires the Ministry to consult with them and the Local Fisheries Committee in the island concerned. Where no local committee has been appointed, any local fishermen likely to be affected must be consulted (s 3(4)).

7.5 Fisheries Management

Local Fisheries Committees on any island are appointed by the Secretary for Marine Resources. The function of the Committees is to advise on the management and development of fisheries in relation to the island (s 4(1)). The Act requires representatives on the committee to be drawn from the various commercial and subsistence sectors, fish farmers, sport fishermen and tour operators (s 4(3)). The functions of the Committee are to advise the Secretary of Marine Resources on issues relating to management and development of fisheries on the island and to make recommendations to the Island Council to adopt or amend by-laws regulating the conduct of fishing operations and the issue of fishing licences for any designated fishery (s 4(4)).

The Island Councils have the power to manage fishery resources by declaring closed and open seasons for the whole or part of the designated fisheries. During the closed seasons no one is permitted to fish for the species or in areas specified in the declaration. During the open season, fishing for any species in the areas specified in the declaration is permitted (s 6).

7.6 Licences

The Island Councils have the power to issue fishing licences to persons engaged in fishing operations in any designated fishery (s 7(1)). Conditions consistent with any applicable by-law may be imposed by the Island Council (s 7(2)). The Minister for Marine Resources has ultimate supervisory powers under this section of the Act to affirm, vary or reverse decisions made by the Island Councils after consultation with them (s 7(6)). Stringent measures are applied against those who commit an offence against any Council by-laws or any action taken by the Council pursuant to the Act. A maximum fine of \$2000 can be imposed and if the offence continues, a further fine of \$500 can be imposed for each day (s 7(8)).

Local fishing vessels that are 10 meters or more (with the exception of those local vessels used solely for sport fishing) cannot engage in fishing-related activities unless a valid licence is issued by the Secretary specifically for that vessel (s 9(1)). A licence may however be denied if it is necessary to give effect to any licensing programme specified in any applicable fisheries plan; or there is reason to believe that the applicant will not comply with the conditions of the licence; or that the vessel does not comply with the safety requirements prescribed by-law; or for any other ground specified in the Act or the regulations. There are heavy penalties for the contravention of the provisions of section 9 and the master, owner, and charterer of the vessel can each be liable on conviction to a maximum fine of \$10,000.

A Sport Fishing Vessel Licence is mandatory if a vessel, including a foreign fishing vessel, is used for reward, offered for charter or hired for sport fishing. A licence will be denied if it is considered necessary to give effect to any management programme specified in any fisheries plan; or that the applicant will not comply with the conditions of a licence; or the vessel does not comply with safety requirements; or for any other ground specified in the Act or regulations (s

10). A maximum fine of up to \$10,000 is payable if anyone contravenes section 10(1) or any condition of the licence (s 10(4)).

7.7 Scientific Research

Scientific research operations in the fishery waters can only be allowed by the Minister on the submission of a research plan. Authorisations may exempt the vessel or persons engaged in research from the requirements of any fisheries management and conservation measures but these exemptions must be specified in the authorisation (s 18(1)). The Minister may however, attach conditions considered necessary to safeguard any fisheries species (s 18(2)). Contravention of any condition or research conducted without specific authorisation attracts a maximum fine of \$100,000 (s 18(6)).

Other authorisations may also be granted by the Minister for trans-shipment and test fishing if there is no access or related agreement but the Minister may attach conditions, including environmental conditions, to such operations. A maximum fine of \$250,000 may be imposed against anyone who undertakes test fishing or trans-shipment activities without authorisation (s 19).

7.8 Destructive Fishing Methods

The *Cook Islands State of the Environment Report 1992* records the destructive fishing methods practised in the Cook Islands (page 57/58). The use of derris or 'ora papua roots (*Derris elliptica*) and barringtonia or 'utu seeds to stun fish occurs wherever these plants are found. On some islands, by-laws are enforced with fines of up to \$200 if people are found using such methods for fishing. Although rarely used, dynamiting has been reported in some areas on Rarotonga and Aitutaki. The use of scuba gear for spear fishing has been a matter of concern to the Conservation Service. The high demand for reef fish by restaurant owners is largely responsible for this method of fishing as scuba fishing provides a quick way to catch many fish in a short period of time. On Aitutaki and Manihiki, the Island Councils have banned this method of fishing and the Conservation Service has focused attention on the need to control scuba fishing on other islands.

The use of small mesh size fishing nets is considered destructive to the lagoon food chain. The Conservation Service has proposed that small gill-net sizes below 3.5 inches should be banned. Mesh size recommendations were also made at the public Environment Seminar in March 1992 consistent with the proposals of the Conservation Service.

The *Marine Resources Act* prohibits the use of any explosive, poison or other noxious substances for the killing, catching or disabling of fish. Anyone who permits, carries, or has in his or her control such explosives, poisons or noxious substances can be liable on conviction to a maximum fine of up to \$10,000 and/or a two months imprisonment term (s 26).

The Queen's Representative may, by Order in Executive Council, make regulations to regulate or prohibit fishing of all kinds within any lagoon or any part of it, during any time of the year. Regulations can also be made to restrict or prohibit the equipment or methods used in connection with fishing (s 60(y)).

7.9 Aquaculture

The Cook Islands Government Property Corporation may, on the advice of the Minister or, in the case of the outer islands, on the recommendation of particular Island Councils and with the approval of the Minister, lease or grant a licence over Crown land (including areas of lagoons, foreshore, and sea-bed) that is vested in the Corporation, for the purposes of aquaculture (s 29).

The Mitiaro Aquaculture project under the Ministry of Marine Resources is a joint project with UNDP and the FAO/South Pacific Aquaculture Development Project (FAO/SPADP). The

project, commenced in 1989, aims to culture milk fish and mullet in the Mitiaro lake. The *Marine Resources Sector Report* points out that other aquaculture activities, such as fresh water prawns, are being considered for the lake. The Report further adds that milk fish fry from Manihiki; machrobrachium (fresh water prawn) species from Rarotonga, tilapia, mosquito fish and mullet brought in from overseas have been introduced into the Mitiaro lake.

The *Marine Resources Act* empowers the Queen's Representative to make Regulations by Order in Executive Council for aquaculture, access to land leased for aquaculture and to waters surrounding such land (s 60(p)); and to further regulate or prohibit either generally, or in any specified fishery, any aquaculture operation (s 60(w)(iv)).

7.10 Protection of Particular Species

The *Cook Islands State of the Environment Report 1992* points out that over-harvesting of fishery resources, particularly clams in Aitutaki, is a problem. Destructive fishing methods and overfishing will lead to the depletion of the local fish resources unless active intervention by Government and Island Councils occurs (page 57/58).

The Queen's Representative may, by Order in Executive Council, make regulations prescribing measures for the protection of trochus, pearl and pearl-shell, turtles, green snails, clams and lobsters (s 60(x)). The *Trochus Act 1975* was repealed by the *Marine Resources Act 1989*. It is important that any protective and conservation measures for trochus previously offered under the 1975 Act not be overlooked.

7.11 Giant Clam (Paua)

The Outer Island (Aitutaki Paua) By-laws (20/1988) prohibit the taking of paua (giant clam) of the species *tridacna maxima* without a permit. An offence committed by anyone taking paua from Aitutaki to any other island; buying, selling or possessing any paua for sale without a permit (s 3). A permit may be granted by the Council for paua to be taken from the Aitutaki lagoon for:

- sale to any restaurant or place where food is sold on Aitutaki;
- consumption at any wedding, funeral, birthday, family re-union, investiture, kava eva, opening of a community or public building, or any other similar function where large numbers of the public are likely to attend;
- export to sell in another island or country provided the proceeds of the sale is utilised in Aitutaki for the benefit of the residents (s 4(1)). Paua is deemed to be sold if it forms part of a meal for which payment is made (s 4(3)).

The types of conditions that the Council may impose could relate to the number of pauas to be taken; the size; the part of the lagoon from which the paua is to be taken; the name of the person authorised to take paua; or the expiry date of the permit (s 4(2)).

Anyone acting in contravention of the by-laws or the permit conditions may be liable, on conviction, to a maximum fine of \$200 with respect to the first offence and on a subsequent offence, a further fine of \$200 and/or three months imprisonment (s 5).

7.12 Quarantine

The *Marine Resources Sector Report 1992* points out that the hatchery complex in Aitutaki allows for all incoming marine species from overseas to be quarantined. Before the quarantine and hatchery facility was built, the Cook Islands had introduced one species of clam, trochus, green snails and several species of fish with no quarantine precautions. It is anticipated that the local clam species (*Tridacna maxima*) will be spawned at the hatchery. The resultant juveniles will be

seeded on to the reefs within the Cook Islands which have been over-exploited in the past by subsistence fishing.

7.13 Pearl Farming

The *Cook Islands State of the Environment Report 1992* states that the pearling industry, particularly for pearl shells, has been part of the Northern Group since the 1860s and the overharvesting beyond the sustainable levels of production has caused the industry to decline (page 57).

The Manihiki Pearl and Pearl Shell By-laws 1991 (made pursuant to sections 15 and 16 of the *Outer Island Local Government Act 1987* and section 5 of the *Marine Resources Act 1989*) make provision for pearl farming only on the island of Manihiki. A Pearl Shell Farming Permit from the Island Council must be obtained first for the farming of pearl shells and the collection of spat (s 8). In granting the permit, the Council may impose conditions and restrict the period in which pearl shells in the lagoon can be farmed (s 9).

Culture pearl farming is not permitted except under a Culture Pearl Farming Permit. This permit is also necessary for the seeding, cultivation and the growing of pearls under artificial conditions (s 10). A Culture Pearl Farming Permit may be issued to any person holding a current Pearl Shell Farming Permit (s 11). Technicians employed in the pearl industry must have the approval of the Island Council.

The method of taking pearl shells is also restricted under the By-law. Anyone diving for naturally occurring pearl shells must first obtain a Pearl Shell Diving Permit from the Island Council (s 4). The Council may impose conditions in the permit and restrict the period of the taking (s. 5). Underwater breathing apparatus is prohibited when diving for naturally occurring shells (s. 6). If the Island Council considers that the pearl shell stocks are likely to be over-exploited, all or some of the Pearl Shell Diving Permits will be revoked by public notice (7(1)).

7.14 Enforcement

Section 19 of the *Outer Island Local Government Act 1987* confers on every member of the police force the power to enforce the provisions of the By-laws (s. 17). Penalties imposed by the By-laws carry a maximum fine of \$500 and/or three months imprisonment with respect to offences under Part I of the By-laws (free diving) and Part III (Culture Pearl Farming Permit). Offences involving technicians carry a maximum fine of \$2,000 and a further \$500 for every day the offence continues and/or twelve months imprisonment (s. 19). The Court may, in addition to any penalty, order the forfeiture to the Island Council of any boat, underwater breathing apparatus, farming and seeding equipment or any other property used by the offender (s. 19(2)).

The *Marine Resources Sector Report 1992* expresses the concern that pearl farming is now growing at such a rapid rate that if not controlled it "could cause huge environmental problems for the Northern Group atolls" particularly from diseases associated with poor farming methods. The Report proposes that a maximum quota of farmed shells be set for each lagoon and that wild stocks be continually monitored for changes in stock size and overall health. Shell spacing and cleaning to keep shells healthy and minimise the risk of spreading disease must be actively enforced. The trans-shipment of oysters from one lagoon to another also needs to be controlled in such a way as to reduce the risk of diseases spreading between lagoons and to preserve the genetic integrity of individual stocks.

7.15 Trochus

Trochus was introduced to Aitutaki from Fiji in 1957. Since then the species have multiplied to such an extent that commercial harvesting was introduced in the 1980s. Currently about 25 tonnes of shells are harvested annually. The Ministry of Marine Resources plays a critical role in stock assessment and management and offers advice to Island Councils on harvesting and quotas.

The *Marine Resources Sector Report 1992* points out that trochus is a valuable resource for Aitutaki and although it has been seeded in most of the Cook Islands, it has yet to firmly establish a population size sufficient for harvesting. As a sedentary resource, trochus is very vulnerable to over-exploitation. The fishery is therefore closely regulated and harvested only once per year. A quota is applied, based on the results of stock assessment surveys.

7.16 Fisheries Aggregation Device (FAD) Programme

The FAD programme is to aggregate migratory fish species around fishing buoys. The programme aims to reduce overfishing on heavily exploited reef and lagoon fisheries. The *Marine Resources Sector Report 1992* indicates that the total catch taken by individual fishermen is insignificant in comparison to migratory species taken by foreign fishing fleets operating in Cook Island waters.

7.17 The Exclusive Economic Zone (EEZ)

The *Territorial Sea and Exclusive Economic Zone Act (16/1977)* which entered into force on the 1st. October 1979 (15/1979) makes provision for the demarcation of the Cook Islands marine spaces such as the territorial sea (s 3), internal waters (s 4) and the exclusive economic zone (EEZ) (s 8) and declares the right to control and regulate the exploitation of its marine resources. (Some sections of this Act have been repealed by the *Marine Resources Act 1989*, i.e. some of the definitions in section 2(1) and sections 9 to 22, 25 and 28). Section 5 of the Act sets out the baseline from which the territorial sea and the EEZ is to be measured as follows:

- (a) in the case where there is a coral reef surrounding any island or any part of any island, the mean low water mark along the outer edge of the coral reef;
- (b) in the case where the island or any part of the island is not surrounded by a coral reef the mean low water mark along the coast of the island;
- (c) in the case of the sea adjacent to any harbour, a straight line joining the low water marks of the natural entrance points of the harbour.

The Act also declares that the bed of the territorial sea and internal waters are vested in the Crown (s 6). (Note needs to be taken that the *Marine Resources Act 1989* defines "fishery waters" to mean waters of the territorial sea, the EEZ and other internal waters, including lagoons, similar to the definition contained in the *Territorial Sea and Economic Zone Act 1977*; it includes other waters over which the Government of the Cook Islands has fisheries jurisdiction.)

7.18 Foreign Fishing

Cook Islands sovereignty over its fishery waters gives it the right to regulate and control fisheries and other resources (e.g. minerals) in the area. The 1989 *Marine Resources Act* provides the legal framework to permit the exploitation of the fisheries resources of the EEZ as well as the continuing requirement for the protection and conservation of marine resources. It has been recognised that the survival of any fishing industry is dependent on the opportunities to exploit fisheries resources in broad geographical areas which include both the high seas as well as some of the more attractive and economically viable sites located in the EEZ of island states.

The exploitation of fisheries resources by foreign vessels is permitted under the statutory provisions of the *Marine Resources Act* but the Act gives the Ministry of Marine Resources a great deal of flexibility to shape plans for the exploitation of these resources to meet the particular needs of the Cook Islands.

The *Marine Resources Act* empowers the Ministry to regulate the activities of foreign vessels in Cook Island waters and prohibits foreign fishing vessels:-

- (a) to enter except for a purpose recognised by international law; or
- (b) to be used for fishing or related activities except as may be provided for in this Act; or
- (c) to fish except in accordance with a valid licence issued under the Act, an access agreement or a multilateral access agreement or as otherwise authorised by the Act (s 12(1)).

7.19 International Treaties

The Act authorises the Minister for Marine Resources to enter into international, bilateral and multilateral access agreements with other countries providing for fisheries access or for other related activities provided for under the Act (s 13(1)). The Act prohibits fisheries allocation under access agreements to exceed a level that is inconsistent with the conservation and management of fisheries resources and that adversely affects fishing. The agreement must also be consistent with any fisheries plans (s 13(2)). The Minister is given power to enter into related agreements to implement any access agreement or to promote fisheries cooperation, including, among other matters, the harmonisation of joint exploitation and development programmes as well as programmes designed for the conservation and management of the resources (s 14(d)(e)(f)).

The Treaty on Fisheries between the Governments of Certain Pacific Island States and the Government of the United States of America was signed by the Cook Islands Government in Port Moresby on 2 April 1987. Under this Treaty, Pacific Island States which are parties to the Treaty may permit fishing vessels of the United States of America to fish for tuna in the EEZ of each of the Contracting Parties subject to the terms and conditions of licences issued by the Director of the South Pacific Forum Fisheries Agency (FFA) within the framework of the Treaty and upon payment of the agreed fees set out in Schedule 2 to Annex II of the Treaty. One of the objectives of the Treaty is to maximise the benefits flowing from the development of the fisheries resources within the EEZ and fisheries zones of the Pacific Island Contracting Parties.

The *Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific (Driftnet Convention)* was signed by the Cook Islands in November 1989. The damage done by foreign vessels using driftnet fishing to the albacore tuna resource, other fisheries resources, the marine environment and the economy of the South Pacific Islands, called for an immediate ban on this method of fishing. Driftnet fishing activities are prohibited in the Cook Islands fishery waters under section 15 of the *Marine Resources Act* and anyone contravening section 15 is liable to a maximum fine of \$250,000.

7.20 Foreign Fishing Licences

No foreign fishing licences will be issued with respect to any foreign fishing vessel unless the Cook Islands Government is a party to the Access Agreement (s 16) but this does not apply to a licence or authorisation issued for test fishing operations, or to a locally based foreign fishing vessel used for scientific research or any related activities (s 16(2)). The Minister has discretion however, in the absence of an access agreement, to issue a licence to a foreign fishing vessel if the applicant provides sufficient financial and other guarantees required to fulfil all the obligations under the *Marine Resources Act* (s 16(3)).

Locally based foreign vessels are not permitted to fish without a valid licence (s 17(1)). Terms and conditions may be imposed in the licence and contravention of any condition could render the master, owner and charterer liable to a fine of \$100,000 (s 17(5)).

7.21 Conditions of Fishing Licences

No description of fishing programmes would be complete without at least a brief discussion of the types of terms and conditions normally included in licences. While terms and conditions vary according to the activity undertaken, the Ministry of Marine Resources has established certain requirements against which all licences are measured.

Section 20 of the Act provides that every licence issued by the Minister or the Secretary may have general or special conditions. General conditions, additional to those "which all fishing licences or any category of fishing licences shall be subject" can include conditions relating to open and closed seasons, prohibited fishing areas, minimum mesh and species sizes (s 20(2)). Special conditions could include the type and method of fishing or related activities authorised; the area within which such fishing or related activities are authorised; the target species; the amount of fish authorised to be taken; and restrictions on by-catch (s 20(3)). The Minister may vary any special condition if it is considered expedient for the proper management of fisheries (s 20(4)). Every licence issued by the Minister or Secretary must be recorded in a Register.

7.22 Conclusion

The 1989 *Marine Resources Act* encourages economic efficiency and at the same time ensures that environmental factors and resource protection and conservation measures are taken into consideration. The 1989 law has significantly reformed fisheries planning and management, based upon concepts of sustainability, ensuring the continued viability of fisheries. For environmental purposes, the *Marine Resources Act* is considered to contain a satisfactory balance between economic and environmental measures.

The proposed *Environment Bill 1992* charges the Director in section 40(g) to prepare draft management plans for the protection, conservation, management and control of Cook Island waters and water resources. Section 2 of the draft Bill interprets "Cook Island Waters" to mean:

the waters of the Exclusive Economic Zone as defined in section 3 of the *Territorial Sea and Exclusive Economic Zone Act 1977* and internal waters of the Cook Islands as defined in section 4 of that Act and includes the waters of any river, stream, or lake.

The Ministry of Marine Resources also has responsibilities for the management of marine areas and marine resources under the *Marine Resources Act 1989* and it is recommended that the relevant provisions of the proposed *Environment Bill* be further assessed in the light of the responsibilities of the Ministry of Marine Resources to avoid conflicts over management of marine resources that may arise (see **Recommendation 18**).

7.23 Recommendation for Chapter Seven

18. It is recommended that the Environment Agency's management responsibilities in the proposed *Environment Bill* for Cook Island waters and water resources be assessed in the light of the management responsibilities of the Ministry of Marine Resources over the same areas and resources to avoid any conflicts that may arise.

CHAPTER EIGHT

WATER SUPPLY AND WATER QUALITY

8.1 Relevant Legislation

Conservation Act 1986-87

Cook Islands Act 1915

Peace, Order and Good Government Ordinance 1918 No. 1 (Mauke Island Council)

Proposed National Water Authority Bill

Water Supply Ordinance 1958, Aitutaki

8.2 Introduction

Water supplies in the Cook Islands are managed through three programmes:

8.2.1 Community and Household Water Tank Programme

This programme is focused on the islands of the Northern Group. Being coral atolls, the islands are without surface water and are dependent on supplies from vulnerable water lens which are subject to rapid depletion. Under this programme, individual dwellings are being provided with 1000 gallon (4500 litres) capacity ferro-cement rain water tanks while 10,000 gallon (45,000 litres) communal tanks are being constructed near or under large public buildings.

8.2.2 Underground Generator-Pumped Programme

This programme focuses on the Outer Islands of the Southern Group and takes advantage of the underground resources. These and the islands undulating terrain make gravity-fed reticulation possible with traditional pumping systems used to supply settlements on flat or higher ground.

8.2.3 Stream Intake and Gallery Programme

On Rarotonga, water from stream catchments is piped into 50,000 and 100,000 gallon (225,000-450,000 litres) storage tanks connected to the rain reticulation system which serves the majority of households. (Round Table I-24).

The Ministry of Works is responsible for water supplies which are provided free of charge to end users. Water quality is generally good although it does not meet the full criteria of the World Health Organisation (WHO) Guidelines for potable water. There is a water quality monitoring programme for both ground and surface water on Rarotonga but on the outer islands, monitoring and testing the quality of water is less frequent.

Planning for water supplies in some areas is seriously hampered by the lack of reliable data. While supply and distribution problems on Rarotonga and Aitutaki have been studied in considerable detail, there are no formal records of supply capacities and consumption rates on other islands. All water supply catchment areas in Rarotonga lie in the valley particularly in the wet zone of the island, and all of the current six catchment areas lie on private land. It is understood that much of the valley areas above the water supply intakes are under cultivation and it is further understood that protection of the catchment areas is less than satisfactory. Pollution in the water sources is a serious concern.

8.3 Statutory Background

There is no single, national comprehensive Water Supply legislation in the Cook Islands, but there are scattered legal provisions that address the supply of water to the public.

The two key components of water legislation are water quantity and water quality but sometimes the law (particularly those dating to earlier times) does not address these two components

together. The responsibility for water supply and water quantity generally falls within the Ministry of Works whilst water quality is left primarily to the Ministry of Health. One reason for this distinction may be that water quality issues tend to relate to the health of the population and the availability of scientific knowledge and expertise to monitor water pollution correspond more directly with the responsibilities of the Ministry of Health. The distinctions drawn between these two key components and responsibilities lying in more than one Ministry may be resolved with the proposed *National Water Authority Bill* (see **Recommendation 19**).

The provisions found in the current law are as follows:

- (a) Under the *Cook Islands Act 1915*, the Queen's Representative may by warrant, take any land in the Cook Islands for any public purpose specified in the warrant (s 357). Public purpose is defined in section 364 to include water supply. When any land is taken for a public purpose anyone who has a right, title, estate or interest which is extinguished or divested by the taking is entitled to compensation from the Crown (s 359(1)).
- (b) The *Conservation Act 1986-87* does provide for the protection, conservation, management and the control of the water catchment areas (s 6(d)); and further provides for the Director of Conservation to prepare draft management plans for the protection, conservation, management and control of water resources (s 30(c)). The proposed *Environment Bill* also incorporates a similar provision. This provision would need to be considered in the light of the proposed *National Water Authority Bill*.
- (c) A number of Island Councils are made responsible for protecting water sources through the Peace, Order and Good Government Ordinances. For example, under the Peace, Order and Good Government Ordinance 1918, No. 1 (Mauke Island Council) an offence is committed if any person throws or leaves any dead animal or offensive matter of any kind in any creek, stream or other water or on the banks (s 10).

In Aitutaki, the Water Supply Ordinance 1958 No. 12 as amended, creates offences and the offender is liable to a fine for:

- wilfully damaging or destroying any part of the reticulated water supply system; or
- unlawfully diverts any water from the reticulated water supply; or
- wilfully or negligently allows any tap to run so that water is wasted; or
- bathes or washes clothes under the reticulated water supply;
- attaches any hose to tap the reticulated water supply into any premises or building; or
- draws off water from a reticulated water supply for agricultural purposes, irrigation, filling fish ponds, mixing cement or lime or spraying dusty road surfaces (s 3).

The Cook Islands Party (CIP) Manifesto sets out a range of policy guidelines for the current period the Cook Islands Party is in power. By 1990, a National Water Commission was to be established with responsibilities to formulate national water policies. A draft Bill to establish a National Water Authority was understood to be with the office of the Solicitor-General during the period of this Review. The contents of this Bill will be discussed below.

Water quality measures are also addressed in the CIP Manifesto. Particular reference is made for the continual assessment of water resources for information on the extent, capacity and quality of the resource and further proposals to put in place a pollution control programme. In the pursuit of water quality, some adjustment is likely to be made by landowners where the water source is located on private land. The protection of the catchment areas and the ground water lenses would need to be accommodated in the interests of public health and welfare.

8.4 Water Conservation

Although it was not possible during the period of the Review to obtain views on the use of water, it is understood that the wastage of water is of particular concern. The proposed *National Water Authority Bill* makes provision for water conservation and strategies to conserve and protect the resource.

8.5 The proposed *National Water Authority Bill*

This proposed Bill establishes the National Water Authority with a wide range of duties and powers set out in section 9. The Bill provides for the Authority to impose adequate controls to ensure supply of suitable water for domestic use, agricultural use, irrigation and for commercial and industrial use (s 9(2)). Controls can be imposed by the Authority to prevent the haphazard and unregulated exploitation of underground and surface water (s 9(3)) and in addition, safeguards can be imposed to control and prevent flooding, soil erosion and damage to the catchment areas (s 9(4)) (see **Recommendations 20 and 21**).

The Authority is empowered to declare special protection areas in the following circumstances:

- (a) Where an existing borehole or catchment area is threatened with contamination from:
 - the watering of livestock;
 - infiltration of impurities from human or animal waste disposal;
 - the spreading of herbicides or pesticides; or
 - the storage or disposal of oil and other chemicals; and
- (b) where the water supply from an existing borehole or catchment area is threatened with diminution resulting from:
 - abstraction from nearby boreholes or well fields drawn from the same aquifer or
 - the construction of upstream dams or basins restricting the flow of surface water down stream (s 9(5)).

8.6 Conclusion

The proposed Bill is fundamentally sound, contains adequate environmental safeguards, addresses both key components of water supply and water quality under one regulatory framework, and provides a legal regime to regulate, conserve and protect one of the country's most important resources. Its implementation is recommended.

8.7 Recommendations for Chapter Eight

It is recommended that:

19. the proposed *National Water Authority Bill* and the proposed *Environment Bill* be assessed together to identify areas where there are overlapping responsibilities to avoid any conflict that is likely to arise in the management of water resources;
20. the protection of the catchment areas and ground water lenses be given more protection than presently exists;
21. the *National Water Authority Bill* be considered urgently with a view to implementation.

CHAPTER NINE

WASTE MANAGEMENT AND POLLUTION

9.1 Relevant Legislation

Animal Disease Prevention Regulations 1982
Building Controls and Standard Regulations 1991
Conservation Act 1986/87
Dangerous Goods Act 1984
Harbour Control Act 1971-72
Noise Control Act 1986
Outer Islands Local Government Act 1987
Proposed Environment Bill 1992
Public Health Regulations 1987
Rarotonga Harbour Control Regulations 1974
Re-Use of Bottles Act 1988
Tobacco Products Control Act 1987
Waterfront Industry Act 1973-74

9.2 Introduction

The enormous costs and potential environmental liabilities associated with waste disposal have already triggered efforts to reduce the volume of waste through a variety of processes such as recycling, incineration, burial and shipment to alternative transboundary disposal facilities. Because of the tendency for the volume of refuse to grow rather than reduce, and the area of disposal sites tend to become larger and higher, waste disposal wherever located, presents serious problems of environmental degradation and in some cases, direct threats to health.

9.3 Solid Waste

The *Cook Islands State of the Environment Report 1992* states that solid waste and its disposal are major problems in the Cook Islands. The Report attributes the increase in solid waste to the changing lifestyle of Cook Islanders. "More and more organic rubbish normally burnt at home... is being disposed of at the public dump" (page 53). The Report further points out that the problem of acquiring land suitable for the disposal of waste is an issue of concern as swamp lands which are unsuitable for such activities are being used as solid waste disposal sites. The Conservation Service has made efforts to manage dump sites but split responsibilities shared by Internal Affairs, the Ministry of Works and the Health Department makes this task less than satisfactory.

9.4 Statutory Background

The *Outer Islands Local Government Act 1987* (25/1987) provide for the Island Councils to make by-laws to regulate, control or prohibit the deposit, accumulation or disposal of any refuse, garbage or rubbish of any description on any vacant land, in the sea or on any motu (s 16(1)(q)).

The *Animal Disease Prevention Regulations 1982* (made pursuant to the *Animals Act 1975*) prohibits the dumping of refuse by any overseas ship or aircraft within the territorial limits of the Cook Islands except as provided for by these regulations (s 5). Refuse on any overseas ship or aircraft must be held in receptacles approved by the Secretary for Agriculture and stored on board to the satisfaction of an Inspector (s 6). An Inspector may order the owner or master of the ship or commander of an aircraft to dispose of refuse within the territorial limits of the Cook Islands but the disposal must be by incineration in facilities located at ports or by other methods approved by an Inspector (s 7). All refuse conveyed to the incinerator must be destroyed within 24 hours of delivery or as the Secretary permits.

The *Rarotonga Harbour Control Regulations 1974* provides for the removal of sunken, stranded or abandoned ships within the harbour and the Harbour Master may give notice to the owner to remove the ship if it is likely to obstruct navigation. On failure to comply with the notice, the Harbour Master is empowered to take possession, remove or destroy the ship (s 8). The Regulations also prohibit the depositing of any rubbish, dead animal or filth below the high water mark within any harbour or on any land belonging to the Crown or the Waterfront Commission (s 13).

9.5 Litter

The *Conservation Act 1986/87* makes extensive provisions for the control of litter. Litter is defined to include:

any refuse, rubbish, animal remains, glass, metal, garbage, debris, dirt, filth, rubble, ballast, stones, earth, or waste matter (s 4).

The Minister responsible for Conservation may designate any Crown land or any other land acquired by the Crown through lease or licence, for the disposal of litter and rubbish (s 44). The Act gives Conservation Officers wide powers to prevent the disposal of litter in any public place or on private land, without the consent of the occupier (s 45). A Conservation Officer may require an offender to remove dumped litter and to pay a fine of \$10 within seven days. Anyone defaulting in the payment of the fine is liable to prosecution (s 45). Management plans for dump sites may be prepared by the Conservation Service under section 30(h) of the Act under their broad management responsibilities to prepare plans with regards to "any matter relating to the environment which in the opinion of the Council, will benefit from the management plan".

The proposed *Environment Bill* also makes provision for the control of Litter in Part VI and uses the same definition for litter as found in the *Conservation Act 1986/87*. Environment Officers are given wide powers to enforce the provisions of Part VI and have authority to issue notices to occupiers of private land and to occupiers of Crown land:

- (a) to clear away, or remove, from the land; or
- (b) to clean up; or
- (c) to screen, cover, or otherwise obscure from view,

and such litter as may be specified in the notice, and within such time as may be so specified (s 47).

Objections to notices can be made to the Environment Council in Rarotonga or to Island Councils which are empowered to hear the objections.

9.6 Recycling of Waste

The recycling of waste is carried out by two companies in Rarotonga, Glema Waste Management and Pacific Cook Island Steel. Glema recycles cans and other non-ferrous (e.g. paper, cardboard) rubbish.

The *Re-Use of Bottles Act 1988* (4/1988) administered by the Department of Trade, Labour and Transport provides for the re-use of bottles. The Act provides that any person who becomes an owner of a bottle, i.e. by lawfully coming into possession of an empty bottle or by purchasing a bottle for its contents (s 30) will not be answerable to any former owner of that bottle for its subsequent use, reuse or disposal (s 4(1)).

9.7 Sanitation

The *Cook Islands State of the Environment Report 1992* (page 54) points out that sewage disposal is currently a problem on Rarotonga. The Report states that the majority of houses in Rarotonga are connected to a system of septic tanks. While coverage is extensive, overall standards have been judged deficient.

The Report adds that the present practice of sewage disposal on Rarotonga is to spread sludge from septic tanks over orchard lands as fertilisers. With the current increased rate of new housing development, particularly on agricultural land, problems associated with this practice will require some attention. Sewage contamination is posing problems for some householders in Avarua. The increase of algal growth along the foreshores of Rarotonga implies that there is an increased level of organic content in that system. There is also concern expressed over the effectiveness of the waste treatment systems in some hotels and other tourist accommodation. Some hotels have their own sewage treatment system but in some cases, the existing system has become inadequate with the influx of tourists and expansion in the tourist industry. Attempts are however being made to upgrade the treatment plants.

A World Health Organisation financed study undertaken in 1983 confirms the need for upgrading and improving the sewage system. The study's technical proposals included provision for the disposal of untreated wastes. This proposal was deemed unacceptable at the time and the proposal was redesigned to include the construction of a sewage treatment plant. The reformulated plan is treated as high priority by Government and is awaiting implementation. Special attention is given to the Avarua Township where the need for improvement in the sanitation system is considered urgent.

In the Northern Islands, Government has initiated a pour-flush (i.e. pouring water to the system) sanitation programme where traditional open pits and lagoon latrines pose health and environmental hazards. Households in the Southern Group which possess water closet toilets are being provided with pour-flush systems under this programme.

9.8 Statutory Background

The *Public Health Regulations 1987* (28/1987) specify that sanitary conveniences must be connected to:

- (a) a public sewerage system, where such a system is available; or
- (b) a septic tank where no public sewerage system is available (s 11)

The *Building Controls and Standards Regulations 1991* require the complete working drawings of all structural details, plumbing, sanitation and earthwork when application is made for a building permit (rule 6(b)). Under the Building Controls and Standard (National Building Code) Amendment Order 1991 (10/91) a room containing a closet pan or urinal must not open directly into a kitchen or a room where food is stored or consumed, except if the building contains only one habitable room (O. 4).

A building permit, once issued, is deemed to include a condition that the Building Controller is entitled to inspect any work carried out (rule 17(a)). Inspection of the work is also carried out within seven days of receipt of the advice that the work has been completed (rule 20). A Certificate of Completion is issued by the Building Controller if the work conforms to the approved building specifications (rule 21). The Certificate of Completion does not exempt the Applicant or any occupier of the building from the necessity to obtain any other certificates or permission required for other uses of the building (rule 21(6)).

Permits are also required from the Director-General of Health for building purposes.

The *Public Health Regulations* make provision for drainage, septic tanks, water closets, urinals and privies. The establishment or alteration of any drain, septic tank, disposal system or other sanitary appliances is only permitted on the issue of a permit from the Director-General of Health (s 19). Once the permit is issued, the regulations prohibit any departure from the particulars supplied (s 19). The permit holder is also required to notify the Director-General of the work to be inspected and no work must be covered up or enclosed until it has been inspected, tested and approved (s 20(1)).

Every drain, septic tank, water closet, urinal or privy to be constructed must comply with the Building Code. The Health Regulation 1987 sets out the materials to be used and the standards to be adopted for drainage (s 5). Disused sanitary appliances, drains or fittings must be closed off and sealed (s 9). The Regulations prohibit any trade waste or condensing water to be discharged into any drain or sewer unless written permission is obtained from the Director-General (rule 10).

Regulation 12 stresses the basic principle that any effluent from a septic tank must be conducted and disposed of in an approved manner (s 12(5)) and that domestic waste must not be allowed to flow directly into an open watercourse without settlement, filtration or treatment on land (s 12(6)).

No one is permitted to construct, alter or repair water closets unless it is done in accordance with the building specifications defined in the regulations (s 13). The construction of urinals must also comply with specifications defined in section 14 of the regulations. Among other things, the Director-General must be satisfied with the means of drainage and disposal of the effluent from urinals (s 14(3)).

Pit privies are also subject to the approval of the Director-General (s 16(1)). Every pit or bore-hole privy constructed close to a building must be :

- not less than 20 metres from the front or street alignment of the land upon which the building is situated and not less than three metres from any other street or public way; and
- not less than two metres from the boundary of any adjoining allotment of land (s 16(2)(a)(b)).

Every pit privy must be provided with fly-proof casing, slats arranged to seal the pit against the entry of insects and protected against the entry of surface water. The privy must have approved cement slab, paved or covered by impervious material laid with adequate fall to an approved drainage outlet (s 16(c)(d)). The Regulation empowers the Director-General in the interests of public health and decency, to serve written notices on owners or occupiers of premises to repair, reconstruct, remove any existing privy within 60 days (s 17).

A maximum penalty of \$500, and a further penalty of \$50 for each day a wrongful act, omission or breach continues may be imposed (s 22).

9.9 Pollution Control

Activities carried out on the waterfront such as the storing of goods, machinery and cargo in sheds or on land have environmental implications for marine pollution from potential discharges. Operating industrial facilities requires a focus on the disposal of both solid and liquid wastes.

The *Waterfront Industry Act 1973-74* (42/1973-74) (which repealed the *Harbour Control Act 1971-72*) is administered by the Minister responsible for the Waterfront Commission. The Act establishes a Waterfront Commission to administer and control, amongst other matters, the stevedoring of any ship; the administration and control of all cargo facilities, including storage sheds at any harbour; the administration and control of all facilities to ensure the safe, speedy

and effective receipt and clearance of any goods into, or out of any harbour and to provide for amenities as may be necessary (s 16(a)(b)(c)).

The unsecured storage of dangerous goods is potentially hazardous to the environment. It is therefore important to assess what legal requirements exist to safeguard the storage of potentially dangerous chemicals and petroleum.

The primary statute that regulates and controls the storage of dangerous goods is the *Dangerous Goods Act 1984* (21/1984). The Crown is bound by Parts II, III and IV of the Act (s 3). The Act is administered by the Department of Trade, Labour and Transport.

Dangerous goods and hazardous products stored anywhere in the Cook Islands is only permitted under licence (s 5(1)). The Secretary will only grant a licence if the safeguards are sufficient for public safety and for the protection of property (s 5(2)). The Schedule to the Act classifies dangerous goods and follows the recommendations of the United Nations Committee of Experts on Transport of Dangerous Goods. There are eight classifications used in the Act with Explosives in the Class 1 category to corrosives in class 8.

Dangerous goods can only be stored and used in premises that are licensed under the Act and in the manner prescribed by the Secretary (s 19). The storage of more than 15 litres at any one time of liquid dangerous goods of class 3(a) (i.e. flammable liquids, mixture of liquids containing solids in solution or suspension used in those premises connected with any manufacture, trade or business) is prohibited (s 19(2)). An offence is committed by anyone who stores or uses dangerous goods contrary to the requirements of section 19 of the Act and the owner and the occupier of the premises may both be held liable.

The Act prescribes restrictions on the containers for dangerous goods (s 20) and specifies that the containers must be specially marked (s 21). Class 3A flammable liquids must be stored for retail purposes in underground tanks and must comply with the terms and requirements the Secretary may prescribe (s 22). Restrictions also apply to the use of dangerous goods by hairdressers (s 23) and the use of gases in balloons requires the prior written consent of a Dangerous Goods Inspector (s 24). Matches made with white or yellow phosphorus are prohibited from sale (s 25).

9.10 Air Pollution

It can be stated that because of Cook Islands geographic isolation and the lack of heavy industries (e.g. mining, metal and cement works), containments from the natural environment are unlikely to cause any significant adverse impacts on the health of the population or on the environment. There are however likely to be sources of air pollution in the Cook Islands, for example, from sand quarrying, burning, odours from animal waste (mainly pigs) and motorised vehicles (see **Recommendation 22**).

Legislation to control discharges of pollutants into the atmosphere is currently inadequate. The only piece of legislation controlling discharges of pollution into the atmosphere is the *Tobacco Products Control Act 1987* (3/1987).

The *Tobacco Products Control Act* administered by the Ministry of Health primarily addresses the sale and use of tobacco. Because of the pollution and health dangers caused by smoke, the Act also controls the use of tobacco in aircraft, buses and taxis. The Act prohibits the smoking of any tobacco product in an aircraft that is carrying members of the public on any journey beginning and ending in the Cook Islands without any intermediate stop outside the Cook Islands, whether or not the aircraft leaves and returns to the same airport without any intermediate stop (s 7).

The Act also prohibits smoking in buses (s 8) and taxis (s 9) and anyone who fails to comply with the provisions of the Act is liable on conviction to a maximum fine of \$200 (s 11). It is understood that to date, no one has been prosecuted under the Act.

The Act makes it conditional that any advertisement for tobacco products must incorporate or carry a health warning (s 5(1)) but the Minister may exclude a class of advertisements from this requirement (s 5(3)).

The Queen's Representative who may from time to time by Order in Executive Council, designate any public place as an area in which smoking is prohibited (s 13). No smoking areas can also be designated in restaurants (s 14). Smoking in designated non-smoking areas is prohibited.

The proposed *Environment Bill 1992* provides for the Environment Agency to "prevent, control and correct pollution of air" (s 6(g)) with details to be established once the Bill is in force. It would appear that the Environment Agency would be the authority to establish legally binding national emission standards for all sources of air pollution but as this will not take place until sometime in the future, it is suggested that the emissions from sand quarrying and motorised vehicles be assessed with a view to establishing air quality objectives.

9.11 Noise Pollution

The *Noise Control Act 1986* provides for the abatement of unreasonable and excessive noise. The Act currently applies only to the Islands of Rarotonga and Aitutaki under the *Noise Control Act Application Order 1986 (23/86)* and will only apply to those islands as the Queen's Representative determines by Order in Council (s 4). The Act does not apply to the conduct of military business (s 3). The Act binds the Crown.

The Act defines noise as vibrations and distinguishes between unreasonable and excessive noise. Excessive noise is defined as any noise which unreasonably interferes with the peace, comfort and convenience of any person (s 2). Excessive noise emitted by musical instruments, electrical appliances, vehicles (except aircraft) or any machine in any residential premises; or by any gathering of persons at any residential premises or place of assembly (except where the principal purpose is either religion, burial or commemoration of a deceased person or the carrying out of a community activity or cultural performances to which the general public is invited), fall into this category.

Occupiers are under a general obligation to avoid unreasonable noise. Section 6 of the Act imposes obligations on the occupier of any premises to adopt the best practicable means of ensuring that the emission of noise does not exceed a reasonable level (s 6(1)). Every occupier who fails to comply with this requirement commits an offence and is liable to a maximum fine of \$2,000. If the offence continues, a further maximum fine of \$200 can be imposed for each day.

9.12 Abatement Notices

A noise control officer who believes on reasonable grounds, that any noise emitted from any premises is such as to constitute a nuisance, may with such assistance considered necessary, give to the occupier a written notice to abate the noise to a reasonable level within seven days or within any shorter or longer period as the officer considers appropriate, having regard to the special circumstances of the case (7(c)).

Enforcement of Abatement Notice:

Where the terms of an abatement notice have not been complied with in the required period, the noise control officer can take steps to abate the noise to a reasonable level and may with the assistance of a constable, seize and impound the noise source.

Anyone who considers that excessive noise is being emitted from any premises may lay a complaint with a noise control officer or a constable (s 10). Public health officers are designated as noise control officers by the Director-General of Health with the approval of the Public Service Commissioner (s 5). If the noise control officer or constable considers the noise to be

excessive, directions can be given to the occupier of the premises or to the person responsible to "forthwith abate the noise to a reasonable level" (s 10(3)). Every direction given has the effect of prohibiting the person causing or contributing to the emission of excessive noise (s 11(1)). Everyone to whom a direction has been given is bound by the direction (s 11(2)).

The directions given may be enforced by the noise control officer and constable upon non-compliance. Enforcement may be by seizure and removal from the premises of the source of the noise, or by rendering the source inoperable by the removal of any part, or lock, seal or make unusable any instrument, appliance, vehicle, or machine that is producing or contributing to the excessive noise (s 12(1)). A noise control officer is not entitled to exercise his or her powers on any premises under this section unless accompanied by a constable (s 12(2)).

Property seized or impounded by a noise control officer must be taken to the nearest police station and may be recovered by the owner within 72 hours upon the payment of costs incurred by the police (s 14(3)).

A maximum fine of \$2,000 can be imposed on anyone convicted under this section and a further fine of \$200 can be imposed for each day the offence continues (s 13).

9.13 Marine Pollution

The *Rarotonga Harbour Control Regulations* prohibit the deposit of any rubbish, dead animal or filth below the high water mark in any harbour (rule 13). Under the *Marine Resources Act 1989* the Queen's Representative may, by Order in Council make regulations for the prevention of marine pollution (s 60(2)(t)). No regulations have been made (see **Recommendation 23**).

9.14 International Conventions

The Cook Islands became a Contracting Party to the *SPREP Convention* and its related Protocols on the 9 September 1987. The Convention requires the Contracting Parties to take all appropriate measures to prevent, reduce and control pollution from vessels, land-based sources, sea-bed activities, airborne pollution and pollution from the testing of nuclear devices. The provisions of this Convention relating to the prevention and control of atmospheric pollution needs to be fully addressed in domestic legislation (see **Recommendation 24**).

9.15 Recommendations for Chapter Nine

It is recommended that:

22. that emissions from sand quarrying and motorised vehicles be assessed with the view to establishing air quality objectives;
23. that regulations be considered for the prevention of marine pollution;
24. Article 9 of the *SPREP Convention* which relates to airborne pollution be considered when drafting detailed provisions to prevent and control air pollution under the proposed *Environment Bill*.

CHAPTER TEN

TOURISM

10.1 Relevant Legislation

Conservation Act 1986-87

General Licensing Authority Act 1989

Proposed Environment Bill 1992

Tourist Authority Act 1989

10.2 Introduction

With 34,000 tourist arrivals (1990) and 34 establishments offering nearly 700 rooms, tourism is the biggest industry, the primary generator of economic growth and the largest single income earner in the Cook Islands. Presently estimated to be worth approximately NZ\$30 million per annum, the importance of the tourism industry in the country's economy will continue to increase as the present government is obviously committed to further growth in this sector. The Cook Islands is a member of the Tourism Council of the South Pacific (TCSP), a regional body assisted by the European Development Fund of the European Community. In its "Guidelines for the Integration of Tourism Development and Environmental Protection in the South Pacific" the TCSP praises the Cook Islands environmental legislation (*Conservation Act 1986-87*) as a model for other Pacific Island Countries in the following terms; "There is no doubt that any island Pacific nation wishing a thorough overhaul of its environmental legislation would do well to look at the Cook Islands' model".

Tourism development for the future has been outlined in the Tourism Master Plan. Legislation relating to tourism underwent a review in 1989 and the proposed *Sustainable Development of the Environment Bill*, which is to replace the *Conservation Act 1986-87* (rendered inoperable in May 1991 by the discovery of a technical error), if enacted, shall provide even more comprehensive legal tools for environmental protection by introducing Environmental Impact Assessment requirements for "any activity which, in the opinion of the Director [of the future Environment Service], ... is likely to significantly affect the environment".

10.3 The Tourism Master Plan

The present government's recognition of the need for further development in the Tourist Industry has led to a thorough study, funded by the Asian Development Bank and carried out under the auspices of the Cook Islands Tourist Authority, which has resulted in the publication of the *Tourism Master Plan for the Cook Islands* in August 1991. It is a substantial document, containing a wealth of information about the country, but most importantly, taking seriously into account the environmental aspects of tourism development. It is in fact the only such plan that addresses environmental issues. It was endorsed by the Cook Islands Government in December 1991. The Plan recognises the close link between development and conservation of the environment. It clearly states the Tourist Authority's intention to continue to be actively involved in the fundamental issue of sound environmental management. Without an "attractive" environment the tourist industry cannot prosper. Recognising that resources must be used sustainably if the nation is to progress, two main environment-related objectives have been identified by the Tourism Master Plan:

- The need to rehabilitate resources that have been degraded through over-exploitation, and to a certain degree pollution, such as sand beaches, lagoons, forests etc., upon which tourism clearly depends and which support the traditional culture of the island;
- the need, from here on, to manage the environment in a sustainable manner to avoid the errors of the past.

To support these objectives the Tourism Master Plan stresses the need to:

- Undertake environmental awareness programmes for the people of the Cook Islands;
- ensure that development projects are fully evaluated in terms of their socio-environmental consequences;
- strengthen the capabilities of the Cook Islands Tourist Authority and the General Licensing Authority.

10.4 Statutory Background

The *Tourist Authority Act 1968* (now repealed) established an "Authority to encourage the development of and administer the tourist industry". This original Authority had the power to "license, regulate and control hotels, accommodation premises, restaurants and tourist and public accommodations of all kinds in the Cook Islands". This Act was amended in May 1989 to abolish the Authority's specific function to issue licences following the establishment of the General Licensing Authority to which this power devolved.

In December 1989, new legislation was enacted to "reconstitute the Tourist Authority and to establish a Tourist Advisory Committee as bodies within the Cook Islands". The former principal *Tourist Act*, the *Tourist Regulations 1970* and one Amendment to the principal Act were repealed. However, the 1989 *Amendment Act*, abolishing the function to issue licences by the now defunct 1968 Tourist Authority, remained untouched.

The *Tourist Authority Act* enacted in December 1989 is described as:

An Act to reconstitute the Tourist Authority and to establish a Tourist Advisory Committee as bodies within the Cook Islands.

The primary objective of the Authority is to:

Encourage and promote the development of tourism in the Cook Islands in a manner which is appropriate to the interests of the Cook Islands as a whole and of its people at large" (part II, 13).

The Tourist Authority is primarily funded by the Government.

10.5 Structure

The Tourist Authority established as a body corporate by the 1968 Act, maintains this structure under the 1989 Act. The current Act establishes a Board of Directors (part I, 4) and a Tourism Advisory Committee (part III, 17).

The Board of Directors has overall control of the Authority; it is composed of the Director of Tourism, Chief Executive Officer of the Authority and four to six members appointed by the Minister of Tourism. The criteria for appointments is based on competence in the travel industry or private commercial interests and personal attributes or qualifications enabling them to represent general community interests. The Minister appoints one of the members as Chairperson of the Board. The Chairperson has a deliberative vote and, in the case of equality of votes, a casting vote. The majority of the members of the Board forms a quorum and all questions arising at a meeting will be decided by a majority of the valid votes of members present. Members having conflicting interests on any matter brought before the Board are required to disclose such interests and abstain from taking part in deliberations and decisions pertaining to that matter (part I, 9).

The Tourism Advisory Committee is responsible to the Authority. It is composed of twelve members appointed by the Minister upon recommendation of the Authority (Part III, 17, 2, 3). Together, the twelve members provide representation of the various sectors of Cook Islands' society concerned with tourism and tourist-related industries. Representatives are drawn from transport, airline industry, tourist accommodation, tour operators, food and beverage establishments, growers, the Religious Advisory Council, the Outer Islands tourist industry, those engaged in training for the tourist industry, the Koutu Nui (an assembly of Mataiapos or traditional chief of second rank having representative and advisory roles), the Conservation Service. The Director of Tourism or his or her nominee is also part of the Committee.

The Committee has a general consultative role, providing advice and recommendations to the Authority on matters referred to it by the Authority and on tourism-related issues affecting commercial, community and governmental interests.

The Authority, being the central institution for tourism, has functions which embrace a wide range of tourism related activities pertaining to:

- policy and planning;
- marketing and promotion;
- cultural and community issues;
- education and training;
- commercial operations;
- liaising with Outer Islands with the special mission to "encourage the growth of tourism in the Outer Islands in accordance with the degree to which each island seeks to participate in the tourist industry" (Part II, 14 {f}).

Of particular importance are the Authority's functions:

- in promoting and facilitating dialogue and consultation between Government, the tourism sector and the general public of the Cook Islands (section 14, (c), (i)); and
- to work with other departments and agencies to regulate and control the development of scenic attractions and recreational facilities in the Cook Islands.

The Authority is vested with all powers necessary for the performance of its functions. Of particular importance are those functions listed below that are of some relevance to environmental concerns:

- to acquire by purchase, lease, sublease or otherwise and to dispose of any land or interest in land other than the fee simple in such land, with or without any building (part II, 15, (2), (b));
- to contract for the erection or provision of accommodations on acquired land;
- to participate financially in any company dealing with promotion of tourism, tourist accommodations, travelling, recreation and entertainment;
- to make recommendations regarding standards to be complied with by tourist establishments, scenic attractions and recreational facilities (part II, 16).

The exercise of any of the above functions require the prior approval of the Cabinet.

Provisions for regulations are made under section 29 of the Act but none have been enacted so far. The regulations existing under the previous principal Act (*Tourist Authority Act 1968*) dealt mainly with licensing of tourist establishments, a function which has now devolved to the General Licensing Authority.

10.6 The General Licensing Authority Act 1989

One of the main changes in tourism legislation by the review carried out in 1989 is the removal of responsibility for licensing of tourist establishments from the Cook Islands Tourist Authority and the creation of a new body, the General Licensing Authority, to take over this regulatory function.

This specialised agency is a body corporate consisting of five members appointed by the Minister of Tourism for a term of two years. A Chairperson and Deputy Chairperson are appointed from amongst its members (Part I, 3, 4, 7, 8,). Three members constitute a quorum. Special meetings can be called by written request of any three members or by the Chairperson at any time. The Chairperson has a deliberative vote and in case of equality, a casting vote. Questions are decided by a majority of the valid votes recorded at any meeting.

Provisions are made in the Act for the functioning of the General Licensing Authority in the Outer Islands. During such times, the Mayor of the Island, a member of the Aronga Mana together with three members as the General Licensing Authority, will hear and determine matters in the particular island. The Mayor and the member of the Aronga Mana are deemed to be full members of the Authority for the purpose of the hearing and have the right to vote. Public notification of the hearing is required seven days prior to it (part I, 8).

10.7 Functions

The General Licensing Authority's principal functions are outlined under section 12, and include:

- the licensing of tourist establishments;
- the issuing of special tourist-transport licences for motor vehicles, bicycles and boats;
- the working out of a grading system and the standards of services and facilities to be complied with by tourist establishments.

The Authority has the power to:

- set conditions in respect of any licence to be granted;
- recommend standards;
- issue licences;
- review, suspend, revoke and re-issue such licences as the Authority decides;
- appoint officers and employees as required but with the approval of the Minister for Tourism.

Licences are subject to review once a year and cannot be transferred without the consent of the Authority. The procedures for licensing are set out in the Act. The Authority has the power to hold public sittings for the purpose of enquiring and collecting evidence and recommendations from interested parties (part III,17 {a,b}).

Section 18 of the Act reads as a guideline to the Authority in its function of issuing licences:

In determining whether the issue of any licence under this Act is necessary or desirable the Authority shall have regard to:

- (a) The desirability of increasing the amount and improving the standard of accommodation and restaurants for the public, tourists and holidaymakers;
- (b) The convenience of persons who will be entering or staying on the land or in the building or premises with which the Authority is concerned;
- (c) The desirability of improving the standard of motor vehicles and other transport used, by the public, tourists and holidaymakers.

These provisions reflect the Authority's regulatory control role. Paragraph (a) of this section should be used effectively for ensuring a balanced, sustainable development of the tourist industry in the Cook Islands through controlling the number of tourist establishments allowed to function, their size and standards. Thus the General Licensing Authority can have a major role in implementing the Cook Islands policies on tourism.

10.8 Regulations

Provisions for regulations are made under section 29 of the *General Licensing Act 1989*.

Regulations made by Order in Executive Council, on 13 December 1990, determine licensing fees to be prescribed in accordance with scales dividing tourist accommodation premises into 4 categories: Resort Hotels, Hotels, Self-catering Accommodations, Budget Accommodation.

There are five types of fees: Application fee, Approval fee, Annual Licence renewal fee which is calculated per room, the Annual Licence renewal proper and Extension approval fee.

Regulations issued by Order in Executive Council on 29 October 1991 concern restaurant fees and include application fees and annual licence fees calculated per seat.

10.9 Tourism and Conservation Legislation

At the present time there is no conservation legislation in force in the Cook Islands. The specific tourism legislation analysed above deals mainly with establishing institutions such as the Tourist Authority and the General Licensing Authority. The only existing regulations concern licensing fees.

Although environmental concerns are considered, no specific environmental protection as such is included in the above mentioned Acts. It is suggested that the legislation be assessed in the light of the strong directions given for environmental matters to be taken into consideration in the Tourism Master Plan (see **Recommendation 25**). It would appear that tourism legislation relies on the *Conservation Act* for implementation and enforcement of environmental protection. With the *Conservation Act* being inoperative, nothing can be done to stop or control potentially hazardous projects.

An example of this is the major tourist project presently underway on Rarotonga involving construction on a Fast Track Programme of a four star, 200 room hotel complex with direct access to the beach, sophisticated landscaped grounds scattered with saltwater lagoons, fresh water swimming pools and all the desirable amenities of a hotel of this standard. It is to be fully owned by the Cook Islands Government, through Essington Cook Islands Limited, and will be managed by Sheraton Pacific Hotels Pty Ltd. This hotel is expected to be ready by mid-1993.

An Environmental Impact Assessment (EIA) was carried out after the commencement of the project. As there are no legal requirements for Environmental Impact Assessments to be

conducted, there is still scope for Environmental Impact Assessment procedures to be integrated into the project planning and decision-making process which could provide additional information on environmental dimensions in addition to technological information for decision-makers to decide on the viability of the project proposal. The proposed *Environment Bill 1992* makes provision for Environmental Impact Assessment but as the Bill is not yet in force, it is suggested that Environmental Impact Assessment guidelines be established and applied in the interim (see **Recommendation 25**).

However, the urgent need to pass the new legislation is recognised by all interested parties in the Cook Islands. The new Bill provides the legal capability for good environmental management and development in the fields of establishment of protected areas, species protection and pollution control; the inclusion of Environmental Impact Assessment requirements is a considerable improvement on the 1986-87 *Conservation Act*.

All of these provisions are of particular interest for achieving sustainable tourism development. The existing tourism legislation seems crippled without the support formerly provided by the environmental protection provisions of the *Conservation Act*. The two sets of legislation, tourism and conservation, are complementary.

10.10 Conclusion

The Cook Islands have the right blend of all the natural and socio-cultural features to make it an outstanding destination for tourists. Provided these assets are not destroyed through uncontrolled development, the tourist industry will continue to prosper and thus strengthen the nation's economy. One must however be realistic and keep in mind that the Cook Islands' land mass is small and will not support uncontrolled, mass tourism. Efforts should be directed towards making it a desirable, high quality tourist destination for a select type of traveller, eager to learn about the Polynesian ways and ready to participate in keeping the country as the natural paradise that it always has been. This can be achieved through appropriate tourism legislation coupled with vigorous environmental legislation aimed at preserving the nation's resources while allowing controlled tourist development, in other words, optimising rather than maximising the tourism sector.

The Cook Islands has good potential for further tourism development. Eco-tourism in particular should be further investigated (see **Recommendation 27**). The existing National Park on the island of Suvarrow coupled with the proposed establishment of National Parks on the islands of Mangaia, Atiu and Penrhyn can provide valuable eco-tourism destinations. The existing tourism legislation coupled with the conservation measures should allow for the development of such tourism without jeopardising the intrinsic values of the natural environment of the Cook Islands.

The Festival of Pacific Arts in October 1992 should provide the opportunity to test the Cook Islands capability to absorb an important number of tourist arrivals and will possibly help in determining the desirable scope of future tourism development.

10.11 Recommendations for Chapter Ten

It is recommended that:

25. the *Tourist Authority Act* and the *General Licensing Act* be assessed in the light of the environmental directions given in the Tourism Master Plan;
26. that Environmental Impact Assessment guidelines be established in the interim and applied to tourism projects (e.g. hotel construction) before approval is given to implement the projects;
27. other destinations within the Cook Islands which have potential for Eco-tourism be investigated.

CHAPTER ELEVEN

BIODIVERSITY CONSERVATION

11.1 Relevant Legislation

International

Convention on the Conservation of Biodiversity
Convention for the Protection of Natural Resources and Environment of the South Pacific
Convention on the Conservation of Nature in the South Pacific
Convention on International Trade in Endangered Species of Wild Fauna and Flora

National

Conservation Act 1975
Conservation Act 1986-87
Convention on Biological Diversity
Cook Islands Act 1915
Outer Islands Local Government Act 1987
Proposed Environment Bill 1992

11.2 Introduction

The global *Convention on the Conservation of Biological Diversity* adopted on 22 May after four years of negotiation by an Intergovernmental Negotiating Committee under the sponsorship of the United Nations Environment Programme (UNEP) brought to centre stage the necessity to effectively conserve biological diversity through policies and legislation. The direction that policies and legislation should take is to ensure that there is an appropriate balance between the preservation of areas in perpetuity as national parks and reserves for their intrinsic worth and those areas that are protected but open for the use and enjoyment of the public. The national park system both terrestrial and marine through the various categories of protected area (e.g. sanctuary, nature reserve), is the most commonly used strategy to protect living resources and to conserve biological diversity.

The need to preserve genetic resources is emphasised in the World Conservation Strategy (IUCN: 1980), which points out that

we are morally obliged to our descendants and other creatures to act prudently. Since our capacity to alter the course of evolution does not make us any the less subject to it, wisdom also dictates that we be prudent. We cannot predict what species may become useful to us or are vital parts of the life support system on which we depend. For reasons of ethics and self-interest, therefore we should not knowingly cause the extinction of a species (IUCN, 1980:3).

It is generally understood that the designation of about 10% of land in a country as a national park, nature reserve etc. is a minimum requirement to prevent the trend towards species depletion (MacKinnon et al, 1986:5). It may be possible in many countries to adopt this guideline but in countries with limited land mass and where most of the land is privately owned in a complex system of tenure, this figure is unrealistic. A system of protected areas can however be facilitated by directly involving landowners in management of such areas, or through a system of protected areas tailored specifically to the unique land tenure system in the Cook Islands or through the designation of several categories of protected areas, each area with a different management objective and each permitting different levels of use (see **Recommendation 28**).

Designating large tracts of land as national parks may be desirable from a conservation point of view, but it is simply not feasible in most countries if in

addition to 'total protection' areas a country has alternative categories in which, for instance, limited selective forestry, hunting or controlled livestock grazing is permitted, the protection agency might be able to extend proper conservation practices over a much greater area. Thus land designated for productive forestry or hunting can be managed in such a way as to minimise loss of gene pools, and give prime attention to the goals of nature conservation (MacKinnon et al, 1986:15).

The need to preserve genetic diversity is emphasised in the World Conservation Strategy (IUCN: 1980). The three objectives to conserve living resources outlined in the World Conservation Strategy are as follows:

- to maintain essential ecological processes and life-support systems;
- to preserve genetic diversity; and
- to ensure the sustainable utilisation of species and ecosystems (IUCN:1980).

11.3 Traditional Protection

There is little Crown land available in the Cook Islands for protected area development and any land available is subject to competing land use demands. Protected areas and restrictions imposed on land, sea and natural resources for the protection of species and natural systems is not altogether an alien concept in the Cook Islands. Different types of traditional conservation practices exist. However, in some islands such as Rarotonga these practices have greatly weakened or have disappeared altogether with economic development. The traditional custom of Ra'ui (customary prohibitions) can be placed by the chief of the tribe or the head of the land holding lineage, on lands, lagoons, areas, rivers, fresh water ponds, lakes, swamps, fruit trees, coconuts, birds, wildlife etc. for conservation purposes. People on the islands or in the villages are expected to observe the prohibitions placed on these areas or species. Although Ra'ui is basically imposed to allow the resource to recover either to improve the yield of a particular species or in preparation for a special event, it is an important tool in protected area management (see Recommendation 29).

11.4 Statutory Background

The *Cook Islands Act 1915*, sections 356 and 357 allows for the setting aside of Crown land as a reserve for any public purpose. The distinction made between sections 356 and 357 is that section 356 allows for the setting aside of public land whilst section 357 permits the taking of any land (including customary land) for a public purpose. When land is taken for a public purpose, all persons having a right, interest, title or estate in that piece of land are entitled to compensation from the Crown. If the land taken is native customary land, the Land Court is required to investigate the customary title to that land and award compensation accordingly (s 359). Section 487 of the Act provides for the establishment of native reserves on any native land, whether freehold or customary, for historical or scenic interest.

The *Outer Islands Local Government Act 1987 (25/87)* gives the Island Councils the power to make By-laws for regulating, controlling or prohibiting the use of any reserve or park under their control (BL 16(i)). The now repealed *Trochus Act 1965* (which regulated the harvesting of trochus within three reserves) also affected protected areas. The *Trochus Act* was repealed by the *Marine Resources Act 1989* but the Act does not appear to make any specific reference to the establishment of marine reserves. However, a general power exists under section 60 whereby the Queen's Representative may by Order in Council make regulations to prohibit fishing of all kinds within any lagoon or any part of a lagoon (s 60(y)).

11.5 Conservation Legislation

The *Conservation Act 1975* (repealed by the 1986-87 *Conservation Act*) was the principal statute for the conservation of nature and natural resources and included the protection of historic sites. The Act made provision for areas to be set aside as national parks and reserves. The 1975 Act provided the Director of Conservation Services (then located within the Ministry of Internal Affairs and Conservation) with wide-ranging powers to protect, control, conserve and manage parks, wildlife, forests and water catchment areas. These powers are consistent with the principles that protected areas can contribute significantly to the stability of the soil and the climate through the maintenance and protection of natural forests, vegetation cover and water sources. In some respects, it can also be consistent with customary conservation practices. Under the Act, any land, lagoon, reef or island or portion of the seabed with its surrounding waters, could be declared a national park, reserve or world park. In addition, the Director was under a duty to prepare management plans for any national park or reserve declared under the Act and, after approval, to implement them.

In a similar way to the 1975 Act, the 1986/87 Act provides for the conservation and protection of the environment and natural resources and the establishment of national parks and reserves. The Act does not however cover historic sites as it did in the previous Act, but archaeological sites must be given consideration by the Conservation Service in the preparation of any management plans. The 1986/87 *Conservation Act* distinguishes between national parks and reserves though the Act itself does not define what these terms mean.

11.6 Existing Protected Areas

The island of Suvarrow, with the lagoon and atolls covering 13,468 hectares was gazetted a national park in 1978. Suvarrow, located about 950 kilometres north north-west of Rarotonga is a low coral atoll atop an extinct submarine volcano. The atoll rim, 0.5-1 kilometres wide, is continuous and encloses a 10 kilometres wide lagoon. Twenty-two islands occur on the rim, most featuring limestone exposures of 0.5-1.5 kilometres above sea level. The Park is administered by the Conservation Service with assistance from other Government departments. Important as a sanctuary for seabird and other wildlife, commercial development activities are prohibited in the area except for a number of limited exceptions. Exploitation of fish and other resources by visitors is permitted for immediate use but not for commercial purposes. Licences can be issued for mother-of-pearl, and trochus harvest, copra production and coconut crab culling (Lausche, ppage 72-73).

Its distance from Rarotonga poses a number of management difficulties for the Conservation Service. The illegal visits by passing yachts, the introduction of species by illegally visiting yachts and fishing vessels and poaching on marine resources by visitors are difficult to control. The potential threat of fire to the sanctuary from careless acts by passing illegal visitors is a matter of concern to the administrators.

The 1992 *Cook Islands State of the Environment Report* identified the land tenure system as posing the greatest difficulties in establishing protected areas (page 58). The Conservation Service has made attempts in the last four years to establish and manage reserves in the following areas:

- (a) the Te Manga Nature Reserve in the central uplands of Rarotonga. The mist community found in this proposed reserve is the most restricted and scientifically interesting assemblage in inland Rarotonga. Numerous species found in this isolated mist community are not found elsewhere in Rarotonga;
- (b) the Pokoinu Recreational Reserve;
- (c) the Kakerori Reserve in central south-east Rarotonga for the conservation of the Rarotonga flycatcher (*Kakerori*) *Pomarea dimidiata*;

- (d) Takutea Nature Reserve located in the southern Cook Islands is an important seabird breeding area.

11.7 International Conventions

The Cook Islands is a Contracting Party to the *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* and related Protocols (*SPREP Convention*) and the *Convention on the Conservation of Nature in the South Pacific (Apia Convention)* (see Recommendation 30).

The *SPREP Convention* requires that the Parties establish protected areas, such as parks and reserves and prohibit or regulate any activity likely to have adverse effects on the species, ecosystems or biological processes that such areas are designed to protect (Article 14). Under the *Apia Convention*, the Contracting Parties are required to encourage the creation of protected areas to safeguard representative samples of the natural ecosystems occurring therein (particular attention to be given to endangered species), as well as superlative scenery, striking geological formations, and regions and objects of aesthetic interest or historic, cultural or scientific value (Article 11 (1)). The Convention further requires that the boundaries of national parks not be altered or be able to be alienated, and that national parks not be subjected to exploitation for commercial profit except after the fullest examination. The hunting, killing, capture or collection of specimens (including eggs and shells) of the fauna and destruction or collection of specimens of the flora in national parks is prohibited except when authorised. Provisions must be made for visitors to enter and use national parks for specified conditions such as for cultural, educational or for recreation purposes (Article 111). The *Apia Convention* also requires the establishment of national reserves which "shall be maintained inviolate as far as practicable" (Article IV).

11.8 Environment Bill 1992

The *Environment Bill 1992* basically adopts the same provisions for protected areas as in the 1986-87 *Conservation Act*.

Under the 1986-87 Act, the Queen's Representative, on the advice of the Minister responsible for Conservation, is empowered to proclaim by notice published in the Cook Islands Gazette that any land, lagoon, reef or island or any Cook Island waters, or portion of the sea bed of those waters to be established as a national park (s 32(1)). Further proclamations may be made in the same way for additional allocations to national parks (s 31(2)). Reserves may also be proclaimed (s 33) but any proclamation made cannot be revoked except by an Act of Parliament (s 34).

11.9 Conclusion and Recommendations

The *Cook Islands State of the Environment Report 1992* and an Overview of the Cook Islands protected area system by James Paine (Paine: 1989; this overview was used to provide information for this chapter) make reference to the fact that the land tenure system is one of the major constraints against establishing protected areas. Negotiations however continue for the involvement of landowners in the establishment and administration of national parks and reserves. The competing demands for land use where land is limited can also adversely affect the establishment of protected areas. The resolution of such issues is important as the destruction of unique and special species of wildlife and the degradation of the environment have serious implications for the future development of the nation. Another constraint identified during the course of the Review is the problem of enforcement. The enforcement of controls in the different categories of protected areas established is critical to an effective protected area system.

The two pieces of conservation legislation and the proposed *Environment Bill* give the Conservation Service wide responsibility to protect wildlife, establish and manage protected areas. Such laws illustrate the Government's role as steward for wildlife and its habitat, and its duty to ensure the health of the earth's life support system, which also includes the protection of

representative samples of landscapes and natural systems. Whether the public trust doctrine supersedes private interests on private or customary land in the protection of wildlife and areas of national interest is uncertain as there has been no litigation in the Cook Islands to throw some light on this matter. The public trust doctrine does open a complicated legal question as to the extent of Government authority and jurisdiction over wildlife and species on private or customary land. Whether landowner authority and Governmental authority and jurisdiction to protect wildlife and their habitat can coexist in portions of private or customary land is a question that may require future judicial interpretation.

Given the complexities involved in establishing protected areas, alternative solutions would need to be investigated. Perhaps one approach that could be explored is the question of imposing moratoriums on the taking of wildlife and species and imposing moratoriums on the areas to be protected (see Recommendation 31). The principal feature of the moratorium is to protect particular species and bring such species to an optimum sustainable level. Under the moratorium it would be illegal to take and destroy particular species and wildlife with the exception of that for scientific and educational purposes. Moratoriums could also be placed over areas of land or units within an area containing unique and special species or that of special scientific and historic interest. Moratoriums may be waived provided stringent standards are met. The use of Ra'ui in such circumstances may be possible and requires further investigation.

Protecting areas with the agreement of landowner has been tried in the Cook Islands and negotiation by the Conservation Service in this regard is an ongoing process. The establishment of protected areas, with the landowners playing a central role, has also been tried elsewhere in the Pacific with varying degrees of success, and could suggest that given the circumstances in the Cook Islands, this may still be a viable option.

11.10 Recommendations for Chapter Eleven

It is recommended that:

28. the involvement of landowners in the management of protected areas be a continuing process to ensure the success of the protected area system;
29. The use of Ra'ui to protect species and habitats be considered and, if feasible, to be given legislative support;
30. Article 14 of the *SPREP Convention*, and the *Apia Convention* be examined when details of National Parks and Reserves outlined in Part III of the proposed *Environment Bill 1992* is drafted to ensure that the obligations under both Conventions have been complied with;
31. moratoriums to protect species and habitats be considered.

CHAPTER TWELVE

WILDLIFE CONSERVATION

12.1 Relevant Legislation

Conservation Act 1986-87

12.2 Introduction

One of the major responsibilities of the Conservation Service under the 1986/87 *Conservation Act* is the protection of wildlife (s 6(b)). Wildlife is defined by this Act to mean:

- (a) animals and plants that are indigenous to the Cook Islands;
- (b) migratory animals that periodically visit the Cook Islands or Cook Island waters;
- (c) other animals and plants described by regulations made under this Act (s 2).

The *Cook Islands State of the Environment Report 1992* (page 69) points out that the Conservation Service has investigated three areas of biological interest and concept documents have been prepared for each of the areas dealt with below.

(a) The Takutea Nature Reserve

The Takutea Nature Reserve was first proposed by the Conservation Service in 1988 to protect seabird breeding areas. Takutea is located in the southern Cook Islands and comprises an area of approximately 150 hectares. According to Paine (1989) the island is the most important seabird breeding area in the Southern Group. The kinds of wildlife identified on Takutea include a large colony of red-footed bobby *Sula sula*, frigate birds, *Fregata minor*, brown bobby, *Sula leucogaster*, white-capped noddy *Anous minutus*, masked bobby *S. dactylatra*, red-tailed tropic bird *Phaeton rubricauda* and white tern *Gygis alba*. Land birds are restricted to reef heron *Egretta sacra* which breeds on Takutea and the migrant New Zealand long-tailed cuckoo *Eudynamis taitensis* which nests in New Zealand. A number of species migrate from Alaska for winter, including bristle-thighed curlew *Numenius tahitiensis*, golden plover *Pluvialis sp.* and the wandering tattler *Hereroscelus incanus* (page 27/8).

(b) Kakerori Nature Reserve

The proposed Kakerori Nature Reserve is situated in central south east Rarotonga. The reserve is proposed principally to protect the Rarotonga Flycatcher (Kakerori) *Pomarea dimidata*. The proposed area covers approximately 200 hectares. Two surveys were carried out to determine the population and breeding grounds of the Kakerori in 1883 when the survey recorded 21 birds and two nests. In 1987 34 birds were recorded, mostly located in the Totokoitu and Taipara valleys and possibly in the upper valleys of the Turoa and some eastern valleys of the Avana. The Conservation Service's major activity in this area is focused on the Kakerori Recovery Programme aimed at increasing the population. Other land birds located in this area include the Rarotonga starling, *Aplonis cinerascens*, Rarotonga fruit dove, *Ptilinopus rarotongensis* and Pacific imperial pigeon *Ducula pacifica*. The long-tailed koel, *Eudynamis taitensis*, a nesting migrant from New Zealand, is also present during winter months. Seabirds in the proposed area are the common noddy *Anous stolidus* and white tern *Gygis alba*, whilst white-tailed tropic bird *Phaeton lepturus* also nest on some of the cliffs on the Te Manga-Te Atukura divide. Native mammals are restricted to flying fox *Peteropus sp.*

(c) Te Manga Nature Reserve

The proposed Reserve located in the central uplands of Rarotonga is one of the few known breeding grounds of herald petrel (koputu) *Pterodroma arminjoniana* which was recorded as

extinct in 1899. Nowadays it is not uncommon to see the birds flying over the main Te Manga Te Atukura breeding ground. Smaller colonies are said to exist on Maungatea and possibly on Maungaroa. The Mist landsnail *Tekoulina sp.* is uniquely viviparous, and endemic to the proposed Reserve.

Suvarrow Atoll National Park is a breeding ground for turtles, especially the green turtle *Chelonia mydas* on Turtle Island. All the islets, especially Manu and Turtle, and with the exception of Anchorage, are major breeding areas for seabirds. Coconut crab *Birgus latro*, terrestrial hermit-crabs and a variety of other crabs, some clam *Tridacna maxima* and five species of lizard also occur on Suvarrow.

12.3 Statutory Background

Wildlife located in the areas described above attracts the necessity for strong legislation which can stand alone to be put in place to protect wildlife, especially wildlife under threat or endangered (see Recommendation 32). The only piece of current legislation protecting wildlife is the 1986/87 *Conservation Act* which gives the Conservation Service the power to "protect, conserve, manage and control wildlife" (s 6(b)). Any new law envisaged needs to specify the bird species covered and the prohibitions on taking and destruction, subject to limited exceptions. The legislation should make it unlawful to hunt, take, capture, kill or possess any named bird protected by-law or to take or disturb their nesting sites. The prohibition should also extend to the taking and destruction of eggs. The Minister responsible for Conservation should be authorised to establish by regulation the circumstances under which protected birds may be taken, such as for research or species propagation.

Protecting wildlife from direct injury or killing is of little value if adequate protection is not given to their habitat. Areas set aside to protect wildlife and wildlife habitat are usually units of the National Parks and Reserve system as well as the Forest and Marine Reserve system. Although in general, legislation to protect Parks and Reserves also extends to wildlife found therein, wildlife should have its own enabling authority and own protective measures which spells out in greater detail the conservation and protective measures and particularly the measures to protect endangered species (see Recommendation 32).

12.4 International Conventions

Article 14 of the *SPREP Convention* requires Contracting Parties to establish protected areas and to prohibit or regulate any activity likely to have adverse effects on the species, ecosystems or biological processes that such areas are designed to protect. The *Apia Convention* includes the following three Articles which are pertinent to wildlife protection:

1. The Contracting Parties shall, in addition to the protection given to indigenous fauna and flora in protected areas, use their best endeavours to protect such fauna and flora (special attention being given to migratory species) so as to safeguard them from unwise exploitation and other threats that may lead to their extinction.
2. Each Contracting Party shall establish and maintain a list of species of its indigenous fauna and flora that are threatened with extinction. Such lists shall be prepared as soon as possible after this Convention has come into force and shall be communicated to the body charged with the continuing bureau duties under this Convention.
3. Each Contracting Party shall protect as completely as possible as a matter of special urgency and importance the species included in the list it has established in accordance with the provisions of the last preceding paragraph. The hunting, killing, capture or collection of specimens (including eggs and shells) of such species shall be allowed only with the permission of the appropriate authority. Such permission shall be

granted only under special circumstances, in order to further scientific purposes or when essential for the maintenance of the equilibrium of the ecosystem or for the administration of the area in which the animal or plant is founded.

4. Each Contracting Party shall carefully consider the consequences of the deliberate introduction into ecosystems of species which have not previously occurred therein (Article V).

Domestic legislation giving effect to the various components of the *SPREP* and *Apia Conventions* needs to be considered.

Wildlife and its natural habitat is extremely vulnerable to agricultural and commercial development as well as to human settlement. The Government, through the Conservation Service, has the legal capacity to provide protection. Cook Islands is not a party to the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* and it is suggested that accession to this Convention be considered in the light of its long term benefits to protect wildlife (see **Recommendation 33**). The Convention is designed to govern trade in threatened and endangered or exploited species and aims to regulate and control trade across national borders. The Cook Islands with its many islands and valuable wildlife would be an attractive target for international wildlife smugglers.

12.5 Recommendations for Chapter Twelve

The value that the Cook Islands place on its wildlife should be clearly reflected in strong legislative provisions. It is suggested that:

32. specific wildlife legislation capable of standing alone be considered, or alternatively adequate measures to protect wildlife and endangered species be incorporated in the proposed *Environment Bill 1992*;
33. consideration be given to accession to the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*.

CHAPTER THIRTEEN

PROTECTION OF NATIONAL HERITAGE

13.1 Relevant Legislation

Cook Islands Act 1915

Cook Islands Amendment Act 1950

Ministry of Cultural Development Act 1990

Proposed Environment Bill 1992

13.2 Statutory Background

The *Cook Islands Amendment Act 1950* (amending the *Cook Islands Act 1915*) makes provision for native antiquities. The Act defines native antiquities to include:

native relics, articles made with ancient native tools and according to native methods, and all other articles or things of historical or scientific value or interest and relating to the Cook Islands, but does not include any botanical or mineral collections or specimens (s 2).

The Queen's Representative may acquire on behalf of Her Majesty, native antiquities and provide for their safe custody (s 3). The removal of antiquities from the Cook Islands is prohibited without first offering them for sale to the Queen's Representative (s 4). Anyone who exports antiquities without the written consent of the Queen's Representative commits an offence and is liable to a fine of up to \$200 (s 6(1)). Notice of an intention to export antiquities must be given by the exporter to the Collector of Customs at least 24 hours before shipment (s 6(2)). Any antiquities entered for export without complying with the requirements of section 6(2) are deemed to be forfeited and the antiquities will vest in Her Majesty for the benefit of Cook Islanders (s 6(3)). The Queen's Representative, on making inquiries, may cancel the forfeiture.

Antiquities may be required to be copied by photography or cast as a condition of the permission to export them (s 8). Any copies made will be the property of Her Majesty and held for the benefit of Cook Islanders (s 8(2)). Any dispute arising as to whether any article or thing comes within the scope of this part of the Act will be determined by the Queen's Representative whose decision will be final (9).

The *Ministry of Cultural Development Act 1990*, (repealing the *National Arts Council Act 1981-82*) establishes a separate Ministry of Cultural Development from what used to be the Cultural Division in the Ministry of Internal Affairs and Conservation. The principal objectives of the Ministry are to:

- (a) preserve and enhance Cook Islands cultural heritage;
- (b) encourage cultural art forms;
- (c) present, where appropriate, the varied elements of ancient and contemporary Cook Islands art and cultural forms;
- (d) maintain the unique cultural national identity of the people of the Cook Islands (s 4(1)).

Some of the principal functions of the Ministry are to encourage, promote, support and develop the standards in the arts and all forms of artistic activities; oversee the activities of the Library and Museum, Archives, Anthropological Services, National Arts Council, Constitution Celebrations, Audio-Visual Recording Unit; charge fees for admission to land or buildings under its control; and publish and disseminate information relating to the arts (s 4(2)).

The Act also establishes a National Arts Council (s 13(1)) and a Cultural Development Fund (s 20). The Minister of Cultural Development is responsible for the Ministry's policies (s 5) and has the power to appoint, with the concurrence of Cabinet, advisory and technical committees to provide advice on the functions of the Ministry (s 6(1)).

13.3 Conclusion

It appears that the protection of historic sites, monuments, historic buildings and their surroundings is part of the responsibility (through the Anthropological Services) of the Ministry of Culture. The Conservation Service (Agency for the Environment) will also have similar responsibilities with regard to the protection of historic sites under the proposed *Environment Bill 1992*. It is understood that registration of historic places has been carried out by the Cook Islands Museum and that there is a plan for mapping maraes (traditional ceremonial sites) on Rarotonga with assistance provided by the University of Auckland.

As the protection of national heritage is varied in nature, different safeguards would apply to secure the protection of the different components that form part of the nation's heritage. New buildings and other forms of economic development pose real dangers to historic sites and monuments and to buildings of historic and architectural importance. Such areas should be actively protected by legislation against damage, destruction and from pollution that would impair their value and authenticity.

Section 29 of the *Ministry of Cultural Development Act* gives power to the Queen's Representative to make regulations by Order in Executive Council "as may be necessary or expedient for the purposes of giving full effect to the provisions of this Act". It is suggested that the above matters be given consideration, as some of the areas discussed, e.g. historic buildings, could merit specific legal protection. Should this suggestion be adopted, corresponding changes would need to be made by way of amendments to the *Land Use Act 1969*, the building laws and regulations and the proposed *Environment Bill* to avoid conflicting responsibilities (see **Recommendation 34**).

13.4 Recommendation for Chapter Thirteen

It is recommended that:

34. assessment be made of the existing historic buildings in the Cook Islands with a view to ensuring their preservation. Where a specific system for the preservation of historic buildings is instituted, the provisions in the building legislation, the *Land Use Act* and the proposed *Environment Bill* would need to be examined and harmonised with any provisions made to safeguard the national heritage.

REFERENCES

1. INTERNATIONAL CONVENTIONS, TREATIES AND AGREEMENTS

Convention for the Protection of Natural Resources and Environment of the South Pacific Region (SPREP Convention) and related Protocols:

- *Protocol for the Prevention of Pollution of the South Pacific Region by Dumping, and the*
- *Protocol Concerning Co-Operation in Combating Pollution Emergencies in the South Pacific Region;*

Convention on the Conservation of Nature in the South Pacific 1976 (Apia Convention);

- *Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific Wellington 1989;*
- *Vienna Convention for the Protection of the Ozone Layer 1985;*
- *Convention on the Conservation of Biological Diversity 1992*
- *South Pacific Forum Fisheries Agency Convention Port Moresby 1985;*
- *Law of the Sea Convention 1982;*
- *South Pacific Nuclear Free Zone Treaty Rarotonga 1985;*
- *Treaty on Fisheries between the Government of Certain Pacific Island States and the Government of the United States of America.*

2. STATUTES, REGULATIONS AND BY-LAWS

Airports and Airport Authorities Act 1968-69

Aitutaki Fisheries Protection By-laws 1990

Animals Act 1975

Animal Disease Prevention Regulations 1982

Animals Importation Regulations

Building Controls and Standards Act 1991

Building Controls and Standard Regulations 1991

Conservation Act 1975

Conservation Act 1986-87

Cook Islands Act 1915

Cook Islands Amendment Act 1950

Cook Islands Constitution Act 1964

Cook Islands Constitution Amendment (No. 9) 1980-81
Cook Islands Constitution Amendment Act 1965
Copra Act 1970
Dangerous Goods Act 1984
General Licensing Authority Act 1989
Harbour Control Act 1971-72
House of Arikis Act 1966
Land Use Act 1969
Land Use Capability Guideline 1990
Manihiki Pearl and Pearl Shell By-laws 1991
Marine Resources Act 1989
Ministry of Agriculture Act 1978
Ministry of Cultural Development Act 1990
Ministry Of Marine Resources Act 1984
National Building Code
Noise Control Act 1986
Outer Islands (Aitutaki Paua) By-laws 1988
Outer Islands Local Government Act 1987
Outer Islands Local Government Act 1988
Peace, Order and Good Government Ordinance 1918 No. 1 (Mauke Island Council)
Pesticide Act 1987
Plant Introduction and Quarantine Amendment Regulations 1980&1985
Plant Introduction and Quarantine Regulations 1976
Plants Act 1973
Proposed Environment Bill 1992
Proposed National Water Authority Bill
Public Health Regulations 1987
Rarotonga Harbour Control Regulations 1974
Rarotonga Local Government Act 1988

Re-Use of Bottles Act 1988

Short Term Crop Leases Act 1966

Territorial Sea and Exclusive Economic Zone Act 1977

Tobacco Products Control Act 1987

Tourism Master Plan

Tourist Authority Act 1989

Wandering Animals Act 1976

Water Supply Ordinance 1958, Aitutaki

Waterfront Industry Act 1973-74

3. BOOKS, ARTICLES ETC

This is a list of books, articles and other materials, includes all references found in the text, as well as references which, although not referred to, are relevant to legislative and administrative issues relating to environmental management in the Cook Islands. These extra references are included for the purposes of further research by others in the future.

Agenda 21

Cook Islands Census on Agriculture 1988.

Cook Islands State of the Environment Report 1992, prepared by Teariki Rongo, Director, Conservation Service.

Crocombe, Ron (1987) "The Cook Islands, Fragmentation and Emigration" in *Land Tenure in the Pacific*, Institute of Pacific Studies, University of the South Pacific, Suva (1964) *Land Tenure in the Cook Islands*, Oxford University Press, Melbourne.

Crocombe, Ron and Marsters, William, 1987. "Land Tenure in a Test Tube", in *Land Tenure in the Atolls*, Institute of Pacific Studies, University of the South Pacific, Suva.

Guidelines for Protected Areas Legislation by Barbara J. Lausche, IUCN Environmental Policy and Law Paper, No. 16.

IUCN, *World Conservation Strategy 1980*, IUCN, WWF and UNEP.
Implementing the World Conservation Strategy 1985-87

Land Tenure in the Atolls 1987, Institute of Pacific Studies University of the South Pacific.

MacKinnon, John and Kathy, Child. Graham and Thorsell, Jim 1986 *Managing Protected Areas in the Tropics*, IUCN, Gland, Switzerland.

Marine Resources Sector Report 1992, Conservation Service, Cook Islands

Manual for Crop Management and Export Standards of Fruits and Vegetables

Marine Resources Sector Report 1992

Paine, James R, *Cook Islands, An Overview of its Protected Areas System* by , World Conservation Monitoring Centre, United Kingdom. July 1989.

Report to the Research Advisory Committee 1991 Totokoitu Research Station, Rarotonga

Totokoitu Research Station, Rarotonga. Report to the Research Advisory Committee 1991.

Teiwaki Roniti 1988 *Management of Marine Resources in Kiribati*, University of the South Pacific.

World Conservation Strategy 1980

About the Reviews of Environmental Law

The National Environment Management Strategies which have been developed over the past two years in a number of Pacific countries have highlighted a wide range of environmental problems. They have also indicated the urgent need for administrative and legal responses to these problems.

The Reviews of Environmental Law have been carried out as part of the National Environment Management Strategy process. Each of the legal consultants has endeavoured to ensure that there has been broad input from relevant organisations and individuals in the Reviews. This input has been invaluable.

The Reviews indicate that there are many common problems faced by each country, related to the development of adequate legal frameworks for the conservation of the natural and social environment and the proper allocation of natural resources. They clearly indicate that some major initiatives in environmental law are required in each country, both in terms of the need to draft new legislation as well as in the implementation and enforcement of existing legislation. Also clear is the need for environmental legal education initiatives specifically aimed at administrators of the environmental legislation.

Each of the Reviews has made extensive suggestions for reform of the law relating to the environment. With more modern environmental legislation and improved enforcement measures, combined with the initiatives set out in the National Environmental Management Strategies and related documents, the goal of sustainable development will become easier to achieve.



IUCN
The World Conservation Union

ACEL
AUSTRALIAN CENTRE FOR ENVIRONMENTAL LAW